Confidential Draft Submission No. 3 submitted to the Securities and Exchange Commission on March 2, 2015. This draft registration statement has not been publicly filed with the Securities and Exchange Commission and all information herein remains strictly confidential.

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ADURO BIOTECH, INC.

(Exact name of Registrant as specified in its charter)

Delaware	2834	94-3348934
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

626 Bancroft Way, 3C
Berkeley, CA 94710
(510) 848-4400
(Address, including zip code and telephone number, of Registrant's principal executive offices)

Stephen T. Isaacs
Chairman, President and Chief Executive Officer
Aduro Biotech, Inc.
626 Bancroft Way, 3C
Berkeley, CA 94710
(510) 848-4400
(Name, address, including zip code and telephone number, including area code, of agent for service)

Copies to:

Barbara A. Kosacz **Michael E. Tenta** **Cooley LLP** **3175 Hanover Street** **Palo Alto, California 94304** **(650) 843-5000**	**Alan C. Mendelson** **Mark V. Roeder** **Latham & Watkins LLP** **140 Scott Drive** **Menlo Park, California 94025** **(650) 328-4600**

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒ (Do not check if a smaller reporting company)	Smaller reporting company	☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee
Common Stock, $0.0001 par value per share		

(1) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
(2) Includes offering price of any additional shares that the underwriters have the option to purchase.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission acting pursuant to said Section 8(a), may determine.

Table of Contents

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject To Completion.
Preliminary Prospectus dated , 2015.

PROSPECTUS

Shares

Common Stock

This is an initial public offering of shares of common stock of Aduro Biotech, Inc. We are selling shares of our common stock in this offering.

We expect the public offering price to be between $ and $ per share. Currently, no public market exists for the shares. After pricing of the offering, we expect the shares will trade on the NASDAQ Global Market under the symbol "ADRO."

We are an "emerging growth company" under applicable Securities and Exchange Commission rules and will be subject to reduced public company reporting requirements.

Investing in our common stock involves risks that are described in the "Risk Factors" section beginning on page 11 of this prospectus.

	Per Share	Total
Public offering price	$	$
Underwriting discount(1)	$	$
Proceeds to us, before expenses	$	$

(1) We refer you to "Underwriting" beginning on page 163 for additional information regarding total underwriting compensation.

The underwriters may also exercise their option to purchase up to an additional shares from us, at the public offering price, less the underwriting discount for 30 days after the date of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The shares will be ready for delivery on or about , 2015.

BofA Merrill Lynch **Leerink Partners**

William Blair **Canaccord Genuity**

The date of this prospectus , 2015.

TABLE OF CONTENTS

Neither we nor the underwriters have authorized anyone to provide you with any information or to make any representation, other than those contained in this prospectus or any free writing prospectus we have prepared. We take no responsibility for, and provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only in circumstances and in jurisdictions where it is lawful to so do. The information contained in this prospectus is accurate only as of its date, regardless of the time of delivery of this prospectus or of any sale of our common stock.

Neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. You are required to inform yourself about, and to observe any restrictions relating to, this offering and the distribution of this prospectus.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our common stock, you should read the entire prospectus carefully, including the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus. Unless the context suggests otherwise, references in this prospectus to "Aduro," "Aduro Biotech," "we," "us" and "our" refer to Aduro Biotech, Inc.

ADURO BIOTECH, INC.

Overview

We are a clinical-stage immuno-oncology company focused on the development of first-in-class technology platforms designed to stimulate robust and durable immune responses against cancer, and our lead product candidate is in a randomized controlled Phase 2b clinical trial in metastatic pancreatic cancer. Immuno-oncology encompasses a class of therapies that leverage the patient's immune system to slow the growth and spread of, or eliminate, tumor cells. We believe a critical distinguishing factor in our approach to immuno-oncology is that our novel therapies initiate powerful innate immune responses and drive targeted, durable adaptive immune responses. The immunotherapy field is rapidly advancing with new immuno-oncology combinations that focus on strengthening therapeutic efficacy in a wide range of cancers. We intend to pursue a broad strategy of combining our technology platforms with conventional and novel immuno-oncology therapies, based on their mechanisms of action, safety profiles and versatility. Our pipeline of immuno-oncology product candidates is derived from two proprietary technology platforms: Live, Attenuated, Double-Deleted, or LADD, *Listeria monocytogenes* and cyclic dinucleotides, or CDNs. Our lead LADD product candidate, CRS-207, is currently being developed in metastatic pancreatic cancer and unresectable malignant pleural mesothelioma. In a completed randomized controlled Phase 2a clinical trial in metastatic pancreatic cancer patients, CRS-207 demonstrated a statistically significant improvement in overall survival when combined with GVAX Pancreas, a cellular vaccine product candidate. The 93-patient two-arm Phase 2a clinical trial was designed to compare the combination of CRS-207 and GVAX Pancreas versus GVAX Pancreas alone. The trial met the primary efficacy endpoint of overall survival at an interim analysis and was stopped upon recommendation from the Data Monitoring Committee. Based on the data from this study, our lead immuno-oncology regimen of CRS-207 and GVAX Pancreas was granted Breakthrough Therapy designation by the U.S. Food and Drug Administration, or FDA. Breakthrough Therapy designation is intended to expedite the development and review of products that treat serious or life-threatening conditions. We have obtained orphan drug designations from the FDA for CRS-207 and GVAX Pancreas for the treatment of pancreatic cancer. Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biologic intended to treat a rare disease or condition. Orphan drug designation entitles a party to certain financial incentives and can provide limited market exclusivity in certain circumstances. We are developing a pipeline of proprietary product candidates, including two product candidates in collaboration with Janssen Biotech, Inc., or Janssen, targeting prostate and lung cancers. We have intellectual property protection on both of our technology platforms and each of our product candidates, which we believe we will maintain into the 2030s.

Immuno-oncology is an emerging field of cancer therapy that aims to activate the immune system in the tumor microenvironment to create and enhance anti-tumor immune responses, as well as to overcome the immuno-suppressive mechanisms that cancer cells have developed against the immune system. Recent developments in the field of immuno-oncology, including checkpoint inhibitors—therapies that have mechanisms focused on unmasking hidden cancer cells—have shown the potential to provide dramatic efficacy responses and extended survival, even in cancers where conventional therapies, such as surgery, chemotherapy and radiotherapy, have failed.

Product candidates from our two immuno-oncology technology platforms are engineered to prime and enhance a patient's innate and tumor-specific adaptive immune responses to deliver enhanced efficacy over current therapies. Since our product candidates act by stimulating the patient's own immune system, we believe they have the potential to be safer and more tolerable than existing therapies, such as chemotherapy and radiotherapy. Based on the mechanism of action and safety profile of our technology platforms, we intend to build a deep pipeline of LADD- and CDN-based product candidates that can be readily combinable and synergistic with both conventional and novel therapies, such as checkpoint inhibitors.

Our vision is to leverage our scientific expertise and understanding of the body's natural defense systems, including the interplay between the innate and adaptive immune responses, to develop safe and effective therapies for the benefit of patients.

Our Proprietary Technology Platforms and Pipeline

Live, Attenuated, Double-Deleted Listeria Monocytogenes

Our proprietary LADD product candidates have been engineered for safety and optimal efficacy. We seek to optimize tumor-specific immune responses by engineering our LADD product candidates to express the encoded tumor-specific antigens and deliver them to antigen-presenting cells. Antigen-presenting cells, which include dendritic cells, lead to efficient priming of a class of immune cells known as T cells. Once primed, these T cells seek out and eliminate the targeted tumor cells. Our LADD product candidates have been engineered for safety in humans through the deletion of two genes critical for virulence of unmodified *Listeria*: *actA* and *inlB*. The deletion of the *actA* gene prevents the spread of our LADD product candidates from cell to cell, which controls the spread of infection. The deletion of the *inlB* gene prevents the infection of hepatocytes, or liver cells, which can lead to toxicity. We believe key attributes of our LADD technology platform include:

- *Early Evidence of Efficacy.* Our randomized controlled Phase 2a clinical trial in patients with metastatic pancreatic cancer who had received or refused prior therapy demonstrated improved overall survival.
- *Novel Mechanism.* Our LADD product candidates are designed to initiate a powerful innate immune response and drive a targeted, durable adaptive immune response.
- *Early Evidence of Safety in Preclinical Studies and Clinical Trials.* Through our proprietary deletion of two genes that contribute to *Listeria*'s virulence, we substantially reduce the natural disease-causing properties of *Listeria*, creating stable product candidates suitable for therapeutic use.
- *Versatility.* Individual LADD product candidates can be engineered to target a wide range of cancers by promoting anti-tumor immune responses against antigens associated with specific tumors.
- *Combinability*. The mechanisms of action and safety profile of our LADD product candidates may give them the potential for combination with conventional and novel therapies, such as cellular vaccines, chemotherapy, radiotherapy and checkpoint inhibitors, among others.
- *Repeatable Administration.* Our LADD product candidates are not neutralized by the patient's immune system and are designed for repeat administration, thus allowing a chronic therapy for a sustained tumor antigen-specific response.
- *Cost-effectiveness.* Our LADD product candidates are not personalized for each patient and can be manufactured through a relatively simple and cost-effective fermentation process.

Cyclic Dinucleotides

Our proprietary CDN product candidates are synthetic small molecule immune modulators that are designed to target and activate a receptor known as the Stimulator of Interferon Genes, or STING, receptor. Once activated, the STING receptor initiates a profound innate immune response by signaling through three distinct pathways, inducing the expression of a broad profile of cytokines that activate the development of an effective tumor antigen-specific T cell adaptive immune response. The STING receptor is generally expressed at high levels in the cytosol of immune cells, including dendritic cells. Recent advancements reported in numerous leading scientific journals have created interest in the potential for STING receptor-targeting drug candidates across diverse applications. We believe the STING receptor represents an attractive target for novel drug candidates because it is known to be critical for immune surveillance and control of cancer progression. We are developing CDN product candidates as therapies that are intended to prime and enhance the innate and adaptive immune responses. Our proprietary synthetic CDN product candidates are significantly more potent than naturally occurring CDN molecules, indicating a high translational potential as a therapeutic approach to elicit an effective immune response. We believe key attributes of our CDN technology platform include:

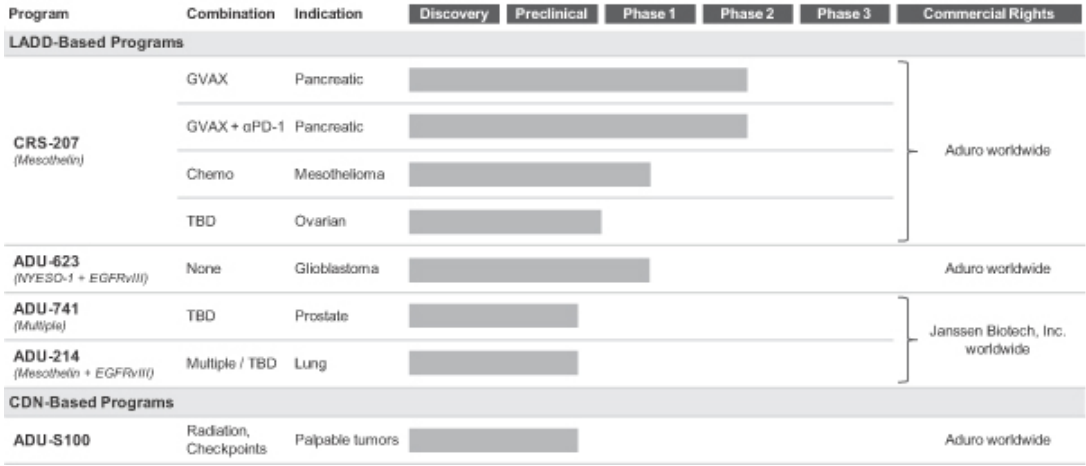
- *Early Evidence of Potency.* Our CDN product candidates have demonstrated significant anti-tumor activity in pre-clinical studies.
- *Novel Mechanism.* Our CDN product candidates are designed to initiate broad and strong innate and adaptive immune responses through the activation of the STING receptor signaling pathway.
- *Versatility of Delivery*. We believe our CDN product candidates can be effectively delivered via intratumoral injection, systemic delivery via formulation and other novel modalities, such as conjugation with antibodies.
- *Combinability*. Based on their mechanism of action, we believe our CDN product candidates may have synergistic or additive benefits of immune-mediated tumor killing mechanisms when combined with conventional and novel therapies, such as cellular vaccines, chemotherapy, radiotherapy and checkpoint inhibitors, among others.
- *Ease of Manufacture*. Our CDN product candidates are small molecules manufactured through a relatively simple and cost-effective process.
- *Broad Applicability*. We believe our CDN product candidates will have broad application in oncology and the potential to expand into other therapeutic areas such as infectious and autoimmune diseases.

Pipeline

Our most advanced immuno-oncology regimen, currently in a randomized controlled Phase 2b clinical trial known as ECLIPSE, assesses the combination of our lead LADD product candidate, CRS-207, with GVAX Pancreas to treat late-stage metastatic pancreatic cancer patients who have received at least one prior line of therapy. GVAX Pancreas is an important synergistic combination candidate because it is designed to induce T cells against an array of pancreatic cancer antigens and enable a broad-based immune response and has demonstrated a favorable safety profile in clinical trials to date. We expect to report top line results from ECLIPSE in the first half of 2016. In addition, we are evaluating CRS-207 in combination with chemotherapy in unresectable malignant pleural mesothelioma and have a planned study of CRS-207 in combination with GVAX Pancreas and an anti-PD-1 checkpoint inhibitor in metastatic pancreatic cancer. We also have ongoing and planned clinical development programs evaluating LADD regimens for glioblastoma multiforme and ovarian cancer, and with Janssen, lung and prostate cancers.

We also envision multiple product opportunities for our CDN technology platform. Because STING receptors are known to be critical for immune surveillance and control of cancer progression, we believe that STING receptors represent an attractive target for novel drug candidates. We are developing our CDN product candidates as impactful therapies that are intended to prime and enhance the innate and adaptive immune responses. Based on their mechanism of action, our CDN product candidates may also have synergistic or additive benefits when combined with other cancer therapies.

Our pipeline of product candidates is depicted in the following chart:



Our Strategy

Our current focus is to develop and commercialize best-in-class cancer therapies using our LADD and CDN technology platforms. Key elements of our strategy include:

- **Rapidly advance CRS-207 through clinical development and regulatory approval.** We are currently conducting our Phase 2b ECLIPSE clinical trial of CRS-207 in combination with GVAX Pancreas in patients with metastatic pancreatic cancer who have received at least one prior line of therapy. We expect to complete enrollment in the third quarter of 2015 and to report top line results in the first half of 2016.

- **Maximize the commercial value of our proprietary LADD and CDN technology platforms.** We currently have global development, marketing and commercialization rights for our lead product candidate, CRS-207, as well as additional LADD product candidates and our CDN product candidates. If we obtain regulatory approvals for CRS-207 in pancreatic cancer or other indications, we plan to build a commercial organization with a specialty sales force to market CRS-207. We also plan to retain commercial rights to additional LADD and CDN product candidates.

- **Develop novel drug candidates by leveraging our proprietary technology platforms and our understanding of combination therapy in immuno-oncology.** We have proprietary technology platforms that we believe can generate novel and combinable therapies to target a wide range of cancers with significant unmet medical need. We plan to invest in these technology platforms to develop additional product candidates. We intend to further explore combination opportunities with conventional and novel treatments, including cellular vaccines, chemotherapy, radiotherapy and checkpoint inhibitors, among others.

- **Expand on the value of our product candidates through collaborations in areas outside of our core strategic focus.** We may decide to selectively partner large and complex oncology indications or geographies where a partner could bring additional resources and expertise to maximize the value of our product candidates. We entered into two strategic collaborations with Janssen for the treatment of prostate, lung and certain other cancers.

- **Leverage the expertise of our scientific founders and key advisors to develop innovative technologies at the forefront of the immuno-oncology field.** Our scientific founders and advisors are from some of the world's leading research institutions and have a history of seminal discoveries and significant experience in oncology, immuno-oncology and vaccines. As such, we plan to continue to leverage the collective talent of our scientists, clinicians and a network of highly influential advisors to inform our development strategy and enable our technology to be at the forefront of the immuno-oncology field. We strive to protect our commercially important discoveries and product candidates by applying for, maintaining and defending our patent rights. At January 27, 2015, our owned U.S. patent portfolio consisted of 21 issued patents and 14 pending patent applications.

Risks Associated with Our Business

Our business is subject to numerous risks and uncertainties, including those highlighted in the section titled "Risk Factors" immediately following this prospectus summary. Some of these risks are:

- We have incurred net losses in every year since our inception and anticipate that we will continue to incur substantial and increasing net losses in the foreseeable future. We will require substantial additional financing to achieve our goals, and a failure to obtain this necessary capital when needed could force us to delay, limit, reduce or terminate our product development or commercialization efforts.

- Our business is highly dependent on the success of our lead product candidate, CRS-207, and GVAX Pancreas. CRS-207, GVAX Pancreas and our other product candidates will require significant additional clinical testing before we can seek regulatory approval and potentially launch commercial sales.

- Clinical development involves a lengthy and expensive process with uncertain outcomes, and results of earlier studies and trials may not be predictive of future clinical trial results.

- Our technology platforms and product candidates are based on novel technologies, and the development and regulatory approval pathways for such product candidates are unproven and may never lead to marketable products.

- Our product candidates may cause undesirable side effects or have other properties that could halt their clinical development, prevent their regulatory approval, limit their commercial potential, if approved, or result in significant negative consequences.

- If we are unable to protect our intellectual property rights or if our intellectual property rights are inadequate for our technology and product candidates, our competitive position could be harmed.

- We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

- We are subject to a complicated regulatory regime subject to change and may fail to obtain regulatory approval for any of our product candidates.

Corporate Information

We were incorporated in California as Oncologic, Inc. in 2000. In 2008, we merged with Triton BioSystems, Inc. and subsequently changed our name to Aduro Biotech, Inc. in 2009. In June 2011, we reincorporated as a Delaware corporation. Our principal executive offices are located at 626 Bancroft Way, 3C, Berkeley, California 94710 and our telephone number is (510) 848-4400. Our website address is www.aduro.com. Information contained on or accessible through our website is not a part of this prospectus and should not be relied upon in determining whether to make an investment decision.

Aduro, Aduro Biotech, the Aduro logo and other trade names, trademarks or service marks of Aduro appearing in this prospectus are the property of Aduro. Trade names, trademarks and service marks of other companies appearing in this prospectus are the property of their respective holders.

JOBS Act

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, and therefore we may take advantage of certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments. We may take advantage of these exemptions until we are no longer an "emerging growth company." We may remain an "emerging growth company" for up to five years. We will cease to be an "emerging growth company" upon the earliest of: (1) the last day of the fiscal year following the fifth anniversary of this offering, (2) the last day of the first fiscal year in which our annual gross revenues are $1.0 billion or more, (3) the date on which we have, during the previous rolling three-year period, issued more than $1.0 billion in non-convertible debt securities, and (4) the date on which we are deemed to be a "large accelerated filer" as defined in the Securities Exchange Act of 1934, as amended, or the Exchange Act. We are choosing to irrevocably opt out of the extended transition periods available under the JOBS Act for complying with new or revised accounting standards.

THE OFFERING

Common stock offered by us	shares.
Common stock to be outstanding after this offering	shares.
Underwriters' option to purchase additional shares	shares.
Use of proceeds	We estimate that our net proceeds from this offering will be approximately $ million, or approximately $ million if the underwriters exercise in full their option to purchase additional shares of our common stock, based on an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the underwriting discount and estimated offering expenses payable by us. We intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, to complete our Phase 2b ECLIPSE and STELLAR clinical trials, to advance the development of CRS-207 in pancreatic cancer and mesothelioma, and for planned clinical development programs evaluating LADD regimens for glioblastoma multiforme and ovarian cancer, to manufacture CRS-207 and GVAX Pancreas at commercial scale in preparation for potential regulatory approval, for development of CDN product candidates and other planned research and development programs, and for general corporate and working capital purposes. See "Use of Proceeds" for additional information.
Risk factors	See "Risk Factors" beginning on page 12 and the other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock.
Proposed NASDAQ Global Market symbol	"ADRO"

The number of shares of common stock to be outstanding after this offering is based on 70,111,221 shares of our common stock (including preferred stock on an as-converted basis) outstanding at December 31, 2014, and excludes the following:

- 8,292,303 shares of common stock issuable upon the exercise of outstanding stock options at December 31, 2014, with a weighted-average exercise price of $0.57 per share;
- 108,006 shares of common stock issuable upon the exercise of preferred stock warrants at December 31, 2014, with a weighted-average exercise price of $1.21 per share;
- 1,603,197 shares of common stock issuable upon the exercise of outstanding common stock warrants at December 31, 2014, with a weighted-average exercise price of $0.17 per share;

- 4,381,609 shares of common stock reserved for future issuance under our 2009 Stock Plan, which will become available for issuance under our 2015 Equity Incentive Plan, or 2015 Plan, after consummation of this offering;
- shares of common stock, subject to increase on an annual basis, reserved for future issuance under our 2015 Plan, which will become effective immediately prior to the consummation of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this benefit plan; and
- shares of common stock to be reserved for issuance under our 2015 Employee Stock Purchase Plan, which will become effective immediately prior to the consummation of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this benefit plan.

In addition, unless we specifically state otherwise, all information in this prospectus assumes:

- a -for- reverse split of our outstanding common stock and preferred stock prior to the closing of this offering;
- the automatic conversion of all outstanding shares of our preferred stock at December 31, 2014 into an aggregate of 69,608,339 shares of common stock upon the closing of this offering;
- the automatic conversion of all outstanding warrants exercisable for shares of our preferred stock at December 31, 2014 into warrants exercisable for 108,006 shares of our common stock upon the closing of this offering;
- the filing and effectiveness of our amended and restated certificate of incorporation in Delaware and the adoption of our amended and restated bylaws, each of which will occur upon the completion of this offering;
- no exercise of outstanding stock options or warrants subsequent to December 31, 2014; and
- no exercise of the underwriters' option to purchase up to an additional shares of common stock.

SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables summarize our consolidated financial data. You should read this summary financial data together with the sections titled "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" as well as our audited consolidated financial statements included elsewhere in this prospectus.

The summary consolidated statements of operations data presented below for the years ended December 31, 2013 and 2014 are derived from our audited consolidated financial statements included elsewhere in this prospectus. Our results of operations for any prior period are not necessarily indicative of results of operations that should be expected in any future periods.

	Year Ended December 31,	
	2013	2014
	(in thousands, except share and per share information)	
Consolidated Statements of Operations Data:		
Revenue:		
Collaboration and license revenue	$ —	$ 13,038[3]
Grant revenue	828	351
Total revenue	828	13,389
Operating expenses:		
Research and development[1]	10,687	23,513
General and administrative[1]	4,677	8,994
Total operating expenses	15,364	32,507
Loss from operations	(14,536)	(19,118)
Interest expense	(1,371)	(2,395)[4]
Gain on extinguishment of convertible promissory notes	—	3,553[5]
Other (expense) income, net	(147)	946
Net loss and comprehensive loss	$ (16,054)	$ (17,014)
Net loss per common share, basic and diluted[2]	$ (40.16)	$ (38.19)
Shares used in computing net loss per common share, basic and diluted[2]	399,706	445,505
Pro forma net loss per common share, basic and diluted[2]		$ (0.51)
Shares used in computing pro forma net loss per common share, basic and diluted[2]		38,948,479

(1) Includes stock-based compensation as follows:

	Year Ended December 31,	
	2013	2014
	(in thousands)	
Research and development	$ 194	$ 202
General and administrative	215	368
Total stock-based compensation	$ 409	$ 570

(2) See Note 16 to our audited consolidated financial statements included elsewhere in this prospectus for an explanation of the calculations of our basic and diluted net loss per common share, pro forma net loss per common share, and the weighted-average number of shares used in the computation of the per share amounts.

(3) Represents the revenue recognized in connection with our collaboration agreements entered into with Janssen Biotech, Inc. in May and November 2014. See Note 7 to our audited consolidated financial statements included elsewhere in this prospectus.

(4) Includes amortization of debt discount associated with convertible promissory notes due to the issuance of warrants and beneficial conversion feature associated with such convertible promissory notes. See Note 5 to our audited consolidated financial statements included elsewhere in this prospectus.

(5) Upon the conversion of convertible promissory notes issued to related parties into Series C convertible preferred stock in May 2014, a gain on extinguishment was recorded because the amount allocated to reacquire the convertible promissory notes was less than the carrying value of the notes. See Note 5 to our audited consolidated financial statements included elsewhere in this prospectus.

	At December 31, 2014		
	Actual	Pro Forma(1)	Pro Forma As Adjusted(2)(3)
		(in thousands)	
Consolidated Balance Sheet Data:			
Cash and cash equivalents	$119,456	$ 119,456	$
Working capital	81,006	81,006	
Total assets	126,462	126,462	
Convertible preferred stock warrant liability	100	—	
Common stock warrant liability	889	889	
Convertible preferred stock	139,963	—	
Accumulated deficit	(61,643)	(61,643)	
Total stockholders' (deficit) equity	126,462	78,766	

(1) The pro forma column reflects the automatic conversion of all outstanding shares of our convertible preferred stock and convertible preferred stock warrants into common stock and common stock warrants, respectively, immediately prior to the closing of this offering.

(2) The pro forma as adjusted column further reflects the receipt of the estimated net proceeds from the sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the underwriting discount and estimated expenses payable by us.

(3) A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) each of cash and cash equivalents, working capital, total assets and total stockholders' equity by $ million, assuming that the number of shares offered as set forth on the cover page of this prospectus remains the same, and after deducting the underwriting discount and estimated expenses payable by us. Each increase (decrease) of 1,000,000 shares in the number of shares of common stock offered by us would increase (decrease) each of cash and cash equivalents, working capital, total assets and total stockholders' equity by approximately $ million, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the underwriting discount and estimated expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following risks and all of the other information contained in this prospectus, including our financial statements and related notes, before investing in our common stock. While we believe that the risks and uncertainties described below are the material risks currently facing us, additional risks that we do not yet know of or that we currently think are immaterial may also arise and materially affect our business. If any of the following risks materialize, our business, financial condition and results of operations could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you may lose some or all of your investment.

Risks Related to Our Business

We have incurred net losses in every year since our inception and anticipate that we will continue to incur substantial and increasing net losses in the foreseeable future.

We are a clinical-stage biopharmaceutical company with a limited operating history. Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval and become commercially viable. We have financed our operations primarily through the sale of equity securities and convertible debt securities. Since our inception, most of our resources have been dedicated to the preclinical and clinical development of our product candidates. The size of our future net losses will depend, in part, on our future expenses and our ability to generate revenue, if any. We have no products approved for commercial sale and have not generated any revenue from product sales to date, and we continue to incur significant research and development and other expenses related to our ongoing operations. As a result, we are not profitable and have incurred losses in each period since our inception. For the years ended December 31, 2013 and 2014, we reported a net loss of $16.1 million and $17.0 million, respectively. At December 31, 2014, we had an accumulated deficit of $61.6 million. We expect to continue to incur significant losses for the foreseeable future, and we expect these losses to increase as we continue our research and development of, and seek regulatory approvals for, our product candidates.

Even if we succeed in commercializing one or more of our product candidates, we will continue to incur substantial research and development and other expenditures to develop and market additional product candidates. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital.

We will require substantial additional financing to achieve our goals, and a failure to obtain this necessary capital when needed could force us to delay, limit, reduce or terminate our product development or commercialization efforts.

Our operations have consumed substantial amounts of cash since inception. At December 31, 2014, our cash and cash equivalents were $119.5 million. We expect to continue to spend substantial amounts to continue the clinical development of our product candidates. If we are able to gain regulatory approval for any of our product candidates, we will require significant additional amounts of cash in order to launch and commercialize any such product candidates. In addition, other unanticipated costs may arise. Because the design and outcome of our planned and anticipated clinical trials is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of our product candidates.

Our future capital requirements depend on many factors, including:

- the scope, progress, results and costs of researching and developing our product candidates, and conducting preclinical studies and clinical trials;
- the timing of, and the costs involved in, obtaining regulatory approvals for our product candidates if clinical trials are successful;
- the cost of commercialization activities for our product candidates, if any of our product candidates is approved for sale, including marketing, sales and distribution costs;
- the cost of manufacturing our product candidates for clinical trials in preparation for regulatory approval and in preparation for commercialization;
- our ability to establish and maintain strategic licensing or other arrangements and the financial terms of such agreements;
- the costs involved in preparing, filing, prosecuting, maintaining, expanding, defending and enforcing patent claims, including litigation costs and the outcome of such litigation;
- the timing, receipt and amount of sales of, or royalties on, our future products, if any; and
- the emergence of competing cancer therapies and other adverse market developments.

We do not have any committed external source of funds or other support for our development efforts other than our license agreements with Janssen, which may be terminated by Janssen upon delivery of notice. Until we can generate sufficient product and royalty revenue to finance our cash requirements, which we may never do, we expect to finance our future cash needs through a combination of public or private equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing or distribution arrangements. Additional financing may not be available to us when we need it or it may not be available on favorable terms.

If we raise additional capital through marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish certain valuable rights to our product candidates, technologies, future revenue streams or research programs or grant licenses on terms that may not be favorable to us. If we raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we are unable to obtain adequate financing when needed, we may have to delay, reduce the scope of or suspend one or more of our clinical trials or research and development programs or our commercialization efforts.

Risks Related to the Development and Commercialization of Our Current and Future Product Candidates

Our technology platforms and product candidates are based on novel technologies, and the development and regulatory approval pathway for such product candidates is unproven and may never lead to marketable products.

We are developing our pipeline of immuno-oncology product candidates via two technology platforms: Live, Attenuated, Double-Deleted, or LADD, *Listeria monocytogenes* and cyclic dinucleotides, or CDNs. Immuno-oncology encompasses a class of therapies that leverage the patient's immune system to slow the

growth and spread of, or eliminate, tumor cells. Any products we develop may not effectively modulate the immune response to slow the spread of or eliminate cancer cells. The scientific evidence to support the feasibility of developing product candidates based on impacting the anti-tumor immune response is preliminary and limited. Advancing these novel immuno-oncology therapies creates significant challenges for us, including, among others:

- obtaining approval from regulatory authorities to conduct clinical trials with our product candidates;
- successful enrollment and completion of preclinical studies and clinical trials with favorable results;
- obtaining approvals from regulatory authorities to manufacture and market our product candidates;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- making arrangements with third-party manufacturers for, or establishing, commercial manufacturing capabilities;
- manufacturing our product candidates at an acceptable cost;
- launching commercial sales of our product candidates, if and when approved, whether alone or in collaboration with Janssen or other partners;
- acceptance of our product candidates, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other cancer therapies;
- obtaining and maintaining coverage and adequate reimbursement by third-party payors, including government payors, for our product candidates;
- protecting rights in our intellectual property portfolio;
- maintaining a continued acceptable safety profile of our product candidates, if approved, following approval; and
- maintaining and growing an organization of scientists and business people who can develop and commercialize our products and technology.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully develop and commercialize our product candidates, which could materially harm our business, financial condition and results of operations.

We may not be successful in our efforts to use and expand our technology platforms to build a pipeline of product candidates.

A key element of our strategy is to use and expand our technology platforms to build a pipeline of product candidates, combine our product candidates with existing and novel therapies, and progress these product candidates and combinations through clinical development for the treatment of various diseases. Although our research and development efforts to date have resulted in a pipeline of product candidates directed at various cancers, we may not be able to develop product candidates that are safe and effective. Even if we are successful in continuing to build our pipeline, the potential product candidates that we identify may not be suitable for

clinical development, including as a result of being shown to have harmful side effects or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance. If we do not continue to successfully develop and begin to commercialize product candidates, we will face difficulty in obtaining product revenues in future periods.

Our business is highly dependent on the success of our lead product candidate, CRS-207, and GVAX Pancreas. CRS-207, GVAX Pancreas and our other product candidates from our LADD and CDN technology platforms will require significant additional clinical testing before we can seek regulatory approval and potentially launch commercial sales.

We do not have any products that have gained regulatory approval. Our business and future success depend on our ability to obtain regulatory approval of and then successfully commercialize our lead product candidate, CRS-207, and GVAX Pancreas. CRS-207, GVAX Pancreas and our other product candidates are in the early stages of development. We are currently conducting our Phase 2b ECLIPSE clinical trial of CRS-207 in combination with GVAX Pancreas to treat late-stage metastatic pancreatic cancer patients who have received at least one prior line of therapy. Our ability to develop, obtain regulatory approval for, and successfully commercialize CRS-207 and GVAX Pancreas effectively will depend on several factors, including the following:

- successful completion of our Phase 2b ECLIPSE clinical trial or other clinical trials, which will depend substantially upon the satisfactory performance of third-party contractors;
- successful achievement of the objectives of the our Phase 2b ECLIPSE clinical trial, including the demonstration of a survival benefit and a favorable risk-benefit outcome;
- receipt of marketing approvals for CRS-207 and GVAX Pancreas from the U.S. Food and Drug Administration, or FDA, and similar regulatory authorities outside the United States;
- establishing commercial manufacturing and supply arrangements;
- establishing a commercial infrastructure;
- acceptance of the product by patients, the medical community and third-party payors;
- establishing market share while competing with other therapies;
- successfully executing our pricing and reimbursement strategy;
- a continued acceptable safety and adverse event profile of the product following regulatory approval; and
- qualifying for, identifying, registering, maintaining, enforcing and defending intellectual property rights and claims covering the product.

All of our product candidates, including CRS-207 and GVAX Pancreas, will require additional clinical and non-clinical development, regulatory review and approval in multiple jurisdictions, substantial investment, access to sufficient commercial manufacturing capacity and significant marketing efforts before we can generate any revenue from product sales. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from the FDA or comparable foreign regulatory authorities, and we may never receive such regulatory approval for any of our product candidates. If we are unable to develop or receive marketing approval for CRS-207 or GVAX Pancreas in a timely manner or at all, we could experience significant delays or an inability to commercialize CRS-207 and GVAX Pancreas, which would materially and adversely affect our business, financial condition and results of operations.

Clinical development involves a lengthy and expensive process with uncertain outcomes, and results of earlier studies and trials may not be predictive of future clinical trial results. Our clinical trials may fail to demonstrate adequately the safety and efficacy of one or more of our product candidates, which would prevent or delay regulatory approval and commercialization.

Before obtaining regulatory approvals for the commercial sale of our product candidates, including CRS-207, we must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that our product candidates are both safe and effective for use in each target indication. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. For example, the positive results generated to date in preclinical studies and in our Phase 2a metastatic pancreatic cancer study for CRS-207 do not ensure that future studies will demonstrate similar results. There is typically an extremely high rate of attrition from the failure of product candidates proceeding through clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. We cannot be certain that we will not face similar setbacks. Most product candidates that commence clinical trials are never approved as commercial products.

We may experience delays in our ongoing clinical trials and we do not know whether planned clinical trials will begin on time, need to be redesigned, enroll patients on time or be completed on schedule, if at all. Clinical trials can be delayed for a variety of reasons, including delays related to:

- obtaining regulatory approval to commence a trial;
- reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- obtaining institutional review board, or IRB, approval at each site;
- recruiting suitable patients to participate in a trial;
- having patients complete a trial or return for post-treatment follow-up;
- clinical sites deviating from trial protocol or dropping out of a trial;
- adding new clinical trial sites; or
- manufacturing sufficient quantities of product candidate for use in clinical trials.

We could encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by the Data Safety Monitoring Board, or DSMB, for such trial or by the FDA or other regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

Furthermore, we rely on CROs and clinical trial sites to ensure the proper and timely conduct of our clinical trials and while we have agreements governing their committed activities, we have limited influence over

their actual performance. If we experience delays in the completion of, or termination of, any clinical trial of our product candidates, the commercial prospects of our product candidates will be harmed, and our ability to generate product revenues from any of these product candidates will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product candidate development and approval process and jeopardize our ability to commence product sales and generate revenues. Any of these occurrences may harm our business, financial condition and prospects significantly. In addition, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive cash compensation in connection with such services. We also give grants to investigators' institutions from time to time. If certain of these relationships exceed specific financial thresholds, they must be reported to the FDA If these relationships and any related compensation paid results in perceived or actual conflicts of interest, or the FDA concludes that the financial relationship may have affected interpretation of the study, the integrity of the data generated at the applicable clinical trial site may be questioned and the utility of the clinical trial itself may be jeopardized, which could result in the delay in approval, or rejection, of our marketing applications by the FDA. Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

In addition, even if the trials are successfully completed, we cannot guarantee that the FDA or foreign regulatory authorities will interpret the results as we do, and we may need to conduct additional trials before we submit applications seeking regulatory approval of our product candidates.

To the extent that the results of the trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, approval of our product candidates may be significantly delayed, or we may be required to expend significant additional resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates.

Our product candidates may cause undesirable side effects or have other properties that could halt their clinical development, prevent their regulatory approval, limit their commercial potential, if approved, or result in significant negative consequences.

Undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or comparable foreign regulatory authorities. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics.

To date, patients treated with CRS-207 have experienced drug-related side effects including Grade 3 adverse events, or AEs, which are considered moderate, and Grade 4 AEs which are considered severe. In our Phase 2a clinical trial of CRS-207, the most frequent drug-related Grade 3 or 4 AE was lymphopenia (an abnormally low level of white blood cells), with three patients experiencing Grade 3 lymphopenia and two patients experiencing Grade 4 lymphopenia. Lymphopenia is expected based on prior nonclinical studies and CRS-207's mechanism of action, and the AEs of lymphopenia were self-correcting or did not reveal an unexpected pattern of toxicity. We currently do not plan to alter our development plan for CRS-207 based on these observed AEs of lymphopenia. There were no other Grade 4 AEs, and there were no other Grade 3 AEs with frequencies higher than five percent in either arm. The most common Grade 3 AEs were transient lymphopenia, fevers, elevated liver enzymes and fatigue.

If unacceptable side effects arise in the development of our product candidates, we could suspend or terminate our clinical trials or the FDA or comparable foreign regulatory authorities could order us to cease clinical trials or deny approval of our product candidates for any or all targeted indications. Treatment-related side effects could also affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. In addition, these side effects may not be appropriately recognized or managed by the treating medical staff. We expect to have to train medical personnel using our product candidates to understand the side effect profiles for our clinical trials and upon any commercialization of any of our product candidates. Inadequate training in recognizing or managing the potential side effects of our product candidates

could result in patient injury or death. Any of these occurrences may harm our business, financial condition and prospects significantly.

Additionally, if one or more of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw approvals of such product;
- regulatory authorities may require additional warnings on the label;
- we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and could significantly harm our business, results of operations and prospects.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the study until its conclusion. We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons. The enrollment of patients depends on many factors, including:

- the patient eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- the proximity of patients to study sites;
- the design of the trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating;
- our ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will drop out of the trials before completion.

In addition, our clinical trials will compete with other clinical trials for product candidates that are in the same therapeutic areas as our product candidates, and this competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. Since the number of qualified clinical investigators is limited, we expect to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials in such clinical trial site. Moreover, because our product candidates represent a departure from more commonly used methods for cancer treatment, potential patients and their doctors may be inclined to use conventional therapies, such as chemotherapy and hematopoietic cell transplantation, rather than enroll patients in any future clinical trial.

Delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our product candidates.

Clinical trials are expensive, time-consuming and difficult to design and implement.

Human clinical trials are expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. Because our product candidates are based on new technologies and engineered on a patient-by-patient basis, we expect that they will require extensive research and development and have substantial manufacturing and processing costs. In addition, costs to treat patients with relapsed/refractory cancer and to treat potential side effects that may result from our product candidates may be significant. Accordingly, our clinical trial costs are likely to be significantly higher than for more conventional therapeutic technologies or drug products.

The market opportunities for our product candidates may be limited to those patients who are ineligible for established therapies or for whom prior therapies have failed, and may be small.

Cancer therapies are sometimes characterized as first line, second line or third line, and the FDA often approves new therapies initially only for third line use. When cancer is detected early enough, first-line therapy, usually chemotherapy, hormone therapy, surgery, radiotherapy or a combination of these, is sometimes adequate to cure the cancer or prolong life without a cure. Second- and third-line therapies are administered to patients when prior therapy is not effective. We expect to initially seek approval of our product candidates as a therapy for patients who have received one or more prior treatments. Subsequently, for those products that prove to be sufficiently beneficial, if any, we would expect to seek approval potentially as a first-line therapy, but there is no guarantee that our product candidates, even if approved, would be approved for first-line therapy, and, prior to any such approvals, we may have to conduct additional clinical trials.

Our projections of both the number of people who have the cancers we are targeting, as well as the subset of people with these cancers who have received one or more prior treatments, and who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, or market research, and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these cancers. The number of patients may turn out to be lower than expected. Additionally, the potentially addressable patient population for our product candidates may be limited or may not be amenable to treatment with our product candidates. Even if we obtain significant market share for our product candidates, because the potential target populations are small, we may never achieve profitability without obtaining regulatory approval for additional indications, including to be used as first or second line therapy.

We have obtained orphan drug designations from the FDA for CRS-207 and GVAX Pancreas for the treatment of pancreatic cancer, but we may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biologic intended to treat a rare disease or condition, which is defined as one occurring in a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug or biologic will be recovered from sales in the United States. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, if a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications, including a full Biologics License Application, or BLA, to market the same biologic for the

same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or where the manufacturer is unable to assure sufficient product quantity.

Even though we have received orphan drug designation for both CRS-207 and GVAX Pancreas for the treatment of pancreatic cancer, we may not be the first to obtain marketing approval of either product candidate for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products. In addition, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan-designated indication or may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties can be approved for the same condition. Even after an orphan product is approved, the FDA can subsequently approve the same drug with the same active moiety for the same condition if the FDA concludes that the later drug is safer, more effective, or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process. In addition, while we intend to seek orphan drug designation for other product candidates, we may never receive such designations.

We have obtained Breakthrough Therapy designation from the FDA for the combination of CRS-207 and GVAX Pancreas in pancreatic cancer, but we may be unable to maintain the benefits associated with this designation.

In 2012, the FDA established a new Breakthrough Therapy designation, which is intended to expedite the development and review of products that treat serious or life-threatening conditions where “preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development.” The designation of a product candidate as a Breakthrough Therapy provides potential benefits that include but are not limited to more frequent meetings with the FDA to discuss the development plan for the product candidate and ensure collection of appropriate data needed to support approval; more frequent written correspondence from FDA about such things as the design of the proposed clinical trials and use of biomarkers; intensive guidance on an efficient drug development program; organizational commitment involving senior managers; and eligibility for rolling review and priority review. Breakthrough Therapy designation does not change the standards for product approval. We have obtained Breakthrough Therapy designation for our CRS-207 and GVAX Pancreas combination. Despite the potential advantages of Breakthrough Therapy designation, we may fail to obtain regulatory approval of CRS-207 and GVAX Pancreas, and if we do obtain approval, we may fail to do so on an accelerated basis. In addition, while we intend to seek Breakthrough Therapy designation for other product candidates, we may never receive such designation.

If we fail to develop additional product candidates, our commercial opportunity will be limited.

We expect to initially develop our lead product candidate, CRS-207. However, one of our strategies is to pursue clinical development of additional product candidates. Developing, obtaining regulatory approval for and commercializing additional product candidates will require substantial additional funding beyond the net proceeds of this offering and are prone to the risks of failure inherent in medical product development. We cannot assure you that we will be able to successfully advance any of these additional product candidates through the development process.

Even if we obtain FDA approval to market additional product candidates for the treatment of cancer, we cannot assure you that any such product candidates will be successfully commercialized, widely accepted in the marketplace or more effective than other commercially available alternatives. If we are unable to successfully develop and commercialize additional product candidates, our commercial opportunity will be limited. Moreover, a failure in obtaining regulatory approval of additional product candidates may have a negative effect on the approval process of any other, or result in losing approval of any approved, product candidate.

We are subject to a multitude of manufacturing and supply chain risks, any of which could substantially increase our costs and limit the supply of our product candidates.

The process of manufacturing our product candidates is complex, highly regulated and subject to several risks, including:

- The manufacturing of drug products is susceptible to product loss due to contamination, equipment failure, improper installation or operation of equipment or vendor or operator error. Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects and other supply disruptions. If foreign microbial, viral or other contaminations are discovered in our product candidates or in the manufacturing facilities in which our products are made, these manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination.

- The manufacturing facilities in which our product candidates are made could be adversely affected by equipment failures, labor shortages, natural disasters, power failures and numerous other factors.

- We and our contract manufacturers must comply with the FDA's cGMP regulations and guidelines. Any failure to follow cGMP or other regulatory requirements or any delay, interruption or other issues that arise in the manufacture, fill-finish, packaging, or storage of our products as a result of a failure of our facilities or the facilities or operations of third parties to comply with regulatory requirements or pass any regulatory authority inspection could significantly impair our ability to develop and commercialize our products, including leading to significant delays in the availability of products for our clinical studies or the termination or hold on a clinical study, or the delay or prevention of a filing or approval of marketing applications for our product candidates. Significant noncompliance could also result in the imposition of sanctions, including fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approvals for our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products, operating restrictions and criminal prosecutions, any of which could damage our reputation. If we are not able to maintain regulatory compliance, we may not be permitted to market our products and/or may be subject to product recalls, seizures, injunctions, or criminal prosecution.

- Our LADD product candidates and GVAX Pancreas are temperature sensitive and must be frozen during storage and transportation, which adds complexity and expense. We rely on third parties to provide controlled temperature storage and shipping. If any third-party provider fails to maintain proper temperature control or if a shipment is delayed in transit for a prolonged period of time, the product could become unsuitable for use.

Any adverse developments affecting manufacturing operations for our product candidates and/or damage that occurs during shipping may result in delays, inventory shortages, lot failures, withdrawals or recalls or other interruptions in the supply of our drug substance and drug product. We may also have to write off inventory, incur other charges and expenses for supply of drug product that fails to meet specifications, undertake costly remediation efforts, or seek more costly manufacturing alternatives. Inability to meet the demand for any of our product candidates, if approved, could damage our reputation and the reputation of our products among physicians, healthcare payors, patients or the medical community, which could adversely affect our ability to operate our business and our results of operations.

We currently have no marketing and sales organization and have no experience in marketing products. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our product candidates, we may not be able to generate product revenue.

We currently have no sales, marketing or distribution capabilities and have no experience in marketing products. We intend to develop an in-house marketing organization and sales force, which will require significant

capital expenditures, management resources and time. We will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train and retain marketing and sales personnel.

If we are unable or decide not to establish internal sales, marketing and distribution capabilities, we will pursue collaborative arrangements regarding the sales and marketing of our products; however, we cannot assure you that we will be able to establish or maintain such collaborative arrangements, or if we are able to do so, that they will have effective sales forces. Any revenue we receive will depend upon the efforts of such third parties, which may not be successful. We may have little or no control over the marketing and sales efforts of such third parties and our revenue from product sales may be lower than if we had commercialized our product candidates ourselves. We also face competition in our search for third parties to assist us with the sales and marketing efforts of our product candidates.

We cannot assure you that we will be able to develop in-house sales and distribution capabilities or establish or maintain relationships with third-party collaborators to commercialize any product in the United States or elsewhere.

A variety of risks associated with marketing our product candidates internationally could materially adversely affect our business.

We plan to seek regulatory approval of our product candidates outside of the United States and, accordingly, we expect that we will be subject to additional risks related to operating in foreign countries if we obtain the necessary approvals, including:

- differing regulatory requirements in foreign countries;
- unexpected changes in tariffs, trade barriers, price and exchange controls and other regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- difficulties staffing and managing foreign operations;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- potential liability under the Foreign Corrupt Practices Act of 1977 or comparable foreign regulations;
- challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geo-political actions, including war and terrorism.

These and other risks associated with our international operations may materially adversely affect our ability to attain or maintain profitable operations.

We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

The biopharmaceutical industry is characterized by intense competition and rapid innovation. Our competitors may be able to develop other compounds or drugs that are able to achieve similar or better results. Many major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies and universities and other research institutions continue to invest time and resources in developing novel approaches to immuno-oncology. Promising results have spurred significant competition from major pharmaceutical and biotechnology companies alike. Our competitors in the field of immuno-oncology and cancer vaccines include AdaptImmune LLC, Advaxis, Inc., AstraZeneca PLC, Bristol Myers-Squibb Company, Celgene Corporation, GlaxoSmithKline plc, Idera Pharmaceuticals, Inc., Immune Design Corp., Incyte Corporation, Merck & Co., Inc., Merrimack Pharmaceuticals, Inc., NewLink Genetic Corporation, Novartis AG, Pfizer Inc., Roche Holding Ltd, Sanofi SA, and Verastem, Inc., among others. Many of our competitors have substantially greater financial, technical and other resources than we do, such as larger research and development staff and experienced marketing and manufacturing organizations and well-established sales forces. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors, either alone or with collaborative partners, may succeed in developing, acquiring or licensing on an exclusive basis drug or biologic products that are more effective, safer, more easily commercialized or less costly than our product candidates or may develop proprietary technologies or secure patent protection that we may need for the development of our technologies and products. We believe the key competitive factors that will affect the development and commercial success of our product candidates are efficacy, safety, tolerability, reliability, convenience of use, price and reimbursement.

Even if we obtain regulatory approval of our product candidates, the availability and price of our competitors' products could limit the demand and the price we are able to charge for our product candidates. We may not be able to implement our business plan if the acceptance of our product candidates is inhibited by price competition or the reluctance of physicians to switch from existing methods of treatment to our product candidates, or if physicians switch to other new drug or biologic products or choose to reserve our product candidates for use in limited circumstances. For additional information regarding our competition, see "Business—Competition."

We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.

Our ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. We are highly dependent on our management, scientific and medical personnel, including our President and Chief Executive Officer, our Chief Scientific Officer and our Chief Operating Officer. The loss of the services of any of our executive officers, other key employees, and other scientific and medical advisors, and our inability to find suitable replacements could result in delays in product development and harm our business.

We conduct our operations at our facility in Northern California. This region is headquarters to many other biopharmaceutical companies and many academic and research institutions. Competition for skilled personnel in our market is intense and may limit our ability to hire and retain highly qualified personnel on acceptable terms or at all.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we have provided stock options that vest over time. The value to employees of stock options that vest over time may be significantly affected by movements in our stock price that are beyond our control, and may at any time be insufficient to counteract more lucrative offers from other companies. Despite our efforts to retain valuable employees, members of our management, scientific and development teams may terminate their employment with us on short notice. Although we have employment agreements with our key employees, these employment agreements provide for at-will employment, which means that any of our employees could leave our employment at any time, with or without notice. We do not maintain "key man" insurance policies on the lives of these individuals or the lives of any of our other employees. Our success also depends on our ability to continue to attract, retain and motivate highly skilled junior, mid-level and senior managers as well as junior, mid-level and senior scientific and medical personnel.

We will need to grow the size of our organization, and we may experience difficulties in managing this growth.

At January 31, 2015, we had 50 full-time employees, including 39 employees engaged in research and development. As our development and commercialization plans and strategies develop, and as we transition into operating as a public company, we expect to need additional managerial, operational, sales, marketing, financial and other personnel. Future growth would impose significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining and motivating additional employees;
- managing our internal development efforts effectively, including the clinical and FDA review process for our product candidates, while complying with our contractual obligations to contractors and other third parties; and
- improving our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to commercialize our product candidates will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants to provide certain services, including substantially all aspects of regulatory approval, clinical management, and manufacturing. We cannot assure you that the services of independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by consultants is compromised for any reason, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval of our product candidates or otherwise advance our business. We cannot assure you that we will be able to manage our existing consultants or find other competent outside contractors and consultants on economically reasonable terms, or at all.

If we are not able to effectively expand our organization by hiring new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize our product candidates and, accordingly, may not achieve our research, development and commercialization goals.

Our internal computer systems, or those used by our CROs or other contractors or consultants, may fail or suffer security breaches.

Despite the implementation of security measures, our internal computer systems and those of our future CROs and other contractors and consultants are vulnerable to damage from computer viruses and unauthorized

access. While we have not to our knowledge experienced any such material system failure or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs and our business operations. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development and commercialization of our product candidates could be delayed.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our CROs and other contractors and consultants, could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or man-made disasters or business interruptions, for which we are predominantly self-insured. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. We rely on third-party manufacturers to produce and process our product candidates on a patient by patient basis. Our ability to obtain clinical supplies of our product candidates could be disrupted if the operations of these suppliers are affected by a man-made or natural disaster or other business interruption. Our corporate headquarters is in Northern California near major earthquake faults and fire zones. The ultimate impact on us, our significant suppliers and our general infrastructure of being located near major earthquake faults and fire zones and being consolidated in certain geographical areas is unknown, but our operations and financial condition could suffer in the event of a major earthquake, fire or other natural disaster.

Our employees, independent contractors, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk that our employees, independent contractors, consultants, commercial partners and vendors may engage in fraudulent or illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violates: (1) the laws of the FDA and other similar foreign regulatory bodies, including those laws requiring the reporting of true, complete and accurate information to such regulators; (2) manufacturing standards; (3) healthcare fraud and abuse laws in the United States and similar foreign fraudulent misconduct laws; or (4) laws that require the true, complete and accurate reporting of financial information or data. If we obtain FDA approval of any of our product candidates and begin commercializing those products in the United States, our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. These laws may impact, among other things, our current activities with principal investigators and research patients, as well as proposed and future sales, marketing and education programs. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, structuring and commissions, certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials.

Effective upon the completion of this offering, we intend to adopt a code of business conduct and ethics, but it is not always possible to identify and deter misconduct by our employees and other third parties, and the precautions we take to detect and prevent these activities may not be effective in controlling unknown or

unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us and we are not successful in defending ourselves or asserting our rights, those actions could result in the imposition of significant fines or other sanctions, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings and curtailment of operations, any of which could adversely affect our ability to operate our business and our results of operations. Whether or not we are successful in defending against such actions or investigations, we could incur substantial costs, including legal fees, and divert the attention of management in defending ourselves against any of these claims or investigations.

Even if we obtain regulatory approval of our product candidates, the products may not gain market acceptance among physicians, patients, hospitals, cancer treatment centers and others in the medical community.

The use of LADD or CDN product candidates as potential cancer treatments, even if approved, may not become broadly accepted by physicians, patients, hospitals, cancer treatment centers and others in the medical community. For example, certain of the product candidates that we are developing target a cell surface marker that may be present on non-cancerous cells as well as cancer cells. It is possible that our product candidates may kill these non-cancerous cells, which may result in unacceptable side effects, including death. Additional factors will influence whether our product candidates are accepted in the market, including:

- the clinical indications for which our product candidates are approved;
- physicians, hospitals, cancer treatment centers and patients considering our product candidates as a safe and effective treatment;
- the potential and perceived advantages of our product candidates over alternative treatments;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA or other regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA;
- the timing of market introduction of our product candidates as well as competitive products;
- the cost of treatment in relation to alternative treatments;
- the availability of adequate coverage, reimbursement and pricing by third-party payors and government authorities;
- the willingness of patients to pay out-of-pocket in the absence of coverage by third-party payors and government authorities;
- relative convenience and ease of administration, including as compared to alternative treatments and competitive therapies; and
- the effectiveness of our sales and marketing efforts.

In addition, we are utilizing replication competent vectors, and adverse publicity due to the ethical and social controversies surrounding the therapeutic use of such technologies, and reported side effects from any

clinical trials using these technologies or the failure of such trials to demonstrate that these therapies are safe and effective may limit market acceptance our product candidates. If our product candidates are approved but fail to achieve market acceptance among physicians, patients, hospitals, cancer treatment centers or others in the medical community, we will not be able to generate significant revenue.

Even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time if new products or technologies are introduced that are more favorably received than our products, are more cost effective or render our products obsolete.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if our product candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability or a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our product candidates;
- injury to our reputation;
- withdrawal of clinical trial participants;
- initiation of investigations by regulators;
- costs to defend the related litigation;
- a diversion of management’s time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- exhaustion of any available insurance and our capital resources;
- the inability to commercialize any product candidate; and
- a decline in our share price.

Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we develop, alone or with corporate collaborators.

We currently hold $5.0 million in product liability insurance in the aggregate, which we believe is customary for similarly situated companies and adequate to provide us with insurance coverage for foreseeable risks, but which may not be adequate to cover all liabilities that we may incur. Insurance coverage is increasingly

expensive. We may not be able to maintain insurance at a reasonable cost or in an amount adequate to satisfy any liability that may arise, if at all. Our insurance policy contains various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

Risks Related to Our Reliance on Third Parties

We have entered into licensing agreements with third parties for certain product candidates and as a result have placed restrictions on our development of certain product candidates for particular indications. We may elect to enter into additional licensing or collaboration agreements to partner our product candidates in territories we currently retain. Our dependence on such relationships may adversely affect our business.

Because we have limited resources, we may seek to enter into collaboration agreements with other pharmaceutical or biotechnology companies. Any failure by our partners to perform their obligations or any decision by our partners to terminate these agreements could negatively impact our ability to successfully develop, obtain regulatory approvals for and commercialize our product candidates. In the event we grant exclusive rights to such partners, we would be precluded from potential commercialization of our product candidates within the territories in which we have a partner. For example, we have entered into exclusive research and license agreements with Janssen for the development and commercialization of ADU-741, GVAX for prostate cancer and ADU-214. Under these agreements, we have granted Janssen exclusive rights to develop and commercialize LADD product candidates for prostate and lung cancers. In addition, we have granted Janssen exclusive rights to develop and commercialize LADD product candidates with certain antigens and antigen combinations implicated in lung and other cancers for all fields of use. In addition, any termination of our collaboration agreements will terminate the funding we may receive under the relevant collaboration agreement and may impair our ability to fund further development efforts and our progress in our development programs.

Our commercialization strategy for our product candidates may depend on our ability to enter into agreements with collaborators to obtain assistance and funding for the development and potential commercialization of our product candidates in the territories in which we seek to partner. Despite our efforts, we may be unable to secure additional collaborative licensing or other arrangements that are necessary for us to further develop and commercialize our product candidates. Supporting diligence activities conducted by potential collaborators and negotiating the financial and other terms of a collaboration agreement are long and complex processes with uncertain results. Even if we are successful in entering into one or more collaboration agreements, collaborations may involve greater uncertainty for us, as we have less control over certain aspects of our collaborative programs than we do over our proprietary development and commercialization programs. We may determine that continuing a collaboration under the terms provided is not in our best interest, and we may terminate the collaboration. Our potential future collaborators could delay or terminate their agreements, and as a result our product candidates may never be successfully commercialized.

Further, our potential future collaborators may develop alternative products or pursue alternative technologies either on their own or in collaboration with others, including our competitors, and the priorities or focus of our collaborators may shift such that our product candidates receive less attention or resources than we would like, or they may be terminated altogether. We may also enter into agreements with collaborators to share in the burden of conducting clinical trials, manufacturing and marketing our product candidates. Any such actions by our potential future collaborators may adversely affect our business prospects and ability to earn revenues. In addition, we could have disputes with our potential future collaborators, such as the interpretation of terms in our agreements. Any such disagreements could lead to delays in the development or commercialization of our product candidates or could result in time-consuming and expensive litigation or arbitration, which may not be resolved in our favor.

We rely and will rely on third parties to conduct our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates.

We depend and plan to continue to depend upon independent investigators, other third parties and collaborators, such as universities, medical institutions, CROs and strategic partners, to conduct our preclinical and clinical trials under agreements with us. We expect to have to negotiate budgets and contracts with CROs and study sites, which may result in delays to our development timelines and increased costs. We rely and plan to continue relying heavily on these third parties over the course of our clinical trials, and we control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. We and these third parties are required to comply with good clinical practices, or GCPs, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for product candidates in clinical development. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of these third parties fail to comply with applicable GCP regulations, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, such regulatory authorities will determine that any of our clinical trials comply with the GCP regulations. In addition, our clinical trials must be conducted with biologic product produced under current good manufacturing practices, or cGMPs, regulations and will require a large number of test patients. Our failure or any failure by these third parties to comply with these regulations or to recruit a sufficient number of patients may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

Any third parties conducting our clinical trials are not our employees and, except for remedies available to us under our agreements with such third parties, we cannot control whether or not they devote sufficient time and resources to our ongoing preclinical, clinical and nonclinical programs. These third parties may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical studies or other drug development activities, which could affect their performance on our behalf. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to complete development of, obtain regulatory approval of or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenue could be delayed.

Switching or adding third parties to conduct our clinical trials involves substantial cost and requires extensive management time and focus. In addition, there is a natural transition period when a new third party commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with third parties conducting our clinical trials, we cannot assure you that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects.

We rely and expect to continue to rely on third parties to manufacture our clinical product supplies, and we intend to rely on third parties to produce and process our product candidates, if approved, and our commercialization of any of our product candidates could be stopped, delayed or made less profitable if those third parties fail to obtain approval of government regulators, fail to provide us with sufficient quantities of drug product or fail to do so at acceptable quality levels or prices.

We do not currently have nor do we plan to acquire the infrastructure or capability internally to manufacture our clinical supplies for use in the conduct of our clinical trials, and we lack the resources and the capability to manufacture any of our product candidates on a clinical or commercial scale. We currently rely on outside vendors to manufacture our clinical supplies of our product candidates and plan to continue relying on third parties to manufacture our product candidates on a commercial scale, if approved.

The facilities used by our contract manufacturers to manufacture our product candidates must be approved by the FDA pursuant to inspections that will be conducted after we submit our marketing applications to the FDA. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements, known as cGMPs, for manufacture of our product candidates. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved.

We do not yet have sufficient information to reliably estimate the cost of the commercial manufacturing of our product candidates, and the actual cost to manufacture our product candidates could materially and adversely affect the commercial viability of our product candidates. As a result, we may never be able to develop a commercially viable product.

In addition, our reliance on third-party manufacturers exposes us to the following additional risks:

- We may be unable to identify manufacturers on acceptable terms or at all.
- Our third-party manufacturers might be unable to timely formulate and manufacture our product or produce the quantity and quality required to meet our clinical and commercial needs, if any.
- Contract manufacturers may not be able to execute our manufacturing procedures appropriately.
- Our future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products.
- Manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state agencies to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards.
- We may not own, or may have to share, the intellectual property rights to any improvements made by our third-party manufacturers in the manufacturing process for our products.
- Our third-party manufacturers could breach or terminate their agreement with us.

Each of these risks could delay our clinical trials, the approval, if any of our product candidates by the FDA or the commercialization of our product candidates or result in higher costs or deprive us of potential product revenue. In addition, we rely on third parties to perform release testing on our product candidates prior to delivery to patients. If these tests are not appropriately conducted and test data are not reliable, patients could be put at risk of serious harm and could result in product liability suits.

The manufacture of medical products is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of biologic products often encounter difficulties in production, particularly in scaling up and validating initial production and absence of contamination. These problems include difficulties with production costs and yields, quality control, including stability of the product, quality assurance testing, operator error, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. Furthermore, if contaminants are discovered in our supply of our product candidates or in the manufacturing facilities, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. We cannot assure you that any stability or other issues relating to the manufacture of our product candidates will not occur in the future. Additionally, our manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments. If our manufacturers were to encounter any of these difficulties, or otherwise fail to comply with their contractual obligations, our ability to provide our product candidates to patients in clinical trials would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense or terminate clinical trials completely.

We may form or seek strategic alliances or enter into additional licensing arrangements in the future, and we may not realize the benefits of such alliances or licensing arrangements.

We may form or seek strategic alliances, create joint ventures or collaborations or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our product candidates and any future product candidates that we may develop. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing stockholders or disrupt our management and business. In addition, we face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy. If we license products or businesses, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture. We cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction. Any delays in entering into new strategic partnership agreements related to our product candidates could delay the development and commercialization of our product candidates in certain geographies for certain indications, which would harm our business prospects, financial condition and results of operations.

If our third-party manufacturers use hazardous and biological materials in a manner that causes injury or violates applicable law, we may be liable for damages.

Our research and development activities involve the controlled use of potentially hazardous substances, including chemical and biological materials, by our third-party manufacturers. Our manufacturers are subject to federal, state and local laws and regulations in the United States governing the use, manufacture, storage, handling and disposal of medical and hazardous materials. Although we believe that our manufacturers' procedures for using, handling, storing and disposing of these materials comply with legally prescribed

standards, we cannot completely eliminate the risk of contamination or injury resulting from medical or hazardous materials. As a result of any such contamination or injury, we may incur liability or local, city, state or federal authorities may curtail the use of these materials and interrupt our business operations. In the event of an accident, we could be held liable for damages or penalized with fines, and the liability could exceed our resources. We do not have any insurance for liabilities arising from medical or hazardous materials. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production efforts, which could harm our business, prospects, financial condition or results of operations.

Risks Related to Government Regulation

The FDA regulatory approval process is lengthy and time-consuming, and we may experience significant delays in the clinical development and regulatory approval of our product candidates.

The time required to obtain approval by the FDA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. We have not previously submitted a BLA or NDA to the FDA, or similar marketing applications filings to comparable foreign authorities. A BLA or NDA must include extensive preclinical and clinical data and supporting information to establish the product candidate's safety, purity and potency, or safety and effectiveness for each desired indication. The BLA or NDA must also include significant information regarding the chemistry, manufacturing and controls for the product. We expect the novel nature of our product candidates to create further challenges in obtaining regulatory approval. For example, the FDA has limited experience with commercial development of immunotherapies for cancer. We also intend to obtain regulatory approval of future product candidates regardless of cancer type or origin, which the FDA may have difficulty accepting if our clinical trials only involved cancers of certain origins. Accordingly, the regulatory approval pathway for our product candidates may be uncertain, complex, expensive and lengthy, and approval may not be obtained.

Our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of a BLA or other submission or to obtain regulatory approval in the United States or elsewhere;

- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; or

- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

This lengthy approval process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval to market our product candidates, which would significantly harm our business, results of operations and prospects.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our products, may grant approval contingent on the performance of costly post-marketing clinical trials or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of our product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, while a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even if the FDA grants marketing approval of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion of the product candidate in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and greater than, those in the United States, including additional preclinical studies or clinical trials as clinical studies conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

We may also submit marketing applications in other countries. Regulatory authorities in jurisdictions outside of the United States have requirements for approval of product candidates with which we must comply prior to marketing in those jurisdictions. Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we fail to comply with the regulatory requirements in international markets and/or receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

Even if we receive regulatory approval of our product candidates, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.

Any regulatory approvals that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or the conditions of approval, or contain requirements for potentially costly post-market testing and surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a risk evaluation and mitigation strategy, or REMS, as a condition of approval of our product candidates, which could include requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient

registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export and recordkeeping for our product candidates will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and GCPs for any clinical trials that we conduct post-approval. Later discovery of previously unknown problems with our product candidates, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of our product candidates, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- fines, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or suspension or revocation of license approvals;
- product seizure or detention, or refusal to permit the import or export of our product candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

In addition, if we were able to obtain accelerated approval of our pancreatic cancer combination of CRS-207 and GVAX Pancreas, the FDA would require us to conduct a confirmatory study to verify the predicted clinical benefit and additional safety studies. The results from the confirmatory study may not support the clinical benefit, which would result in the approval being withdrawn.

Coverage and reimbursement may be limited or unavailable in certain market segments for our product candidates, which could make it difficult for us to sell our product candidates profitably.

Successful sales of our product candidates, if approved, depend, in part, on the availability of adequate coverage and reimbursement from third-party payors. In addition, because our product candidates represent new approaches to the treatment of cancer, we cannot accurately estimate the potential revenue from our product candidates.

Patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Adequate coverage and reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payors is critical to new product acceptance.

Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which drugs and treatments they will cover and the amount of reimbursement. Reimbursement by a third-party payor may depend upon a number of factors, including, but not limited to, the third-party payor's determination that use of a product is:

- a covered benefit under its health plan;

- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Obtaining coverage and reimbursement approval of a product from a government or other third-party payor is a time-consuming and costly process that could require us to provide to the payor supporting scientific, clinical and cost-effectiveness data for the use of our products. Even if we obtain coverage for a given product, the resulting reimbursement payment rates might not be adequate for us to achieve or sustain profitability or may require co-payments that patients find unacceptably high. Further, we plan to develop our product candidates for use in combination with other products, which may make them cost prohibitive or less likely to be covered by third-party payors. Patients are unlikely to use our product candidates unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our product candidates.

In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific, clinical and cost-effectiveness data and support for the use of our product candidates to each payor separately, with no assurance that coverage and adequate reimbursement will be obtained. We intend to seek approval to market our product candidates in both the United States and in selected foreign jurisdictions. If we obtain approval in one or more foreign jurisdictions for our product candidates, we will be subject to rules and regulations in those jurisdictions. In some foreign countries, particularly those in the EU, the pricing of biologics is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after obtaining marketing approval of a product candidate.

Recently enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and affect the prices we may obtain.

Third-party payors, whether domestic or foreign, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to the health care system that could impact our ability to sell our products profitably. In particular, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively, the Affordable Care Act, was enacted. The Affordable Care Act and its implementing regulations, among other things, subjected biologic products to potential competition by lower-cost biosimilars, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for certain drugs and biologics, including our product candidates, that are inhaled, infused, instilled, implanted or injected, increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program, extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjected manufacturers to new annual fees and taxes for certain branded prescription drugs, provided incentives to programs that increase the federal government’s comparative effectiveness research and established a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer’s outpatient drugs to be covered under Medicare Part D.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending

a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in April 2013, and will remain in effect through 2024 unless additional Congressional action is taken. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, or the ATRA, which, among other things, further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- the demand for our product candidates, if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our products;
- our ability to generate revenue and achieve or maintain profitability;
- the level of taxes that we are required to pay; and
- the availability of capital.

Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our future profitability.

Our current and future relationships with customers and third-party payors in the United States and elsewhere may be subject, directly or indirectly, to applicable anti-kickback, fraud and abuse, false claims, transparency, health information privacy and security and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act, which may constrain the business or financial arrangements and relationships through which we sell, market and distribute any drugs for which we obtain marketing approval. In addition, we may be subject to transparency laws and patient privacy regulation by the U.S. federal and state governments and by governments in foreign jurisdictions in which we conduct our business. The applicable federal, state and foreign healthcare laws and regulations that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. A person or entity can be found guilty of violating the statute without actual knowledge of the statute or specific intent to violate it. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act;

- federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other third-party payors that are false or fraudulent or knowingly making a false statement to improperly avoid, decrease or conceal an obligation to pay money to the federal government;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity can be found guilty of violating these statutes without actual knowledge of the statutes or specific intent to violate them;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization;

- the federal Physician Payment Sunshine Act, created under the Affordable Care Act, and its implementing regulations, which require manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the United States Department of Health and Human Services, or HHS, information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members and payments or other "transfers of value" made to such physician owners;

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and

- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available under such laws, it is possible that some of our business activities could be subject to challenge under one or more of such laws. The scope and enforcement of each of these laws is uncertain and subject to

rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal and state enforcement bodies have recently increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry. Responding to investigations can be time-and resource-consuming and can divert management's attention from the business. Additionally, as a result of these investigations, healthcare providers and entities may have to agree to additional onerous compliance and reporting requirements as part of a consent decree or corporate integrity agreement. Any such investigation or settlement could increase our costs or otherwise have an adverse effect on our business.

If our operations are found to be in violation of any of the laws described above or any other government regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in federal and state healthcare programs and the curtailment or restricting of our operations, any of which could harm our ability to operate our business and our financial results. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

Risks Related to Our Intellectual Property

If we are unable to protect our intellectual property rights or if our intellectual property rights are inadequate for our technology and product candidates, our competitive position could be harmed.

Our commercial success will depend in part on our ability to obtain and maintain patent and other intellectual property protection in the United States and other countries with respect to our proprietary technology and products. We rely on trade secret, patent, copyright and trademark laws, and confidentiality, licensing and other agreements with employees and third parties, all of which offer only limited protection. We seek to protect our proprietary position by filing and prosecuting patent applications in the United States and abroad related to our novel technologies and products that are important to our business.

The patent positions of biotechnology and pharmaceutical companies generally are highly uncertain, involve complex legal and factual questions and have in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patents, including those patent rights licensed to us by third parties, are highly uncertain. The steps we or our licensors have taken to protect our proprietary rights may not be adequate to preclude misappropriation of our proprietary information or infringement of our intellectual property rights, both inside and outside of the United States Further, the examination process may require us or our licensors to narrow the claims for our pending patent applications, which may limit the scope of patent protection that may be obtained if these applications issue. The rights already granted under any of our currently issued patents or those licensed to us and those that may be granted under future issued patents may not provide us with the proprietary protection or competitive advantages we are seeking. If we or our licensors are unable to obtain and maintain patent protection for our technology and products, or if the scope of the patent protection obtained is not sufficient, our competitors could develop and commercialize technology and products similar or superior to ours, and our ability to successfully commercialize our technology and products may be adversely affected. It is also possible that we or our licensors will fail to identify patentable aspects of inventions made in the course of our development and commercialization activities before it is too late to obtain patent protection on them.

With respect to patent rights, we do not know whether any of the pending patent applications for any of our compounds or biologic products will result in the issuance of patents that effectively protect our technology or products, or if any of our issued patents or if any of our or our licensors' issued patents will effectively prevent others from commercializing competitive technologies and products. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing or in some cases not at all, until they are

issued as a patent. Therefore, we cannot be certain that we or our licensors were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we or our licensors were the first to file for patent protection of such inventions.

Our pending applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. Because the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, issued patents that we own or have licensed from third parties may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in the loss of patent protection, the narrowing of claims in such patents or the invalidity or unenforceability of such patents, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection for our technology and products. Protecting against the unauthorized use of our or our licensor's patented technology, trademarks and other intellectual property rights is expensive, difficult and may in some cases not be possible. In some cases, it may be difficult or impossible to detect third-party infringement or misappropriation of our intellectual property rights, even in relation to issued patent claims, and proving any such infringement may be even more difficult. For example, two of our patents, U.S. Patent Nos. 7,842,289 and 7,935,804, related to our LADD technology platform were challenged in an *ex parte* reexamination proceeding, which is now concluded. No claims of U.S. Patent No. 7,842,289 were canceled or amended as a result of the e*x parte* reexamination. Of the original 84 claims of U.S. Patent No. 7,935,804, 12 were amended and 22 were canceled to overcome the objections raised in the e*x parte* reexamination, but we believe the remaining claims still cover our LADD technology platform.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could harm our business.

Our commercial success depends upon our ability to develop, manufacture, market and sell our product candidates, and to use our related proprietary technologies without infringing the intellectual property rights of third parties. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our product candidates, including interference or derivation proceedings before the U.S. Patent and Trademark Office, or USPTO. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future. If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue commercializing our product candidates. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Under certain circumstances, we could be forced, including by court order, to cease commercializing our product candidates. In addition, in any such proceeding or litigation, we could be found liable for monetary damages. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business. Any claims by third parties that we have misappropriated their confidential information or trade secrets could have a similar negative impact on our business.

While our product candidates are in preclinical studies and clinical trials, we believe that their use in these preclinical studies and clinical trials falls within the scope of the exemptions provided by 35 U.S.C. Section 271(e) in the United States, which exempts from patent infringement liability activities reasonably related to the development and submission of information to the FDA. As our product candidates progress toward commercialization, the possibility of a patent infringement claim against us increases. We attempt to ensure that our product candidates and the methods we employ to manufacture them, as well as the methods for their use we intend to promote, do not infringe other parties' patents and other proprietary rights. We cannot assure you they do not, however, and competitors or other parties may assert that we infringe their proprietary rights in any event.

In addition, we are testing our product candidates administered with other product candidates or products that are covered by patents held by other companies or institutions. In the event that a labeling instruction is required in product packaging recommending that combination, we could be accused of, or held liable for, infringement of the third-party patents covering the product candidate or product recommended for

administration with our product candidates. In such a case, we could be required to obtain a license from the other company or institution to use the required or desired package labeling, which may not be available on commercially reasonable terms, or at all.

We are aware of certain U.S. and foreign patents owned by a certain third party with claims that are broadly directed to a *Listeria* vaccine strain that contains certain proteins, some of which expire as late as 2021. These patents could be construed to cover CRS-207. In addition, we are aware of certain U.S. and foreign patents owned by a certain third party with claims that are broadly directed methods of using *Listeria*-based vaccines to treat certain cancers, which expire in 2017. The patents expiring in 2017 may be construed to cover our LADD product candidate, CRS-207, as well as the product candidates licensed to Janssen, ADU-214 and ADU-741. Notwithstanding, we do not currently expect a product launch prior to 2017 and, therefore, the patents expiring in 2017 would not appear relevant to our commercialization plans unless our approval was accelerated or they somehow were extended. Generally, conducting clinical trials and other development activities in the United States is not considered an act of infringement. If and when products are approved by the FDA, that certain third party may then seek to enforce its patents by filing a patent infringement lawsuit against us or our licensee(s). In such lawsuit, we or our licensee(s) may incur substantial expenses defending our rights or our licensee(s) rights to commercialize such product candidates, and in connection with such lawsuit and under certain circumstances, it is possible that we or our licensee(s) could be required to cease or delay the commercialization of a product candidate and/or be required to pay monetary damages or other amounts, including royalties on the sales of such products. Moreover, such lawsuit may also consume substantial time and resources of our or our licensee(s) management team and board of directors. The threat or consequences of such a lawsuit may also result in royalty and other monetary obligations, which may adversely affect our results of operations and financial condition.

If we breach any of our license agreements, it could have a material adverse effect on our commercialization efforts for our product candidates.

Our commercial success depends on our ability, and the ability of our licensors and collaborators, to develop, manufacture, market and sell our product candidates and use our licensors' or collaborators' proprietary technologies without infringing the property rights of third parties. For example, we have entered into license agreements with the Johns Hopkins University and the Regents of the University of California related to our LADD product candidates, and license agreements with Karagen Pharmaceuticals, Inc. and the Regents of the University of California related to our CDN product candidates, and we expect to enter into additional licenses in the future. If we fail to comply with the obligations under these agreements, including payment and diligence terms, our licensors may have the right to terminate these agreements, in which event we may not be able to develop, manufacture, market or sell any product that is covered by these agreements or may face other penalties under the agreements. Such an occurrence could materially adversely affect the value of the product candidate being developed under any such agreement. Termination of these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or reinstated agreements, which may not be available to us on equally favorable terms, or at all, or cause us to lose our rights under these agreements, including our rights to intellectual property or technology important to our development programs.

We have granted Janssen certain rights to file, prosecute, maintain and enforce specific patents that relate to ADU-214, ADU-741 and GVAX Prostate. Our inability to control the filing, prosecution, maintenance and enforcement of such patents could materially harm our business.

As part of the agreements with Janssen related to ADU-214, ADU-741 and GVAX Prostate, we have granted Janssen the initial right and responsibility to file, prosecute, maintain and enforce any patents and patent applications that contain pending or issued claims that are specifically directed to the antigens contained in ADU-214, ADU-741 and GVAX Prostate. For example, if a third party is infringing one of the antigen-specific patents by marketing a product that is identical or similar to ADU-214 for the treatment of lung cancer (such as a biosimilar of ADU-214), Janssen would have the initial right to enforce the antigen-specific patents against the

third party. If we do not have the ability to control the enforcement of the antigen-specific patents against a third party that is marketing a product that is identical or similar to ADU-214, ADV-741 or GVAX Prostate, our business may be materially harmed.

We have granted Janssen the right to determine patent term extension strategy for specific patents that relate to ADU-214, ADU-741 and GVAX Prostate. Our inability to control the patent term extension strategy could materially harm our business.

As part of the license agreements with Janssen related to ADU-214, ADU-741 and GVAX Prostate, we have granted Janssen the right and responsibility to determine the strategy to apply for the extension of the term of any licensed patents that are specifically directed to the antigen contained in ADU-214 or the antigens contained in ADU-741. Janssen may decide not to apply for extension of any term of a licensed patent that may otherwise be eligible for extension, which could decrease the royalties received from Janssen for the sale of ADU-214, ADU-741 and/or GVAX Prostate. If we allow Janssen to also apply for extension of a licensed patent for ADU-214, ADU-714 and/or GVAX Prostate that may also be relevant to another product candidates that we may be developing and commercializing, we could be prevented from seeking extension of the same patent for our product. If we do not have the ability to control the strategy for patent term extension of any of our licensed patents, our business may be materially harmed.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on all of our product candidates throughout the world would be prohibitively expensive, and our or our licensors' intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws and practices of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we and our licensors may not be able to prevent third parties from practicing our and our licensors' inventions in all countries outside the United States, or from selling or importing products made using our and our licensors' inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products, and may export otherwise infringing products to territories where we or our licensors have patent protection, but where enforcement is not as strong as that in the United States. These products may compete with our products in jurisdictions where we do not have any issued patents and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our or our licensor's patents or marketing of competing products in violation of our proprietary rights generally in those countries. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, could put our and our licensors' patents at risk of being invalidated or interpreted narrowly and our and our licensors' patent applications at risk of not issuing and could provoke third parties to assert claims against us or our licensors. We or our licensors may not prevail in any lawsuits that we or our licensors initiate and the damages or other remedies awarded, if any, may not be commercially meaningful.

The laws of certain foreign countries may not protect our rights to the same extent as the laws of the United States, and these foreign laws may also be subject to change. For example, methods of treatment and manufacturing processes may not be patentable in certain jurisdictions, and the requirements for patentability may differ in certain countries, particularly developing countries. Furthermore, generic and/or biosimilar product manufacturers or other competitors may challenge the scope, validity or enforceability of our or our licensors' patents, requiring us or our licensors to engage in complex, lengthy and costly litigation or other proceedings.

Generic or biosimilar product manufacturers may develop, seek approval for, and launch biosimilar versions or generic versions, respectively, of our products. The FDA has published four draft guidance documents on biosimilar product development. For the FDA to approve a biosimilar product as interchangeable with a reference product, the agency must find that the biosimilar product can be expected to produce the same clinical results as the reference product and, for products administered multiple times, the biosimilar and the reference biologic may be switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. However, complexities associated with the larger, and often more complex, structures of biological products, as well as the process by which such products are manufactured, pose significant hurdles to implementation, which are still being worked out by the FDA. To date, no biosimilar or interchangeable biologic has been licensed under the Biologics Price Competition and Innovation Act of 2009, or BPCIA, framework, although such approvals have occurred in Europe, and it is anticipated that the FDA will approve a biosimilar in the relatively near future. If any of our product candidates are approved by the FDA, the approval of a biologic product biosimilar to one of our products could have a material impact on our business. In particular, a biosimilar could be significantly less costly to bring to market and priced significantly lower than our products, if approved by the FDA. See "Business—Government Regulation and Product Approval—U.S. Patent Term Restoration and Marketing Exclusivity" for a more detailed description of the BPCIA.

Some jurisdictions may require us to grant licenses to third parties. Such compulsory licenses could be extended to include some of our product candidates, which may limit our potential revenue opportunities.

Many countries, including European Union countries, have compulsory licensing laws under which a patent owner may be compelled under certain circumstances to grant licenses to third parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our and our licensors' efforts to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license.

Patent terms may be inadequate to protect our competitive position on our products for an adequate amount of time, and our product candidates for which we intend to seek approval as biologic products may face competition sooner than anticipated.

Given the amount of time required for the development, testing and regulatory review of new product candidates, such as our product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. Currently, we own or license patent families that cover our LADD technology platform, which expire between 2022 and 2027, subject to any extensions, and we own or license patent families that cover *Listeria* strains engineered to express particular antigens, which expire between 2031 and 2033. We expect to seek extensions of patent terms in the United States and, if available, in other countries where we are prosecuting patents. In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent term extension of up to five years beyond the normal expiration of the patent, which is limited to the approved indication (or any additional indications approved during the period of extension). However, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case.

The BPCIA established legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as "interchangeable" based on its similarity to an existing brand product. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years

after the original branded product was approved under a BLA. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty. While it is uncertain when such processes intended to implement BPCIA may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for our biological products.

We anticipate being awarded market exclusivity for each of our biological product candidates that is subject to its own BLA for 12 years in the United States, 10 years in Europe and significant durations in other markets. However, the term of the patents that cover such product candidates may not extend beyond the applicable market exclusivity awarded by a particular country. For example, in the United States, if all of the patents that cover our particular biologic product expire before the 12-year market exclusivity expires, a third party could submit a marketing application for a biosimilar product four years after approval of our biologic product, and the FDA could immediately review the application and approve the biosimilar product for marketing 12 years after approval of our biologic. Alternatively, a third party could submit a BLA for a similar or identical product any time after approval of our biologic product, and the FDA could immediately review and approve the similar or identical product for marketing and the third party could begin marketing the similar or identical product upon expiry of all of the patents that cover our particular biologic product.

Additionally, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. The extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

Changes in patent law, including recent patent reform legislation, could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

As is the case with other pharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the pharmaceutical industry involve technological and legal complexity, and obtaining and enforcing pharmaceutical patents is costly, time-consuming, and inherently uncertain. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. For example, the U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our and our licensors' ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our and our licensors' ability to obtain new patents or to enforce existing patents and patents we and our licensors may obtain in the future. Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our and our licensors' patent applications and the enforcement or defense of our or our licensors' issued patents.

In September 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. In particular, under the Leahy-Smith Act, the United States transitioned in March 2013 to a "first to file" system in which the first inventor to file a patent application will be entitled to the patent. Third parties are allowed to submit prior art before the issuance of a patent by the USPTO and may become involved in opposition, derivation, reexamination, inter-partes review or interference proceedings challenging our patent rights or the patent rights of our licensors. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our or our licensors' patent rights, which could adversely affect our competitive position.

The USPTO is currently developing regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, did not become effective until March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents and those licensed to us.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submissions, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for noncompliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors fail to maintain the patents and patent applications covering our product candidates, our competitive position would be adversely affected.

We may become involved in lawsuits to protect or enforce our intellectual property, which could be expensive, time consuming and unsuccessful and have a material adverse effect on the success of our business.

Competitors may infringe our patents or misappropriate or otherwise violate our intellectual property rights. To counter infringement or unauthorized use, litigation may be necessary in the future to enforce or defend our intellectual property rights, to protect our trade secrets or to determine the validity and scope of our own intellectual property rights or the proprietary rights of others. Also, third parties may initiate legal proceedings against us or our licensors to challenge the validity or scope of intellectual property rights we own or control. These proceedings can be expensive and time consuming. Many of our current and potential competitors have the ability to dedicate substantially greater resources to defend their intellectual property rights than we can. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property. Litigation could result in substantial costs and diversion of management resources, which could harm our business and financial results. In addition, in an infringement proceeding, a court may decide that a patent owned by or licensed to us is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments in any such proceedings. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of shares of our common stock.

We may be subject to claims by third parties asserting that our licensors, employees or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Many of our employees and our licensors' employees, including our senior management, were previously employed at universities or at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Some of these employees, including each member of our senior

management, executed proprietary rights, non-disclosure and non-competition agreements, or similar agreements, in connection with such previous employment. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such third party. Litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or sustain damages. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

- Others may be able to make compounds or biologics that are the same as or similar to our product candidates but that are not covered by the claims of the patents that we own or have exclusively licensed.
- We or our licensors or any strategic partners might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or have exclusively licensed.
- We or our licensors might not have been the first to file patent applications covering certain of our inventions.
- Others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights.
- It is possible that our pending patent applications will not lead to issued patents.
- Issued patents that we own or have exclusively licensed may not provide us with any competitive advantages, or may be held invalid or unenforceable as a result of legal challenges.
- Our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets.
- We may not develop additional proprietary technologies that are patentable.
- The patents of others may have an adverse effect on our business.

If we are unable to protect the confidentiality of our proprietary information and know-how, the value of our technology and products could be adversely affected.

In addition to patent protection, we also rely on other proprietary rights, including protection of trade secrets, know-how and confidential and proprietary information. To maintain the confidentiality of trade secrets and proprietary information, we will enter into confidentiality agreements with our employees, consultants and

collaborators upon the commencement of their relationships with us. These agreements require that all confidential information developed by the individual or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not disclosed to third parties. Our agreements with employees also provide that any inventions conceived by the individual in the course of rendering services to us shall be our exclusive property. However, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms. In the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets or other confidential information. To the extent that our employees, consultants or contractors use technology or know-how owned by third parties in their work for us, disputes may arise between us and those third parties as to the rights in related inventions.

Adequate remedies may not exist in the event of unauthorized use or disclosure of our confidential information. The disclosure of our trade secrets would impair our competitive position and may materially harm our business, financial condition and results of operations.

Risks Related to our Financial Results

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or our guidance.

Our quarterly and annual operating results may fluctuate significantly in the future, which makes it difficult for us to predict our future operating results. From time to time, in addition to existing agreements with Janssen, we may enter into license or collaboration agreements with other companies that include development funding and significant upfront and milestone payments and/or royalties, which may become an important source of our revenue. Accordingly, our revenue may depend on development funding and the achievement of development and clinical milestones under current and any potential future license and collaboration agreements and sales of our products, if approved. These upfront and milestone payments may vary significantly from period to period and any such variance could cause a significant fluctuation in our operating results from one period to the next.

In addition, we measure compensation cost for stock-based awards made to employees at the grant date of the award, based on the fair value of the award as determined by our board of directors, and recognize the cost as an expense over the employee's requisite service period. As the variables that we use as a basis for valuing these awards change over time, including, after the closing of this offering, our underlying stock price and stock price volatility, the magnitude of the expense that we must recognize may vary significantly.

Furthermore, our operating results may fluctuate due to a variety of other factors, many of which are outside of our control and may be difficult to predict, including the following:

- the timing and cost of, and level of investment in, research and development activities relating to our current and any future product candidates, which will change from time to time;
- our ability to enroll patients in clinical trials and the timing of enrollment;
- the cost of manufacturing our current and any future product candidates, which may vary depending on FDA guidelines and requirements, the quantity of production and the terms of our agreements with manufacturers;
- expenditures that we will or may incur to acquire or develop additional product candidates and technologies;
- the timing and outcomes of clinical studies for our product candidates or competing product candidates;

- competition from existing and potential future drugs that compete with our product candidates, and changes in the competitive landscape of our industry, including consolidation among our competitors or partners;
- any delays in regulatory review or approval of CRS-207 or any of our other product candidates;
- the level of demand for our product candidates, if approved, which may fluctuate significantly and be difficult to predict;
- the risk/benefit profile, cost and reimbursement policies with respect to our products candidates, if approved, and existing and potential future drugs that compete with our product candidates;
- our ability to commercialize our product candidates, if approved, inside and outside of the United States, either independently or working with third parties;
- our ability to establish and maintain collaborations, licensing or other arrangements;
- our ability to adequately support future growth;
- potential unforeseen business disruptions that increase our costs or expenses;
- future accounting pronouncements or changes in our accounting policies; and
- the changing and volatile global economic environment.

The cumulative effect of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance. This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated revenue and/or earnings guidance we may provide.

We previously identified a material weakness in our internal control over financial reporting at December 31, 2012 and December 31, 2013, and we may identify additional material weaknesses in the future that may cause us to fail to meet our reporting obligations or result in material misstatements of our financial statements. If we fail to remediate any material weaknesses or if we fail to establish and maintain effective control over financial reporting, our ability to accurately and timely report our financial results could be adversely affected.

In connection with the contemporaneous audit of our consolidated financial statements for the years ended December 31, 2012 and 2013, we identified a control deficiency in the design and operation of our internal control over financial reporting that constituted a material weakness. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our financial statements will not be prevented or detected on a timely basis.

The material weakness identified in our internal control over financial reporting related to our lack of sufficient financial reporting and accounting personnel with the technical expertise to appropriately account for complex, non-routine transactions, primarily related to convertible debt and equity. The material weakness resulted in adjustments to our consolidated financial statements for the years ended December 31, 2012 and

2013. During 2013 and 2014, we took certain actions that remediated the material weakness, which included hiring additional personnel with public company financial reporting expertise to build our financial management and reporting infrastructure, and engaging a third party to provide additional advisory services with respect to technical accounting matters. We intend to further develop and document our accounting policies and financial reporting procedures. However, we cannot assure you that these measures will be sufficient to remediate or prevent future material weaknesses or significant deficiencies from occurring. We also cannot assure you that we have identified all of our existing material weaknesses.

Neither we nor our independent registered public accounting firm has performed an evaluation of our internal control over financial reporting during any period in accordance with the provisions of the Sarbanes-Oxley Act. In light of the control deficiencies and the resulting material weakness that were previously identified as a result of the limited procedures performed, we believe that it is possible that, had we and our independent registered public accounting firm performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act, additional material weaknesses and significant control deficiencies may have been identified. However, for as long as we remain an "emerging growth company" as defined in the JOBS Act, we intend to take advantage of the exemption permitting us not to comply with the requirement that our independent registered public accounting firm provide an attestation on the effectiveness of our internal control over financial reporting.

If we identify future material weaknesses in our internal controls over financial reporting or fail to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to accurately report our financial results, or report them within the timeframes required by law or stock exchange regulations. Failure to comply with Section 404 of the Sarbanes-Oxley Act could also potentially subject us to sanctions or investigations by the SEC or other regulatory authorities. We cannot assure that in the future, additional material weaknesses will not exist or otherwise be discovered, any of which could adversely affect our reputation, financial condition and results of operations.

Our ability to use our net operating loss carryforwards to offset future taxable income, and our ability to use our tax credit carryforwards, may be subject to certain limitations.

In general, a corporation that undergoes an "ownership change" under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, is subject to limitations on its ability to utilize its pre-change net operating loss carryforwards, or NOLs, to offset future taxable income and its ability to utilize tax credit carryforwards. As of December 31, 2014, we reported U.S. federal and state NOLs of approximately $51.2 million and $6.0 million, respectively. In general, an "ownership change" occurs if the aggregate stock ownership of one or more stockholders or groups of stockholders who owns at least 5% of a corporation's stock increases its ownership by more than 50 percentage points over its lowest ownership percentage within a specified testing period. We performed a Section 382 analysis and believe that we experienced multiple ownership changes under Section 382 of the Code. As a result of the ownership changes, the Company estimates that the utilization of $42.4 million and $5.0 million of federal and state NOLs, respectively, is subject to annual limitations under Section 382. Furthermore, future changes in our stock ownership, such as certain stock issuances (including in connection with this offering) and transfers between stockholders, some of which changes are outside of our control, could result in ownership changes under Section 382 of the Code. For these reasons, we may not be able to utilize a material portion of our NOLs and tax credit carryforwards, even if we attain profitability.

Risks Related to This Offering and Ownership of our Common Stock

The price of our stock may be volatile, and you could lose all or part of your investment.

The trading price of our common stock following this offering is likely to be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control, including limited trading volume. In addition to the factors discussed in this "Risk Factors" section and elsewhere in this prospectus, these factors include:

- the commencement, enrollment or results of the planned clinical trials of our product candidates or any future clinical trials we may conduct, or changes in the development status of our product candidates;
- any delay in our regulatory filings for our product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings, including without limitation the FDA's issuance of a "refusal to file" letter or a request for additional information;
- adverse results or delays in clinical trials;
- our decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;
- adverse regulatory decisions, including failure to receive regulatory approval of our product candidates;
- changes in laws or regulations applicable to our products, including but not limited to clinical trial requirements for approvals;
- adverse developments concerning our manufacturers;
- our inability to obtain adequate product supply for any approved product or inability to do so at acceptable prices;
- our inability to establish collaborations if needed;
- our failure to commercialize our product candidates;
- additions or departures of key scientific or management personnel;
- unanticipated serious safety concerns related to the use of our product candidates;
- introduction of new products or services offered by us or our competitors;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- our ability to effectively manage our growth;
- the size and growth of our initial cancer target markets;
- our ability to successfully treat additional types of cancers or at different stages;

- actual or anticipated variations in quarterly operating results;
- our cash position;
- our failure to meet the estimates and projections of the investment community or that we may otherwise provide to the public;
- publication of research reports about us or our industry, or immuno-oncology in particular, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- changes in the market valuations of similar companies;
- overall performance of the equity markets;
- sales of our common stock by us or our stockholders in the future;
- trading volume of our common stock;
- changes in accounting practices;
- ineffectiveness of our internal controls;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation;
- general political and economic conditions; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general, and the NASDAQ Global Market and biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. If the market price of our common stock after this offering does not exceed the initial public offering price, you may not realize any return on your investment in us and may lose some or all of your investment. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company's securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources, which would harm our business, operating results or financial condition.

We do not know whether an active, liquid and orderly trading market will develop for our common stock or what the market price of our common stock will be and as a result it may be difficult for you to sell your shares of our common stock.

Prior to this offering there has been no public market for shares of our common stock. Although we have applied to have our common stock listed on the NASDAQ Global Market, an active trading market for our shares may never develop or be sustained following this offering. You may not be able to sell your shares quickly or at the market price if trading in shares of our common stock is not active. The initial public offering price for our common stock will be determined through negotiations with the underwriters, and the negotiated price may not be indicative of the market price of the common stock after the offering. As a result of these and other

factors, you may be unable to resell your shares of our common stock at or above the initial public offering price. Further, an inactive market may also impair our ability to raise capital by selling shares of our common stock and may impair our ability to enter into strategic partnerships or acquire companies or products by using our shares of common stock as consideration.

Unstable market and economic conditions may have serious adverse consequences on our business, financial condition and stock price.

As widely reported, global credit and financial markets have experienced extreme volatility and disruptions in the past several years, including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates and uncertainty about economic stability. We cannot assure you that further deterioration in credit and financial markets and confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, volatile business environment or continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate, or do not improve, it may make any necessary debt or equity financing more difficult, more costly, and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay or abandon clinical development plans. In addition, there is a risk that one or more of our current service providers, manufacturers and other partners may not survive these difficult economic times, which could directly affect our ability to attain our operating goals on schedule and on budget.

At December 31, 2014, we had $119.5 million of cash and cash equivalents. While we are not aware of any downgrades, material losses, or other significant deterioration in the fair value of our cash equivalents since December 31, 2014, we cannot assure you that further deterioration of the global credit and financial markets would not negatively impact our current portfolio of cash equivalents or our ability to meet our financing objectives. Furthermore, our stock price may decline due in part to the volatility of the stock market and the general economic downturn.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Prior to this offering, our executive officers, directors, and 5% stockholders beneficially owned approximately 77.2% of our voting stock at January 31, 2015, and, upon the closing of this offering, that same group will hold approximately % of our outstanding voting stock (assuming no exercise of the underwriters' option to purchase additional shares) in each case based on an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover of this prospectus. In addition, Morningside Venture (VI) Investments Limited, or MVIL, beneficially owns approximately 37.8% of our outstanding voting stock and will hold approximately % of our outstanding voting stock (assuming no exercise of the underwriters' option to purchase additional shares) in each case based on an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover of this prospectus. The previously discussed ownership percentage upon the completion of this offering does not reflect the potential purchase of any shares in this offering by such persons. Therefore, even after this offering, these stockholders will have the ability to influence us through this ownership position. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interest as one of our stockholders.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

The initial public offering price is substantially higher than the net tangible book value per share of our common stock. Investors purchasing common stock in this offering will pay a price per share that substantially exceeds the book value of our tangible assets after subtracting our liabilities. As a result, investors purchasing common stock in this offering will incur immediate dilution of $ per share, based on an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover of this prospectus. Further, investors purchasing common stock in this offering will contribute approximately % of the total amount invested by stockholders since our inception, but will own only approximately % of the shares of common stock outstanding after giving effect to this offering.

This dilution is due to our investors who purchased shares prior to this offering having paid substantially less when they purchased their shares than the price offered to the public in this offering and the exercise of stock options granted to our employees. To the extent outstanding options or warrants are exercised, there will be further dilution to new investors. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation. For a further description of the dilution that you will experience immediately after this offering, see “Dilution.”

We are an emerging growth company, and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an emerging growth company, as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements and exemptions from the requirements of holding nonbinding advisory votes on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years following the year in which we complete this offering, although circumstances could cause us to lose that status earlier. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least $1.0 billion or (c) in which we are deemed to be a large accelerated filer, which requires the market value of our common stock that is held by non-affiliates to exceed $700.0 million as of the prior June 30th, and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

Even after we no longer qualify as an emerging growth company, we may still qualify as a “smaller reporting company” which would allow us to take advantage of many of the same exemptions from disclosure requirements including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. As a result, changes in rules of U.S. generally accepted accounting principles or their interpretation, the adoption of new guidance or the application of existing guidance to changes in our business could significantly affect our financial position and results of operations.

We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. We will be subject to the reporting requirements of the Securities Exchange Act of 1934, which will require, among other things, that we file with the Securities and Exchange Commission, or the SEC, annual, quarterly and current reports with respect to our business and financial condition. In addition, the Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC and the NASDAQ Global Market to implement provisions of the Sarbanes-Oxley Act, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Further, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as "say on pay" and proxy access. Recent legislation permits emerging growth companies to implement many of these requirements over a longer period and up to five years from the pricing of this offering. We intend to take advantage of this new legislation but cannot guarantee that we will not be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

We expect the rules and regulations applicable to public companies to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. If these requirements divert the attention of our management and personnel from other business concerns, they could have a material adverse effect on our business, financial condition and results of operations. The increased costs will decrease our net income or increase our net loss, and may require us to reduce costs in other areas of our business or increase the prices of our products or services. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the same or similar coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

Sales of a substantial number of shares of our common stock by our existing stockholders in the public market could cause our stock price to fall.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after the lock-up and other legal restrictions on resale discussed in this prospectus lapse, the trading price of our common stock could decline. Based on shares of common stock outstanding at December 31, 2014, upon the closing of this offering we will have outstanding a total of shares of common stock. Of these shares, only the shares of common stock sold in this offering by us, plus any shares sold upon exercise of the underwriters' option to purchase additional shares, will be freely tradable without restriction in the public market immediately following this offering. Merrill, Lynch, Pierce, Fenner & Smith Incorporated and Leerink Partners LLC, however, may, in their sole discretion, permit our officers, directors and other stockholders who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements.

We expect that the lock-up agreements pertaining to this offering will expire after 180 days from the date of this prospectus. In addition, shares of common stock that are either subject to outstanding options or reserved for future issuance under our 2015 Plan, will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements and Rule 144 and Rule 701 under the Securities Act. If these additional shares of common stock are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

After this offering, the holders of shares of our common stock at December 31, 2014 will be entitled to rights with respect to the registration of their shares under the Securities Act, subject to the 180-day lock-up agreements described above. See "Description of Capital Stock—Registration Rights." Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares held by affiliates, as defined in Rule 144 under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our 2015 Plan, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We expect that significant additional capital may be needed in the future to continue our planned operations, including conducting clinical trials, commercialization efforts, expanded research and development activities and costs associated with operating a public company. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities, investors may be materially diluted by subsequent sales. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to the holders of our common stock, including shares of common stock sold in this offering.

Pursuant to our 2015 Plan, certain amendments of which became effective on the business day prior to the public trading date of our common stock, our management is authorized to grant stock options to our employees, directors and consultants.

Initially, the aggregate number of shares of our common stock that may be issued pursuant to stock awards under our 2015 Plan is shares. Additionally, the number of shares of our common stock reserved for issuance under our 2015 Plan will automatically increase on January 1 of each year, beginning on January 1, 2016 and continuing through and including January 1, 2025, by % of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors. Unless our board of directors elects not to increase the number of shares available for future grant each year, our stockholders may experience additional dilution, which could cause our stock price to fall.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section entitled "Use of Proceeds," and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our management might not apply our net proceeds in ways that ultimately increase the value of your investment. We expect to use the net proceeds from this offering together with our existing cash and cash equivalents, to complete our Phase 2b ECLIPSE clinical trial, to advance the development of CRS-207 in pancreatic cancer and mesothelioma, for planned clinical development programs evaluating LADD regimens for glioblastoma multiforme and ovarian cancer, to manufacture CRS-207 and GVAX Pancreas at commercial scale in preparation for potential regulatory approval, for development of CDN product candidates and other planned research and development programs, and for general corporate and working capital purposes. The failure by our management to apply these funds effectively could harm our business. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders. If we do not invest or apply the net proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

Anti-takeover provisions under our charter documents and Delaware law could delay or prevent a change of control which could limit the market price of our common stock and may prevent or frustrate attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws, which are to become effective at or prior to the closing of this offering, contain provisions that could delay or prevent a change of control of our company or changes in our board of directors that our stockholders might consider favorable. Some of these provisions include:

- a board of directors divided into three classes serving staggered three-year terms, such that not all members of the board will be elected at one time;
- a prohibition on stockholder action through written consent, which requires that all stockholder actions be taken at a meeting of our stockholders;
- a requirement that special meetings of stockholders be called only by the chairman of the board of directors, the chief executive officer, or by a majority of the total number of authorized directors;
- advance notice requirements for stockholder proposals and nominations for election to our board of directors;
- a requirement that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of not less than two-thirds of all outstanding shares of our voting stock then entitled to vote in the election of directors;
- a requirement of approval of not less than two-thirds of all outstanding shares of our voting stock to amend any bylaws by stockholder action or to amend specific provisions of our certificate of incorporation; and
- the authority of the board of directors to issue preferred stock on terms determined by the board of directors without stockholder approval and which preferred stock may include rights superior to the rights of the holders of common stock.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporate Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These anti-takeover provisions and other provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make it more difficult for stockholders or potential acquirors to obtain control of our board of directors or initiate actions that are opposed by the then-current board of directors and could also delay or impede a merger, tender offer or proxy contest involving our company. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing or cause us to take other corporate actions you desire. Any delay or prevention of a change of control transaction or changes in our board of directors could cause the market price of our common stock to decline.

Our certificate of incorporation will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our certificate of incorporation will provide that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of

fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine. This provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find this provision in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business and financial condition.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on our company. If no securities or industry analysts commence coverage of our company, the trading price for our stock would likely be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price may decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections titled “Prospectus Summary,” “Risk Factors,” “Use of Proceeds,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” contains forward-looking statements about us and our industry that involve substantial risks and uncertainties. All statements, other than statements of historical facts contained in this prospectus, including statements regarding our future financial condition, business strategy and plans, and objectives of management for future operations, are forward-looking statements. In some cases you can identify these statements by forward-looking words such as “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan,” “expect” or the negative or plural of these words or similar expressions. These forward-looking statements include, but are not limited to, statements concerning the following:

- our history of net operating losses and uncertainty regarding our ability to achieve profitability;
- our ability to fund our working capital needs;
- our ability to develop and commercialize our product candidates;
- our ability to use and expand our technology platforms to build a pipeline of product candidates;
- our dependence on our lead product candidate, CRS-207, and GVAX Pancreas;
- our ability to obtain and maintain regulatory approval of our product candidates;
- our inability to operate in a competitive industry and compete successfully against competitors that have greater resources than we do;
- our ability to retain and attract key personnel;
- our products may not gain market acceptance;
- our reliance on third parties; and
- our ability to obtain and adequately protect intellectual property rights for our product candidates.

These statements are only current predictions and are subject to known and unknown risks, uncertainties and other factors that may cause our or our industry’s actual results, levels of activity, performance or achievements to be materially different from those anticipated by the forward-looking statements. We discuss many of these risks in this prospectus in greater detail under the heading “Risk Factors” and elsewhere in this prospectus. You should not rely upon forward-looking statements as predictions of future events. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risks and uncertainties.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Except as required by law, after the date of this prospectus, we are under no duty to update or revise any of the forward-looking statements, whether as a result of new information, future events or otherwise.

We obtained industry, market and competitive position data in this prospectus from our own internal estimates and research as well as from industry and general publications and research surveys and studies conducted by third parties. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such information or estimates.

INDUSTRY AND MARKET DATA

This prospectus also contains estimates, projections and other information concerning our industry, the market in which we operate and our business. Unless otherwise indicated, information contained in this prospectus concerning our industry and the market in which we operate, including our general expectations and market position, market opportunity and market size, is based on information from various sources, such as reports, research surveys, studies and similar data prepared by third parties, industry, medical and general publications, government data and similar sources and is subject to a number of assumptions and limitations. Although we are responsible for all of the disclosure contained in this prospectus and we believe the information from the third-party sources included in this prospectus is reliable, such information is inherently imprecise. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section titled “Risk Factors.” These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us. In some cases, we do not expressly refer to the sources from which these data are derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph are derived from the same sources, unless otherwise expressly stated or the context otherwise requires.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of shares of common stock in this offering will be approximately $ million at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting the underwriting discount and estimated offering expenses payable by us. If the underwriters exercise their option to purchase additional shares in full, we estimate that the net proceeds will be approximately $ million after deducting the underwriting discount and estimated offering expenses payable by us.

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) our net proceeds by $ million, assuming the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting the underwriting discount and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase (decrease) of 1,000,000 in the number of shares we are offering would increase (decrease) the net proceeds to us from this offering, after deducting the underwriting discount and estimated offering expenses payable by us, by approximately $ million, assuming the assumed initial public offering price stays the same.

We are undertaking this offering in order to access the public capital markets and to increase our liquidity. At December 31, 2014, we had cash and cash equivalents of $119.5 million. We intend to use the net proceeds of this offering, together with our existing cash and cash equivalents, as follows:

- approximately $ million to complete our ongoing ECLIPSE and STELLAR Phase 2b clinical trials in pancreatic cancer;
- approximately $ million to advance the development of CRS-207 in additional indications, including planned Phase 2 clinical trials in mesothelioma and ovarian cancer;
- approximately $ million to manufacture CRS-207 and GVAX Pancreas at commercial scale in preparation for potential regulatory approval;
- approximately $ million for CDN product candidates, including a planned Phase 1 clinical trial for ADU-S100 and other research and development programs; and
- the remainder for general corporate and working capital purposes.

However, due to the uncertainties inherent in the product development process, it is difficult to estimate with certainty the exact amounts of the net proceeds from this offering that may be used for the above purposes. The amount and timing of our actual expenditures will depend upon numerous factors, including the results of our research and development efforts, the timing and success of our ongoing preclinical studies and clinical trials or preclinical studies and clinical trials we may commence in the future and the timing of regulatory submissions. As a result, our management will have broad discretion over the use of the net proceeds from this offering.

We believe opportunities may exist from time to time to expand our current business through acquisitions or in-licenses of complementary companies, medicines or technologies. While we have no current agreements, commitments or understandings for any specific acquisitions or in-licenses at this time, we may use a portion of the net proceeds for these.

Pending the use of the proceeds from this offering, we intend to invest the net proceeds in interest-bearing, investment-grade securities, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to dividend policy will be made at the discretion of our board of directors.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization at December 31, 2014, as follows:

- on an actual basis;
- on a pro forma basis to reflect (i) the conversion of all outstanding shares of our convertible preferred stock into 69,608,339 shares of common stock and (ii) the reclassification to additional paid-in capital of our preferred stock warrant liability in connection with the conversion of our outstanding preferred stock warrants into common stock warrants; and
- on a pro forma as adjusted basis to further reflect the receipt of the estimated net proceeds from the sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the underwriting discount and estimated expenses payable by us.

You should read this table in conjunction with "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements included elsewhere in this prospectus.

	At December 31, 2014		
	Actual	Pro Forma	Pro Forma as Adjusted(1)
	(in thousands, except share and per share data)		
Cash and cash equivalents	$ 119,456	$ 119,456	$
Convertible preferred stock warrant liability	$ 100	$ —	$
Convertible preferred stock, $0.0001 par value per share; 69,716,345 shares authorized, 69,608,339 shares issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	139,963	—	
Stockholders' (deficit) equity:			
Preferred stock, $0.0001 par value per share; no shares authorized, issued or outstanding, actual; shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted	—	—	
Common stock, $0.0001 par value per share; 85,000,000 shares authorized, 502,882 shares issued and outstanding, actual; shares authorized, 70,111,221 shares issued and outstanding, pro forma; shares issued and outstanding, pro forma as adjusted	—	7	
Additional paid-in capital	346	140,402	
Accumulated deficit	(61,643)	(61,643)	
Total stockholders' (deficit) equity	(61,297)	78,766	
Total capitalization	$ 78,766	$ 78,766	$

(1) A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) each of cash and cash equivalents, additional paid-in capital, total capitalization and total stockholders' equity by $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus,

remains the same, and after deducting the underwriting discount and estimated offering expenses payable by us. Each increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) cash and cash equivalents, additional paid-in capital, total capitalization and total stockholders' equity by approximately $ million, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the underwriting discount and estimated offering expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

The number of shares of common stock in the table above excludes:

- 8,292,303 shares of common stock issuable upon the exercise of outstanding stock options at December 31, 2014, with a weighted-average exercise price of $0.57 per share;
- 108,006 shares of common stock issuable upon the exercise of preferred stock issued after the exercise of outstanding preferred stock warrants at December 31, 2014, with a weighted-average exercise price of $1.21 per share;
- 1,603,197 shares of common stock issuable upon the exercise of outstanding common stock warrants at December 31, 2014, with a weighted-average exercise price of $0.17 per share;
- 4,381,609 shares of common stock reserved for future issuance under our 2009 Stock Plan, which will become available for issuance under our 2015 Plan after consummation of this offering;
- shares of common stock, subject to increase on an annual basis, reserved for future issuance under our 2015 Plan, which will become effective immediately prior to the consummation of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this benefit plan; and
- shares of common stock to be reserved for issuance under our ESPP, which will become effective immediately prior to the consummation of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this benefit plan.

DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

Net tangible book value per share is determined by dividing our total tangible assets less our total liabilities by the number of shares of common stock outstanding. Our historical net tangible book deficit at December 31, 2014, was $ million, or $ per share of common stock. Our pro forma net tangible book value (deficit) at December 31, 2014, before giving effect to this offering, was $, or $ per share of common stock, based on the total number of shares of our common stock outstanding at December 31, 2014, after giving effect to the conversion of all outstanding shares of our convertible preferred stock into common stock. Pro forma net tangible book value, before giving effect to this offering, gives effect to the conversion of all outstanding shares of our convertible preferred stock into an aggregate of 69,608,339 shares of our common stock.

Dilution per share to new investors represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the pro forma as adjusted net tangible book value per share of common stock immediately after completion of this offering. After giving effect to our sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover of this prospectus, and after deducting the underwriting discount and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value at December 31, 2014 would have been $ million, or $ per share. This represents an immediate increase in pro forma net tangible book value of $ per share to existing stockholders and an immediate dilution of $ per share to investors participating in this offering, as illustrated in the following table:

Assumed initial public offering price per share		$
Historical net tangible book value (deficit) per share at December 31, 2014	$	
Pro forma net tangible book value (deficit) per share at December 31, 2014, before giving effect to this offering		
Increase in pro forma net tangible book value (deficit) per share attributable to new investors purchasing shares in this offering	$	
Pro forma as adjusted net tangible book value per share after giving effect to this offering		
Dilution per share to investors participating in this offering		$

Each $1.00 increase (decrease) in the assumed public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) our pro forma as adjusted net tangible book value by approximately $ million, or approximately $ per share, and the dilution per share to investors in this offering by approximately $ per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the underwriting discount and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) our pro forma as adjusted net tangible book value by approximately $ million, or approximately $ per share, and the pro forma dilution per share to investors in this offering by approximately $ per share, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the underwriting discount and estimated offering expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

If the underwriters' option to purchase additional shares is exercised in full, the pro forma as adjusted net tangible book value per share after this offering would be $ per share, the increase in pro forma as

adjusted net tangible book value per share to existing stockholders would be $ per share and the dilution to new investors purchasing shares in this offering would be $ per share.

The following table presents, on a pro forma as adjusted basis described above, the differences between the existing stockholders and the purchasers of shares in this offering with respect to the number of shares purchased from us, the total consideration paid, which includes net proceeds received from the issuance of common and convertible preferred stock and cash received from the exercise of stock options (in thousands, except per share amounts and percentages):

	Total Shares		Total Consideration		Average Price per Share
	Number	Percent	Amount	Percent	
Existing stockholders before this offering		%	$	%	$
Investors participating in this offering					
Total		100%	$	100%	$

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid to us by new investors and total consideration paid to us by all stockholders by $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the underwriting discount and estimated offering expenses payable by us. An increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) the total consideration paid to us by new investors and total consideration paid to us by all stockholders by $ million, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the underwriting discount and estimated offering expenses payable by us.

The calculations above are based on 70,111,221 shares outstanding at December 31, 2014 after giving effect to the conversion of all outstanding shares of convertible preferred stock into common stock and exclude:

- 8,292,303 shares of common stock issuable upon the exercise of outstanding stock options at December 31, 2014, with a weighted-average exercise price of $0.57 per share;
- 108,006 shares of common stock issuable upon the exercise of preferred stock issued after the exercise of outstanding preferred stock warrants at December 31, 2014, with a weighted-average exercise price of $1.21 per share;
- 1,603,197 shares of common stock issuable upon the exercise of outstanding common stock warrants at December 31, 2014, with a weighted-average exercise price of $0.17 per share;
- 4,381,609 shares of common stock reserved for future issuance under our 2009 Stock Plan, which will become available for issuance under our 2015 Plan after consummation of this offering;
- shares of common stock, subject to increase on an annual basis, reserved for future issuance under our 2015 Plan, which will become effective immediately prior to the consummation of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this benefit plan; and
- shares of common stock to be reserved for issuance under our ESPP, which will become effective immediately prior to the consummation of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this benefit plan.

To the extent that any outstanding options are exercised, new options are issued under our stock-based compensation plans or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering.

SELECTED CONSOLIDATED FINANCIAL DATA

The selected consolidated financial data included in this section are not intended to replace the consolidated financial statements included elsewhere in this prospectus. We derived the selected consolidated statements of operations data for the years ended December 31, 2013 and 2014 and the selected consolidated balance sheet data at December 31, 2013 and 2014 from our audited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future. You should read the selected historical consolidated financial data below in conjunction with the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the audited consolidated financial statements included elsewhere in this prospectus.

	Year Ended December 31,	
	2013	2014
	(in thousands, except share and per share data)	
Consolidated Statements of Operations Data:		
Revenue:		
Collaboration and license revenue	$ —	$ 13,038[3]
Grant revenue	828	351
Total revenue	828	13,389
Operating expenses:		
Research and development[1]	10,687	23,513
General and administrative[1]	4,677	8,994
Total operating expenses	15,364	32,507
Loss from operations	(14,536)	(19,118)
Interest expense	(1,371)	(2,395)[4]
Gain on extinguishment of convertible promissory notes	—	3,553[5]
Other (expense) income, net	(147)	946
Net loss and comprehensive loss	$ (16,054)	$ (17,014)
Net loss per common share, basic and diluted[2]	$ (40.16)	$ (38.19)
Shares used in computing net loss per common share, basic and diluted[2]	399,706	445,505
Pro forma net loss per common share, basic and diluted[2]		$ (0.51)
Shares used in computing pro forma net loss per common share, basic and diluted[2]		38,948,479

(1) Includes stock-based compensation as follows:

	Year Ended December 31,	
	2013	2014
	(in thousands)	
Research and development	$ 194	$ 202
General and administrative	215	368
Total stock-based compensation	$ 409	$ 570

(2) See Note 16 to our audited consolidated financial statements included elsewhere in this prospectus for an explanation of the calculations of our basic and diluted net loss per common share, pro forma net loss per common share and the weighted-average number of shares used in the computation of the per share amounts.

(3) Represents the revenue recognized in connection with our collaboration agreements entered into with Janssen in May and November 2014. See Note 7 to our audited consolidated financial statements included elsewhere in this prospectus.

(4) Includes amortization of debt discount associated with convertible promissory notes due to the issuance of warrants and beneficial conversion feature associated with such convertible promissory notes. See Note 5 to our audited consolidated financial statements included elsewhere in this prospectus.

(5) Upon the conversion of convertible promissory notes to related parties into Series C convertible preferred stock in May 2014, a gain on extinguishment was recorded because the amount allocated to reacquire the convertible notes was less than the carrying value of the notes. See Note 5 to our audited consolidated financial statements included elsewhere in this prospectus.

	At December 31,	
	2013	2014
	(in thousands)	
Consolidated Balance Sheet Data:		
Cash and cash equivalents	$ 8,532	$ 119,456
Working capital	(5,075)	81,006
Total assets	9,880	126,462
Note payable to related party	200	—
Convertible promissory notes payable to related parties, net	12,789	—
Convertible preferred stock warrant liability	72	100
Common stock warrant liability	505	889
Convertible preferred stock	32,224	139,963
Accumulated deficit	(44,629)	(61,643)
Total stockholders' deficit	(38,758)	(61,297)

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the section of this prospectus titled "Selected Consolidated Financial Data" and our consolidated financial statements included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risk and uncertainties, such as statements of our plans, objectives, expectations and intentions. As a result of many factors, including those factors set forth in the "Risk Factors" section of this prospectus, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a clinical-stage immuno-oncology company focused on the development of first-in-class technology platforms designed to stimulate robust and durable immune responses against cancer, and our lead product candidate is in a randomized controlled Phase 2b clinical trial in metastatic pancreatic cancer. Immuno- oncology encompasses a class of therapies that leverage the patient's immune system to slow the growth and spread of, or eliminate, tumor cells. We believe a critical distinguishing factor in our approach to immuno- oncology is that our novel therapies initiate powerful innate immune responses and drive targeted, durable adaptive immune responses. The immunotherapy field is rapidly advancing with new immuno-oncology combinations that focus on strengthening therapeutic efficacy in a wide range of cancers. We intend to pursue a broad strategy of combining our technology platforms with conventional and novel immuno-oncology therapies, based on their mechanisms of action, safety profiles and versatility. Our pipeline of immuno-oncology product candidates is derived from two proprietary technology platforms: Live, Attenuated, Double-Deleted, or LADD, *Listeria monocytogenes* and cyclic dinucleotides, or CDNs. Our lead LADD product candidate, CRS-207, is currently being developed in metastatic pancreatic cancer and unresectable malignant pleural mesothelioma. In a completed randomized controlled Phase 2a clinical trial in metastatic pancreatic cancer patients, CRS-207 demonstrated a statistically significant improvement in overall survival when combined with GVAX Pancreas, a cellular vaccine product candidate. The 93-patient two-arm Phase 2a clinical trial was designed to compare the combination of CRS-207 and GVAX Pancreas versus GVAX Pancreas alone. The trial met the primary efficacy endpoint of overall survival at an interim analysis and was stopped upon recommendation from the Data Monitoring Committee. Based on the data from this study, our lead immuno-oncology regimen of CRS-207 and GVAX Pancreas was granted Breakthrough Therapy designation by the U.S. Food and Drug Administration, or FDA. Breakthrough Therapy designation is intended to expedite the development and review of products that treat serious or life-threatening conditions. We have obtained orphan drug designations from the FDA for CRS-207 and GVAX Pancreas for the treatment of pancreatic cancer. Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biologic intended to treat a rare disease or condition. Orphan drug designation entitles a party to certain financial incentives and can provide limited market exclusivity in certain circumstances. We are developing a pipeline of proprietary product candidates, including two product candidates in collaboration with Janssen Biotech, Inc., or Janssen, targeting prostate and lung cancer. We have intellectual property protection on both of our technology platforms and each of our product candidates, which we believe we will maintain into the 2030s.

Both of our technology platforms, LADD and CDN, are designed to activate and stimulate a patient's immune system to specifically target cancer cells. Our LADD technology platform is based on a naturally pathogenic bacterium, *Listeria monocytogenes*, which induces a strong innate immune response. In order to engineer this bacterium for therapeutic use, we modify the *Listeria* with two proprietary gene deletions, substantially reducing its natural disease-causing properties. We then engineer specific LADD product candidates to express and secrete tumor antigens that stimulate the adaptive immune system to mount a powerful cellular attack on tumors. The intended effect is to prime and enhance the innate and adaptive immune responses and deliver an antigen-specific T cell attack against the target tumor cells. Our proprietary CDN technology platform comprises synthetic small molecule immune modulators that target and activate Stimulator of Interferon Genes, or STING,

receptors that are generally expressed at high levels in immune cells. Once activated, STING receptors prime and enhance the innate immune response by signaling through multiple distinct pathways. These signals activate the expression of a broad profile of cytokines that initiate the development of an effective adaptive immune response. Recent advancements reported in numerous leading scientific journals have created interest in the potential for STING receptor-targeting drug candidates for a broad range of therapeutic applications.

Our pipeline of product candidates has the potential to be applicable to a variety of cancers and to be combinable with many conventional and emerging cancer therapies, including cellular vaccines, chemotherapy, radiotherapy and checkpoint inhibitors, among others. Our most advanced immuno-oncology regimen, currently in a Phase 2b clinical trial known as ECLIPSE, assesses the combination of our lead LADD product candidate, CRS-207, with GVAX Pancreas to treat late-stage metastatic pancreatic cancer patients who have received at least one prior line of therapy. GVAX Pancreas is a potentially synergistic combination candidate that is designed to induce T cells against an array of pancreatic cancer antigens to enable a broad-based immune response, and has demonstrated a favorable safety profile in clinical trial to date. We expect to report top line results from ECLIPSE in the first half of 2016. In addition, we are evaluating CRS-207 in combination with chemotherapy in unresectable malignant pleural mesothelioma and have a planned study of CRS-207 in combination with GVAX Pancreas and an anti-PD-1 checkpoint inhibitor in metastatic pancreatic cancer. We also have ongoing and planned clinical development programs evaluating LADD regimens for glioblastoma multiforme and ovarian cancer, and with Janssen in lung and prostate cancers. We also envision multiple product opportunities for the CDN technology platform. Because STING receptors are known to be important for immune surveillance and control of cancer progression, we believe that STING receptors represent an attractive target for novel drug candidates. We are developing CDN product candidates as impactful therapies that are intended to prime and enhance the innate and adaptive immune responses. Based on their mechanism of action, our CDN product candidates may also have synergistic or additive benefits when combined with other cancer therapies.

Since commencing our operations, our efforts have been focused on research, development and the advancement of our product candidates into clinical trials. As a result we have incurred significant losses. We have funded our operations primarily through the sale of convertible preferred stock, the issuance of convertible promissory notes, revenue from government grants and licensing agreements with pharmaceutical partners. We incurred a net loss of $16.1 million and $17.0 million for the years ended December 31, 2013 and 2014, respectively. At December 31, 2014, our accumulated deficit was $61.6 million.

Financial Operations Overview

Revenue

We have not generated any revenue from product sales. Our revenue to date has been primarily derived from research and development grants from the U.S. government and two separate research and license agreements we entered into with Janssen, which became effective in May 2014 and in November 2014. We recognize revenue related to research and development grants when the related research expenses are incurred and our specific performance obligations under the terms of the respective contracts are satisfied. We recognize revenue from upfront payments under our Janssen agreements ratably over the term of our estimated period of performance under the agreement. In addition to receiving upfront payments, we may also be entitled to milestone and other contingent payments upon achieving predefined objectives. Revenue from milestones, if they are nonrefundable and deemed substantive, are recognized upon successful accomplishment of the milestones. To the extent that non-substantive milestones are achieved and we have remaining performance obligations, milestones are deferred and recognized as revenue over the estimated remaining period of performance.

We expect that any revenue we generate from our research and license agreements with Janssen, government research and development grants, and any future collaboration partners will fluctuate from year to year as a result of the timing and amount of milestones and other payments.

Research and Development Expenses

The largest component of our total operating expenses has historically been our investment in research and development activities, including the clinical development of our product candidates. Research and development expenses represent costs incurred to conduct research, such as the discovery and development of our product candidates, as well as the development of product candidates pursuant to our research and license agreement with Janssen. We recognize all research and development costs as they are incurred. Clinical trial costs, contract manufacturing and other development costs incurred by third parties are expensed as the contracted work is performed.

We expect our research and development expenses to increase in absolute dollars in the future as we advance our product candidates into and through clinical trials and pursue regulatory approval of our product candidates. The process of conducting the necessary clinical research to obtain regulatory approval is costly and time-consuming. The actual probability of success for our product candidates and technology platforms may be affected by a variety of factors including: the quality of our product candidates, early clinical data, investment in our clinical program, competition, manufacturing capability and commercial viability. We may never succeed in achieving regulatory approval for any of our product candidates. As a result of the uncertainties discussed above, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of our product candidates.

General and Administrative Expenses

General and administrative expenses include personnel costs, expenses for outside professional services and other allocated expenses. Personnel costs consist of salaries, bonuses, benefits and stock-based compensation. Outside professional services consist of legal, accounting and audit services and other consulting fees. Allocated expenses consist of rent expense related to our office and research and development facility. We expect to incur additional expenses as a result of operating as a public company, including expenses related to compliance with the rules and regulations of the Securities and Exchange Commission, and those of any national securities exchange on which our securities are traded, additional insurance expenses, investor relations activities and other administrative and professional services.

Interest Expense

Interest expense consists of amortization of debt discount associated with convertible promissory note warrants, issuance of the equity component of a convertible promissory note and beneficial conversion features associated with certain convertible promissory notes, as well as stated interest costs associated with our borrowings.

Gain on Extinguishment of Convertible Promissory Notes

During 2013 and 2014, we issued convertible promissory notes to related parties, which were subsequently converted in May 2014 to Series C convertible preferred stock. The conversion of convertible promissory notes was determined to be an extinguishment of debt and a portion of the reacquisition price was allocated to the reacquisition of the embedded beneficial conversion feature. We recorded a gain on extinguishment, as the amount allocated to reacquire the notes was less than the carrying value of the notes.

Other Income (Expense), Net

Other income (expense), net, consists of gains and losses from the remeasurement of the fair value of our liabilities related to our convertible preferred stock warrants and common stock warrants, the change in the fair value of the preferred stock derivative liability associated with our obligation to issue additional shares of Series C convertible preferred stock, and interest income earned on our cash and cash equivalents.

Our convertible preferred stock warrants are exercisable into shares that are contingently redeemable and our common stock warrants are subject to performance conditions that may result in the issuance of a variable number of shares. As such, we have classified these warrants as liabilities in the consolidated balance sheets at their estimated fair values, and we record the change in the estimated fair values each reporting period as other income (expense), net. We will continue to record adjustments to the estimated fair values of the convertible preferred stock and common stock warrants until they are exercised or expire.

In May 2014, we entered into a Series C convertible preferred stock purchase agreement. Under the agreement, we agreed to issue to the purchasers, and the purchasers agreed to purchase, additional shares of our Series C convertible preferred stock in tranches within a specified timeframe after the initial closing. We determined that the obligation to issue additional Series C convertible preferred stock at future dates was a freestanding financial instrument that should be accounted for as a liability. Accordingly, we recorded a preferred stock derivative liability related to this instrument at the time of the initial close in May 2014, and we remeasured the liability at fair value at each reporting period with the corresponding gain or loss from the adjustment recorded as other income (expense), net until the tranche obligation either expired or was fulfilled. In December 2014, the final tranche of the Series C convertible preferred stock was issued and the corresponding preferred stock derivative liability was remeasured and then reclassified as equity.

Results of Operations

Comparison of the Years Ended December 31, 2013 and 2014

	Year Ended December 31,		Change
	2013	2014	$
	(in thousands)		
Revenue:			
Collaboration and license revenue	$ —	$ 13,038	$13,038
Grant revenue	828	351	(477)
Total revenue	828	13,389	12,561
Operating expenses:			
Research and development	10,687	23,513	12,826
General and administrative	4,677	8,994	4,317
Total operating expenses	15,364	32,507	17,143
Loss from operations	(14,536)	(19,118)	(4,582)
Interest expense	(1,371)	(2,395)	(1,024)
Gain on extinguishment of convertible promissory notes	—	3,553	3,553
Other income (expense), net	(147)	946	1,093
Net loss and comprehensive loss	$(16,054)	$(17,014)	$ (960)

Revenue

Collaboration and license revenue was $13.0 million for the year ended December 31, 2014, due to recognition of a portion of the upfront fees and substantive and non-substantive development-related milestones achieved under the Janssen agreements.

Grant revenue was $0.4 million for the year ended December 31, 2014, a decrease of $0.5 million compared to the year ended 2013, primarily due to our focus on other research and development activities which resulted in a decrease in grant-related research and development in 2014.

Research and Development Expenses

The following table summarizes our research and development expenses incurred during the years ended December 31, 2013 and 2014:

	Year Ended December 31,		Change
	2013	2014	$
		(in thousands)	
Clinical development	$ 3,196	$ 7,547	$ 4,351
Contract manufacturing	1,323	5,246	3,923
Other research and development costs	1,244	3,611	2,367
Compensation and related personnel costs	3,245	5,212	1,967
Licensing fees	461	1,617	1,156
Facility costs	218	280	62
Acquired GVAX technology	1,000	—	(1,000)
Total research and development	$10,687	$23,513	$12,826

Research and development expenses were $23.5 million for the year ended December 31, 2014, an increase of $12.8 million, compared to the year ended 2013. The increase was primarily attributed to a $4.4 million increase in clinical development expenses mainly associated with ongoing trials for our lead indication in pancreatic cancer; a $3.9 million increase in contract manufacturing costs of our clinical product candidates; a $2.4 million increase in other research and development costs; a $2.0 million increase in compensation expenses primarily related to additional research and development staff; and a $1.2 million increase in licensing fees primarily due to payment of sublicense fees in connection with the research and license agreement with Janssen. The increase was partially offset by the $1.0 million expense recognized in 2013 related to the acquisition of GVAX technology from BioSante Pharmaceuticals, Inc. (which later merged into ANI Pharmaceuticals, Inc.).

General and Administrative Expenses

The following table summarizes our general and administrative expenses incurred during the years ended December 31, 2013 and 2014:

	Year Ended December 31,		Change
	2013	2014	$
		(in thousands)	
Outside professional services	$2,117	$4,784	$2,667
Compensation and related personnel costs.	1,895	3,026	1,131
Facility costs	375	648	273
Other general and administrative	290	536	246
Total general and administrative	$4,677	$8,994	$4,317

General and administrative expenses were $9.0 million for the year ended December 31, 2014, an increase of $4.3 million, compared to the year ended 2013. The increase was primarily due to a $2.7 million increase in legal fees related to licensing and general corporate matters and other professional services fees, including accounting fees, as well as a $1.1 million increase in compensation expenses primarily related to our additional administrative personnel.

Interest Expense

Interest expense was $2.4 million for the year ended December 31, 2014, an increase of $1.0 million, compared to the year ended 2013. The increase was primarily attributed to the amortization of debt discount

associated with the warrants and beneficial conversion feature associated with our convertible promissory notes payable to related parties.

Gain on Extinguishment of Convertible Promissory Notes

During 2013 and 2014, we issued convertible promissory notes to related parties, which were subsequently converted in May 2014 to Series C convertible preferred stock. The conversion of convertible promissory notes was determined to be an extinguishment of debt and a portion of the reacquisition price was allocated to the reacquisition of the embedded beneficial conversion feature. We recorded a gain on extinguishment of $3.6 million during the year ended December 31, 2014, as the amount allocated to reacquire the notes was less than the carrying value of the notes.

Other Income (Expense), Net

Other income (expense), net increased by $1.1 million for the year ended December 31, 2014, compared to the year ended 2013. The increase was primarily due to the remeasurement of the fair value of the preferred stock derivative liability associated with the future issuance of our Series C convertible preferred stock. At December 31, 2014, there was no obligation remaining related to the future issuance of our Series C convertible preferred stock and therefore no preferred stock derivative liability on the consolidated balance sheets. The increase was partially offset by other expenses recognized for remeasurement of common and preferred stock warrants.

Liquidity and Capital Resources

Our operations have been financed primarily by net proceeds from the sale of convertible preferred stock, issuance of convertible promissory notes, revenue from government grants and proceeds from our Janssen research and license agreements. At December 31, 2014, we had cash and cash equivalents of $119.5 million.

Our primary uses of capital are, and we expect will continue to be, compensation and related expenses, third-party clinical research and development services, laboratory and related supplies, clinical costs and other regulatory expenses. Cash used to fund operating expenses is impacted by the timing of when we pay expenses, as reflected in the change in our outstanding accounts payable and accrued expenses. We expect to incur substantial expenditures in the foreseeable future for the development and potential commercialization of our product candidates. Specifically, we have incurred and we expect to continue to incur substantial expenses in connection with our Phase 2b ECLIPSE clinical trial for metastatic pancreatic cancer.

We plan to continue to fund our operations and capital funding needs through equity and/or debt financing. We may also consider entering into additional collaboration arrangements or selectively partnering for clinical development and commercialization. The sale of additional equity would result in additional dilution to our stockholders. The incurrence of debt financing would result in debt service obligations and the instruments governing such debt could provide for operating and financing covenants that would restrict our operations. If we are not able to secure adequate additional funding, we may be forced to make reductions in spending, extend payment terms with suppliers, liquidate assets where possible and/or suspend or curtail planned programs. Any of these actions could harm our business, results of operations, financial condition and future prospects.

Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Year Ended December 31,	
	2013	2014
	(in thousands)	
Net cash provided by (used in):		
Operating activities	$(14,232)	$ 19,365
Investing activities	(170)	(782)
Financing activities	19,239	92,341
Net change in cash and cash equivalents	$ 4,837	$110,924

Operating Activities

Net cash provided by operating activities was $19.4 million for the year ended December 31, 2014, compared to net cash used of $14.2 million for the year ended 2013. The increase in net cash provided was primarily due to the upfront and milestone payments totaling $46.0 million received from the research and license agreements with Janssen during 2014, partially offset by increased operating expenses due to additional headcount, increased clinical trial activities and other research and development.

Investing Activities

Net cash used in investing activities was $0.8 million for the year ended December 31, 2014, compared to $0.2 million for the year ended 2013. The increase in net cash used was primarily the result of investment in laboratory and office equipment, furniture and leasehold improvements.

Financing Activities

Net cash provided by financing activities was $92.3 million for the year ended December 31, 2014, compared to $19.2 million for the year ended 2013. The increase was primarily related to $51.4 million in gross proceeds from the issuance of Series D convertible preferred stock, $41.9 million in net proceeds from the issuance of Series C convertible preferred stock and $0.3 million in proceeds from the issuance of convertible promissory notes, which were converted into Series C convertible preferred stock in May 2014. The increase in financing activities was partially offset by $1.1 million of payments made related to preparing to become a public company.

Operating Capital Requirements and Plan of Operations

We do not expect to generate significant revenue from product sales unless and until we obtain regulatory approval of and commercialize our current or any future product candidates. We anticipate that we will continue to generate losses for the foreseeable future, and we expect the losses to increase as we continue the development of and seek regulatory approvals for our product candidates and begin to commercialize any approved products. We are subject to all of the risks pertinent to the development of new products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may harm our business. Upon the closing of this offering, we expect to incur additional costs associated with operating as a public company and we anticipate that we will need substantial additional funding in connection with our continuing operations.

We believe that our existing capital resources, not including potential milestone payments and the proceeds we receive from this offering, will be sufficient to meet our projected operating requirements through

the end of 2016. If we need to raise additional capital to fund our operations and complete our ongoing and planned clinical studies, funding may not be available to us on acceptable terms, or at all.

Our future funding requirements will depend on many factors, including the following:

- the scope, rate of progress, results and cost of our clinical studies and other related activities;
- the cost of manufacturing clinical supplies and establishing commercial supplies of our product candidate and any other products that we may develop;
- the cost, timing and outcomes of regulatory approvals;
- the cost and timing of establishing sales, marketing and distribution capabilities;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish, including any required milestone and royalty payments thereunder; and
- the emergence of competing technologies or other adverse market developments.

Critical Accounting Polices and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenue generated and expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Revenue Recognition

We have historically generated revenue through government grants and, beginning in 2014, from funds received under research and license arrangements. Government grants provide funding for certain types of expenditures in connection with research and development activities over a contractually-defined period. Revenue related to government grants is recognized in the period during which the related costs are incurred and the related services are rendered, provided that the applicable performance obligations under the government grants have been met. We intend to continue to evaluate pursuing additional government grant opportunities on a case-by-case basis.

Revenues from research activities made under collaboration arrangements are recognized when there is persuasive evidence that an arrangement exists, services have been rendered, the price is fixed or determinable and collectability is reasonably assured. Revenue generated from our collaboration arrangements is not subject to repayment and typically includes upfront fees, milestone payments and royalties on future licensee's product sales. Our obligations under collaboration agreements may include the transfer of intellectual property rights in the form of licenses, obligations to provide research and development services and obligations to participate on certain development committees with the collaboration party. We make judgments that affect the period over which we recognize revenue. On a quarterly basis, we review our estimated period of performance for our

collaboration and license revenue based on the progress under the arrangement and account for the impact of any changes in estimated periods of performance on a prospective basis. We record amounts received prior to satisfying the above revenue recognition criteria as deferred revenue until all applicable revenue recognition criteria are met. Deferred revenue represents the portion of research or license payments received that have not been earned.

For revenue agreements with multiple-element arrangements, such as license and development agreements, we allocate revenue to each non-contingent element based on the relative selling price of each element. When applying the relative selling price method, we determine the selling price for each deliverable using vendor-specific objective evidence or third-party evidence. If neither exists, we use the best estimate of selling price for that deliverable. Revenue allocated is then recognized when the four basic revenue recognition criteria are met for each element. Our obligations under the agreements may include the transfer of intellectual property rights in the form of licenses, obligations to provide research and development services and obligations to participate on certain development committees.

Milestones are considered substantive if all of the following conditions are met: (1) the milestone is nonrefundable; (2) achievement of the milestone was not reasonably assured at the inception of the arrangement; (3) substantive effort is involved to achieve the milestone; and (4) the amount of the milestone appears reasonable in relation to the effort expended, and the other milestones in the arrangement and the related risk associated with the achievement of the milestone and any ongoing research and development or other services are priced at fair value. Such payments that are contingent upon the achievement of a substantive milestone are recognized entirely as revenue in the period in which the milestone is achieved. To the extent that non-substantive milestones are achieved and we have remaining performance obligations, milestones are deferred and recognized as revenue over the estimated remaining period of performance. If there were no remaining performance obligations, we recognize the revenue in the period it is earned.

Accrued Research and Development Costs

We record accrued expenses for estimated costs of our research and development activities conducted by third-party service providers, which include the conduct of preclinical studies and clinical trials and contract manufacturing activities. We record the estimated costs of research and development activities based upon the estimated amount of services provided but not yet invoiced, and we include these costs in accrued liabilities in the consolidated balance sheets and within research and development expense in the statement of operations and comprehensive loss. These costs are a significant component of our research and development expenses. We record accrued expenses for these costs based on the estimated amount of work completed and in accordance with agreements established with these third parties.

We estimate the amount of work completed through discussions with internal personnel and external service providers as to the progress or stage of completion of the services and the agreed-upon fee to be paid for such services. We make significant judgments and estimates in determining the accrued balance in each reporting period. As actual costs become known, we adjust our accrued estimates. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed, the number of patients enrolled and the rate of patient enrollment may vary from our estimates and could result in us reporting amounts that are too high or too low in any particular period. Our accrued expenses are dependent, in part, upon the receipt of timely and accurate reporting from clinical research organizations and other third-party service providers. To date, there have been no material differences from our accrued expenses to actual expenses.

Stock-Based Compensation

We recognize compensation costs related to stock options granted to employees and directors based on the estimated fair value of the awards on the date of grant, net of estimated forfeitures. We estimate the grant date

fair value using the Black-Scholes option-pricing model. The grant date fair value of the stock-based awards is generally recognized on a straight-line basis over the requisite service period, which is generally the vesting period of the respective awards.

We recorded stock-based compensation expense related to options granted of $0.4 million and $0.6 million in each of the years ended December 31, 2013 and 2014, respectively.

In determining the fair value of the stock-based awards, we use the Black-Scholes option-pricing model and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment to determine.

Expected Term. The expected term represents the period that stock-based awards are expected to be outstanding. We used the simplified method to determine the expected term, which is calculated as the mid-point between the vesting date and the end of the contractual term of the options.

Expected Volatility. Since we are not yet a public company and do not have any trading history for our common stock, the expected volatility was estimated based on the average historical volatilities of common stock of comparable publicly traded entities over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, stage in the life cycle or area of specialty. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.

Risk-Free Interest Rate. The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of the option.

Expected Dividend. We have never paid dividends on our common stock and have no plans to pay dividends on our common stock. Therefore, we used an expected dividend yield of zero.

In addition to the Black-Scholes assumptions, we estimate our forfeiture rate based on an analysis of our actual forfeitures and will continue to evaluate the adequacy of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover behavior and other factors. The impact from any forfeiture rate adjustment would be recognized in full in the period of adjustment, and if the actual number of future forfeitures differs from our estimates, we might be required to record adjustments to stock-based compensation in future periods.

Historically, for all periods prior to this offering, the fair value of the shares of common stock underlying our share-based awards were estimated on each grant date by our board of directors. In order to determine the fair value of our common stock underlying option grants, our board of directors considered, among other things, contemporaneous valuations of our common stock prepared by an unrelated third-party valuation firm at February 28, 2013, March 31, 2014, June 30, 2014, September 30, 2014 and December 31, 2014 in accordance with the guidance provide by the American Institute of Certified Public Accountants Practice Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation. Given the absence of a public trading market for our common stock, our board of directors exercised reasonable judgment and considered a number of objective and subjective factors to determine the best estimate of the fair value of our common stock, including our stage of development; progress of our research and development efforts; the rights, preferences and privileges of our preferred stock relative to those of our common stock; equity market conditions affecting comparable public companies and the lack of marketability of our common stock.

The unrelated third-party valuations were prepared using the discounted cash flow approach to estimate our aggregate enterprise value at each valuation date. To arrive at the estimated fair value of our common stock, the enterprise value was allocated across our classes and series of capital stock using the Probability Weighted Expected Return Method, or PWERM, or Option Pricing Method, or OPM. The PWERM is a scenario-based analysis that estimates the value per share of common stock based on the probability-weighted present value of

expected future equity values for the common stock, under various possible future liquidity event scenarios, including initial public offering, sale of the company, dissolution and staying private. The OPM values each equity class by creating a series of call options on the equity value, with exercise prices based on the liquidation preferences, participation rights and strike prices of derivatives.

After the completion of this offering, our board of directors will determine the fair value of each share of underlying common stock based on the closing price of our common stock as reported on the date of grant.

The intrinsic value of all outstanding options at December 31, 2014 was $ million based on an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus.

Estimated Fair Value of Convertible Preferred Stock Warrants and Common Stock Warrants

Warrants for shares that are contingently redeemable, such as our convertible preferred stock, and common stock warrants subject to performance conditions that may result in the issuance of a variable number of shares are accounted for as freestanding financial instruments. These warrants are classified as liabilities on our consolidated balance sheets and are recorded at their estimated fair value. At the end of each reporting period, changes in the estimated fair value during the period are recorded as a component of other income (expense), net. We will continue to adjust these liabilities for changes in fair value until the earlier of the conversion to common stock warrants, performance conditions met, expiration or the exercise of the warrants.

We estimate the fair values of our convertible preferred stock warrants and common stock warrants using an option pricing model based on inputs as of the valuation measurement dates, including the fair values of our convertible preferred stock and common stock, the estimated volatility of the price of our convertible preferred stock and common stock, the expected term of the warrants and the risk-free interest rates.

Estimated Fair Value of Preferred Stock Derivative Liability

We have determined that our obligation to issue and our investor's obligation to purchase additional shares of convertible preferred stock represented a freestanding financial instrument, which we accounted for as a liability. The freestanding convertible preferred stock derivative liability was initially recorded at fair value, with fair value changes recognized at each balance sheet date as increases or decreases to other income (expense), net in the statement of operations and comprehensive loss. At the time of the exercise of the option, we remeasured the obligation to fair value with the change recognized in other income (expense), net on the consolidated statements of operations and comprehensive loss. The remaining value of the option subsequent to remeasurement was recorded as a capital transaction.

Income Taxes

We recognize deferred income taxes for temporary differences between the basis of assets and liabilities for financial statement and income tax purposes. We periodically evaluate the positive and negative evidence bearing upon realizability of our deferred tax assets. Based upon the weight of available evidence, which includes our historical operating performance, reported cumulative net losses since inception and difficulty in accurately forecasting our future results, we maintained a full valuation allowance on the net deferred tax assets. We intend to maintain a full valuation allowance on the federal and state deferred tax assets until sufficient positive evidence exists to support reversal of the valuation allowance.

At December 31, 2014, we generated net operating loss, or NOL, carryforwards (before tax effects) for federal and state income tax purposes of $51.2 million and $6.0 million, respectively. These federal and state NOL carryforwards will begin to expire in 2027 and 2017, respectively, if not utilized. In addition, we generated federal and state research and development tax credit carryforwards of $0.3 million and $0.9 million,

respectively, to offset future income tax liabilities. The federal research and development tax credits can be carried forward for 20 years and will start to expire in 2034, if not utilized, while the state research and development tax credits can be carried forward indefinitely. Under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, our ability to utilize NOL carryforwards or other tax attributes, such as research tax credits, in any taxable year may be limited if we have experienced an "ownership change." We performed a Section 382 analysis and believe that we experienced multiple ownership changes under Section 382 of the Code and as a result our federal and state NOLs and tax credits are subject to limitation.

We record unrecognized tax benefits as liabilities and adjust these liabilities when our judgment changes as a result of the evaluation of new information not previously available. Because of the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from our current estimate of the unrecognized tax benefit liabilities. These differences will be reflected as increases or decreases to income tax expense in the period in which new information is available.

Contractual Obligations and Other Commitments

The following table summarizes our contractual obligations at December 31, 2014:

	Payments due by period				
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total
			(in thousands)		
Operating leases	$ 392	$ 261	$ —	$ —	$653
Total contractual obligations	$ 392	$ 261	$ —	$ —	$653

We enter into agreements in the normal course of business with contract research organizations for clinical trials and with vendors for preclinical studies and other services and products for operating purposes which are cancelable at any time by us, generally upon 30 days prior written notice. These payments are not included in this table of contractual obligations.

We are obligated to make future payments to third parties under in-license agreements, including sublicense fees, royalties and payments that become due and payable on the achievement of certain development and commercialization milestones. As the amount and timing of sublicense fees and the achievement and timing of these milestones are not probable and estimable, such commitments have not been included on our consolidated balance sheets or in the contractual obligations table above.

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements and do not have variable interests in variable interest entities.

Quantitative and Qualitative Disclosures about Market Risk

At December 31, 2014, we had cash and cash equivalents of $119.5 million, which consisted primarily of bank deposits. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations of interest income have not been significant.

We have not been exposed nor do we anticipate being exposed to material risks due to changes in interest rates. A hypothetical 10% change in interest rates during any of the periods presented would not have had a material impact on our consolidated financial statements.

JOBS Act Accounting Election

We are an "emerging growth company," as defined in the JOBS Act of 2012. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards, and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, 2014-09 (Accounting Standards Codification Topic, or ASC, 606), *Revenue from Contracts with Customers*. ASU 2014-09 affects any entity that either enters into contracts with customers to transfer goods and services or enters into contracts for the transfer of nonfinancial assets. ASU 2014-09 will replace most existing revenue recognition guidance when it becomes effective. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In doing so, companies will need to use more judgment and make more estimates than under the currently effective guidance. These may include identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU 2014-09 is effective for annual periods beginning after December 15, 2016, including interim periods within that period. Early adoption is not permitted. We are currently evaluating the impact of this guidance on our consolidated financial statements.

In June 2014, the FASB issued ASU 2014-10, *Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation.* ASU 2014-10 simplifies the accounting guidance by removing all incremental financial reporting requirements for development stage entities. The amendments related to the elimination of the inception-to-date information and other disclosure requirements of Topic 915 should be applied retrospectively and are effective for annual reporting periods beginning after December 15, 2014 and interim periods therein. The Company has elected to early adopt this guidance and, accordingly, there is no inception to date information presented in these consolidated financial statements.

In August 2014, the FASB issued ASU 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*. ASU 2014-15 requires management to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. In doing so, companies will have reduced diversity in the timing and content of footnote disclosures than under today's guidance. ASU 2014-15 is effective for the first quarter of 2016 with early adoption permitted. We do not believe the impact of adopting ASU 2014-15 on our consolidated financial statements will be material.

BUSINESS

Overview

We are a clinical-stage immuno-oncology company focused on the development of first-in-class technology platforms designed to stimulate robust and durable immune responses against cancer, and our lead product candidate is in a randomized controlled Phase 2b clinical trial in metastatic pancreatic cancer. Immuno-oncology encompasses a class of therapies that leverage the patient's immune system to slow the growth and spread of, or eliminate, tumor cells. We believe a critical distinguishing factor in our approach to immuno-oncology is that our novel therapies initiate powerful innate immune responses and drive targeted, durable adaptive immune responses. Another key attribute of our approach to immuno-oncology is the versatility of our technology platforms to generate customized and combinable therapies to target a wide range of cancers. Our pipeline of immuno-oncology product candidates is derived from two proprietary technology platforms: Live, Attenuated, Double-Deleted, or LADD, *Listeria monocytogenes* and cyclic dinucleotides, or CDNs. Our lead LADD product candidate, CRS-207, is currently being developed in metastatic pancreatic cancer and unresectable malignant pleural mesothelioma. In a completed randomized controlled Phase 2a clinical trial in metastatic pancreatic cancer patients, CRS-207 demonstrated a statistically significant improvement in overall survival when combined with GVAX Pancreas, a cellular vaccine product candidate. The 93-patient two-arm Phase 2a clinical trial was designed to compare the combination of CRS-207 and GVAX Pancreas versus GVAX Pancreas alone. The trial met the primary efficacy endpoint of overall survival at an interim analysis and was stopped upon recommendation from the Data Monitoring Committee. Based on the data from this study, our lead immuno-oncology regimen of CRS-207 and GVAX Pancreas was granted Breakthrough Therapy designation by the U.S. Food and Drug Administration, or FDA. Breakthrough Therapy designation is intended to expedite the development and review of products that treat serious or life-threatening conditions. We have obtained orphan drug designations from the FDA for CRS-207 and GVAX Pancreas for the treatment of pancreatic cancer. Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biologic intended to treat a rare disease or condition. Orphan drug designation entitles a party to certain financial incentives and can provide limited market exclusivity in certain circumstances. We are developing a pipeline of proprietary product candidates, including two product candidates in collaboration with Janssen Biotech, Inc., or Janssen, targeting prostate and lung cancers. We have intellectual property protection on both of our technology platforms and each of our product candidates, which we believe we will maintain into the 2030s.

Despite recent advances in the treatment of cancer over the past few decades, cancer remains the second leading cause of death in the United States and cancer treatment represents a major unmet medical need. Immuno-oncology is an emerging field of cancer therapy that aims to activate the immune system in the tumor microenvironment to create and enhance anti-tumor immune responses, as well as to overcome the immuno-suppressive mechanisms that cancer cells have developed against the immune system. Recent developments in the field of immuno-oncology, including checkpoint inhibitors—therapies that have mechanisms focused on unmasking hidden cancer cells—have shown the potential to provide dramatic efficacy responses and extended survival, even in cancers where conventional therapies such as surgery, chemotherapy and radiotherapy have failed. Based on these advancements, immuno-oncology is becoming a new frontier for cancer drug development, and we believe it is one of the most promising areas of research and development within the pharmaceutical industry.

Both of our technology platforms, LADD and CDN, are designed to activate and stimulate a patient's immune system to specifically target cancer cells. Our LADD technology platform is based on a naturally pathogenic bacterium, *Listeria monocytogenes*, which induces a strong innate immune response. In order to engineer this bacterium for therapeutic use, we modify the *Listeria* with two proprietary gene deletions, substantially reducing its natural disease-causing properties. We then engineer specific LADD product candidates to express and secrete tumor antigens that stimulate the adaptive immune system to mount a powerful cellular attack on tumors. The intended effect is to prime and enhance the innate and adaptive immune responses and deliver an antigen-specific T cell attack against the target tumor cells. Our proprietary CDN technology platform comprises synthetic small molecule immune modulators that target and activate Stimulator of Interferon Genes, or STING,

receptors that are generally expressed at high levels in immune cells. Once activated, STING receptors prime and enhance the innate immune response by signaling through multiple distinct pathways. These signals activate the expression of a broad profile of cytokines that initiate the development of an effective adaptive immune response. Recent advancements reported in numerous leading scientific journals have created interest in the potential for STING receptor-targeting drug candidates for a broad range of therapeutic applications.

Our pipeline of product candidates has the potential to be applicable to a variety of cancers and to be combinable with many conventional and emerging cancer therapies, including cellular vaccines, chemotherapy, radiotherapy and checkpoint inhibitors, among others. Our most advanced immuno-oncology regimen, currently in a Phase 2b clinical trial known as ECLIPSE, assesses the combination of our lead LADD product candidate, CRS-207, with GVAX Pancreas, to treat late-stage metastatic pancreatic cancer patients who have received at least one prior line of therapy. GVAX Pancreas is a potentially synergistic combination candidate that is designed to induce T cells against an array of pancreatic cancer antigens to enable a broad-based immune response and has demonstrated a favorable safety profile in clinical trial to date. We expect to report top line results from ECLIPSE in the first half of 2016. In addition, we are evaluating CRS-207 in combination with chemotherapy in unresectable malignant pleural mesothelioma and have a planned study of CRS-207 in combination with GVAX Pancreas and an anti-PD-1 checkpoint inhibitor in metastatic pancreatic cancer. We also have ongoing and planned clinical development programs evaluating LADD regimens for glioblastoma multiforme and ovarian cancer, and with Janssen in lung and prostate cancers.

We also envision multiple product opportunities for the CDN technology platform. Because STING receptors are known to be critical for immune surveillance and control of cancer progression, we believe that STING receptors represent an attractive target for novel drug candidates. We are developing CDN product candidates as impactful therapies that are intended to prime and enhance the innate and adaptive immune responses. Based on their mechanism of action, our CDN product candidates may also have synergistic or additive benefits when combined with other cancer therapies.

Our vision is to leverage our scientific expertise and understanding of the body's natural defense systems, including the interplay between the innate and adaptive immune responses, to develop safe and effective therapies for the benefit of patients.

Our Proprietary Technology Platforms

We have developed first-in-class technology platforms, LADD and CDN, to prime and enhance immune responses to cancer in indications with significant unmet medical need. We believe our technology platforms represent innovative approaches in immuno-oncology that leverage the potential of the patient's immune system to initiate a powerful innate immune response and to drive a targeted and durable adaptive immune response against cancer.

***Live, Attenuated, Double-Deleted* Listeria Monocytogenes**

Our proprietary LADD product candidates have been engineered for safety and optimal efficacy. We seek to optimize tumor-specific immune responses by engineering our LADD product candidates to express the encoded tumor-specific antigens and deliver them to antigen-presenting cells, which include dendritic cells, or DCs, lead to efficient priming of a class of immune cells known as T cells. Once primed, these T cells seek out and eliminate the targeted tumor cells. Our LADD product candidates have been engineered for safety in humans through the deletion of two genes critical for virulence of unmodified *Listeria*: *actA* and *inlB*. The deletion of the *actA* gene prevents the spread of our LADD product candidates from cell to cell, which controls the spread of infection. The deletion of the *inlB* gene prevents the infection of hepatocytes, or liver cells, which can lead to toxicity. We believe key attributes of our LADD technology platform include:

- *Early Evidence of Efficacy.* Our randomized controlled Phase 2a clinical trial in patients with metastatic pancreatic cancer who had received or refused prior therapy demonstrated improved overall survival.

- *Novel Mechanism.* Our LADD product candidates are designed to initiate a powerful innate immune response and drive a targeted, durable adaptive immune response.

- *Early Evidence of Safety in Preclinical Studies and Clinical Trials.* Through our proprietary deletion of two genes that contribute to *Listeria*'s virulence, we substantially reduce the natural disease-causing properties of *Listeria*, creating stable product candidates suitable for therapeutic use.

- *Versatility.* Individual LADD product candidates can be engineered to target a wide range of cancers by promoting anti-tumor immune responses against antigens associated with specific tumors.

- *Combinability*. The mechanisms of action and safety profile of our LADD product candidates may give them the potential for combination with conventional and novel therapies, such as cellular vaccines, chemotherapy, radiotherapy and checkpoint inhibitors, among others.

- *Repeatable Administration.* Our LADD product candidates are not neutralized by the patient's immune system and are designed for repeat administration, thus allowing a chronic therapy for a sustained tumor antigen-specific response.

- *Cost-effectiveness.* Our LADD product candidates are not personalized for each patient and can be manufactured through a relatively simple and cost-effective fermentation process.

We have engineered and developed proprietary LADD product candidates that are currently under evaluation in clinical trials in metastatic pancreatic cancer, unresectable malignant pleural mesothelioma and glioblastoma multiforme. Further, we are planning additional clinical development programs in indications with significant unmet medical need, such as ovarian, lung and prostate cancers. For large or complex indications, we are pursuing collaborations on a product-by-product basis. As part of this strategy, in May 2014 we entered into a collaboration with Janssen for the development of a LADD product candidate for prostate cancer. Subsequently, we entered into a second collaboration with Janssen for the development of a LADD product candidate for lung cancer, and this agreement became effective in November 2014. In July 2014, our lead immuno-oncology regimen of CRS-207 combined with GVAX Pancreas was granted Breakthrough Therapy designation by the FDA based on Phase 2a clinical trial results that showed a statistically significant improvement in overall survival in patients with metastatic pancreatic cancer who had received or refused prior therapy.

Cyclic Dinucleotides

Our proprietary CDN product candidates are synthetic small molecule immune modulators that are designed to target and activate a receptor known as the STING receptor. Once activated, the STING receptor initiates a profound innate immune response by signaling through three distinct pathways, inducing the expression of a broad profile of cytokines that activate the development of an effective tumor antigen-specific T cell adaptive immune response. The STING receptor is generally expressed at high levels in the cytosol of immune cells, including DCs. Recent advancements reported in numerous leading scientific journals have created interest in the potential for STING receptor-targeting drug candidates across diverse applications. We believe the STING receptor represents an attractive target for novel drug candidates because it is known to be critical for immune surveillance and control of cancer progression. We are developing CDN product candidates as therapies that are intended to prime and enhance the innate and adaptive immune response. Our proprietary synthetic CDN product candidates are significantly more potent than naturally occurring CDN molecules, indicating a high translational potential as a therapeutic approach to elicit an effective immune response. We believe key attributes of our CDN technology platform are:

- *Early Evidence of Potency.* Our CDN product candidates have demonstrated significant anti-tumor activity in pre-clinical studies.

- *Novel Mechanism.* Our CDN product candidates are designed to initiate broad and strong innate and adaptive immune responses through the activation of the STING receptor signaling pathway.

- *Versatility of Delivery*. We believe our CDN product candidates can be effectively delivered via intratumoral, or IT, injection, systemic delivery via formulation and other novel modalities such as conjugation with antibodies.

- *Combinability*. Based on their mechanism of action, we believe our CDN product candidates may have synergistic or additive benefits of immune-mediated tumor killing mechanisms when combined with conventional and novel therapies such as cellular vaccines, chemotherapy, radiotherapy and checkpoint inhibitors, among others.

- *Ease of Manufacture*. Our CDN product candidates are small molecules manufactured through a relatively simple and cost-effective process.

- *Broad Applicability*. We believe our CDN product candidates will have broad application in oncology and the potential to expand into other therapeutic areas such as infectious and autoimmune diseases.

Our preclinical studies utilizing our synthetic CDN derivatives resulted in eradication of treated tumors and induction of systemic tumor-specific immunity in several aggressive preclinical tumor models. Based on the results of these preclinical studies, we believe our proprietary CDN derivatives are significantly more potent than natural stimulators of the STING receptor. We expect to file an Investigational New Drug, or IND, application for our lead CDN product candidate, ADU-S100, in the first half of 2015 and to dose our first patient in the second half of 2015.

Key Advantages of the Aduro Approach

Immuno-oncology is an emerging field of cancer treatment that aims to directly activate the immune system in the tumor microenvironment to create and enhance anti-tumor immune responses, as well as to overcome the immuno-suppressive mechanisms that cancer cells have developed against the immune system. There are two general approaches to immuno-oncology: “create and expand” the anti-tumor immune response and “remove the brakes” placed on the immune response by the tumor’s defenses. By focusing on the “create and expand” approach, our technology platforms are designed to prime and enhance innate and tumor-specific adaptive immune responses against the target tumor cells.

We believe several advantages to our approach include:

- **Our product candidates are engineered to prime and enhance both the innate and adaptive immune responses against tumors.** We believe that leveraging both the innate and adaptive immune responses is a novel approach to immuno-oncology that differentiates our technology platforms from current and conventional therapies and has the potential to create best-in-class cancer therapies. Our LADD product candidates efficiently enter circulating APCs, priming and enhancing a potent innate immune response and an adaptive immune response to fight cancer. By stimulating the expression of a broad profile of cytokines, our CDN product candidates are designed to directly activate the tumor microenvironment and enhance recognition of the tumor by the immune system, leading to tumor destruction and long-lasting anti-tumoral immunological memory. This proprietary synthetic molecule is significantly more potent than naturally occurring CDN molecules and toll-like receptor, or TLR, agonists, indicating a high potential as a therapeutic approach against diverse tumor types.

- **By working to stimulate the patient’s immune system, our product candidates have the potential to be well-tolerated and safe, relative to many existing treatments.** Because our

therapies are designed to prime and enhance the body's natural innate and adaptive immune responses, we believe that our approach may offer a safer treatment alternative to conventional oncology approaches such as chemotherapy, radiotherapy and antibody therapies. To date, our LADD product candidates have been well-tolerated in the clinical setting.

- **Based on their mechanism of action and safety profiles, our therapies have the potential to be readily combinable and synergistic with both conventional and novel therapies.** Our most advanced regimen, currently in our Phase 2b ECLIPSE clinical trial, is an immuno-oncology regimen that assesses the combination of CRS-207, with GVAX Pancreas. In an earlier randomized controlled Phase 2a clinical trial, this combination regimen demonstrated a statistically significant overall survival benefit in patients with metastatic pancreatic cancer who had received or refused prior therapy, when compared to patients receiving GVAX Pancreas alone. GVAX Pancreas is a potentially synergistic combination candidate that is designed to induce T cells against an array of pancreatic cancer antigens to enable a broad-based immune response with a well-established, favorable safety profile. We believe CRS-207 has further potential to enhance therapeutic outcomes when combined with other cancer treatments. CRS-207 is also under investigation for use in combination with chemotherapy in patients with unresectable malignant pleural mesothelioma who have not received prior therapy. In preclinical studies, we have shown that our proprietary CDN product candidates can be co-formulated with designated recombinant proteins to induce potent antigen-specific helper T cell, or CD4+ T cell, and cytotoxic T cell, or CD8+ T cell, immunity.

- **Our "create and expand" approach to immuno-oncology may have a role alongside other potentially complementary immuno-oncology therapies that have mechanisms focused on the "remove the brakes" approach, such as checkpoint inhibitors.** Many of the immuno-oncology therapies in development center on the "remove the brakes" approach, which works by overcoming immunosuppressive pathways that mask a tumor from the body's immune system. Some of the most advanced technologies are anti-PD-1/PD-L1 monoclonal antibodies, a class of checkpoint inhibitors that target these immunosuppressive pathways. By impairing the interaction of the inhibitory receptor PD-1 on T cells, which we refer to as "removing the brakes," these checkpoint inhibitors strengthen the anti-tumor T cell response. We believe that our approach to "create and expand" the immune response will be synergistic to these "remove the brakes" approaches and allow our technology to play an important role in the overall immuno-oncology treatment paradigm.

- **Our versatile LADD and CDN technology platforms have produced a deep pipeline and have the potential to produce a breadth of future development opportunities.** Our lead LADD product candidate, CRS-207, is engineered to stimulate a response to mesothelin, an antigen expressed by multiple tumor types. Thus, our ongoing clinical trials involving CRS-207 are focused on assessing CRS-207 for the treatment of mesothelin-based tumors in metastatic pancreatic cancer and unresectable malignant pleural mesothelioma. We anticipate conducting additional studies of CRS-207 in other tumor types that express high levels of mesothelin. We have developed other proprietary LADD product candidates to target prostate cancer, lung cancer and glioblastoma multiforme and intend to explore the development of additional LADD product candidates to target other cancers. With our CDN technology program, we are exploring various delivery methods and formulations, as well as the potential to expand their application into other disease areas beyond oncology.

Our Strategy

Our current focus is to develop and commercialize best-in-class cancer therapies using our LADD and CDN technology platforms. Key elements of our strategy include:

- **Rapidly advance CRS-207 through clinical development and regulatory approval.** We are currently conducting our Phase 2b ECLIPSE clinical trial of CRS-207 in combination with GVAX

Pancreas in patients with metastatic pancreatic cancer who have received at least one prior line of therapy. We expect to complete enrollment in the third quarter of 2015 and to report top line results in the first half of 2016. Assuming positive clinical results in pancreatic cancer studies, we plan to seek regulatory approval of CRS-207 in the United States, Europe and other major geographies around the world.

- **Maximize the commercial value of our proprietary LADD and CDN technology platforms.** We currently have global development, marketing and commercialization rights for our lead product candidate, CRS-207, as well as additional LADD product candidates and our CDN product candidates. If we obtain regulatory approvals for CRS-207 in pancreatic cancer or other indications, we plan to build a commercial organization with a specialty sales force to market CRS-207. We also plan to retain commercial rights to additional LADD and CDN product candidates.

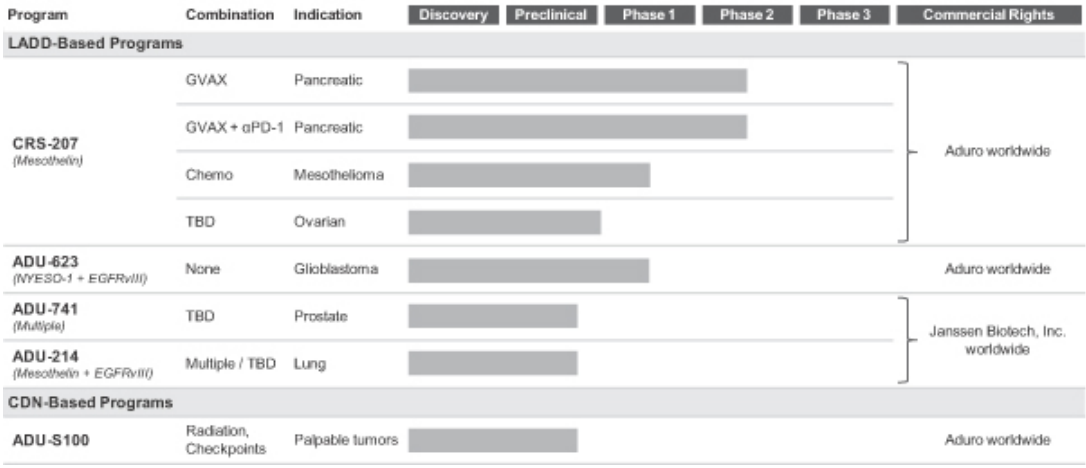
- **Develop novel drug candidates by leveraging our proprietary technology platforms and our understanding of combination therapy in immuno-oncology.** We have proprietary technology platforms that we believe can generate novel and combinable therapies to target a wide range of cancers with significant unmet medical need. We plan to invest in these technology platforms to develop additional product candidates, and our current and future pipeline may be applicable to various tumor types due to the current efficacy data, safety profiles and combination potential of our current product candidates. We intend to further explore combination opportunities with conventional and novel treatments, including cellular vaccines, chemotherapy, radiotherapy and checkpoint inhibitors, among others.

- **Expand on the value of our product candidates through collaborations in areas outside of our core strategic focus.** We may decide to selectively partner large and complex oncology indications or geographies where a partner could bring additional resources and expertise to maximize the value of our product candidates. We entered into two strategic collaborations with Janssen for the treatment of prostate, lung and certain other cancers.

- **Leverage the expertise of our scientific founders and key advisors to develop innovative technologies at the forefront of the immuno-oncology field.** Our scientific founders and advisors are from some of the world's leading research institutions and have a history of seminal discoveries and significant experience in oncology, immuno-oncology and vaccines. As such, we plan to continue to leverage the collective talent of our scientists, clinicians and a network of highly influential advisors to inform our development strategy and enable our technology to be at the forefront of the immuno-oncology field. We strive to protect our commercially important discoveries and product candidates by applying for, maintaining and defending our patent rights. At January 27, 2015, our owned U.S. patent portfolio consisted of 21 issued patents and 14 pending patent applications.

Our Pipeline

Our pipeline of product candidates is depicted in the following chart:



Immuno-oncology and the Application of Our Technology Platform

Background on Immuno-Oncology

Cancer is a broad group of diseases in which cells divide and grow in an uncontrolled fashion, and spread via the bloodstream. In normal tissues, the rates of new cell growth and cell death are tightly regulated and kept in balance. In cancerous tissues, this balance is disrupted as a result of mutations, causing unregulated cell growth that leads to tumor formation. The immune system is designed to identify and eliminate tumor cells expressing foreign or abnormal antigens, although this process is often defective in cancer patients.

The immune system is generally divided into two subsystems: the innate immune system and the adaptive immune system. The innate immune system is the body's first line of immune defense and is non-specific, providing an immediate response to foreign bodies, including tumor antigens. The adaptive immune system provides a specific and long-lasting immune response against these threats. Within the innate immune system, natural killer cells, or NK cells, cytokines and APCs, such as DCs, are involved in tumor detection and destruction. NK cells can detect foreign or transformed cells, which no longer function normally, and cause them to self-eliminate through a process called apoptosis or programmed cell death. Cytokines can stimulate a broad-based immune response against cancer cells through multiple modalities, including activating T cells and causing them to proliferate. DCs act as messengers between the innate and the adaptive immune systems, by sampling the resulting fragments of destroyed cells. The DCs process foreign antigens, and present them on the cell surface to be recognized by T cells. T cells are a central component of the adaptive immune system. Within the T cell population, CD8+ T cells recognize and destroy cells expressing foreign antigens, whereas CD4+ T cells recognize foreign antigens and assist in the immune response. These cells can specifically target tumors based on antigen-specificity and further promote tumor destruction. Specificity, training T cells to recognize a specific antigen, and immunological memory, providing long-lasting protection against an antigen, are the two most important components of the adaptive immune system in fighting cancers.

In cancer, the immune system's natural strength has been diminished leading to a reduced capability to eradicate tumor cells. Immuno-oncology is an emerging field of cancer treatment that aims to activate the immune system in the tumor microenvironment to create and enhance anti-tumor immune responses, as well as to overcome the immuno-suppressive mechanisms that cancer cells have developed against the immune system. Recent developments in the field of immuno-oncology have shown the potential to provide dramatic efficacy

responses and extended survival, even in cancers where conventional therapies such as surgery, chemotherapy and radiotherapy have failed.

There are two general approaches to immuno-oncology: “creating and expanding” anti-tumor immune responses and “removing the brakes,” or overcoming the immuno-suppressive mechanisms that cancer cells have developed against the immune system.

Creating and Expanding

The “create and expand” approach to immuno-oncology involves harnessing the patient’s immune system to identify and eradicate cancer cells. There have been many modalities within this approach, some of which have shown early promise, yet these individual approaches have inherent limitations in efficacy, safety or commercial viability. Some of these approaches and their potential limitations are as follows:

- *Cellular Vaccines*: In this approach, irradiated human cancer cells, which are genetically modified to express immune system-stimulating cytokines, such as GM-CSF, to help stimulate the immune system, are administered to patients to recruit and activate DCs. These whole cancer cells contain the full spectrum of antigens expressed by a particular cancer cell line, thus allowing for antigen-specific T cell priming to numerous relevant antigens. Cellular vaccines have demonstrated the potential to generate both CD4+ and CD8+ T cell responses against tumor cells, though completed clinical trials to date have shown limitations in their effectiveness as a monotherapy.

- *Engineered CD8+ T Cells*: In this approach, T cells are engineered outside of the body incorporating chimeric antigen receptors, or CARs, or T cell receptors, or TCRs, directed against specific tumor antigens. Following ex-vivo proliferation, CAR-T cells and TCR-T cells are infused back into the patient. Several engineered CD8+ T cell therapies have shown promising clinical results, yet these personalized therapies may have challenges with commercial-scale manufacturing and broad distribution.

- *Ex-Vivo Modulated Cancer Vaccines*: In this approach, inactive APCs are isolated and removed from the body, then activated in a laboratory. Post-activation, the cells are administered to the patient with the aim of stimulating the tumor microenvironment into mounting a response against the cancer cells. This personalized approach has resulted in one approved product, sipuleucel-T, developed by Dendreon Corporation, but has been hampered by cumbersome manufacturing and handling requirements.

- *Oncolytic Viral Vaccines*: In this approach, oncolytic viruses selectively lyse cancer cells causing an immune response through the release of tumor antigens. Though some promising results have been observed, efficacy as a monotherapy has been limited by inefficient delivery to tumors, balancing the optimal viral replication profile, and a limited ability to grow the induced immune response beyond the initial treatment site.

- *Peptide Vaccines:* In this approach, partial or full tumor antigens are administered with a second agent called an immune adjuvant. Most cancer vaccine clinical trials have been performed with peptide vaccines. Clinical outcomes using this approach have been disappointing, in part because this treatment mechanism has been shown to stimulate CD4+ T cells and other regulatory T cells, but not the CD8+ T cells that are necessary to kill cancer cells.

- *Vector-based Vaccines:* In this approach, vector-based vaccines deliver tumor antigens to APCs in their genomic form through bacterial and viral vectors. We believe that this may be the most powerful method to generate a strong adaptive immune response against tumor cells. However, previously studied vector-based vaccines have had significant limitations due to their virulence and the effects of neutralizing antibodies, among other factors.

Removing the Brakes

The “remove the brakes” approach to immuno-oncology is based on the premise of unmasking hidden cancer cells that have developed escape mechanisms to evade the immune system. The primary modality to this approach is classified within the category of checkpoint inhibitors. These therapies have demonstrated significant promise to treat a broad range of tumor types, yet they are not effective in many cancers. We believe our approach could be complementary to checkpoint inhibitors making them more effective in a broader range of cancers.

Checkpoint inhibitors are aimed at overcoming the defenses that tumor cells have developed against the immune system. Anti-CTLA-4 and anti-PD-1 are checkpoint inhibitors that have been studied in clinical trials for cancer. We believe that the efficacy of this approach as a monotherapy depends on the pre-existence of a T cell response against the tumor cells. Some patients’ immune systems are unable to recognize the tumor and therefore cannot generate the necessary immune response to eliminate the tumor following treatment with checkpoint inhibitors. Multiple preclinical models have shown an amplified anti-tumor effect against poorly immunogenic tumors when checkpoint inhibitors are combined with strong adaptive immune cell stimulators, such as cancer vaccines.

The Aduro Approach to Immuno-Oncology

We believe that our LADD and CDN technology platforms represent a new, significant advancement within the field of immuno-oncology that can both overcome the limitations of other “create and expand” approaches and potentially complement emerging “remove the brakes” approaches to immuno-oncology. Our “create and expand” approach is designed to prime and enhance innate and adaptive immune responses against cancer cells. In addition, our LADD technology platform has the potential for combination with conventional and novel therapies, including other immuno-oncology products that modulate the immune response, including checkpoint inhibitors that “remove the brakes,” due to the mechanism of action and safety profile. Using our proprietary method of modifying *Listeria*, we engineer LADD product candidates which are designed to prime and enhance an innate and adaptive immune responses specific for several targets present on tumor cells. We have designed our LADD product candidates to directly address the safety concerns seen with other vector-based vaccines by deleting two genes critical for the virulence of unmodified *Listeria*. Our LADD product candidates are not neutralized by the patient’s immune system therefore allowing for repeat administration as a chronic therapy which has a sustained enhancing of tumor antigen-specific T cell immunity. Our CDN technology platform is designed to specifically activate the STING receptor. Once activated, the STING receptor initiates a profound innate immune response, causing the secretion of cytokines that enhance the adaptive immune response against tumor cells. Both our LADD and CDN technology platforms are intended to prime and enhance an innate and adaptive immune response specific for several targets present on tumor cells.

Our Immuno-Oncology Technology Platforms

LADD Technology Platform Overview

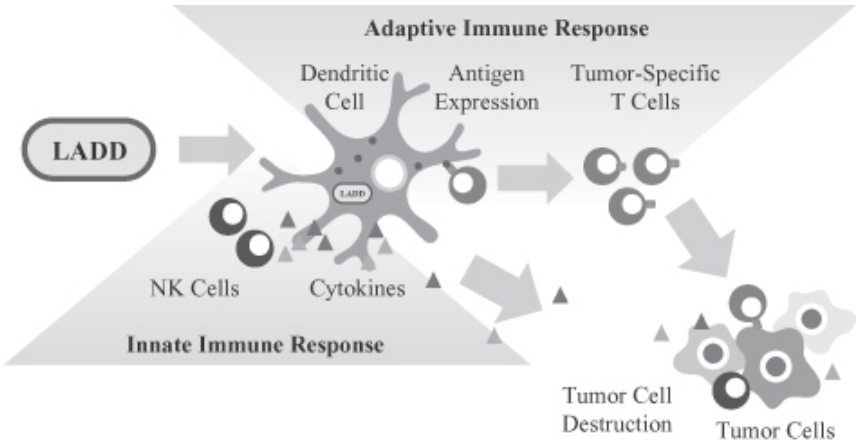
Listeria is a natural bacterium that has inherent characteristics to recruit and activate NK cells, triggering a strong and immediate innate immune response. Our LADD technology platform modifies *Listeria* in two ways: (1) to exclude two harmful genes required for the virulence of the unmodified organism and (2) to express and secrete tumor antigens which prime and enhance an adaptive immune response, a T cell attack specifically against tumor cells.

There are a number of desirable features of the natural biology of *Listeria* that make it an attractive platform for immuno-oncology drug development, in particular is its ability to induce strong innate and adaptive immune responses by effective stimulation of CD4+ and CD8+ T cell immunity. There are also practical features of *Listeria*-based vaccines, including that they are not neutralized by the patient’s immune system, are designed

for repeat administration and can be manufactured through a relatively simple and cost-effective fermentation process. We believe we have developed a LADD technology platform that is safe yet retains the potency of the natural, or unmodified, bacteria.

We designed our LADD technology platform to enable the safe administration of *Listeria* by deleting two genes critical to the bacterium's natural virulence, *actA* and *inlB*, which are required for the spread from one cell to another and the infection of hepatocytes, respectively. Our method of attenuation results in the complete deletion of *actA* and *inlB* virulence genes, and as a result we believe there is no possibility for reversion to unmodified *Listeria*. The attenuated strain of bacteria is then modified with new genetic material to encode and express specific tumor antigens. Our method of antigen expression involves site-specific insertion of antigen expression cassettes in up to four locations on the chromosome of the attenuated platform strain.

Upon intravenous administration, our LADD product candidates initially target APCs, including DCs. DCs circulate in the blood stream and continuously monitor their environment for danger signals by sampling proteins known as antigens from dying tumor cells and pathogens such as *Listeria*. Activated DCs release cytokines and process the sampled antigens and present them on the cell surface to be recognized by T cells, thereby training the T cells to specifically target the presented antigens. In this way, DCs are the primary initiators of both the innate and adaptive immune responses and serve as messengers between the innate and adaptive immune systems, as illustrated in the figure below. Our LADD product candidates are designed to leverage the combined effect of broad-based innate immune responses and antigen-specific T cell responses to initiate destruction of tumor cells while sparing normal tissue.



LADD-Based Pipeline

Our LADD product candidates are developed in combination with complementary therapies to treat specific cancers. The current portfolio includes:

Program	Indication	Combination	Status
CRS-207 *(Mesothelin)*	Pancreatic	GVAX	Phase 2b / Ongoing
	Pancreatic	GVAX+ anti-PD-1	Phase 2b / Ongoing
	Mesothelioma	Chemo	Phase 1b / Ongoing
ADU-623 *(NYESO-1 + EGFRvIII)*	Glioblastoma	None	Phase 1 / Ongoing
ADU-741* *(Multiple)*	Prostate	TBD	Preclinical
ADU-214* *(Mesothelin + EGFRvIII)*	Lung	Multiple / TBD	Preclinical

* Programs under collaboration with Janssen.

The IND for CRS-207 for use in combination with GVAX Pancreas for pancreatic cancer was filed by Aduro in April 2011. The IND for CRS-207 in combination with GVAX Pancreas and nivolumab for pancreatic cancer was filed by The Johns Hopkins University, or JHU, in September 2014. The IND for CRS-207 for use in mesothelioma was filed by Cerus Corporation in June 2007.

The IND for ADU-623 for use in glioblastoma was filed by Providence Health & Services in August 2013.

We have not yet filed INDs for the two preclinical programs, ADU-741 for prostate cancer and ADU-214 for lung cancer.

CRS-207

CRS-207 is our lead LADD product candidate. CRS-207 is a monovalent LADD product candidate engineered to express the mesothelin antigen that is over-expressed on all pancreatic and mesothelioma tumors. Some studies have shown that mesothelin is over-expressed in the following additional cancer types: ovarian, gastric, lung, triple negative breast, esophageal and colorectal.

CRS-207 in Pancreatic Cancer

Pancreatic Cancer Overview

Pancreatic cancer is the fourth leading cause of cancer deaths in the United States. In 2012, the estimated incidence according to Globocan was 43,000 in the Untied States and 338,000 worldwide. Pancreatic cancer is aggressive and often not diagnosed until it is too advanced for current treatments to be effective. Most patients are diagnosed after the age of 45, and 94% of patients die within five years from diagnosis. The majority of pancreatic cancer patients are treated with chemotherapy, but this cancer is highly resistant to chemotherapy. Approximately 20% of the pancreatic cancer patients are treated with surgery; however, even for those with successful surgical resection, the median survival is approximately two years. Radiotherapy may be used for locally advanced tumors, but it is not curative. There are currently no approved treatments for second and third-line patients.

CRS-207 with GVAX Pancreas in Pancreatic Cancer

CRS-207 combined with GVAX Pancreas is our lead LADD regimen. We are currently conducting our Phase 2b ECLIPSE clinical trial of CRS-207 in combination with GVAX Pancreas in patients with metastatic pancreatic cancer who have received at least one prior line of therapy in the metastatic setting.

About GVAX and GVAX Pancreas

GVAX product candidates are a family of vaccines derived from human cancer cell lines that have been engineered to recruit the immune system. In 2013, we acquired the rights, title and interest of ANI Pharmaceuticals Inc. to GVAX Pancreas product candidates. These irradiated tumor cell lines are modified to express GM-CSF, the most potent DC recruitment factor. GVAX induces T cells against a broad array of cancer antigens. Low-dose cyclophosphamide is administered one day prior to GVAX Pancreas to inhibit regulatory T cells. GVAX Pancreas is derived from human pancreatic cancer cell lines and is designed to activate specific T cell immunity to cancer antigens including mesothelin enabling, or priming, a broad-based immune response.

Preclinical studies have shown the concept of synergy between immune checkpoint inhibitors such as anti-CTLA-4 antibodies and cancer vaccines such as GVAX. For example, researchers at JHU conducted a Phase 1b, open-label, randomized study to build on these preclinical observations by evaluating ipilimumab (a checkpoint inhibitor, anti-CTLA-4 antibody) alone or in combination with GVAX Pancreas for the treatment of previously treated, locally advanced, or metastatic pancreatic cancer. The primary objective of the study was to determine the safety profile. Secondary objectives included estimation of overall survival. A total of 30 patients with previously treated advanced pancreatic cancer were randomized (1:1). The median overall survival was 3.6 months for patients receiving ipilimumab, Arm 1, compared with 5.7 months for patients receiving ipilimumab in combination with GVAX Pancreas, Arm 2 (hazard ratio for death, or HR, = 0.51, p-value = 0.072). The one-year survival probability for patients in Arm 1 was 7% compared to 27% for patients in Arm 2. The hazard ratio is a measure of the risk of a particular event in one group compared to another group, over time. An HR lower than 1.00 indicates that the observed risk is lower in the treatment arm than in the control arm. A p-value is a measure of the statistical significance of the observed result. By convention, a p-value lower than 0.05 is considered statistically significant. Similar to prior ipilimumab studies, 20% of patients in each arm had grade 3/4 immune-related adverse events. The results of the study concluded that immune checkpoint blockade in combination with GVAX Pancreas has the potential for clinical benefit and should be evaluated further in a larger study.

Clinical Status

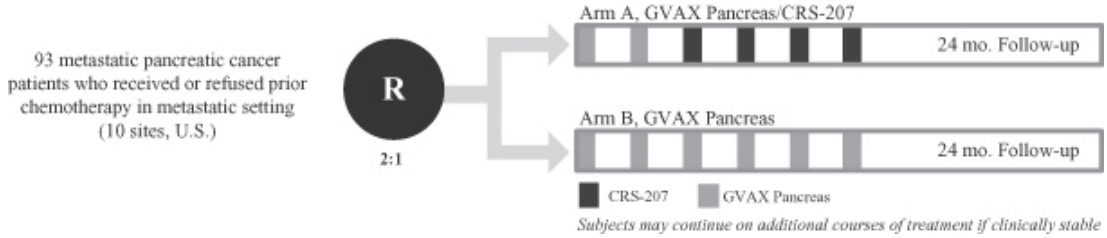
Our preclinical and Phase 1 clinical studies, conducted by Cerus Corporation in 2005-2006 and Anza Therapeutics in 2007-2009, demonstrated the potential of utilizing the heterologous priming and enhancing combination of CRS-207 and GVAX Pancreas. Based on these data, we initiated a randomized controlled Phase 2a clinical trial with this combination. The results of our randomized controlled Phase 2a clinical trial were first presented at the American Society of Clinical Oncology, or ASCO, in 2013 and published in the January 2015 issue of the Journal of Clinical Oncology and further supported this combination approach to treat metastatic pancreatic cancer.

In a randomized controlled Phase 2a clinical trial the combination of CRS-207 with GVAX Pancreas demonstrated a statistically significant improvement in overall survival compared to GVAX Pancreas alone in patients with metastatic pancreatic cancer who previously received or refused prior chemotherapy. Based on these data, the FDA granted Breakthrough Therapy designation to the combination of CRS-207 and GVAX Pancreas. We have also obtained orphan drug designations for both GVAX Pancreas and CRS-207 for pancreatic cancer. We designed our Phase 2b ECLIPSE clinical trial based on the results we observed in the Phase 2a clinical trial. The ECLIPSE clinical trial is being conducted to compare the clinical outcomes of the combination of CRS-207 and GVAX Pancreas to currently used single agent chemotherapies or to CRS-207 alone. We expect to complete enrollment in ECLIPSE in the third quarter of 2015 and to report top line results in the first half of 2016.

Phase 2a (Completed)

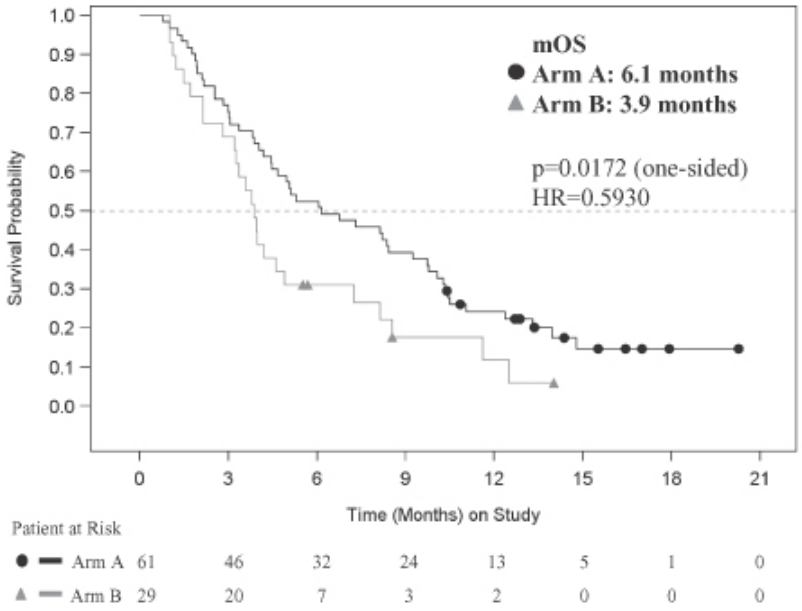
We conducted a randomized controlled Phase 2a clinical trial of CRS-207 in combination with GVAX Pancreas in patients with metastatic pancreatic cancer who received or refused prior therapy. The 93-patient two-arm study was designed to compare the combination of CRS-207 and GVAX Pancreas versus GVAX Pancreas alone. The trial met the primary efficacy endpoint of overall survival at an interim analysis and was stopped upon recommendation from the Data Monitoring Committee.

The trial enrolled advanced-stage metastatic pancreatic cancer patients, with most patients having received two or more prior therapies in the metastatic setting. Patients were randomized in a two to one ratio in Arm A, which received GVAX Pancreas vaccine followed by four doses of CRS-207, or Arm B, which received six doses of GVAX Pancreas vaccine alone. In each arm, low dose cyclophosphamide was administered one day prior to GVAX Pancreas in order to enhance its immunogenicity and anti-tumor activity. Low dose cyclophosphamide inhibits T regulatory cells, and T regulatory cells may diminish a vaccine's efficacy. Patients were allowed to receive additional treatment courses (a treatment course contains six vaccinations) if they were clinically stable and perceived by the investigator to benefit from treatment. In both arms, treatments are administered at three week intervals, with a four week interval between treatment courses. After a four-week rest, clinically stable patients were offered additional courses.



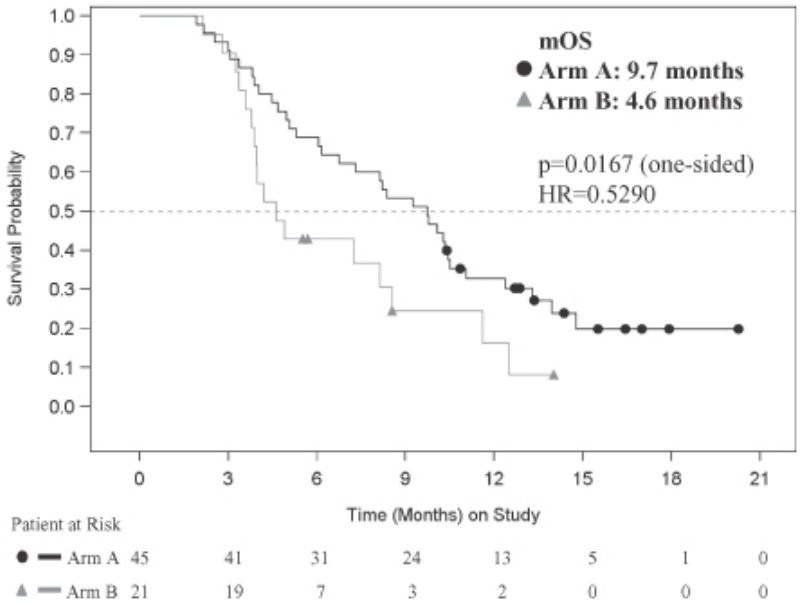
In January 2014, safety and efficacy data were presented at the ASCO Gastrointestinal Cancers Symposium. The study demonstrated a statistically significant survival benefit in patients receiving the combination of CRS-207 and GVAX Pancreas, Arm A, compared to GVAX Pancreas vaccine alone, Arm B. The median overall survival, or mOS, of the patients receiving the combination was 6.1 months compared to 3.9 months for those receiving GVAX Pancreas monotherapy (hazard ratio for death, or HR, = 0.59, one-sided p value = 0.0172). One-year survival probability for patients in Arm A was 24% compared with 12% for patients in Arm B. The Kaplan-Meier survival curve for the full analysis set, patients who received at least one treatment, as of October 2013 is shown below.

Phase 2a Overall Survival - Full Analysis Set



To better evaluate the effect of CRS-207, we performed a pre-defined subset analysis that included only patients who received at least three doses in either treatment group, GVAX Pancreas followed by at least one CRS-207 dose in Arm A or at least three doses of GVAX Pancreas in Arm B. In this subset of 45 Arm A patients and 21 Arm B patients, the mOS was 9.7 months in Arm A compared to 4.6 months in Arm B (HR = 0.53, one-sided p value = 0.0167). The Kaplan-Meier survival curve for the subset of patients who received at least three doses (per protocol subset) as of October 2013 is shown below.

Phase 2a Overall Survival - Per Protocol Analysis Set



In addition to the 45 Arm A patients in the per protocol subset who received the combination of CRS-207 and GVAX Pancreas, three Arm B patients were crossed over into combination therapy. Of these 48 patients, nine survived longer than 24 months from randomization. None of the patients who received only GVAX Pancreas survived longer than 21 months. We continue to monitor the long-term survival of patients treated in our Phase 2a clinical trial. As of February 16, 2015, two patients continued to receive the combination treatment, one of whom was in the eighth course of combination treatment, and five patients remained in follow up.

Carbohydrate antigen 19-9, or CA 19-9, is a serum biomarker used in the diagnosis of pancreatic cancer in symptomatic patients and is being studied further to determine if it could also be used as a biomarker for prognosis, overall survival, response to chemotherapy and recurrence. While not statistically significant, we observed a higher proportion of patients with stable or declining levels of CA 19-9 during treatment in Arm A than in Arm B. There was no difference in progression-free survival, or PFS.

Side effects are known as adverse events, or AEs, and are graded in level of severity from Grade 1 to Grade 4. Grade 1 and 2 AEs are generally characterized as mild. Grade 3 AEs are considered moderate and Grade 4 AEs are considered severe. In our Phase 2a clinical trial, the most frequent drug-related Grade 3 or 4 AE was lymphopenia (an abnormally low level of white blood cells), with three patients experiencing Grade 3 lymphopenia and two patients experiencing Grade 4 lymphopenia. Lymphopenia is expected based on prior nonclinical studies and CRS-207's mechanism of action. In addition, the AEs of lymphopenia were self-correcting or did not reveal an unexpected pattern of toxicity. We currently do not plan to alter our development plan for CRS-207 based on these observed AEs of lymphopenia. There were no other Grade 4 AEs, and there were no other Grade 3 AEs with frequencies higher than five percent in either arm. The most common Grade 3 AEs were transient lymphopenia, fevers, elevated liver enzymes and fatigue.

Phase 2b ECLIPSE (Ongoing)

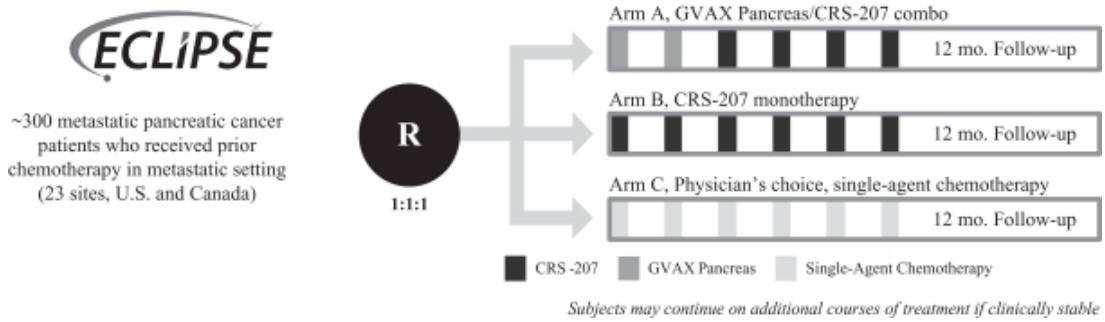
We are conducting our Phase 2b ECLIPSE clinical trial of CRS-207 in combination with GVAX Pancreas to treat late-stage metastatic pancreatic cancer patients who have received at least one prior line of therapy. The study is designed to evaluate the efficacy and safety of CRS-207 in combination with GVAX Pancreas, Arm A, compared to single agent chemotherapies, Arm C, commonly used in this setting. The study also includes an arm in which patients receive CRS-207 as a monotherapy, Arm B, to evaluate the contribution of GVAX Pancreas to the combination therapy. The three-arm trial will enroll approximately 300 patients at over 20 clinical trial sites in the United States and Canada.

Patients are being enrolled in two cohorts. The primary cohort will include approximately 190 patients who have received at least two prior treatment regimens for metastatic pancreatic cancer, or third+ line. The exploratory cohort will include approximately 110 patients who have received only one prior treatment regimen for metastatic pancreatic cancer, or second line. Patients will be randomized in a one to one to one ratio across each arm of the trial. Patients in Arm A will receive two doses of GVAX and four doses of CRS-207. Patients in Arm B will receive six doses of CRS-207. Patients in Arm C will receive a physician's choice of the following single-agent chemotherapies: gemcitabine, 5-Fluorouracil, capecitabine, irinotecan or erlotinib.

In Arms A and B, treatments will be administered at three-week intervals. Low-dose cyclophosphamide will be delivered intravenously one day before each GVAX Pancreas treatment. GVAX Pancreas will be administered as six intradermal injections. CRS-207 will be delivered by one-hour intravenous infusion followed by a four-hour observation period. Oral antibiotics are initiated seven days after the final CRS-207 vaccination of each treatment course. After a four-week rest, clinically stable patients are offered additional courses.

The primary objective is to compare overall survival, or OS, in the primary cohort between Arms A and C. Secondary/exploratory objectives include comparison of OS in both primary and exploratory cohorts between all treatment arms, assessment of safety and clinical responses through tumor assessments and CA19-9 levels, and correlation of *Listeria*- and mesothelin-specific T cell and other immunological responses with OS, PFS, best overall response and quality of life.

The study is 80% powered (one-sided overall alpha = 0.15) for the primary endpoint comparison of third+ line patients receiving Arm A versus chemotherapy alone Arm C.



We expect to complete enrollment in the third quarter of 2015 and to report top line results in the first half of 2016. Following the completion of the ECLIPSE study, we plan to initiate a global Phase 3 trial in metastatic pancreatic cancer patients who have received prior chemotherapy. We expect the trial would be randomized to evaluate overall survival in patients treated with our therapy in comparison to standard of care.

CRS-207 with GVAX Pancreas and Anti-PD-1 in Pancreatic Cancer

We have initiated a clinical trial using CRS-207 in combination with GVAX Pancreas and nivolumab, an anti-PD-1 checkpoint inhibitor, in metastatic pancreatic cancer. Nivolumab is being developed by Bristol-Myers Squibb and is currently approved in Japan for treatment of melanoma. We anticipate that combining CRS-207 and GVAX Pancreas with a checkpoint inhibitor may further improve clinical outcomes because of their complementary mechanisms of action.

About Anti-PD-1

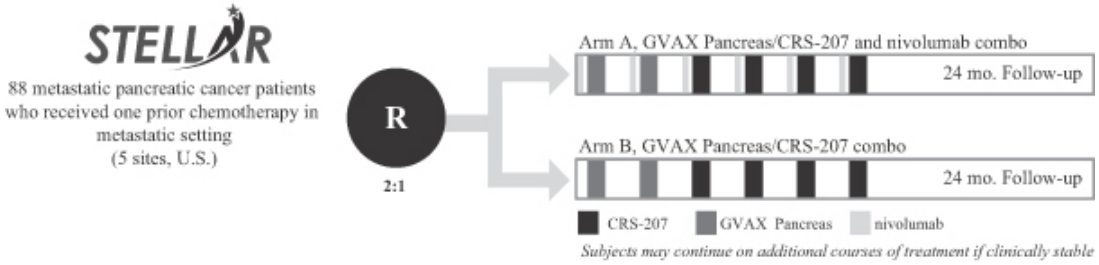
Programmed cell death protein 1, or PD-1, is expressed on the surface of activated T cells, B cells, and DCs. PD-1 and associated ligands, PD-L1 and PD-L2, negatively regulate immune responses with the ligands expressed on many murine tumor cell lines. Anti-PD-1/PD-L1 monoclonal antibodies, a class of checkpoint inhibitors, target this novel immunosuppressive pathway with the goal of strengthening the anti-tumor T cell response by impairing the interaction of the inhibitory receptor PD-1 on T cells with PD-L1 expressed on tumor cells. While anti-PD-1 therapies have shown efficacy in subsets of patients in some tumor types, patients with certain cancers have not responded to treatment with anti-PD-1 in early clinical trials, including pancreatic cancer patients. Based on preclinical models and early clinical data, we believe that checkpoint inhibitors when combined with strong adaptive immune cell stimulators, such as cancer vaccines, can have an amplified anti-tumor effect against poorly immunogenic tumors. These results provide rationale for further testing of checkpoint inhibitors in combination with other immunotherapies.

Clinical Status

The investigator-sponsored randomized controlled Phase 2b clinical trial, or STELLAR, is supported by Aduro, Bristol-Myers Squibb, Stand Up to Cancer, PanCAN/AACR and the Lustgarten Foundation. STELLAR is designed to explore the synergistic effects on our treatment regimen in combination with nivolumab. The first patient was dosed in the first quarter of 2015.

Phase 2b STELLAR (Ongoing)

Our Phase 2b STELLAR clinical trial is a randomized controlled Phase 2b clinical trial of CRS-207 in combination with GVAX Pancreas and nivolumab in patients with metastatic pancreatic cancer who have received only one prior line of therapy in the metastatic setting. The ongoing 88-patient randomized controlled two-arm Phase 2b clinical trial is anticipated to be conducted by leading investigators at up to five U.S. clinical trial sites. Patients receive either the combination therapy with nivolumab or the combination therapy alone. The primary endpoint of the trial is overall survival and secondary endpoints include evaluation of clinical and immune response and safety.



We expect to complete enrollment in the first quarter of 2016 and to report data from an interim analysis in the second half of 2016.

CRS-207 in Mesothelioma

Mesothelioma Overview

Malignant mesothelioma is a tumor in the tissue lining, most commonly the tissue lining surrounding the lungs. Mesothelioma is a relatively rare disease; it is estimated that the incidence in the United States is approximately 3,000 cases per year.

Malignant mesothelioma carries a poor prognosis with an mOS of approximately 12 months from diagnosis. Mesothelioma is currently treated with surgery, chemotherapy and radiotherapy.

CRS-207 with Chemotherapy in Mesothelioma

We are using CRS-207 in combination with standard-of-care chemotherapy for treatment in the front line-setting of unresectable malignant pleural mesothelioma.

About Chemotherapy

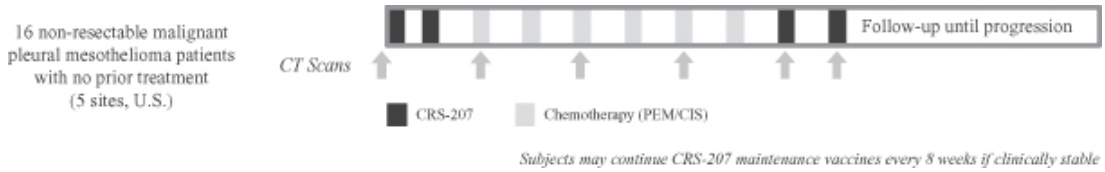
Chemotherapy can be an effective treatment option to enhance immune responses, inhibit immunosuppression and modify the tumor microenvironment to be more susceptible to immune-mediated killing. This provides a strong rationale to use chemotherapies in combination with a LADD product candidate to trigger robust innate and adaptive immune responses in a more susceptible tumor environment.

Clinical Status

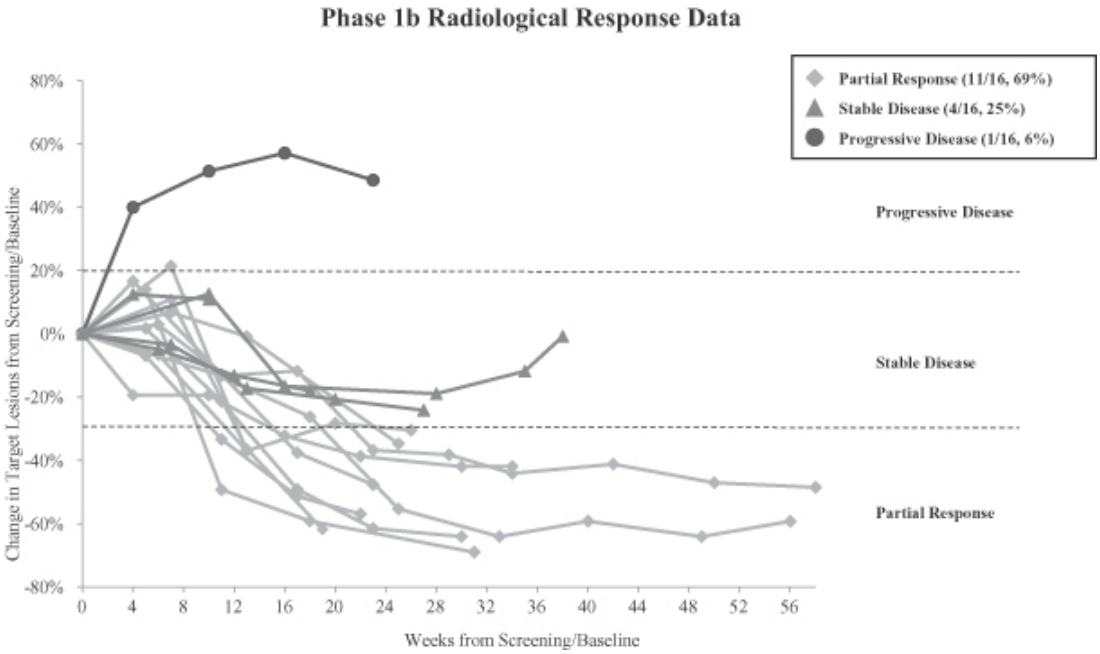
We are enrolling a single-arm Phase 1b clinical trial of CRS-207 in combination with standard-of-care chemotherapy in patients with unresectable malignant pleural mesothelioma who have not received prior therapy. Based on encouraging results in the initial cohort of 16 patients, we have opened an expansion cohort of up to a total of 40 patients. We expect to finish enrollment in 2015 and report final top line results in 2016.

Phase 1b (Ongoing)

The study design is single-arm; patients receive two prime CRS-207 vaccinations followed by standard-of-care chemotherapy, consisting of pemetrexed and cisplatin, or PEM/CIS, and then followed with boost and maintenance vaccinations of CRS-207. The study was initially designed to enroll 16 patients. The primary endpoints of the study are safety and immune response to the CRS-207 therapy. Secondary endpoints include tumor response, time to progression, immune analyses and tumor marker kinetics.



In June 2014, data from scheduled radiologic time points of the first 16 patients, shown below, were presented at the ASCO conference. Of 16 evaluable patients with response data, 69%, or 11 of the 16 patients, had confirmed durable partial responses and 25%, or 4 of the 16 patients, experienced stable disease after CRS-207 and chemotherapy, for a 94% rate of disease control (the sum of partial responses and stable disease). Radiologic images were also read by an independent, central radiologist supporting our investigators' findings. Based on these encouraging data, the protocol was amended to increase the enrollment in the trial by up to 24 patients for a total enrollment of up to 40 patients.



In October 2014, updated safety and efficacy data were presented at the International Mesothelioma Interest Group Conference. At the time of the presentation, estimated PFS was 7.5 months with one patient on study for more than 19 months, who continued to receive maintenance therapy with CRS-207 following the combination treatment.

Phase 2 (Planned)

We anticipate initiating a randomized controlled Phase 2 clinical trial in North America, Europe and Australia to evaluate PFS, overall response rate, OS and safety of the combination therapy of CRS-207 and standard-of-care chemotherapy.

ADU-623 in Glioblastoma Multiforme

ADU-623 is a bivalent LADD product candidate engineered to express EGFRvIII and NY-ESO-1, antigens expressed in glioblastoma multiforme, as well as other cancers.

Glioblastoma Multiforme Overview

Glioblastoma multiforme is a brain cancer with an incidence of approximately 11,000 people in the United States in 2013 according to Datamonitor Healthcare. These tumors are rapidly progressing, with a median time from diagnosis to the patient's death of approximately 15 months. In recurrent glioblastoma multiforme, treatment consists of both symptomatic and palliative therapies. However, with currently available therapies glioblastoma multiforme typically remains fatal within a very short period of time.

Clinical Status

ADU-623 is being evaluated in an ongoing Phase 1 clinical trial conducted by leading investigators at the Earle A. Chiles Research Institute at Providence Cancer Center in Portland, Oregon.

Phase 1 (Ongoing)

The Phase 1, dose escalation, safety and immunogenicity trial will enroll up to a total of 38 patients in the second-line. Second-line glioblastoma multiforme patients are those who have previously completed standard-of-care radiotherapy and temozolomide followed by adjuvant temozolomide or who have progressed following standard-of-care radiotherapy and chemotherapy. The study will evaluate three dose levels of ADU-623 with the primary endpoint of establishing the safety of the therapy and determining the optimal dose. The trial will also evaluate the patients' tumor responses and immune response to the ADU-623 therapy.

ADU-741 in Prostate Cancer

ADU-741 is a LADD product candidate engineered to express multiple antigens, and is under partnership with Janssen, which has exclusive rights to certain LADD-based product candidates specifically engineered for the treatment of prostate cancer.

Prostate Cancer Overview

According to the American Cancer Society, approximately one in seven men in the United States will be diagnosed with prostate cancer in his lifetime. According to Globocan, the incidence of prostate cancer was 233,000 cases in the United States and 1.1 million cases worldwide in 2012.

Development Status

In May 2014, we entered into an agreement whereby we granted Janssen an exclusive, worldwide license to certain product candidates specifically engineered for the treatment of prostate cancer, based on our novel LADD technology platform for any and all uses. We are eligible to receive up to a potential total of $365.0 million in upfront fees and development and commercialization milestones. Janssen will have exclusive rights to develop and commercialize LADD product candidates in prostate cancer and will assume responsibility for all research, development, manufacturing, regulatory and commercialization activities for the licensed products.

ADU-214 in Lung Cancer

ADU-214 is a bivalent LADD product candidate expressing EGFRvIII and mesothelin, and is licensed to Janssen, which has exclusive rights for LADD product candidates for lung cancer indications and exclusive rights to develop and commercialize LADD product candidates expressing these antigens for any and all uses.

Lung Cancer Overview

Lung cancer causes more deaths than the next three leading causes of cancer deaths—colon, breast and prostate cancers—combined. According to Globocan, there were an estimated 214,000 new cases of lung cancer diagnosed in the United States in 2012 and 1.8 million new cases of lung cancer diagnosed worldwide in 2012.

Development Status

In November 2014, an additional agreement with Janssen became effective, granting Janssen an exclusive, worldwide license to certain product candidates engineered for the treatment of lung cancer and certain other cancers based on our novel LADD technology platform for any and all uses. Under the agreement we are eligible to receive significant development, regulatory and commercialization milestone payments up to a potential total of $817.0 million. Janssen will have exclusive rights to develop and commercialize LADD product candidates in lung cancer and will assume responsibility for all research, development, manufacturing, regulatory and commercialization activities for the licensed products.

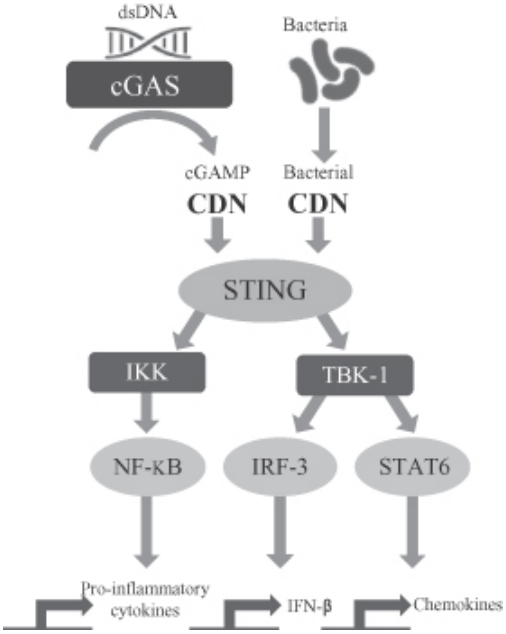
CDN Technology Platform Overview

Recent advancements reported in numerous leading scientific journals have generated significant interest and rationale for targeting the STING receptor as a novel therapeutic approach to immuno-oncology. We are developing a portfolio of synthetic proprietary CDN small molecule immune modulators that target and activate the STING receptor with applications across diverse diseases. The STING receptor is generally expressed at high levels in the cytosol of immune cells, including DCs. Once activated, the STING receptor initiates a profound innate immune response by signaling through three distinct pathways, inducing the expression of a broad profile of cytokines, including interferons and chemokines. This cytokine profile subsequently leads to the development of an effective tumor antigen-specific T cell adaptive immune response.

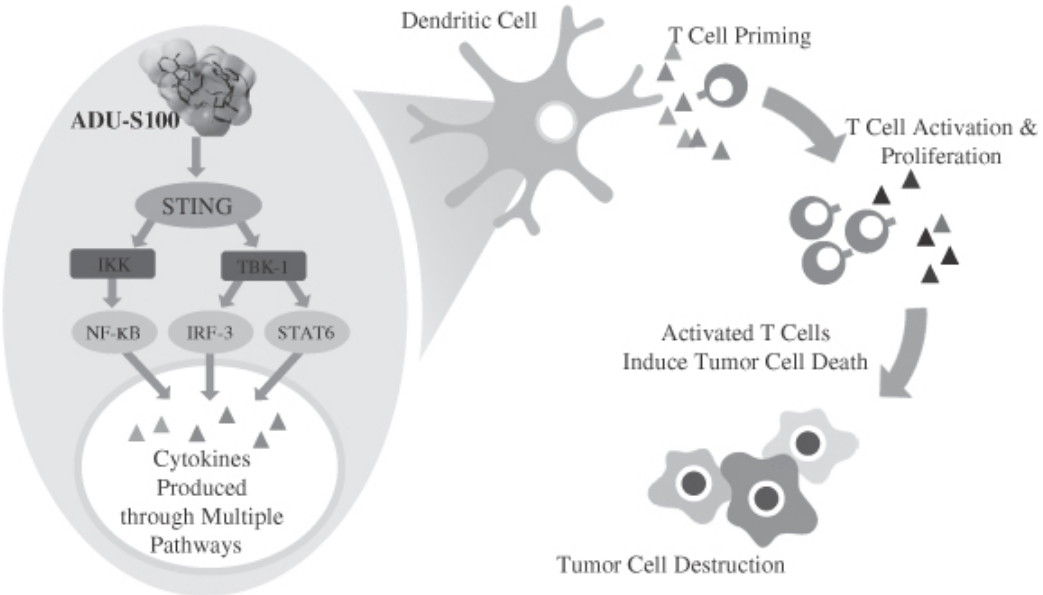
Naturally occurring CDNs that target the STING receptor are produced by bacteria that secrete CDNs into the host cell or by mammalian cells through cyclic GMP-AMP synthetase, or cGAS. cGAS is a recently discovered receptor that senses double-stranded, or ds, DNA in the cytosol of APCs, and in response synthesizes a CDN that is structurally distinct from the CDNs produced by bacteria. While both bacterial- and cGAS-produced CDNs target the STING receptor, CDNs produced by cGAS bind more tightly to STING than CDNs produced by bacteria. This stronger binding triggers a larger and more stable change in shape of the STING receptor, leading to the development of a more effective tumor antigen-specific immune response. Additionally, while some of the five unique STING receptors in humans respond poorly to CDNs produced by bacteria, all respond to CDNs produced by cGAS. All our novel synthetic CDN product candidates that we are advancing through preclinical development contain a structure based on the cGAS-produced CDN structure, thus stimulating potent innate immune responses to all of the known human STING receptors.

We have developed proprietary CDN derivative compounds that are significantly more potent than the natural cGAS-produced molecules, which can be demonstrated by comparing the expression levels the cytokines produced from signaling through three distinct pathways. The NF-kB pathway induces the expression of numerous pro-inflammatory cytokines, including IL-6 and TNFa that stimulate a variety of immune cells. The IRF-3 pathway leads to the induction of IFN-b and co-regulated genes which orchestrate diverse innate immune responses. The STAT6 pathway leads to expression of chemokines, including CCL2 and CCL20, that are

involved in immune cell recruitment. The unique profile of cytokines induced through activating the STING receptor results in strong efficacy in numerous aggressive preclinical mouse models of cancer.



In healthy individuals, DCs and other APCs constantly sample nearby tumor and non-tumor cells, however, in cancer patients, tumors can produce immune-inhibitory molecules which can make the DCs non-functional. The activation of the STING receptor in the tumor microenvironment by IT injection of our proprietary CDN product candidates stimulate the maturation of the DCs, leading to the presentation of antigens found on the individual's unique tumor. The activated tumor-specific T cells induce tumor cell death both locally and systemically, resulting in significant and durable therapeutic efficacy in preclinical tumor models.



CDN Product Candidates

We envision multiple immuno-oncology CDN product opportunities as a monotherapy or in combination with other cancer treatments. In preclinical animal models, our data have shown that our proprietary CDN product candidates can be combined with designated recombinant proteins to induce potent antigen-specific CD4+, which recognize foreign antigens and assist in the immune response, and CD8+, which recognize and destroy cells expressing foreign antigens, T cell immunity. We believe our CDN product candidates can also be combined with conventional cancer treatments such as chemotherapy and radiotherapy to enhance our CDN product candidates' immune-mediated tumor killing mechanisms. We also believe that our CDN product candidates could alter the nature of the tumor microenvironment, thus allowing for improved responses to checkpoint inhibitors.

ADU-S100

Our proprietary modifications to the mammalian CDN structure are designed to optimize stability, STING receptor binding affinity and potency, without significant toxicity. Our lead product candidate based on these criteria is ADU-S100.

Clinical Status

We plan to initiate a Phase 1 clinical study of ADU-S100, our first CDN-based clinical candidate, in the second half of 2015.

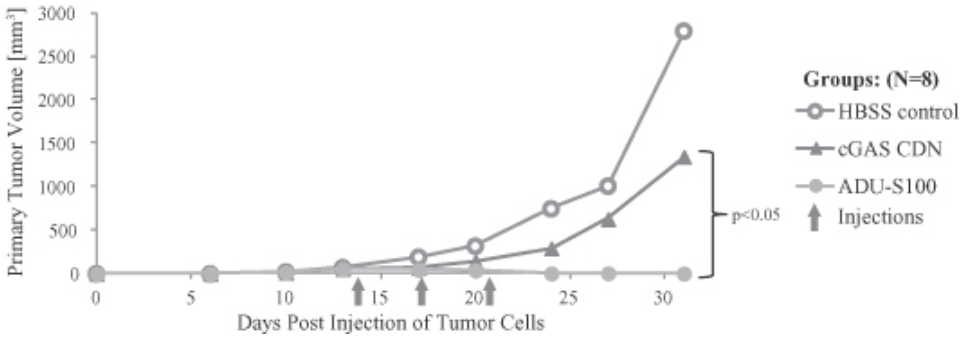
ADU-S100 CDN Preclinical Studies

In preclinical mouse tumor models, IT injection of ADU-S100 induced tumor shrinkage and generated substantial immune responses that may be capable of providing long-lasting systemic antigen-specific T cell immunity to prevent further growth of distal, untreated tumor metastases, a response known as an abscopal effect. Further preclinical studies demonstrated that the abscopal effect is entirely STING receptor-dependent. These data provide the rationale for advancing this novel molecule for the treatment of locally advanced or metastatic cancers.

Further rationale for the approach of IT injection of CDN product candidates is the recent discovery by Dr. Thomas Gajewski of the University of Chicago that the STING-dependent innate immune sensing in the tumor microenvironment is a critical step in promoting spontaneous tumor-initiated T cell priming, subsequent infiltration of tumor lymphocytes and tumor regression. Analyses conducted with tumors isolated from melanoma patients have also revealed that tumors containing infiltrating activated T cells are characterized by an IFN-ß transcriptional signature. Studies in mice have demonstrated that IFN-ß signaling plays a critical role in tumor-initiated T cell priming. We believe that treatment strategies to induce IFN-ß signaling and DC activation in the tumor microenvironment to bridge the innate and adaptive immune responses have significant therapeutic potential. IT delivery of our synthetic CDN product candidates activate a tumor-specific T cell response that is unique to the individual's tumor; conceptually, a small molecule approach to patient-specific immuno-oncology treatments.

Single Agent ADU-S100 (B16 Melanoma Therapeutic Model)

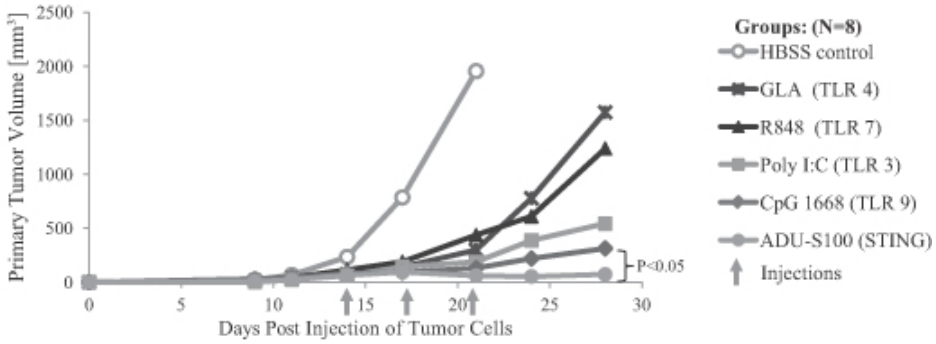
Proprietary CDN versus Naturally Occurring



In the preclinical study depicted above, mice were injected with melanoma tumor cells. Once the tumor grew to be 100 mm3, groups of mice were given three 50 µg IT doses of ML cGAMP, a naturally occuring cGAS CDN, or ADU-S100. In addition, one group was treated with Hank's Balanced Salt Solution, or HBSS, as a control. All three doses of the compounds were given over the same one-week period. In this study we demonstrated that our synthetic CDN product candidate in mice had superior anti-tumor activity as compared to a naturally occurring cGAS CDN.

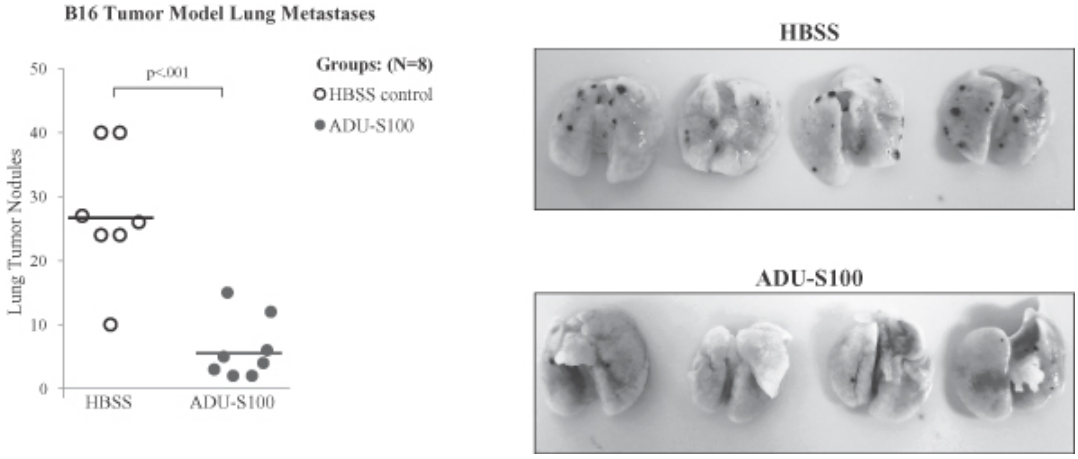
ADU-S100 Versus TLR Ligands (B16 Melanoma Therapeutic Model)

Proprietary CDN versus TLR Ligands



In this experiment, similar in design to the prior experiment, mice were injected with melanoma tumor cells and received three IT doses of select compounds over the same one-week period once the tumors grew to be 100 mm3. ADU-S100 was compared to TLR ligand product candidates in order to compare against other innate immune activators which are currently in clinical development by other companies. The doses of the IT injections for the TLR ligands and ADU-S100 were kept constant at 50 µg. While it is appreciated that the doses may not be optimized for each TLR ligand, the same dosing was used for consistency. In addition, one group was treated with HBSS, as a control. The results from this study supported the selection of ADU-S100 for tumor regression and control.

IT CDN Therapy with ADU-S100 Induces a Potent Abscopal Effect (B16 Melanoma Therapeutic Model)



In the preclinical study designed to examine the abscopal effect, mice were injected with melanoma cells on their right flank to create the primary tumor, and also given additional melanoma cells one week later by intravenous injection to create lung metastases, distal tumor lesions. The primary tumor was treated three times over a one-week period with 50 µg of ADU-S100, or HBSS, as a control. On day 28, the lungs were examined to determine the number of lung metastases. Mice treated with ADU-S100 in the primary tumor showed significant inhibition of the treated tumor and additionally demonstrated a significant inhibition of distant lung metastases. The photographs of the lungs are representative of the two treatment groups and show the contrast in the number of lung metastases (black nodules) between the control group, where numerous metastases are visible, and the treatment group, where only a few metastases are visible. Thus, these results show that IT injection with ADU-S100 primes an effective systemic CD8+ T cell immune response that significantly inhibits the growth of distal untreated lesions.

Phase 1 (Planned)

We plan to initiate a Phase 1 study of ADU-S100 in the second half of 2015. The single-arm, dose escalation trial is expected to enroll at least 30 patients with treatment-refractory cutaneously accessible primary or metastatic solid tumors, including melanoma, head-and-neck, breast, renal cell cancers and B-cell lymphomas. The study will be conducted by leading investigators at up to five U.S. clinical trial sites. Patients will receive escalating doses of ADU-S100 administered by IT injection. The primary endpoints of the study will be to evaluate the safety and tolerability of ADU-S100. The secondary endpoint is the establishment of pharmacokinetics. Exploratory endpoints will include assessment of immune activation and treated and distal tumor regression.

CDN Product Opportunities

We envision multiple product opportunities for the CDN technology platform. We believe that our CDN product candidates can be used as a monotherapy to directly activate the tumor microenvironment, enhancing recognition of the tumor by the immune system and leading to tumor destruction. In preclinical animal models, we have shown that our proprietary CDN product candidates can be co-formulated with designated recombinant proteins to induce potent antigen-specific CD4+ and CD8+ T cell immunity. We believe that due to our CDN product candidates' immune-mediated tumor killing mechanisms and ability to alter the nature of the tumor microenvironment our proprietary CDN product candidates could be combined with conventional and novel therapies, such as cellular vaccines, chemotherapy, radiotherapy and checkpoint inhibitors, among others.

In addition, our CDN product candidates directly activate NK cells and could enhance Antibody-Dependent Cellular Cytotoxicity, or ADCC, tumor cell killing mechanisms, which are a significant mechanism of action of several established monoclonal antibody therapies. Another possible opportunity for our CDN technology platform would be to directly conjugate our CDN product candidates to enhance ADCC.

We also believe that our CDN product candidates have the potential to be used in treatments for infectious and autoimmune diseases as an adjuvant to enhance existing vaccines or in formulations for new products. We are also developing other CDN derivatives that, in contrast to our current CDN product candidate that activate the STING receptor, would block the STING receptor, thus preventing or controlling the immune response which is a key in the treatment of autoimmune diseases.

Manufacturing

Overview

We rely on third-party contract manufacturing organizations, or CMOs, to produce our product candidates for clinical use and currently do not own or operate manufacturing facilities. We have established manufacturing processes, and supply and quality agreements for all of the investigational agents used in our ongoing clinical trials. We require that our CMOs produce bulk drug substances and finished drug products in accordance with current Good Manufacturing Practices, or cGMPs, and all other applicable laws and regulations. We may continue to rely on CMOs to manufacture our products for commercial sale. We maintain agreements with potential and existing manufacturers that include confidentiality and intellectual property provisions to protect our proprietary rights related to our product candidates.

LADD Product Candidates

LADD product candidates are produced through a fermentation process and then concentrated and purified. The drug substance is diluted into a cryopreservative and filled into vials that are inspected, labeled and frozen as final drug product. We have contracts with IDT Biologika GmbH, or IDT, and Waisman Clinical BioManufacturing to produce and release LADD product candidates. We recently transitioned manufacturing of our lead LADD product candidate, CRS-207, to IDT, which can support commercial manufacturing.

Under our process development and manufacturing agreement with IDT, which we entered into in December 2013, IDT provides manufacturing services for CRS-207. We pay for manufacturing services performed by IDT under the agreement pursuant to a work plan described in the agreement.

We may unilaterally terminate the agreement in the event of a material breach of the agreement by IDT if such breach remains uncured after 45 days of receiving written notice of such breach. In addition, either party may terminate the agreement in the event of the other party's insolvency. Either party may also terminate the agreement by providing 30 days' written notice to the other party if we decide to end our CRS-207 program, solely for reasons of clinical inefficacy or safety, or an action by the FDA, EMA or other regulatory authority not granting approval despite commercially reasonable efforts to gain such approval.

GVAX Pancreas Product Candidates

GVAX Pancreas product candidates are engineered cell lines that express GM-CSF and have been lethally irradiated to prevent replication. GVAX Pancreas is composed of two allogeneic pancreatic cancer cell lines that are expanded in cell factories. The cells are harvested, concentrated, purified and then lethally gamma irradiated. GVAX Pancreas is frozen, stored and transported in vapor-phase liquid nitrogen. We have contracts with Lonza Walkersville, Inc., or Lonza, and JHU to produce and release GVAX Pancreas product candidates. We recently began transferring the manufacturing process to Lonza, which can support commercial production of GVAX Pancreas product candidates.

Under our manufacturing services agreement with Lonza , which we entered into in August 2012, Lonza provides manufacturing services to produce cell lines for our GVAX Pancreas product candidates. We pay for manufacturing services performed by Lonza under the agreement pursuant to statements of work entered into from time to time.

We may unilaterally terminate the agreement upon 45 days' written notice to Lonza. Lonza may terminate the agreement upon 12 months' written notice to us. Either party may terminate the agreement in the event of the other party's insolvency or for the other party's material breach of the agreement if such breach remains uncured after 30 days of receiving written notice of such breach or after 90 days of receiving written notice of such breach if such breach is not capable of being cured within 30 days and the breaching party is making diligent efforts to cure such breach. Absent early termination, the agreement will continue until the fifth anniversary of the effective date of the original agreement.

CDN Product Candidates

Manufacturing for the CDN technology platform generally encompasses both the chemical synthesis of the active pharmaceutical ingredient, or API, and its formulation and fill/finish of the final product. The synthetic process for the manufacture of our CDN product candidates is a trade secret and we retain control and ownership of the process. We have contracted with a CMO to produce, release and stability test the ADU-S100 API. We have also entered into a drug product manufacturing and clinical supply agreement with a CMO for the formulation and fill/finish and release and stability testing of the drug product candidate.

Intellectual Property

Intellectual property is of vital importance in our field and in biotechnology generally. We seek to protect and enhance proprietary technology, inventions, and improvements that are commercially important to the development of our business by seeking, maintaining, and defending patent rights, whether developed internally or licensed from third parties. We will also seek to rely on regulatory protection afforded through orphan drug designations, data exclusivity, market exclusivity and patent term extensions where available.

We have obtained orphan drug designations for both GVAX Pancreas and CRS-207 for pancreatic cancer, which makes them eligible for a period of orphan drug exclusivity, if approved, under certain conditions. We believe that each of our different biological products approved under a biologics license application, or BLA, will be eligible for 12 years of market exclusivity in the United States, 10 years of market exclusivity in Europe and significant durations in other markets, which would be complementary to any relevant patent exclusivity.

Through licensing and through developing our own portfolio, we have rights to more than 100 issued patents and more than 50 pending applications in the United States and foreign countries. Families within the portfolio are directed to our LADD and CDN technology platforms, and to GVAX.

LADD Technology Platform

We own eleven issued U.S. patents, seven pending U.S. patent applications, and corresponding foreign issued patents and patent applications, and additionally we are the exclusive licensee to families of patents and patent applications, all relating to our LADD technology platform. The issued U.S. patents that we own expire between 2022 and 2027, not including any patent term extensions that may be available under U.S. laws. The patents and patent applications, if issued, cover attenuated *Listeria* strains that have deleted or disrupted genomic *actA* and *inlB* virulence genes in conjunction with the expression of non-*Listeria* polypeptides, as well as to *Listeria* strains that are engineered to express non-*Listeria* polypeptides, including cancer antigens or fragments thereof. There are also patents and patent applications, if issued, that cover proprietary antigen expression cassettes and methods which are applicable to *Listeria* generally and not limited to any particular strain or method of attenuation.

Antigen Expression

Within this portfolio are issued U.S. patents and pending U.S. applications, and corresponding foreign issued patents and patent applications, directed to *Listeria* strains that are engineered to express particular cancer antigens or fragments thereof, including mesothelin and NY-ESO-1. This portfolio includes U.S. patents covering CRS-207, which expire in 2024 and 2026, not giving effect to any potential patent term adjustment or extension that may be available on a jurisdictional basis and assuming payment of all appropriate maintenance, renewal, annuity or other governmental fees. We have also filed U.S. and international patent applications directed to a modified *actA* fusion protein, which, if issued, would cover ADU-623, ADU-214 and our future LADD product candidates. If patents with such claims are issued, they could extend the technology platform patent protection for such products until 2033.

EGFRvIII Family

Within this portfolio are pending U.S. and corresponding foreign patent applications that we co-own with Providence Health & Services–Oregon, a family of patent applications that are directed to *Listeria* strains that express EGFRvIII antigen. This technology is included in our ADU-623, ADU-214 and other product candidates. A patent that would issue from such application would expire in 2031.

Combination Therapy with LADD

Additionally, within this portfolio are U.S. patents and pending applications directed to compositions that can be used in conjunction with or as an adjuvant to the LADD technology platform. For example, we have received a notice of allowance in the United States to claims directed to a method of enhancing an immune response to mesothelin by administering a boost dose of an attenuated *Listeria* that encodes an active mesothelin antigen after administration of an effective amount of a tumor cell that encodes mouse GM-CSF. Claims directed to such method have been allowed and are expected to issue. If such claims issue, they could cover the use of CRS-207 and would expire in 2027. In addition, we have also filed a U.S. application and foreign applications directed to a method of treating cancer by administering a cancer antigen expressing *Listeria* after administration of an effective amount of radiotherapy. If such claims issue, they would expire in 2031.

CDN Family

We own and license families of patent applications directed to our CDN product candidates, which target the STING receptor, which, if issued, would expire between 2025 and 2034. In particular, we own three pending U.S. patent applications and corresponding pending foreign patent applications directed to stereochemically pure cyclic purine dinucleotides, which if issued would expire in 2033. Within this portfolio are U.S. and international patent applications directed to systems and methods for activating STING utilizing our CDN product candidates that are jointly owned with the Regents of the University of California, and which, if issued, would expire in 2034. Also within this portfolio are U.S. and international patent applications directed to the use of our CDN product candidates in conjunction with cytokine expressing cells, for instance CSF-expressing cells, that are owned jointly JHU, and which, if issued, would expire in 2033 and 2034 respectively. We also license a family of patents from Karagen Pharmaceuticals directed to certain CDN molecules and their use in modulating immune response in a patient, which expire in 2025, a family of patents from the Regents of the University of California also directed to certain CDN molecules and their uses that, if issued, would expire in 2034, and a family of patents from a consortium of universities led by Memorial Sloan Kettering also directed to certain CDN molecules and their uses that, if issued, would expire in 2034.

GVAX Technology

We own ten issued U.S. patents and four pending U.S. patent applications and exclusively license multiple families of patents and patent applications that cover cell lines that express GM-CSF. This technology is

referred to as GVAX. We license a family of patents from JHU that covers the first generation GVAX platform, including a U.S. patent specifically covering GVAX Pancreas. The patents in this family are expected to expire between 2016 and 2022; however, we have a license with JHU for continued exclusive use of the cell lines produced by JHU after the patents expire. Additionally, in 2013, we entered into another license agreement with JHU relating to GVAX technology that includes toll-like receptor ligands. This GVAX technology includes two international patent applications, which, if issued, would expire in 2031 to 2032.

Other Technology

In addition to the technologies described in detail above, we license or own other intellectual property directed to compositions and methods that could be used in conjunction with our *Listeria* technology platform. The intellectual property is directed to, for example, methods of administering our *Listeria* products in conjunction with other therapeutics. Additionally, we have licensed technology from UC Berkeley that enables us to integrate expression sequences more easily into *Listeria* and allows us to develop multivalent vaccines more quickly and efficiently. We have an exclusive license to this technology, which expires in 2023, subject to any extensions or disclaimers of the licensed patents.

General Considerations

As with other biopharmaceutical companies, our ability to maintain and solidify a proprietary position for our lead product candidates will depend upon our success in obtaining effective patent claims that cover such product candidates and their intended methods of use, and enforcing those claims once granted.

The term of a patent that covers an FDA-approved drug or biologic may be eligible for patent term extension, which provides patent term restoration as compensation for the patent term lost during the FDA regulatory review process. The Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug or biologic is under regulatory review. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug or biologic may be extended. Similar provisions are available in Europe and other foreign jurisdictions to extend the term of a patent that covers an approved drug or biologic. In the future, if and when our biopharmaceutical products receive FDA approval, we expect to apply for patent term extensions on patents covering those products.

Many biopharmaceutical companies, biotechnology companies and academic institutions are competing with us in the field of oncology and filing patent applications potentially relevant to our business. Even when a third-party patent is identified, we may conclude upon a thorough analysis, that we do not infringe upon the patent or that the patent is invalid. If the third-party patent owner disagrees with our conclusion and we continue with the business activity in question, we may be subject to patent litigation. Alternatively, we might decide to initiate litigation in an attempt to have a court declare the third-party patent invalid or non-infringed by our activity. In either scenario, patent litigation typically is costly and time-consuming, and the outcome can be favorable or unfavorable.

In addition to patents, we rely upon unpatented trade secrets, know-how and continuing technological innovation to develop and maintain a competitive position. We seek to protect our proprietary information, in part, through confidentiality agreements with our employees, collaborators, contractors and consultants, and invention assignment agreements with our employees. We also have agreements with some of our consultants that require them to assign to us any inventions created as a result of their working with us. The confidentiality agreements are designed to protect our proprietary information and, in the case of agreements or clauses requiring invention assignment, to grant us ownership of technologies that are developed through a relationship with a third party.

Our commercial success will depend in part upon not infringing upon the proprietary rights of third parties. It is uncertain whether the issuance of any third-party patent would require us or our licensee(s) to alter our development or commercial strategies, obtain licenses, or cease certain activities. The biopharmaceutical industry is characterized by extensive litigation regarding patents and other intellectual property rights. If a third party commences a patent infringement action against us, or our licensee(s), it could consume significant financial and management resources, regardless of the merit of the claims or the outcome of the litigation.

We may rely, in some circumstances, on trade secrets to protect our technology. However, trade secrets can be difficult to protect. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our employees, consultants, scientific advisors and contractors. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our consultants, contractors or collaborators use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Collaborations

Janssen ADU-741 Agreement

In May 2014, we entered into a research and license agreement with Janssen Biotech, Inc., or Janssen, pursuant to which we granted Janssen an exclusive, worldwide license under intellectual property rights controlled by us to research, develop, manufacture, use, sell and otherwise exploit products containing ADU-741 for any and all uses. Under this Agreement, or the Janssen ADU-741 Agreement, we also granted Janssen the right, subject to availability, to develop specified derivatives of the *Listeria* strain. Janssen will have exclusive rights to develop LADD product candidates in prostate cancer and to develop and commercialize the licensed products and will assume responsibility for all research, development, manufacturing, regulatory and commercialization activities for the licensed products.

In partial consideration for the grant of this license, Janssen paid us $12.0 million as an upfront license fee. Additionally, under the Janssen ADU-741 Agreement we are eligible to receive from Janssen up to an aggregate of $7.5 million upon our achievement and performance of specified technology transfers and development and regulatory milestones pursuant to an agreed upon plan, an aggregate of $103.5 million upon Janssen's achievement of specified development and regulatory milestones, and an aggregate of $242.0 million upon Janssen's achievement of specified commercial milestones. Janssen is also obligated to pay us royalties on net sales of licensed products by Janssen, its affiliates and sublicensees at a rate ranging from the mid-single digits to the low teens based on the aggregate annual net sales of licensed products worldwide and based on the country of sale. Janssen's royalty obligation continues on a licensed product-by-licensed product and country-by-country basis until the later of (i) 12 years from the date of first commercial sale of such licensed product in such country, (ii) expiration of the last valid claim in the licensed patents covering the composition of matter or the approved method of use of such licensed product or (iii) the expiration of data exclusivity with respect to such licensed product in such country.

The Janssen ADU-741 Agreement will continue in effect until the later of expiration of all of the licensed patents and on a product-by-licensed product and country-by-country basis, the expiration of Janssen's royalty obligations with respect to such licensed product in such country. Either party may terminate the Janssen ADU-741 Agreement upon the other party's uncured material breach that is not cured within 60 days after the breaching party receives notice of such breach, provided, that Janssen may elect to make specified modifications to the agreement in lieu of terminating the agreement in the event we fail to timely cure any material breach of this agreement. Additionally, either party may terminate the Janssen ADU-741 Agreement for the other party's

insolvency and Janssen may terminate this agreement at will after the first anniversary of the effective date upon 90 days' written notice. If the Janssen ADU-741 Agreement is terminated early for reasons other than our uncured material breach, Janssen is obligated to grant us a license to specified patents and know-how to exploit the terminated licensed products in the terminated countries.

Janssen ADU-214 Agreement

In November 2014, a research and license agreement with Janssen became effective, pursuant to which we granted Janssen an exclusive worldwide license under intellectual property rights controlled by us to research, develop, manufacture, use, sell and otherwise exploit products containing ADU-214 for any and all uses. Under this Agreement, or the Janssen ADU-214 Agreement, we also granted Janssen the right, subject to availability, to develop specified derivatives of the *Listeria* strain. Janssen will have exclusive rights to develop LADD product candidates in lung cancer and to develop and commercialize the licensed products and will assume responsibility for all research, development, manufacturing, regulatory and commercialization activities for the licensed products.

In partial consideration for the grant of this license, Janssen paid us $30.0 million as an upfront license fee. Additionally, under the Janssen ADU-214 Agreement we are eligible to receive from Janssen up to an aggregate of $11.0 million upon our achievement and performance of specified technology transfers and development and regulatory milestones pursuant to an agreed upon plan, an aggregate of $184.5 million upon Janssen's achievement of specified development and regulatory milestones, and an aggregate of $591.5 million upon Janssen's achievement of specified commercial milestones. Janssen is also obligated to pay us royalties on net sales of licensed products by Janssen, its affiliates and sublicensees at a rate ranging from the high-single digits to the low teens based on the aggregate annual net sales of licensed products worldwide and based on the country of sale. Janssen's royalty obligation continues on a licensed product-by-licensed product and country-by-country basis until the later of (i) 12 years from the date of first commercial sale of such licensed product in such country, (ii) expiration of the last valid claim in the licensed patents covering the composition of matter or the approved method of use of such licensed product or (iii) the expiration of data exclusivity with respect to such licensed product in such country.

The Janssen ADU-214 Agreement will continue in effect until the later of expiration of all of the licensed patents and on a product-by-licensed product and country-by-country basis, the expiration of Janssen's royalty obligations with respect to such licensed product in such country. Either party may terminate the Janssen ADU-214 Agreement upon the other party's uncured material breach that is not cured within 60 days after the breaching party receives notice of such breach, provided, that Janssen may elect to make specified modifications to the agreement in lieu of terminating the agreement in the event we fail to timely cure any material breach of this agreement. Additionally, either party may terminate the Janssen ADU-214 Agreement for the other party's insolvency and Janssen may terminate this agreement at will after the first anniversary of the closing date of the Janssen ADU-214 Agreement upon 90 days' written notice. If the Janssen ADU-214 Agreement is terminated early for reasons other than our uncured material breach, Janssen is obligated to grant us a license to specified patents and know-how to exploit the terminated licensed products in the terminated countries.

Janssen GVAX Prostate Agreement

In May 2014, we also entered into a license agreement with Janssen, or the Janssen GVAX Prostate Agreement, pursuant to which we granted Janssen an exclusive worldwide license under intellectual property rights controlled by us to research develop, manufacture, use, sell and otherwise exploit products containing GVAX Prostate for any and all uses. Janssen will have exclusive rights to develop and commercialize the licensed products and will assume responsibility for all research, development, manufacturing, regulatory and commercialization activities for the licensed products.

In partial consideration for the grant of this license, Janssen paid us $500,000 as an upfront license fee. Additionally, under the Janssen GVAX Prostate Agreement we are eligible to receive from Janssen up to

$2.0 million upon Janssen's achievement of a specified commercial milestone. Janssen is also obligated to pay us royalties on net sales of licensed products by Janssen and its affiliates and sublicensees at a rate in the mid- to high-single digits. Janssen's royalty obligation continues on a licensed product-by-licensed product and country-by-country basis until 12 years from the date of first commercial sale of such licensed product in such country.

The Janssen GVAX Prostate Agreement will continue in effect until the later of expiration of all of the licensed patents and on a licensed product-by-licensed product and country-by-country basis, the expiration of Janssen's royalty obligations with respect to such licensed product in such country. Either party may terminate the Janssen GVAX Prostate Agreement upon the other party's uncured material breach that is not cured within 60 days after the breaching party receives notice of such breach, provided, that Janssen may elect to make specified modifications to the agreement in lieu of terminating the agreement in the event we fail to timely cure any material breach of this agreement. Additionally, either party may terminate the Janssen GVAX Prostate Agreement for the other party's insolvency and Janssen may terminate this agreement at will after the first anniversary of the effective date upon 90 days' written notice. If the Janssen GVAX Prostate Agreement is terminated early for reasons other than our uncured material breach, Janssen is obligated to grant us a license to specified patents and know-how to exploit the terminated licensed products in the terminated countries.

Our Research and Development and License Agreements

Listeria-*Based Agreements*

JHU Listeria *Agreement*

In March 2011, we entered into a license agreement with JHU pursuant to which we received an exclusive, worldwide, sublicensable license to certain patent rights covering the tumor-associated antigen mesothelin to make, use, import and commercialize products and to provide services for all bacteria-based therapeutic and/or prophylactic uses for cancer treatment and/or prevention and as a companion diagnostic. Under the agreement, or the JHU *Listeria* Agreement, we are obligated to use commercially reasonable efforts to develop and market licensed products and services, which can be demonstrated by achieving specified development milestones by specified dates.

Under the JHU *Listeria* Agreement, we paid an upfront fee of $25,000 in 2011 and a milestone payment of $25,000 in 2012 and are required to make future milestone payments totaling up to $375,000 upon achievement of certain regulatory milestones. Under the JHU *Listeria* Agreement, we are obligated to pay JHU royalties based on net sales of licensed products and services by us, our affiliates and our sublicensees at a rate in the low-single digits, subject to minimum annual royalties, and a percentage of consideration received from any sublicensing arrangements ranging from the low-single digits to the low twenties depending on the field of use and the stage of development of the product candidate at the time the sublicense is granted.

The JHU *Listeria* Agreement will continue in effect on a country-by-country basis until the expiration of the last patent within the licensed patent rights or if no patents issue then for 20 years from the effective date of the agreement. Either party may terminate the JHU *Listeria* Agreement for the other party's uncured breach of the agreement upon 30 days' prior notice or for the other party's insolvency. Additionally, we may terminate the JHU *Listeria* Agreement at will upon 90 days' prior written notice to JHU.

UCB Listeria *Agreement*

In March 2012, we entered into a license agreement with the Regents of the University of California on behalf of its Berkeley campus, or UCB, granting us an exclusive, worldwide, sublicensable license to certain patent rights covering the use of the *Listeria monocytogenes* phage integration vector which accelerates the genetic engineering of *Listeria* to express more than one antigen to make, use, import and commercialize products and to provide services for all fields of use. Under this agreement, or the UCB *Listeria* Agreement, we

are obligated to use commercially reasonable efforts to develop, manufacture and sell licensed products and services and we are obligated to achieve specified development and regulatory milestones by specified dates.

Under the UCB *Listeria* Agreement, we paid UCB an upfront fee of $25,000 in 2012 and a milestone payment of $25,000 in 2013 and are required to make future milestone payments totaling up to $350,000 upon achievement of certain development and regulatory milestones. We are required to pay an annual license maintenance fee until our first sale of a product covered by the licensed patent rights. Under the UCB *Listeria* Agreement, we are obligated to pay UCB royalties based on net sales of licensed products and services sold by us and our sublicensees at a rate in the low single digits, subject to minimum annual royalties and customary reductions, and a percentage of certain of our sublicensing revenues ranging from the low-single digits to the low thirties depending on how the product covered by the licensed patent rights is used.

The UCB *Listeria* Agreement will last until the expiration of the last patent within the licensed patent rights. UCB may terminate the agreement for our uncured material breach upon 90 days' prior written notice and we may terminate the agreement at will upon 90 days' prior written notice to UCB.

GVAX-Based Agreements

ANI Agreement

In January 2013, we entered into an asset purchase agreement with BioSante Pharmaceuticals, Inc., which subsequently merged with and into ANI Pharmaceuticals, Inc., or ANI, in June 2013. Under the agreement, or the ANI Agreement, we purchased all the rights, title and interest of ANI in and to all of the assets related to or comprising GVAX product candidates and any assets necessary or reasonably useful to make, have made, use, have used, sell, offer for sale, have sold, import, have imported, develop, have developed, commercialize and have commercialized GVAX products.

Under the ANI Agreement, we paid ANI cash consideration of $1.0 million and will be required to make royalty payments on net sales of GVAX products sold by us, our affiliates and our sublicensees for the treatment of certain cancers, which are covered by purchased intellectual property rights or developed using purchased technology, at rates in the low-single digits. We are also required to pay milestone payments of up to $4.0 million for GVAX pancreas or prostate products in combination with *Listeria* or up to $12.0 million per product for other GVAX products upon the achievement of certain sales milestones. We are obligated to make royalty payments on a product-by-product and country-by-country basis until the later of (i) the expiration of the last to expire of the purchased patent rights covering the GVAX product or the regulatory exclusivity period and (ii) up to seven years from the first commercial sale of the product in such country depending on the level of net sales in such country after the expiration of the patent or regulatory exclusivity period. The royalties and milestone payments for GVAX products for the treatment of pancreas and prostate cancer, as well as the royalties and milestone payments for other cancer products, are each capped at specified maximum amounts. To the extent we enter into a sublicensing agreement relating to the GVAX pancreas or prostate cancer products in combination with *Listeria*, we are required to pay ANI a percentage of our sublicensing income, ranging from the low teens to the low thirties based on the indication, the stage of development of the GVAX products at the time the sublicense is granted and the amount of development costs expended by us at the time the sublicense is granted. The sublicensing payments owed under this ANI Agreement for pancreas and prostate cancer in combination with *Listeria* are each capped at specified maximum amounts.

JHU GVAX Agreement

In January 2013, we entered into a license agreement with JHU granting us an exclusive, worldwide, sublicensable license under certain GVAX-related patent rights and cell lines, and a non-exclusive, worldwide, sublicensable license to related know-how, in each case to make, have made, use, have used, sell, offer for sale, have sold, import, have imported, develop and commercialize products and services using or incorporating

licensed patent rights, cell lines or know-how for any use. Under the agreement, or the New License Agreement, we are obligated to use commercially reasonable efforts to develop and market licensed products and services, including using commercially reasonable efforts to achieve specified development milestones by specified dates.

Under the New License Agreement, we paid upfront fees of $125,000 in February 2013 and $125,000 in February 2014. Under the New License Agreement, we are also required to pay JHU development and regulatory milestone payments totaling up to approximately $1.1 million for STINGVAX, a GVAX product with CDNs, approximately $1.2 million for TEGVAX, a GVAX product with TLRs, and approximately $1.2 million for other licensed products. We are also required to pay JHU royalties based on net sales of licensed products and services by us, our affiliates and our sublicensees at a rate in the low single digits, subject to minimum annual royalties and standard reductions upon expiration of patent coverage and for licenses to third-party intellectual property rights, as well as a percentage of certain consideration received in consideration of the grant of sublicenses under this agreement ranging from the low tens to the mid-twenties depending on the stage of development of the product candidate at the time the sublicense is granted and the number of sublicenses granted.

The New License Agreement will continue in effect on a product-by-product basis and service-by-service basis until 30 years after the first commercial sale of such product or service, provided that the term may be extended for additional 10-year periods upon mutual agreement of the parties. Either party may terminate the New License Agreement for the other party's uncured material breach of the agreement upon 60 days' prior notice to the breaching party, or 30 days' notice if such breach relates to a payment obligation, or for the other party's insolvency. Additionally, we may terminate the New License Agreement at will upon 90 days' prior written notice to JHU.

GVAX RALA

In January 2013, as a result of entering into the ANI Agreement, we were assigned the March 2011 Restated and Amended License Agreement, or the RALA, by and between JHU and BioSante Pharmaceuticals, Inc. Under the RALA, we were granted a worldwide license, sublicensable under certain conditions, under certain patent rights to make, have made, use, import and sell licensed products and to provide licensed services for any use. Such licensed patents include patents covering the cell lines used in the GVAX Pancreas product candidate. Pursuant to the agreement, we must use reasonable commercial efforts to develop and commercialize licensed products and meet certain specified milestones.

Under the RALA, we are required to pay JHU an annual license fee as well as milestone payments totaling up to $300,000 upon the occurrence of certain development, regulatory, and patent-related milestones. We are also required to pay JHU royalties based on net sales of licensed products and services by us, our affiliates and our sublicensees at a rate in the low single digits, as well as a percentage of amounts received in consideration for sublicenses under the agreement in the mid-teens.

The RALA will expire on a country-by-country basis upon the expiration of the last to expire patent within the licensed patent rights or if no patent issues, then 20 years from the effective date of the agreement. Either party may terminate the agreement for the other party's uncured breach of the agreement upon 60 days' prior written notice. We may terminate the agreement upon 60 days' prior written notice.

CDN-Based Agreements

Karagen Agreement

In June 2012, we entered into a license agreement with Karagen Pharmaceuticals, Inc., or Karagen, pursuant to which Karagen granted us an exclusive, worldwide, sublicenseable license under certain patents and know-how related to CDNs to make, develop, use and commercialize products for use in the therapeutic and/or prophylactic treatment of cancer or precancerous conditions and a non-exclusive license to such patents and know-how to make, develop, use and commercialize products for all other uses. Under the agreement, or the

Karagen Agreement, we were also granted an option to designate a particular disease or condition to be added to the field of use under our exclusive license. Under the Karagen Agreement, we are obligated to use commercially reasonable efforts to develop and commercialize licensed products in the United States and the European Union.

Under the Karagen Agreement, we paid Karagen an upfront fee of $75,000 in 2012 and are required to make milestone payments totaling up to $900,000, in the aggregate, for the achievement of specified development and regulatory milestones as well as royalties based on net sales of products by us, our affiliates and sublicensees at rates ranging in the low single-digit percentages, determined by whether the disease field is an exclusive or non-exclusive disease field, subject to minimum annual royalties and standard reductions. In addition, we are required to pay Karagen a percentage of consideration received from any sublicensing arrangements ranging from the mid-single digits to the mid-teen digits determined by the current stage of development of the relevant licensed product at the time of the sublicense grant, or by whether we have exercised our option to add a designated field of use to its exclusive license, as applicable.

The Karagen Agreement will expire, on a country-by-country basis, upon the expiration of the last-to-expire valid claim within the licensed patent rights. Either party may terminate the Karagen Agreement upon 90 days' advance written notice in the event of the other party's material breach that is not cured within such 90-day period, and immediately upon notice in the event of the other party's bankruptcy or insolvency. Additionally, we may terminate the Karagen Agreement at will upon 90 days' advance written notice to Karagen.

UCB Vance Agreement

In September 2014, we entered into a license agreement with UCB, granting us an exclusive, worldwide sublicenseable license under certain patent rights covering the use of the CDN molecules that activate the STING receptor to make, develop, use and commercialize products, to practice methods and to offer services, in each case that are covered by the licensed patent rights, in all fields of use. Under this agreement, or the UCB Vance Agreement, we are obligated to use commercially reasonable efforts to develop, manufacture and sell licensed products and services and are obligated to achieve specified development and regulatory milestones by specified dates.

Under the UCB Vance Agreement, we paid UCB an upfront fee of $50,000 in 2014 and are required to make future milestone payments totaling up to $1.5 million, in the aggregate, upon our achievement of certain specified development and regulatory milestones for the first indication and up to $250,000 upon our achievement of a specified development and regulatory milestone for each additional indication developed. Under the UCB Vance Agreement, we are obligated to pay UCB royalties based on net sales of licensed products and services sold by us and our sublicensees at a rate in the low single-digit percentages, subject to minimum annual royalties and customary reductions, and a percentage of consideration received from any sublicensing arrangements at rates ranging from the low-single digits to the low thirties, determined by the current stage of development of the relevant licensed product at the time the sublicense is granted.

The UCB Vance Agreement will continue in effect until the expiration of the last-to-expire valid claim within the licensed patent rights. UCB may terminate the agreement upon 90 days' advance written notice in the event of our material breach that is not cured within such 90-day period. We may terminate the agreement at will upon 90 days' advance written notice. UCB may the terminate agreement upon 90 days' advance written notice in the event we challenge the validity or unenforceability of any licensed patent.

MSK Agreement

In December 2014, we entered into a license agreement with Memorial Sloan Kettering Cancer Center, or MSK, The Rockefeller University, Rutgers, The State University of New Jersey, and University of Bonn, collectively the Licensors, pursuant to which we received an exclusive, worldwide, sublicensable license under certain patents related to CDNs and a non-exclusive, worldwide, sublicensable license under specified know-how, in each case to develop, make, have made, use, have used, import, sell, and otherwise commercialize

licensed products for use in therapeutic and/or prophylactic treatments in humans. Under the agreement, or the MSK Agreement, we are obligated to use commercially reasonable efforts to develop and commercialize a licensed product, including achieving specified development and regulatory milestones by specified dates.

Under the MSK Agreement, we paid MSK upfront fees of $50,000 in January 2015. We are required to pay MSK development and regulatory milestone payments totaling up to $375,000 for each licensed product and commercialization milestone payments totaling up to $2,950,000 for each licensed product. We are also required to pay MSK royalties based on net sales of licensed products by us and our sublicensees at a rate ranging in the low single digits depending on whether the licensed product is covered by a valid claim of the licensed patents, subject to minimum annual royalties. Our royalty obligation to MSK continues on a country-by-country basis until the later of the expiration of the last patent right covering the licensed product in such country or 10 years from the first commercial sale in such country. We are also obligated to pay MSK a percentage of certain consideration received for the grant of sublicenses, ranging from ten to the mid-twenties.

The MSK Agreement will continue in effect until the expiration of our royalty obligations. Either party may terminate the MSK Agreement upon the other party's uncured material breach that is not cured within 90 days after the breaching party receives notice of such breach. Additionally, the Licensors may terminate the MSK Agreement for our bankruptcy or insolvency or if we fail to pay any undisputed amounts owed under the agreement and do not cure such failure within 30 days after receiving notice of such failure.

Competition

The biotechnology and pharmaceutical industries, and the immuno-oncology subsector, are characterized by rapid evolution of technologies, fierce competition and strong defense of intellectual property. A wide variety of institutions, including large pharmaceutical companies, specialty biotechnology companies, academic research departments and public and private research institutions, are actively developing potentially competitive products and technologies. We face substantial competition from biotechnology and pharmaceutical companies developing products in immuno-oncology and in our lead indications. They generally fall within the following categories:

- diversified immuno-oncology: AstraZeneca PLC, Bristol-Myers Squibb Company, GlaxoSmithKline plc, Merck & Co., Inc., Novartis AG, Pfizer Inc., Roche Holding Ltd and Sanofi SA;
- immuno-oncology aimed at stimulating immune response: AdaptImmune LLC, Idera Pharmaceuticals, Inc., Immune Design Corp. and NewLink Genetic Corporation;
- *Listeria*-based technology: Advaxis, Inc.;
- pancreatic cancer: Celgene Corporation, Incyte Corporation and Merrimack Pharmaceuticals, Inc.; and
- mesothelioma: Verastem, Inc.

While we believe that our product candidates, technology, knowledge and experience provide us with competitive advantages, we face competition from established and emerging pharmaceutical and biotechnology companies, among others. Any product candidates that we successfully develop and commercialize will compete with existing and new therapies that may become available in the future. The availability of reimbursement from government and other third-party payors will also significantly affect the pricing and competitiveness of our products.

Many of our competitors, either alone or with strategic partners, have substantially greater financial, technical and human resources than we do. Accordingly, our competitors may be more successful than us in obtaining approval for treatments and achieving widespread market acceptance, rendering our treatments obsolete or non-competitive. Accelerated mergers and acquisitions activity in the biotechnology and pharmaceutical industries may result in even more resources being concentrated among a smaller number of our competitors. These

companies also compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical study sites and patient registration for clinical studies and acquiring technologies complementary to, or necessary for, our programs. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

Our commercial opportunity could be substantially limited in the event that our competitors develop and commercialize products that are more effective, safer, less toxic, more convenient or cheaper than our comparable products. In geographies that are critical to our commercial success, competitors may also obtain regulatory approvals before us, resulting in our competitors building a strong market position in advance of our product's entry. We believe the factors determining the success of our programs will be the efficacy, safety and convenience of our product candidates.

Government Regulation and Product Approval

As a biopharmaceutical company that operates in the United States, we are subject to extensive regulation. Federal, state and local government authorities in the United States and in other countries extensively regulate, among other things, the research, development, testing, manufacturing, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of biological and pharmaceutical products such as those we are developing. Our product candidates must be approved by the FDA before they may be legally marketed in the United States and by the appropriate foreign regulatory agency before they may be legally marketed in foreign countries. Generally, our activities in other countries will be subject to regulation that is similar in nature and scope as that imposed in the United States, although there can be important differences. Additionally, some significant aspects of regulation in Europe are addressed in a centralized way, but country-specific regulation remains essential in many respects. The process for obtaining regulatory marketing approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources.

U.S. Product Development Process

In the United States, the FDA regulates pharmaceutical and biological products under the Federal Food, Drug and Cosmetic Act, or FDCA, and the Public Health Service Act, or PHSA, and the FDA's implementing regulations. Products are also subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. FDA sanctions could include, among other actions, refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls or withdrawals from the market, product seizures, total or partial suspension of production or distribution injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us. The FDA has limited experience with commercial development of combination immuno-oncology products. The process required by the FDA before a drug or biological product may be marketed in the United States generally involves the following:

- completion of nonclinical laboratory tests and animal studies according to good laboratory practices, or GLPs, and applicable requirements for the humane use of laboratory animals or other applicable regulations;

- submission to the FDA of an Investigational New Drug Application, or IND, which must become effective before human clinical trials may begin;

- performance of adequate and well-controlled human clinical trials according to the FDA's regulations commonly referred to as good clinical practices, or GCPs, and any additional requirements for the protection of human research patients and their health information, to establish the safety and efficacy of the product candidate for its intended use;

- submission to the FDA of a BLA for any biologic or an NDA for any drug we seek to market that includes substantive evidence of safety, purity, and potency, or safety and effectiveness from results of nonclinical testing and clinical trials;

- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the product is produced, to assess compliance with cGMP, to assure that the facilities, methods and controls are adequate to preserve the product's identity, strength, quality and purity, and, if applicable, the FDA's current good tissue practices, or GTPs, for the use of human cellular and tissue products;

- potential FDA audit of the nonclinical study and clinical trial sites that generated the data in support of the BLA or NDA; and

- FDA review and approval of the NDA, or licensure, of the BLA.

Before testing any product candidate in humans, the product candidate enters the preclinical testing stage. Preclinical tests, also referred to as nonclinical studies, include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies to assess the potential safety and activity of the product candidate. The conduct of the preclinical tests must comply with federal regulations and requirements including GLPs. The clinical trial sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. Some preclinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA raises concerns or questions regarding the proposed clinical trials and places the trial on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may also impose clinical holds on a product candidate at any time before or during clinical trials due to safety concerns or non-compliance. If the FDA imposes a clinical hold, trials may not recommence without FDA authorization and then only under terms authorized by the FDA. Accordingly, we cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such trials.

Where a recombinant nucleic acid trial is conducted at, or sponsored by, institutions receiving funding for recombinant DNA research from the U.S. National Institutes of Health, or NIH, prior to the submission of an IND to the FDA, a protocol and related documentation is submitted to and the study is registered with the NIH Office of Biotechnology Activities, or OBA, pursuant to the NIH Guidelines for Research Involving Recombinant DNA Molecules, or NIH Guidelines. Compliance with the NIH Guidelines is mandatory for investigators at institutions receiving NIH funds for research involving recombinant DNA, however many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them. The NIH is responsible for convening the Recombinant DNA Advisory Committee, or RAC, a federal advisory committee, which discusses protocols that raise novel or particularly important scientific, safety or ethical considerations at one of its quarterly public meetings. The OBA will notify the FDA of the RAC's decision regarding the necessity for full public review of a protocol. RAC proceedings and reports are posted to the OBA web site and may be accessed by the public.

Clinical trials involve the administration of the product candidate to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject

safety, including stopping rules that assure a clinical trial will be stopped if certain adverse events should occur. Each protocol and any amendments to the protocol must be submitted to the FDA as part of the IND. Clinical trials must be conducted and monitored in accordance with the FDA's regulations composing the GCP requirements, including the requirement that all research patients provide informed consent. Further, each clinical trial must be reviewed and approved by an independent institutional review board, or IRB, at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent that must be signed by each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Clinical trials of certain biologics also must be reviewed by an institutional biosafety committee, or IBC, a local institutional committee that reviews and oversees basic and clinical research conducted at that institution. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- Phase 1. The biological product is initially introduced into healthy human patients and tested for safety. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.

- Phase 2. The biological product is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule.

- Phase 3. Clinical trials are undertaken to further evaluate dosage, clinical efficacy, potency, and safety in an expanded patient population at geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk to benefit ratio of the product and provide an adequate basis for product labeling.

Post-approval clinical trials, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These clinical trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication, particularly for long-term safety follow-up.

During all phases of clinical development, regulatory agencies require extensive monitoring and auditing of all clinical activities, clinical data, and clinical trial investigators. Annual progress reports detailing the results of the clinical trials must be submitted to the FDA. Written IND safety reports must be promptly submitted to the FDA, the NIH and the investigators for serious and unexpected adverse events, any findings from other studies, tests in laboratory animals or in vitro testing that suggest a significant risk for human patients, or any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must submit an IND safety report within 15 calendar days after the sponsor determines that the information qualifies for reporting. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within seven calendar days after the sponsor's initial receipt of the information. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor or its data safety monitoring board may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research patients are being exposed to an unacceptable health risk, including risks inferred from other unrelated immuno-oncology trials. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the biological product has been associated with unexpected serious harm to patients.

Human immuno-oncology products are a new category of therapeutics. Because this is a relatively new and expanding area of novel therapeutic interventions, there can be no assurance as to the length of the trial period, the number of patients the FDA will require to be enrolled in the trials in order to establish the safety, efficacy, purity and potency of immuno-oncology products, or that the data generated in these trials will be acceptable to the FDA to support marketing approval.

Concurrently with clinical trials, companies usually complete additional studies and must also develop additional information about the physical characteristics of the product candidate as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. To help reduce the risk of the introduction of adventitious agents with use of biological products, the PHSA emphasizes the importance of manufacturing control for products whose attributes cannot be precisely defined. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other criteria, the sponsor must develop methods for testing the identity, strength, quality, potency and purity of the final biological product. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the biological product candidate does not undergo unacceptable deterioration over its shelf life.

U.S. Review and Approval Processes

After the completion of clinical trials of a product candidate, FDA approval of a BLA or NDA must be obtained before commercial marketing of the product. The BLA or NDA must include results of product development, laboratory and animal studies, human trials, information on the manufacture and composition of the product, proposed labeling and other relevant information. The FDA may grant deferrals for submission of data, or full or partial waivers. The testing and approval processes require substantial time and effort and there can be no assurance that the FDA will accept the BLA or NDA for filing and, even if filed, that any approval will be granted on a timely basis, if at all.

Under the Prescription Drug User Fee Act, or PDUFA, as amended, each BLA or NDA must be accompanied by a significant user fee. The FDA adjusts the PDUFA user fees on an annual basis. PDUFA also imposes an annual product fee for products and an annual establishment fee on facilities used to manufacture prescription biological or drug products. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on BLAs or NDAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

Within 60 days following submission of the application, the FDA reviews a BLA or NDA submitted to determine if it is substantially complete before the agency accepts it for filing. The FDA may refuse to file any BLA or NDA that it deems incomplete or not properly reviewable at the time of submission, and may request additional information. In this event, the BLA or NDA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review of the BLA or NDA. The FDA reviews the BLA to determine, among other things, whether the proposed product is safe, potent, and/or effective for its intended use, and has an acceptable purity profile, and in the case of an NDA, whether the product is safe and effective for its intended use, and in each case, whether the product is being manufactured in accordance with cGMP. The FDA may refer applications for novel biological or drug products or biological or drug products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. During the product approval process, the FDA also will determine whether a Risk Evaluation and Mitigation Strategy, or REMS, is necessary to assure the safe use of the product. If the FDA concludes a REMS is needed, the sponsor of the BLA or NDA must submit a proposed REMS. The FDA will not approve a BLA or NDA without a REMS, if required.

Before approving a BLA or NDA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. For human tissue-based products, the FDA also will not approve the product if the manufacturer is not in compliance with the FDA's current good tissue practices, or GTPs, to the extent applicable. These are FDA regulations and guidance documents that govern the methods used in, and the facilities and controls used for, the manufacture of human cells, tissues, and cellular and tissue based products, or HCT/Ps, which are human cells or tissue intended for implantation, transplant, infusion, or transfer into a human recipient. The primary intent of the GTP requirements is to ensure that cell and tissue based products are manufactured in a manner designed to prevent the introduction, transmission and spread of communicable disease. FDA regulations also require tissue establishments to register and list their HCT/Ps with the FDA and, when applicable, to evaluate donors through screening and testing. Additionally, before approving a BLA or NDA, the FDA will typically inspect one or more clinical sites to assure that the clinical trials were conducted in compliance with IND trial requirements and GCP requirements. To assure cGMP, GTP and GCP compliance, an applicant must incur significant expenditure of time, money and effort in the areas of training, record keeping, production and quality control.

Notwithstanding the submission of relevant data and information, the FDA may ultimately decide that the BLA or NDA does not satisfy its regulatory criteria for approval and deny approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data. If the agency decides not to approve the BLA or NDA in its present form, the FDA will issue a complete response letter that describes all of the specific deficiencies in the BLA or NDA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the BLA or NDA, addressing all of the deficiencies identified in the letter, or withdraw the application.

If a product receives regulatory approval, the approval may be significantly limited to specific indications and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product.

Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. The FDA may impose restrictions and conditions on product distribution, prescribing, or dispensing in the form of a risk management plan, or otherwise limit the scope of any approval. In addition, the FDA may require post marketing clinical trials, sometimes referred to as Phase 4 clinical trials, designed to further assess a biological product's safety and effectiveness, and testing and surveillance programs to monitor the safety of approved products that have been commercialized.

In addition, under the Pediatric Research Equity Act, or PREA, a BLA or supplement to a BLA must contain data to assess the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any product for an indication for which orphan designation has been granted. However, if only one indication for a product has orphan designation, a pediatric assessment may still be required for any applications to market that same product for the non-orphan indication(s).

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making available in the United States a drug or biologic for this type of disease or condition will be recovered from sales in the United States for that drug or biologic.

Orphan drug designation must be requested before submitting a BLA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. The orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review or approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a full BLA, to market the same biologic for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity. Orphan drug exclusivity does not prevent FDA from approving a different drug or biologic for the same disease or condition, or the same drug or biologic for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the BLA application user fee.

A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. In addition, exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

We have received orphan drug designation for CRS-207 and GVAX Pancreas for the treatment of pancreatic cancer. There can be no assurance that we will receive orphan drug designation for additional indications or for any additional product candidates.

Expedited Development and Review Programs

The FDA has a Fast Track program that is intended to expedite or facilitate the process for reviewing new products that meet certain criteria. Specifically, new products are eligible for Fast Track designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. Unique to a Fast Track product, the FDA may consider for review sections of the BLA or NDA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the BLA or NDA, the FDA agrees to accept sections of the BLA or NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the BLA or NDA.

Any product, submitted to the FDA for approval, including a product with a Fast Track designation, may also be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. A product is eligible for priority review if it has the potential to provide safe and effective therapy where no satisfactory alternative therapy exists or a significant improvement in the treatment, diagnosis or prevention of a disease compared to marketed products. The FDA will attempt to direct additional resources to the evaluation of an application for a new product designated for priority review in an effort to facilitate the review. Additionally, a product may be eligible for accelerated approval. Products studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may receive accelerated approval upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a drug or biological product receiving accelerated approval perform adequate and well-controlled post-marketing clinical studies. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product. Fast

Track designation, priority review and accelerated approval do not change the standards for approval but may expedite the development or approval process.

In 2012 the FDA established a Breakthrough Therapy designation which is intended to expedite the development and review of products that treat serious or life-threatening conditions. The designation is available for product candidates that are intended, alone or in combination with one or more other products, to treat serious or life-threatening diseases or conditions and for which preliminary clinical evidence indicates that the product may demonstrate substantial improvement over currently available therapy on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The designation includes all of the Fast Track program features, as well as more intensive FDA interaction and guidance. The Breakthrough Therapy designation is a distinct status from both Fast Track designation and priority review, which can also be granted to the same product if relevant criteria are met. If a product is designated as Breakthrough Therapy, FDA will expedite the development and review of such product.

We received Breakthrough Therapy designation for the combination of CRS-207 and GVAX Pancreas. Where applicable, we plan to request Fast Track and Breakthrough Therapy designation for other product candidates and regimens. Even if we receive one or both of these designations for our product candidates, the FDA may later decide that our product candidates no longer meets the conditions for qualification. In addition, these designations may not provide us with a material commercial advantage.

Post-Approval Requirements

Any products for which we receive FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, and complying with FDA promotion and advertising requirements, which include, among others, standards for direct-to-consumer advertising, restrictions on promoting products for uses or in patient populations that are not described in the product's approved uses, known as off-label use, limitations on industry-sponsored scientific and educational activities and requirements for promotional activities involving the internet. Although physicians may prescribe legally available products for off-label uses, if the physicians deem to be appropriate in their professional medical judgment, manufacturers may not market or promote such off-label uses.

In addition, quality control and manufacturing procedures must continue to conform to applicable manufacturing requirements after approval to ensure the long-term stability of the product. We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products in accordance with cGMP regulations. cGMP regulations require among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Manufacturers and other entities involved in the manufacture and distribution of approved products are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. Discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved BLA or NDA, including, among other things, recall or withdrawal of the product from the market. In addition, changes to the manufacturing process are strictly regulated, and depending on the significance of the change, may require prior FDA approval before being implemented. Other types of changes to the approved product, such as adding new indications and claims, are also subject to further FDA review and approval.

The FDA also may require post-marketing testing, known as Phase 4 testing, and surveillance to monitor the effects of an approved product. Discovery of previously unknown problems with a product or the failure to comply with applicable FDA requirements can have negative consequences, including adverse publicity, judicial or administrative enforcement, warning letters from the FDA, mandated corrective advertising or communications

with doctors, and civil or criminal penalties, among others. Newly discovered or developed safety or effectiveness data may require changes to a product's approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of other risk management measures. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

U.S. Patent Term Restoration and Marketing Exclusivity

The Biologics Price Competition and Innovation Act, or BPCIA, amended the PHSA to authorize the FDA to approve similar versions of innovative biologics, commonly known as biosimilars. A competitor seeking approval of a biosimilar must file an application to establish its molecule as highly similar to an approved innovator biologic, among other requirements. The BPCIA, however, bars the FDA from approving biosimilar applications for 12 years after an innovator biological product receives initial marketing approval.

Depending upon the timing, duration and specifics of the FDA approval of the use of our product candidates, some of our U.S. patents, if granted, may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent restoration term of up to five years, as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of a BLA or NDA plus the time between the submission date of a BLA or NDA and the approval of that application. Only one patent applicable to an approved product is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The U.S. Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may intend to apply for restoration of patent term for one of our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant BLA or NDA.

Pediatric exclusivity is another type of regulatory market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric trial in accordance with an FDA-issued "Written Request" for such a trial.

Other U.S. Healthcare Laws and Compliance Requirements

In the United States, our activities are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including but not limited to, the Centers for Medicare and Medicaid Services, or CMS, other divisions of the U.S. Department of Health and Human Services, for instance the Office of Inspector General, the U.S. Department of Justice, or DOJ, and individual U.S. Attorney offices within the DOJ, and state and local governments. For example, sales, marketing and scientific/educational grant programs must comply with the anti-fraud and abuse provisions of the Social Security Act, the false claims laws, the physician payment transparency laws, the privacy and security provisions of the Health Insurance Portability and Accountability Act, or HIPAA, as amended by the Health Information Technology and Clinical Health Act, or HITECH, and similar state laws, each as amended.

The federal Anti-Kickback Statute prohibits, among other things, any person or entity from knowingly and willfully offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any item or service reimbursable under Medicare, Medicaid or other federal healthcare programs. The term remuneration has been interpreted broadly to include anything of value. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers,

purchasers, and formulary managers on the other. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution. The exceptions and safe harbors are drawn narrowly and practices that involve remuneration that may be alleged to be intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exception or safe harbor. Our practices may not in all cases meet all of the criteria for protection under a statutory exception or regulatory safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor, however, does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances.

Additionally, the intent standard under the Anti-Kickback Statute was amended by the Affordable Care Act to a stricter standard such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, the Affordable Care Act codified case law that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act, as discussed below.

The civil monetary penalties statute imposes penalties against any person or entity that, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent.

The federal False Claims Act prohibits, among other things, any person or entity from knowingly presenting, or causing to be presented, a false claim for payment to, or approval by, the federal government or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes “any request or demand” for money or property presented to the U.S. government. Recently, several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies’ marketing of the product for unapproved, and thus non-reimbursable, uses.

HIPAA created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud or to obtain, by means of false or fraudulent pretenses, representations or promises, any money or property owned by, or under the control or custody of, any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up by trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

Also, many states have similar fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

We may be subject to data privacy and security regulations by both the federal government and the states in which we conduct our business. HIPAA, as amended by the HITECH Act, and their respective implementing regulations, including the final omnibus rule published on January 25, 2013, imposes requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA’s privacy and security standards directly applicable to business associates independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys’ fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways, thus complicating compliance efforts.

Additionally, the federal Physician Payments Sunshine Act under the Affordable Care Act, and its implementing regulations, require that certain manufacturers of drugs, devices, biological and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with certain exceptions, to report information related to certain payments or other transfers of value made or distributed to physicians and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals and to report annually certain ownership and investment interests held by physicians and their immediate family members and payments or other "transfers of value" made to such physician owners. Failure to submit timely, accurately, and completely the required information may result in civil monetary penalties of up to an aggregate of $150,000 per year and up to an aggregate of $1 million per year for "knowing failures"). Manufacturers were required to begin collecting data on August 1, 2013 and submit reports on aggregate payment data to the government for the first reporting period of August 1, 2013 to December 31, 2013, by March 31, 2014, and to report detailed payment data for the first reporting period and submit legal attestation to the accuracy of such data by June 30, 2014. Thereafter, manufacturers must submit reports by the 90th day of each subsequent calendar year. CMS made all reported data publicly available on September 30, 2014. Certain states also mandate implementation of compliance programs, impose restrictions on pharmaceutical manufacturer marketing practices and/or require the tracking and reporting of gifts, compensation and other remuneration to healthcare providers and entities.

In order to distribute products commercially, we must also comply with state laws that require the registration of manufacturers and wholesale distributors of drug and biological products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states have enacted legislation requiring pharmaceutical and biotechnology companies to establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical and biotechnology companies for use in sales and marketing and to prohibit certain other sales and marketing practices. All of our activities are potentially subject to federal and state consumer protection and unfair competition laws.

If our operations are found to be in violation of any of the federal and state healthcare laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including without limitation, civil, criminal and/or administrative penalties, damages, fines, disgorgement, exclusion from participation in government programs, such as Medicare and Medicaid, injunctions, private "qui tam" actions brought by individual whistleblowers in the name of the government, or refusal to allow us to enter into government contracts, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend, in part, on the extent to that third-party payors provide coverage, and establish adequate reimbursement levels for such products. In the United States, third-party payors include federal and state healthcare programs, private managed care providers, health insurers and other organizations. The process for determining whether a third-party payor will provide coverage for a product may be separate from the process for setting the price of a product or for establishing the reimbursement rate that such a payor will pay for the product. Third-party payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the FDA-approved products for a particular indication. Third-party payors are increasingly challenging the price, examining the

medical necessity and reviewing the cost-effectiveness of medical products, therapies and services, in addition to questioning their safety and efficacy. We may need to conduct expensive pharmaco-economic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain the FDA approvals. Our product candidates may not be considered medically necessary or cost-effective. A payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a product does not assure that other payors will also provide coverage for the product. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

Different pricing and reimbursement schemes exist in other countries. In the EU, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on health care costs has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

The marketability of any product candidates for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on healthcare pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Healthcare Reform

In March 2010, President Obama enacted the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively, the Affordable Care Act, which has the potential to substantially change healthcare financing and delivery by both governmental and private insurers, and significantly impact the pharmaceutical and biotechnology industry. The Affordable Care Act will impact existing government healthcare programs and will result in the development of new programs.

Among the Affordable Care Act's provisions of importance to the pharmaceutical and biotechnology industries, in addition to those otherwise described above, are the following:

- an annual, nondeductible fee on any entity that manufactures or imports certain specified branded prescription drugs and biologic agents apportioned among these entities according to their market share in some government healthcare programs;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program, to 23.1% and 13% of the average manufacturer price for most branded and generic drugs, respectively and capped the total rebate amount for innovator drugs at 100% of the Average Manufacturer Price, or AMP;
- addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for certain drugs and biologics, including our product candidates, that are inhaled, infused, instilled, implanted or injected;
- extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;

- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for individuals with income at or below 133% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability;

- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;

- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program; and

- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in April 2013, and will remain in effect through 2024 unless additional Congressional action is taken. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals and cancer treatment centers.

We anticipate that the Affordable Care Act and other legislative reforms will result in additional downward pressure on the price that we receive for any approved product, if covered, and could seriously harm our business. Any reduction in reimbursement from Medicare and other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products. In addition, it is possible that there will be further legislation or regulation that could harm our business, financial condition and results of operations.

The Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering, or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring the company to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Additional Regulation

In addition to the foregoing, state and federal laws regarding environmental protection and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservancy and Recovery Act and the Toxic Substances Control Act, affect our business. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines. We believe that we are in material compliance with applicable

environmental laws and that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations.

Europe and Rest of World Government Regulation

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products. Whether or not we obtain FDA approval of a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical trial application much like the IND prior to the commencement of human clinical trials. In the EU, for example, a clinical trial application must be submitted to each country's national health authority and an independent ethics committee, much like the FDA and IRB, respectively. Once the clinical trial application is approved in accordance with a country's requirements, clinical trial development may proceed. Because biologically sourced raw materials are subject to unique contamination risks, their use may be restricted in some countries.

The requirements and process governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, the clinical trials are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

To obtain regulatory approval of an investigational drug or biological product under EU regulatory systems, we must submit a marketing authorization application. The application used to file the BLA in the United States is similar to that required in the EU, with the exception of, among other things, country-specific document requirements.

For other countries outside of the EU, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we or our potential collaborators fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Legal Proceedings

We are not currently subject to any material legal proceedings.

Facilities

We lease an 18,211 square foot facility in Berkeley, CA for research and development and administrative activities. The current lease agreement commenced on June 1, 2014 and has an initial term expiring on August 31, 2016, with options to extend until August 31, 2018. We believe that our existing facilities are adequate to meet our current needs, and that suitable additional alternative spaces will be available in the future on commercially reasonable terms.

Employees

As of January 31, 2015, we had 50 full-time employees, 20 of whom hold Ph.D. degrees, 39 of whom were engaged in research and development activities and 11 of whom were engaged in finance, business development, facilities, human resources and administrative support. None of our employees are subject to a collective bargaining agreement. We consider our relationship with our employees to be good.

MANAGEMENT

Executive Officers and Directors

Our executive officers and directors, their respective positions and their respective ages at December 31, 2014 are as follows:

Name	Age	Position(s)
Executive Officers		
Stephen T. Isaacs	65	Chairman, Director, President and Chief Executive Officer
Gregory W. Schafer	50	Chief Operating Officer
Thomas W. Dubensky, Jr., Ph.D.	57	Chief Scientific Officer
Jennifer Lew	42	Senior Vice President of Finance
Dirk G. Brockstedt, Ph.D.	46	Senior Vice President of Research and Development
Non-Employee Directors		
Gerald Chan(3)	64	Director
William M. Greenman(1)(3)	48	Director
Ross Haghighat(1)(2)	51	Director
Frank McCormick, Ph.D.(3)	64	Director
Stephanie O'Brien(1)(2)	56	Director

(1) Member of the audit committee.
(2) Member of the compensation committee.
(3) Member of the nominating and corporate governance committee.

Executive Officers

Stephen T. Isaacs has served as our Chairman, Director, President and Chief Executive Officer since 2008. Prior to Aduro, Mr. Isaacs founded Cerus Corporation, a biomedical products company commercializing the Intercept Blood Systems, in 1991. He served as President and Chief Executive Officer of Cerus from 1991 to 2004. Prior to Cerus, Mr. Isaacs founded and served as Chief Executive Officer and President of HRIS Associates and HRI Research, both biotechnology companies focusing on research and development. He held a non-teaching faculty position in the Department of Chemistry at the University of California Berkeley from 1978 to 1986. Mr. Isaacs has published over 20 peer-reviewed scientific articles and is an inventor on over 40 issued patents. Mr. Isaacs holds a B.A. degree in Biochemistry from University of California Berkeley, and had graduate training in organic chemistry in the Ph.D. program in the Department of Chemistry at Berkeley. Because of Mr. Isaacs' biomedical expertise, extensive knowledge of our company and experience as founder and executive officer of biotechnology companies, we believe he is able to make valuable contributions to our board of directors.

Gregory W. Schafer has served as our Chief Operating Officer since July 2013. Prior to joining Aduro, he served as Chief Financial Officer of Jennerex, Inc, a private biotechnology company, from June 2010 until July 2013, where he was responsible for finance, accounting, planning, investor relations and treasury functions. Prior to Jennerex, he served as Chief Financial Officer of Onyx Pharmaceuticals, Inc., a public biotechnology company, from April 2006 until January 2009, where he was responsible for finance, accounting, risk management and strategic and operational planning. Before joining Onyx, he served as Chief Financial Officer and Vice President of finance for IntraBiotics Pharmaceuticals and Cerus Corporation, both biotechnology companies. Prior to Cerus, Mr. Schafer worked as a management consultant for Deloitte & Touche LLP. Mr. Schafer also serves on the board of directors for Capricor, Inc., a public biotechnology company. He received his M.B.A. from the Anderson Graduate School of Management at the University of California, Los Angeles and a B.S.E. in mechanical engineering from the University of Pennsylvania.

Thomas W. Dubensky, Jr., Ph.D. has served as our Chief Scientific Officer since September 2011. From 2009 to 2011, Dr. Dubensky served as Chief Scientific Officer of Immune Design Corp., a biotechnology company, where he was responsible for overseeing the development of immune therapies based on proprietary molecularly defined adjuvants and dendritic cell targeting vaccine platforms. He was a co-founder and Chief Scientific Officer of Anza Therapeutics, Inc., a biotechnology company which was spun out from Cerus Corporation in 2007, where he served as the Vice President of Research beginning in 2002. At Cerus and at Anza, he helped to develop vaccine platforms based on attenuated strains of *Listeria monocytogenes*, which serves as the technology basis for Aduro. Previously, Dr. Dubensky developed vaccine platforms based on alphaviruses, adenoviruses, retroviruses/lentiviruses and plasmid DNA in positions of increasing responsibility at Viagene Biotech, Inc., Chiron Corporation and Onyx Pharmaceuticals, Inc, all biotechnology companies. Dr. Dubensky has co-authored more than 60 scientific papers and is an inventor on more than 25 issued U.S. patents and multiple pending applications. Dr. Dubensky received his B.A. in Bacteriology and Immunology from the University of California, Berkeley; he earned his Ph.D. at the University of Colorado Health Sciences Center; and he was a post-doctoral fellow at Harvard Medical School in the Department of Pathology.

Jennifer Lew joined Aduro in October 2013 and has served as our Senior Vice President of Finance since January 2015. Prior to joining Aduro, Ms. Lew held various roles at Dynavax Technologies Corporation, a biopharmaceutical company, from August 2006 to October 2013, most recently as Vice President of Finance and Principal Accounting Officer, where she oversaw accounting and finance operations. Prior to joining Dynavax, Ms. Lew held positions as Assistant Controller and Director of Finance at QRS Corporation, a publicly-held technology company, from 2000 to 2004. Ms. Lew was a member of the audit practice at Ernst & Young from 1994 to 1999. She earned a B.A. in Economics/Accounting and Government from Claremont McKenna College and is a Certified Public Accountant (inactive status).

Dirk G. Brockstedt, Ph.D. joined Aduro in April 2009 and has served as our Senior Vice President of Research and Development since September 2011. Prior to joining Aduro, Dr. Brockstedt held various positions in the immunology department of Cerus Corporation since joining that company in 2002 and served as Cerus Corporation's Director, Immunology from 2006 to 2007. He was the third employee in the original Immunotherapy group at Cerus Corporation. Prior to Cerus Corporation, he was a scientist at Aventis in the Immunotherapy and Anti-Angiogenesis group from 1999 until 2002 developing novel therapies against cancer. Dr. Brockstedt has co-authored 36 scientific papers and is a named inventor on five issued patents and several pending applications. Dr. Brockstedt holds a Diploma/Masters of Science in Microbiology from the University of Kiel; he earned his Ph.D. from the University of Kiel and Stanford University, and he was a post-doctoral fellow at the Stanford School of Medicine in the department of Pathology.

Board of Directors

Dr. Gerald Chan has served on our board of directors since 2014. Dr. Chan co-founded Morningside Venture (VI) Investments Limited, a private investment group with venture, private equity and property investments, in 1986. He has served as a member of the Global Advisory Council of the International Society for Stem Cell Research since 2008, the Global Advisory Council of Harvard University since 2012, the Dean's Board of Advisors of the Harvard School of Public Health since 2011, the advisory boards of the Cold Spring Harbor Conferences Asia since 2008, the Johns Hopkins Nanjing Center since 2004 and the Columbia University Center for Radiological Research since 2010. Dr. Chan also has been a member of the board of directors of Hang Lung Group Limited since 1986. Dr. Chan received his B.S. and M.S. degrees in engineering from the University of California, Los Angeles, and his Master's degree in medical radiological physics and Doctor of Science degree in radiation biology from Harvard University. He did his post-doctoral training at the Dana-Farber Cancer Institute as a fellow of the Leukemia Society of America. Because of his extensive experience in life science investments, we believe Dr. Chan will make valuable contributions to our board of directors.

William M. Greenman has served as a member of our board of directors since 2010. Mr. Greenman is currently the President and Chief Executive Officer of Cerus Corporation, and has held several executive and management positions with Cerus since joining the company in 1995. Prior to Cerus, he worked in various marketing and business development positions in Baxter's Biotech Division from 1991 to 1995. Mr. Greenman

holds undergraduate degrees in Biological Sciences and Economics from Stanford University. Because of his extensive experience holding executive positions and knowledge of the biomedical industry, we believe Mr. Greenman is able to make valuable contributions to our board of directors.

Ross Haghighat has served as a member of our board of directors since 2009. Mr. Haghighat is the founder, Chairman and Managing Partner of Triton Systems, Inc. Mr. Haghighat has served on the board of Triton Systems, Inc., a product venturing company, where he has also served as its Chief Executive Officer since 2009. Mr. Haghighat has served on the board of directors of Triton Systems, S12 Technologies and FRX Polymers since 2009. Mr. Haghighat holds a Bachelor's of Science and a Masters in Material Science, Organometallic Chemistry from Rutgers University and a Master of Business Administration from Boston College. Because of his extensive experience in the biotechnology field, we believe Mr. Haghighat will provide valuable contributions to our board of directors.

Frank McCormick, Ph.D., F.R.S., D.Sc. (Hon) has served as a member of our board of directors since 2010. Dr. McCormick has held the positions of Director of the University of California, San Francisco, or UCSF, Helen Diller Family Comprehensive Cancer Center, a multidisciplinary research and clinical care organization, since 1997, the position of Associate Dean of the UCSF School of Medicine since 1997 and has been a Fellow of the Royal Society, a society for science, since 1996. Prior to joining the UCSF faculty, Dr. McCormick pursued cancer-related work with several biotechnology firms, including Cetus Corporation as Director of Molecular Biology from 1981 to 1990 and Vice President of Research from 1990 to 1991, and Chiron Corporation as Vice President of Research from 1991 to 1992. In 1992, Dr. McCormick founded Onyx Pharmaceuticals and served as its Chief Scientific Officer until 1996. Dr. McCormick received his B.Sc. in biochemistry from the University of Birmingham, and his Ph.D. in biochemistry from the University of Cambridge and held postdoctoral fellowships in the U.S. at the State University of New York at Stony Brook and in London at the Imperial Cancer Research Fund. Because of Dr. McCormick's extensive experience in the biomedical industry, we believe Dr. McCormick is able to make valuable contributions to our board of directors.

Stephanie O'Brien has served as a member of our board of directors since 2011. Ms. O'Brien has been a member of the investment team at Morningside since 1997. She has served as a director for numerous private nonclinical and clinical stage companies developing drugs across a broad spectrum of therapeutic focus, including oncology and immunotherapy, and has extensive experience providing operational and management oversight to venture-backed technology companies. She has also facilitated multiple financings for public and private companies such as Dendreon, BioVex, Stealth Biotherapeutics and Sohu.com. Prior to joining Morningside, Ms. O'Brien spent nine years as a corporate lawyer with Hale and Dorr in the Boston and Washington, D.C. offices, working primarily on public offerings, venture capital finances and start-up companies. She previously worked at Chase Manhattan Bank, working in international portfolio analysis. She received her A.B., cum laude, from Harvard College and her J.D. from New York University School of Law. Because of Ms. O'Brien's extensive experience serving on boards of directors and governing biotechnology companies, we believe she is able to make valuable contributions to our board of directors.

Board Composition

Certain members of our board of directors were elected pursuant to the provisions of our amended and restated voting agreement. Under this agreement, our stockholders that are party to the agreement have agreed to vote their shares to elect to our board of directors: (i) two directors designated by a majority of the outstanding shares Series B convertible preferred stock, one of whom small be designated by MVIL for so long as MVIL holds at least 50% of the shares of Series B convertible preferred stock originally purchase by MVIL; (ii) two directors designated by purchasers who invested at least 60% of the Series C convertible preferred stock investment amount and who shall be reasonably acceptable to MVIL; (iii) the person serving as Chief Executive Officer; and (vi) two individuals to serve as independent directors. This agreement will terminate upon the completion of this offering.

Our board may establish the authorized number of directors from time to time by resolution. Our board of directors currently consists of six members. In accordance with our amended and restated certificate of incorporation to be filed in connection with this offering, immediately after this offering, our board of directors will be divided into three classes with staggered three-year terms. At each annual general meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

- the Class I directors will be and , and their terms will expire at the annual general meeting of stockholders to be held in 2016;
- the Class II directors will be and , and their terms will expire at the annual general meeting of stockholders to be held in 2017; and
- the Class III directors will be and , and their terms will expire at the annual general meeting of stockholders to be held in 2018.

We expect that any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control.

Director Independence

Generally, under the listing requirements and rules of NASDAQ, independent directors must comprise a majority of a listed company's board of directors within one year of the closing of this offering. Our board of directors has undertaken a review of its composition, the composition of its committees and the independence of each director. Our board of directors has determined that, other than Stephen Isaacs by virtue of his position as Chief Executive Officer, none of our directors has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each is "independent" as that term is defined under the listing requirements of NASDAQ. Accordingly, a majority of our directors is independent, as required under applicable NASDAQ rules. In making this determination, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

Board Committees

The standing committees of our board of directors consist of an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. Each of the committees report to the board of directors as they deem appropriate and as the board may request. The composition, duties and responsibilities of the committees are set forth below.

Audit Committee

Our audit committee consists of William Greenman, Ross Haghighat and Stephanie O'Brien. Our board of directors has determined that William Greenman, Ross Haghighat and Stephanie O'Brien are independent under NASDAQ listing standards and Rule 10A-3(b)(1) of the Exchange Act. The chair of our audit committee is William Greenman, who our board of directors has determined is an "audit committee financial expert" within the meaning of SEC regulations. Our board of directors has also determined that each member of our audit committee has the requisite financial expertise required under the applicable requirements of NASDAQ. In

arriving at this determination, the board has examined each audit committee member's scope of experience and the nature of their employment in the corporate finance sector. The primary functions of this committee include:

- reviewing and approving the engagement of our independent registered public accounting firm to perform audit services and any permissible non-audit services;
- evaluating the performance of our independent registered public accounting firm and deciding whether to retain their services;
- monitoring the rotation of partners on our engagement team of our independent registered public accounting firm;
- reviewing our annual and quarterly financial statements and reports and discussing the statements and reports with our independent registered public accounting firm and management, including a review of disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations;"
- considering and approving or disapproving all related party transactions;
- reviewing, with our independent registered public accounting firm and management, significant issues that may arise regarding accounting principles and financial statement presentation, as well as matters concerning the scope, adequacy and effectiveness of our financial controls;
- conducting an annual assessment of the performance of the audit committee and its members, and the adequacy of its charter; and
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding financial controls, accounting or auditing matters.

Compensation Committee

Our compensation committee consists of Ross Haghighat and Stephanie O'Brien. Our board of directors has determined that each of Ross Haghighat and Stephanie O'Brien is independent under NASDAQ listing standards and the rules and regulations of the SEC, is a "non-employee director" as defined in Rule 16b-3 promulgated under the Exchange Act and is an "outside director" as that term is defined in Section 162(m) of the Code. The chair of our compensation committee is Stephanie O'Brien. The functions of this committee include:

- determining the compensation and other terms of employment of our chief executive officer and our other executive officers and reviewing and approving corporate performance goals and objectives relevant to such compensation;
- reviewing and recommending to the full board of directors the compensation of our directors;
- evaluating and administering the equity incentive plans, compensation plans and similar programs advisable for us, as well as reviewing and recommending to our board of directors the adoption, modification or termination of our plans and programs;
- establishing policies with respect to equity compensation arrangements;
- reviewing with management our disclosures under the caption "Compensation Discussion and Analysis" and recommending to the full board its inclusion in our periodic reports to be filed with the SEC; and
- reviewing and evaluating, at least annually, the performance of the compensation committee and the adequacy of its charter.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Gerald Chan, William Greenman and Frank McCormick. Our board of directors has determined that Gerald Chan, William Greenman and Frank McCormick are independent under NASDAQ listing standards and the rules and regulations of the SEC. The chair of our nominating and corporate governance committee is Gerald Chan. The functions of this committee include:

- reviewing periodically and evaluating director performance on our board of directors and its applicable committees, and recommending to our board of directors and management areas for improvement;
- interviewing, evaluating, nominating and recommending individuals for membership on our board of directors;
- reviewing and recommending to our board of directors any amendments to our corporate governance policies; and
- reviewing and assessing, at least annually, the performance of the nominating and corporate governance committee and the adequacy of its charter.

Code of Business Conduct and Ethics

In connection with this offering, our board of directors will adopt a code of business conduct and ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. Upon completion of this offering, our code of business conduct and ethics will be available on our website at www.aduro.com. We intend to disclose any amendments to the code, or any waivers of its requirements, on our website to the extent required by the applicable rules and exchange requirements. The inclusion of our website address in this prospectus does not include or incorporate by reference into this prospectus the information on or accessible through our website.

Compensation Committee Interlocks and Insider Participation

None of the members of the compensation committee is currently or has been at any time one of our officers or employees. None of our executive officers currently serves, or has served during the last year, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

Non-Employee Director Compensation

The table below shows all compensation earned by or paid to our non-employee directors during the year ended December 31, 2014.

Name	Fees Earned or Paid in Cash	Option Awards(1)	Total
Gerald Chan	$ —	$ —	$ —
William M. Greenman.	—	—	—
Ross Haghighat	—	—	—
Frank McCormick, Ph.D.	—	—	—
Stephanie O’Brien	—	—	—

(1) The amounts reported do not reflect the amounts actually received by our non-employee directors. Instead, these amounts represent the aggregate grant date fair value of each stock option granted to our non-

employee directors during the fiscal year ended December 31, 2014, as computed in accordance with Financial Accounting Standard Board Accounting Standards Codification Topic 718. The assumptions used in calculating the grant date fair value of the awards reported in this column are set forth in the notes to our audited consolidated financial statements included elsewhere in this prospectus. As required by SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. Non-employee directors who receive options may only realize compensation with regard to these options to the extent the trading price of our common stock is greater than the exercise price of such options.

Upon completion of this offering, our board of directors may establish a compensation program for our non-employee directors.

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table sets forth information regarding the compensation awarded to or earned by our Chief Executive Officer and our two other highest paid executive officers during the years ended December 31, 2013 and 2014. Throughout this prospectus, these officers are referred to as our named executive officers.

Name and Principal Position	Year	Salary ($)	Bonus(1) ($)	Option Awards ($)(2)	All Other Compensation ($)	Total ($)
Stephen T. Isaacs	2014	402,500	484,100	609,380	6,146	1,502,126
Chairman, President and Chief Executive Officer	2013	372,501	110,441	26,174	6,657	515,773
Gregory W. Schafer(3)	2014	318,000	267,900	168,673	46	754,619
Chief Operating Officer	2013	150,000	39,759	154,920	276	344,955
Thomas W. Dubensky, Jr., Ph.D.	2014	319,545	265,350	119,043	3,391	707,329
Chief Scientific Officer	2013	312,885	69,812	6,804	3,897	393,398

(1) Includes discretionary annual cash bonuses based on a target percentage of salary and one-time discretionary bonuses for extraordinary performance in 2014 as awarded by the Board of Directors.

(2) The amounts in the “Option Awards” column reflect the aggregate grant date fair value of stock options granted during the calendar year computed in accordance with the provisions of Accounting Standards Codification (ASC) 718, *Compensation—Stock Compensation*. The assumptions that we used to calculate these amounts are discussed in the notes to our audited consolidated financial statements included elsewhere in this prospectus. These amounts do not reflect the actual economic value that will be realized by the named executive officer upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.

(3) Mr. Schafer became an employee in July 2013.

Outstanding Equity Awards at December 31, 2014

The following table provides information regarding outstanding equity awards held by our named executive officers at December 31, 2014.

		Option Awards			
Name	Vesting Commencement Date	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable	Option Exercise Price	Option Expiration Date
Stephen T. Isaacs	5/15/2006	284	—	14.10	5/15/2016
	2/12/2007	9,942	—	14.10	2/12/2017
	2/12/2008	2,954	—	24.70	2/12/2018
	2/12/2008	1,477	—	49.28	2/12/2018
	4/15/2011	336,047	—	0.37	10/24/2021
	4/15/2011	423,919	—	0.37	10/24/2021
	4/15/2011(1)	572,080	52,008	0.37	10/24/2021
	11/9/2012	362,766	—	0.32	3/18/2020
	11/9/2012	27,323	—	0.32	3/18/2020
	11/9/2012	50,740	—	0.32	3/18/2020
	11/27/2013	72,005	—	0.59	11/26/2023
	7/31/2014(2)	130,322	1,120,778	0.72	7/30/2024
Gregory W. Schafer	7/1/2013(1)	138,453	252,474	0.59	11/26/2023
	7/31/2014(2)	36,145	310,855	0.72	7/30/2024
Thomas W. Dubensky, Jr., Ph.D.	9/1/2011(1)	247,825	57,191	0.37	10/23/2021
	9/1/2011(3)	136,864	27,376	0.37	10/23/2021
	11/9/2012	5,069	—	0.32	3/18/2020
	11/27/2013	18,715	—	0.59	11/26/2023
	7/31/2014(2)	25,510	219,390	0.72	7/30/2024

(1) Twenty-five percent of the shares subject to the option vested on the first anniversary of the vesting commencement date, and the remainder vests in 36 equal monthly installments thereafter.

(2) The option vests as to 1/48 of the shares in monthly installments measured from July 31, 2014.

(3) 13,687 shares subject to the option vested on December 31, 2011, 41,060 shares subject to the option vested on December 31, 2012, 2013 and 2014, and the remaining 27,373 shares subject to the option vest on December 31, 2015.

Employment and Severance Agreements

We entered into an employment agreement with Stephen Isaacs, our Chairman, President and Chief Executive Officer, in February 2010, which was subsequently amended in July 2014. Mr. Isaacs is employed “at will,” which means that he has no definitive term of employment. The employment agreement provides for an annual base salary, which for 2013 was set at $380,000 and provides that Mr. Isaacs will be eligible to participate in any bonus plans established by us. If Mr. Isaacs is terminated by us without just cause and not due to his permanent disability, or if he terminates his employment for good reason, he will receive a lump sum payment equal to one year of his base salary and a lump sum payment equal to the product of his target bonus for the year in which his termination occurs multiplied by a percentage equal to the quotient of the number of days that lapsed in the year of termination divided by 365 (366 if a leap year), we will pay all applicable COBRA payments for up to 12 months, and all of his unvested equity awards will immediately vest in full, subject to Mr. Isaacs’ timely execution and the effectiveness of a release of claims against us. Additionally, upon the occurrence of a change in control, any and all of Mr. Isaacs’ unvested equity awards will immediately vest in full. Mr. Isaacs also entered into our standard proprietary information and inventions agreement.

We entered into an offer letter agreement with Gregory Schafer, our Chief Operating Officer, in April 2013. Mr. Schafer is employed “at will,” which means that he has no definitive term of employment. The offer

agreement provides for an initial base salary of $300,000 and provides for an annual cash bonus with a target level of 30% of his base salary, subject to the achievement of performance metrics. Mr. Schafer's offer letter also provided certain severance benefits, which were replaced in July 2014, when we entered into a severance agreement with Mr. Schafer. The offer letter agreement was subject to execution of our standard proprietary information and inventions agreement. The severance agreement provides that if Mr. Schafer is terminated by us without cause, and not due to his death or disability, or terminates his employment for good reason, each a qualifying termination, he will continue to receive his base salary for a period of six months following the termination date, we will pay applicable COBRA payments for a period of up to six months following the termination date, he will receive a lump sum payment equal to the product of his target bonus for the year in which his termination occurs multiplied by a percentage equal to the quotient of the number of days that lapsed in the year of termination divided by 365 (366 if a leap year), and the unvested portion of all of his equity awards will become vested and exercisable on an accelerated basis as if the termination had occurred six months after the termination date, subject to Mr. Schafer's timely execution and the effectiveness of a release of all claims against us. If Mr. Schafer's qualifying termination occurs during the time period beginning on the closing date of a change in control and ending on the first anniversary of such change in control, then the unvested portion of all of his equity awards shall become vested and exercisable on the qualifying termination date.

We entered into an offer letter agreement with Thomas W. Dubensky, Jr., Ph.D., our Chief Scientific Officer, in September 2011. Dr. Dubensky is employed "at will," which means that he has no definitive term of employment. The offer letter agreement provides for an annual base salary, which for 2013 was set at $315,180 and provides for an annual cash bonus with a target level of not less than 25% of his base salary, subject to the achievement of performance metrics. The offer letter agreement was subject to execution of our standard proprietary information and inventions agreement. In July 2014, we entered into a severance agreement with Dr. Dubensky. The severance agreement provides that if Dr. Dubensky is terminated by us without cause, and not due to his death or disability, or terminates his employment for good reason, each a qualifying termination, he will continue to receive his base salary for a period of six months following the termination date, we will pay applicable COBRA payments for a period of up to six months following the termination date, he will receive a lump sum payment equal to the product of his target bonus for the year in which his termination occurs multiplied by a percentage equal to the quotient of the number of days that lapsed in the year of termination divided by 365 (366 if a leap year), and the unvested portion of all of his equity awards will become vested and exercisable on an accelerated basis as if the termination had occurred six months after the termination date, subject to Dr. Dubensky's timely execution and the effectiveness of a release of all claims against us. If Dr. Dubensky's qualifying termination occurs during the time period beginning on the closing date of a change in control and ending on the first anniversary of such change in control, then the unvested portion of all of his equity awards shall become vested and exercisable on the qualifying termination date.

Employee Benefit Plans

The principal features of our equity incentive plans are summarized below. These summaries are qualified in their entirety by reference to the actual text of the plans, which are filed as exhibits to the registration statement of which this prospectus is a part.

Oncologic, Inc. 2000 Long-Term Incentive Plan

The board of directors of Oncologic, Inc. adopted the Oncologic, Inc. 2000 Long-Term Incentive Plan., or the 2000 Long-Term Incentive Plan, in December 2000. Since the adoption of our 2009 Stock Incentive Plan, our board of directors has not granted and will not grant any additional options under the 2000 Long-Term Incentive Plan. However, the 2000 Long-Term Incentive Plan continues to govern the terms and conditions of outstanding options previously granted under the plan.

The 2000 Long-Term Incentive Plan provided for the grant of incentive stock options to our employees, and for the grant of non-qualified stock options, stock appreciation rights, restricted stock, dividend equivalents

and other incentive awards to our employees, directors and consultants. Our board of directors, or a committee thereof appointed by our board of directors, administers the 2000 Long-Term Incentive Plan and the stock awards granted thereunder. The administrator has the authority to determine the terms and conditions of stock awards granted under the plan.

In the event of a corporate transaction, including a reorganization, merger, consolidation or sale of all or substantially all of our assets, the board of directors may, without the consent or approval of any participant: (1) accelerate the vesting and the time at which stock awards may be exercised, in whole or in part, of the stock awards and provide for their termination if not exercised prior to the corporate transaction; (2) require the mandatory surrender of some or all outstanding stock awards as of a specified date, in which case our board of directors would cancel such awards prior to the corporate transaction in exchange for a cash payment; (3) make such adjustments to the stock awards so that such stock awards thereafter cover the number and class of shares of stock or other securities to which the holder of such stock awards would have been entitled pursuant to the terms of the corporate transaction had such holder been the holder of record of the number of shares covered by the stock award; or (4) in the event of a transaction in which our common stockholder receive shares in the acquiror, the conversion of the stock awards into awards to acquire shares of the acquiror, assumption, continuation or substitution of a stock award by a successor corporation.

Triton BioSystems, Inc. 2001 Equity Incentive Plan

The board of directors of Triton BioSystems, Inc. adopted, and its stockholders approved, the Triton BioSytems, Inc. 2001 Equity Incentive Plan, or the 2001 Equity Incentive Plan, in March 2001. Since the adoption of our 2009 Stock Incentive Plan, our board of directors has not granted and will not grant any additional options under the 2001 Equity Incentive Plan. However, the 2001 Equity Incentive Plan continues to govern the terms and conditions of outstanding options previously granted under the plan.

The 2001 Equity Incentive Plan provided for the grant of incentive stock options to our employees, and for the grant of non-qualified stock options and restricted shares to our employees, directors, consultants and other individuals who provide services to us. Our board of directors, or a committee thereof appointed by our board of directors, administers the 2001 Equity Incentive Plan and the stock awards granted thereunder. The administrator has the authority to determine the terms and conditions of the options and restricted shares granted under the plan.

In the event of a change in control, including a sale of more than 50% of the voting power of our stock or a sale of substantially all of our assets, the administrator will take any one or more of the following actions with respect to each outstanding stock award: (1) cause an option to become fully vested and exercisable, (2) cause restricted shares to become non-forfeitable, (3) cancel an option in exchange for an option to purchase common stock of any successor company, (4) substitute restricted shares in exchange for restricted stock of any successor company, (5) cancel an option in exchange for cash and/or other consideration with a value equal to the difference between the option exercise price and the fair market value per share on the date of the change in control, or (6) redeem restricted shares in exchange for cash and/or other consideration.

2009 Stock Incentive Plan

Our board of directors adopted our 2009 Stock Incentive Plan, or the 2009 Stock Incentive Plan, and our stockholders approved our 2009 Stock Incentive Plan in October 2009. The 2009 Stock Incentive Plan was subsequently amended in 2011. The 2009 Stock Incentive Plan provides for the grant of incentive stock options to our employees and nonstatutory stock options and stock purchase awards to our employees, directors and consultants. At December 31, 2014, options to purchase 8,292,303 shares of our common stock at a weighted-average exercise price per share of $0.57 were outstanding under the 2009 Stock Incentive Plan. No other awards have been granted under the 2009 Stock Incentive Plan. At December 31, 2014, 4,381,609 shares of our common stock were available for future issuance pursuant to awards granted under the 2009 Stock Incentive Plan.

Following the completion of this offering and in connection with the effectiveness of our 2015 Plan, the 2009 Stock Incentive Plan will terminate and no further awards will be granted under the 2009 Stock Incentive Plan. However, all outstanding awards will continue to be governed by their existing terms.

Our board of directors, or a committee thereof appointed by our board of directors, administers the 2009 Stock Incentive Plan and the stock awards granted thereunder. The administrator has the authority to determine the terms and conditions of the options and restricted shares granted under the plan.

In the event of a change of control, including a reorganization, merger, consolidation or sale of all or substantially all of our assets, the board of directors may: (1) accelerate the vesting, in whole or in part, of the stock awards and provide for the cancellation of the awards with notice to the holders at least three days prior to the change in control, and its termination of the Stock Incentive Plan prior to the change in control; (2) cancel or arrange for the cancellation of the plan and all outstanding stock awards with notice to the holders at least three days prior to the change in control without the payment of any consideration; (3) the assumption of the 2009 Stock Incentive Plan and all outstanding stock awards by the successor corporation or its parent; (4) the substitution by the successor corporation or its parent of options in the successor corporation or its parent with substantially the same terms for the outstanding options; or (5) the settlement for full value of all outstanding options under the 2009 Stock Incentive Plan determined as the number of shares to which the options relate multiplied by the difference between the fair market value of a share of our common stock on the date of the change in control and the exercise price.

2015 Equity Incentive Plan

Our board of directors adopted our 2015 Plan in , 2015 and our stockholders approved our 2015 Plan in , 2015. Our 2015 Plan is the successor to and continuation of the Stock Incentive Plan. Our 2015 Plan provides for the grant of incentive stock options, or ISOs, to our employees and for the grant of nonstatutory stock options, or NSOs, stock appreciation rights, restricted stock awards, RSU awards, performance stock awards, performance cash awards, and other forms of stock awards to our employees, directors, and consultants.

Authorized shares. The maximum number of shares of our common stock that may be issued pursuant to stock awards under our 2015 Plan is equal to , which number of shares will be increased by any shares subject to stock options or other stock awards granted under the 2009 Stock Incentive Plan that would have otherwise returned to our 2009 Stock Incentive Plan (such as upon the expiration or termination of a stock option prior to vesting), not to exceed . Additionally, the number of shares of our common stock reserved for issuance pursuant to stock awards under our 2015 Plan will automatically increase on January 1 of each year for a period of up to ten years, beginning on January 1, 2016 and ending on and including January 1, 2025, by % of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors. The maximum number of shares of our common stock that may be issued upon the exercise of ISOs under our 2015 Plan is .

Shares subject to stock awards granted under our 2015 Plan that expire or terminate without being exercised in full, or that are paid out in cash rather than in shares, do not reduce the number of shares available for issuance under our 2015 Plan. Additionally, shares issued pursuant to stock awards under our 2015 Plan that we repurchase or that are forfeited, as well as shares used to pay the exercise price of a stock award or to satisfy the tax withholding obligations related to a stock award, become available for future grant under our 2015 Plan.

Plan administration. Our board of directors, or a duly authorized committee of our board of directors, will administer our 2015 Plan. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than officers) to receive specified stock awards, and (2) determine the number of shares subject to such stock awards. Subject to the terms of our 2015 Plan, the board of directors has the authority to determine the terms of awards, including recipients, the exercise, purchase or strike price of stock

awards, if any, the number of shares subject to each stock award, the fair market value of a share of our common stock, the vesting schedule applicable to the awards, together with any vesting acceleration, and the form of consideration, if any, payable upon exercise or settlement of the award and the terms of the award agreements for use under our 2015 Plan.

The board of directors has the power to modify outstanding awards under our 2015 Plan. The board of directors has the authority to reprice any outstanding option or stock appreciation right, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration or take any other action that is treated as a repricing under GAAP, with the consent of any adversely affected participant.

Section 162(m) limits. At such time as necessary for compliance with Section 162(m) of the Code, no participant may be granted stock awards that are intended to comply with Section 162(m) of the Code covering more than shares of our common stock under our 2015 Plan during any calendar year pursuant to stock options, stock appreciation rights and other stock awards whose value is determined by reference to an increase over an exercise price or strike price of at least 100% of the fair market value of our common stock on the date of grant. Additionally, no participant may be granted in a calendar year a performance stock award covering more than shares of our common stock or a performance cash award having a maximum value in excess of $ under our 2015 Plan. These limitations are intended to give us the flexibility to grant compensation that will not be subject to the $1,000,000 annual limitation on the income tax deductibility imposed by Section 162(m) of the Code.

Performance awards. We believe our 2015 Plan permits the grant of performance-based stock and cash awards that may qualify as performance-based compensation that is not subject to the $1,000,000 limitation on the income tax deductibility imposed by Section 162(m) of the Code. Our compensation committee may structure awards so that the stock or cash will be issued or paid only following the achievement of certain pre-established performance goals during a designated performance period.

Our compensation committee may establish performance goals by selecting from one or more of the following performance criteria: (1) profit before tax; (2) billings; (3) revenues; (4) net revenues; (5) earnings (which may include earnings before interest and taxes, earnings before taxes, and net earnings); (6) operating income; (7) operating margin; (8) operating profit; (9) controllable operating profit, or net operating profit; (10) net profit; (11) gross margin; (12) operating expenses or operating expenses as a percentage of revenue; (13) net income; (14) earnings per share; (15) total stockholder return; (16) market share; (17) return on assets or net assets; (18) our stock price; (19) growth in stockholder value relative to a pre-determined index; (20) return on equity; (21) return on invested capital; (22) cash flow (including free cash flow or operating cash flows); (23) cash conversion cycle; (24) economic value added; (25) individual confidential business objectives; (26) contract awards or backlog; (27) overhead or other expense reduction; (28) credit rating; (29) strategic plan development and implementation; (30) succession plan development and implementation; (31) improvement in workforce diversity; (32) customer indicators; (33) new product invention or innovation; (34) attainment of research and development milestones; (35) improvements in productivity; (36) bookings; (37) initiation of phases of clinical trials and/or studies by specified dates; (38) regulatory body approval with respect to products, studies and/or trials; (39) patient enrollment dates; (40) commercial launch of products; and (41) to the extent that an award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by our board of directors or compensation committee.

Our compensation committee may establish performance goals on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless otherwise specified by our board of directors (i) in the award agreement at the time the award is granted or (ii) in such other document setting forth the performance goals at the time the performance goals are established, our compensation committee will appropriately make adjustments in the method of calculating the attainment of the performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges;

(2) to exclude exchange rate effects; (3) to exclude the effects of changes to GAAP; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any "extraordinary items" as determined under GAAP; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by our company achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under GAAP; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under GAAP; (12) to exclude the effect of any other unusual, non-recurring gain or loss or other extraordinary item; (13) to exclude the effects of the timing of acceptance for review and/or approval of submissions to the FDA or any other regulatory body; and (14) to exclude the effects of entering into or achieving milestones involved in licensing joint ventures.

***Changes to Capital Structure*.** In the event there is a specified type of change in our capital structure, such as a stock split, reverse stock split or recapitalization, appropriate adjustments will be made to: (1) the class and maximum number of shares reserved for issuance under our 2015 Plan; (2) the class and maximum number of shares by which the share reserve may increase automatically each year; (3) the class and maximum number of shares that may be issued upon the exercise of incentive stock options; (4) the class and maximum number of shares subject to stock awards that can be granted in a calendar year (as established under our 2015 Plan pursuant to Section 162(m) of the Code); and (5) the class and maximum number of shares and exercise price, strike price or purchase price, if applicable, of all outstanding stock awards.

***Corporate transactions*.** Our 2015 Plan provides that in the event of certain specified significant corporate transactions, as defined under our 2015 Plan, each outstanding award will be treated as the administrator determines. The administrator may (1) arrange for the assumption, continuation or substitution of a stock award by a successor corporation; (2) arrange for the assignment of any reacquisition or repurchase rights held by us to a successor corporation; (3) accelerate the vesting, in whole or in part, of the stock award and provide for its termination prior to the transaction; (4) arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by us; (5) cancel or arrange for the cancellation of the stock award prior to the transaction in exchange for a cash payment, if any, determined by the board of directors; or (6) cancel or arrange for the cancellation of the stock award prior to the transaction in exchange for a payment, in such form as may be determined by our board of directors equal to the excess, if any, of the value of the property the participant would have received upon the exercise of the stock award immediately prior to the transaction over any exercise price payable by such holder in connection with such exercise. The plan administrator is not obligated to treat all stock awards or portions of stock awards, even those that are of the same type, in the same manner.

***Plan amendment or termination*.** Our board of directors has the authority to amend, suspend, or terminate our 2015 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. No ISOs may be granted after the tenth anniversary of the date our board of directors adopted our 2015 Plan. No stock awards may be granted under our 2015 Plan while it is suspended or after it is terminated.

2015 Employee Stock Purchase Plan

Our board of directors adopted our ESPP in , 2015 and our stockholders approved our ESPP in , 2015. Our ESPP is intended to qualify as an employee stock purchase plan under Section 423 of the Code. The first offering period under our ESPP will begin and end upon a date to be approved by our board of directors or the compensation committee.

Authorized shares. The maximum aggregate number of shares of our common stock that may be issued under our ESPP is shares. Additionally, the number of shares of our common stock reserved for issuance

under our ESPP will increase automatically each year for a period of up to ten years, beginning on January 1, 2016 and continuing through and including January 1, 2025, by the lesser of (1) % of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year; (2) shares of common stock; or (3) such lesser number as determined by our board of directors. The stock purchasable under our ESPP will be shares of authorized but unissued or reacquired common stock, including shares repurchased by us in the open market. Shares subject to purchase rights granted under our ESPP that terminate without having been exercised in full will be available for grant under our ESPP.

ESPP administration. Our board of directors will administer our ESPP. Our board of directors may delegate authority to administer our ESPP to our compensation committee. The administrator may approve offerings with a duration of not more than 27 months, and may specify one or more shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for the employees who are participating in the offering. The administrator, in its discretion, will determine the terms of offerings under our ESPP including determining which of our designated affiliates will be eligible to participate in the 423 component of our ESPP and which of our designated affiliates will be eligible to participate in the non-423 component of our ESPP.

Eligibility. Our employees, including executive officers, may have to satisfy one or more of the following service requirements before participating in our ESPP, as determined by the administrator: (1) customary employment for more than 20 hours per week and more than five months per calendar year, or (2) continuous employment for a minimum period of time, not to exceed two years. An employee may not be granted rights to purchase stock under our ESPP if such employee (a) immediately after the grant would own stock possessing 5% or more of the total combined voting power or value of our common stock; or (b) holds rights to purchase stock under our ESPP that would accrue at a rate that exceeds $25,000 worth of our stock for each calendar year that the rights remain outstanding.

Purchase rights and purchase price. Our ESPP permits participants to purchase shares of our common stock through payroll deductions or other methods with up to 15% of their earnings, as defined in the ESPP. The purchase price of the shares will be not less than 85% of the lower of the fair market value of our common stock on the first day of an offering or on the date of purchase.

Corporate transactions. In the event of certain specified corporate transactions, as defined in our ESPP, a successor corporation may assume, continue or substitute each outstanding purchase right. If the successor corporation does not assume, continue or substitute for the outstanding purchase rights, the offering in progress may be shortened and a new exercise date will be set, so that the participants' purchase rights can be exercised and terminate immediately thereafter.

Changes to Capital Structure. In the event there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, the board of director will make appropriate adjustments to: (1) the number of shares reserved under our ESPP; (2) the maximum number of shares by which the shares reserve may increase automatically each year; (3) the number of shares and purchase price of all outstanding purchase rights; and (4) the number of shares that are subject to purchase limits under ongoing offerings.

ESPP amendment or termination. Our board of directors has the authority to amend, suspend or terminate our ESPP, at any time and for any reason. Any benefits, privileges, entitlements and obligations under any outstanding purchase rights granted before an amendment, suspension or termination of our ESPP will not be materially impaired except (1) with the participant's consent; (2) to comply with any laws, listing requirements or regulations; or (3) to obtain or maintain favorable tax, listing or regulatory treatment.

401(k) Plan

We maintain a tax-qualified retirement plan that provides eligible U.S. employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees may defer eligible compensation subject to applicable annual Code limits. The 401(k) plan permits participants to make both pre-tax and certain after-tax (Roth) deferral contributions. These contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participant's directions. Employees are immediately and fully vested in their contributions. Currently, we do not make matching contributions or discretionary contributions to the 401(k) plan. The 401(k) plan is intended to be qualified under Section 401(a) of the Code with the 401(k) plan's related trust intended to be exempt under Section 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan.

Limitation on Liability and Indemnification Matters

Our amended and restated certificate of incorporation and restated bylaws, each to be effective upon the completion of this offering, will provide that we will indemnify our directors and officers, and may indemnify our employees and other agents, to the fullest extent permitted by the Delaware General Corporation Law. However, Delaware law prohibits our amended and restated certificate of incorporation from limiting the liability of our directors for the following:

- any breach of a director's duty of loyalty to us or to our stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or unlawful stock repurchases or redemptions; and
- any transaction from which a director derived an improper personal benefit.

If Delaware law is amended to authorize corporate action further eliminating or limiting the personal liability of a director, then the liability of our directors will be eliminated or limited to the fullest extent permitted by Delaware law, as so amended. Our amended and restated certificate of incorporation does not eliminate a director's duty of care and, in appropriate circumstances, equitable remedies, such as injunctive or other forms of non-monetary relief, remain available under Delaware law. It also does not affect a director's responsibilities under any other laws, such as the federal securities laws or other state or federal laws. Under our amended and restated bylaws, we will also be empowered to enter into indemnification agreements with our directors, officers, employees and other agents and to purchase insurance on behalf of any person whom we are required or permitted to indemnify.

In addition to the indemnification required in our amended and restated certificate of incorporation and amended and restated bylaws, we have entered into indemnification agreements with each of our current directors and executive officers. These agreements provide for the indemnification of such persons for all reasonable expenses and liabilities incurred in connection with any action or proceeding brought against them by reason of the fact that they are or were serving in such capacity. We believe that these certificate of incorporation and bylaws provisions and indemnification agreements are necessary to attract and retain qualified persons as directors, officers and employees. Furthermore, we have obtained director and officer liability insurance to cover liabilities our directors and officers may incur in connection with their services to us and expect to increase the level upon completion of this offering.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A

stockholder's investment may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or the Securities Act, may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. There is no pending litigation or proceeding naming any of our directors or officers as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director or officer.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

The following is a description of transactions since January 1, 2011 to which we have been a party, in which the amount involved exceeded or will exceed $120,000, and in which any of our executive officers, directors, promoters or holders of more than 5% of any class of our voting securities, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest, other than compensation, termination and change in control arrangements, which are described under "Executive Compensation." We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, in arm's-length transactions with unrelated third parties.

Convertible Note Financing

In August 2013, September 2013, October 2013, December 2013 and January 2014 we issued and sold to investors, including an executive officer and holders of more than 5% of our capital stock, convertible promissory notes, or the notes, in the aggregate principal amount of $13.0 million, which we refer to as our bridge notes. The bridge notes issued carried an interest rate of 5.0% per annum.

The participants in these loan arrangements included the following holders of more than 5% of our capital stock or entities affiliated with them. The following table presents the aggregate principal amount of convertible promissory notes issued to these related parties for more than $120,000.

	Aggregate Principal Amount of Notes
Morningside Venture (VI) Investments Limited(1)	$ 8,000,000
John E. and Lois A. Rogers	$ 3,116,000

(1) Dr. Chan and Ms. O'Brien, members of our board of directors, are affiliated with Morningside Venture (VI) Investments Limited.

Additionally, pursuant to the Series B purchase agreement, as defined below, we issued and sold to MVIL convertible promissory notes in the aggregate principal amount of $9.0 million. The notes carried no interest.

Series B Preferred Stock Financing

In April 2011, we entered into a Series B convertible preferred stock purchase agreement, or the Series B purchase agreement, pursuant to which we issued and sold an aggregate of 12,716,523 shares of our Series B convertible preferred stock for $1.19 per share, warrants exercisable for 855,096 shares of our common stock and warrants exercisable for 83,771 shares of Series B Preferred Stock for aggregate consideration of approximately $15.1 million. In addition during 2011, the aggregate amount of $1.1 million of convertible notes converted into 1,185,806 shares of Series B convertible preferred stock at a conversion price equal to approximately $0.95 per share, a 20% discount to the purchase price, and approximately $9.0 million of convertible notes converted during 2013 and 2014 into 7,539,380 shares of Series B convertible preferred stock at a conversion price equal to $1.19 per share. The table below sets forth the number of shares of Series B convertible preferred stock issued to our stockholders who held more than 5% of any class of our voting securities and their affiliates, to the extent they were issued more than $120,000 of our Series B convertible preferred stock. For each share of preferred stock set forth in the table below, the holder will receive, upon conversion, one share of our common stock upon the closing of this offering.

	Number of Shares of Series B Convertible Preferred Stock	Number of Common Stock Warrant Shares	Number of Series B Preferred Stock Warrant Shares	Aggregate Purchase Price
Morningside Venture (VI) Investments Limited(1)	15,497,614	628,282	61,410	$18,499,999.68(2)
John E. and Lois A. Rogers	3,046,477	95,220	11,815	$ 3,559,341.00(3)

(1) Dr. Chan and Ms. O'Brien, members of our board of directors, are affiliated with Morningside Venture (VI) Investments Limited.
(2) Includes the conversion of an aggregate principal amount of $9.0 million of convertible notes into 7,539,380 shares of Series B convertible preferred stock.
(3) Includes the conversion of an aggregate principal and interest amount of $0.3 million of convertible notes into 323,924 shares of Series B convertible preferred stock.

Series C Preferred Stock Financing

In May 2014, we entered into a Series C convertible preferred stock purchase agreement, or the Series C purchase agreement, pursuant to which we issued and sold an aggregate of 19,423,965 shares of our Series C convertible preferred stock for approximately $2.17 per share, for aggregate consideration of approximately $42.2 million. In addition, the aggregate amount of approximately $13.5 million of the bridge notes converted into 6,199,217 shares of Series C convertible preferred stock at a conversion price equal to approximately $2.17 per share. The table below sets forth the number of shares of Series C convertible preferred stock issued to stockholders who held more than 5% of any class of our voting securities and their affiliates, to the extent they were issued more than $120,000 of our Series C convertible preferred stock. For each share of preferred stock set forth in the table below, the holder will receive, upon conversion, one share of our common stock upon the closing of this offering.

	Number of Shares of Series C Convertible Preferred Stock	Aggregate Purchase Price
Morningside Venture (VI) Investments Limited(1)	15,345,433	$ 33,299,588.45(3)
Johnson & Johnson Development Corporation	4,608,295	$ 10,000,000.15
John E. and Lois A. Rogers(2)	4,244,750	$ 9,211,107.50(4)

(1) Dr. Chan and Ms. O'Brien, members of our board of directors, are affiliated with Morningside Venture (VI) Investments Limited.
(2) Consists of (a) 3,955,243 purchased by John E. Rogers and Lois A. Rogers, JTWROS, (b) 52,637 purchased by the Buchholz Rogers Family Living Trust 2012, (c) 52,637 purchased by the Phan Rogers Trust, (d) 26,319 shares purchased by Christopher Hagerman, (e) 26,319 shares purchased by Joseph Rogers, (f) 26,319 shares purchased by Lisa M. Rogers, (g) 26,319 shares purchased by Michael J. Rogers, (h) 26,319 shares purchased by Molly Rogers, (i) 26,319 shares purchased by Peter Rogers and (j) 26,319 shares purchased by Sara Rogers, over which John E. Rogers exercises voting control.
(3) Includes the conversion of an aggregate principal and interest amount of $8.3 million of convertible notes into 3,824,695 shares of Series C convertible preferred stock.
(4) Includes the conversion of an aggregate principal and interest amount of $3.2 million of convertible notes into 1,479,773 shares of Series C convertible preferred stock.

Series D Preferred Stock Financing

In December 2014, we entered into a Series D convertible preferred stock purchase agreement, or the Series D purchase agreement, pursuant to which we issued and sold an aggregate of 19,012,173 shares of our Series D convertible preferred stock for approximately $2.70 per share, for aggregate consideration of approximately $51.4 million. The table below sets forth the number of shares of Series D convertible preferred stock issued to stockholders who held more than 5% of any class of our voting securities and their affiliates, to the extent they were issued more than $120,000 of our Series D convertible preferred stock. For each share of preferred stock set forth in the table below, the holder will receive, upon conversion, one share of our common stock upon the closing of this offering.

	Number of Shares of Series D Convertible Preferred Stock	Aggregate Purchase Price
Morningside Venture (VI) Investments Limited(1)	2,774,798	$ 7,500,001.51
John E. and Lois A. Rogers	731,072	$ 1,976,014.51
Entities affiliated with Fidelity Investments(2)	5,549,595	$ 15,000,000.32

(1) Dr. Chan and Ms. O'Brien, members of our board of directors, are affiliated with Morningside Venture (VI) Investments Limited.

(2) Consists of (a) 2,692,455 shares purchased by Fidelity Securities Fund: Fidelity OTC Portfolio. (b) 2,376,915 shares purchased by Fidelity Select Portfolios: Biotechnology Portfolio and (c) 480,225 shares purchased by Fidelity Advisors Series VII: Fidelity Advisor Biotechnology Fund.

Amended and Restated Voting Agreement

We have entered into an amended and restated voting agreement with certain holders of our common stock and preferred stock, including certain of our named executive officers and directors and entities with which certain of our directors are affiliated, with respect to the election of our directors and certain other matters. All of our current directors were elected pursuant to the terms of this agreement. The amended and restated voting agreement will terminate upon the closing of this offering. For more information, see "Management—Board Composition."

Amended and Restated Right of First Refusal and Co-Sale Agreement

We have entered into an amended and rested right of first refusal and co-sale agreement with certain holders of our common stock and preferred stock, including certain of our named executive officers and directors and entities with which certain of our directors are affiliated. This agreement provides the holders of preferred stock a right of purchase and a right of co-sale in respect of sales of securities by certain holders of our common stock and preferred stock. These rights of purchase and co-sale will terminate upon the closing of this offering.

Amended and Restated Investors' Rights Agreement

We have entered into an amended and restated investors' rights agreement with certain holders of our preferred stock, including certain of our directors and entities with which certain of our directors are affiliated. This agreement provides that the holders of common stock issuable upon conversion of our preferred stock have the right to demand that we file a registration statement or request that their shares of common stock be covered by a registration statement that we are otherwise filing. With respect to this offering, the registration rights have been validly waived. In addition to the registration rights, the second amended and restated investors' rights agreement provides for certain information rights and a right of first offer. The provisions of the second amended and restated investors' rights agreement, other than those relating to registration rights, will terminate upon the closing of this offering. For more information regarding this agreement, see "Description of Capital Stock—Registration Rights."

Indemnification Agreements

We have entered into indemnification agreements with each of our directors and executive officers. For more information regarding these agreements, see “Executive Compensation—Limitation on Liability and Indemnification Matters.”

Policies and Procedures for Transactions with Related Persons

We intend to adopt a policy that our executive officers, directors, nominees for election as a director, beneficial owners of more than 5% of any class of our common stock and any members of the immediate family of any of the foregoing persons are not permitted to enter into a related person transaction with us without the prior consent of our audit committee. Any request for us to enter into a transaction with an executive officer, director, nominee for election as a director, beneficial owner of more than 5% of any class of our voting securities or any member of the immediate family of any of the foregoing persons, in which the amount involved exceeds $120,000 and such person would have a direct or indirect interest, must first be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our audit committee is to consider the material facts of the transaction, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related person’s interest in the transaction. All of the transactions described above were entered into prior to the adoption of such policy, but after presentation, consideration and approval by our board of directors.

PRINCIPAL STOCKHOLDERS

The following table sets forth, at January 31, 2015, information regarding beneficial ownership of our capital stock by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our named executive officers;
- each of our directors; and
- all of our current executive officers and directors as a group.

Beneficial ownership is determined according to the rules of the SEC and generally means that a person has beneficial ownership of a security if he, she or it possesses sole or shared voting or investment power of that security, including options and warrants that are currently exercisable within 60 days of January 31, 2015. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons named in the table below have sole voting and investment power with respect to all shares of common stock shown that they beneficially own, subject to community property laws where applicable. The information does not necessarily indicate beneficial ownership for any other purpose, including for purposes of Sections 13(d) and 13(g) of the Securities Act.

Our calculation of the percentage of beneficial ownership prior to this offering is based on 70,135,715 shares of our common stock (including preferred stock on an as-converted basis) outstanding at January 31, 2015. We have based our calculation of the percentage of beneficial ownership after this offering on shares of our common stock outstanding immediately after the closing of this offering (assuming no exercise of the underwriters' option to purchase additional shares of common stock).

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Aduro Biotech, Inc., 626 Bancroft Way, 3C, Berkeley, California 94710.

Name of beneficial owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned	
		Before Offering	After Offering
5% Stockholders:			
Morningside Venture (VI) Investments Limited(1)	26,894,950	37.8%	
John E. and Lois A. Rogers(2)	8,841,313	12.5%	
Ultimate Keen Limited(3)	7,781,251	11.1%	
Entities affiliated with Fidelity Investments(4)	5,549,595	7.9%	
Johnson & Johnson Development Corporation(5)	4,608,295	6.6%	
Executive Officers and Directors:			
Stephen T. Isaacs(6)	2,382,236	3.3%	
Gregory W. Schafer(7)	300,335	*	
Thomas W. Dubensky, Jr.(8)	493,961	*	
Gerald Chan(9)	5,000	*	
Stephanie O'Brien(10)	50,790	*	
William M. Greenman(11)	51,364	*	
Ross Haghighat(12)	1,745,803	2.5%	
Frank McCormick(13)	64,300	*	
All executive officers and directors as a group (10 persons)(14)	5,809,989	7.8%	

* Represents beneficial ownership of less than 1% of the outstanding common stock.

(1) Includes 1,058,356 shares issuable upon the exercise of warrants held by Morningside Venture (VI) Investments Limited, or MVIL. Yuk Lan Wong and Louise Mary Garbarino, the directors of MVIL, share voting and dispositive control over the shares held by MVIL. The address of MVIL is 2nd Floor, Le Prince de Galles, 3-5 Avenue des Citronniers, MC 98000, Monaco.

(2) Consists of (a) 8,117,650 shares and 295,772 shares issuable upon the exercise of warrants held by John E. Rogers and Lois A. Rogers, JTWROS, (b) 72,637 shares and 5,162 shares issuable upon the exercise of warrants held by the Buchholz Rogers Family Living Trust 2012, (c) 72,637 shares and 5,162 shares issuable upon the exercise of warrants held by the Phan Rogers Trust, (d) 36,319 shares and 2,580 shares issuable upon the exercise of warrants held by Christopher Hagerman, (e) 36,319 shares and 2,580 shares issuable upon the exercise of warrants held by Joseph Rogers, (f) 36,319 shares and 2,580 shares issuable upon the exercise of warrants held by Lisa M. Rogers, (g) 36,319 shares and 2,580 shares issuable upon the exercise of warrants held by Michael J. Rogers, (h) 36,319 shares and 2,580 shares issuable upon the exercise of warrants held by Molly Rogers, (i) 36,319 shares and 2,580 shares issuable upon the exercise of warrants held by Peter Rogers and (j) 36,319 shares and 2,580 shares issuable upon the exercise of warrants held by Sara Rogers, over which John E. Rogers exercises voting control. The address for John E. and Lois A. Rogers is 5110 North 40th Street, Suite 234, Phoenix, Arizona 85018.

(3) Raymond Long Sing Tang and Jill Marie Franklin, the directors of Ultimate Keen Limited, or UKL, share voting and dispositive control over the shares held by UKL. The address of UKL is P.O. Box 957, Offshore Incorporations Centre, Road Town, Tortola, British Virgin Islands.

(4) Consists of (a) 2,692,455 shares held by Fidelity Securities Fund: Fidelity OTC Portfolio, (b) 2,376,915 shares held by Fidelity Select Portfolios: Biotechnology Portfolio and (c) 480,225 shares held by Fidelity Advisor Series VII: Fidelity Advisor Biotechnolgy Fund. These accounts are managed by direct or indirect subsidiaries of FMR LLC. Edward C. Johnson 3d is a Director and the Chairman of FMR LLC and Abigail P. Johnson is a Director, the Vice Chairman and the President of FMR LLC. Members of the family of Edward C. Johnson 3d, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Edward C. Johnson 3d nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the various investment companies registered under the Investment Company Act, or the Fidelity Funds, advised by Fidelity Management & Research Company, a wholly owned subsidiary of FMR LLC, which power resides with the Fidelity Funds' Boards of Trustees. Fidelity Management & Research Company carries out the voting of the shares under written guidelines established by the Fidelity Funds' Boards of Trustees. The address for FMR LLC is 245 Summer Street, Boston, MA 02210.

(5) The board of directors of Johnson & Johnson Development Corporation, or JJDC, Linda M. Vogel, Manager, Operations of JJDC, exercises voting and dispositive control over the shares held by JJDC. The address of JJDC is 410 George Street, New Brunswick, NJ 08901.

(6) Includes (a) 2,167,388 shares issuable pursuant to stock options exercisable within 60 days of January 31, 2015, (b) 16,552 shares issuable upon the exercise of warrants.

(7) Includes (a) 248,117 shares issuable pursuant to stock options exercisable within 60 days of January 31, 2015, and (b) 4,608 shares issuable upon the exercise of a warrant.

(8) Consists of 493,961 shares issuable pursuant to stock options exercisable within 60 days of January 31, 2015.

(9) Consists of 5,000 shares issuable pursuant to stock options exercisable within 60 days of January 31, 2015.

(10) Consists of 50,790 shares issuable pursuant to stock options exercisable within 60 days of January 31, 2015.

(11) Consists of 51,364 shares issuable pursuant to stock options exercisable within 60 days of January 31, 2015.

(12) Consists of (a) 20,504 shares and 66,276 shares issuable pursuant to stock options exercisable within 60 days of January 31, 2015 held by Ross Haghighat, (b) 518,624 shares and 9,217 shares issuable upon the exercise of warrants held by Triton Holdings LLC, (c) 1,035,370 shares and 78,919 shares issuable upon the exercise of warrants held by Triton Systems, Inc. and (d) 16,893 shares held by Turnpike Properties, LLC, over which Ross Haghighat exercises voting and dispositive control.

(13) Consists of 64,300 shares issuable pursuant to stock options exercisable within 60 days of January 31, 2015.

(14) Includes 3,863,396 shares issuable pursuant to stock options exercisable within 60 days of January 31, 2015 and 109,296 shares issuable upon the exercise of warrants held by the directors and executive officers.

DESCRIPTION OF CAPITAL STOCK

General

The following description of our capital stock summarizes the most important terms of our capital stock as they are expected to be in effect upon the closing of this offering. The descriptions of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation and the amended and restated bylaws that will be in effect upon the closing of this offering. Copies of these documents will be filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part.

Our amended and restated certificate of incorporation provides for common stock and undesignated preferred stock, the rights, preferences and privileges of which may be designated from time to time by our board of directors.

Upon the closing of this offering, our authorized capital stock will consist of shares, all with a par value of $0.0001 per share, of which shares will be designated as common stock and shares will be designated as preferred stock.

At December 31, 2014, we had outstanding 70,111,221 shares of common stock, which assumes the conversion of all 69,608,339 shares of preferred stock outstanding at December 31, 2014 into the same number of shares of common stock upon the closing of this offering. Our outstanding capital stock was held by approximately 244 stockholders of record at December 31, 2014. In addition, at December 31, 2014, there were outstanding options to acquire 8,292,303 shares of our common stock.

Common Stock

The holders of our common stock are entitled to one vote per share on all matters submitted to a vote of our stockholders. Subject to preferences that may be applicable to any preferred stock outstanding at the time, the holders of outstanding shares of common stock are entitled to receive ratably any dividends declared by our board of directors out of assets legally available therefor. In the event that we liquidate, dissolve or wind up, holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preference of any then outstanding shares of preferred stock. Holders of common stock have no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are, and all shares of common stock to be outstanding upon completion of this offering will be, fully paid and nonassessable.

Preferred Stock

At December 31, 2014, there were 69,608,339 shares of our preferred stock outstanding, which will convert into 69,608,339 shares of our common stock upon the closing of this offering.

Upon the closing of this offering, our board of directors may, without further action by our stockholders, fix the rights, preferences, privileges and restrictions of up to an aggregate of shares of preferred stock in one or more series and authorize their issuance, subject to the approval rights of the common stock described above. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of our common stock or common stock. The issuance of our preferred stock could adversely affect the voting power of holders of our common stock or common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change of control or other corporate action. Upon the closing of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Registration Rights

We are party to an amended and restated investors' rights agreement that provides that holders of our preferred stock, including certain holders of 5% of our capital stock and entities affiliated with certain of our directors, have certain registration rights, as set forth below. The registration of shares of our common stock pursuant to the exercise of registration rights described below would enable the holders to sell these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We will pay the registration expenses, other than the underwriting discount, of the shares registered pursuant to the demand, piggyback and Form S-3 registrations described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions, to limit the number of shares such holders may include. The demand, piggyback and Form S-3 registration rights described below will expire upon the earlier of five years following the completion of this offering, or when all investors, considered with their affiliates, can sell all of their shares in a 90-day period under Rule 144.

Demand Registration Rights

The holders of an aggregate of 66,238,908 shares of common stock outstanding at December 31, 2014, including shares issuable upon conversion of outstanding preferred stock, giving effect to the company conversion as if it occurred on such date, will be entitled to certain demand registration rights. At any time beginning after the earlier of December 19, 2016 or six months following the date of this prospectus, the holders of at least (a) a majority of our common stock issued or issuable upon conversion of our Series C preferred stock and Series D preferred stock, voting together as a single class, or (b) a majority of our common stock issued or issuable upon conversion of our Series B preferred stock, on not more than two occasions, request that we register all or a portion of their shares, subject to certain specified exceptions. Such request for registration must cover such number of shares such that the anticipated aggregate offering price, net of the underwriting discount, would equal or exceed $5.0 million.

Piggyback Registration Rights

In connection with this offering, the holders of an aggregate of 66,252,258 shares of common stock outstanding at December 31, 2014, including shares issuable upon conversion of outstanding preferred stock, giving effect to the company conversion as if it occurred on such date, were entitled to, and the necessary percentage of holders waived, their rights to notice of this offering and to include their shares of registrable securities in this offering. In the event that we propose to register any of our securities under the Securities Act in another offering, either for our own account or for the account of other security holders, the holders of these shares will be entitled to certain "piggyback" registration rights allowing them to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, including a registration statement on Form S-3 as discussed below, other than with respect to a demand registration or a registration statement on Forms S-4 or S-8 or related to stock issued upon conversion of debt securities, the holders of these shares are entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of shares included in the registration, to include their shares in the registration.

Form S-3 Registration Rights

The holders of an aggregate of 66,238,908 shares of common stock outstanding at December 31, 2014, including shares issuable upon conversion of outstanding preferred stock, giving effect to the company conversion as if it occurred on such date, will be entitled to certain Form S-3 registration rights. Any holder or holders of these shares can make a request that we register their shares on Form S-3 if we are qualified to file a registration statement on Form S-3, subject to certain specified exceptions. Such request for registration on Form S-3 must cover securities the aggregate offering price of which, before payment of the underwriting discount, equals or exceeds $1.5 million.

Anti-Takeover Provisions

Certificate of Incorporation and Bylaws to be in Effect upon the Closing of this Offering

Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the outstanding shares of common stock outstanding will be able to elect all of our directors. Our amended and restated certificate of incorporation and amended and restated bylaws to be effective upon the closing of this offering will provide that all stockholder actions must be effected at a duly called meeting of stockholders and not by written consent. A special meeting of stockholders may be called by holders of a majority of our common stock and common stock, voting together as a single class, or by the majority of our whole board of directors, or our chief executive officer.

As described above in "Management—Board Composition," in accordance with our amended and restated certificate of incorporation to be filed in connection with this offering, immediately after this offering, our board of directors will be divided into three classes with staggered three-year terms.

The foregoing provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage certain types of transactions that may involve an actual or threatened acquisition of us. These provisions are also designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of deterring hostile takeovers or delaying changes in our control or management. As a consequence, these provisions also may inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned by (i) persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 $^{2}/_{3}$% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loss, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an "interested stockholder" as an entity or person who, together with the person's affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

A Delaware corporation may "opt out" of these provisions with an express provision in its certificate of incorporation. We have not opted out of these provisions, which may discourage or prevent mergers or other takeover or change of control attempts of our company.

Choice of Forum

Our amended and restated certificate of incorporation will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine.

Limitations of Liability and Indemnification

See "Executive Compensation—Limitation on Liability and Indemnification Matters."

Listing

We intend to apply to have our common stock approved for listing on the NASDAQ Global Market under the symbol "ADRO."

Transfer Agent and Registrar

Upon the closing of this offering, the transfer agent and registrar for our common stock will be .

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our capital stock. Future sales of our common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of shares will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Based on the number of shares outstanding at December 31, 2014, upon the closing of this offering, shares of common stock will be outstanding, assuming no exercise of the underwriters' option to purchase additional shares of common stock and no exercise of outstanding options. Of the outstanding shares, all of the shares sold in this offering will be freely tradable, except that any shares held by our affiliates, as that term is defined in Rule 144 under the Securities Act, may only be sold in compliance with the limitations described below.

The remaining shares of our common stock outstanding after this offering are restricted securities as such term is defined in Rule 144 under the Securities Act and are subject to lock-up agreements with us as described below. Following the expiration of the lock-up period, restricted securities may be sold in the public market only if registered or if they qualify for an exemption from registration under Rule 144 or 701 promulgated under the Securities Act, described in greater detail below.

Rule 144

In general, a person who has beneficially owned restricted shares of our common stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale and (ii) we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned restricted shares of our common stock for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares of our common stock outstanding after this offering, which will equal shares assuming no exercise of the underwriters' option to purchase additional shares of common stock; or
- the average weekly trading volume of our common stock on the NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale;

provided, in each case, that we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Such sales both by affiliates and by non-affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144.

Rule 701

Rule 701 under the Securities Act, as in effect on the date of this prospectus, permits re-sales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers, directors or consultants who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and under "Underwriting" and will become eligible for sale at the expiration of those agreements.

Lock-Up Agreements

We, our directors and executive officers, and substantially all of our stockholders have agreed with the underwriters that for a period of 180 days following the date of this prospectus, subject to certain exceptions, we and they will not, directly or indirectly, offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of or hedge any of our shares of common stock, any options or warrants to purchase shares of our common stock, or any securities convertible into, or exchangeable for or that represent the right to receive shares of our common stock. Merrill, Lynch, Pierce, Fenner & Smith Incorporated and Leerink Partners LLC may, in their sole discretion, at any time, release all or any portion of the shares from the restrictions in such agreement.

Employees can only sell vested shares. Employees who do not hold vested shares, including shares subject to options, upon expiration of these selling restrictions will not be able to sell shares until they vest.

Registration Rights

On the date beginning 181 days after the date of this prospectus, the holders of approximately 66,252,258 shares of our common stock, or their transferees, will be entitled to certain rights with respect to the registration of those shares under the Securities Act. For a description of these registration rights, see “Description of Capital Stock—Registration Rights.” If these shares are registered, they will be freely tradable without restriction under the Securities Act.

Equity Incentive Plans

As soon as practicable after the closing of this offering, we intend to file a Form S-8 registration statement under the Securities Act to register shares of our common stock issued or reserved for issuance under our equity compensation plans and agreements. This registration statement will become effective immediately upon filing, and shares covered by this registration statement will thereupon be eligible for sale in the public markets, subject to vesting restrictions, the lock-up agreements described above and Rule 144 limitations applicable to affiliates. For a more complete discussion of our equity compensation plans, see “Executive Compensation—Employee Benefit Plans.”

MATERIAL U.S. FEDERAL INCOME AND ESTATE TAX CONSEQUENCES TO NON-U.S. HOLDERS OF OUR COMMON STOCK

The following is a summary of the material U.S. federal income and estate tax consequences to non-U.S. holders (as defined below) of the acquisition, ownership and disposition of our common stock issued pursuant to this offering. This discussion is not a complete analysis of all potential U.S. federal income tax consequences relating thereto, does not address the potential application of the Medicare contribution tax and does not address any gift tax consequences or any tax consequences arising under any state, local or foreign tax laws, or any other U.S. federal tax laws. This discussion is based on the Code, Treasury Regulations promulgated thereunder, judicial decisions and published rulings and administrative pronouncements of the Internal Revenue Service, or IRS, all as in effect as of the date of this prospectus. These authorities may change, possibly retroactively, resulting in U.S. federal income tax consequences different from those discussed below. We have not requested a ruling from the IRS with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions.

This discussion is limited to non-U.S. holders who purchase our common stock issued pursuant to this offering and who hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all of the U.S. federal income tax consequences that may be relevant to a particular holder in light of such holder's particular circumstances. This discussion also does not consider any specific facts or circumstances that may be relevant to holders subject to special rules under the U.S. federal income tax laws, including, without limitation, certain former citizens or long-term residents of the United States, partnerships or other pass-through entities, "controlled foreign corporations," "passive foreign investment companies," corporations that accumulate earnings to avoid U.S. federal income tax, banks, financial institutions, investment funds, insurance companies, brokers, dealers or traders in securities, tax-exempt organizations, tax-qualified retirement plans, persons subject to the alternative minimum tax, persons that own, or have owned, actually or constructively, more than 5% of our common stock and persons holding our common stock as part of a hedging or conversion transaction or straddle, or a constructive sale, or other risk reduction strategy.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds our common stock, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. Partnerships holding our common stock and the partners in such partnerships are urged to consult their tax advisors as to particular U.S. federal income tax consequences to them of holding and disposing of our common stock.

PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING AND DISPOSING OF OUR COMMON STOCK, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL OR FOREIGN TAX LAWS, ANY OTHER U.S. FEDERAL TAX LAWS OR ANY APPLICABLE TAX TREATY.

Definition of Non-U.S. Holder

For purposes of this discussion, a non-U.S. holder is any beneficial owner of our common stock that is not a "U.S. person" or a partnership (including any entity or arrangement treated as a partnership) for U.S. federal income tax purposes. A U.S. person is any of the following:

- an individual citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States, any state thereof or the District of Columbia;

- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or

- a trust (1) whose administration is subject to the primary supervision of a U.S. court and which has one or more U.S. persons who have the authority to control all substantial decisions of the trust, or (2) that has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

Distributions on our Common Stock

As described in the section entitled "Dividend Policy," we do not anticipate paying any cash dividends in the foreseeable future. However, if we make cash or other property distributions on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and will first be applied against and reduce a holder's tax basis in our common stock, but not below zero. Any excess will be treated as gain realized on the sale or other disposition of our common stock and will be treated as described under the section of this prospectus titled "—Gain on Disposition of our Common Stock" below.

Dividends (out of earnings and profits) paid to a non-U.S. holder of our common stock generally will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends, or such lower rate specified by an applicable income tax treaty. To receive the benefit of a reduced treaty rate, a non-U.S. holder must furnish to us or our paying agent a valid IRS Form W-8BEN (in the case of an individual), IRS Form W-8BEN-E (in the case of an entity) or applicable successor form, including a U.S. taxpayer identification number and certifying such holder's qualification for the reduced rate. This certification must be provided to us or our paying agent prior to the payment of dividends and must be updated periodically. If the non-U.S. holder holds the stock through a financial institution or other agent acting on the non-U.S. holder's behalf, the non-U.S. holder will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our paying agent, either directly or through other intermediaries.

Non-U.S. holders that do not timely provide the required certification, but that qualify for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

If a non-U.S. holder holds our common stock in connection with the conduct of a trade or business in the United States, and dividends paid on our common stock are effectively connected with such holder's U.S. trade or business (and are attributable to such holder's permanent establishment in the United States if required by an applicable tax treaty), the non-U.S. holder will be exempt from U.S. federal withholding tax. To claim the exemption, the non-U.S. holder must generally furnish a properly executed IRS Form W-8ECI (or applicable successor form).

Any dividends paid on our common stock that are effectively connected with a non-U.S. holder's U.S. trade or business (and if required by an applicable income tax treaty, are attributable to a permanent establishment maintained by the non-U.S. holder in the United States) generally will be subject to U.S. federal income tax on a net income basis at the regular graduated U.S. federal income tax rates in the same manner as if such holder were a resident of the United States. A non-U.S. holder that is a foreign corporation also may be subject to an additional branch profits tax equal to 30% (or such lower rate specified by an applicable income tax treaty) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items. Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Gain on Disposition of our Common Stock

Subject to the discussion below regarding backup withholding and FATCA, a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock, unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States, and if required by an applicable income tax treaty, is attributable to a permanent establishment maintained by the non-U.S. holder in the United States;
- the non-U.S. holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition, and certain other requirements are met; or
- our common stock constitutes a "United States real property interest" by reason of our status as a United States real property holding corporation, or USRPHC, for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding the disposition and the non-U.S. holder's holding period for our common stock, and our common stock is not regularly traded on an established securities market during the calendar year in which the sale or other disposition occurs.

The determination of whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our other trade or business assets and our foreign real property interests. We believe we are not currently and do not anticipate becoming a USRPHC for U.S. federal income tax purposes.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular graduated U.S. federal income tax rates in the same manner as if such holder were a resident of the United States. A non-U.S. holder that is a foreign corporation may also be subject to an additional branch profits tax equal to 30% (or such lower rate specified by an applicable income tax treaty) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items. Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Gain described in the second bullet point above will be subject to U.S. federal income tax at a flat 30% rate (or such lower rate specified by an applicable income tax treaty), but may be offset by certain U.S.-source capital losses (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.

Information Reporting and Backup Withholding

We must report annually to the IRS and to each non-U.S. holder the amount of dividends on our common stock paid to such holder and the amount of any tax withheld with respect to those dividends. These information reporting requirements apply even if no withholding was required because the dividends were effectively connected with the holder's conduct of a U.S. trade or business, or withholding was reduced or eliminated by an applicable income tax treaty. This information also may be made available under a specific treaty or agreement with the tax authorities in the country in which the non-U.S. holder resides or is established. Backup withholding, currently at a 28% rate, generally will not apply to payments to a non-U.S. holder of dividends on or the gross proceeds of a disposition of our common stock provided the non-U.S. holder furnishes the required certification as to its non-U.S. status, such as by providing a valid IRS Form W-8BEN, IRS Form W-8BEN-E or IRS Form W-8ECI, or certain other requirements are met. Notwithstanding the foregoing, backup withholding may apply if the payor has actual knowledge, or reason to know, that the holder is a U.S. person who is not an exempt recipient.

Backup withholding is not an additional tax. If any amount is withheld under the backup withholding rules, the non-U.S. holder should consult with a U.S. tax advisor regarding the possibility of and procedure for obtaining a refund or a credit against the non-U.S. holder's U.S. federal income tax liability, if any.

Foreign Accounts

Sections 1471 through 1474 of the Code (commonly referred to as FATCA) will impose a U.S. federal withholding tax of 30% on certain payments, including dividends on and the gross proceeds of a disposition of our common stock, made to a "foreign financial institution" (as specially defined under these rules) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or an exemption applies. FATCA also generally will impose a U.S. federal withholding tax of 30% on certain payments, including dividends on and the gross proceeds of a disposition of our common stock, made to a non-financial foreign entity unless such entity provides the withholding agent a certification identifying the direct and indirect U.S. owners of the entity or an exemption applies. An intergovernmental agreement between the United States and an applicable foreign country may modify these requirements. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. These withholding taxes currently may be imposed on dividends paid on our common stock. These withholding taxes may also be imposed on gross proceeds from sales or other dispositions of our common stock after December 31, 2016.

Prospective investors are encouraged to consult with their own tax advisors regarding the possible implications of these rules on their investment in our common stock.

Estate Tax

Individual non-U.S. holders and entities whose property is potentially includible in such an individual's gross estate for U.S. federal estate tax purposes (for example, a trust funded by such an individual and with respect to which the individual has retained certain interests or powers), should note that, absent an applicable treaty benefit, our common stock generally will be treated as U.S. situs property subject to U.S. federal estate tax.

UNDERWRITING

Merrill Lynch, Pierce, Fenner & Smith Incorporated and Leerink Partners LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

Underwriter	Number of Shares
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
Leerink Partners LLC	
William Blair & Company, L.L.C.	
Canaccord Genuity Inc.	
Total	

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of $ per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	Per Share	Without Option	With Option
Public offering price	$	$	$
Underwriting discount	$	$	$
Proceeds, before expenses, to Aduro Biotech, Inc.	$	$	$

The expenses of the offering, not including the underwriting discount, are estimated at $ and are payable by us.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to additional shares at the public offering price, less the underwriting discount. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We, our executive officers and directors and our other existing security holders have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for 180 days after the date of this prospectus without first obtaining the written consent of Merrill Lynch, Pierce, Fenner & Smith Incorporated and Leerink Partners LLC. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly

- offer, pledge, sell or contract to sell any common stock,
- sell any option or contract to purchase any common stock,
- purchase any option or contract to sell any common stock,
- grant any option, right or warrant for the sale of any common stock,
- lend or otherwise dispose of or transfer any common stock,
- request or demand that we file a registration statement related to the common stock, or
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

NASDAQ Global Market Listing

We expect the shares to be approved for listing on the NASDAQ Global Market, subject to notice of issuance, under the symbol "ADRO."

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us,
- our financial information,
- the history of, and the prospects for, our company and the industry in which we compete,

- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues,
- the present state of our development and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. “Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. “Naked” short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters’ purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the NASDAQ Global Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area, each a Relevant Member State, no offer of shares may be made to the public in that Relevant Member State other than:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;

(b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares shall require us or the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

Each person in a Relevant Member State who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed that it is a “qualified investor” within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive. In the case of any shares being offered to a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Relevant Member State to qualified investors as so defined or in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

We, the representatives and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

This prospectus has been prepared on the basis that any offer of shares in any Relevant Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of shares. Accordingly any person making or intending to make an offer in that Relevant Member State of shares which are the subject of the offering contemplated in this prospectus may only do so in circumstances in which no obligation arises for us or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither we nor the underwriters have authorized, nor do they authorize, the making of any offer of shares in circumstances in which an obligation arises for us or the underwriters to publish a prospectus for such offer.

For the purpose of the above provisions, the expression “an offer to the public” in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in the Relevant Member State by any measure implementing the Prospectus Directive in the Relevant Member State and the expression “Prospectus Directive” means Directive 2003/71/EC (including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member States) and includes any relevant implementing measure in the Relevant Member State and the expression “2010 PD Amending Directive” means Directive 2010/73/EU.

Notice to Prospective Investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are “qualified investors” (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the Order, and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as “relevant persons”). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, us, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, or FINMA, and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority, or DFSA. This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission, or ASIC, in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001, or the Corporations Act, and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons, or the Exempt Investors, who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

(a) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(b) where no consideration is or will be given for the transfer;

(c) where the transfer is by operation of law;

(d) as specified in Section 276(7) of the SFA; or

(e) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

LEGAL MATTERS

Cooley LLP of Palo Alto, California will pass upon the validity of the shares of common stock offered hereby. The underwriters are being represented by Latham & Watkins LLP of Menlo Park, California in connection with the offering.

EXPERTS

The financial statements included in this prospectus have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein and elsewhere in the registration statement of which this prospectus forms a part. Such financial statements are included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to this offering of our common stock. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some items of which are contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our common stock, we refer you to the registration statement, including the exhibits and the financial statements and notes filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The exhibits to the registration statement should be referenced for the complete contents of these contracts and documents. A copy of the registration statement and the exhibits filed therewith may be inspected without charge at the public reference room of the SEC, located at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the public reference rooms by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

As a result of this offering, we will become subject to the information and reporting requirements of the Exchange Act and, in accordance with this law, will file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available for inspection and copying at the SEC's public reference facilities and the website of the SEC referred to above. We also maintain a website at http://www.aduro.com. After the closing of this offering, you may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of this prospectus.

ADURO BIOTECH, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Years Ended December 31, 2013 and 2014

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors
Aduro Biotech, Inc.
Berkeley, California

We have audited the accompanying consolidated balance sheets of Aduro Biotech, Inc. and its subsidiary (the "Company") as of December 31, 2013 and 2014, and the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit, and cash flows for each of the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Aduro Biotech, Inc. and its subsidiary as of December 31, 2013 and 2014, and the results of their operations and their cash flows for each of the years then ended in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP

San Francisco, California
March 2, 2015

ADURO BIOTECH, INC.
Consolidated Balance Sheets
(In thousands, except share and per share amounts)

	December 31,		Pro Forma at December 31, 2014
	2013	2014	(unaudited)
Assets			
Current assets:			
Cash and cash equivalents	$ 8,532	$ 119,456	$ 119,456
Accounts receivable	357	3,153	3,153
Prepaid expenses and other current assets	467	2,612	2,612
Total current assets	9,356	125,221	125,221
Property and equipment, net	399	1,053	1,053
Other assets	125	188	188
Total assets	$ 9,880	$ 126,462	$ 126,462
Liabilities, Convertible Preferred Stock and Stockholders' (Deficit) Equity			
Current liabilities:			
Accounts payable	$ 763	$ 5,030	$ 5,030
Accrued clinical trial and manufacturing expenses	890	3,350	3,350
Accrued expenses and other liabilities	1,138	2,408	2,408
Deferred revenue	57	33,427	33,427
Note payable to related party	200	—	—
Convertible promissory notes payable to related parties, net	11,383	—	—
Total current liabilities	14,431	44,215	44,215
Deferred revenue	—	2,592	2,592
Convertible promissory note payable to related party, net	1,406	—	—
Convertible preferred stock warrant liability	72	100	—
Common stock warrant liability	505	889	889
Total liabilities	16,414	47,796	47,696
Commitments and contingencies (Note 9)			
Convertible preferred stock; $0.0001 par value, 25,555,508 and 69,716,345 shares authorized at December 31, 2013 and 2014; 22,041,003 and 69,608,339 shares issued and outstanding at December 31, 2013 and 2014; no shares issued and outstanding, pro forma (unaudited); aggregate liquidation value of $145,261 at December 31, 2014	32,224	139,963	—
Stockholders' (deficit) equity:			
Common stock, $0.0001 par value; 32,000,000 and 85,000,000 shares authorized; and 410,522 and 502,882 shares issued and outstanding at December 31, 2013 and 2014, respectively; 70,111,221 shares issued and outstanding, pro forma (unaudited)	—	—	7
Additional paid-in capital	5,871	346	140,402
Accumulated deficit	(44,629)	(61,643)	(61,643)
Total stockholders' (deficit) equity	(38,758)	(61,297)	78,766
Total liabilities, convertible preferred stock and stockholders' (deficit) equity	$ 9,880	$ 126,462	$ 126,462

The accompanying notes are an integral part of these consolidated financial statements.

ADURO BIOTECH, INC.
Consolidated Statements of Operations and Comprehensive Loss
(In thousands, except share and per share amounts)

	Year Ended December 31,	
	2013	2014
Revenue:		
Collaboration and license revenue	$ —	$ 13,038
Grant revenue	828	351
Total revenue	828	13,389
Operating expenses:		
Research and development	10,687	23,513
General and administrative	4,677	8,994
Total operating expenses	15,364	32,507
Loss from operations	(14,536)	(19,118)
Interest expense	(1,371)	(2,395)
Gain on extinguishment of convertible promissory notes	—	3,553
Other (expense) income, net	(147)	946
Net loss and comprehensive loss	$ (16,054)	$ (17,014)
Net loss per common share, basic and diluted	$ (40.16)	$ (38.19)
Shares used in computing net loss per common share, basic and diluted	399,706	445,505
Pro forma net loss per common share, basic and diluted (unaudited)		$ (0.51)
Shares used in computing pro forma net loss per common share, basic and diluted (unaudited)		38,948,479

The accompanying notes are an integral part of these consolidated financial statements.

ADURO BIOTECH, INC.
Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit
(In thousands, except share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balance at January 1, 2013	14,839,965	$ 23,693	365,143	$ —	$ 866	$ (28,575)	$ (27,709)
Issuance of Series B convertible preferred stock for cash, net of $65 of issuance costs	2,593,639	3,031	—	—	—	—	—
Issuance of Series B convertible preferred stock upon conversion of convertible promissory notes	4,607,399	5,500	—	—	—	—	—
Convertible promissory notes beneficial conversion feature (Note 5)	—	—	—	—	2,339	—	2,339
Recognition of equity component of Series B convertible promissory note (Note 5)	—	—	—	—	2,241	—	2,241
Issuance of common stock upon exercise of stock options	—	—	45,379	—	16	—	16
Stock-based compensation expense	—	—	—	—	409	—	409
Net loss	—	—	—	—	—	(16,054)	(16,054)
Balance at December 31, 2013	22,041,003	32,224	410,522	—	5,871	(44,629)	(38,758)
Issuance of Series C convertible preferred stock for cash, net of $262 of issuance costs (Note 10)	19,423,965	41,888	—	—	—	—	—
Issuance of Series C convertible preferred stock upon conversion of convertible promissory notes (Note 5)	6,199,217	13,452	—	—	—	—	—
Effects of Series C convertible preferred stock tranche (Note 10)	—	(1,475)	—	—	—	—	—
Issuance of Series B convertible preferred stock upon conversion of Series B convertible promissory notes (Note 5)	2,931,981	4,956	—	—	—	—	—
Issuance of Series D convertible preferred stock for cash, net of $2,470 of issuance costs (Note 10)	19,012,173	48,918	—	—	—	—	—
Reclassification of common stock warrants (Note 12)	—	—	—	—	784	—	784
Convertible promissory notes beneficial conversion feature	—	—	—	—	57	—	57
Reacquisition of equity component of Series B convertible promissory note	—	—	—	—	(3,432)	—	(3,432)
Reacquisition of convertible promissory notes beneficial conversion feature	—	—	—	—	(3,553)	—	(3,553)
Issuance of common stock upon exercise of stock options	—	—	92,360	—	49	—	49
Stock-based compensation expense	—	—	—	—	570	—	570
Net loss	—	—	—	—	—	(17,014)	(17,014)
Balance at December 31, 2014	69,608,339	$139,963	502,882	$ —	$ 346	$ (61,643)	$ (61,297)

The accompanying notes are an integral part of these consolidated financial statements.

ADURO BIOTECH, INC.
Consolidated Statement of Cash Flows
(In thousands)

	Year Ended December 31, 2013	2014
Cash Flows from Operating Activities		
Net loss	$(16,054)	$(17,014)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Depreciation and amortization	129	240
Stock-based compensation	409	570
Loss from changes in the fair value of warrants, net	162	566
Gain from changes in the fair value of preferred stock derivative liability	—	(1,475)
Gain on extinguishment of convertible promissory notes	—	(3,553)
Non-cash interest expense related to convertible promissory notes payable	1,367	2,380
Changes in operating assets and liabilities:		
Accounts receivable	(315)	(2,796)
Prepaid expenses and other assets	(382)	(1,117)
Accounts payable	(670)	1,681
Deferred revenue	—	35,962
Accrued clinical trial and manufacturing expenses	711	2,460
Accrued expenses and other liabilities	411	1,461
Net cash (used in) provided by operating activities	(14,232)	19,365
Cash Flows from Investing Activities		
Purchase of property and equipment	(170)	(782)
Net cash used in investing activities	(170)	(782)
Cash Flows from Financing Activities		
Proceeds from issuance of convertible promissory note payable to related parties	16,192	308
Repayment of note payable to related party	—	(200)
Proceeds from issuance of convertible preferred stock, net of issuance costs	3,031	93,276
Deferred offering costs	—	(1,092)
Proceeds from exercise of stock options	16	49
Net cash provided by financing activities	19,239	92,341
Net increase in cash and cash equivalents	4,837	110,924
Cash and cash equivalents at beginning of period	3,695	8,532
Cash and cash equivalents at end of period	$ 8,532	$119,456
Supplemental Disclosure		
Cash paid for interest	$ 32	$ 18
Supplemental Disclosure of Non-Cash Investing and Financing Activities		
Issuance of Series C convertible preferred stock to a related party and other investors in connection with conversion of convertible promissory notes and accrued interest	$ —	$ 13,452
Issuance of Series B convertible preferred stock to a related party in connection with conversion of convertible promissory notes	$ 5,500	$ 4,956

The accompanying notes are an integral part of these consolidated financial statements.

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements

1. Nature of Business and Management's Plans

Nature of Business

Aduro Biotech, Inc., or the Company, is a clinical-stage immuno-oncology company located in Berkeley, California. The Company was founded in 2000 under the name Oncologic, Inc., later merged with Triton BioSystems, Inc. in 2008, and subsequently changed its name to Aduro Biotech, Inc. in 2009. The Company is focused on the development of technology platforms designed to stimulate robust and durable immune responses against cancer. The Company operates in one business segment.

The Company's more advanced technology platform is its proprietary Live, Attenuated, Double- Deleted, or LADD, method of engineering *Listeria monocytogenes* bacteria into therapeutic agents that stimulate both an immediate innate immune response and a targeted adaptive immune response to specific tumor antigens. The Company's earlier-stage technology platform is based on cyclic dinucleotides, or CDNs, novel small molecules that activate the intracellular Stimulator of Interferon Genes, or STING, receptor, a central mediator of the innate immune response. The Company's pipeline of product candidates has the potential to be applicable to a variety of cancers and to be combinable with a range of conventional and emerging cancer therapies, including cellular vaccines, chemotherapy, radiotherapy and checkpoint inhibitors, among others.

2. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America and include the accounts of Aduro Biotech, Inc. and its wholly owned subsidiary, Aduro GVAX, Inc. All intercompany transactions and balances have been eliminated.

Unaudited Pro Forma Stockholders' Equity

On December 16, 2014, the Company's board of directors authorized management of the Company to file a registration statement with the Securities and Exchange Commission for the Company to sell shares of its common stock to the public. The unaudited pro forma stockholders' equity at December 31, 2014 presents the Company's stockholders' equity as though all the Company's outstanding convertible preferred stock had converted into shares of common stock upon the completion of an initial public offering, or IPO, of the Company's common stock. In addition, the pro forma stockholders' equity assumes the reclassification of the convertible preferred stock warrant liability and deferred offering costs to stockholders' equity upon completion of an IPO of the Company's common stock.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities and reported amounts of expenses in the financial statements and accompanying notes. On an ongoing basis, management evaluates its estimates, including those related to revenue recognition, clinical trial accruals, convertible preferred stock and related warrants, common stock and related warrants, income taxes and stock-based compensation. Management bases its estimates on historical experience and on various other market-specific and relevant assumptions that management believes to be reasonable under the circumstances. Actual results could differ from those estimates.

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

Revenue Recognition

The Company recognizes revenues from collaboration, license or research arrangements and development grants when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured.

For revenue agreements with multiple-element arrangements, such as license and research and development agreements, the Company allocates revenue to each non-contingent element based on the relative selling price of each element. When applying the relative selling price method, the Company determines the selling price for each deliverable by first using vendor-specific objective evidence, if available, and then third-party evidence. If neither exists, the Company uses its best estimate of selling price for that deliverable. Revenue allocated to an element is then recognized when the four basic revenue recognition criteria are met.

Revenue associated with nonrefundable upfront license fees under arrangements where the license fees and research and development activities cannot be accounted for as separate units of accounting is deferred and recognized as revenue on a straight-line basis over the expected period of performance. Revenues from the achievement of research and development milestones, if deemed substantive, are recognized as revenue when the milestones are achieved and the milestone payments are due and collectible. If not deemed substantive, the Company recognizes such milestones as revenue on a straight-line basis over the remaining expected performance period under the arrangement. The Company will account for sales-based royalties as revenue upon achievement of certain sales milestones.

Milestones are considered substantive if all of the following conditions are met: (1) the milestone is nonrefundable; (2) achievement of the milestone was not reasonably assured at the inception of the arrangement; (3) substantive effort is involved to achieve the milestone; and (4) the amount of the milestone appears reasonable in relation to the effort expended, and the other milestones in the arrangement and the related risk associated with the achievement of the milestone and any ongoing research and development or other services are priced at fair value. Revenue related to research and development grants is recognized when the related research expenses are incurred and the Company’s specific performance obligations under the terms of the respective contracts are satisfied. Revenue recognized in the condensed consolidated statement of operations is not subject to repayment.

Deferred revenue at December 31, 2014 represents the portion of payments received for which the earnings process has not been completed. Deferred revenue expected to be recognized within the next 12 months is classified as a current liability.

The Company recognizes revenue from research and development grants when the related research expenses are incurred and the Company’s specific performance obligations under the terms of the respective contracts are satisfied. Revenue recognized in the accompanying financial statements is not subject to repayment.

Cash and Cash Equivalents

Cash and cash equivalents include all cash balances and highly liquid investments with original maturities of three months or less from the date of purchase. At December 31, 2013 and 2014, cash and cash equivalents consisted of cash in bank deposits and money market accounts held at financial institutions. The recorded carrying amount of cash equivalents approximates their fair value.

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

Deferred Offering Costs

Deferred offering costs, consisting primarily of legal, accounting and filing fees related to the IPO, are capitalized. The deferred offering costs will be offset against proceeds from the IPO upon the effectiveness of the offering. In the event the offering is terminated, all capitalized deferred offering costs will be expensed. At December 31, 2014, $1.4 million of deferred offering costs were capitalized, which were included in prepaid and other assets in the accompanying consolidated balance sheets. No amounts were deferred at December 31, 2013.

Preferred Stock Derivative Liability

In May 2014, the Company recorded a preferred stock derivative liability for a related party's right to purchase from the Company, on the same terms as the Series C Preferred Stock Purchase Agreement, additional shares of Series C preferred stock in a second and third tranche. At initial recognition, the Company recorded this derivative as a liability on the balance sheets at its estimated fair value. The derivative was subject to remeasurement at each balance sheet date, with changes in fair value recognized as a component of other income (expense), net. At the time of each tranche funding, the Company remeasured the derivative liability, with the change in fair value recognized as a component of other income (expense), net and then reclassified the remaining value associated with the preferred stock derivative liability to the Series C convertible preferred stock.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentration of credit risk consist of cash and cash equivalents and accounts receivable. Cash and cash equivalents are held at financial institutions in the United States. The Company is exposed to credit risk in the event of default by the financial institution to the extent that cash and cash equivalent balances recorded in the balance sheets are in excess of the amounts that are insured by the Federal Deposit Insurance Corporation, or FDIC. The Company has not experienced any losses on its deposits since inception, and management believes that minimal credit risk exists with respect to these financial institutions.

Accounts receivable consist of amounts due from a company related to a milestone payment and grant proceeds for services under an agreement with the United States government. The Company's management believes these receivables are fully collectible.

Property and Equipment

Property and equipment is carried at cost less accumulated depreciation and amortization. Depreciation and amortization of property and equipment is calculated using the straight-line method. When assets are retired or otherwise disposed of, the cost and accumulated depreciation are removed from the balance sheet and any resulting gain or loss is reflected in operations in the period realized.

The useful lives of the property and equipment are as follows:

Lab equipment	5 years
Furniture and fixtures	5 years
Computer and office equipment	3 years
Leasehold improvements	Shorter of remaining lease term or estimated useful life

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

Impairment of Long-Lived Assets

The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Recoverability of assets held and used is measured by comparison of the carrying amount of an asset to the future undiscounted cash flows expected to be generated from the use of the asset and its eventual disposition. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount exceeds the fair value of the impaired assets. Assets to be disposed of are reported at the lower of their carrying amount or fair value less cost to sell. The Company has not recorded an impairment of long-lived assets since inception.

Accrued Research and Development Costs

The Company records accrued liabilities for estimated costs of research and development activities conducted by third-party service providers, which include the conduct of preclinical studies and clinical trials and contract manufacturing activities. These costs are a significant component of the Company's research and development expenses. The Company accrues for these costs based on factors such as estimates of the work completed and in accordance with agreements established with its third-party service providers under the service agreements. The Company makes significant judgments and estimates in determining the accrued liabilities balance in each reporting period. As actual costs become known, the Company adjusts its accrued liabilities. The Company has not experienced any material differences between accrued costs and actual costs incurred. However, the status and timing of actual services performed, number of patients enrolled and the rate of patient enrollments may vary from the Company's estimates, resulting in adjustments to expense in future periods. Changes in these estimates that result in material changes to the Company's accruals could materially affect the Company's results of operations.

Convertible Preferred Stock

The Company has classified the convertible preferred stock as temporary equity in the balance sheets due to certain change in control events that are outside the Company's control, including liquidation, sale or transfer of the Company, as holders of the convertible preferred stock can cause redemption of the shares. The Company has not adjusted the carrying values of the convertible preferred stock to the liquidation preferences of such shares because it is uncertain whether or when an event would occur that would obligate the Company to pay the liquidation preferences to holders of shares of convertible preferred stock. Subsequent adjustments to the carrying values to the liquidation preferences will be made only when it becomes probable that such a redemption event will occur.

Convertible Preferred Stock and Common Stock Warrant Liability

Warrants for shares that are contingently redeemable are classified as liabilities in the balance sheets. Certain common stock warrants are subject to performance conditions which may result in the issuance of a variable number of shares. At initial recognition, the Company classified these warrants as liabilities on the balance sheets at their estimated fair value. The warrants are subject to remeasurement at each balance sheet date, with changes in fair value recognized as a component of other income (expense), net. The Company will continue to adjust the liability for changes in fair value until the earlier of the conversion to common stock warrants, performance conditions met, expiration or exercise of the warrants.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development costs consist of salaries and benefits, lab supplies, contract and grant research costs, fees paid to consultants and third parties that

conduct certain research and development activities on the Company's behalf and allocations of facilities-related costs. Nonrefundable advance payments for goods or services to be rendered in the future for use in research and development activities are deferred and capitalized as prepaid expenses until the related goods are delivered or the services are performed.

Stock-Based Compensation

The Company measures its stock-based awards made to employees based on the estimated fair values of the awards as of the grant date using the Black-Scholes option-pricing model. Stock-based compensation expense is recognized over the requisite service period using the straight-line method and is based on the value of the portion of stock-based payment awards that is ultimately expected to vest. As such, the Company's stock-based compensation is reduced for the estimated forfeitures at the date of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

Stock-based compensation expense for options granted to non-employees as consideration for services received is measured on the date of performance at the fair value of the consideration received or the fair value of the equity instruments issued, using the Black-Scholes option-pricing model, whichever can be more reliably measured. Compensation expense for options granted to non-employees is remeasured each period as the underlying options vest.

Income Taxes

The Company accounts for income taxes using the asset and liability method. Under this method, deferred income tax assets and liabilities are recorded based on the estimated future tax effects of differences between the financial reporting and the tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. Deferred income taxes are classified as current or non-current, based on the classifications of the related assets and liabilities giving rise to the temporary differences. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized.

The Company follows the authoritative guidance under Accounting Standards Codification Topic, or ASC 740, which clarifies the accounting for uncertainty in tax positions recognized in the financial statements. ASC 740 provides that a tax benefit from an uncertain tax position may be recognized when it is more likely that not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, based on the technical merits.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09 (ASC 606), *Revenue from Contracts with Customers*. This ASU affects any entity that either enters into contracts with customers to transfer goods and services or enters into contracts for the transfer of nonfinancial assets. ASU 2014-09 will replace most existing revenue recognition guidance in GAAP when it becomes effective. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In doing so, companies will need to use more judgment and make more estimates than under the currently effective guidance. These may include identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU 2014-09 is effective for annual periods beginning after December 15, 2016, including interim periods within that period. Early adoption is not permitted. The Company is currently evaluating the impact of this guidance on its consolidated financial statements.

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

In June 2014, the FASB issued ASU 2014-10, *Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation.* ASU 2014-10 simplifies the accounting guidance by removing all incremental financial reporting requirements for development stage entities. The amendments related to the elimination of the inception-to-date information and other disclosure requirement of Topic 915 should be applied retrospectively and are effective for annual reporting periods beginning after December 15, 2014 and interim periods therein. The Company has elected to early adopt this guidance and, accordingly, there is no inception to date information presented in these consolidated financial statements.

In August 2014, the FASB issued ASU 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*. ASU 2014-15 requires management to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. In doing so, companies will have reduced diversity in the timing and content of footnote disclosures than under today's guidance. ASU 2014-15 is effective for the Company in the first quarter of 2016 with early adoption permitted. The Company does not believe the impact of adopting ASU 2014-15 on its consolidated financial statements will be material.

3. Fair Value Measurements

The carrying amounts of certain of the Company's financial instruments, including cash equivalents, accounts receivable, accounts payable and convertible promissory notes payable approximated their fair values due to their short maturities. Assets and liabilities recorded at fair value on a recurring basis in the balance sheets, as well as assets and liabilities measured at fair value on a non-recurring basis or disclosed at fair value, are categorized based upon the level of judgment associated with inputs used to measure their fair values. The accounting guidance for fair value provides a framework for measuring fair value, and requires certain disclosures about how fair value is determined. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The accounting guidance also establishes a three-level valuation hierarchy that prioritizes the inputs to valuation techniques used to measure fair value based upon whether such inputs are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions made by the reporting entity. The three-level hierarchy for the inputs to valuation techniques is briefly summarized as follows:

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level 3—Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

The Company's financial instruments consist of Level 1 assets and Level 3 liabilities. Where quoted prices are available in an active market, securities are classified as Level 1. Level 1 assets consist of highly liquid money market funds that are included in cash equivalents.

In certain cases where there is limited activity or less transparency around the inputs to valuation, securities are classified as Level 3. Level 3 liabilities consist of common and preferred stock warrant liabilities,

convertible promissory note warrant liabilities and preferred stock derivative liability. The determination of the fair value of the warrants is discussed in Note 12. Generally, increases or decreases in the fair value of the underlying convertible preferred stock or common stock would result in a directionally similar impact in the fair value measurement of the associated warrant liability.

The following table sets forth the Company's financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy (in thousands):

	December 31, 2013			
	Level 1	Level 2	Level 3	Total
Financial Assets:				
Money market funds	$ 633	$ —	$ —	$ 633
Financial Liabilities:				
Convertible preferred stock warrant liability	$ —	$ —	$ 72	$ 72
Common stock warrant liability	—	—	505	505
Convertible promissory note warrants(1)	—	—	617	617
Total	$ —	$ —	$1,194	$ 1,194

(1) Convertible promissory note warrants are classified as part of convertible promissory notes payable.

	December 31, 2014			
	Level 1	Level 2	Level 3	Total
Financial Assets:				
Money market funds	$110,001	$ —	$ —	$110,001
Financial Liabilities:				
Convertible preferred stock warrant liability	$ —	$ —	$ 100	$ 100
Common stock warrant liability	—	—	889	889
Total	$ —	$ —	$ 989	$ 989

The following table sets forth a summary of the changes in the fair value of the Company's Level 3 financial liabilities (in thousands):

	Preferred Stock Warrant Liability	Common Stock Warrant Liability	Preferred Stock Derivative Liability	Convertible Promissory Note Warrants
Balance at December 31, 2012	$ 81	$ 334	$ —	$ —
Issuance of convertible promissory note warrants	—	—	—	617
Net increase (decrease) in fair value upon revaluation	(9)	171	—	—
Balance at December 31, 2013	72	505	—	617
Issuance of convertible promissory note warrants	—	—	—	15
Initial recognition of preferred stock derivative liability	—	—	3,018	—
Issuance of preferred stock	—	—	(1,543)	—
Net increase (decrease) in fair value upon revaluation	28	384	(1,475)	152
Reclassification to additional paid-in capital	—	—	—	(784)
Balance at December 31, 2014	$ 100	$ 889	$ —	$ —

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

4. Balance Sheet Components

Property and Equipment, Net

Property and equipment, net consisted of the following (in thousands):

	December 31,	
	2013	2014
Lab equipment	$ 569	$ 1,165
Computer and office equipment	439	520
Furniture and fixtures	24	87
Leasehold improvements	150	304
Total property and equipment	1,182	2,076
Less: accumulated depreciation and amortization	(783)	(1,023)
Property and equipment, net	$ 399	$ 1,053

Depreciation and amortization expense for the years ended December 31, 2013 and 2014 was $129,000 and $240,000, respectively.

Accrued Expenses and Other Liabilities

Accrued expenses and other liabilities consisted of the following (in thousands):

	December 31,	
	2013	2014
Compensation and related benefits	$ 786	$1,276
Professional and consulting services	135	961
Interest payable	190	—
Other	27	171
Total accrued expenses and other liabilities	$1,138	$2,408

5. Related Party Convertible Promissory Notes

Convertible Promissory Notes Payable to Related Parties, Short-Term

In August 2013, the Company entered into a note and warrant purchase agreement with related parties to raise up to $13.0 million via the issuance of convertible promissory notes, or the Notes, and warrants to purchase common stock. The Notes bear interest at 5% per annum and automatically convert into equity shares upon the earlier of the closing of a convertible preferred stock financing with proceeds of at least $35.0 million, or Next Financing Event, or the merger or sale of the Company, or Sale Event, or the maturity of the notes on May 30, 2014. If the Notes are converted due to a Next Financing Event, the conversion price shall be equal to the issue price of the equity financing, with investors receiving a variable number of shares. If the Notes are converted due to a Sale Event or their maturity, the conversion price shall be based on the Series B convertible preferred stock issue price of $1.1937322 per share, with the investors receiving a fixed number of shares, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B convertible preferred stock. The Company determined that the automatic conversion feature upon occurrence of the Next Financing Event represented a redemption feature embedded within the

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

Notes. The Company also determined that the provisions whereby the Notes automatically convert upon a Sale Event or on the original maturity date of the Notes of May 30, 2014 were considered to be conversion options within the Notes.

During 2013, the Company issued $12.7 million in Notes and in January 2014 issued an additional $0.3 million in Notes. At the time the Notes were issued, the Company determined that a beneficial conversion feature existed as the fair value of the securities into which the Notes were convertible was greater than the effective conversion price on the borrowing date. Accordingly, the Company recorded a beneficial conversion feature of $2.3 million and $0.1 million during 2013 and 2014, respectively. The beneficial conversion feature was recorded as an increase to additional paid-in capital with the offset recorded as a discount on the Notes.

Each Note was also issued with warrants to purchase common stock with the number of warrants being equal to 10% of the outstanding principal balance of the Notes (or $1.3 million) divided by the issuance price per share of the shares into which the Notes convert. The warrants can be exercised at any time into a variable number of shares of common stock at an exercise price of $0.01 per share for a period of 10 years from the date of issuance. See Note 12. In May 2014, a total of 599,076 warrant shares were issued when the Notes and accrued interest were converted into Series C convertible preferred stock. At the time the warrants were issued, the Company recognized the fair value of the warrants of $0.6 million as a discount on the related Notes. Prior to the Series C convertible preferred stock financing in May of 2014, such warrants were determined to be embedded derivatives and classified together with the Notes on the consolidated balance sheet.

The discounts associated with both the beneficial conversion feature and warrants were amortized to interest expense using the effective interest method through May 30, 2014, the contractual maturity date of the Notes. During the years ended December 31, 2013 and 2014, the Company recognized interest expense of $1.0 million and $2.0 million, respectively.

At the time of the Series C convertible preferred stock offering in May 2014, the Notes were redeemed under the Next Financing Event redemption feature whereby the aggregate of the outstanding principal and accrued interest balance of the Notes of $13.4 million was converted into 6,199,217 shares of Series C convertible preferred stock based on the Series C convertible preferred stock fair value. The redemption of the Notes was accounted for as a debt extinguishment. Additionally, the Notes contained a beneficial conversion feature which was reacquired and a portion of the reacquisition price allocated to the beneficial conversion feature. The amount allocated to reacquire the beneficial conversion feature was measured using the intrinsic value of the conversion option at the extinguishment date and reflected as a reduction to equity of $3.6 million. As a result, the amount allocated to reacquire the Notes was less than the carrying value of the Notes which resulted in a gain on extinguishment of $3.6 million.

Additionally, on the date of the Series C convertible preferred stock offering in May 2014, the warrants issued together with the Notes were no longer classified as embedded derivatives and accordingly the fair value of such warrants was reclassified to equity in the amount of $0.8 million.

Convertible Promissory Notes Payable to Related Party, Long-Term

As part of the Series B convertible preferred stock financing, the Company entered into various unsecured convertible promissory notes and warrants with an investor. The notes are noninterest-bearing, convertible into Series B preferred stock at a price of $1.1937322 per share upon the closing of a convertible preferred stock financing with proceeds of at least $2.0 million and mature on April 15, 2021. Convertible promissory notes in the amounts of $2.5 million, $3.0 million and $3.5 million were issued in October

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

2011, August 2012 and January 2013, respectively. In January 2013, the $2.5 million and $3.0 million notes were converted into 4,607,399 shares of Series B convertible preferred stock. In May and November 2014 $1.6 million and $1.9 million of the convertible promissory notes, respectively, were converted into 1,373,843 and 1,558,138 shares of Series B convertible preferred stock, respectively. See Note 10.

As part of the Series B preferred stock financing, the Company also issued warrants to the investor as follows: (a) in April 2011, warrants to purchase 61,410 shares of Series B convertible preferred stock and 83,771 shares of common stock; (b) in June 2011, warrants to purchase 335,084 shares of common stock; and (c) in October 2011, warrants to purchase 209,427 shares of common stock. See Note 12 for information regarding the terms of the warrants.

The notes issued in January 2013 were determined to contain a feature allowing for cash settlement. In accordance with the applicable accounting standards for certain convertible debt instruments that may be settled in cash or other assets, or partially in cash, upon conversion, the Company recorded the long-term debt and equity components of the convertible promissory note separately. At initial recognition, the Company allocated $1.3 million and $2.2 million to the debt and equity components, respectively. The Company recorded the equity component as a discount on the related debt. The discount, which represents non-cash interest expense, is being amortized to interest expense through maturity date of April 15, 2021 using the effective interest method. The Company recognized $0.1 million in interest expense for each of the years ended December 31, 2013 and 2014. In May 2014 and November 2014, the Company converted $1.6 million and $1.9 million, respectively, of the $3.5 million Series B convertible promissory notes prior to their maturity date. Upon conversion, the Company reacquired the equity component of the related convertible promissory notes, recording a reduction to additional paid in capital of $3.4 million, the elimination of the related unamortized debt discount of $2.0 million and the issuance of Series B preferred stock of $5.0 million.

The outstanding carrying balance of the long-term convertible promissory note payable to related party, net of the unamortized debt discount was $1.4 million at December 31, 2013. There was no balance outstanding at December 31, 2014.

6. Note Payable to Related Party

In December 2008, the Company issued an unsecured note payable to an existing minority stockholder for $200,000. The note bears interest at the U.S. Federal Reserve prime rate, or prime, per annum, compounded quarterly, and beginning in 2014, the interest rate increases to prime plus 4%, compounded quarterly. Accrued interest from the date of issuance of the note until December 31, 2013 in the amount of $32,000 was paid in 2013, according to the terms of the note agreement. The outstanding principal balance of $200,000 along with $15,000 of accrued interest was paid in December 2014.

7. Collaboration Agreements

Janssen ADU-741 and GVAX Prostate Agreements

In May 2014, the Company entered into a Research and License Agreement, or Janssen ADU-741 Agreement, and a GVAX Prostate License Agreement, or Janssen GVAX Prostate Agreement, with Janssen Biotech, Inc., or Janssen, a wholly-owned subsidiary of Johnson & Johnson Development Corporation, to collaborate in the development of a drug for the treatment of prostate cancer. Under the terms of the Janssen ADU-741 Agreement, the Company granted Janssen exclusive, worldwide license under intellectual property rights controlled by the Company to research, develop, manufacture, use, sell and otherwise exploit products containing ADU-741 for any and all uses. The Company is responsible for certain research and development

activities from the effective date of the agreement until approval of an investigational new drug, or IND. During 2014, the Company received an upfront payment of $12.0 million and non-substantive milestone payments of $3.5 million upon completion of certain development activities. In December 2014, the Company completed a substantive milestone resulting in recognition of collaboration and license revenue of $3.0 million. The Company received the $3.0 million payment in January 2015. Under the terms of the Janssen ADU-741 Agreement, the Company may receive future nonrefundable milestone payments up to a total of $1.0 million after completion of various stages of the research and development activities, and the Company is eligible to receive future contingent payments up to a total of $345.5 million comprised of development milestones through completion of all Phase 3 clinical trials, as well as launch, commercialization and sales milestones. The contingent payments are triggered upon the activities expected to be undertaken by Janssen. The Company is eligible to receive royalties on net sales of licensed products by Janssen, its affiliates and sublicensees at a rate ranging from the mid-single digits to low teens based on the aggregate annual net sales and based on the country of sale.

Under the Janssen GVAX Prostate Agreement, the Company granted Janssen an exclusive worldwide license under intellectual property rights controlled by the Company to research, develop, manufacture, use, sell and otherwise exploit products containing GVAX Prostate for any and all uses. The Company received an upfront payment of $500,000 in June 2014 and may receive an additional $2.0 million on the achievement of a specified commercial milestone. In addition, the Company is eligible to receive royalties in the high single digits based on net sales of the product.

The development activities being conducted by the Company are based on a combination of the technology licensed under both agreements. Accordingly, the Company has accounted the Janssen ADU-741 Agreement and Janssen GVAX Prostate Agreement as one arrangement and has identified the deliverables within the arrangement as a license to the technology and research and development activities through IND regulatory approval. The Company has determined that the licenses and development services under the license and research agreements represent a single unit of accounting. The licenses do not have stand-alone value to Janssen, separable from the development services to be performed under the agreement, as Janssen is unable to use the licenses for their intended purpose without the Company's performance of the research and development services. As a result, the Company recognizes revenue from the upfront payments ratably over the term of its estimated period of performance under the agreement. Changes in the estimated period of performance will be accounted for prospectively as a change in estimate. The upfront fees received totaling $12.5 million are being recognized on a straight-line basis from the effective date of the agreements to September 2015, the Company's estimated performance period. The Company will recognize non-substantive milestone payments on a straight-line basis through September 2015, the Company's estimated performance period.

Janssen ADU-214 Agreement

In November 2014, a Research and License Agreement with Janssen, or Janssen ADU-214 Agreement, became effective to develop a drug for the treatment of lung cancer. Under the terms of the Janssen ADU-214 Agreement, the Company granted Janssen an exclusive, worldwide license under intellectual property rights controlled by the Company to research, develop, manufacture, use, sell and otherwise exploit products containing ADU-214 for any and all uses. The Company is responsible for certain research and development activities from the effective date of the agreement until IND regulatory approval. In November 2014, the Company received an upfront license fee of $30.0 million, which is being recognized as revenue on a straight-line basis from the effective date of the Janssen ADU-214 Agreement to February 2016, the Company's estimated performance period. Changes in the estimated period of performance will be accounted for prospectively as a change in estimate. Under the terms of the Janssen ADU-214 Agreement, the Company may receive future nonrefundable milestone payments up to a total of $11.0 million after completion of various stages of the research and development activities, and the Company is eligible to receive future contingent payments up to a total of

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

$776.0 million comprised of development milestones through completion of all Phase 3 clinical trials, as well as regulatory and commercial milestones. The contingent payments are triggered upon the activities expected to be undertaken by Janssen. The Company is eligible to receive royalties on net sales of licensed products by Janssen, its affiliates and sublicensees at a rate ranging from the high-single digits to the low teens based on the aggregate annual net sales of licensed products worldwide and based on the country of sale.

For the year ended December 31, 2014, the Company recognized revenue totaling $13.0 million related to amortization of the upfront fees and development-related substantive and non-substantive milestones. The remaining balance of the payments received of $36.0 million is included in deferred revenue at December 31, 2014.

8. Research and Development and License Agreements

Listeria-Based Agreements

JHU Listeria Agreement

In March 2011, the Company entered into a license agreement with The Johns Hopkins University, or JHU, pursuant to which the Company received an exclusive, worldwide, sublicensable license to certain patent rights covering the tumor-associated antigen mesothelin to make, use, import and commercialize products and to provide services for all bacteria-based therapeutic and/or prophylactic uses for cancer treatment and/or prevention and as a companion diagnostic. Under the agreement, or the JHU *Listeria* Agreement, the Company is obligated to use commercially reasonable efforts to develop and market licensed products and services, which can be demonstrated by achieving specified development milestones by specified dates.

Under the JHU *Listeria* Agreement, the Company is required to make future milestone payments totaling up to $375,000 upon achievement of certain regulatory milestones. Under the JHU *Listeria* Agreement, the Company is obligated to pay JHU royalties based on net sales of licensed products and services by us, our affiliates and our sublicensees at a rate in the low-single digits, subject to minimum annual royalties, and a percentage of consideration received from any sublicensing arrangements ranging from the low-single digits to the low twenties depending on the field of use and the stage of development of the product candidate at the time the sublicense is granted.

The JHU *Listeria* Agreement will continue in effect on a country-by-country basis until the expiration of the last patent within the licensed patent rights, or if no patents issue then for 20 years from the effective date of the agreement. Either party may terminate the JHU *Listeria* Agreement for the other party's uncured breach of the agreement upon 30 days' prior notice or for the other party's insolvency. Additionally, the Company may terminate the JHU *Listeria* Agreement at will upon 90 days' prior written notice to JHU.

UCB Listeria Agreement

In March 2012, the Company entered into a license agreement with the Regents of the University of California on behalf of its Berkeley campus, or UCB, granting the Company an exclusive, worldwide, sublicensable license to certain patent rights covering the use of the *Listeria monocytogenes* phage integration vector which accelerates the genetic engineering of *Listeria* to express more than one antigen to make, use, import, and commercialize products and to provide services for all fields of use. Under this agreement, or the UCB *Listeria* Agreement, the Company is obligated to use commercially reasonable efforts to develop, manufacture and sell licensed products and services and the Company is obligated to achieve specified development and regulatory milestones by specified dates.

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

Under the UCB *Listeria* Agreement, the Company is required to make future milestone payments totaling up to $350,000 upon achievement of certain development and regulatory milestones. The Company is required to pay an annual license maintenance fee until its first sale of a product covered by the licensed patent rights. Under the UCB *Listeria* Agreement, the Company is obligated to pay UCB royalties based on net sales of licensed products and services sold by the Company and its sublicensees at a rate in the low single digits, subject to minimum annual royalties and customary reductions, and a percentage of certain of the Company's sublicensing revenues in the low-single digits to low thirties depending on how the product covered by the licensed patent rights is used.

The UCB *Listeria* Agreement will last until the expiration of the last patent within the licensed patent rights. UCB may terminate the agreement for the Company's uncured material breach upon 90 days' prior written notice and the Company may terminate the agreement at will upon 90 days' prior written notice to UCB.

The Company made payments of $30,000 and $845,000 in milestone, annual maintenance fees and sublicensing fees related to this agreement during the years ended December 31, 2013 and 2014, respectively, which were recorded in research and development expense.

Cerus Corporation Agreement

On November 3, 2009, the Company entered into a license agreement with Cerus Corporation, or Cerus. Under the terms of this license agreement, Cerus granted the Company a worldwide exclusive license under certain of Cerus' patents and technology to make, have made, use, import, offer for sale and sell therapeutics for the treatment or prevention of any human or animal diseases involving a vaccine or immunotherapy.

The Company is required to pay Cerus royalties based on a percentage of net sales in the low single digits, including net sales by sublicensees, of products incorporating the licensed technology and from the provision of any services based upon the licensed technology. If the products or services are bundled with any other products or services, the portion of the net sales allocated to the licensed technology would be used in determining the royalty payments.

GVAX-Based Agreements

ANI Agreement

In January 2013, the Company entered into an asset purchase agreement with BioSante Pharmaceuticals, Inc., which subsequently merged with and into ANI Pharmaceuticals, Inc., or ANI, in June 2013. Under the agreement, or the ANI Agreement, the Company purchased all the rights, title and interest of ANI in and to all of the assets related to or comprising GVAX product candidates and any assets necessary or reasonably useful to make, have made, use, have used, sell, offer for sale, have sold, import, have imported, develop, have developed, commercialize and have commercialized GVAX products.

Under the ANI Agreement, the Company paid ANI cash consideration of $1.0 million and will be required to make royalty payments on net sales of GVAX products sold by the Company, its affiliates and its sublicensees for the treatment of certain cancers, which are covered by purchased intellectual property rights or developed using purchased technology, at rates in the low single digits. The Company is also required to pay milestone payments up to $4.0 million for GVAX pancreas or prostate products in combination with *Listeria* or up to $12.0 million per product for other GVAX products upon the achievement of certain sales milestones. The Company is obligated to make royalty payments on a product-by-product and country-by-country basis until the later of (i) the expiration of the last to expire of the purchased patent rights covering the GVAX product or the

regulatory exclusivity period and (ii) up to seven years from the first commercial sale of the product in such country depending on the level of net sales in such country after the expiration of the patent or regulatory exclusivity period. The royalties and milestone payments for GVAX products for the treatment of pancreas and prostate cancer, as well as the royalties and milestone payments for other cancer products, are each capped at specified maximum amounts. To the extent the Company enters into a sublicensing agreement relating to the GVAX pancreas or prostate cancer products in combination with *Listeria*, the Company is required to pay ANI a percentage of the Company's sublicensing income, ranging from the low teens to the low thirties based on the indication, the stage of development of the GVAX products at the time the sublicense is granted and the amount of development costs expended by the Company at the time the sublicense is granted. The sublicensing payments owed under this ANI Agreement for pancreas and prostate cancer products in combination with *Listeria* are each capped at specified maximum amounts.

In 2013, the Company recorded the $1.0 million payment for the purchase of the assets as research and development expense because the Company determined that there was no alternative future use. During 2014, the Company made a payment of $0.1 million for sublicensing fees, which was recorded in research and development expense.

JHU GVAX Agreement

In January 2013, the Company entered into a license agreement with JHU granting the Company an exclusive, worldwide, sublicensable license under certain GVAX-related patent rights and cell lines, and a non- exclusive, worldwide, sublicensable license to related know-how, in each case to make, have made, use, have used, sell, offer for sale, have sold, import, have imported, develop and commercialize products and services using or incorporating licensed patent rights, cell lines, or know-how for any use. Under the agreement, or the New License Agreement, the Company is obligated to use commercially reasonable efforts to develop and market licensed products and services, including using commercially reasonable efforts to achieve specified development milestones by specified dates.

Under the New License Agreement, the Company paid licensing fees of $125,000 in 2013 and 2014, which were recorded in research and development expenses. Under the New License Agreement, the Company is also required to pay JHU development and regulatory milestone payments totaling up to approximately $1.1 million for STINGVAX, a GVAX product with CDNs, approximately $1.2 million for TEGVAX, a GVAX product with TLRs, and approximately $1.2 million for other licensed products. The Company is also required to pay JHU royalties based on net sales of licensed products and services by the Company, its affiliates and its sublicensees at a rate in the low single digits, subject to minimum annual royalties and standard reductions upon expiration of patent coverage and for licenses to third-party intellectual property rights, as well as a percentage of certain consideration received in consideration of the grant of sublicenses under this agreement ranging from the low tens to the mid-twenties depending on the stage of development of the product candidate at the time the sublicense is granted and the number of sublicenses granted.

The New License Agreement will continue in effect on a product-by-product basis and service-by- service basis until 30 years after the first commercial sale of such product or service, provided that the term may be extended for additional ten-year periods upon mutual agreement of the parties. Either party may terminate the New License Agreement for the other party's uncured material breach of the agreement upon 60 days' prior notice to the breaching party, or 30 days' notice if such breach relates to a payment obligation, or for the other party's insolvency. Additionally, the Company may terminate the New License Agreement at will upon 90 days' prior written notice to JHU.

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

CDN-Based Agreements

Karagen Agreement

In June 2012, the Company entered into a license agreement with Karagen Pharmaceuticals, Inc., or Karagen, pursuant to which Karagen granted the Company an exclusive, worldwide, sublicenseable license under certain patents and know-how related to CDNs to make, develop, use and commercialize products for use in the therapeutic and/or prophylactic treatment of cancer or precancerous conditions and a non-exclusive license to such patents and know-how to make, develop, use, and commercialize products in all other fields of use. Under the agreement, or the Karagen Agreement, the Company was also granted an option to designate a particular disease or condition to be added to the field of use under its exclusive license. Under the Karagen Agreement, the Company is obligated to use commercially reasonable efforts to develop and commercialize licensed products in the United States and the European Union.

Under the Karagen Agreement, the Company is required to make milestone payments totaling up to $900,000, in the aggregate, upon its achievement of specified development and regulatory milestones as well as royalty payments based on net sales of products by the Company and by its affiliates and sublicensees at rates ranging in the low single-digit percentages, determined by whether the disease field is an exclusive or non-exclusive disease field, subject to minimum annual royalties and standard reductions. In addition, the Company is required to pay Karagen a percentage of consideration received from any sublicensing arrangements ranging from the mid-single digits to the mid-teen digits, determined by the current stage of development of the relevant licensed product at the time of the sublicense grant, or by whether the Company has exercised its option to add a designated field of use to its exclusive license, as applicable.

The Karagen Agreement will expire, on a country-by-country basis, upon the expiration of the last-to- expire valid claim within the licensed patent rights. Either party may terminate the Karagen Agreement upon 90 days' advance written notice in the event of the other party's material breach that is not cured within such 90-day period, and immediately upon notice in the event of the other party's bankruptcy or insolvency. Additionally, the Company may terminate the Karagen Agreement at will upon 90 days' advance written notice to Karagen.

UCB Vance Agreement

In September 2014, the Company entered into a license agreement with UCB, granting the Company an exclusive, worldwide, sublicenseable license under certain patent rights covering the use of the CDN molecules that activate the STING receptor to make, develop, use and commercialize products, to practice methods and to offer services, in each case that are covered by the licensed patent rights, in all fields of use. Under this agreement, or the UCB Vance Agreement, the Company is obligated to use commercially reasonable efforts to develop, manufacture and sell licensed products and services and are obligated to achieve specified development and regulatory milestones by specified dates.

Under the UCB Vance Agreement, the Company paid UCB an upfront fee of $50,000 in 2014, which was recorded in research and development expenses, and is required to make future milestone payments totaling up to $1.8 million upon achievement of certain development and regulatory milestones. Under the UCB Vance Agreement, the Company is also obligated to pay UCB royalties based on net sales of licensed products by the Company and our sublicensees at a rate in the low single-digit percentages, subject to minimum annual royalties and a percentage of certain of the Company's sublicensing revenues ranging from the low-single digits to the low thirties, determined by the current stage of development of the relevant licensed product at the time the sublicense is granted.

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

The UCB Vance Agreement will continue in effect until the expiration of the last-to-expire valid claim within the licensed patent rights. UCB may terminate the agreement upon 90 days' advance written notice in the event of the Company's material breach that is not cured within such 90 day period. The Company may terminate the agreement at will upon 90 days' advance written notice.

Memorial Sloan Kettering Cancer Center Agreement

In December 2014, the Company entered into a license agreement with Memorial Sloan Kettering Cancer Center, or MSK, The Rockefeller University, Rutgers, The University of New Jersey, and University of Bonn, collectively the Licensors, granting the Company an exclusive, worldwide, sublicensable license to certain patent rights related to CDNs and a non-exclusive, worldwide, sublicensable license under specified know-how, in each case to develop, make, have made, use, have used, import, sell, and otherwise commercialize licensed products for use in therapeutic and/or prophylactic treatments in humans. Under this agreement, or the MSK Agreement, the Company is obligated to use commercially reasonable efforts to develop and commercialize a licensed product, including achieving specified development and regulatory milestones by specified dates.

Under the MSK Agreement, the Company paid MSK an up-front fee of $50,000 in January 2015, which was recorded in research and development expenses in 2014, and is required to make future milestone payments totaling up to $3.3 million upon achievement of certain development, regulatory and commercialization milestones. Under the MSK Agreement, the Company is also obligated to pay MSK royalties based on net sales of licensed products by the Company and our sublicensees at a rate in the low single digits, subject to minimum annual royalties and a percentage of certain of the Company's sublicensing revenues ranging from ten to mid-twenties.

The MSK Agreement will continue in effect until the expiration of our royalty obligations. The Company or the Licensors may terminate the agreement for uncured material breach upon 90 days' prior written notice and the Company may terminate the agreement at will upon 30 days' prior written notice to the Licensors.

9. Commitments and Contingencies

Leases

The Company leases their office and research and development facility in Berkeley, California, under a non-cancelable operating lease which expires in August 2016. In April 2014, the Company amended its office lease agreement to increase the square footage by 3,990 square feet of rentable space resulting in an $8,000 increase in the monthly rent payment effected on June 1, 2014.

Rent expense was $281,000 and $344,000 for the years ended December 31, 2013 and 2014, respectively. Under the terms of the lease agreement, the Company is also responsible for certain insurance, property tax and maintenance expenses. Future minimum payments under the lease at December 31, 2014 are as follows (in thousands):

Year ending December 31,	Amounts
2015	$ 392
2016	261
Total	$ 653

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

Indemnifications

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. Pursuant to such agreements, the Company may indemnify, hold harmless and defend an indemnified parties for losses suffered or incurred by the indemnified party. Some of the provisions will limit losses to those arising from third party actions. In some cases, the indemnification will continue after the termination of the agreement. The maximum potential amount of future payments the Company could be required to make under these provisions is not determinable. The Company has never incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. The Company has also entered into indemnification agreements with its directors and officers that may require the Company to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers to the fullest extent permitted by Delaware corporate law. The Company currently has directors' and officers' insurance.

Legal

During the normal course of business, the Company may be a party to legal claims that may not be covered by insurance. Management does not believe that any such claims would have a material impact on the Company's financial statements.

Other Commitments

The Company has various manufacturing, clinical, research and other contracts with vendors in the conduct of the normal course of its business. All contracts are terminable, with varying provisions regarding termination. If a contract with a specific vendor were to be terminated, the Company would only be obligated for the products or services that the Company had received at the time the termination became effective as well as non-cancelable and non-refundable payment obligations incurred by the vendor for products or services before the termination became effective. In the case of terminating a clinical trial agreement at a particular site, the Company would also be obligated to provide continued support for appropriate medical procedures at that site until completion or termination.

10. Convertible Preferred Stock

In January 2013, the Company issued 2,593,639 shares of Series B convertible preferred stock to a related party for net cash proceeds of $3.0 million and 4,607,399 shares as settlement of outstanding convertible promissory notes issued in October 2011 and August 2012, in the amount of $5.5 million. In May and November 2014, the Company issued 1,373,843 and 1,558,138 shares, respectively, of Series B convertible preferred stock to the related party as settlement of a convertible promissory note issued in January 2013. See Note 5.

On May 30, 2014, the Company entered into the Series C Preferred Stock Purchase Agreement with existing as well as new investors for the issuance of up to 31,544,844 shares of Series C convertible preferred stock at a purchase price of $2.17 per share. Upon the execution of the agreement, the Company issued 17,119,818 shares of Series C convertible preferred stock for net cash proceeds of $36.9 million and 6,199,217 shares as settlement of outstanding convertible promissory notes, including accrued interest, in the amount of $13.5 million. On December 15, 2014, the Company issued 2,304,148 additional shares of Series C convertible preferred stock to the related party for cash proceeds of $5.0 million.

In May 2014, the Company recorded a preferred stock derivative liability in the amount of $3.0 million, as a related party received the right to purchase from the Company, on the same terms, additional shares of Series

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

C convertible preferred stock, in a second and third tranche. As the related party holds a majority of the board seats, the decision to complete these tranches was deemed to be outside the control of the Company. During the year ended December 31, 2014, the Company recognized a $1.5 million gain related to changes in fair value of the preferred stock derivative liability. At the time of the second and third tranche funding, the Company remeasured the preferred stock derivative liability, with the change in fair value recognized as a component of other income (expense), net. At the date of derecognition of the preferred stock derivative liability, the Company reclassified the remaining value associated with the liability of $1.5 million to Series C convertible preferred stock.

The key assumptions used in the valuation of the preferred stock derivative liability were as follows:

	Year Ended December 31, 2014
Expected term (in years)	0 – 0.55
Fair value of underlying shares	$2.17 – $2.46
Volatility	80.0%
Risk-free interest rate	0.02% –0.07%
Dividend yield	— %

On December 19, 2014, the Company entered into the Series D Preferred Stock Purchase Agreement with existing as well as new investors for the issuance of up to 19,012,173 shares of Series D convertible preferred stock at a purchase price of $2.7029 per share. Upon the execution of the agreement, the Company issued 19,012,173 shares of Series D convertible preferred stock for net cash proceeds of $48.9 million.

At December 31, 2013, convertible preferred stock consisted of the following (in thousands, except share data):

	Shares Authorized	Shares Outstanding	Net Carrying Value	Liquidation Preference
Series A	161,844	161,844	$ 8,092	$ 8,092
Series A-1	3,393,666	3,369,431	4,582	4,582
Series B	22,000,000	18,509,728	19,550	22,096
Total	25,555,508	22,041,003	$32,224	$ 34,770

At December 31, 2014, convertible preferred stock consisted of the following (in thousands, except share data):

	Shares Authorized	Shares Outstanding	Net Carrying Value	Liquidation Preference
Series A	161,843	161,843	$ 8,092	$ 8,092
Series A-1	3,393,666	3,369,431	4,582	4,582
Series B	21,525,480	21,441,709	24,505	25,596
Series C	25,623,183	25,623,183	53,866	55,603
Series D	19,012,173	19,012,173	48,918	51,388
Total	69,716,345	69,608,339	$ 139,963	$ 145,261

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

Significant provisions of the convertible preferred stock are as follows:

Dividends—The holders of preferred stock are entitled to receive, on a pari passu basis, non-cumulative dividends, as adjusted for stock splits, dividends, reclassifications or the like, prior and in preference to any declaration or payment of any dividends to the holders of common stock, when and if declared by the Board of Directors, at a rate of 8% of the original issuance price per share for Series B, Series C, and Series D, or collectively, Senior Preferred, and 5% for Series A-1 and Series A, or collectively, Junior Preferred, per annum. No dividends have been declared by the Board of Directors or paid since inception.

Conversion—At the option of the holder, each share of preferred stock is convertible into fully paid and nonassessable shares of common stock on a one-to-one basis, subject to stock splits, stock dividends and dilution. Each share of preferred stock automatically converts into the number of shares of common stock into which such shares are convertible at the then applicable conversion ratio upon (i) the closing of the sale of shares of common stock in a public offering resulting in at least $45.0 million of gross proceeds, or (ii) the consent of the majority of the holders of the then outstanding shares of Series B and Series C and at least 60% of the then outstanding shares of Series D, voting together as a single class on an as-converted basis.

Liquidation—In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, holders of Senior Preferred are entitled to receive, prior and in preference to holders of Junior Preferred and common stock, an amount equal to their original issue price plus any declared and unpaid dividends. If upon occurrence of such an event, the assets and funds to be distributed among the holders of Senior Preferred are insufficient to permit the payment to such holders, the entire assets and funds of the Company legally available for distribution will be distributed ratably among the holders of Senior Preferred. Upon completion of the distribution to the holders of Senior Preferred, holders of Junior Preferred are entitled to receive prior and in preference to holders of common stock, an amount equal to their original issue price plus any declared but unpaid dividends. If upon occurrence of such an event, after payment in full of preferential amounts due to holders of Senior Preferred, the assets and funds to be distributed among the holders of Junior Preferred are insufficient to permit the payment to such holders, the entire remaining assets and funds of the Company legally available for distribution will be distributed ratably among the holders of Junior Preferred. All remaining legally available assets of the Company are to be distributed pro rata to the holders of Senior Preferred and common stock, on an as-converted basis. A liquidation may be deemed to be occasioned by or to include (unless waived by the written election of the majority of the outstanding shares of Series B and majority of Series C and Series D holders at least 10 days prior to the effective date of such event) (i) a consolidation or merger of the Company with or into any other corporation in which the Company's stockholders of record as constituted immediately prior to such transaction will, immediately after such transaction, fail to hold at least 50% of the voting power of the result of the surviving corporation; or (ii) a sale, conveyance or disposition of all or substantially all of the assets of the Company.

Voting—Each holder of preferred stock is entitled to the number of votes equal to the number of shares of common stock into which each such shares of preferred stock could be converted on the record date for the vote or consent of the stockholders, except as otherwise required by law or other provisions of the Company's Certificate of Incorporation, and have voting rights and powers equal to the voting rights and powers of the common stockholders. The holders of Series B, voting as a separate class, are entitled to elect two member of the Board of Directors. The holders of Series C, voting as a separate class, are entitled to elect two members of the Board of Directors. The holders of preferred stock and common stock, voting as a single class on an as-converted basis, are entitled to elect three members of the Board of Directors.

Protective Provisions—The holders of Series D have certain protective provisions. As long as any shares of Series D are outstanding, the Company cannot, without the approval of the majority of the then

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

outstanding shares of Series D, voting as a separate class, take any actions that: (i) amends, alters or repeals any powers, preferences or rights of Series D preferred stock; (ii) increase or decrease the authorized number of shares of Series D; (iii) redeem, repurchase or make acquisitions of the Series C, Series B, Junior Preferred or common stock; or (iv) declare or pay any dividends or distributions on the Series C, Series B, Junior Preferred or common stock.

The holders of Series C and Series B have certain protective provisions. As long as any shares of Series C and Series B are outstanding, the Company cannot, without the approval of 60% of the then outstanding shares of Series C and a majority of the then outstanding shares of Series B, each voting as a separate class, take any actions that: (i) consummates a liquidation, dissolution or winding up of the Company; (ii) amends, alters or repeals any powers, preferences or rights of Series C or Series B preferred stock; (iii) results in issuance of any additional class or series of capital stock, unless the class ranks junior to Series C or Series B preferred stock with respect to liquidation preferences; (iv) increases or decreases the authorized number of members of the Board of Directors; (v) declare or pay any dividends or distributions on the preferred and common stock; or (vi) redeem, repurchase or make acquisitions of any securities of the Company.

The holders of Junior Preferred have certain protective provisions. As long as any shares of Junior Preferred are outstanding, the Company cannot, without the approval of the majority of the then outstanding shares of Junior Preferred, voting as a separate class, take any action that: (i) amends, alters or repeals any powers, preferences or rights of Junior Preferred; or (ii) increase the number of authorized shares of Junior Preferred.

11. Common Stock

The Company had reserved shares of common stock, on an as-converted basis, for future issuance as follows:

	December 31,	
	2013	2014
Convertible preferred stock outstanding	22,041,003	69,608,339
Options issued and outstanding	5,596,400	8,292,303
Shares available for future stock option grants	128,168	4,381,609
Series A-1 convertible preferred stock warrants	24,235	24,235
Series B convertible preferred stock warrants	83,771	83,771
Common stock warrants	1,589,005	1,603,197
Total	29,462,582	83,993,454

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

12. Warrants

The Company had issued and outstanding warrants that are not subject to remeasurement as follows:

	Warrants Outstanding				
	December 31, 2013	December 31, 2014	Issuance Date	Exercise Price per Share	Terms (Years)
Type of Security:					
Common	1,600	1,600	November 2008	$ 25.00	10.0
Common	1,000	1,000	January 2009	$ 25.00	10.8
Common	400	400	February 2009	$ 25.00	10.0
Common	500	500	March 2009	$ 25.00	10.0
Common	200	200	April 2009	$ 25.00	10.0
Common	91,913	91,913	July 2009	$ 1.36	10.0
Common	29,412	29,412	September 2009	$ 1.36	10.0
Common	24,000	24,000	April 2011	$ 0.50	10.0
Common	N/A	322,581(1)	August 2013	$ 0.01	10.0
Common	N/A	184,332(1)	September 2013	$ 0.01	10.0
Common	N/A	77,971(1)	December 2013	$ 0.01	10.0
Common	N/A	14,192(1)	January 2014	$ 0.01	10.0
Total	149,025	748,101			

(1) In connection with the issuance of convertible promissory notes to related parties, warrants to purchase common stock were issued in August 2013, September 2013, December 2013 and January 2014. These warrants were classified together with convertible promissory notes payable at issuance. At December 31, 2013, the number of warrants issued was subject to adjustment pending the occurrence of the next round of financing. On May 30, 2014, outstanding principal and accrued interest of the convertible promissory notes in the amount of $13.5 million was converted into Series C convertible preferred stock and issued 599,076 common stock warrants. See Note 5. At the conversion date, warrants at the then fair value were reclassified into additional paid-in capital in the amount of $0.8 million.

The Company had issued and outstanding warrants that are subject to remeasurement as follows:

	Warrants Outstanding				
	December 31, 2013	December 31, 2014	Issuance Date	Exercise Price per Share	Terms (Years)
Type of Security:					
Series A-1	10,002	10,002	April 2011	$ 1.36	10.0
Series A-1	14,233	14,233	April 2011	$ 1.23	10.0
Series B	83,771	83,771	April 2011	$ 1.19	5.0
Common	274,506	274,506	April 2011	$ 0.0001	10.0
Common	335,084	335,084	June 2011	$ 0.0001	9.8
Common	245,506	245,506	October 2011	$ 0.0001	9.5
Common	— (2)	N/A	August 2013	$ 0.01	10.0
Common	— (2)	N/A	September 2013	$ 0.01	10.0
Common	— (2)	N/A	December 2013	$ 0.01	10.0
Total	963,102	963,102			

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

(2) In connection with the issuance of convertible promissory notes to related parties, warrants to purchase common stock were issued in August 2013, September 2013, and December 2013. At December 31, 2013, the number of warrants issued was subject to adjustment pending the occurrence of the next round of financing. On May 30, 2014, outstanding principal and accrued interest of the convertible promissory notes in the amount of $13.5 million was converted into Series C convertible preferred stock and issued 599,076 common stock warrants. See Note 5.

The following is a summary of the outstanding warrants to purchase common stock and warrants to purchase convertible preferred stock that are subject to remeasurement and their fair values at December 31, 2013 and 2014 (in thousands, except share data):

	Shares at		Fair Value at	
	December 31, 2013	December 31, 2014	December 31, 2013	December 31, 2014
Classified as warrant liability:				
Series A-1	24,235	24,235	$ 13	$ 25
Series B	83,771	83,771	59	75
Total convertible preferred stock warrants	108,006	108,006	72	100
Common	855,096	855,096	505	889
Total classified as warrant liability	963,102	963,102	$ 577	$ 989
Classified within convertible promissory notes payable:				
Common(3)	—	—	617	—
Total classified within convertible promissory notes payable	—	—	$ 617	$ —

(3) In connection with the issuance of convertible promissory notes to related parties, warrants to purchase common stock were issued in August 2013, September 2013 and December 2013. At December 31, 2013, the number of warrants issued is subject to adjustment should the Next Financing Event occur. See Note 5.

In April 2011, the Company issued warrants to purchase 24,235 shares of Series A-1 convertible preferred stock as consideration for services provided, with a weighted-average exercise price of $1.28 per share. The warrants are immediately exercisable and expire, if not exercised, in April 2021. As the shares into which the warrants are exercisable are contingently redeemable, the Company has recognized a liability for the fair value of these warrants on the consolidated balance sheets. The Company determined the fair value of the warrants to be $16,000 on the date of grant using the Black-Scholes option pricing model. The fair value of the warrants was $13,000 and $25,000 at December 31, 2013 and December 31, 2014, respectively.

In April 2011, in connection with the Series B convertible preferred stock financing, the Company issued warrants to purchase 83,771 shares of Series B convertible preferred stock, with an exercise price of $1.19 per share. The warrants are immediately exercisable and expire, if not exercised, in April 2016. As the shares into which the warrants are exercisable are contingently redeemable, the Company has recognized a liability for the fair value of these warrants on the consolidated balance sheets. The Company determined the fair value of the warrants to be $70,000 on the date of grant using the Black-Scholes option pricing model. The fair value of the warrants was $59,000 and $75,000 at December 31, 2013 and December 31, 2014, respectively.

In April, June, and October 2011, as part of the Series B convertible preferred stock financing, the Company issued warrants to purchase an aggregate of 855,096 shares of common stock, with an exercise price of

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

$0.0001 per share. The warrants are exercisable beginning in April 2015 and may terminate, in whole or part, if the Company obtains certain levels of government grant funds before April 2015. The warrants expire, if not exercised, in April 2021. The Company estimated that it is more likely than not that the minimum level of grant funds will not be achieved and has recognized a liability for the fair value of these warrants on the consolidated balance sheet, as the warrants are subject to performance conditions which may result in the issuance of a variable number of shares. The Company determined the fair value of the warrants to be $393,000 on the date of grant using a Black-Scholes option pricing model. The fair value of the warrants was $0.5 million and $0.9 million at December 31, 2013 and December 31, 2014, respectively.

In August 2013, September 2013, December 2013 and January 2014, in connection with the issuance of the convertible promissory notes payable to related parties, the Company issued warrants to purchase shares of common stock equal to 10% of the outstanding principal balance of the convertible promissory notes (or $1.3 million) divided by the issuance price per share of the shares into which the convertible promissory notes convert. The warrants are immediately exercisable at $0.01 per share and expire, if not exercised, 10 years from the date of issuance. The warrants are recorded at fair value as a bifurcated embedded derivative instrument subject to remeasurement at the end of each reporting period in other income (expense), net in the consolidated statements of operations and comprehensive loss. The fair value of the derivative liability was $0.6 million at December 31, 2013 and is presented on a combined basis with the underlying convertible promissory notes on the consolidated balance sheets. In May 2014, the fair value of derivative liability of $0.8 million was reclassified to additional paid-in capital.

Convertible Preferred Stock Warrants

The key assumptions used in the Black-Scholes option-pricing model for the valuation of the convertible preferred stock warrants were as follows:

	Year Ended December 31,	
	2013	2014
Expected term (in years)	2.29 – 8.04	1.29 – 7.04
Fair value of underlying shares	$0.79 – $1.41	$0.67 – $1.98
Volatility	80.0%	53.9% – 80.8%
Risk-free interest rate	0.37% – 2.51%	0.23% – 2.30%
Dividend yield	— %	— %

Common Stock Warrants and Convertible Promissory Note Warrants

The key assumptions used in the Black-Sholes option-pricing model for the valuation of the common stock warrants were as follows:

	Year Ended December 31,	
	2013	2014
Expected term (in years)	7.29 – 9.83	6.29 – 9.79
Fair value of underlying shares	$0.59	$0.73 – $1.04
Volatility	80.0%	75.7% – 80.4%
Risk-free interest rate	1.46% – 3.04%	1.84% – 2.73%
Dividend yield	— %	— %

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

13. Stock Option Plan

In October 2009, the Company adopted the 2009 Stock Incentive Plan, or the Plan. The Plan provides for the granting of stock-based awards to employees, directors and consultants under terms and provisions established by the Board of Directors.

Under the Plan, the Board of Directors may grant incentive stock options or nonqualified stock options. Incentive stock options may only be granted to Company employees. The exercise price of incentive stock options and nonqualified stock options will be no less than 100% of the fair value per share of the Company's common stock on the date of grant. If an individual owns capital stock representing more than 10% of the voting shares, the price of each share will be at least 110% of the fair value on the date of grant. The Board of Directors determined the fair value of common stock using valuations prepared by an unrelated third-party valuation firm. Options expire after 10 years (five years for stockholders owning greater than 10% of the voting stock). The Board of Directors determines the period over which the options vest and become exercisable. Shares issued upon exercise of unvested options shall be subject to the Company's right to repurchase at their purchase price.

Stock option activity under the Company's stock option plan was as follows:

		Options Outstanding		
	Shares Available for Grant	Number of Options	Weighted-Average Exercise Price	Aggregate Intrinsic Value (In thousands)
Balance—December 31, 2012	809,181	4,313,865	$ 0.53	
Authorized	650,000	—		
Granted	(1,340,136)	1,340,136	$ 0.59	
Exercised	—	(45,379)	$ 0.34	
Canceled	9,123(1)	(12,222)	$ 12.37	
Balance—December 31, 2013	128,168	5,596,400	$ 0.52	$ 985
Authorized	7,043,166	—		
Granted	(2,805,000)	2,805,000	$ 0.72	
Exercised	—	(92,360)	$ 0.53	
Canceled	15,275(1)	(16,737)	$ 6.74	
Balance—December 31, 2014	4,381,609	8,292,303	$ 0.57	$ 4,335
Options exercisable—December 31, 2014		4,915,360	$ 0.51	$ 3,090
Options vested and expected to vest—December 31, 2014		7,990,955	$ 0.57	$ 4,220

(1) The amount excludes 3,099 and 1,462 canceled options for the years ended December 31, 2013 and 2014, respectively, initially granted from the legacy stock option plans. As these plans have been terminated, any options canceled are not added back to the existing option plan pool.

The aggregate intrinsic values of options outstanding, exercisable, vested and expected to vest were calculated as the difference between the exercise price of the options and the estimated fair value of the Company's common stock, as determined by the Board of Directors, at December 31, 2014.

The aggregate intrinsic value of options exercised under the Plan was zero and $17,000 for the years ended December 31, 2013 and December 31, 2014, respectively.

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

The total fair value of options that vested during the years ended December 31, 2013 and 2014 were $0.3 million and $0.5 million, respectively.

The weighted-average grant date fair value of employee options granted during the years ended December 31, 2013 and 2014 were $0.39 and $0.48 per share, respectively.

At December 31, 2014, the weighted-average remaining contractual life was 6.9 years and 7.8 years for exercisable options and vested and expected to vest options, respectively. The weighted-average remaining contractual life of options outstanding was 8.0 years and 7.9 years at December 31, 2013 and 2014, respectively.

Stock-based Compensation Expense

Total stock-based compensation expense recognized was as follows (in thousands):

	Year Ended December 31,	
	2013	2014
Research and development	$194	$202
General and administrative	215	368
Total stock-based compensation expense	$409	$570

At December 31, 2014, the total unrecognized compensation expense related to unvested options, net of estimated forfeitures, was $1.4 million, which the Company expects to recognize over an estimated weighted- average period of 3.2 years.

In determining the fair value of the stock-based awards, the Company uses the Black-Scholes option- pricing model and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment.

Expected Term—The Company's expected term represents the period that the Company's stock-based awards are expected to be outstanding and is determined using the simplified method (based on the mid- point between the vesting date and the end of the contractual term).

Expected Volatility—Since the Company is not yet a public company and does not have any trading history for its common stock, the expected volatility was estimated based on the average volatility for comparable publicly traded biopharmaceutical companies over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, stage in the life cycle or area of specialty.

Risk-Free Interest Rate—The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of option.

Expected Dividend—The Company has never paid dividends on its common stock and has no plans to pay dividends on its common stock. Therefore, the Company used an expected dividend yield of zero.

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

The fair value of stock option awards granted to employees was estimated at the date of grant using a Black-Scholes option-pricing model with the following assumptions:

	Year Ended December 31,	
	2013	2014
Expected term (in years)	5.0 – 6.0	5.3 – 6.1
Volatility	75.7 – 78.6%	70.2 – 77.3%
Risk-free interest rate	1.36 – 1.73%	1.85 – 2.0%
Dividend yield	— %	— %

For the years ended December 31, 2013 and 2014, the Company recognized $0.4 million and $0.5 million, respectively, of stock-based compensation related to options granted to employees. The compensation expense is allocated on a departmental basis, based on the classification of the option holder. No income tax benefits have been recognized in the statements of operations for stock-based compensation arrangements and no stock-based compensation costs have been capitalized as property and equipment as of December 31, 2014.

The Company uses the fair value method to value options granted to non-employees. In 2013 and 2014, the Company recognized stock-based compensation of $50,000 and $85,000, respectively, related to options granted to non-employees.

The fair value of stock option awards granted to non-employees was estimated at the date of grant using a Black-Scholes option-pricing model with the following assumptions:

	Year Ended December 31,	
	2013	2014
Expected term (in years)	10.0	9.3 – 9.7
Volatility	78.4%	78.0 – 78.1%
Risk-free interest rate	2.72%	2.19 – 2.39%
Dividend yield	— %	— %

14. Income Taxes

For both the years ended December 31, 2013 and 2014, the Company recorded no provision for income taxes due to losses incurred.

A reconciliation of the statutory U.S. federal rate to the Company's effective tax rate is as follows:

	Year Ended December 31,	
	2013	2014
U.S. federal taxes at statutory rate	(34.0%)	(34.0%)
U.S. research credits	(1.3)	(1.0)
Warrants	3.8	2.1
Other permanent items	0.2	1.0
Change in valuation allowance	31.3	31.9
Total	— %	— %

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

The tax effects of temporary differences and carryforwards that give rise to significant portions of the deferred tax assets are as follows (in thousands):

	December 31,	
	2013	2014
Deferred tax assets:		
Net operating loss carryforwards	$ 16,823	$ 17,746
Research and development credits	1,394	870
Stock-based compensation	100	124
Accruals and reserves	291	488
Gross deferred tax assets	18,608	19,228
Valuation allowance	(18,600)	(19,212)
Total deferred tax assets	8	16
Deferred tax liabilities:		
Tangible assets	(8)	(16)
Total deferred tax liabilities	(8)	(16)
Net deferred tax assets	$ —	$ —

The Company is required to reduce its deferred tax assets by a valuation allowance if it is more likely than not that some or all of its deferred tax assets will not be realized. Management must use judgment in assessing the potential need for a valuation allowance, which requires an evaluation of both negative and positive evidence. The weight given to the potential effect of negative and positive evidence should be commensurate with the extent to which it can be objectively verified. In determining the need for and amount of the valuation allowance, if any, the Company assesses the likelihood that it will be able to recover its deferred tax assets using historical levels of income, estimates of future income and tax planning strategies. As a result of historical cumulative losses, the Company determined that, based on all available evidence, there was substantial uncertainty as to whether it will recover recorded net deferred taxes in future periods. Accordingly, the Company recorded a valuation allowance against all of its net deferred tax assets at December 31, 2013 and 2014. The net valuation allowance increased by $5.7 million and $0.6 million in 2013 and 2014, respectively.

At December 31, 2014, the Company generated net operating loss, or NOL, carryforwards (before tax effects) for federal and state income tax purposes of $51.2 million and $6.0 million, respectively. These federal and state NOL carryforwards will begin to expire in 2027 and 2017, respectively, if not utilized. In addition, the Company generated federal and state research and development tax credit carryforwards of $0.3 million and $0.9 million, respectively, to offset future income tax liabilities. The federal research and development tax credits can be carried forward for 20 years and will start to expire in 2034, if not utilized, while the state research and development tax credit can be carried forward indefinitely.

Under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, the Company’s ability to utilize NOL carryforwards or other tax attributes, such as research tax credits, in any taxable year may be limited if the Company has experienced an “ownership change.” Generally, a Section 382 ownership change occurs if one or more stockholders or groups of stockholders who owns at least 5% of a corporation’s stock increases its ownership by more than 50 percentage points over its lowest ownership percentage within a specified testing period. Similar rules may apply under state tax laws. The Company performed a Section 382 analysis and believes that it experienced multiple ownership changes under Section 382 of the Code. As a result of the ownership changes, the Company estimates that the utilization of $42.4 million and $5.0 million of federal and state NOLs, respectively, is subject to annual limitations under Section 382. Future changes in the

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

Company's stock ownership, some of which are outside of the Company's control, could result in additional ownership changes under Section 382 of the Code and result in additional limitations. All of the Company's federal tax credits generated prior to 2014 will expire unutilized subject to limitation while the state credit carryforwards will not expire as they are carried forward indefinitely. The Company has recorded a full valuation allowance related to its NOLs, tax credits and other net deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets. The Company's NOLs may expire unutilized or underutilized, which would prevent the Company from offsetting future taxable income.

Uncertain Tax Positions

A reconciliation of the Company's unrecognized tax benefits for the years ended December 31, 2013 and 2014 is as follows (in thousands):

	December 31,	
	2013	2014
Balance at beginning of year	$587	$ 695
Reductions based on tax positions related to prior year	—	(412)
Additions based on tax positions related to current year	108	225
Balance at end of year	$695	$ 508

There were no unrecognized tax benefits included in the balance sheet that would, if recognized, affect the effective tax rate.

The Company does not foresee material changes to its gross uncertain income tax position liability within the next 12 months.

The Company files income tax returns in the United States and state jurisdictions. The federal and state income tax returns are open under the statute of limitations subject to tax examinations for the tax years ended December 31, 2010 through December 31, 2013. To the extent the Company has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the IRS or state tax authorities to the extent utilized in a future period.

The Company will recognize accrued interest and penalties related to unrecognized tax benefits as income tax expense in its statements of operations. At December 31, 2014, the amount of interest and penalties the Company has recorded was zero.

15. Employee Benefit Plan

The Company sponsors a 401(k) plan. All employees are eligible to participate in the 401(k) plan after meeting certain eligibility requirements. Participants may elect to have a portion of their salary deferred and contributed to the 401(k) plan up to the limit allowed under the Internal Revenue Code. The Company has made no contributions to the 401(k) plan since inception.

16. Net Loss per Common Share and Pro Forma Net Loss per Common Share (Unaudited)

Net Loss per Common Share

Since the Company was in a loss position for all periods presented, basic net loss per common share is the same as diluted net loss per common share for all periods presented as the inclusion of all potential common

ADURO BIOTECH, INC.
Notes to Consolidated Financial Statements (continued)

shares outstanding would have been anti-dilutive. Potentially dilutive securities that were not included in the diluted per common share calculations because they would be anti-dilutive were as follows:

	December 31,	
	2013	2014
Convertible preferred stock	22,041,003	69,608,339
Options to purchase common stock	5,596,400	8,292,303
Convertible preferred stock warrants	108,006	108,006
Common stock warrants	1,004,121	1,603,197
Convertible notes	13,564,181	—
Total	42,313,711	79,611,845

Pro Forma Net Loss per Common Share (Unaudited)

The Company has presented pro forma basic and diluted net loss per common share, which has been computed to give effect to the conversion of all shares of convertible preferred stock into shares of common stock as if such conversion had occurred as of the beginning of the period presented or the original date of issuance, if later. The following table sets forth the computation of the Company's pro forma basic and diluted net loss per common share (in thousands, except share and per share amounts):

	Year Ended December 31, 2014
Net loss	$ (17,014)
Change in fair value of convertible preferred stock warrant liability	28
Interest expense associated with convertible promissory notes payable to related parties	266
Interest expense associated with beneficial conversion feature and warrants related to convertible promissory notes payable to related parties	1,998
Gain from preferred stock derivative liability revaluation	(1,475)
Gain on extinguishment of convertible promissory notes	(3,553)
Net loss used in computing pro forma net loss per common share, basic and diluted	$ (19,750)
Shares used in computing net loss per common share, basic and diluted	445,505
Pro forma adjustments to reflect assumed conversion of convertible preferred stock and convertible promissory notes to related parties	38,502,974
Shares used in computing pro forma net loss per common share, basic and diluted	38,948,479
Pro forma net loss per common share, basic and diluted	$ (0.51)

17. Subsequent Events

Subsequent events have been evaluated through March 2, 2015 which is the date the financial statements were available to be issued.

Through and including , 2015, (the 25th day after the date of this prospectus), all dealers effecting transactions in the Common Stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Shares

Common Stock

PROSPECTUS

BofA Merrill Lynch

Leerink Partners

William Blair

Canaccord Genuity

, 2015

PART II

Information Not Required in Prospectus

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, other than the underwriting discount, payable in connection with the sale and distribution of the securities being registered. All amounts are estimated except the SEC registration fee, the FINRA filing fee and the NASDAQ listing fee. Except as otherwise noted, all the expenses below will be paid by us.

SEC registration fee	$	*
FINRA filing fee		*
NASDAQ initial listing fee		*
Legal fees and expenses		*
Accounting fees and expenses		*
Printing and engraving expenses		*
Transfer agent and registrar fees and expenses		*
Miscellaneous fees and expenses		*
Total	$	*

* To be completed by amendment.

Item 14. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the Securities Act of 1933, as amended. Our amended and restated certificate of incorporation to be in effect prior to the closing of this offering provides for indemnification of our directors, officers, employees and other agents to the maximum extent permitted by the Delaware General Corporation Law, and our amended and restated bylaws to be in effect prior to the closing of this offering provide for indemnification of our directors, officers, employees and other agents to the maximum extent permitted by the Delaware General Corporation Law.

We have entered into indemnification agreements with our directors and executive officers, whereby we have agreed to indemnify our directors and executive officers to the fullest extent permitted by law, including indemnification against expenses and liabilities incurred in legal proceedings to which the director or executive officer was, or is threatened to be made, a party by reason of the fact that such director or executive officer is or was our director, officer, employee or agent, provided that such director or executive officer acted in good faith and in a manner that the director or executive officer reasonably believed to be in, or not opposed to, the our best interest. At present, there is no pending litigation or proceeding involving any of our directors or executive officers regarding which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

We maintain insurance policies that indemnify our directors and officers against various liabilities arising under the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, that might be incurred by any director or officer in his capacity as such.

The underwriters are obligated, under certain circumstances, pursuant to the underwriting agreement to be filed as Exhibit 1.1 hereto, to indemnify us, our officers and our directors against liabilities under the Securities Act of 1933, as amended.

Item 15. Recent Sales of Unregistered Securities.

The following sets forth information regarding all unregistered securities sold since July 1, 2011:

(a) From July 1, 2011 to date, we have granted stock options under our 2009 Stock Plan to purchase an aggregate of 11,510,041 shares of our common stock at an exercise price ranging between $0.32 and $1.04 per share to a total of 72 employees, directors and consultants. From July 1, 2011 to date, options to purchase an aggregate of 177,233 shares of common stock have been exercised.

(b) In October 2011, we issued an aggregate of 2,815,822 shares of our Series B convertible preferred stock (convertible into 2,815,822 shares of common stock) to seven accredited investors at a price per share of $1.19, for aggregate consideration of $3.4 million.

(c) In August 2012, we issued an aggregate of 2,396,968 shares of our Series B convertible preferred stock (convertible into 2,396,968 shares of common stock) to seven accredited investors at a price per share of $1.19, for aggregate consideration of $2.9 million.

(d) In January 2013, we issued an aggregate of 6,986,656 shares of our Series B convertible preferred stock (convertible into 6,986,656 shares of common stock) to 11 accredited investors at a price per share of $1.19, for aggregate consideration of $8.3 million.

(e) In February 2013, we issued an aggregate of 214,382 shares of our Series B convertible preferred stock (convertible into 214,382 shares of common stock) to two accredited investors at a price per share of $1.19, for aggregate consideration of $0.3 million.

(f) In August 2013, we issued and sold to an investor convertible promissory notes in the aggregate principal amount of $7.0 million, which notes bore interest at a rate of 5% per annum. This note converted into shares of our Series C convertible preferred stock in May 2014 as described in paragraph (l) below.

(g) In September 2013, we issued and sold to investors convertible promissory notes in the aggregate principal amount of $0.8 million, which notes bore interest at a rate of 5% per annum. These notes converted into shares of our Series C convertible preferred stock in May 2014 as described in paragraph (l) below.

(h) In October 2013, we issued and sold to investors convertible promissory notes in the aggregate principal amount of $3.2 million, which notes bore interest at a rate of 5% per annum. These notes converted into shares of our Series C convertible preferred stock in May 2014 as described in paragraph (l) below.

(i) In December 2013, we issued and sold to investors convertible promissory notes in the aggregate principal amount of $1.7 million, which notes bore interest at a rate of 5% per annum. These notes converted into shares of our Series C convertible preferred stock in May 2014 as described in paragraph (l) below.

(j) In January 2014, we issued and sold to investors convertible promissory notes in the aggregate principal amount of $0.3 million, which notes bore interest at a rate of 5% per annum. These notes converted into shares of our Series C convertible preferred stock in May 2014 as described in paragraph (l) below.

(k) In May 2014, an aggregate principal amount of $1.6 million of convertible notes converted into 1,373,843 shares of our Series B convertible preferred stock (convertible into 1,373,843 shares of common stock) at a price per share of $1.19.

(l) In May 2014, we issued an aggregate of 12,511,523 shares of our Series C convertible preferred stock (convertible into 12,511,523 shares of common stock) to nine accredited investors at a price per share of $2.17, for aggregate consideration of $27.1 million. In addition, the aggregate principal and interest amount of $13.5 million of convertible notes referred to in paragraphs (f), (g), (h), (i) and (j) above converted into 6,199,217 shares of Series C convertible preferred stock at a conversion price equal to $2.17.

(m) In September 2014, we issued 4,608,295 shares of our Series C convertible preferred stock (convertible into 4,608,295 shares of common stock) to one accredited investors at a price per share of $2.17, for aggregate consideration of $10.0 million.

(n) In November 2014, an aggregate principal amount of $1.9 million of convertible notes converted into 1,558,138 shares of our Series B convertible preferred stock (convertible into 1,558,138 shares of common stock) at a price per share of $1.19.

(o) In December 2014, we issued 2,304,148 shares of our Series C convertible preferred stock (convertible into 2,304,148 shares of common stock) to one accredited investor at a price per share of $2.17, for aggregate consideration of $5.0 million.

(p) In December 2014, we issued an aggregate of 19,012,173 shares of our Series D convertible preferred stock (convertible into 19,012,173 shares of common stock) to 28 accredited investors at a price per share of $2.70, for aggregate consideration of $51.4 million.

The offers, sales and issuances of the securities described in Item 15(a) were deemed to be exempt from registration under the Securities Act under either (1) Rule 701 promulgated under the Securities Act as offers and sale of securities pursuant to certain compensatory benefit plans and contracts relating to compensation in compliance with Rule 701 or (2) Section 4(2) of the Securities Act as transactions by an issuer not involving any public offering. The recipients of securities in each of these transactions represented their intention to acquire the securities for investment only and not with view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the stock certificates and instruments issued in such transactions.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

Exhibit No.	Description of Exhibit
1.1*	Form of Underwriting Agreement.
3.1*	Restated Certificate of Incorporation of Aduro Biotech, Inc., as currently in effect.
3.2*	Form of Restated Certificate of Incorporation of Aduro Biotech, Inc., to be in effect upon completion of this offering.
3.3#	Bylaws of Aduro Biotech, Inc., as currently in effect.
3.4*	Form of Amended and Restated Bylaws of Aduro Biotech, Inc., to be in effect upon completion of this offering.
4.1*	Form of common stock certificate.
4.2	Amended and Restated Investors' Rights Agreement, by and among Aduro Biotech, Inc. and the stockholders named therein, dated December 19, 2014.
5.1*	Opinion of Cooley LLP.
10.1#	2000 Oncologic Equity Incentive Plan.

Exhibit No.	Description of Exhibit
10.2#	Forms of Stock Option Agreement and Notice of Grant of Stock Option under the 2000 Oncologic Equity Incentive Plan.
10.3#	2001 Triton BioSystems Equity Incentive Plan.
10.4#	Forms of Stock Option Agreement and Notice of Grant of Stock Option under the 2001 Triton BioSystems Equity Incentive Plan.
10.5#	Aduro Biotech 2009 Stock Incentive Plan.
10.6#	Forms of Stock Option Agreement and Notice of Grant of Stock Option under the 2009 Stock Plan.
10.7*	2015 Equity Incentive Plan, to be in effect upon completion of this offering.
10.8*	Forms of Stock Option Agreement and Notice of Grant of Stock Option under the 2015 Equity Incentive Plan.
10.9*	Forms of Restricted Stock Unit Agreement and Notice of Grant of Restricted Stock Unit under the 2015 Equity Incentive Plan.
10.10*	2015 Employee Stock Purchase Plan, to be in effect upon completion of this offering.
10.11#	Form of Indemnification Agreement made by and between Aduro Biotech, Inc. and each of its directors and executive officers.
10.12#	Executive Employment Agreement between Aduro Biotech, Inc. and Stephen T. Isaacs, dated as of February 26, 2010.
10.13#	Amendment to Executive Employment Agreement between Aduro Biotech, Inc. and Stephen T. Isaacs, dated as of July 31, 2014.
10.14#	Offer of Employment Letter between Aduro Biotech, Inc. and Gregory W. Schafer, dated as of April 28, 2013.
10.15#	Severance Agreement between Aduro Biotech, Inc. and Gregory W. Schafer, dated as of July 31, 2014.
10.16#	Offer of Employment Letter between Aduro Biotech, Inc. and Thomas Dubensky, dated September 7, 2011.
10.17#	Severance Agreement between Aduro Biotech, Inc. and Thomas Dubensky, dated as of July 31, 2014.
10.18+#	Research and License Agreement between Aduro Biotech, Inc. and Janssen Biotech, Inc., dated as of May 27, 2014.
10.19+#	GVAX Prostate License Agreement between Aduro Biotech, Inc. and Janssen Biotech, Inc., dated as of May 27, 2014.
10.20+#	Research and License Agreement between Aduro Biotech, Inc. and Janssen Biotech, Inc., dated as of October 13, 2014.
10.21+	Exclusive License Agreement between Aduro Biotech, Inc. and The Johns Hopkins University, dated March 24, 2011.
10.22+	Exclusive License Agreement between Aduro Biotech, Inc. and the Regents of the University of California, dated March 15, 2012.

Exhibit No.	Description of Exhibit
10.23+	Asset Purchase Agreement between Aduro GVAX Inc. and BioSante Pharmaceuticals, Inc., dated January 31, 2013.
10.24+	Patent and Technology License and Materials Transfer Agreement between Aduro Biotech, Inc. and The Johns Hopkins University, dated January 31, 2013.
10.25+	Restated and Amended License Agreement between The Johns Hopkins University and BioSante Pharmaceuticals, Inc., dated March 3, 2011.
10.26+	License Agreement between Karagen Pharmaceuticals, Inc. and Aduro Biotech, Inc., dated June 20, 2012.
10.27+	Exclusive License between Aduro Biotech, Inc. and the Regents of the University of California, dated September 25, 2014.
10.28+	Exclusive License Agreement among Aduro Biotech, Inc., Memorial Sloan Kettering Cancer Center, The Rockefeller University, Rutgers, the State University of New Jersey and University of Bonn, dated December 18, 2014.
10.29+	Manufacturing Services Agreement between Lonza Walkersville, Inc. and Aduro Biotech, Inc., dated August 6, 2013.
10.30+	Process Development and Manufacturing Services Agreement between IDT Biologika GmbH and Aduro Biotech, Inc., dated December 12, 2013.
10.31#	Third Addendum to Office and Lab Lease, dated April 28, 2014, by and between the Company and Bancroft Way, LLC.
23.1*	Consent of Cooley LLP (included in Exhibit 5.1).
23.2*	Consent of Deloitte & Touche LLP, independent registered public accounting firm.
24.1*	Power of Attorney.

* To be filed by amendment.
\# Previously filed.
\+ Confidential treatment requested.

(b) Financial statement schedules.

All schedules have been omitted because the information required to be presented in them is not applicable or is shown in the financial statements or related notes.

Item 17. Undertakings

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the Underwriting Agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, we have duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the Berkeley, State of California, on the day of , 2015.

ADURO BIOTECH, INC.

By: _____
Stephen T. Isaacs
Chairman, President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Stephen T. Isaacs and Jennifer Lew, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and to sign any registration statement for the same offering covered by this Registration Statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
Stephen T. Isaacs	Chairman, President, Chief Executive Officer and Chief Financial Officer (*principal executive officer*)	, 2015
Gregory W. Schafer	Chief Operating Officer (*principal financial officer*)	, 2015
Jennifer Lew	Vice President of Finance (*principal accounting officer*)	, 2015
Gerald Chan, DSc	Director	, 2015
William M. Greenman	Director	, 2015
Ross Haghighat	Director	, 2015
Frank McCormick	Director	, 2015
Stephanie O'Brien	Director	, 2015

Table of Contents

EXHIBIT INDEX

Exhibit No.	Description of Exhibit
1.1*	Form of Underwriting Agreement.
3.1*	Restated Certificate of Incorporation of Aduro Biotech, Inc., as currently in effect.
3.2*	Form of Restated Certificate of Incorporation of Aduro Biotech, Inc., to be in effect upon closing of this offering.
3.3#	Bylaws of Aduro Biotech, Inc., as currently in effect.
3.4*	Form of Amended and Restated Bylaws of Aduro Biotech, Inc., to be in effect upon closing of this offering.
4.1*	Form of common stock certificate.
4.2	Amended and Restated Investors' Rights Agreement, by and among Aduro Biotech, Inc. and the stockholders named therein, dated December 19, 2014.
5.1*	Opinion of Cooley LLP.
10.1#	2000 Oncologic Equity Incentive Plan.
10.2#	Forms of Stock Option Agreement and Notice of Grant of Stock Option under the 2000 Oncologic Equity Incentive Plan.
10.3#	2001 Triton BioSystems Equity Incentive Plan.
10.4#	Forms of Stock Option Agreement and Notice of Grant of Stock Option under the 2001 Triton BioSystems Equity Incentive Plan.
10.5#	Aduro Biotech 2009 Stock Incentive Plan.
10.6#	Forms of Stock Option Agreement and Notice of Grant of Stock Option under the 2009 Stock Plan.
10.7*	2015 Equity Incentive Plan, to be in effect upon completion of this offering.
10.8*	Forms of Stock Option Agreement and Notice of Grant of Stock Option under the 2015 Equity Incentive Plan.
10.9*	Forms of Restricted Stock Unit Agreement and Notice of Grant of Restricted Stock Unit under the 2015 Equity Incentive Plan.
10.10*	2015 Employee Stock Purchase Plan, to be in effect upon completion of this offering.
10.11#	Form of Indemnification Agreement made by and between Aduro Biotech, Inc. and each of its directors and executive officers.
10.12#	Executive Employment Agreement between Aduro Biotech, Inc. and Stephen T. Isaacs, dated as of February 26, 2010.
10.13#	Amendment to Executive Employment Agreement between Aduro Biotech, Inc. and Stephen T. Isaacs, dated as of July 31, 2014.
10.14#	Offer of Employment Letter between Aduro Biotech, Inc. and Gregory W. Schafer, dated as of April 28, 2013.
10.15#	Severance Agreement between Aduro Biotech, Inc. and Gregory W. Schafer, dated as of July 31, 2014.
10.16#	Offer of Employment Letter between Aduro Biotech, Inc. and Thomas Dubensky, dated September 7, 2011.

Table of Contents

Exhibit No.	Description of Exhibit
10.17#	Severance Agreement between Aduro Biotech, Inc. and Thomas Dubensky, dated as of July 31, 2014.
10.18+#	Research and License Agreement between Aduro Biotech, Inc. and Janssen Biotech, Inc., dated as of May 27, 2014.
10.19+#	GVAX Prostate License Agreement between Aduro Biotech, Inc. and Janssen Biotech, Inc., dated as of May 27, 2014.
10.20+#	Research and License Agreement between Aduro Biotech, Inc. and Janssen Biotech, Inc., dated as of October 13, 2014.
10.21+	Exclusive License Agreement between Aduro Biotech, Inc. and The Johns Hopkins University, dated March 24, 2011.
10.22+	Exclusive License Agreement between Aduro Biotech, Inc. and the Regents of the University of California, dated March 15, 2012.
10.23+	Asset Purchase Agreement between Aduro GVAX Inc. and BioSante Pharmaceuticals, Inc., dated January 31, 2013.
10.24+	Patent and Technology License and Materials Transfer Agreement between Aduro Biotech, Inc. and The Johns Hopkins University, dated January 31, 2013.
10.25+	Restated and Amended License Agreement between The Johns Hopkins University and BioSante Pharmaceuticals, Inc., dated March 3, 2011.
10.26+	License Agreement between Karagen Pharmaceuticals, Inc. and Aduro Biotech, Inc., dated June 20, 2012.
10.27+	Exclusive License between Aduro Biotech, Inc. and the Regents of the University of California, dated September 25, 2014.
10.28+	Exclusive License Agreement among Aduro Biotech, Inc., Memorial Sloan Kettering Cancer Center, The Rockefeller University, Rutgers, the State University of New Jersey and University of Bonn, dated December 18, 2014.
10.29+	Manufacturing Services Agreement between Lonza Walkersville, Inc. and Aduro Biotech, Inc., dated August 6, 2013.
10.30+	Process Development and Manufacturing Services Agreement between IDT Biologika GmbH and Aduro Biotech, Inc., dated December 12, 2013.
10.31#	Third Addendum to Office and Lab Lease, dated April 28, 2014, by and between the Company and Bancroft Way, LLC.
23.1*	Consent of Cooley LLP (included in Exhibit 5.1).
23.2*	Consent of Deloitte & Touche LLP, independent registered public accounting firm.
24.1*	Power of Attorney.

* To be filed by amendment.
\# Previously filed.
\+ Confidential treatment requested.

Exhibit 4.2

ADURO BIOTECH, INC.

AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

December 19, 2014

TABLE OF CONTENTS

ADURO BIOTECH, INC.

AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

This Agreement dated as of December 19, 2014 is entered into by and among Aduro Biotech, Inc., a Delaware corporation (the "**Company**"), and the individuals and entities listed on Exhibit A attached hereto (the "**Purchasers**").

Recitals

WHEREAS, the Company and certain of the Purchasers have entered into a Series D Preferred Stock Purchase Agreement of even date herewith (as the same may be amended from time to time, the "**Purchase Agreement**"), pursuant to which such Purchasers are purchasing shares of Series D Preferred Stock, $0.0001 par value per share (the "**Series D Preferred**"), of the Company;

WHEREAS, the obligations in the Purchase Agreement are conditioned upon the execution and delivery of this Agreement;

WHEREAS, the Company and certain of the Purchasers (the "**Prior Parties**") previously entered into that certain Amended and Restated Investor Rights Agreement dated May 30, 2014 (the "**Prior Investor Rights Agreement**");

WHEREAS, the Company and the Purchasers desire to provide for certain arrangements with respect to (i) the registration of shares of capital stock of the Company under the Securities Act (as defined below), (ii) certain Purchasers' right of first refusal with respect to certain issuances of securities of the Company, and (iii) certain covenants of the Company; and

WHEREAS, the Company and the Prior Parties desire to amend and restate the Prior Investor Rights Agreement in its entirety pursuant to the terms hereof.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained in this Agreement, the parties hereto agree as follows:

1. Certain Definitions.

As used in this Agreement, the following terms shall have the following respective meanings:

"**Affiliated Party**" means, with respect to any Purchaser, shall mean, with respect to any Purchaser, (a) any person or entity which, directly or indirectly, controls, is controlled by or is under common control with such Purchaser, including, without limitation, any general partner, officer or director of such Purchaser, (b) any venture capital fund now or hereafter existing which is controlled by one or more general partners of, or shares the same management company as, such Purchaser, (c) any registered investment company that shares the same investment advisor, and (d) a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law, including any trust for the benefit of the Purchaser or any of the foregoing persons.

"**Available Undersubscription Amount**" means the difference between the total of all of the Basic Amounts available for purchase by Qualified Purchasers pursuant to Section 3.1 and the Basic Amounts subscribed for pursuant to Section 3.1.

"**Basic Amount**" means, with respect to a Qualified Purchaser, its pro rata portion of the Offered Securities determined by multiplying the number of Offered Securities by a fraction, the numerator of which is the aggregate number of shares of Common Stock that are then held by such Qualified Purchaser or that are issuable upon conversion of all Shares (including Shares held pursuant to Series B Warrants) and other convertible securities and convertible notes of the Company then held by such Qualified Purchaser and the denominator of which is the total number of shares of Common Stock then outstanding (giving effect to the conversion into Common Stock of all outstanding shares of convertible Preferred Stock).

"**Charter**" means the Amended and Restated Certificate of Incorporation of the Company, as in effect as of the date hereof, as the same may be amended and restated from time to time.

"**Code**" means the Internal Revenue Code of 1986, as amended.

"**Commission**" means the Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

"Common Stock" means the common stock, $0.0001 par value per share, of the Company.

"**Company**" has the meaning ascribed to it in the introductory paragraph hereto.

"**Company Sale**" means: (a) a merger or consolidation in which (i) the Company is a constituent party, or (ii) a Company Subsidiary is a constituent party and the Company issues shares of its capital stock pursuant to such merger or consolidation, except in the case of either clause (i) or (ii) any such merger or consolidation involving the Company or a Company Subsidiary in which the shares of capital stock of the Company outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock which represent, immediately following such merger or consolidation, more than 50% by voting power of the capital stock (including, for the purposes of this clause, the capital stock issuable upon conversion of any convertible promissory notes prior to such event) of (A) the surviving or resulting corporation or (B) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; (b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Company or a Company Subsidiary of all or substantially all the assets of the Company and the Company Subsidiaries taken as a whole (except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned Company Subsidiary); or (c) the sale or transfer, in a single transaction or series of related transactions, by the stockholders of the Company of more than 50% by voting power of the then-outstanding capital stock of the Company to any person or entity or group of affiliated persons or entities.

"**Company Subsidiary**" means any corporation, partnership, trust, limited liability company or other non-corporate business enterprise in which the Company (or another Company Subsidiary) holds stock or other ownership interests representing (a) more than 50% of the voting power of all outstanding stock or ownership interests of such entity or (b) the right to receive more than 50% of the net assets of such entity available for distribution to the holders of outstanding stock or ownership interests upon a liquidation or dissolution of such entity.

"**Confidential Information**" means any information that is labeled as confidential, proprietary or secret which a Purchaser obtains from the Company pursuant to financial statements, reports and other materials provided by the Company to such Purchaser pursuant to this Agreement or pursuant to visitation or inspection rights granted hereunder.

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended, or any successor federal statute, and the rules and regulations of the Commission issued under such Act, as they each may, from time to time, be in effect.

"**Fidelity**" means Fidelity Management & Research Company.

"**Fidelity Purchaser**" means each of Fidelity Securities Fund: Fidelity OTC Portfolio, Fidelity Select Portfolios: Biotechnology Portfolio and Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund.

"**Indemnified Party**" means a party entitled to indemnification pursuant to Section 2.5.

"**Indemnifying Party**" means a party obligated to provide indemnification pursuant to Section 2.5.

"**Initial Public Offering**" means the initial underwritten public offering of shares of Common Stock pursuant to an effective Registration Statement or in a jurisdiction and on a recognized securities exchange outside of the United States provided that such public offering is reasonably equivalent to a public offering in the United States in terms of price, offering proceeds and regulatory approval.

"**Initiating Holders**" means the Purchasers initiating a request for registration pursuant to Section 2.1(a) or 2.1(b), as the case may be.

"**JJDC**" means Johnson & Johnson Development Corporation.

"**Notice of Acceptance**" means a written notice from a Purchaser to the Company containing the information specified in Section 3.1(b).

"**Major Investor**" means a Purchaser holding shares of Series A Preferred and/or Series A-1 Preferred that are convertible into at least 3,000,000 shares of Common Stock, a Purchaser holding at least 1,000,000 shares of Series B Preferred, a Purchaser holding at least 2,000,000 shares of Series C Preferred, and/or a Purchaser holding at least 3,000,000 shares of Series D Preferred.

"**MVIL**" means Morningside Venture (VI) Investments Limited.

"**Offer**" means a written notice of any proposed or intended issuance, sale or exchange of Offered Securities containing the information specified in Section 3.1(a).

"**Offered Securities**" means (a) any shares of its Common Stock, (b) any other equity securities of the Company, including, without limitation, shares of preferred stock, (c) any option, warrant or other right to subscribe for, purchase or otherwise acquire any equity securities of the Company, or (d) any debt securities convertible into capital stock of the Company.

"**Other Holders**" means holders of securities of the Company (other than Purchasers) who are entitled, by contract with the Company, to have securities included in a Registration Statement.

"**Preferred Stock**" means the preferred stock, $0.0001 par value per share, of the Company.

"**Prior Investor Rights Agreement**" shall have the meaning ascribed to it in the recitals hereto.

"**Prospectus**" means the prospectus included in any Registration Statement, as amended or supplemented by an amendment or prospectus supplement, including post-effective amendments, and all material incorporated by reference or deemed to be incorporated by reference in such Prospectus.

"**Purchase Agreement**" has the meaning ascribed to it in the recitals hereto.

"**Purchaser**" has the meaning ascribed to it in the introductory paragraph hereto.

Qualified IPO" means the closing of the sale of shares of Common Stock to the public in an Initial Public Offering resulting in at least $45,000,000 of gross proceeds to the Company; provided, that the Common Stock has been listed for trading on a "national securities exchange" registered with the Commission under Section 6 of the Exchange Act.

"**Qualified Purchaser**" means a Purchaser that is an "accredited investor" within the meaning of Rule 501(a) under the Securities Act.

"**Refused Securities**" means those Offered Securities as to which a Notice of Acceptance has not been given by the Qualified Purchasers pursuant to Section 3.1.

"**Registrable Shares**" means (a) the shares of Common Stock issued or issuable upon conversion of the Shares, (b) the shares of Common Stock issued or issuable upon exercise of the warrants issued to the Purchasers pursuant to the Series B Purchase Agreement, (c) the shares of Common Stock issued or issuable upon conversion of the Shares issued or issuable pursuant to the exercise of the Series B Warrants, (d) the shares of Common Stock issued or issuable upon exercise of the warrants issued to the Purchasers pursuant to the Series C Purchase Agreement, (e) any other shares of Common Stock, and any shares of Common Stock issued or

issuable upon the conversion or exercise of any other securities, acquired by the Purchasers and (f) any other shares of Common Stock issued in respect of such shares (because of stock splits, stock dividends, reclassifications, recapitalizations or similar events); provided, however, that shares of Common Stock which are Registrable Shares shall cease to be Registrable Shares (i) upon any sale pursuant to a Registration Statement or Rule 144 under the Securities Act, (ii) upon any sale in any manner to a person or entity which is not entitled, pursuant to Section 6, to the rights under this Agreement or (iii) at such time, following an Initial Public Offering, as they become eligible for sale pursuant to Rule 144(b)(1)(i) under the Securities Act; provided, however, with respect to clause (iii), a period of at least one year, as determined in accordance with paragraph (d) of Rule 144 under the Securities Act, has elapsed since the later of the date such shares were acquired from the Company or an affiliate of the Company. Wherever reference is made in this Agreement to a request or consent of holders of a certain percentage of Registrable Shares, the determination of such percentage shall include shares of Common Stock issuable upon conversion of the Shares even if such conversion has not been effected.

"**Registration Expenses**" means all expenses incurred by the Company in complying with the provisions of Section 2, including, without limitation, all registration and filing fees, exchange listing fees, printing expenses, fees and expenses of counsel for the Company and the fees and expenses of one counsel selected by the Selling Stockholders to represent the Selling Stockholders, state Blue Sky fees and expenses, and the expense of any special audits incident to or required by any such registration, but excluding underwriting discounts, selling commissions and the fees and expenses of Selling Stockholders' own counsel (other than the counsel selected to represent all Selling Stockholders).

"**Registration Statement**" means a registration statement filed by the Company with the Commission for a public offering and sale of securities of the Company (other than a registration statement on Form S-8 or Form S-4, or their successors, or any other form for a similar limited purpose, or any registration statement covering only securities proposed to be issued in exchange for securities or assets of another corporation).

"**Securities Act**" means the Securities Act of 1933, as amended, or any successor federal statute, and the rules and regulations of the Commission issued under such Act, as they each may, from time to time, be in effect.

"**Selling Stockholder**" means any Purchaser owning Registrable Shares included in a Registration Statement.

"**Senior Preferred**" means the Series B Preferred, Series C Preferred and Series D Preferred.

"**Series A Preferred**" shall have the meaning ascribed to it in the recitals hereto.

"**Series A-1 Preferred**" means Series A-1 Preferred Stock, $0.0001 par value per share.

"**Series B Directors**" means the members of the Board of Directors designated by the holders of a majority of the outstanding shares of Series B Preferred pursuant to the terms of the Amended and Restated Voting Agreement by and between the Company, the Purchasers and the Key Holders named therein of even date herewith.

"**Series B Purchase Agreement**" means that certain Series B Preferred Stock Purchase Agreement, dated April 15, 2011, among the Company and the Purchasers listed on Exhibit A thereto.

"**Series B Preferred**" means Series B Preferred Stock, $0.0001 par value per share.

"**Series B Warrants**" means warrants for Series B Preferred issued pursuant to the Series B Purchase Agreement.

"**Series C Directors**" means the members of the Board of Directors designated by the Purchasers who hold at least 60% of the outstanding shares of Series C Preferred pursuant to the terms of the Amended and Restated Voting Agreement by and between the Company, the Purchasers and the Key Holders named therein of even date herewith.

"**Series C Preferred**" shall have the meaning ascribed to it in the recitals hereto.

"**Series C Purchase Agreement**" means that certain Series C Preferred Stock Purchase Agreement, dated May 30, 2014, among the Company and the Purchasers listed on Exhibit A thereto.

"**Series D Preferred**" shall have the meaning ascribed to it in the recitals hereto.

"**Shares**" means, collectively, shares of Series A Preferred, Series A-1 Preferred, Series B Preferred, Series C Preferred and Series D Preferred.

"**Significant Investor**" means a Purchaser holding at least 2,250,000 shares of Series D Preferred.

"**Undersubscription Amount**" means, with respect to a Qualified Purchaser, any additional portion of the Offered Securities attributable to the Basic Amounts of other Qualified Purchasers as such Qualified Purchaser indicates it will purchase or acquire should the other Qualified Purchasers subscribe for less than their Basic Amounts.

2. Registration Rights.

2.1 Required Registrations.

(a) At any time after the earlier of (i) two years after the date of this Agreement or (ii) six months after the closing of the Initial Public Offering, a Purchaser or Purchasers holding in the aggregate at least a majority of the then outstanding Common Stock issued or issuable upon conversion of the Series C Preferred and Series D Preferred, voting together as a single class, or a majority of the then outstanding Common Stock issued or issuable upon conversion of the Series B Preferred may request, in writing, that the Company effect the registration on Form S-1 (or any successor form) of Registrable Shares owned by such Purchaser or Purchasers having an aggregate value of at least $5,000,000 (based on the market price or fair value on the date of such request).

(b) At any time after the Company becomes eligible to file a Registration Statement on Form S-3 (or any successor form relating to secondary offerings), a Purchaser or Purchasers holding Registrable Shares may request, in writing, that the Company effect the registration on Form S-3 (or such successor form), of Registrable Shares having an aggregate value of at least $1,500,000 (based on the public market price on the date of such request).

(c) Upon receipt of any request for registration pursuant to this Section 2, the Company shall promptly give written notice of such proposed registration to all other Purchasers. Such Purchasers shall have the right, by giving written notice to the Company within 30 days after the Company provides its notice, to elect to have included in such registration such of their Registrable Shares as such Purchasers may request in such notice of election, subject in the case of an underwritten offering to the terms of Section 2.1(d); provided, that holders of the Senior Preferred will have first priority over other Purchasers to have their shares included in any such registrations. Thereupon, the Company shall, as expeditiously as possible, use its best efforts to effect the registration on an appropriate registration form of all Registrable Shares which the Company has been requested to so register; provided, however, that in the case of a registration requested under Section 2.1(b), the Company will only be obligated to effect such registration on Form S-3 (or any successor form).

(d) If the Initiating Holders intend to distribute the Registrable Shares covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 2.1(a) or (b), as the case may be, and the Company shall include such information in its written notice referred to in Section 2.1(c). In such event, (i) the right of any other Purchaser to include its Registrable Shares in such registration pursuant to Section 2.1(a) or (b), as the case may be, shall be conditioned upon such other Purchaser's participation in such underwriting on the terms set forth herein, and (ii) all Purchasers including Registrable Shares in such registration shall enter into an underwriting agreement upon customary terms with the underwriter or underwriters managing the offering; provided that such underwriting agreement shall not provide for indemnification or contribution obligations on the part of the Purchasers materially greater than the obligations of the Purchasers pursuant to Section 2.5. The Initiating Holders shall have the right to select the managing underwriter(s) for any underwritten offering requested pursuant to Section 2.1(a) or (b), subject to the approval of the Company, which approval will not be unreasonably withheld, conditioned or delayed. If any Purchaser who has requested inclusion of its Registrable Shares in such registration as provided above disapproves of the terms of the underwriting, such Purchaser may elect, by written notice to the Company, to withdraw its Registrable Shares from such Registration Statement and underwriting. If the managing underwriter advises the Company in writing that marketing factors require a limitation on the number of shares to be underwritten, the number of Registrable Shares to be included in the Registration Statement and underwriting shall be allocated among

all Purchasers requesting registration in proportion, as nearly as practicable, to the respective number of Registrable Shares held by them on the date of the request for registration made by the Initiating Holders pursuant to Section 2.1(a) or (b), as the case may be. If any Purchaser would thus be entitled to include more Registrable Shares than such Purchaser requested to be registered, the excess shall be allocated among other requesting Purchasers pro rata in the manner described in the preceding sentence.

(e) The Company shall not be required to effect more than two registrations pursuant to Section 2.1(a). In addition, the Company shall not be required to effect any registration within six months after the effective date of the Registration Statement relating to the Initial Public Offering. For purposes of this Section 2.1(e), a Registration Statement shall not be counted until such time as such Registration Statement has been declared effective by the Commission (unless the Initiating Holders withdraw their request for such registration (other than as a result of information concerning the business or financial condition of the Company which is made known to the Purchasers after the date on which such registration was requested) and elect not to pay the Registration Expenses therefor pursuant to Section 2.4). For purposes of this Section 2.1(e), a Registration Statement shall not be counted if, as a result of an exercise of the underwriter's cut-back provisions, less than 50% of the total number of Registrable Shares that Purchasers have requested to be included in such Registration Statement are so included.

(f) If at the time of any request to register Registrable Shares by Initiating Holders pursuant to this Section 2.1, the Company is engaged or has plans to engage in a registered public offering or is engaged in any other activity which, in the good faith determination of the Company's Board of Directors, would be adversely affected by the requested registration, then the Company may at its option direct that such request be delayed for a period not in excess of 90 days from the date of such request, such right to delay a request to be exercised by the Company not more than once in any 12-month period.

2.2 Incidental Registration.

(a) Whenever the Company proposes to file a Registration Statement (other than a Registration Statement filed pursuant to Section 2.1) at any time and from time to time, it will, prior to such filing, give written notice to all Purchasers of its intention to do so. Upon the written request of a Purchaser or Purchasers given within 20 days after the Company provides such notice (which request shall state the intended method of disposition of such Registrable Shares), the Company shall use its best efforts to cause all Registrable Shares which the Company has been requested by such Purchaser or Purchasers to register to be registered under the Securities Act to the extent necessary to permit their sale or other disposition in accordance with the intended methods of distribution specified in the request of such Purchaser or Purchasers; provided that the Company shall have the right to postpone or withdraw any registration effected pursuant to this Section 2.2 without obligation to any Purchaser.

(b) If the registration for which the Company gives notice pursuant to Section 2.2(a) is a registered public offering involving an underwriting, the Company shall so advise the Purchasers as a part of the written notice given pursuant to Section 2.2(a). In such event, (i) the right of any Purchaser to include its Registrable Shares in such registration pursuant to this Section 2.2 shall be conditioned upon such Purchaser's participation in such underwriting on the terms set forth herein and (ii) all Purchasers including Registrable Shares in such registration shall enter into an underwriting agreement upon customary terms with the underwriter or underwriters selected for the underwriting by the Company; provided that such underwriting agreement shall not provide for indemnification or contribution obligations on the part of Purchasers materially greater than the obligations of the Purchasers pursuant to Section 2.5. If any Purchaser who has requested inclusion of its Registrable Shares in such registration as provided above disapproves of the terms of the underwriting, such person may elect, by written notice to the Company, to withdraw its shares from such Registration Statement and underwriting. If the managing underwriter advises the Company in writing that marketing factors require a limitation on the number of shares to be underwritten, the shares held by holders of securities of the Company other than Purchasers and Other Holders shall be excluded from such Registration Statement and underwriting to the extent deemed advisable by the managing underwriter, and, if a further reduction of the number of shares is required, the number of shares that may be included in such Registration Statement and underwriting shall be allocated first to all Purchasers holding Senior Preferred requesting registration in proportion, as nearly as practicable, to the respective number of shares of Common Stock (on an as-converted basis) held by them on the date the Company gives the notice specified in Section 2.2(a). If any Purchasers holding Senior Preferred would be entitled to include more shares than such holder requested to be registered, the excess shall be allocated first among the other Purchasers holding Senior Preferred pro rata in the manner described in the preceding sentence and, if there remains any shares that may be included, next among all other Purchasers and Other Holders requesting registration in proportion, as nearly as practicable, to the respective number of shares of Common Stock (on an as-converted basis) held by them on the date the Company gives the notice specified in Section 2.2(a); provided that, unless such registration is in connection with the Company's Initial Public Offering, the number of Registrable Shares permitted to be included therein shall in any event be at least 20% of the securities included therein. If any Purchaser or Other Holder would be entitled to include more shares than such holder requested to be registered, the excess shall be allocated among other requesting Purchasers and Other Holders pro rata in the manner described in the preceding sentence.

2.3 Registration Procedures.

(a) If and whenever the Company is required by the provisions of this Agreement to use its best efforts to effect the registration of any Registrable Shares under the Securities Act, the Company shall:

(i) file with the Commission a Registration Statement with respect to such Registrable Shares and use its best efforts to cause that Registration Statement to become effective as soon as possible;

(ii) as expeditiously as possible prepare and file with the Commission any amendments and supplements to the Registration Statement and the prospectus included in the Registration Statement as may be necessary to comply with the provisions of the Securities Act (including the anti-fraud provisions thereof) and to keep the Registration Statement effective for 12 months from the effective date or such lesser period until all such Registrable Shares are sold;

(iii) as expeditiously as possible furnish to each Selling Stockholder such reasonable numbers of copies of the Prospectus, including any preliminary Prospectus, in conformity with the requirements of the Securities Act, and such other documents as such Selling Stockholder may reasonably request in order to facilitate the public sale or other disposition of the Registrable Shares owned by such Selling Stockholder;

(iv) as expeditiously as possible use its best efforts to register or qualify the Registrable Shares covered by the Registration Statement under the securities or Blue Sky laws of such states as the Selling Stockholders shall reasonably request, and do any and all other acts and things that may be necessary or desirable to enable the Selling Stockholders to consummate the public sale or other disposition in such states of the Registrable Shares owned by the Selling Stockholders; provided, however, that the Company shall not be required in connection with this paragraph (iv) to qualify as a foreign corporation or to execute a general consent to service of process in any jurisdiction or to amend its Charter or By-laws in a manner that the Board of Directors of the Company determines is inadvisable;

(v) as expeditiously as possible, cause all such Registrable Shares to be listed on each securities exchange or automated quotation system on which similar securities issued by the Company are then listed;

(vi) promptly provide a transfer agent and registrar for all such Registrable Shares not later than the effective date of such Registration Statement;

(vii) promptly make available for inspection by the Selling Stockholders, any managing underwriter participating in any disposition pursuant to such Registration Statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the Selling Stockholders, all financial and other records, pertinent corporate documents and properties of the Company and cause the Company's officers, directors, employees and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant or agent in connection with such Registration Statement;

(viii) notify each Selling Stockholder, promptly after it shall receive notice thereof, of the time when such Registration Statement has become effective or a supplement to any Prospectus forming a part of such Registration Statement has been filed; and

(ix) as expeditiously as possible following the effectiveness of such Registration Statement, notify each seller of such Registrable Shares of any request by the Commission for the amending or supplementing of such Registration Statement or Prospectus.

(b) If the Company has delivered a Prospectus to the Selling Stockholders and after having done so the Prospectus is amended to comply with the requirements of the Securities Act, the Company shall promptly notify the Selling Stockholders and, if requested, the Selling Stockholders shall immediately cease making offers of Registrable Shares and return all Prospectuses to the Company. The Company shall promptly provide the Selling Stockholders with revised Prospectuses and, following receipt of the revised Prospectuses, the Selling Stockholders shall be free to resume making offers of the Registrable Shares.

(c) In the event that, in the judgment of the Company, it is advisable to suspend use of a Prospectus included in a Registration Statement due to pending material developments or other events that have not yet been publicly disclosed and as to which the Company believes public disclosure would be detrimental to the Company, the Company shall notify all Selling Stockholders to such effect, and, upon receipt of such notice, each such Selling Stockholder shall immediately discontinue any sales of Registrable Shares pursuant to such Registration Statement until such Selling Stockholder has received copies of a supplemented or amended Prospectus or until such Selling Stockholder is advised in writing by the Company that the then current Prospectus may be used and has received copies of any additional or supplemental filings that are incorporated or deemed incorporated by reference in such Prospectus. Notwithstanding anything to the contrary herein, the Company shall not exercise its rights under this Section 2.3(c) to suspend sales of Registrable Shares for a period in excess of 30 days consecutively or 60 days in any 365-day period.

2.4 Allocation of Expenses. The Company will pay all Registration Expenses for all registrations under this Agreement; provided, however, that if a registration under Section 2.1 is withdrawn at the request of the Initiating Holders (other than as a result of information concerning the business or financial condition of the Company which is made known to the Selling Stockholders after the date on which such registration was requested) and if the Initiating Holders elect not to have such registration counted as a registration requested under Section 2.1, the Selling Stockholders shall pay the Registration Expenses of such registration pro rata in accordance with the number of their Registrable Shares included in such registration.

2.5 Indemnification and Contribution.

(a) In the event of any registration of any of the Registrable Shares under the Securities Act pursuant to this Agreement, the Company will indemnify and hold harmless each Selling Stockholder, each underwriter of such Registrable Shares, and each other person, if any, who controls such Selling Stockholder or underwriter within the meaning of the Securities Act or the Exchange Act against any losses, claims, damages or liabilities, joint or several, to which such Selling Stockholder, underwriter or controlling person may become subject under the Securities Act, the Exchange Act, state securities or Blue Sky laws or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained in any Registration Statement under which such Registrable Shares were registered under the Securities Act,

any preliminary prospectus or final prospectus contained in the Registration Statement, or any amendment or supplement to such Registration Statement, (ii) the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law in connection with the Registration Statement or the offering contemplated thereby; and the Company will reimburse such Selling Stockholder, underwriter and each such controlling person for any legal or any other expenses reasonably incurred by such Selling Stockholder, underwriter or controlling person in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon any untrue statement or omission made in such Registration Statement, preliminary prospectus or prospectus, or any such amendment or supplement, in reliance upon and in conformity with information furnished to the Company, in writing, by or on behalf of such Selling Stockholder, underwriter or controlling person specifically for use in the preparation thereof.

(b) In the event of any registration of any of the Registrable Shares under the Securities Act pursuant to this Agreement, each Selling Stockholder, severally and not jointly, will indemnify and hold harmless the Company, each of its directors and officers and each underwriter (if any) and each person, if any, who controls the Company or any such underwriter within the meaning of the Securities Act or the Exchange Act, against any losses, claims, damages or liabilities, joint or several, to which the Company, such directors and officers, underwriter or controlling person may become subject under the Securities Act, Exchange Act, state securities or Blue Sky laws or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any Registration Statement under which such Registrable Shares were registered under the Securities Act, any preliminary prospectus or final prospectus contained in the Registration Statement, or any amendment or supplement to the Registration Statement, or (ii) any omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, if and to the extent (and only to the extent) that the statement or omission was made in reliance upon and in conformity with information relating to such Selling Stockholder furnished in writing to the Company by such Selling Stockholder specifically for use in connection with the preparation of such Registration Statement, prospectus, amendment or supplement; provided, however, that the obligations of a Selling Stockholder hereunder shall be limited to an amount equal to the net proceeds to such Selling Stockholder of Registrable Shares sold in connection with such registration.

(c) Each Indemnified Party shall give notice to the Indemnifying Party promptly after such Indemnified Party has actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom; provided, that counsel for the Indemnifying Party, who shall conduct the defense of such claim or litigation, shall be approved by the Indemnified Party (whose approval shall not be

unreasonably withheld, conditioned or delayed); and, provided, further, that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Section 2.5 except to the extent that the Indemnifying Party is adversely affected by such failure. The Indemnified Party may participate in such defense at such party's expense; provided, however, that the Indemnifying Party shall pay such expense if the Indemnified Party reasonably concludes that representation of such Indemnified Party by the counsel retained by the Indemnifying Party would be inappropriate due to actual or potential differing interests between the Indemnified Party and any other party represented by such counsel in such proceeding; provided further that in no event shall the Indemnifying Party be required to pay the expenses of more than one law firm per jurisdiction as counsel for the Indemnified Party. The Indemnifying Party also shall be responsible for the expenses of such defense if the Indemnifying Party does not elect to assume such defense. No Indemnifying Party, in the defense of any such claim or litigation shall, except with the consent of each Indemnified Party, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect of such claim or litigation, and no Indemnified Party shall consent to entry of any judgment or settle such claim or litigation without the prior written consent of the Indemnifying Party, which consent shall not be unreasonably withheld, conditioned or delayed.

(d) In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in this Section 2.5 is due in accordance with its terms but for any reason is held to be unavailable to an Indemnified Party in respect to any losses, claims, damages and liabilities referred to herein, then the Indemnifying Party shall, in lieu of indemnifying such Indemnified Party, contribute to the amount paid or payable by such Indemnified Party as a result of such losses, claims, damages or liabilities to which such party may be subject in such proportion as is appropriate to reflect the relative fault of the Company on the one hand and the Selling Stockholders on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative fault of the Company and the Selling Stockholders shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of material fact related to information supplied by the Company or the Selling Stockholders and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Selling Stockholders agree that it would not be just and equitable if contribution pursuant to this Section 2.5(d) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to above. Notwithstanding the provisions of this Section 2.5(d), (i) in no case shall any one Selling Stockholder be liable or responsible for any amount in excess of the net proceeds received by such Selling Stockholder from the offering of Registrable Shares and (ii) the Company shall be liable and responsible for any amount in excess of such proceeds; provided, however, that no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. Any party entitled to contribution will, promptly after receipt of notice of commencement of any action, suit or

proceeding against such party in respect of which a claim for contribution may be made against another party or parties under this Section 2.5(d), notify such party or parties from whom contribution may be sought, but the omission so to notify such party or parties from whom contribution may be sought shall not relieve such party from any other obligation it or they may have thereunder or otherwise under this Section 2.5(d). No party shall be liable for contribution with respect to any action, suit, proceeding or claim settled without its prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed.

(e) The rights and obligations of the Company and the Selling Stockholders under this Section 2.5 shall survive the termination of this Agreement.

2.6 Other Matters with Respect to Underwritten Offerings. In the event that Registrable Shares are sold pursuant to a Registration Statement in an underwritten offering pursuant to Section 2.1, the Company agrees to (a) enter into an underwriting agreement containing customary representations and warranties with respect to the business and operations of the Company and customary covenants and agreements to be performed by the Company, including without limitation customary provisions with respect to indemnification by the Company of the underwriters of such offering; (b) use its best efforts to cause its legal counsel to render customary opinions to the underwriters and the Selling Stockholders with respect to the Registration Statement; and (c) use its best efforts to cause its independent public accounting firm to issue customary "cold comfort letters" to the underwriters and the Selling Stockholders with respect to the Registration Statement.

2.7 Information by Holder. Each holder of Registrable Shares included in any registration shall furnish to the Company such information regarding such holder and the distribution proposed by such holder as the Company may reasonably request in writing and as shall be required in connection with any registration, qualification or compliance referred to in this Agreement.

2.8 "Lock-Up" Agreement; Confidentiality of Notices. Each Purchaser agrees, if requested by the Company and the managing underwriter of the Initial Public Offering (but not for any subsequent offerings), (i) not to (a) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any Registrable Shares or other securities of the Company (excluding securities acquired in the Initial Public Offering or in the public market after such offering) or (b) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of any Registrable Shares or other securities of the Company (excluding securities acquired in the Initial Public Offering or in the public market after such offering), whether any transaction described in clause (a) or (b) is to be settled by delivery of securities, in cash or otherwise, during the period beginning on the date of the filing of such registration statement with the Securities and Exchange Commission and ending on the date specified by the Company and the managing underwriter (such period not to exceed 180 days in the case of the Initial Public Offering or such other period not

to exceed 18 days after the expiration of the 180-day period, as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports, and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto), and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering; provided, that all stockholders of the Company then holding at least 1% of the outstanding Common Stock (on an as-converted basis) and all officers and directors of the Company enter into similar agreements; provided further, that the foregoing restrictions shall not apply to securities of the Company purchased by a Purchaser on the open market following the Initial Public Offering or in the Initial Public Offering, if and only if (i) such sales are not required to be reported with the Securities and Exchange Commission on Form 4 in accordance with Section 16 of the Exchange Act during such period, and (ii) such Purchaser does not otherwise voluntarily effect any public filing or report regarding such sales (it being understood that reporting daily holdings on a website or other publicly available resource by a Purchaser that is a registered investment company shall not be considered a public filing or report for purposes of this subsection (ii)).

The Company may impose stop-transfer instructions with respect to the Registrable Shares or other securities subject to the foregoing restriction until the end of such "lock-up" period.

As a condition to the obligation of the Purchasers under this Section 2.8, any "lock-up" obligation of the Purchasers under this Section 2.8, and any agreement entered into by the Purchasers as a result of their obligations under this Section 2.8, shall (i) allow for periodic early releases of portions of the securities subject to such "lock-up" obligations, which may be conditioned upon the trading price of the Company's Common Stock and (ii) provide that all Purchasers will participate on a pro-rata basis in any early release of any stockholder.

Any Purchaser receiving any written notice from the Company regarding the Company's plans to file a Registration Statement shall treat such notice confidentially and shall not disclose such information to any person other than as necessary to exercise its rights under this Agreement.

2.9 Limitations on Subsequent Registration Rights. The Company shall not, without the prior written consent of Purchasers holding in the aggregate at least a majority of the then outstanding Common Stock issued or issuable upon conversion of the Series C Preferred and Series D Preferred, voting together as a single class, and a majority of the then outstanding Common Stock issued or issuable upon conversion of the Series B Preferred, enter into any agreement (other than this Agreement) with any holder or prospective holder of any securities of the Company which grants such holder or prospective holder rights to include securities of the Company in any Registration Statement, unless (a) such rights to include securities in a registration initiated by the Company or by Purchasers are not more favorable than the rights granted to Other Holders under Section 2.2, and (b) no rights are granted to initiate a registration, other than registration pursuant to a registration statement on Form S-3 (or its successor) in

which Purchasers are entitled to include Registrable Shares on a pro rata basis with such holders based on the number of shares of Common Stock (on an as-converted basis) owned by Purchasers and such holders.

2.10 Rule 144 Requirements. After the earliest of (i) the closing of the sale of securities of the Company pursuant to a Registration Statement, (ii) the registration by the Company of a class of securities under Section 12 of the Exchange Act, or (iii) the issuance by the Company of an offering circular pursuant to Regulation A under the Securities Act, the Company agrees to:

(a) make and keep current public information about the Company available, as those terms are understood and defined in Rule 144;

(b) use its best efforts to file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements); and

(c) furnish to any holder of Registrable Shares upon request (i) a written statement by the Company as to its compliance with the reporting requirements of Rule 144 and of the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements), (ii) a copy of the most recent annual or quarterly report of the Company, and (iii) such other reports and documents of the Company as such holder may reasonably request to avail itself of any similar rule or regulation of the Commission allowing it to sell any such securities without registration.

2.11 Registration in Other Jurisdictions. In the event that the Company effects an Initial Public Offering in a jurisdiction other than the United States, the Purchasers shall be entitled to registration rights in such jurisdiction as substantially equivalent as possible to those set forth in this Section 2. In such case, all references in this Section 2 to any regulatory authority, forms and rules and regulations applicable to a registration in the United States shall be deemed to refer instead to the equivalent such regulatory authority, forms and rules and regulations of the jurisdiction in which the Company effected the Initial Public Offering and the Company agrees to comply in all material respects with the laws of the jurisdiction in which the Company effects such an Initial Public Offering as if such Initial Public Offering were effected in the United States.

2.12 Termination. All of the Company's obligations to register Registrable Shares under Sections 2.1 and 2.2 shall terminate upon the earliest of (a) five years after the closing of a Qualified IPO, (b) the date on which no Purchaser holds any Registrable Shares or (c) a Company Sale.

3. Right of First Refusal.

3.1 Rights of Purchasers to Acquire Offered Securities.

(a) The Company shall not issue, sell or exchange, agree to issue, sell or exchange, or reserve or set aside for issuance, sale or exchange, any Offered Securities, unless in each such case the Company shall have first complied with this Section 3.1. The Company shall deliver to each Purchaser holding Senior Preferred an Offer, which shall (i) identify and describe the Offered Securities, (ii) describe the price and other terms upon which they are to be issued, sold or exchanged, and the number or amount of the Offered Securities to be issued, sold or exchanged, (iii) identify the persons or entities (if known) to which or with which the Offered Securities are to be offered, issued, sold or exchanged, and (iv) offer to issue and sell to or exchange with such Purchaser that is a Qualified Purchaser (A) such Qualified Purchaser's Basic Amount and (B) such Qualified Purchaser's Undersubscription Amount.

(b) To accept an Offer, in whole or in part, a Qualified Purchaser must deliver to the Company, on or prior to the date 30 days after the date of delivery of the Offer, a Notice of Acceptance providing a representation letter certifying that such Qualified Purchaser is an accredited investor within the meaning of Rule 501 under the Securities Act and indicating the portion of the Qualified Purchaser's Basic Amount that such Qualified Purchaser elects to purchase and, if such Qualified Purchaser shall elect to purchase all of its Basic Amount, the Undersubscription Amount (if any) that such Qualified Purchaser elects to purchase. If the Basic Amounts subscribed for by all Qualified Purchasers are less than the total of all of the Basic Amounts available for purchase, then each Qualified Purchaser who has set forth an Undersubscription Amount in its Notice of Acceptance shall be entitled to purchase, in addition to the Basic Amounts subscribed for, the Undersubscription Amount it has subscribed for; provided, however, that if the Undersubscription Amounts subscribed for exceed the Available Undersubscription Amount, each Qualified Purchaser who has subscribed for any Undersubscription Amount shall be entitled to purchase only that portion of the Available Undersubscription Amount as the Undersubscription Amount subscribed for by such Qualified Purchaser bears to the total Undersubscription Amounts subscribed for by all Purchasers, subject to rounding by the Board of Directors to the extent it deems reasonably necessary.

(c) The Company shall have 90 days from the expiration of the period set forth in Section 3.1(b) to issue, sell or exchange all or any part of the Refused Securities, but only to the offerees or purchasers described in the Offer (if so described therein) and only upon terms and conditions (including, without limitation, unit prices and interest rates) which are not more favorable, in the aggregate, to the acquiring person or persons or less favorable to the Company than those set forth in the Offer.

(d) In the event the Company shall propose to sell less than all the Refused Securities, then each Qualified Purchaser may, at its sole option and in its sole discretion, reduce the number or amount of the Offered Securities specified in its Notice of Acceptance to an amount that shall be not less than the number or amount of

the Offered Securities that the Qualified Purchaser elected to purchase pursuant to Section 3.1(b) multiplied by a fraction, (i) the numerator of which shall be the number or amount of Offered Securities the Company actually proposes to issue, sell or exchange (including Offered Securities to be issued or sold to Qualified Purchasers pursuant to Section 3.1(b) prior to such reduction) and (ii) the denominator of which shall be the original amount of the Offered Securities. In the event that any Qualified Purchaser so elects to reduce the number or amount of Offered Securities specified in its Notice of Acceptance, the Company may not issue, sell or exchange more than the reduced number or amount of the Offered Securities unless and until such securities have again been offered to the Qualified Purchasers in accordance with Section 3.1(a).

(e) Upon (i) the closing of the issuance, sale or exchange of all or less than all of the Refused Securities or (ii) such other date agreed to by the Company and Qualified Purchasers who have subscribed for a majority of the Offered Securities subscribed for by the Qualified Purchasers, such Qualified Purchaser or Purchasers shall acquire from the Company and the Company shall issue to such Qualified Purchaser or Purchasers, the number or amount of Offered Securities specified in the Notices of Acceptance, as reduced pursuant to Section 3.1(d) if any of the Qualified Purchasers has so elected, upon the terms and conditions specified in the Offer.

(f) The purchase by the Qualified Purchasers of any Offered Securities is subject in all cases to the preparation, execution and delivery by the Company and the Qualified Purchasers of a purchase agreement relating to such Offered Securities reasonably satisfactory in form and substance to the Qualified Purchasers and their respective counsel.

(g) Any Offered Securities not acquired by the Qualified Purchasers or other persons in accordance with Section 3.1(c) may not be issued, sold or exchanged until they are again offered to the Qualified Purchasers under the procedures specified in this Agreement.

(h) The rights of the Qualified Purchasers under this Section 3.1 shall not apply to:

(i) the issuance of any shares of Common Stock as a stock dividend to holders of Common Stock or upon any subdivision or combination of shares of Common Stock;

(ii) the issuance of any shares of Common Stock upon conversion of shares of convertible preferred stock;

(iii) the issuance of shares of Common Stock or convertible securities issued or issuable upon conversion or exchange of any convertible securities or exercise of any options outstanding as of the date of this Agreement, in each case provided such issuance is pursuant to the terms of such option or convertible security;

(iv) the issuance of up to 12,674,545 shares of Common Stock, or options with respect thereto, (subject in either case to appropriate adjustment for stock splits,

stock dividends, recapitalizations and similar events occurring after the date of this Agreement), issued or issuable to employees, directors or officers of, or consultants to, the Company or any Company Subsidiary pursuant to any plan, agreement or arrangement approved by the Board of Directors of the Company, including by a majority of the members of the Board of Directors who are not employees of the Company or a Company Subsidiary (it being understood that that any shares of Common Stock (i) not issued pursuant to rights, agreements, option or warrants ("Unexercised Options") as a result of the termination of such Unexercised Options or (ii) reacquired by the Company from employees, directors or consultants at no more than cost pursuant to agreements that permit the Company to repurchase such shares upon termination of services to the Company shall not be counted toward such maximum number unless and until such shares are regranted as shares of Common Stock and/or options, warrants or other Common Stock purchase rights);

(v) the issuance of shares of Common Stock, options or convertible securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors of the Company that do not exceed an aggregate of 2% of the shares of Common Stock outstanding immediately prior to such issuance (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of options outstanding immediately prior to such issue (whether or not vested) or upon conversion or exchange of convertible securities (including shares of Preferred Stock) outstanding (assuming exercise of any outstanding options therefor) immediately prior to such issue);

(vi) the issuance of shares of Common Stock, options or convertible securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors of the Company that do not exceed an aggregate of 2% of the shares of Common Stock outstanding immediately prior to such issuance (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of options outstanding immediately prior to such issue (whether or not vested) or upon conversion or exchange of convertible securities (including shares of Preferred Stock) outstanding (assuming exercise of any outstanding options therefor) immediately prior to such issue); or

(vii) the issuance of shares of Common Stock by the Company in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act.

3.2 Waiver. In the event that the Purchasers waive the rights set forth in Section 3.1 above, and a Purchaser or any other then-current shareholder of the Company acquires Offered Securities, then the Company shall provide written notice of such sale to each Major Investor that did not consent to such waiver (the "**Non-Consenting Major Investors**") within 30 days after the issuance of the Offered Securities. Each Non-Consenting Major Investor shall have 20 days from the date notice is given to elect to purchase such Non-Consenting Major Investor's Basic Amount of the Offered Securities. The closing of such sale shall occur within 60 days of the date notice is given to the Non-Consenting Major Investors.

3.3 Termination. This Section 3 shall terminate upon the earlier of the closing of a Company Sale or the closing of a Qualified IPO.

4. Covenants.

4.1 Negative Covenants. So long as the holders of the Series B Preferred are entitled to elect at least one Series B Director and/or holders of the Series C Preferred are entitled to elect at least one Series C Director, the Company shall not, without approval of the Board of Directors) (such approval to include the prior approval of at least one Series B Director and at least one Series C Director for the purposes of Section 4.1(i)):

(a) adopt or implement the annual plan prepared by management with respect to the Company's budget or business plan;

(b) implement any material deviation, individually or in the aggregate, from the amounts set forth in the budgets in excess of thresholds approved by the Board of Directors and part of the budget setting process;

(c) incur any aggregate indebtedness in excess of $50,000, that is not already included in a budget approved by the Board of Directors;

(d) pledge, lease, grant a security interest in, or encumber any of the Company's assets in connection with the incurrence of indebtedness;

(e) hire an employee at the level of Vice President or above;

(f) terminate the employment of or change in any material manner the compensation of any executive officer, including approving any option grants or stock awards to executive officers;

(g) enter into any contract or transaction (or amend any existing contracts or transactions) with any shareholder, director, officer, or other insider or any of their family members or affiliates other than on an arms-length basis and upon full disclosure to stockholders;

(h) repurchase Common Stock or Shares; or

(i) materially change the principal business of the Company, enter new lines of business, or exit the current lines of business.

4.2 Affirmative Covenants. So long as any Shares are outstanding, the Company covenants and agrees that it will perform and observe the following covenants and provisions and will cause each Company Subsidiary to perform and observe such of the following covenants and provisions as are applicable to such Company Subsidiary:

(a) Payment of Taxes and Trade Debt. Pay and discharge all taxes, assessments and governmental charges or levies imposed upon it or upon its income or profits or business, or upon any properties belonging to it, prior to the date on which penalties attach thereto, and all lawful claims, which, if unpaid, might become a lien or charge upon any properties of the Company or a Company Subsidiary, other than those which are being contested in good faith if the Company shall have set aside on its books and shall have provided, in accordance with generally accepted accounting principles, adequate reserves with respect thereto; and pay in conformity with customary trade terms, all lease obligations, all trade debt, and all other indebtedness incident to its operations, except such as are being contested in good faith if the Company shall have set aside on its books and shall have provided, in accordance with generally accepted accounting principles, appropriate reserves with respect thereto.

(b) Maintenance of Insurance. Maintain with responsible and reputable insurance companies or associations, insurance in such amounts and covering such risks as the Company reasonably deems advisable. The Company shall use commercially reasonable efforts to obtain or maintain directors and officers liability insurance in the amount of $2,000,000 (or such other amount acceptable to the Board of Directors), provided that such insurance can be obtained or maintained at a reasonable cost to the Company.

(c) Preservation of Corporate Existence. Preserve and maintain its corporate existence, rights, franchises and privileges in the jurisdiction of its incorporation, and qualify and remain qualified as a foreign corporation in each jurisdiction in which such qualification is required, unless the failure to so qualify does not and will not have a material and adverse effect on the business, operations or financial condition of the Company; and preserve and maintain all material licenses and other rights to use patents, processes, licenses, trademarks, trade names, inventions, intellectual property rights or copyrights owned or possessed by it as are reasonably necessary or advisable for it to conduct its business.

(d) Compliance with Laws. Comply with all applicable laws, rules, regulations and orders of any governmental authority, noncompliance with which could materially adversely affect its business or condition, financial or otherwise, except non-compliance being contested in good faith through appropriate proceedings so long as the Company shall have set up and funded sufficient reserves, if any, required under generally accepted accounting principles with respect to such items.

(e) Keeping of Records and Books of Account. Keep adequate records and books of account, in which complete entries will be made in accordance with generally accepted accounting principles consistently applied, reflecting all financial transactions of the Company, and in which, for each fiscal year, all proper reserves for depreciation, depletion, obsolescence, amortization, taxes, bad debts and other purposes in connection within its business shall be made.

(f) Maintenance of Properties, etc. Maintain and preserve all of its properties that the Company reasonably deems necessary or useful in the proper conduct of its business in good repair, working order and condition, ordinary wear and tear excepted, and from time to time make all necessary and proper repairs, renewals,

replacements, additions and improvements thereto; and comply with the provisions of all material leases to which it is a party or under which it occupies property so as to prevent any material loss or forfeiture thereof or thereunder.

4.3 Inspection and Observation. The Company shall permit each Major Investor, or any authorized representative thereof, to visit and inspect the properties of the Company, including its corporate and financial records, and to discuss its business and finances with officers of the Company, during normal business hours following reasonable notice and as often as may be reasonably requested.

4.4 Financial Statements and Other Information.

(a) The Company shall deliver to (i) each Major Investor and (ii) each Fidelity Purchaser:

(i) within 120 days after the end of each fiscal year of the Company, an audited balance sheet of the Company as at the end of such year and audited statements of operations, and of cash flows of the Company for such year, certified by certified public accountants of established national reputation selected by the Company (which public accountants shall be reasonably acceptable to the Board of Directors), and prepared in accordance with generally accepted accounting principles of the United States consistently applied; and

(ii) within 45 days after the end of each fiscal quarter of the Company (other than the fourth quarter), an unaudited balance sheet of the Company as at the end of such quarter, and unaudited statements of operations, and of cash flows of the Company for such fiscal quarter and for the current fiscal year to the end of such fiscal quarter, setting forth in comparative form such results against (a) the prior year comparable period and (b) the Company's projected financial statements for the corresponding periods for the current fiscal year.

(iii) within 60 days after the end of each month, an executive summary of the Company's activities;

(iv) within 60 days after the end of each fiscal year, a notice advising the stockholders as to its status as a "passive foreign investment company" or a "controlled foreign corporation" for United States federal income tax purposes and provide each such stockholder with necessary information to complete its tax filings and elections with respect thereto;

(v) as soon as available, but in any event prior to the commencement of each new fiscal year, a business plan and operating budget for such fiscal year, in reasonable detail and broken down on a quarterly basis;

(vi) such other notices, information and data with respect to the Company as the Company delivers to the holders of its capital stock at the same time it delivers such items to such holders;

(vii) to the extent requested in writing by a Major Investor, such other notices, information and data with respect to the Company as the Company delivers to the Board; provided, however, that the Company shall not be obligated under this subsection to provide information (a) that the Company reasonably determines in good faith to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in a form reasonably acceptable to the Company); or (b) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

(viii) with respect to any proposed Company Sale, Initial Public Offering, or other significant event that requires stockholder approval, timely notice of such proposed transaction and such stockholders shall be afforded at least five business days to review the final agreements relating thereto; and

(ix) with reasonable promptness, such other information and data as such Purchaser may from time to time reasonably request.

(b) The Company shall deliver to each Significant Investor the items identified in Sections 4(a)(i), (ii) and (iv) above.

(c) The foregoing financial statements shall be prepared on a consolidated basis if the Company then has any subsidiaries. The financial statements delivered pursuant to clause (ii) shall be accompanied by a certificate of the chief financial officer of the Company stating that such statements have been prepared in accordance with generally accepted accounting principles consistently applied (except as noted) and fairly present the financial condition and results of operations of the Company at the date thereof and for the periods covered thereby.

4.5 Material Changes and Litigation. The Company shall promptly notify the Purchasers of any material adverse change in the business, prospects, assets or condition, financial or otherwise, of the Company and of any litigation or governmental proceeding or investigation brought or, to the Company's knowledge, threatened against the Company, or against any officer, director, key employee or principal stockholder of the Company which, if adversely determined, would have a material adverse effect on the business, prospects, assets or condition (financial or otherwise) of the Company.

4.6 Key Man Insurance. The Company shall maintain for a period of five years after the date hereof term life insurance upon the life of Stephen T. Isaacs in the amount of $2,000,000, with the proceeds payable to the Company.

4.7 Agreements with Employees; Options.

(a) The Company shall require (i) all officers and employees of the Company now or hereafter employed by the Company to enter into a Confidential Information and Invention Assignments and Non-Solicitation Agreement in the form attached as Exhibit G to the Purchase Agreement or such other form as may be approved by the Board of Directors and (ii) all independent contractors utilized by the Company who have access to confidential or proprietary information of the Company to enter into confidential information and inventions assignment agreements.

(b) The Company agrees that it will not, without the prior written consent of the holders of a majority of the Shares then outstanding, terminate, amend or waive any rights under any Confidential Information and Invention Assignments and Non-Solicitation Agreement or restricted stock agreement between the Company and any officer.

(c) Unless otherwise approved by the Board of Directors of the Company and by a majority of the members of the Board of Directors who are not employees of the Company or a Company Subsidiary, all options or restricted stock granted or issued by the Company shall become exercisable at the rate of 25% on the first anniversary of grant or issue and 2.083% per month thereafter over the subsequent three years so long as the holder continues to be an employee or consultant of the Company.

4.8 Board of Directors.

(a) The Company shall promptly reimburse in full each director of the Company who is not an employee of the Company for all of his or her reasonable out-of-pocket expenses incurred in attending each meeting of the Board of Directors of the Company or any committee thereof.

(b) The Board of Directors shall meet at least quarterly (either in person or by conference call) until the Company is profitable (based on generally accepted accounting principles) for two consecutive quarters and thereafter the Board of Directors shall meet at least quarterly, unless otherwise agreed by a majority of the members of the Board of Directors.

(c) The Board of Directors shall maintain compensation and audit committees consisting only of members of the Board of Directors who are not employees of the Company or a Company Subsidiary. The Series B Directors and Series C Directors shall have the right to serve on the compensation committee.

(d) The Company's Charter shall at all times provide for the indemnification of the members of the Board of Directors to the fullest extent provided by the law of the jurisdiction in which the Company is organized. In the event that the Company or any of its successors or assigns (i) consolidates with or merges into any other entity and shall not be the continuing or surviving corporation in such consolidation or merger or (ii) transfers or conveys all or substantially all of its properties and assets to any entity, then, and in each such case, to the extent necessary, proper provision shall be made so that the successors and assigns of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as contained in the Company's Charter.

4.9 Related Party Transactions.

(a) The Company shall not enter into any agreement with any stockholder, officer or director of the Company, or any "affiliate" of such persons (as such term is defined in the rules and regulations promulgated under the Securities Act), including without limitation any agreement or other arrangement providing for the

furnishing of services by, rental of real or personal property from, or otherwise requiring payments to, any such person or entity, without the consent of at least a majority of the members of the Company's Board of Directors having no interest in such agreement or arrangement.

(b) The approval of the Board of Directors of the Company and a majority of the members of the Board of Directors who are not employees of the Company or a Company Subsidiary shall be required to (i) establish or increase the compensation of executive officers of the Company or (ii) grant stock options to any officer of the Company.

4.10 Reservation of Common Stock. The Company shall reserve and maintain a sufficient number of shares of Common Stock for issuance upon conversion of all of the outstanding Shares.

4.11 International Investment and Trade in Services Survey Act. The Company shall use its best efforts to file on a timely basis all reports required to be filed by it under 22 U.S.C. Section 3104, or any similar statute, relating to a foreign person's direct or indirect investment in the Company.

4.12 JJDC Observer Right. As long as JJDC owns not less than 50% of the shares of Series C Preferred purchased by JJDC under the Purchase Agreement (or an equivalent amount of Common Stock issued upon conversion thereof), the Company shall invite a representative of JJDC to attend all meetings of its Board of Directors in a nonvoting observer capacity (the "**Board Observer**") and, in this respect, shall give such Board Observer copies of all notices and other materials relating to such meetings that it provides to its directors; provided, however, that the Board Observer shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude such Board Observer from any meeting or portion thereof if (i) access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade secrets or (ii) a majority of the directors present at such meeting reasonably conclude that a real or potential conflict of interest exists or could exist between the Company and/or any of its existing or potential affiliates or business partners, and the Board Observer or JJDC or any of their respective affiliates or business partners with regard to any subject matter to be discussed at such meeting or portion thereof.

4.13 Pay-to-Play Protection. In the event that the Board of Directors determines to issue additional shares of Senior Preferred or other series of Preferred Stock on or prior to December 31, 2014, the Purchasers may not, without the consent of JJDC, elect, or act by written consent, either in connection with such issuance or equity financing or thereafter prior to December 31, 2014, to either (a) cause a mandatory conversion of any outstanding shares of Series C Preferred into Common Stock or Junior Preferred (as such term is defined in the Charter), or (b) amend the Charter to adversely affect the rights of the holders of outstanding Series C Preferred with respect to their liquidation preference, conversion price (including anti-dilution protection), voting rights or redemption rights.

4.14 Publicity. The Company and the Purchasers (other than JJDC) shall not, except as may be required by applicable laws or regulations, make any written or other public disclosure about JJDC without JJDC's prior written consent, which shall not be unreasonably withheld, conditioned or delayed.

4.15 No Promotion. The Company agrees that it will not, and shall cause each of its subsidiaries to not, without the prior written consent of Fidelity, use in advertising, publicity, or otherwise the name of Fidelity, or any Fidelity Purchaser, or any partner or employee of Fidelity or any Fidelity Purchaser, nor any trade name, trademark, trade device, service mark, symbol or any abbreviation, contraction or simulation thereof owned by Fidelity, any Fidelity Purchaser or any of their respective affiliates. The Company further agrees that it shall obtain the written consent of Fidelity prior to the Company's or any of its subsidiaries' issuance of any public statement detailing the purchase of Shares by Purchasers pursuant to this Agreement. The foregoing shall not prevent disclosure (a) as required by law (including, without limitation, any rule or regulation promulgated by the Securities and Exchange Commission or any other competent regulatory authority), (b) to other stockholders or potential stockholders, or potential acquirors, or representatives of the foregoing, that the Fidelity Purchasers hold equity securities in the Company or the amount thereof (such as in a capitalization table provided in diligence), or (c) to any legal, tax or accounting advisors of the Company; provided in the cases of subsections (b) and (c), such persons or entities have signed confidentiality agreements containing, or are otherwise bound by confidentiality obligations at least as restrictive as those contained herein.

4.16 Termination of Covenants. Other than the covenant contained in Section 4.10, all covenants of the Company contained in this Section 4 shall terminate upon the earlier of the closing of a Company Sale or the closing of a Qualified IPO; provided, however, that the covenant contained in Section 4.13 shall expire on December 31, 2014.

5. Confidentiality. Each Purchaser agrees that he, she or it will keep confidential and will not disclose, divulge or use for any purpose, other than to monitor its investment in the Company, any Confidential Information, unless such Confidential Information (a) is known or becomes known to the public in general (other than as a result of a breach of this Section 5 by such Purchaser), (b) is or has been independently developed or conceived by the Purchaser without use of the Company's Confidential Information or (c) is or has been made known or disclosed to the Purchaser by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that a Purchaser may disclose Confidential Information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company, (ii) to any prospective purchaser of any Shares from such Purchaser as long as such prospective purchaser agrees to be bound by the provisions of this Section 5, (iii) to any Affiliated Party of such Purchaser or (iv) as may otherwise be required by law, provided that the Purchaser takes reasonable steps to minimize the extent of any such required disclosure.

Notwithstanding anything to the contrary, any Purchaser that is registered as an "investment company" under the Investment Company Act of 1940, as amended, shall be permitted to make disclosures consistent with such Purchaser's policies, procedures and practices. Notwithstanding the foregoing, such information shall not be deemed confidential for the purpose of enforcing this Agreement.

6. Transfers of Rights; Calculation of Share Numbers.

6.1 Transfer of Rights. This Agreement, and the rights and obligations of each Purchaser hereunder, may be assigned by such Purchaser to (a) any person or entity to which at least 2,000,000 Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, recapitalizations and similar events occurring after the date of this Agreement) are transferred by such Purchaser, or (b) to any Affiliated Party of such Purchaser, and, in each case, such transferee shall be deemed a "Purchaser" for purposes of this Agreement; provided that such assignment of rights shall be contingent upon the transferee providing a written instrument to the Company notifying the Company of such transfer and assignment and agreeing in writing to be bound by the terms of this Agreement. Notwithstanding the foregoing, any person or entity to which any Shares or Registrable Shares are transferred by a Purchaser, whether voluntarily or by operation of law, shall be bound by the obligations under Section 2.8 to the same extent as if such transferee were a Purchaser hereunder and no Purchaser shall transfer any Shares or Registrable Shares unless the transferee provides a written instrument to the Company notifying the Company of such transfer and agreeing in writing to be bound by the terms of Section 2.8.

6.2 Calculation of Share Numbers. In determining the number of Shares owned by a Purchaser for purposes of exercising rights under this Agreement, (a) Shares owned by a Purchaser shall be deemed to include Shares which have been converted into Common Stock so long as such Common Stock is owned by such Purchaser and (b) all Shares held by affiliated entities or persons shall be aggregated together (provided that no shares shall be attributed to more than one entity or person within any such group of affiliated entities or persons).

7. General.

7.1 Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement.

7.2 Specific Performance. In addition to any and all other remedies that may be available at law in the event of any breach of this Agreement, each Purchaser shall be entitled to specific performance of the agreements and obligations of the Company hereunder and to such other injunctive or other equitable relief as may be granted by a court of competent jurisdiction.

7.3 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware (without reference to the conflicts of law provisions thereof).

7.4 Notices. All notices, requests, consents and other communications under this Agreement shall be in writing and shall be deemed delivered (i) to a recipient in the United States, by registered or certified mail, return receipt requested, postage prepaid or via a reputable nationwide overnight courier service guaranteeing next business day delivery when received, or (ii) to a recipient outside the United States, via a reputable international courier service guaranteeing specified business day delivery when received, in each case to the intended recipient as set forth below:

If to the Company, at 626 Bancroft Way, #3C Berkeley, CA 94710, Attention: President, or at such other address as may have been furnished in writing by the Company to the other parties hereto, with a copy (which shall not constitute notice) to Cooley LLP, 3175 Hanover Street, Palo Alto, CA 94304, Attention: Michael Tenta, Esq.; or

If to a Purchaser, at its address set forth on Exhibit A, or at such other address as may have been furnished in writing by such Purchaser to the other parties hereto.

Any party may give any notice, request, consent or other communication under this Agreement using any other means (including, without limitation, personal delivery, messenger service, telecopy, first class mail or electronic mail), but no such notice, request, consent or other communication shall be deemed to have been duly given unless and until it is actually received by the party for whom it is intended. Any party may change the address to which notices, requests, consents or other communications hereunder are to be delivered by giving the other parties notice in the manner set forth in this Section 7.4.

7.5 Complete Agreement. This Agreement constitutes the entire agreement and understanding of the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings relating to such subject matter.

7.6 Amendments and Waivers. This Agreement may be amended or terminated and the observance of any term of this Agreement may be waived with respect to all parties to this Agreement (either generally or in a particular instance and either retroactively or prospectively), with the written consent of the Company, the Purchasers who hold a majority of the then outstanding shares of Common Stock issued or issuable upon conversion of the Series B Preferred and the Purchasers who hold a majority of the then outstanding shares of Common Stock issued or issuable upon conversion of the Series C Preferred and the Series D Preferred, voting together as a single class on an as-converted to Common Stock basis; provided that any amendment, termination or waiver to the terms of Section 2 (or a defined term used therein) that occurs after the closing of the Initial Public Offering shall instead require the written consent of the Company and Purchasers holding Registrable Shares representing a majority of the voting power of all Registrable Shares then held by all Purchasers. Notwithstanding the foregoing, (a) this Agreement may not be amended or terminated and the observance of any term hereunder

may not be waived with respect to any Purchaser without the written consent of such Purchaser unless such amendment, termination or waiver applies to all Purchasers in the same fashion (it being agreed that a waiver of the provisions of Section 3 with respect to a particular transaction shall be deemed to apply to all Qualified Purchasers in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Qualified Purchasers may nonetheless, by agreement with the Company, purchase securities in such transaction), and (b) Exhibit A hereto may be amended by the Company from time to time in accordance with Section 2.2 of the Purchase Agreement to add information regarding Additional Purchasers (as defined therein) without the consent of the other parties hereto, (c) no amendments may be made with respect to Section 4.12 or Section 4.13 without the written consent of JJDC and (d) no amendments may be made with respect to the definition of "Major Investor," Section 2.8, Section 3.2, Section 4.4, Section 4.15, Section 5 and Section 7.11 without the written consent of Fidelity. The Company shall give prompt written notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination or waiver. Any amendment, termination or waiver effected in accordance with this Section 7.6 shall be binding on all parties hereto, even if they do not execute such consent. No waivers of or exceptions to any term, condition or provision of this Agreement, in any one or more instances, shall be deemed to be, or construed as, a further or continuing waiver of any such term, condition or provision.

7.7 Pronouns. Whenever the context may require, any pronouns used in this Agreement shall include the corresponding masculine, feminine or neuter forms, and the singular form of nouns and pronouns shall include the plural, and vice versa.

7.8 Counterparts; Facsimile Signatures. This Agreement may be executed in any number of counterparts (including, in the case of the Purchasers, Financing Signature Pages (as defined in the Purchase Agreement)), each of which shall be deemed to be an original, and all of which together shall constitute one and the same document. This Agreement (including the Financing Signature Pages) may be executed by facsimile or .pdf signatures.

7.9 Section Headings and References. The section headings are for the convenience of the parties and in no way alter, modify, amend, limit or restrict the contractual obligations of the parties. Any reference in this agreement to a particular section or subsection shall refer to a section or subsection of this Agreement, unless specified otherwise.

7.10 Additional Purchasers. Persons or entities that, after the date hereof, purchase Shares pursuant to the Purchase Agreement and become Additional Purchasers thereunder may, with the prior written approval of the Company (but without the need for approval by any other party to this Agreement), become parties to this Agreement by executing and delivering a Financing Signature Page, whereupon they shall be deemed "Purchasers" for all purposes of this Agreement.

7.11 Massachusetts Business Trust.

(a) A copy of the Agreement and Declaration of Trust of each Fidelity Purchaser or any affiliate thereof is on file with the Secretary of State of the Commonwealth of Massachusetts and notice is hereby given that this Agreement is executed on behalf of the trustees of such Fidelity Purchaser or any affiliate thereof as trustees and not individually and that the obligations of this Agreement are not binding on any of the trustees, officers or stockholders of such Fidelity Purchaser or any affiliate thereof individually but are binding only upon such Fidelity Purchaser or any affiliate thereof and its assets and property.

(b) A copy of the Agreement and Declaration of Trust of Janus Global Life Sciences Fund ("**Janus**"), or any affiliate thereof is on file with the Secretary of State of the Commonwealth of Massachusetts and notice is hereby given that this Agreement is executed on behalf of the trustees of Janus or any affiliate thereof as trustees and not individually and that the obligations of this Agreement are not binding on any of the trustees, officers or stockholders of Janus or any affiliate thereof individually but are binding only upon Janus or any affiliate thereof and its assets and property.

7.12 Amendment and Restatement of Prior Agreement. Upon effectiveness of this Agreement, the Prior Investor Rights Agreement shall be amended and restated to read in its entirety as set forth herein.

[Remainder of page intentionally left blank.]

Executed as of the date first written above.

COMPANY:

ADURO BIOTECH, INC.

/s/ Stephen T. Isaacs

By: Stephen T. Isaacs
President and Chief Executive Officer

INVESTOR:

For and on behalf of
MORNINGSIDE VENTURE (VI) INVESTMENTS LIMITED

By: /s/ Louise Mary Garbarino/Jill Marie Franklin

Name: Louise Mary Garbarino/Jill Marie Franklin

Title: Authorized Signatures

INVESTOR:

For and on behalf of
Ultimate Keen Limited

By: /s/ Hon Kit Bing/Li Choi Wan, Alice

Name: Hon Kit Bing/Li Choi Wan, Alice

Title: Authorized Signatures

INVESTOR:

By: /s/ David Kanne

Name: David Kanne

INVESTOR:

By: /s/ Harry Kraemer

Name: Harry Kraemer

INVESTOR:

By: /s/ John E. Rogers

Name: John E. Rogers

By: /s/ Lois A. Rogers

Name: Lois A. Rogers

INVESTOR:

By: /s/ John Foster

Name: John Foster

INVESTOR:

By: /s/ Barbara Gibian

Name: Barbara Gibian

INVESTOR:

By: /s/ Christopher Ray

Name: Christopher Ray

INVESTOR:

By: /s/ Thomas Gibian

Name: Thomas Gibian

INVESTOR:

By: /s/ Claes Glassell

Name: Claes Glassell

SIGNATURE PAGE TO ADURO BIOTECH, INC.
SIGNATURE PAGE TO ADURO BIOTECH, INC. INVESTOR RIGHTS AGREEMENTS

INVESTOR:

TRITON HOLDINGS LLC

By: /s/ Ross Haghighat

Name: Ross Haghighat

Title: Chief Executive Officer

SIGNATURE PAGE TO
ADURO BIOTECH, INC. AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

INVESTOR:

Fidelity Select Portfolios: Biotechnology Portfolio

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

INVESTOR:

Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

INVESTOR:

Fidelity Securities Fund: Fidelity OTC Portfolio

By: /s/ Stacie M. Smith
Name: Stacie M. Smith
Title: Authorized Signatory

INVESTOR:

Foresite Capital Fund II, LP

By: Foresight Capital Management II, LLC
Its: General Partner

By: /s/ Dennis D. Ryan
Name: Dennis D. Ryan
Title: CFO

INVESTOR:

Janus Global Life Sciences Fund

By: /s/ Andrew Acker
Name: Andrew Acker
Title: Portfolio Manager

INVESTOR:

By: OrbiMed Capital GP V LLC
Its: General Partner

By: OrbiMed Advisors LLC
Its: Managing Member

By: /s/ W. Carter Neild
Name: W. Carter Neild
Title: Member

INVESTOR:

Jennison Global Healthcare Master Fund, Ltd.

By: Jennison Associates LLC
Its: Investment Manager of Jennison Global Healthcare Master Fund, Ltd.

By: /s/ David Chan
Name: David Chan
Title: Managing Director

INVESTOR:

Clough Investment Partners I, L.P.

By: Clough Capital Partners L.P.,
Its: Investment Manager

By: /s/ John A. Ritacco, Jr.
Name: John A. Ritacco, Jr.
Title: Chief Financial Officer

INVESTOR:

Clough Investment Partners II, L.P.

By: Clough Capital Partners L.P.,
Its: Investment Manager

By: /s/ John A. Ritacco, Jr.
Name: John A. Ritacco, Jr.
Title: Chief Financial Officer

INVESTOR:

Clough Offshore Fund, Ltd.

By: Clough Capital Partners L.P.,
Its: Investment Manager

By: /s/ John A. Ritacco, Jr.
Name: John A. Ritacco, Jr.
Title: Chief Financial Officer

INVESTOR:

Clough Offshore Fund (QP), Ltd.

By: Clough Capital Partners L.P.,
Its: Investment Manager

By: /s/ John A. Ritacco, Jr.
Name: John A. Ritacco, Jr.
Title: Chief Financial Officer

INVESTOR:

Franklin Strategic Series-Franklin Biotechnology Discovery Fund

By: Franklin Advisers, Inc.
Its: Investment Manager

By: /s/ Evan McCulloch
Name: Evan McCulloch
Title: Vice President

INVESTOR:

Franklin Templeton Investment Funds-
Franklin Biotechnology Discovery Fund

By: Franklin Advisers, Inc.
Its: Investment Manager

By: /s/ Evan McCulloch
Name: Evan McCulloch
Title: Vice President

INVESTOR:

Rock Springs Capital Master Fund LP

By: Rock Springs GP LLC
Its: General Partner

By: /s/ Graham McPhail
Name: Graham McPhail
Title: Managing Director
Rock Springs Capital
650 S. Exeter St., Suite 1070
Baltimore, MD 21202

INVESTOR:

Leerink Holdings LLC

By: /s/ Timothy A. G. Gerhold
Name: Timothy A. G. Gerhold
Title: General Counsel

INVESTOR:

Leerink Swann Co-Investment Fund, LLC

By: /s/ Jeffrey A. Leerink
Name: Jeffrey A. Leerink
Title: Manager

INVESTOR:

MOSSROCK CAPITAL, LLC

By: /s/ Thomas Malley
Name: Thomas Malley
Title: President

INVESTOR:

By: /s/ Alan Auerbach
Name: Alan Auerbach

Exhibit A

List of Purchasers

Name and Address

David R. Fischell

Hearst Revocable Trust 3/3/89

Christopher Ray

John Foster

John E. and Lois A. Rogers

Stephen Isaacs

Triton Holdings LLC

David Clayton and Gayle DeKellis Trust

The Crocker Family Trust as amended on 4/1/2002

David Kanne

Thomas R. Gibian

Morningside Venture (VI) Investments Limited

Johnson & Johnson Development Corporation

Harry Kraemer

Barbara Gibian

Ultimate Keen Limited

Mag & Co fbo Fidelity Select Portfolios: Biotechnology Portfolio

Bangle & Co fbo Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund

Booth & Co fbo Fidelity Securities Fund: Fidelity OTC Portfolio

Foresite Capital Fund II, LP

BUOYBREEZE + CO

OrbiMed Private Investments V, LP

Jennison Global Healthcare Master Fund, Ltd.

Clough Investment Partners I, L.P.

Clough Investment Partners II, L.P.

Clough Offshore Fund, Ltd.

Clough Offshore Fund (QP), Ltd.

Hare & Co FBO/Franklin Strategic Series – Franklin Biotechnology Discovery Fund

Egger & Co FBO/Franklin Templeton Investment Funds – Franklin Biotechnology Discovery Fund

Rock Springs Capital Master Fund LP

Leerink Holdings, LLC

Leerink Swann Co-Investment Fund, LLC

Mossrock Capital, LLC

Alan Auerbach

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit 10.21

EXCLUSIVE LICENSE AGREEMENT

BETWEEN

THE JOHNS HOPKINS UNIVERSITY

&

ADURO BIOTECH

JHU Agreement: # -A19340

LICENSE AGREEMENT

THIS LICENSE AGREEMENT (the "Agreement") is entered into by and between THE JOHNS HOPKINS UNIVERSITY, a Maryland corporation having an address at 3400 N. Charles Street, Baltimore, Maryland, 21218-2695 ("JHU") and ADURO BIOTECH, a California corporation having an address at 626 Bancroft Way, Suite 3C, Berkeley, California 94710-2225 ("Company"), with respect to the following:

RECITALS

WHEREAS, as a center for research and education, JHU is interested in licensing PATENT RIGHTS (hereinafter defined) in a manner that will benefit the public by facilitating the distribution of useful products and the utilization of new processes, but is without capacity to commercially develop, manufacture, and distribute any such products or processes; and

WHEREAS, valuable inventions entitled "Development of Mesothelin-Specific Cancer Immunotherapy using an Ascitogenic Ovarian/Peritoneal Tumor Model" and "Control of Human Mesothelin-expressing Tumors By DNA Vaccines" (JHU Ref Nos. C04083 and C10013, respectively) were developed during the course of research conducted by Drs. Tzyy-Choou Wu, Ralph Hruban, Chien-Fu Hung, and Elizabeth Jaffee (all hereinafter, "Inventors"); and

WHEREAS, JHU has acquired through assignment all rights, title and interest, with the exception of certain retained rights by the United States Government, in its interest in said valuable inventions; and

WHEREAS, Company desires to obtain certain rights in such inventions as herein provided, and to commercially develop, manufacture, use and distribute products and processes based upon or embodying said valuable inventions throughout the United States;

NOW THEREFORE, in consideration of the premises and the mutual promises and covenants contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

ARTICLE 1
DEFINITIONS

All references to particular Exhibits, Articles or Paragraphs shall mean the Exhibits to, and Paragraphs and Articles of, this Agreement, unless otherwise specified. For the purposes of this Agreement and the Exhibits hereto, the following words and phrases shall have the following meanings:

1.1 "AFFILIATED COMPANY" as used herein in either singular or plural shall mean any corporation, company, partnership, joint venture or other entity, which controls, is controlled by or is under common control with Company. For purposes of this Paragraph 1.1, control shall mean the direct or indirect ownership of at least fifty percent (50%) of the securities or other ownership interests representing the equity, voting stock, general partnership or membership interest of such entity.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.2 "COMBINATION PRODUCT" shall mean any product that comprises a LICENSED PRODUCT and at least one other therapeutically active component that is not a LICENSED PRODUCT. For the avoidance of doubt, such other therapeutically active components do not include solvents, diluents, carriers, excipients, buffers or the like used in formulating a LICENSED PRODUCT.

1.3 "COMBINATION SERVICE" shall mean any service or method that comprises (a) a LICENSED SERVICE and that is provided in combination with one or more bacteria-based therapeutics and/or prophylactics, one or more of which may be a LICENSED PRODUCT, and also may be combined with one or more other service(s) which is not a LICENSED SERVICE, or (b) a combination of a LICENSED SERVICE and one or more other services.

1.4 "EFFECTIVE DATE" of this License Agreement shall mean the date the last party hereto has executed this Agreement.

1.5 "EXCLUSIVE LICENSE" shall mean a grant by JHU to Company of its entire right and interest in the PATENT RIGHTS subject to rights retained by the United States Government, if any, in accordance with the Bayh-Dole Act of 1980 (established by P.L. 96-517 and amended by P.L. 98-620, codified at 35 USC § 200 et. seq. and implemented according to 37 CFR Part 401), and subject to the retained right of JHU to make, have made, provide and use for its and The Johns Hopkins Health Systems' purposes LICENSED PRODUCT(S) and LICENSED SERVICE(S), including the ability to distribute any biological material disclosed and/or claimed in PATENT RIGHTS for nonprofit academic research use to non-commercial entities as is customary in the scientific community.

1.6 "FIRST COMMERCIAL SALE" shall mean, with respect to any LICENSED PRODUCT or LICENSED SERVICE and any country of the world, the first sale of such LICENSED PRODUCT or LICENSED SERVICE under this Agreement by Company, its AFFILIATED COMPANY, or SUBLICENSEE(S) to a non-affiliate third party in such country.

1.7 "LICENSED FIELD" shall mean all bacteria-based therapeutic and/or prophylactic uses for cancer treatment and/or prevention and all uses as a companion diagnostic for all bacteria-based, mesothelin-expressing cancer therapy or prophylaxis. For purposes of this Agreement, a "companion diagnostic" is defined as a test to assess the likelihood of efficacy before treatment and/or monitor the efficacy after treatment for any bacteria-based, mesothelin-expressing cancer therapy or prophylaxis.

1.8 "LICENSED PRODUCT(S)" as used herein in either singular or plural shall mean any process or method, material, compositions, drug, or other product, the manufacture, use or sale of which would constitute, but for the license granted to Company pursuant to this Agreement, an infringement of a VALID CLAIM of PATENT RIGHTS (infringement shall include, but is not limited to, direct, contributory, or inducement to infringe).

1.9 "LICENSED SERVICE(S)" as used herein in either singular or plural shall mean the performance on behalf of a third party of any method or the manufacture of any product or the use of any product or composition which would constitute, but for the license granted to Company pursuant to this Agreement, an infringement of a VALID CLAIM of the PATENT RIGHTS, (infringement shall include, but not be limited to, direct, contributory or inducement to infringe).

1.10 "NET SALES" shall mean gross sales revenues and fees billed by Company, AFFILIATED COMPANIES and SUBLICENSEES from the sale of LICENSED PRODUCTS less trade discounts or rebates allowed; refunds, returns and recalls; and sales, use, tariff, import/export duties, or other excise taxes invoiced to and/or paid by the purchaser of the such LICENSED PRODUCT. NET SALES of a COMBINATION PRODUCT sold by Company, its SUBLICENSEE(S) and/or its AFFILIATED COMPANIES shall be calculated by multiplying the NET SALES of the COMBINATION PRODUCT by the fraction A/A+B, where A is the number of all LICENSED PRODUCTS in the COMBINATION PRODUCT, and B is the number of all other therapeutically active components which are not LICENSED PRODUCTS in the COMBINATION PRODUCT.

1.11 "NET SERVICE REVENUES" shall mean gross service revenues and fees billed by Company, AFFILIATED COMPANIES and SUBLICENSEES for the performance of LICENSED SERVICES less trade discounts or rebates allowed; refunds; and sales and/or use taxes imposed upon and with specific reference to the LICENSED SERVICE. NET SERVICE REVENUES of a COMBINATION SERVICE sold by Company, its SUBLICENSEE(S) and/or its AFFILIATED COMPANIES consisting of one or more services and one or more bacteria-based therapeutics or prophylactics shall be calculated by: (i) subtracting the separately available price of such non-licensed service(s) and such bacteria-based therapeutic(s) and/or prophylactic(s) in the COMBINATION SERVICE from the NET SERVICE REVENUES; or (ii) if any component is not sold separately the parties agree to negotiate a reduction in the royalty rate to reflect the fair value that the LICENSED SERVICE contributes to the overall COMBINATION SERVICE sold based on the fraction of the fair value of all LICENSED PRODUCTS and SERVICES divided by the fair value of all products and services in the COMBINATION SERVICE. In the event that any bacteria-based therapeutic and/or prophylactic is a LICENSED PRODUCT, the NET SERVICE REVENUES for purposes of royalty payments shall be based on the sales revenues and fees received from sale of the entire COMBINATION SERVICE, provided however, that the running royalty hereunder shall be imposed only once with respect to the sale of a single unit of a LICENSED PRODUCT.

NET SERVICE REVENUES of a COMBINATION SERVICE sold by Company, its SUBLICENSEE(S) and/or its AFFILIATED COMPANIES consisting of one or more services shall be calculated by: (i) subtracting the separately available price of non-licensed services in the COMBINATION SERVICE from the NET SERVICE REVENUES; or (ii) if any service is not sold separately the parties agree to negotiate a reduction in the royalty rate to reflect the fraction of the fair value that the LICENSED SERVICE contributes to the overall COMBINATION SERVICE sold based on the fraction of the fair value of all LICENSED SERVICES divided by the fair value of all services in the COMBINATION SERVICE.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.12 "PATENT RIGHTS" shall mean (i) the U.S. Patent Applications listed in Exhibit A of this Agreement, each of which is assigned to JHU, and the inventions disclosed and claimed therein, and (ii) any patent or patent application claiming priority thereto or common priority therewith including all divisions, continuations-in-part (but only to the extent that the claims of each such continuation-in-part application are directed to subject matter specifically described in (i)) and continuations thereof, all U.S. patents issuing thereon and reissues, reexaminations, renewals and extensions thereof, any corresponding foreign patent applications, and any patents, or other equivalent foreign patent rights issuing, granted or registered thereon. Upon the written request of Company, JHU shall (or JHU shall instruct its outside legal counsel to) provide to Company a complete listing of the issued and applied-for PATENT RIGHTS outstanding at the time, including the status of any applications, divisions, continuations, reexaminations, reissues, renewals, or registrations then outstanding.

1.13 "PHASE II CLINICAL TRIAL" shall mean a human clinical trial, for which a primary endpoint is a preliminary determination of efficacy or dose ranges in patients with the disease target being studied as required in 21 C.F .R. § 312.2 1 (b), as may be amended from time to time, or a similar clinical study prescribed by the regulatory authorities in a market other than the United States.

1.14 "PHASE III CLINICAL TRIAL" shall mean an expanded human clinical trial performed after preliminary evidence suggesting effectiveness has been obtained from a PHASE II CLINICAL TRIAL, and intended to gather the additional information about effectiveness and safety that is needed to evaluate the overall benefit-risk relationship and to provide an adequate basis for physician labeling as required in 21 C.F .R. § 312.21 (c), or a similar clinical study prescribed by the regulatory authorities in a market other than the United States.

1.15 "REGULATORY APPROVAL" shall mean all approvals, including licenses, registrations, and authorizations, of all governmental agencies in a country necessary for the manufacture, use or sale of a LICENSED PRODUCT or LICENSED SERVICE in the applicable country. As used herein, REGULATORY APPROVAL shall not include pricing or reimbursement approval.

1.16 "SUBLICENSEE(S)" as used herein in either singular or plural shall mean any person or entity other than an AFFILIATED COMPANY to which Company has granted a sublicense under this Agreement. SUBLICENSEE(S) shall also include any person or entity to which Company's SUBLICENSEE(S) has granted a sublicense subject to JHU's approval and the conditions hereunder.

1.17 "TERRITORY" shall mean world-wide.

1.18 "VALID CLAIM" shall mean those claims of a patent or patent application in any country that (i) has not expired; (ii) has not been disclaimed; (iii) has not been revoked, held

invalid, or otherwise declared unenforceable or not allowable by a tribunal or patent authority of competent jurisdiction over such claim in such country from which no further appeal has or may be taken; and (iv) in the case of a pending application was filed and is being prosecuted in good faith towards allowance.

ARTICLE 2
LICENSE GRANT

2.1 Grant. Subject to the terms and conditions of this Agreement, JHU hereby grants to Company an EXCLUSIVE LICENSE to make, have made, use, import, offer for sale, sell and have sold the LICENSED PRODUCT(S) and to provide the LICENSED SERVICE(S) in the TERRITORY under the PATENT RIGHTS in the LICENSED FIELD. This Grant shall apply to the Company and any AFFILIATED COMPANY, except that any AFFILIATED COMPANY shall not have the right to sublicense others as set forth in Paragraph 2.2 below. If any AFFILIATED COMPANY exercises rights under this Agreement, such AFFILIATED COMPANY shall be bound by all terms and conditions of this Agreement, including but not limited to indemnity and insurance provisions and royalty payments, which shall apply to the exercise of the rights, to the same extent as would apply had this Agreement been directly between JHU and the AFFILIATED COMPANY. In addition, Company shall remain fully liable to JHU for all acts and obligations of AFFILIATED COMPANY such that acts of the AFFILIATED COMPANY shall be considered acts of the Company.

2.2 Sublicense. Company may sublicense the rights granted by JHU under Paragraph 2.1 to others under this Agreement and may extend the right to further sublicense the rights delivered hereunder to its SUBLICENSEE(S), subject to the terms and conditions of this Paragraph 2.2 and subject to JHU's prior written approval of the sublicense agreement(s). Such approval shall not be unreasonably withheld. As a condition to its validity and enforceability, each sublicense agreement shall: (a) incorporate by reference the terms and conditions of this Agreement, (b) be consistent with the terms, conditions and limitations of this Agreement, (c) name JHU as an intended third party beneficiary of the obligations of SUBLICENSEE without imposition of obligation or liability on the part of JHU or its Inventors to the SUBLICENSEE, and (d) specifically incorporate Paragraphs 6.2 "Representations by JHU", 7.1 "Indemnification", 10.1 "Use of Name", 10.4 "Product Liability" into the body of the sublicense agreement, and cause the terms used in therein to have the same meaning as in this Agreement. Company and its SUBLICENSEE(S) shall provide to JHU each proposed sublicense agreement, executed by both Company and SUBLICENSEE. To the extent that any terms, conditions or limitations of any sublicense agreement are inconsistent with this Agreement, those terms, conditions and limitations are null and void against JHU. Upon receipt of a sublicense agreement from Company, JHU shall have **[*]** days to indicate whether or not JHU approves such sublicense agreement in accordance with this Paragraph 2.2. JHU's failure to provide timely notice in this regard shall be considered approval of the applicable sublicense agreement.

2.3 Government Rights. The United States Government may have acquired a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the inventions described in PATENT RIGHTS throughout the world.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

The rights granted herein are additionally subject to: (i) the requirement that any LICENSED PRODUCT(S) produced for use or sale within the United States shall be substantially manufactured in the United States (unless a waiver under 35 USC § 204 or equivalent is granted by the appropriate United States government agency), (ii) the right of the United States government to require JHU, or its licensees, including Company, to grant sublicenses to responsible applicants on reasonable terms when necessary to fulfill health or safety needs, and, (iii) other rights acquired by the United States government under the laws and regulations applicable to the grant/contract award under which the inventions were made.

ARTICLE 3
FEES, ROYALTIES, & PAYMENTS

3.1 License Fee. Company shall pay to JHU a license fee as set forth in Exhibit B (the "License Fee") upon the earlier of **[*]** days following the EFFECTIVE DATE or **[*]** days following the EFFECTIVE DATE and completion of an equity financing in which Company receives at least **[*]**. JHU will not submit an invoice for the License Fee, which is nonrefundable and shall not be credited against royalties or other fees. Company's obligation to pay the License Fee shall survive termination of this Agreement.

3.2 Milestones License Fees. In addition to the license fee as set forth in Paragraph 3.1, Company shall pay to JHU certain milestone license fees for the achievement of the applicable milestones by Company, AFFILIATED COMPANIES or SUBLICENSEES, as set forth in Exhibit B (the "Milestone License Fees"). For those milestones achieved by Company or AFFILIATED COMPANIES, Company shall pay to JHU the applicable Milestone License Fee(s) within **[*]** days of such achievement, and for those milestones achieved by SUBLICENSEES, Company shall pay to JHU the applicable Milestone License Fee(s) within **[*]** days of such achievement.

3.3 Minimum Annual Royalties. Company shall pay to JHU minimum annual royalties as set forth in Exhibit B (the "Minimum Annual Royalties"). These Minimum Annual Royalties shall be due, without invoice from JHU, within **[*]** days of each anniversary of the EFFECTIVE DATE beginning with the first anniversary. Running royalties accrued under Paragraph 3.4 and paid to JHU during the one (1) year period preceding an anniversary of the EFFECTIVE DATE shall be credited against the Minimum Annual Royalties due on that anniversary date. The amount of all Minimum Annual Royalties paid for any year in excess of the actual running royalties for such year shall be carried forward and credited against running royalties owed in future years.

3.4 Running Royalties. Company shall pay to JHU a running royalty as set forth in Exhibit B, for each LICENSED PRODUCT(S) sold, and for each LICENSED SERVICE(S) provided, by Company, AFFILIATED COMPANIES and SUBLICENSEE(S), based on NET SALES and NET SERVICE REVENUES for the term of this Agreement, except as provided below. Such payments shall be made quarterly.

All non-US taxes due on payments to JHU under this Agreement shall be paid by Company and shall not be deducted from royalty or other payments due to JHU. In the event that any amounts are required under law to be withheld from royalty or other payments otherwise due to JHU, Company shall notify JHU, provide to JHU appropriate documentation of such requirement, use reasonable commercial efforts to provide all forms, documents, and/or other information necessary to eliminate the withholding or reduce any taxes payable pursuant to this Paragraph or necessary to establish JHU's right to a tax credit in respect of any such taxes, only then shall Company withhold the appropriate amount of withholding taxes imposed hereunder, and pay such taxes on behalf of JHU. Company shall provide JHU with receipts or certificates showing the payment of the amounts withheld pursuant to this Paragraph. Any other taxes (other than any due on payments to JHU by Company) levied by any authorities in the TERRITORY shall be treated as described in Paragraphs 1.10 and 1.11 herein as appropriate.

In order to insure JHU the full royalty payments contemplated hereunder, Company agrees that in the event any LICENSED PRODUCT(S) shall be sold to an AFFILIATED COMPANY or SUBLICENSEE(S) or to a corporation, firm or association with which Company shall have any agreement, understanding or arrangement with respect to consideration (such as, among other things, an option to purchase stock or actual stock ownership, or an arrangement involving division of profits or special rebates or allowances) the royalties to be paid hereunder for such LICENSED PRODUCT(S) shall be based upon the greater of: 1) the net selling price (per NET SALES) at which the purchaser of LICENSED PRODUCT(S) resells such product to the end user, 2) the NET SERVICE REVENUES received from using the LICENSED PRODUCT(S) in providing a service, 3) the fair market value of the LICENSED PRODUCT(S) or 4) the net selling price (per NET SALES) of LICENSED PRODUCT(S) paid by the purchaser.

3.5 Sublicense Consideration. In addition to the running royalty as set forth under Paragraph 3.4, Company shall pay to JHU a share of the cash value of compensation received in consideration for the grant of a sublicense of the rights granted herein as set forth in Exhibit B ("Sublicense Consideration"). Sublicense Consideration shall be due, without the need for invoice from JHU, within **[*]** days of Company's receipt of sublicensing income from its SUBLICENSEE. Company shall pay to JHU a share of all sublicensing income, including licensing fees, milestone payments, equity investments in Company to the extent such investments exceed **[*]** of Fair Market Value (as defined herein below), and any other sublicensing revenue, excluding running royalty received from SUBLICENSEE, debt financing, equity investments at or below **[*]** of Fair Market Value (as defined herein below), payments or other consideration for research contracts or development, sales and/or marketing activities, and reimbursement for patent costs or milestones payable to JHU under this Agreement. Company will provide all relevant information in its possession regarding exclusions from Sublicense Consideration which is not the confidential information of a third party, including, but not limited to, copies of research contracts or other contracts with a performance plan and commensurate budget for research, development, sales and/or marketing activities to be performed by Company, providing that the absence of such information shall not preclude exclusion from Sublicense Consideration.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

In the event that equity in lieu of cash or other consideration is received by Company in return for granting a sublicense, Company shall either arrange for JHU's share of such equity to be issued directly to JHU and in the name of "The Johns Hopkins University" or Company shall pay in cash to JHU the Fair Market Value, as defined below, of JHU's share of such equity. The term "Fair Market Value" shall mean (i) if the stock is publicly traded, the average price that the stock in question is publicly trading at for **[*]** days prior to the announcement of the sublicense agreement, or (ii) if the stock is not publicly traded, the value of such stock as determined by an independent appraisal, including an average of up to three appraisals, prepared by an outside party or parties at Company's expense and which is reasonably acceptable to both the Company and to JHU.

3.6 Patent Reimbursement. Company will reimburse JHU for the reasonable, unreimbursed past costs associated with preparing, filing, maintaining and prosecuting PATENT RIGHTS within the LICENSED FIELD incurred by JHU on or before the EFFECTIVE DATE of this Agreement, not to exceed **[*]** and excluding all costs previously paid by another licensee. Company shall reimburse JHU upon the earlier of **[*]** days following the EFFECTIVE DATE and receipt of an invoice from JHU or **[*]** days after the EFFECTIVE DATE and completion of an equity financing in which Company receives at least **[*]**). In accordance with Paragraph 4.1 below, Company will reimburse JHU, within **[*]** days of the receipt of an invoice from JHU, for all costs associated with the preparation, filing, maintenance, and prosecution of PATENT RIGHTS incurred by JHU subsequent to the EFFECTIVE DATE of this Agreement.

3.7 Form of Payment. All payments under this Agreement shall be made in U.S. Dollars by either check or wire transfer.

3.8 Payment Information. All check payments from Company to JHU shall be sent to:

Executive Director
Johns Hopkins Technology Transfer
The Johns Hopkins University
100 N. Charles Street, 5th Floor
Baltimore, MD 21201
Attn: JHU Agreement # A19340

or such other addresses which JHU may designate in writing from time to time. Checks are to be made payable to "The Johns Hopkins University". Wire transfers may be made through:

[*]
Transit/Routing/ABA number: **[*]**
SWIFT code: **[*]**
CHIPS ABA number: **[*]**
Account Number: **[*]**
Type of Account: **[*]**

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Reference: Johns Hopkins Technology Transfer
(JHU Agreement Ref. # - A19340)
Attn: Financial Manager

ACH info:

[*]
Transit/routing/ABA number: **[*]**
Account number: **[*]**
Type of account: **[*]**
(CTX format is preferred; CCD+ is also accepted)

Company shall provide notice of the date and amount of all ACH payments to JHU's Financial Manager by email or telephone. Company shall be responsible for any and all costs associated with wire transfers.

3.9 Late Payments. In the event that any payment due hereunder is not made when due, the payment shall accrue interest beginning on the **[*]** day following the due date thereof, calculated at the annual rate of the sum of (a) **[*]** plus (b) the prime interest rate quoted by The Wall Street Journal on the date said payment is due, the interest being compounded on the last day of each calendar quarter, provided however, that in no event shall said annual interest rate exceed the maximum legal interest rate for corporations. Each such payment when made shall be accompanied by all interest so accrued. Said interest and the payment and acceptance thereof shall not negate or waive the right of JHU to seek any other remedy, legal or equitable, to which it may be entitled because of the delinquency of any payment including, but not limited to termination of this Agreement as set forth in Paragraph 9.2.

ARTICLE 4
PATENT PROSECUTION, MAINTENANCE, & INFRINGEMENT

4.1 Prosecution & Maintenance. JHU, at Company's expense, shall file, prosecute and maintain all patents and patent applications specified under PATENT RIGHTS in the LICENSED FIELD and, subject to the terms and conditions of this Agreement, Company shall be licensed thereunder. Title to all such patents and patent applications shall reside in JHU. JHU shall have full and complete control over all patent matters in connection therewith under the PATENT RIGHTS, provided however, that JHU shall (a) cause its patent counsel to timely copy Company on all official actions and written correspondence with any patent office, and (b) allow Company a reasonable opportunity to comment and advise JHU. JHU shall consider and reasonably incorporate all comments and advice. By concurrent written notification to JHU and its patent counsel at least **[*]** days in advance (or later at JHU's discretion) of any filing or response deadline, or fee due date, Company may elect not to have a patent application filed in any particular country or not to pay expenses associated with prosecuting or maintaining any patent application or patent, provided that Company pays for all costs incurred up to JHU's receipt of such notification. Failure to provide such notification can be considered by JHU to be Company's authorization to proceed at Company's expense. Upon such notification, JHU may file, prosecute, and/or maintain such patent applications or patent at its own expense and for its

own benefit, and any rights or license granted hereunder held by Company, AFFILIATED COMPANIES or SUBLICENSEE(S) relating to the PATENT RIGHTS which comprise the subject of such patent applications or patent and/or apply to the particular country, shall terminate.

4.2 Notification. Each party will notify the other promptly in writing when any infringement by another is uncovered or suspected.

4.3 Infringement. Company shall have the first right to enforce any patent within PATENT RIGHTS against any infringement or alleged infringement thereof, and shall at all times keep JHU informed as to the status thereof. Before Company commences an action with respect to any infringement of such patents, Company shall give careful consideration to the views of JHU and to potential effects on the public interest in making its decision whether or not to sue. Thereafter, Company may, at its own expense, institute suit against any such infringer or alleged infringer and control and defend such suit in a manner consistent with the terms and provisions hereof and recover any damages, awards or settlements resulting therefrom, subject to Paragraph 4.5. However, no settlement, consent judgment or other voluntary final disposition of the suit may be entered into without the prior written consent of JHU, which consent shall not be unreasonably withheld. This right to sue for infringement shall not be used in an arbitrary or capricious manner. JHU shall reasonably cooperate in any such litigation at Company's expense, including by allowing itself to be joined as a party of such litigation if required for purposes of standing.

If Company elects not to enforce any patent within the PATENT RIGHTS, then it shall so notify JHU in writing within **[*]** days of receiving notice that an infringement exists, and JHU may, in its sole judgment and at its own expense, take steps to enforce any patent and control, settle, and defend such suit in a manner consistent with the terms and provisions hereof, and recover, for its own account, any damages, awards or settlements resulting therefrom.

4.4 Patent Invalidity Suit. If a declaratory judgment action is brought naming Company as a defendant and alleging invalidity of any of the PATENT RIGHTS, JHU may elect to take over the sole defense of the action at its own expense. Company shall cooperate fully with JHU in connection with any such action.

4.5 Recovery. Any recovery of ordinary (non-punitive) damages by Company under Paragraph 4.3 shall be deemed to reflect loss of commercial sales, and Company shall pay to JHU an amount calculated by applying the royalty rate defined in Section 3.4 to the non-punitive damages of the recovery net of all reasonable costs and expenses associated with each suit or settlement. In the event a court awards punitive damages to Company in addition to ordinary damages, Company shall pay to JHU **[*]** of such punitive damages net of all reasonable costs and expenses associated with each suit or settlement. If the cost and expenses exceed the recovery, then **[*]** of the excess shall be credited against royalties payable by Company to JHU hereunder in connection with sales of LICENSED PRODUCT covered in the PATENT RIGHTS which are the subject of the infringement suit, in the country of such legal proceedings, provided, however, that any such credit under this Paragraph shall not exceed **[*]** of the royalties otherwise payable to JHU with regard to sales in the country of such action in any one calendar year, with any excess credit being carried forward to future calendar years.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE 5
OBLIGATIONS OF THE PARTIES

5.1 Reports. Company shall provide to JHU the following written reports according to the following schedules.

(a) Company shall provide quarterly Royalty Reports, substantially in the format of Exhibit C and due within **[*]** days of the end of each calendar quarter following the EFFECTIVE DATE of this Agreement. Royalty Reports shall disclose the amount of LICENSED PRODUCT(S) and LICENSED SERVICE(S) sold, the total NET SALES and NET SERVICE REVENUES of such LICENSED PRODUCT(S) and LICENSED SERVICE(S), and the running royalties due to JHU as a result of NET SALES and NET SERVICE REVENUES by Company, AFFILIATED COMPANIES and SUBLICENSEE(S) thereof. Payment of any such royalties due shall accompany such Royalty Reports.

(b) Until Company, an AFFILIATED COMPANY or a SUBLICENSEE(S) has achieved a FIRST COMMERCIAL SALE of a LICENSED PRODUCT or LICENSED SERVICE, or received FDA market approval, Company shall provide semiannual Diligence Reports, due within **[*]** days of the end of every June and December following the EFFECTIVE DATE of this Agreement. These Diligence Reports shall describe Company's, AFFILIATED COMPANIES or any SUBLICENSEE(S)'s technical efforts towards meeting its obligations under the terms of this Agreement.

(c) Company shall provide Annual Reports within **[*]** days of the end of every December following the EFFECTIVE DATE of this Agreement. Annual Reports shall include:

(i) evidence of insurance as required under Paragraph 10.4, or, a statement of why such insurance is not currently required, and

(ii) identification of all AFFILIATED COMPANIES which have exercised rights pursuant to Paragraph 2.1, or, a statement that no AFFILIATED COMPANY has exercised such rights, and

(iii) notice of all FDA approvals of any LICENSED PRODUCT(S) or LICENSED SERVICE(S) obtained by COMPANY, AFFILIATED COMPANY or SUBLICENSEE, the patent(s) or patent application(s) licensed under this Agreement upon which such product or service is based, and the commercial name of such product or service, or, in the alternative, a statement that no FDA approvals have been obtained.

5.2 Records. Company shall make and retain, for a period of **[*]** years following the period of each report required by Paragraph 5.1, true and accurate records, files and books of account containing all the data reasonably required for the full computation and verification of sales and other information required in Paragraph 5.1. Such books and records shall be in accordance with generally accepted accounting principles consistently applied. Company shall

permit the inspection and copying of such records, files and books of account by JHU or its agents during regular business hours upon **[*]** business days' written notice to Company. Such inspection shall not be made more than once each calendar year. All costs of such inspection and copying shall be paid by JHU, provided that if any such inspection shall reveal that an error has been made in the amount equal to **[*]** or more of such payment, such costs shall be borne by Company. As a condition to entering into any such agreement, Company shall include in any agreement with its AFFILIATED COMPANIES or its SUBLICENSEE(S) which permits such party to make, use, sell or import the LICENSED PRODUCT(S) or provide LICENSED SERVICE(S), a provision requiring such party to retain records of sales of LICENSED PRODUCT(S) and records of LICENSED SERVICE(S) and other information as required in Paragraph 5.1 and permit JHU to inspect such records as required by this Paragraph.

5.3 Efforts. Company shall exercise commercially reasonable efforts to develop and to introduce the LICENSED PRODUCT(S) and LICENSED SERVICE(S) into the commercial market as soon as practicable, consistent with sound and reasonable business practice and judgment; thereafter, until the expiration or termination of this Agreement, Company shall endeavor to keep LICENSED PRODUCT(S) and LICENSED SERVICE(S) reasonably available to the public. Company shall also exercise commercially reasonable efforts to develop LICENSED PRODUCT(S) suitable for different indications within the LICENSED FIELD, so that the PATENT RIGHTS can be commercialized as broadly and as speedily as good scientific and business judgment would deem possible.

5.4 Developmental Obligations. Commercially reasonable efforts shall be demonstrated, among other ways, by the achievement of the following the following events within the specified time from the EFFECTIVE DATE:

Event	Date
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**

In the event that unforeseen circumstances prevent the Company from achieving a diligence milestone, the Company and JHU will agree to discuss alternative commercially reasonable milestones. Company shall provide JHU with notice, as provided hereunder in Paragraph 10.6, within **[*]** days of achieving each diligence milestone.

5.5 Other Products. If JHU provides the Company in writing with clinical or other compelling evidence demonstrating a significant commercial opportunity within the LICENSED FIELD which is not being developed or commercialized by Company, Company shall make reasonable efforts either to provide JHU with a development plan and start development or

attempt to sublicense the particular market or use to a third party. If within **[*]** months of such notification by JHU, Company has not initiated reasonable efforts to develop or sublicense that particular significant commercial opportunity, JHU may terminate this license for such particular significant commercial opportunity. This Paragraph shall not be applicable if Company reasonably demonstrates to JHU that commercializing such LICENSED PRODUCT(S) or LICENSED SERVICE(S) or granting such a sublicense in said market or use would have a potentially adverse commercial effect upon marketing or sales of the LICENSED PRODUCT(S).

5.6 Patent Acknowledgement. Company agrees that all packaging containing individual LICENSED PRODUCT(S) sold by Company, AFFILIATED COMPANIES and SUBLICENSEE(S) of Company will be marked with the number of the applicable patent(s) licensed hereunder in accordance with each country's patent laws.

ARTICLE 6
REPRESENTATIONS

6.1 Duties of the Parties. JHU is not a commercial organization. It is an institute of research and education. Therefore, JHU has no ability to evaluate the commercial potential of any PATENT RIGHTS or LICENSED PRODUCT or other license or rights granted in this Agreement. It is therefore incumbent upon Company to evaluate the rights and products in question, to examine the materials and information provided by JHU, and to determine for itself the validity of any PATENT RIGHTS, its freedom to operate, and the value of any LICENSED PRODUCTS or SERVICES or other rights granted.

6.2 Representations by JHU. JHU warrants that it has good and marketable title to its interest in the inventions claimed under PATENT RIGHTS with the exception of certain retained rights of the United States Government, which may apply if any part of the JHU research was funded in whole or in part by the United States Government. JHU does not warrant the validity of any patents or that practice under such patents shall be free of infringement. EXCEPT AS EXPRESSLY SET FORTH IN THIS PARAGRAPH 6.2, COMPANY, AFFILIATED COMPANIES AND SUBLICENSEE(S) AGREE THAT THE PATENT RIGHTS ARE PROVIDED "AS IS", AND THAT JHU MAKES NO REPRESENTATION OR WARRANTY WITH RESPECT TO THE PERFORMANCE OF LICENSED PRODUCT(S) AND LICENSED SERVICE(S) INCLUDING THEIR SAFETY, EFFECTIVENESS, OR COMMERCIAL VIABILITY. JHU DISCLAIMS ALL WARRANTIES WITH REGARD TO PRODUCT(S) AND SERVICE(S) LICENSED UNDER THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, ALL WARRANTIES, EXPRESSED OR IMPLIED, OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, JHU ADDITIONALLY DISCLAIMS ALL OBLIGATIONS AND LIABILITIES ON THE PART OF JHU AND INVENTORS, FOR DAMAGES, INCLUDING, BUT NOT LIMITED TO, DIRECT, INDIRECT, SPECIAL, AND CONSEQUENTIAL DAMAGES, ATTORNEYS' AND EXPERTS' FEES, AND COURT COSTS (EVEN IF JHU HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, FEES OR COSTS), ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, USE, OR SALE OF THE PRODUCT(S) AND

SERVICE(S) LICENSED UNDER THIS AGREEMENT. COMPANY, AFFILIATED COMPANIES AND SUBLICENSEE(S) ASSUME ALL RESPONSIBILITY AND LIABILITY FOR LOSS OR DAMAGE CAUSED BY A PRODUCT AND/OR SERVICE MANUFACTURED, USED, OR SOLD BY COMPANY, ITS SUBLICENSEE(S) AND AFFILIATED COMPANIES WHICH IS A LICENSED PRODUCT(S) OR LICENSED SERVICE(S) AS DEFINED IN THIS AGREEMENT.

ARTICLE 7
INDEMNIFICATION

7.1 Indemnification. Company, AFFILIATED COMPANY and SUBLICENSEE shall indemnify, defend with counsel reasonably acceptable to JHU, and hold JHU, The Johns Hopkins Health Systems, their present and former trustees, officers, Inventors of PATENT RIGHTS, agents, faculty, employees and students harmless as against any judgments, fees, expenses, or other costs arising from or incidental to any product liability or other lawsuit, claim, demand or other action brought as a consequence of the practice of said inventions by any of the foregoing entities, whether or not JHU or said Inventors, either jointly or severally, is named as a party defendant in any such lawsuit and whether or not JHU or the Inventors are alleged to be negligent or otherwise responsible for any injuries to persons or property. Practice of the inventions covered by LICENSED PRODUCT(S) and LICENSED SERVICE(S), by an AFFILIATED COMPANY or an agent or a SUBLICENSEE(S) or a third party on behalf of or for the account of Company or by a third party who purchases LICENSED PRODUCT(S) and LICENSED SERVICE(S) from Company, shall be considered Company's practice of said inventions for purposes of this Paragraph. The obligation of Company to defend and indemnify as set out in this Paragraph shall survive the termination of this Agreement, shall continue even after assignment of rights and responsibilities to an affiliate or sublicensee, and shall not be limited by any other limitation of liability elsewhere in this Agreement.

7.2 Indemnity Procedure. Any Indemnitee seeking indemnification under this Agreement shall promptly notify Company of any claim, demand, action or other proceeding for which such Indemnitee intends to claim such indemnification. Company shall have the right to participate in consideration by the Indemnitee of the financial aspect only of the settlement of any claim, demand, action or other proceeding, but Company may not unreasonably withhold or delay approval of the financial aspect of any settlement. The failure of the Indemnitee to deliver notice to Company within a reasonable time after actual notice of any such claim or demand, or the commencement of any such action or other proceeding, if materially prejudicial to the ability to defend such claim, demand, action or other proceeding, shall relieve Company of any liability under this Section 7 with respect thereto. Each Indemnitee, its employees and agents, shall reasonably cooperate with Company and its legal representatives in the investigation of any claim, demand, action or other proceeding covered by this Section 7 at the expense of Company.

ARTICLE 8
CONFIDENTIALITY

8.1 Confidentiality. If necessary, the parties will exchange information, which they consider to be confidential. The recipient of such information agrees to accept the disclosure of

said information which is marked as confidential at the time it is sent to the recipient, and to employ all reasonable efforts to maintain the information secret and confidential, such efforts to be no less than the degree of care employed by the recipient to preserve and safeguard its own confidential information. The information shall not be disclosed or revealed to anyone except employees of the recipient who have a need to know the information and who have entered into a secrecy agreement with the recipient under which such employees are required to maintain confidential the proprietary information of the recipient and such employees shall be advised by the recipient of the confidential nature of the information and that the information shall be treated accordingly.

The obligations of this Paragraph 8.1 shall also apply to AFFILIATED COMPANIES and/or SUBLICENSEE(S) provided such information by Company. JHU's, Company's, AFFILIATED COMPANIES, and SUBLICENSEES' obligations under this Paragraph 8.1 shall extend until **[*]** years after the termination of this Agreement.

8.2 Exceptions. The recipient's obligations under Paragraph 8.1 shall not extend to any part of the information:

a. that can be demonstrated to have been in the public domain or publicly known and readily available to the trade or the public prior to the date of the disclosure; or

b. that can be demonstrated, from written records to have been in the recipient's possession or readily available to the recipient from another source not under obligation of secrecy to the disclosing party prior to the disclosure; or

c. that becomes part of the public domain or publicly known by publication or otherwise, not due to any unauthorized act by the recipient; or

d. that is demonstrated from written records to have been developed by or for the receiving party without reference to confidential information disclosed by the disclosing party.

e. that is required to be disclosed by law, government regulation or court order.

8.3 Right to Publish. JHU may publish manuscripts, abstracts or the like describing the PATENT RIGHTS and inventions contained therein provided confidential information of Company as defined in Paragraph 8.1, is not included or without first obtaining approval from Company to include such confidential information. Otherwise, JHU and the Inventors shall be free to publish manuscripts and abstracts or the like directed to the work done at JHU related to the licensed technology without prior approval.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE 9
TERM & TERMINATION

9.1 Term. The term of this Agreement shall commence on the EFFECTIVE DATE and shall continue, in each country, until the date of expiration of the last to expire patent included within PATENT RIGHTS in that country or if no patents issue then for a term of twenty (20) years from the EFFECTIVE DATE of this Agreement.

9.2 Termination By Either Party. This Agreement may be terminated by either party, in the event that the other party (a) files or has filed against it a petition under the Bankruptcy Act, makes an assignment for the benefit of creditors, has a receiver appointed for it or a substantial part of its assets, or otherwise takes advantage of any statute or law designed for relief of debtors or (b) fails to perform or otherwise breaches any of its obligations hereunder, if, following the giving of notice by the terminating party of its intent to terminate and stating the grounds therefor, the party receiving such notice shall not have cured the failure or breach within thirty (30) days. In no event, however, shall such notice or intention to terminate be deemed to waive any rights to damages or any other remedy which the party giving notice of breach may have as a consequence of such failure or breach.

9.3 Termination by Company. Company may terminate this Agreement and the license granted herein, for any reason, upon giving JHU ninety (90) days written notice.

9.4 Obligations and Duties upon Termination. If this Agreement is terminated, both parties shall be released from all obligations and duties imposed or assumed hereunder to the extent so terminated, except as expressly provided to the contrary in this Agreement. Upon termination, both parties shall cease any further use of the confidential information disclosed to the receiving party by the other party. Termination of this Agreement, for whatever reason, shall not affect the obligation of either party to make any payments for which it is liable prior to or upon such termination. Termination shall not affect JHU's right to recover unpaid royalties, fees, reimbursement for patent expenses, or other forms of financial compensation incurred prior to termination. Upon termination Company shall submit a final royalty report to JHU and any royalty payments, fees, unreimbursed patent expenses and other financial compensation due JHU shall become immediately payable. Furthermore, upon termination of this Agreement, all rights in and to the licensed technology shall revert immediately to JHU at no cost to JHU. Upon termination of this Agreement, any SUBLICENSEE(S) shall become a direct licensee of JHU, provided that JHU's obligations to SUBLICENSEE(S) are no greater than JHU's obligations to Company under this Agreement. Company shall provide written notice of such to each SUBLICENSEE(S) with a copy of such notice provided to JHU.

ARTICLE 10
MISCELLANEOUS

10.1 Use of Name. Company, AFFILIATED COMPANIES and SUBLICENSEE(S) shall not use the name of The Johns Hopkins University or The Johns Hopkins Health System or any of its constituent parts, such as the Johns Hopkins Hospital or any contraction thereof or the

name of Inventors in any advertising, promotional, sales literature or fundraising documents without prior written consent from an authorized representative of JHU. Company, AFFILIATED COMPANIES and SUBLICENSEE(S) shall allow at least seven (7) business days notice of any proposed public disclosure for JHU's review and comment or to provide written consent.

10.2 No Partnership. Nothing in this Agreement shall be construed to create any agency, employment, partnership, joint venture or similar relationship between the parties other than that of a licensor/licensee. Neither party shall have any right or authority whatsoever to incur any liability or obligation (express or implied) or otherwise act in any manner in the name or on the behalf of the other, or to make any promise, warranty or representation binding on the other.

10.3 Notice of Claim. Each party shall give the other or its representative immediate notice of any suit or action filed, or prompt notice of any claim made, against them arising out of the performance of this Agreement or arising out of the practice of the inventions licensed hereunder.

10.4 Product Liability. Prior to initial human testing or FIRST COMMERCIAL SALE of any LICENSED PRODUCT(S) or LICENSED SERVICE(S) as the case may be in any particular country, Company shall establish and maintain, in each country in which Company, an AFFILIATED COMPANY or SUBLICENSEE(S) shall test or sell LICENSED PRODUCT(S) and LICENSED SERVICE(S), product liability or other appropriate insurance coverage in the minimum amount of Five Million Dollars ($5,000,000) per claim and will annually present evidence to JHU that such coverage is being maintained. Upon JHU's request, Company will furnish JHU with a Certificate of Insurance of each product liability insurance policy obtained. JHU shall be listed as an additional insured in Company's said insurance policies. If such Product Liability insurance is underwritten on a 'claims made' basis, Company agrees that any change in underwriters during the term of this Agreement will require the purchase of 'prior acts' coverage to ensure that coverage will be continuous throughout the term of this Agreement.

10.5 Governing Law. This Agreement shall be construed, and legal relations between the parties hereto shall be determined, in accordance with the laws of the State of Maryland applicable to contracts solely executed and wholly to be performed within the State of Maryland without giving effect to the principles of conflicts of laws. Any disputes between the parties to the Agreement shall be brought in the state or federal courts of Maryland. Both parties agree to waive their right to a jury trial.

10.6 Notice. All notices or communication required or permitted to be given by either party hereunder shall be deemed sufficiently given if mailed by registered mail or certified mail, return receipt requested, or sent by overnight courier, such as Federal Express, to the other party at its respective address set forth below or to such other address as one party shall give notice of to the other from time to time hereunder. Mailed notices shall be deemed to be received on the third business day following the date of mailing. Notices sent by overnight courier shall be deemed received the following business day.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

If to Company: Aduro BioTech
626 Bancroft Way, Suite 3C
Berkeley, CA 94710-2225
Attn: Chief Executive Officer

If to JHU: Executive Director
Johns Hopkins Technology Transfer
The Johns Hopkins University
100 N. Charles Street
5th Floor
Baltimore, MD 21201
Attn: Agreement # A19340

10.7 Compliance with All Laws. In all activities undertaken pursuant to this Agreement, both JHU and Company covenant and agree that each will in all material respects comply with such Federal, state and local laws and statutes, as may be in effect at the time of performance and all valid rules, regulations and orders thereof regulating such activities.

10.8 Successors and Assigns. Neither this Agreement nor any of the rights or obligations created herein, except for the right to receive any remuneration hereunder, may be assigned by either party, in whole or in part, without the prior written consent of the other party, except that either party shall be free to assign this Agreement in connection with any sale of substantially all of its assets without the consent of the other; provided that: (a) any such assignee shall agree in writing to be bound by the terms and conditions of this Agreement; and (b) the assigning party shall notify the other party of any such assignment. This Agreement shall bind and inure to the benefit of the successors and permitted assigns of the parties hereto.

10.9 No Waivers; Severability. No waiver of any breach of this Agreement shall constitute a waiver of any other breach of the same or other provision of this Agreement, and no waiver shall be effective unless made in writing. Any provision hereof prohibited by or unenforceable under any applicable law of any jurisdiction shall as to such jurisdiction be deemed ineffective and deleted herefrom without affecting any other provision of this Agreement. It is the desire of the parties hereto that this Agreement be enforced to the maximum extent permitted by law, and should any provision contained herein be held by any governmental agency or court of competent jurisdiction to be void, illegal and unenforceable, the parties shall negotiate in good faith for a substitute term or provision which carries out the original intent of the parties.

10.10 Entire Agreement; Amendment. Company and JHU acknowledge that they have read this entire Agreement and that this Agreement, including the attached Exhibits constitutes the entire understanding and contract between the parties hereto and supersedes any and all prior or contemporaneous oral or written communications with respect to the subject matter hereof, all of which communications are merged herein. It is expressly understood and agreed that (i) there being no expectations to the contrary between the parties hereto, no usage of

trade, verbal agreement or another regular practice or method dealing within any industry or between the parties hereto shall be used to modify, interpret, supplement or alter in any manner the express terms of this Agreement; and (ii) this Agreement shall not be modified, amended or in any way altered except by an instrument in writing signed by both of the parties hereto.

10.11 Delays or Omissions. Except as expressly provided herein, no delay or omission to exercise any right, power or remedy accruing to any party hereto, shall impair any such right, power or remedy to such party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or in any similar breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

10.12 Force Majeure. If either party fails to fulfill its obligations hereunder (other than an obligation for the payment of money), when such failure is due to an act of God, or other circumstances beyond its reasonable control, including but not limited to fire, flood, civil commotion, riot, war (declared and undeclared), revolution, or embargoes, then said failure shall be excused for the duration of such event and for such a time thereafter as is reasonable to enable the parties to resume performance under this Agreement, provided however, that in no event shall such time extend for a period of more than one hundred eighty (180) days.

10.13 Further Assurances. Each party shall, at any time, and from time to time, prior to or after the EFFECTIVE DATE of this Agreement, at reasonable request of the other party, execute and deliver to the other such instruments and documents and shall take such actions as may be required to more effectively carry out the terms of this Agreement.

10.14 Survival. All representations, warranties, covenants and agreements made herein and which by their express terms or by implication are to be performed after the execution and/or termination hereof, or are prospective in nature, shall survive such execution and/or termination, as the case may be. This shall include Paragraphs 3.1 (License Fee), 3.9 (Late Payments), 5.2 (Records), and Articles 6, 7, 8, 9, and 10.

10.15 No Third Party Beneficiaries. Nothing in this Agreement shall be construed as giving any person, firm, corporation or other entity, other than the parties hereto and their successors and permitted assigns, any right, remedy or claim under or in respect of this Agreement or any provision hereof.

10.16 Headings. Article headings are for convenient reference and not a part of this Agreement. All Exhibits are incorporated herein by this reference.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

10.17 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which when taken together shall be deemed but one instrument.

[Signatures on following page.]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, this Agreement shall take effect as of the EFFECTIVE DATE when it has been executed below by the duly authorized representatives of the parties.

THE JOHNS HOPKINS UNIVERSITY	**ADURO BIOTECH**
/s/ Wesley D. Blakeslee, J.D	/s/ Stephen T. Isaacs
Wesley D. Blakeslee, J.D. Executive Director Johns Hopkins Technology Transfer	Name: Stephen T. Isaacs Title: Chairman & CEO
3/24/2011	3/16/11
(Date)	(Date)

EXHIBIT A. PATENT RIGHTS
EXHIBIT B. LICENSE FEE & ROYALITIES.
EXHIBIT C. SALES & ROYALTY REPORT FORM.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT A

PATENT RIGHTS

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT B

LICENSE FEE & ROYALTIES

1. **License Fee.** The License Fee due under Paragraph 3.1 is Twenty-five Thousand U.S. Dollars ($25,000).

2. **Milestone License Fees.** The Milestone License Fees due under Paragraph 3.2 for LICENSED PRODUCTS or LICENSED SERVICES developed by Company, AFFILIATED COMPANIES, or SUBLICENSEES are as follows:

   (i) **[*]** upon **[*]**; and

   (ii) **[*]** upon **[*]**; and

   (iii) **[*]** upon **[*]**.

3. **Minimum Annual Royalties.** The Minimum Annual Royalties pursuant to Paragraph 3.3 are:

Anniversary	Amount
[*	*
*	*
*	*
*	*
*	*
*	*
*	*
*	*
*	*]

4. **Royalties.** The running royalty rate payable under Paragraph 3.4 is **[*]**.

5. **Sublicense Consideration.** The percent Sublicense Consideration payable under Paragraph 3.5 is as follows:

   (i) For a sublicense to a LICENSED PRODUCT(S) or LICENSED SERVICE(S) that **[*]**:

   (a) [*] if [*];

   (b) [*] if [*]; and

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(c) [*] if [*].

(ii) For a sublicense to a LICENSED PRODUCT(S) or LICENSED SERVICE(S) that **[*]:**

(a) [*] if [*];

(b) [*] if [*]; and

(c) [*] if [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT C

QUARTERLY SALES & ROYALTY REPORT

FOR LICENSE AGREEMENT BETWEEN ADURO BIOTECH AND

THE JOHNS HOPKINS UNIVERSITY DATED

_____

FOR PERIOD OF _____ TO _____

TOTAL ROYALTIES DUE FOR THIS PERIOD $_____

PRODUCT ID	PRODUCT NAME	*JHU REFERENCE	1st COMMERCIAL SALE DATE	TOTAL NET SALES/SERVICES	ROYALTY RATE	AMOUNT DUE

* Please provide the JHU Reference Number or Patent Reference

This report format is to be used to report quarterly royalty statements to JHU. It should be placed on Company letterhead and accompany any royalty payments due for the reporting period. This report shall be submitted even if no sales are reported.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit 10.22

UNIVERSITY OF CALIFORNIA, BERKELEY

OFFICE OF TECHNOLOGY LICENSING

EXCLUSIVE LICENSE

BETWEEN

ADURO BIOTECH INC

AND

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

FOR

LISTERIA MONOCYTOGENES PHAGE INTEGRATION VECTOR

UC Case No.: **[*]**
U.S. Patent Nos. **[*]**;
U.S. Patent Application Serial No. **[*]**;
Foreign Patent Nos. **[*]**

EXCLUSIVE LICENSE

FOR

LISTERIA MONOCYTOGENES PHAGE INTEGRATION VECTOR

UC Case No.: **[*]**
U.S. Patent Nos. **[*]**;
U.S. Patent Application Serial No.**[*]**;
Foreign Patent Nos. **[*]**

This Exclusive License Agreement ("Agreement") is effective March 15, 2012 ("Effective Date") by and between **THE REGENTS OF THE UNIVERSITY OF CALIFORNIA**, a California corporation, whose legal address is 1111 Franklin Street, 12th Floor, Oakland, California 94607-5200, acting through its Office of Technology Licensing, at the University of California, Berkeley, 2150 Shattuck Avenue, Suite 510, Berkeley, CA 94704-1347 ("REGENTS") and **ADURO BIOTECH, INC**, a Delaware corporation having a principal place of business at 626 Bancroft Way, Berkeley, CA 94710-2224 ("LICENSEE"). The parties agree as follows.

1. BACKGROUND

1.1 REGENTS has an assignment of the "**[*]**", invented by **[*]**, employed by the University of California, Berkeley (the "INVENTION"), as described in REGENTS' Case No. **[*]** and to the patents and patent applications under REGENTS' PATENT RIGHTS as defined below, which are directed to the INVENTION.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.2 LICENSEE entered into a Secrecy Agreement with REGENTS effective April 13, 2010, terminating on April 13, 2015, for the purpose of evaluating the INVENTION. LICENSEE further entered into an Option to Negotiate an Exclusive License dated December 15, 2010 terminating on March 15, 2012 (the "Option") with REGENTS granting LICENSEE an exclusive right to negotiate an option or exclusive license in REGENTS' PATENT RIGHTS to the INVENTION, which Option covers LICENSEE's commitment to reimburse REGENTS' future patent costs during the period of good-faith negotiation for an exclusive license.

1.3 LICENSEE has provided REGENTS with a commercialization plan for the INVENTION and business strategy in order to evaluate its capabilities as a LICENSEE.

1.4 The development of the INVENTION was sponsored in part by various grants by U.S. Government agencies, and as a consequence, REGENTS elected to retain title to the INVENTION subject to the rights of the U.S. Government under 35 USC 200-212 and implementing regulations, including that REGENTS, in turn, has granted back to the U.S. Government a non-exclusive, non-transferable irrevocable, paid-up license to practice or have practiced the INVENTION for or on behalf of the U.S. Government throughout the world. These U.S. Government grants are National Institutes of Health Contract Nos. AI027655 and AI029619.

1.5 REGENTS and LICENSEE wish to have the INVENTION perfected and marketed so that products resulting therefrom may be available for public use and benefit on a timeline that is reasonable in light of the financing and development requirements of such products.

1.6 LICENSEE wishes to acquire, and REGENTS wishes to grant to LICENSEE, an exclusive license under the REGENTS' PATENT RIGHTS for the purpose of undertaking development and to manufacture, use, sell, offer for sale and import LICENSED PRODUCT(S) as defined below.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

2. DEFINITIONS

2.1 "AFFILIATE" of LICENSEE means any entity that, directly or indirectly, Controls LICENSEE, is Controlled by LICENSEE, or is under common Control with LICENSEE. "Control" means (i) having the actual, present capacity to elect a majority of the directors of such affiliate, (ii) having the power to direct at least **[*]** of the voting rights entitled to elect directors, or (iii) in any country where the local law will not permit foreign equity participation of a majority, ownership or control, directly or indirectly, of the maximum percentage of such outstanding stock or voting rights permitted by local law so long as control is secured by such ownership.

2.2 "CRE" shall mean efforts and diligence in developing and commercializing LICENSED PRODUCTS, and in undertaking investigations and actions required to obtain regulatory approvals, necessary to market LICENSED PRODUCTS in the LICENSED FIELD in the Territory, such reasonable efforts and diligence to be, on a country-by-country basis, in accordance with the efforts and resources LICENSEE would use for a product candidate owned by it or to which it has rights, which is of similar market potential as the applicable LICENSED PRODUCT, taking into account the competitiveness of the marketplace, the proprietary position of the LICENSED PRODUCT, the relative potential safety and efficacy of the LICENSED PRODUCT, the cost of goods and availability of capacity to manufacture and supply the LICENSED PRODUCT at commercial scale, the profitability of the applicable LICENSED PRODUCT, and other relevant factors including, without limitation, technical, legal, scientific or medical factors. CRE does not include LICENSEE **[*]** a LICENSED PRODUCT (including active study of dosage, formulation, or safety issues) for **[*]**.

2.3 "LICENSED FIELD OF USE" means any and all uses.

2.4 "LICENSED METHOD" means any process or method the use or practice of which, but for the license pursuant to this Agreement, would infringe any VALID CLAIM under REGENTS' PATENT RIGHTS in that country in which the LICENSED METHOD is used or practiced.

2.5 “LICENSED PRODUCTS” means all products or component parts or services, the manufacture, use, SALE, offer for SALE, or import of which: a) would require the performance of the LICENSED METHOD; or b) but for the license granted pursuant to this Agreement, would infringe a VALID CLAIM under REGENTS’ PATENT RIGHTS.

2.6 “LICENSED SERVICE” means provision of a service for a third party, the performance of which comprises the use of a LICENSED METHOD or a LICENSED PRODUCT.

2.7 “LICENSED TERRITORY” means worldwide, where REGENTS PATENT RIGHTS exist.

2.8 “NET SALES” means amounts invoiced by LICENSEE or a sublicensee for SALES of LICENSED PRODUCTS, LICENSED SERVICES, and LICENSED METHODS in the Territory less the sum of the following actual and customary deductions where applicable: cash, trade or quantity discounts including, without limitation, discounts or rebates to governmental, supranational, buying groups (such as PAHO, UNICEF, or the Gulf Consortium), or managed care organizations, credits or deductions for rejected product, returns, expired product or bad debts; sales, use, tariff, import/export duties or other excise taxes or duties (but not income taxes derived from such sales); and handling and transportation charges; and value added taxes but only to the extent such tax is not subject to a credit and deduction to a taxing authority.

2.9 “REGENTS’ PATENT RIGHTS” means all of REGENTS’ rights, title and interests in the following:

i. **[*]**;

ii. **[*]**;

iii. **[*]**;

iv. **[*]**;

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

v. **[*]**;

vi. **[*]**;

vii. **[*]**;

viii. **[*]**;

ix. **[*]**;

x. **[*]**;

xi. **[*]**;

xii. **[*]**;

xiii. and continuing applications thereof including divisions, substitutions, extensions and continuation-in-part applications (only to the extent, however, that claims in the continuation-in-part applications are entitled to the priority filing date of the parent patent application), any patents issuing on said application or continuing applications including reissues; and any corresponding foreign patents or applications.

2.10 "SALE" means, for LICENSED PRODUCTS and LICENSED SERVICES, the act of selling, leasing or otherwise transferring, providing, or furnishing such product or service, and for LICENSED METHOD the act of performing such method for any consideration. Correspondingly, "SOLD" means to have made or caused to be made a SALE.

2.11 "VALID CLAIM" shall mean a claim in an issued, unexpired patent or in a pending patent application (which claim is pending for no more than **[*]** years) within Licensed Patent Rights that (a) has not been cancelled, withdrawn, abandoned or rejected by any administrative agency or other body of competent jurisdiction from which no appeal has or can be taken, (b) has not been revoked, held invalid, or

declared unpatentable or unenforceable in a decision of a court or other body of competent jurisdiction that is unappealable or unappealed within the time allowed for appeal, (c) has not been rendered unenforceable through disclaimer or otherwise, and (d) is not lost through an interference proceeding**.** If a claim is pending for more than **[*]** years and latter issues in a patent, then as of the patent issue date, the claim again becomes a VALID CLAIM.

3. GRANT

3.1 Subject to the terms and conditions set forth in this Agreement, including the license granted to the U.S. Government and the rights reserved in Paragraph 3.3, REGENTS hereby grants and LICENSEE hereby accepts an exclusive worldwide royalty-bearing sublicensable license under REGENTS' PATENT RIGHTS to make, have made, use, have used, SELL, have SOLD, import, and have imported LICENSED PRODUCTS and LICENSED SERVICES, and to practice the LICENSED METHOD, in the LICENSED FIELD OF USE anywhere in the world to the extent such grant is legal, for ultimate use only by end users in the LICENSED TERRITORY.

3.2 The license under Paragraph 3.1 will be exclusive for a term commencing on the Effective Date and ending on the date of the last-to-expire VALID CLAIM under REGENTS' PATENT RIGHTS, unless earlier terminated as permitted herein.

3.3 Nothing in this Agreement will be deemed to limit the right of REGENTS to publish any and all technical data resulting from any research performed by REGENTS relating to the INVENTION. REGENTS expressly reserves the right to use the INVENTION and related technology for its educational and research purposes; to disseminate the other tangible materials associated with, or required to practice the INVENTION and/or the REGENTS' PATENT RIGHTS to researchers at nonprofit institutions for their educational and research purposes.

3.4 This Agreement will terminate immediately if LICENSEE files a claim, including in anyway, the assertion that any portion of the REGENTS' PATENT RIGHTS is invalid or unenforceable where the filing is by the LICENSEE, a third party on behalf of the LICENSEE, or a third party at the written urging of the LICENSEE.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

3.5 LICENSEE will have a continuing responsibility to keep REGENTS informed of the large/small entity status, as defined in 15 U.S.C. 632, of itself and its sublicensees.

3.6 The INVENTION was funded in part by the U.S. Government. In accordance with PL 96-517 as amended by PL 98-620, to the extent required by law or regulation, any products covered by patent applications or patents claiming the INVENTION and sold in the United States will be substantially manufactured in the United States.

4. SUBLICENSES

4.1 REGENTS also grants to LICENSEE the right to sublicense to AFFILIATES and third parties some or all of its rights hereunder provided that LICENSEE has exclusive rights under this Agreement to the rights being sublicensed at the time of sublicensing. LICENSEE agrees to use its CRE to ensure that all sublicensees fulfill their obligations under their sublicense. Every such sublicense will include:

(a) a statement setting forth the date upon which LICENSEE'S exclusive rights, privileges, and license hereunder will expire;

(b) as applicable, all the rights of, and require the performance of all the obligations due to, REGENTS (and, if applicable, the United States Government) under this Agreement other than those rights and obligations specified in Article 5 (License Issue Fee) and Paragraph 6.5 (minimum annual royalty);

(c) a provision requiring payment of royalties to LICENSEE in an amount sufficient to permit LICENSEE to meet its royalty obligations to REGENTS at the rates and bases set forth in this Agreement; and

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(d) the same provision for indemnification of REGENTS as has been provided for in this Agreement.

4.2 In the event LICENSEE grants a sublicense to the REGENTS' PATENT RIGHTS, LICENSEE shall pay REGENTS **[*]** of any SUBLICENSING REVENUE (the "SUBLICENSING REVENUE PERCENTAGE" or "SLP") received by LICENSEE from such sublicensee where "SUBLICENSING REVENUE" means, up front license fee payments and/or annual license fees attributable to the grant of a sublicense of rights under this Agreement, but shall exclude, royalties, milestone payments (but subject to the last paragraph of this subsection), research funding plus reasonable overhead and profit, amounts at up to **[*]** of fair market value directly for development, sales, and/or marketing activities, debt financing at up to **[*]** of fair market value, purchase of equity at up to **[*]** of fair market value reimbursement of patent filing, prosecution and maintenance expenses.

In the event a LICENSED PRODUCT(S) is modified or combined with other products or patents owned or controlled by LICENSEE or a third party as part of a therapeutic or prophylactic vaccine, the SLP shall be reduced (the "Adjusted SLP") to **[*]**. For sake of clarity, LICENSED PRODUCT(S) and LICENSED PATENTS are not adequate or sufficient to produce a vaccine for use in humans. LICENSEE has made multiple modifications to the LICENSED PRODUCT(S) in one or more preclinical candidates to make suitable for use in humans, including without limitation removal of antibiotic resistance, addition of transcriptional terminators, and/or selection of a promoter. In addition, LICENSEE'S vaccine platform includes multiple proprietary elements, including but not limited to ActA deletion in vaccine strain, InlB deletion in vaccine strain, codon optimization in vaccine strain, selection of antigen in vaccine strain, selection of additional antigen in vaccine strain, manufacturing of vaccine, formulation of vaccine, and combination of vaccine with another therapy/therapeutic, and further modifications and combinations may be necessary.

In the event a LICENSED PRODUCT(S) is combined with other products to produce a commercial product that is not a vaccine, where SLP is the sublicensing revenue percentage set forth in Article 4.2 ("Sublicensing Revenue Percentage"), C is **[*]** and B is the total combined Sublicensing Revenue Percentage:

Adjusted Sublicensing Revenue Percentage = SLP × (C/B)

- or -

Adjusted SLP = **[*]**% × **[*]**%/B

However, in no event shall the adjustments contemplated by this paragraph reduce the effective Sublicensing Revenue Percentage payable to Regents to less than **[*]**.

4.3 LICENSEE will notify REGENTS of each sublicense granted hereunder and furnish to REGENTS a copy of each such sublicense agreement, provided any provisions that are not relevant to LICENSEE'S fulfillment of its obligations under this Agreement may be redacted.

4.4 LICENSEE will deliver all reports due REGENTS and received from sublicensees.

4.5 AFFILIATES will have no licenses under REGENTS' PATENT RIGHTS except as granted by sublicense pursuant to this Agreement.

4.6 LICENSEE will collect and guarantee payment of all monies and other consideration due REGENTS as a consequence of sublicenses, and deliver all reports due REGENTS and received from sublicensees, provided LICENSEE may require sublicensees to make reports and payments directly to REGENTS in the interests of timing.

4.7 Upon termination of this Agreement for any reason, all sublicenses that are granted by LICENSEE pursuant to this Agreement where the sublicensee is in compliance with its sublicense agreement as of the date of such termination will remain in effect and, will be assigned to REGENTS except that REGENTS will not be bound to perform any duties or obligations set forth in any sublicenses that extend beyond the duties and obligations of REGENTS set forth in this Agreement.

4.8 If REGENTS (to the extent of the actual knowledge of the licensing professional responsible for administration of this case) or a third party discovers and notifies that licensing professional that the INVENTION is useful for a new and novel application covered by the LICENSED FIELD OF USE (the "NEW USE") based

upon substantial and reliable scientific data, but for which LICENSED PRODUCTS have not been developed or are not currently under development by LICENSEE, then REGENTS, as represented by the Office of Technology Licensing, shall give written notice to LICENSEE with full details so that LICENSEE can make a decision as to development except for: 1) information that is subject to restrictions of confidentiality with third parties, and 2) information which originates with REGENTS' personnel who do not assent to its disclosure to LICENSEE.

LICENSEE shall have **[*]** days to give REGENTS written notice stating whether LICENSEE elects to develop LICENSED PRODUCTS for the application, a longer period may be mutually agreed to consider the novel use and the scientific basis for the same.

If LICENSEE elects to develop and commercialize the proposed LICENSED PRODUCTS for the new application, LICENSEE shall submit a commercially reasonable development and commercialization plan within **[*]** days of such notice and provide progress reports pursuant to Article 8.

If LICENSEE elects not to develop and commercialize the proposed LICENSED PRODUCTS for use in the new application, REGENTS may seek (a) third party(ies) to develop and commercialize the proposed LICENSED PRODUCTS for the new application. If REGENTS is successful in finding a third party, it shall refer such third party to LICENSEE. If the third party requests a sublicense under this Agreement, then LICENSEE shall report the request to REGENTS within **[*]** days from the date of such written request. If the request results in a sublicense, then LICENSEE shall report it to REGENTS pursuant to Paragraph 4.3.

LICENSEE agrees to negotiate in good faith with such third party to agree upon a sublicense of rights to develop a product solely for the NEW USE on commercially reasonable terms. If LICENSEE and the third party are unable agree on the terms for such a sublicense, then within **[*]** days after such refusal LICENSEE shall submit to REGENTS a report specifying the license terms proposed by the third party and a written justification for LICENSEE's refusal to grant the proposed sublicense. If REGENTS, at its sole discretion determines that the terms of the sublicense proposed by the third party are reasonable under the totality of the

circumstances, taking into account LICENSEE's LICENSED PRODUCTS in development and the commercial and other circumstances and considerations relating to LICENSEE's development and commercialization efforts of LICENSED PRODUCTS, then REGENTS shall have the right to grant to the third party a license to make, have made, use, sell, offer for sale and import products for use in the LICENSED FIELD OF USE at substantially the same terms last proposed to LICENSEE by the third party providing the commercial terms of such license, including but not limited to royalty rates, are at least equal to those paid by LICENSEE.

5. LICENSE ISSUE FEE

5.1 LICENSEE will pay to REGENTS a non-creditable, non-refundable license issue fee of Twenty Five Thousand U.S. Dollars ($25,000) due upon signing of this Agreement.

5.2 This fee is non-refundable and not an advance against royalties.

6. ROYALTIES

6.1 LICENSEE will pay to REGENTS earned royalties at the rate of **[*]** of the NET SALES of LICENSED PRODUCT(S) OR LICENSED METHOD; subject to the following:

i. If LICENSEE **[*]** to make any payment (including royalties or other license fees) to a third party to obtain a license or other patent rights **[*]**, such third party payments will be creditable against amounts owed to REGENTS in the order such amounts are owed until fully credited, provided that **[*]** will credits reduce royalties owed to REGENTS by more than **[*]** of amounts owed to REGENTS **[*]**.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ii. Modified or Combined Royalty Adjustment

In the event a LICENSED PRODUCT(S) is modified by or combined with other products or patents owned or controlled by third party in order to produce product(s) for development or commercialization, whether by LICENSEE or a LICENSEE sublicensee, in which the commercial product is a therapeutic or prophylactic vaccine, the earned royalty due to REGENTS shall be adjusted to **[*]**.

In the event a LICENSED PRODUCT(S) is combined with other technologies patented by third party in order to produce product(s) for development or commercialization, whether by LICENSEE or a LICENSEE sublicensee, in which the commercial product is not a vaccine and the total combined royalty burden on Net Sales exceeds **[*]**, the earned royalty due to REGENTS shall be adjusted according to the following formula, where R is the royalty set in the first paragraph of this paragraph 6.1 ("Set Royalty"), C is **[*]** and B is the total combined royalty burden.

Adjusted royalty = R × (C/B)

For example, if LICENSEE's total combined royalty is **[*]** and the Set Royalty is **[*]**, the adjusted royalty due to REGENTS would be **[*]** × **[*]**, or **[*]**. Notwithstanding the foregoing, in no event shall the royalty due to REGENTS under the above formula for a product that is not a therapeutic or prophylactic vaccine be less than **[*]** of the Set Royalty. If LICENSEE utilized the unadjusted Sublicensing Revenue Percentage in 4.2, then LICENSEE may not adjust Net Royalty from a sublicense under 6.1.

6.2 Royalties will be payable on SALES covered by both pending patent applications and issued patents.

6.3 Royalties accruing to REGENTS will be paid to REGENTS quarterly within **[*]** days after the end of each calendar quarter, and **[*]** days with respect to NET SALES by sublicensees.

6.4 LICENSEE will also pay to REGENTS an annual license maintenance fee of Five Thousand Dollars ($5,000) beginning on the first anniversary date of the Effective Date and on each anniversary of the Effective Date thereafter during the term of the AGREEMENT until the first SALE by LICENSEE of a LICENSED PRODUCT.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6.5 Beginning in the first calendar year after the first occurrence of NET SALES and in each succeeding calendar year thereafter, LICENSEE will pay to the REGENTS a minimum annual royalty of **[*]** for the life of this Agreement. This minimum annual royalty will be paid to the REGENTS by January 30 of each year and will be credited against the earned royalty due and owing for the calendar year in which the minimum payment was made.

6.6 LICENSEE will pay the following one-time milestone payment:

(a) For the first LICENSED PRODUCT, LICENSEE shall pay to REGENTS a milestone payment of **[*]** upon **[*]** and;

(b) For the first LICENSED PRODUCT, LICENSEE shall pay to REGENTS a milestone payment of **[*]** upon **[*]** and;

(c) For the first LICENSED PRODUCT, LICENSEE shall pay to REGENTS a milestone payment of **[*]** upon **[*]**.

6.7 All payments due REGENTS will be payable in United States Dollars. When LICENSED PRODUCTS, LICENSED SERVICES, or LICENSED METHOD are SOLD for monies other than United States Dollars, royalties will first be determined in the foreign currency of the country in which the SALE was made and then converted into equivalent United States Dollars. The exchange rate will be that rate quoted in the *Wall Street Journal* on the average of last **[*]** business days of the reporting period.

6.8 Payments due for SALES occurring in any country outside the United States will be reduced by any taxes, fees, or other charges imposed by the government of such country on the remittance of royalty income. LICENSEE will also be responsible for all bank transfer charges, shall cooperate with REGENTS in the recovery of any amounts paid by LICENSEE on REGENTS' behalf.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6.9 LICENSEE will make all payments under this Agreement by check payable to "The Regents of the University of California" and forward it to REGENTS at the address shown in Article 23 (Notices).

6.10 No earned royalties will be collected or paid to REGENTS hereunder on SALES to, or for use by, the United States Government. LICENSEE will reduce the amount charged for such SALES by an amount equal to the earned royalty otherwise due REGENTS as provided herein.

7. DUE DILIGENCE

7.1 LICENSEE will use its CRE to proceed with the development, manufacture, and SALE of LICENSED PRODUCTS, LICENSED SERVICES, and the LICENSED METHOD, and will use its CRE to manufacture them in quantities sufficient to meet the market demand.

7.2 In addition to its obligations under Paragraph 7.1, LICENSEE specifically commits to achieving the following objectives in its due diligence activities under this Agreement:

Due Diligence Objective for Polyvalent Vaccine	Year Completed
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**

7.3 If LICENSEE is unable to meet any of its diligence obligations set forth in Paragraphs 7.1 and 7.2, then REGENTS will so notify LICENSEE of failure to perform. LICENSEE will have the right and option to extend the target date of any such due diligence obligation for a period of **[*]** months upon the payment of **[*]** within **[*]** days of the date to be extended for each such extension option exercised by LICENSEE, and all following milestone dates shall be adjusted accordingly.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

LICENSEE may further extend the target date of any diligence obligation for an additional **[*]** months upon payment of an additional **[*]**, and all following milestone dates shall be adjusted accordingly. Additional extensions may be granted only by mutual written agreement of the parties to this Agreement. These payments are in addition to the minimum royalty payments specified in Paragraph 6.5. Should LICENSEE opt not to extend the obligation or fail to meet it by the extended target date, then REGENTS will have the right and option either to terminate this Agreement or to reduce LICENSEE's exclusive license to a non-exclusive royalty-bearing license. This right, if exercised by REGENTS, supersedes the rights granted in Article 3. The right to terminate this Agreement or reduce LICENSEE's exclusive license granted hereunder to a non-exclusive license will be REGENTS' sole remedy for breach of Paragraph 7.1 or 7.2.

7.4 At the request of either party, any controversy or claim arising out of or relating to the diligence provisions of Paragraphs 7.1 and 7.2 will be settled by a single arbitrator as part of an arbitration conducted in San Francisco, California in accordance with the then current Licensing Agreement Arbitration Rules of the American Arbitration Association. Judgment upon the award rendered by the arbitrator(s) will be binding on the parties and may be entered by either party in the court or forum having jurisdiction. In determination of due diligence, the arbitrator may determine solely the issues of fact or law with respect to termination of LICENSEE's rights under this Agreement but will not have the authority to award monetary damages or grant equitable relief.

7.5 To exercise either the right to terminate this Agreement or to reduce the license to a non-exclusive license for lack of diligence under Paragraph 7.1 or 7.2, REGENTS will give LICENSEE written notice of the deficiency. LICENSEE thereafter has **[*]** days to cure the deficiency or to request arbitration. If REGENTS has not received a written request for arbitration or satisfactory tangible evidence that the deficiency has been cured by the end of the [*] - day period, then REGENTS may, at its option, either terminate the Agreement or reduce LICENSEE's exclusive license to a non-exclusive license by giving written notice to LICENSEE. These notices will be subject to Article 23 (Notices).

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8. PROGRESS AND ROYALTY REPORTS

8.1 For the period beginning March 31, 2012, LICENSEE will submit to REGENTS a semi-annual progress report covering LICENSEE's activities related to the development and testing of all LICENSED PRODUCTS, LICENSED SERVICES and LICENSED METHOD and the obtaining of necessary governmental approvals, if any, for marketing in the United States. These progress reports will be made for all development activities until the first SALE occurs in the United States.

8.2 Each progress report will be a sufficiently detailed summary of activities of LICENSEE and any sublicensees so that REGENTS may evaluate and determine LICENSEE's progress in development of LICENSED PRODUCTS, LICENSED SERVICES, and LICENSED METHOD, and in meeting its diligence obligations under Article 7, and will include (to the extent relevant at the time of reporting) the following: summary of work completed and in progress; current schedule of anticipated events and milestones, including diligence milestones under Paragraph 7.2; anticipated market introduction dates for the licensed territories; and sublicensee's activities during the reporting period.

8.3 LICENSEE also will report to REGENTS in its immediately subsequent progress and royalty reports, the date of first SALE.

8.4 After the first SALE anywhere in the world, LICENSEE will make quarterly royalty reports to REGENTS within **[*]** days after the quarters ending March 31, June 30, September 30, and December 31, of each year. Each such royalty report will include at least the following:

(a) The number of LICENSED PRODUCTS manufactured and the number SOLD;

(b) Gross revenue from SALE of LICENSED PRODUCTS, LICENSED SERVICES and LICENSED METHOD;

(c) NET SALES pursuant to Paragraph 2.8;

(d) Total royalties due REGENTS; and

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(e) Names and addresses of any new sublicensees along with a summary of the material terms of each new sublicense agreement entered into during the reporting quarter.

8.5 If no SALES have occurred during the report period, a statement to this effect is required in the royalty report for that period.

9. BOOKS AND RECORDS

9.1 LICENSEE will keep full, true, and accurate books and records containing all particulars that may be necessary for the purpose of showing the amount of royalties payable to REGENTS and LICENSEE's compliance with other obligations under this Agreement. Said books and records will be kept at LICENSEE's principal place of business or the principal place of business of the appropriate division of LICENSEE to which this Agreement relates. Said books and records and the supporting data will be open at all reasonable times during normal business hours upon reasonable notice, for **[*]** years following the end of the calendar year to which they pertain, to the inspection and audit by representatives of REGENTS for the purpose of verifying LICENSEE's royalty statement or compliance in other respects with this Agreement. Such representatives will be bound to hold all information in confidence except as necessary to communicate LICENSEE's non-compliance with this Agreement to REGENTS.

9.2 The fees and expenses of REGENTS' representatives performing such an examination will be borne by REGENTS. However, if an error in underpaid royalties to REGENTS of more than **[*]** of the total royalties due for any year is discovered, then the fees and expenses of these representatives will be borne by LICENSEE.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

10. LIFE OF THE AGREEMENT

10.1 Unless otherwise terminated by the operation of law or by acts of the parties in accordance with the terms of this Agreement, this Agreement will have the same terms as that of the licenses set forth in Section 3.2.

10.2 Any termination of this Agreement shall not affect the rights and obligations set forth in the following articles:

Article 2	Definitions
Article 4	Sublicenses
Article 9	Books and Records
Article 10	Life of the Agreement
Article 13	Disposition of Licensed Products Upon Termination
Article 16	Use of Names and Trademarks
Article 17	Limited Warranties and Limit of Liability
Article 19	Indemnification
Article 23	Notices
Article 24	Late Payments
Article 26	Confidentiality
Article 29	Applicable Law; Venue

10.3 Any termination of this Agreement will not relieve LICENSEE of its obligation to pay any monies due or owing at the time of such termination and will not relieve any obligations, of either party to the other party, accruing prior to termination.

11. TERMINATION BY REGENTS

If LICENSEE materially breaches any material term of this Agreement, then REGENTS may give written notice of such material breach ("Notice of Default") to LICENSEE. If LICENSEE should fail to remedy such material breach within ninety (90) days of the effective date of such notice, REGENTS will have the right to terminate this Agreement and the licenses herein by a second written notice ("Notice of Termination") to LICENSEE. If a Notice of Termination is sent to LICENSEE, this Agreement will automatically terminate on the effective date of such notice. Such termination will not relieve LICENSEE of its obligation to pay any royalty or license fees owing at the time of such termination and will not impair any accrued rights of REGENTS. These notices will be subject to Article 23 (Notices).

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

12. TERMINATION BY LICENSEE

12.1 LICENSEE will have the right at any time to terminate this Agreement in whole or as to any portion of REGENTS' PATENT RIGHTS by giving notice in writing to REGENTS. Such notice of termination will be subject to Article 23 (Notices) and termination of this Agreement will be effective ninety (90) days after the effective date of such notice.

12.2 Any termination pursuant to Paragraph 12.1 will not relieve LICENSEE of any obligation or liability accrued hereunder prior to such termination or rescind anything done by LICENSEE or any payments made to REGENTS hereunder prior to the time such termination becomes effective, and such termination will not affect in any manner any rights of REGENTS arising under this Agreement prior to such termination.

13. DISPOSITION OF LICENSED PRODUCTS UPON TERMINATION

Upon termination of this Agreement, for a period of one year after the date of termination LICENSEE may complete and SELL any partially made LICENSED PRODUCTS and continue to render any previously commenced LICENSED SERVICES, and continue the practice of LICENSED METHOD only to the extent necessary to do so; provided, however, that all such SALES will be subject to the terms of this Agreement including, but not limited to, the payment of royalties at the rate and at the time provided herein and the rendering of reports thereon.

14. PATENT PROSECUTION AND MAINTENANCE

14.1 REGENTS will diligently prosecute and maintain the United States and foreign patent applications and patents under REGENTS' PATENT RIGHTS, subject to LICENSEE'S reimbursement REGENTS' out of pocket costs under Article 14.3

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

below, and all patent applications and patents under REGENTS' PATENT RIGHTS will be held in the name of REGENTS. REGENTS will have sole responsibility for retaining and instructing patent counsel chosen together with LICENSEE, but continued use of such counsel at any point in the patent prosecution process subsequent to initial filing of a U.S. patent application covering the INVENTION shall be subject to the approval of LICENSEE. If LICENSEE rejects three of REGENTS' choice of prosecution counsel, then REGENTS may select new prosecution counsel without LICENSEE's consent. REGENTS shall promptly provide LICENSEE with copies of all documentation so that LICENSEE may be currently informed and apprised of the continuing prosecution and LICENSEE agrees to keep this documentation confidential in accordance with Article 26. LICENSEE may comment upon such documentation provided, however, that if LICENSEE has not commented upon such documentation in reasonable time for REGENTS to sufficiently consider LICENSEE's comments prior to the deadline for filing a response with the relevant government patent office, REGENTS will be free to respond appropriately without consideration of LICENSEE's comments. LICENSEE and LICENSEE's patent counsel will have the right to consult with patent counsel chosen by REGENTS.

14.2 REGENTS will use reasonable efforts to prepare or amend any patent application to include claims reasonably requested by LICENSEE to protect the LICENSED PRODUCTS contemplated to be SOLD or to be practiced under this Agreement.

14.3 Subject to Paragraphs 14.4 and 14.5, all past (unreimbursed), present, and future costs for preparing, filing, prosecuting, and maintaining all United States and foreign patent applications, and patents under REGENTS' PATENT RIGHTS will be borne by LICENSEE, so long as the licenses granted to LICENSEE herein are exclusive. To date the unreimbursed past patent costs are approximately Twenty Thousand Two Hundred Eighty U.S. Dollars (U.S.$20,280) Payments are due within **[*]** days after receipt of invoice from REGENTS. If, however, REGENTS reduces the exclusive licenses granted herein to non-exclusive licenses pursuant to Paragraphs 7.3, 7.4, or 7.5 and REGENTS grants additional license(s), the costs of preparing, filing, prosecuting and maintaining such patent applications and patents will be divided equally among the licensed parties from the effective date of each subsequently granted license agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

14.4 LICENSEE's obligation to underwrite and to pay all domestic and foreign patent filing, prosecution, and maintenance costs will continue for so long as this Agreement remains in effect, provided, however, that LICENSEE may terminate its obligations with respect to any given patent application or patent in any or all designated countries upon **[*]** months' written notice to REGENTS. REGENTS will use its best efforts to curtail patent costs when such a notice is received from LICENSEE. REGENTS may continue prosecution and/or maintenance of such applications or patents at its sole discretion and expense; provided, however, that LICENSEE will have no further right or licenses thereunder.

15. MARKING

LICENSEE agrees to mark LICENSED PRODUCT(S) (or their containers or labels) made, sold, licensed or otherwise disposed of in the United States under the license granted in this Agreement with the patent numbers of any applicable U.S. patent(s) in accordance with applicable U.S. laws. All LICENSED PRODUCTS shipped to, manufactured, or sold in other countries will be marked in such manner as to conform with the patent laws and practice of such countries.

16. USE OF NAMES AND TRADEMARKS

Nothing contained in this Agreement will be construed as conferring any right to use in advertising, publicity or other promotional activities any name, trademark, trade name, or other designation of either party hereto by the other (including any contraction, abbreviation, or simulation of any of the foregoing). Unless required by law or consented to in writing by REGENTS, the use by LICENSEE of the name "The Regents of the University of California" or the name of any University of California campus in advertising, publicity or other promotional activities is expressly prohibited.

17. LIMITED WARRANTIES AND LIMITATION OF LIABILITY

17.1 REGENTS warrants to LICENSEE that it has the lawful right to grant this license.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

17.2 This license and the associated INVENTION are provided WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED. REGENTS MAKES NO REPRESENTATION OR WARRANTY THAT THE INVENTION, REGENTS' PATENT RIGHTS, LICENSED PRODUCT(S), LICENSED SERVICES OR LICENSED METHOD WILL NOT INFRINGE ANY PATENT OR OTHER PROPRIETARY RIGHT.

17.3 SUBJECT TO LICENSEE'S DUTIES UNDER ARTICLE 19 FOR CLAIMS OF THIRD PARTIES, IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER FOR ANY INCIDENTIAL, SPECIAL, INDIRECTOR OR CONSEQUENTIAL DAMAGES RESULTING FROM EXERCISE OF THIS LICENSE OR THE USE OF THE INVENTION, REGENTS' PATENT RIGHTS, LICENSED METHOD, OR LICENSED PRODUCT(S).

17.4 Nothing in this Agreement is or will be construed as:

(a) A warranty or representation by REGENTS as to the validity, enforceability or scope of any REGENTS' PATENT RIGHTS; or

(b) A warranty or representation that anything made, used, or SOLD under any license granted in this Agreement is or will be free from infringement of patents of third parties; or

(c) An obligation to bring or prosecute actions or suits against third parties for patent infringement, except as provided in Article 18; or

(d) Conferring by implication, estoppel, or otherwise any license or rights under any patents of REGENTS other than REGENTS' PATENT RIGHTS as defined herein, regardless of whether such patents are dominant or subordinate to REGENTS' PATENT RIGHTS; or

(e) An obligation to furnish any know-how not provided in the patents and patent applications under REGENTS' PATENT RIGHTS

18. PATENT INFRINGEMENT

18.1 In the event that a party (for the REGENTS, to the extent of actual knowledge of the licensing professional responsible for administration of this Agreement) learns

of the substantial infringement of any REGENTS' PATENT RIGHTS under this Agreement, they will promptly provide the other party with notice and reasonable evidence of such infringement ("Infringement Notice"). During the period and in a jurisdiction where LICENSEE has exclusive rights under this Agreement, neither party will notify a third party, including the infringer, of the infringement without first obtaining consent of the other party, which consent will not be unreasonably withheld. If agreed by the parties, both parties will use diligent efforts, in cooperation with each other, to terminate such infringement without litigation.

18.2 If the infringing activity of potential commercial significance has not been abated within **[*]** days following the effective date of the Infringement Notice, LICENSEE may institute suit for patent infringement against the infringer. REGENTS may voluntarily join such suit at its own expense, but may not thereafter commence suit against the infringer for the acts of infringement that are the subject of LICENSEE's suit or any judgment rendered in that suit. LICENSEE may not join REGENTS in a suit initiated by LICENSEE without REGENTS' prior written consent, If, in a suit initiated by LICENSEE, REGENTS is involuntarily joined other than by LICENSEE, LICENSEE will pay any costs incurred by REGENTS arising out of such suit, including but not limited to, any legal fees of counsel that REGENTS selects and retains to represent it in the suit.

If, within **[*]** days following the effective date of the Infringement Notice, the infringing activity of potential commercial significance has not been abated and if LICENSEE has not brought suit against the infringer, REGENTS may institute suit for patent infringement against the infringer. If REGENTS institutes such suit, LICENSEE may not join such suit without REGENTS' consent and may not thereafter commence suit against the infringer for the acts of infringement that are the subject of REGENTS' suit or any judgment rendered in that suit.

18.3 Such legal action as is decided upon will be at the expense of the party on account of whom suit is brought and all recoveries recovered thereby will belong to such party, provided that legal action brought jointly by REGENTS and LICENSEE and participated in by both, will be at the joint expense of the parties and all recoveries will be allocated in the following order: a) to each party reimbursement in equal amounts of the attorney's costs, fees, and other related expenses to the extent each

party paid for such costs, fees, and expenses until all such costs, fees, and expenses are consumed for each party; and b) any remaining amount shared jointly by them in proportion to the share of expenses paid by each party, but in no event will REGENTS' share be less than **[*]** of such remaining amount if REGENTS is a party.

18.4 Each party will cooperate with the other in litigation instituted hereunder but at the expense of the party on account of whom suit is brought. Such litigation will be controlled by the party bringing the action, except that REGENTS may be represented by counsel of its choice in any suit brought by LICENSE.

18.5 Any agreement made by LICENSEE for the purposes of settling litigation or other dispute shall comply with the requirements of Article 4 (Sublicenses) of this Agreement.

19. INDEMNIFICATION

19.1 LICENSEE will, and will require its sublicensees, to indemnify, hold harmless, and defend REGENTS, its officers, employees, and agents, sponsor(s) of the research that led to the INVENTION, the inventors of any patents and patent applications in REGENTS' PATENT RIGHTS, and their employers ("REGENTS INDEMNITEES") against any and all claims, suits, losses, damages, costs, fees, and expenses resulting from or arising of exercise of this license or any sublicense, including without limitation any cause of action relating to product liability. This indemnification will include, but not be limited to, any product liability; provided that LICENSEE and sublicensees shall not be responsible for any losses caused by breach of this Agreement by REGENTS."

19.2 LICENSEE, at its sole cost and expense, will insure its activities in connection with any work performed hereunder and will obtain, keep in force, and maintain the following insurance:

(a) prior to clinical trials, Commercial Form General Liability Insurance (contractual liability included) with limits as follows:

Each Occurrence	$ 500,000
Products/Completed Operations Aggregate	$ 0.
Personal and Advertising Injury	$ 0.
General Aggregate	$1,000,000

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) upon the earlier of any clinical trials, Commercial Form General Liability Insurance (contractual Liability included) with limits as follows:

Each Occurrence	$5,000,000
Products/Completed Operations Aggregate	$5,000,000
Personal and Advertising Injury	$ 0.
General Aggregate	$3,000,000

(c) upon the earlier of the first commercial sale of a LICENSED PRODUCT, LICENSED SERVICE and LICENSED METHOD, Commercial Form General Liability Insurance (contractual Liability included) with limits as follows:

Each Occurrence	$ 5,000,000
Products/Completed Operations Aggregate	$10,000,000
Personal and Advertising Injury	$ 5,000,000
General Aggregate	$10,000,000

If the above insurance is written on a claims-made form, it shall continue for three (3) years following termination or expiration of this Agreement. The insurance shall have a retroactive date of placement prior to or coinciding with the first commercial sale of Licensed Product; and

(d) worker’s compensation as legally required in the jurisdiction in which LICENSEE is doing business.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

19.3 The coverage and limits referred to in Subparagraphs 19.2a, 19.2b and 19.2c above will not in any way limit the liability of LICENSEE under this Article. Upon the execution of this Agreement, LICENSEE will furnish REGENTS with certificates of insurance evidencing compliance with all requirements. Such certificates will:

(a) provide for **[*]** days' (**[*]** days for non-payment of premium) advance written notice to REGENTS of any cancellation of insurance coverages; LICENSEE will promptly notify REGENTS of any material reduction of the insurance coverages below the amounts required hereunder; and

(b) indicate that REGENTS has been endorsed as an additional insured under the coverage described above in Subparagraph l9.2.

(c) include a provision that the coverage will be primary and will not participate with, nor will be excess over, any valid and collectable insurance or program of self-insurance maintained by REGENTS.

19.4 REGENTS will promptly notify LICENSEE in writing of any claim or suit brought against REGENTS for which REGENTS intends to invoke the provisions of this Article 19. LICENSEE will keep REGENTS informed of its defense of any claims pursuant to this Article 19.

20. COMPLIANCE WITH LAWS

LICENSEE will comply with all applicable international, national, state, regional, and local laws and regulations in performing its obligations hereunder and in its use, manufacture, SALE or import of the LICENSED PRODUCTS, LICENSED SERVICES, or practice of the LICENSED METHOD. LICENSEE understands that REGENTS is subject to United States laws and regulations (including the Arms Export Control Act, as amended, and the Export Administration Act of 1979), controlling the export of technical data, computer software, laboratory prototypes and other commodities, and REGENTS' obligations under this Agreement are contingent on compliance with such laws and regulations. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances by LICENSEE that LICENSEE will not export such technical data and/or commodities to certain foreign countries without prior approval of such agency. REGENTS neither represents that a license will not be required nor that, if required, it will be issued.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

21. GOVERNMENT APPROVAL OR REGISTRATION

If this Agreement or any associated transaction is required by the law of any nation to be either approved or registered with any governmental agency, LICENSEE will assume all legal obligations to do so. LICENSEE will notify REGENTS if it becomes aware that this Agreement is subject to a United States or foreign government reporting or approval requirement. LICENSEE will make all necessary filings and pay all costs including fees, penalties, and all other out-of-pocket costs associated with such reporting or approval process.

22. ASSIGNMENT

Neither this Agreement nor any right or obligation hereunder may be assigned, delegated or otherwise transferred, in whole or in part, by either party without the prior express written consent of the other; provided, however, that either party may, without written consent of the other, assign this Agreement and its rights and delegate its obligations hereunder to its successors, or in connection with the transfer or sale of all or substantially all of such party's assets or business related to this Agreement, or in the event of its merger, consolidation, change in control or similar transaction. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment in violation of this Section 22 shall be void. The terms and conditions of this Agreement shall be binding upon and inure to the benefit of the permitted successors and assigns of the parties. The REGENTS may assign to an invention management organization without LICENSEES approval, provided that the organization is managing the inventions on behalf of the University of California, Berkeley.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

23. NOTICES

All notices under this Agreement shall be in writing and may be delivered in person, or mailed by registered or certified U.S. mail, or sent by nationally-recognized overnight courier. All such notices shall be deemed delivered at the following address.

To REGENTS: Office of Technology Licensing
2150 Shattuck Avenue, Suite 510
Berkeley, CA 94704-1347
Attn.: Director (UC Case No.: **[*]**)

To LICENSEE: Aduro Biotech
626 Bancroft Way
Berkeley, CA 94710-2224
Attn.: Steven Bodovitz <sbodovitz@adurobiotech.com>

If received on a day other than a business day, then such notice shall be deemed delivered on the next business day at the address of receipt. Either party may change its address upon written notice to the other party.

24. LATE PAYMENTS

If monies owed to REGENTS under this Agreement are not received by REGENTS when due, LICENSEE will pay to REGENTS interest charges at a rate of ten percent (10%) per annum. Such interest will be calculated from the date payment was due until actually received by REGENTS. Such accrual of interest will be in addition to, and not in lieu of, enforcement of any other rights of REGENTS related to such late payment. Acceptance of any late payment will not constitute a waiver under Article 25 (Waiver) of this Agreement.

25. WAIVER

The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement will not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party. None of the terms and conditions of this Agreement can be waived except by the written consent of the party waiving compliance.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

26. CONFIDENTIALITY

26.1 Each party will secure and hold the other party's proprietary business and technical information, patent prosecution material and other proprietary information, including the negotiated terms of this Agreement, in confidence and against disclosure to third parties with at least the same degree of care as it exercises to protect its own data and license agreements of a similar nature. This obligation will expire **[*]** years after the termination or expiration of this Agreement.

26.2 Nothing contained herein will in any way restrict or impair the right of LICENSEE or REGENTS to use, disclose, or otherwise deal with any information or data which:

(a) at the time of disclosure to a receiving party is generally available to the public or thereafter becomes generally available to the public by publication or otherwise through no act of the receiving party;

(b) the receiving party can show by written record was in its possession prior to the time of disclosure to it hereunder and was not acquired directly or indirectly from the disclosing party;

(c) is independently made available to the receiving party without restrictions as a matter of right by a third party; or

(d) is subject to disclosure under the California Public Records Act or other requirements of law.

26.3 REGENTS will be free to release to the inventors and senior administrators employed by REGENTS the terms and conditions of this Agreement upon their request. If such release is made, REGENTS will inform such employees of the confidentiality obligations set forth above and will request that they do not disclose such terms and conditions to others. Should a third party inquire whether a license to REGENTS' PATENT RIGHTS is available, REGENTS may disclose the existence of this Agreement and the extent of the grant in Articles 3 and 4 to such third party, but will not disclose the name of LICENSEE unless LICENSEE has already made such disclosure publicly, except where REGENTS is required to release information under either the California Public Records Act or other applicable law, provided REGENTS gives prior written notice to LICENSEE of such disclosure. REGENTS can publicly identify LICENSEE's corporate name and contact information as an entity with which REGENTS has an agreement that involves the commercialization of technology developed at the University of

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

California, Berkeley; however this exception does not cover other information about this AGREEMENT, including INVENTIONS and INVENTORS, when used in association with LICENSEE's name

26.4 LICENSEE and REGENTS agree to destroy or return to the disclosing party proprietary information received from the other in its possession within **[*]** days following the effective date of termination of this Agreement. However, each party may retain one copy of proprietary information of the other solely for archival purposes in non-working files for the sole purpose of verifying the ownership of the proprietary information, provided such proprietary information will be subject to the confidentiality provisions set forth in Article 26.1. LICENSEE and REGENTS agree to provide each other, within **[*]** days following termination of this Agreement, with a written notice that proprietary information has been returned or destroyed.

27. FORCE MAJEURE

Except for LICENSEE's obligation to make any payments to REGENTS hereunder (assuming that the ability of LICENSEE to recover revenue and make payments is unimpaired by the force majeure), the parties to this Agreement shall be excused from any performance required hereunder if such performance is rendered impossible or unfeasible due to any catastrophes or other major events beyond their reasonable control, including, without limitation, war, riot, and insurrection; laws, proclamations, edicts, ordinances, or regulations; strikes, lockouts, or other serious labor disputes; and floods, fires, explosions, or other natural disasters. When such events have abated, the parties' respective obligations hereunder will resume.

28. SEVERABILITY

The provisions of this Agreement are severable, and in the event that any provision of this Agreement will be determined to be invalid or unenforceable under any controlling body of law, such invalidity or enforceability will not in any way affect the validity or enforceability of the remaining provisions hereof.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

29. APPLICABLE LAW AND VENUE

THIS AGREEMENT WILL BE CONSTRUED, INTERPRETED, AND APPLIED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, excluding any choice of law rules that would direct the application of the laws of another jurisdiction, but the scope and validity of any patent or patent application under REGENTS' PATENT RIGHTS will be determined by the applicable law of the country of such patent or patent application. Any legal action brought by the parties relating to this Agreement will be conducted in San Francisco, California.

30. SCOPE OF AGREEMENT

This Agreement incorporates the entire agreement between the parties with respect to the subject matter hereof, and this Agreement may be altered or modified only by written amendment duly executed by the parties hereto.

31. HEADINGS

Section and subsection headings are inserted for convenience of reference only and do not form part of this Agreement.

32. COUNTERPARTS

This Agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[Remainder of this page intentionally left blank]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

33. ELECTRONIC COPY

The parties to this document agree that a copy of the original signature (including an electronic copy) may be used for any and all purposes for which the original signature may have been used. The parties further waive any right to challenge the admissibility or authenticity of this document in a court of law based solely on the absence of an original signature.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate originals by their duly authorized officers or representatives.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA		**ADURO BIOTECH**	
By	/s/ Irvin J. Mettler	By	/s/ Stephen Isaacs
	Irvin J. Mettler, Ph.D.		
	Associate Director	Printed Name	Stephen Isaacs
	Office of Technology Licensing		
		Title	CEO
Date	March 15, 2012	Date	March 15, 2012

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ASSET PURCHASE AGREEMENT

This Asset Purchase Agreement (this "**Agreement**") is made effective as of January 31, 2013 (the "**Effective Date**") by and between BioSante Pharmaceuticals, Inc. a Delaware corporation with a principal place of business at 111 Barclay Boulevard, Suite 400, Lincolnshire, Illinois 60069 ("**Seller**"), and Aduro GVAX Inc., a Delaware corporation with a principal place of business at 626 Bancroft Way, #3C, Berkeley, CA 94710-2224 ("**Buyer**"). Seller and Buyer are each hereafter referred to individually as a "**Party**" and together as the "**Parties**".

WHEREAS, Seller desires to sell, and Buyer desires to purchase, the Purchased Assets (as defined below) in accordance with the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereby agree as follows:

1. DEFINITIONS

Whenever used in the Agreement with an initial capital letter, the terms defined in this Article 1 shall have the meanings specified.

1.1 "**Affiliate**" shall mean any corporation, firm, limited liability company, partnership or other entity that directly controls or is controlled by a Party to this Agreement. For purposes of this Section 1.1, "control" means ownership, directly or indirectly through one or more Affiliates, of fifty percent (50%) or more of the shares of stock entitled to vote for the election of directors, in the case of a corporation, or fifty percent (50%) or more of the equity interests in the case of any other type of legal entity, status as a general partner in any partnership, or any other arrangement whereby a Party controls or has the right to control the Board of Directors or equivalent governing body of a corporation or other entity.

1.2 "**Applicable Law**" shall mean, with respect to any Person, each and any of the following to the extent applicable to such Person: federal, state, local, municipal, foreign, international, multinational or other constitution, law, ordinance, principle of common law, code, rule, regulation, statute or treaty, in each of the foregoing cases, as amended or may be amended.

1.3 "**Assignment and Assumption Agreement**" shall have the meaning set forth in Section 3.2.3.

1.4 "**Assignment of Contracts**" shall have the meaning set forth in Section 3.2.3.

1.5 "**Assumed Liabilities**" shall have the meaning set forth in Section 2.3.

1.6 "**Bill of Sale**" shall have the meaning set forth in Section 3.2.2.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.7 "**BLA**" shall mean a biologics license application (as defined in Title 21 of the United States Code of Federal Regulations, as amended from time to time) filed with the FDA seeking Regulatory Approval to market and sell any GVAX Product in the United States.

1.8 "**Books and Records**" shall mean all Regulatory Documentation, Technology, books, files, papers, agreements, correspondence, databases, information systems, programs, software, documents and records (regardless of medium, whether in physical or electronic format and stored in computer memory or other storage device) related to the Purchased Assets or the Assumed Liabilities.

1.9 "**Buyer Indemnitees**" shall have the meaning set forth in Section 10.1.2.

1.10 "**Closing**" shall have the meaning set forth in Section 3.2.1.

1.11 "**Closing Date**" shall have the meaning set forth in Section 3.2.1.

1.12 "**Closing Payment**" shall have the meaning set forth in Section 4.1.1.

1.13 "**Confidential Information**" shall mean with respect to a Party (the "**Receiving Party**"), all information which is disclosed by the other Party (the "**Disclosing Party**") to the Receiving Party hereunder or to any of its employees, consultants, Affiliates, licensees or sublicensees, except to the extent that the Receiving Party can demonstrate by written record or other suitable physical evidence that such information, (a) as of the date of disclosure is demonstrably known to the Receiving Party or its Affiliates other than by virtue of a prior confidential disclosure to such Party or its Affiliates; (b) as of the date of disclosure is in, or subsequently enters, the public domain, through no fault or omission of the Receiving Party; (c) is obtained from a Third Party having a lawful right to make such disclosure free from any obligation of confidentiality to the Disclosing Party; or (d) is independently developed by or for the Receiving Party without reference to or reliance upon any Confidential Information of the Disclosing Party; provided, however, that with respect to the Purchased Assets, Seller shall be deemed to be the Receiving Party as of the Closing and shall not be entitled to the benefit of (a) or (d) above with respect thereto.

1.14 "**Copyright Assignment**" shall have the meaning set forth in Section 3.2.2.

1.15 "**Development**" and "**Develop**" shall mean, with respect to any GVAX Product, all activities with respect to such GVAX Product relating to research and development in connection with seeking, obtaining and/or maintaining any Regulatory Approval for such GVAX Product in the Territory, including without limitation, all pre-clinical research and development activities, all human clinical studies, all activities relating to developing the ability to manufacture any GVAX Product or any component thereof (including, without limitation, process development work), and all other activities relating to seeking, obtaining and/or maintaining any Regulatory Approvals from the FDA and/or any Foreign Regulatory Authority.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.16 "**Domain Name Assignment**" shall have the meaning set forth in Section 3.2.2.

1.17 "**Drug Approval Application**" shall mean any application for Regulatory Approval (including pricing and reimbursement approvals) required prior to any commercial sale or use of a GVAX Product in any country or jurisdiction in the Territory, including, without limitation, (a) any BLA, NDA or MAA filed with the FDA or any Foreign Regulatory Authority, and (b) any equivalent application filed with any Foreign Regulatory Authority for Regulatory Approval (including pricing and reimbursement approvals) required prior to any commercial sale or use of a GVAX Product in any country or jurisdiction in the Territory.

1.18 "**Encumbrance**" shall mean any charge, claim, community or other marital property interest, condition, equitable interest, lien, option, pledge, security interest, mortgage, right of way, easement, encroachment, servitude, right of first option, right of first refusal or similar restriction, including any restriction on use, voting (in the case of any security or equity interest), transfer, receipt of income or exercise of any other attribute of ownership.

1.19 "**Excluded Assets**" shall have the meaning set forth in Section 2.2.

1.20 "**Excluded Liabilities**" shall have the meaning set forth in Section 2.4.

1.21 "**First Commercial Sale**" shall mean, on a country-by-country basis, the date of the first arm's length transaction, transfer or disposition for value to a Third Party of a GVAX Product by or on behalf of Buyer or any Affiliate of Buyer in such country as part of a country-wide commercialization effort.

1.22 "**FDA**" shall mean the United States Food and Drug Administration and any successor agency or authority thereto.

1.23 "**Foreign Regulatory Authority**" shall mean any applicable supranational, national, federal, state or local regulatory agency, department, bureau or other governmental entity of any country or jurisdiction in the Territory (other than the FDA in the United States), having responsibility in such country or jurisdiction for any Regulatory Approvals of any kind in such country or jurisdiction, and any successor agency or authority thereto.

1.24 "**GVAX**" shall mean a composition comprising autologous or allogeneic tumor cells that have been genetically modified to express GM-CSF and are rendered proliferation incompetent by irradiation, or autologous or allogeneic tumor cells admixed, administered or co-administered with a bystander cell line that expresses GM-CSF and rendered proliferation incompetent by irradiation.

1.25 "**GVAX-Other Field**" shall mean any therapy relating to the treatment of cancer in humans, outside of the GVAX-Pancreas Field and the GVAX-Prostate Field, utilizing the Purchased Technology.

1.26 "**GVAX-Other Product**" shall mean (a) any product or service of Buyer or its Affiliates or Sublicensees, the manufacture, use, sale or performance of which infringes any Valid Claim included in the Purchased Patent Rights (excluding the GVAX-Pancreas Patent Rights and the GVAX-Prostate Patent Rights) in the GVAX-Other Field, (b) any product or service developed in whole or in part through the use of a process that is covered by a Valid Claim included in the Purchased Patent Rights (excluding the GVAX-Pancreas Patent Rights and the GVAX-Prostate Patent Rights) in the GVAX-Other Field, or (c) any product in the GVAX-Other Field not covered by (a) or (b) but that is developed and/or manufactured as a result of the use of the Purchased Technology.

1.27 "**GVAX-Pancreas Field**" shall mean a combination therapy relating to the treatment of pancreas cancer in humans utilizing both the Purchased Technology and one or more of any listeria vaccines in any formulation existing now or in the future or any Other Vaccines.

1.28 "**GVAX-Pancreas Patent Rights**" shall mean the Purchased Patent Rights relating to the GVAX-Pancreas cancer vaccines listed on Schedule A.

1.29 "**GVAX-Pancreas Product**" shall mean (a) any product or service of Buyer or its Affiliates or Sublicensees, the manufacture, use, sale or performance of which infringes any Valid Claim included in the GVAX-Pancreas Patent Rights in the GVAX-Pancreas Field, (b) any product or service developed in whole or in part through the use of a process that is covered by a Valid Claim included in the GVAX-Pancreas Patent Rights in the GVAX-Pancreas Field, or (c) any product in the GVAX-Pancreas Field not covered by (a) or (b) but that is developed and/or manufactured as a result of the use of the Purchased Technology.

1.30 "**GVAX-Prostate Field**" shall mean a combination therapy relating to the treatment of prostate cancer in humans utilizing both the Purchased Technology and one or more of any listeria vaccines in any formulation existing now or in the future or any Other Vaccines.

1.31 "**GVAX-Prostate Patent Rights**" shall mean the Purchased Patent Rights relating to the GVAX-Prostate cancer vaccines listed on Schedule A.

1.32 "**GVAX-Prostate Product**" shall mean (a) any product or service of Buyer or its Affiliates or Sublicensees, the manufacture, use, sale or performance of which infringes any Valid Claim included in the GVAX-Prostate Patent Rights in the GVAX-Prostate Field, (b) any product or service developed in whole or in part through the use of a process that is covered by a Valid Claim included in the GVAX-Prostate Patent Rights in the GVAX-Prostate Field, or (c) any product in the GVAX-Prostate Field not covered by (a) or (b) but that is developed and/or manufactured as a result of the use of the Purchased Technology.

1.33 "**GVAX Product**" shall mean any GVAX-Other Product, any GVAX-Pancreas Product, or any GVAX-Prostate Product.

1.34 "**Governmental Entity**" shall mean any court, arbitrational tribunal, administrative agency or commission or other governmental, quasi-governmental or regulatory authority, agency or instrumentality, including without limitation, the FDA and Foreign Regulatory Authorities.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.35 "**Hussman Agreement**" shall mean the Letter Agreement by and between Seller and The John P. Hussman Foundation dated as of July 13, 2011 and attached Operating Terms and appendices.

1.36 "**IND**" shall mean an investigational new drug application (as defined in Title 21 of the United States Code of Federal Regulations, as amended from time to time) filed or to be filed with the FDA with regard to any GVAX Product.

1.37 "**Indemnifying Party**" shall have the meaning set forth in Section 10.2.

1.38 "**JHU**" shall mean The Johns Hopkins University, a Maryland corporation.

1.39 "**JHU License Agreements**" shall mean that certain Restated and Amended License Agreement between JHU and Seller dated as of March 3, 2011, which amends and restates in the entirety that certain License Agreement between JHU and Cell Genesys, Inc. ("**Cell Genesys**") dated as of June 15, 2000, as amended by a First Amendment to the License Agreement dated as of March 27, 2008, that certain License Agreement between JHU and Cell Genesys, Inc., dated March 12, 2001, as amended by a First Amendment to the License Agreement dated as of March 27, 2008, and that certain License Agreement between JHU and Cell Genesys, Inc., dated October 1, 1999, as amended by a First Amendment to the License Agreement dated as of August 30, 2003.

1.40 "**Liability**" shall mean any liability or obligation of any kind, character or description, whether known or unknown, absolute or contingent, matured or unmatured, disputed or undisputed, secured or unsecured, conditional or unconditional, accrued or unaccrued, liquidated or unliquidated, vested or unvested, joint or several, due or to become due, executory, determined, determinable or otherwise, and whether or not the same is required to be accrued on financial statements.

1.41 "**MAA**" shall mean an application filed with the relevant Foreign Regulatory Authorities in Europe seeking Regulatory Approval to market and sell any GVAX Product in Europe or any country or territory therein.

1.42 "**MIT License Agreement**" shall mean that certain Amended and Restated Exclusive Patent License Agreement between The Massachusetts Institute for Technology, The Whitehead Institute for Research and Cell Genesys, Inc. dated as of December 17, 1998, as amended by a First Amendment to the Amended and Restated Exclusive Patent License Agreement dated as of September 27, 2005, and as amended by a Second Amendment to the Amended and Restated Exclusive Patent License Agreement, dated as of May 26, 2011.

1.43 "**NDA**" shall mean a new drug application (as defined in Title 21 of the United States Code of Federal Regulations, as amended from time to time) filed with the FDA seeking Regulatory Approval to market and sell any GVAX Product in the United States.

1.44 "**Net Sales**" shall mean the gross amounts actually received by Buyer or its Affiliates for all GVAX Products sold by Buyer or its Affiliates or Sublicensees to Third Parties throughout the Territory, less any deductions allowed under U.S. G.A.A.P. to the extent not already taken, including, without limitation, the following amounts incurred or paid by Buyer or its Affiliates or Sublicensees with respect to sales of GVAX Products:

(a) trade, cash and quantity discounts or rebates actually allowed or taken, including discounts or rebates to governmental or managed care organizations;

(b) reimbursements, credits or allowances actually given or made for rejection or return of previously sold GVAX Products (including Medicare and similar types of rebates);

(c) any charges for insurance, freight, and other transportation costs directly related to the delivery of GVAX Products;

(d) any tax, tariff, duty or governmental charge levied on the sales, transfer, transportation or delivery of a GVAX Product (including any tax such as a value added or similar tax or government charge) borne by the seller thereof, other than franchise or income tax of any kind whatsoever;

(e) any import or export duties or their equivalent borne by the seller;

(f) any amounts received in connection with conducting clinical trials;

(g) sales to government organizations, charitable non-governmental organizations, indigent programs and sales of GVAX Products at a loss or for materially reduced profit margins; and

(h) the aggregate amount of all royalty payments made by Buyer to one or more Third Parties in any country in the Territory as consideration for a license to an issued patent or patents with respect to the GVAX component of a GVAX Product, in the absence of which the GVAX Product could not legally be used or sold in such country.

"Net Sales" shall not include sales or transfers between Buyer and its Affiliates or Sublicensees, unless the GVAX Product is consumed by the Affiliate or Sublicensee.

1.45 "**Other Vaccines**" shall mean one or more Buyer bacterial vaccines (other than listeria vaccines) that Buyer elects to include within the scope of the combination therapies contemplated by this Agreement.

1.46 "**Patent Assignment**" shall have the meaning set forth in Section 3.2.2.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.47 "**Patent Rights**" shall mean the rights and interests in and to issued patents and pending patent applications (including inventor's certificates and utility models) in any country or jurisdiction within the Territory, including all provisionals, substitutions, continuations, continuations-in-part, divisionals, supplementary protection certificates, renewals, all letters patent granted thereon, and all reissues, reexaminations, extensions, confirmations, revalidations, registrations, patents of addition thereof, PCTs and foreign counterparts.

1.48 "**Person**" shall mean any individual, corporation, general or limited partnership, limited liability company, joint venture, estate, trust, association, organization, labor union, or other entity or Governmental Entity.

1.49 "**Purchased Price**" shall have the meaning set forth in Section 3.1.

1.50 "**Purchased Assets**" shall have the meaning set forth in Section 2.1.

1.51 "**Purchased Patent Rights**" shall mean all Patent Rights which are included in the Purchased Assets.

1.52 "**Purchased Technology**" shall mean and include all Technology which is included in the Purchased Assets.

1.53 "**RCT Non-Exclusive License Agreement**" shall mean that certain Non-exclusive License Agreement between Research Corporation Technologies, Inc. and Cell Genesys, Inc., dated July 1, 1999.

1.54 "**Regulatory Approval**" shall mean any and all filings and approvals (including pricing and reimbursement approvals only in those jurisdictions requiring reimbursement approval required before marketing can commence), product and establishment licenses, registrations or authorizations of any kind of the FDA or any Foreign Regulatory Authority necessary for the development, pre-clinical and/or human clinical testing, manufacture, quality testing, supply, use, storage, importation, export, transport, marketing and sale of a GVAX Product (or any component thereof) in any country or other jurisdiction in the Territory. "Regulatory Approval" shall include, without limitation, any INDs and drug master files.

1.55 "**Regulatory Documentation**" shall mean all applications, registrations, licenses, authorization and approvals (including all Regulatory Approvals), all correspondence submitted to or received from the FDA or any Foreign Regulatory Authority (including minutes and official contact reports relating to any communications with the FDA or any Foreign Regulatory Authority) and all supporting documents and data contained in any of the foregoing (including any INDs or foreign equivalents, any manufacturing facility validation and/or licensure, any Drug Approval Applications, orphan drug applications, and any other documents related to Regulatory Approvals) that was provided to Seller by Cell Genesys upon the acquisition of Cell Genesys by Seller, or is in Seller's possession or control, that is related to GVAX, including, without limitation, vaccines or products related to or necessary or useful in connection with GVAX Products.

1.56 "**Royalty Payments**" shall mean the royalty payments payable by Buyer to Seller in accordance with Sections 4.1.2 through 4.1.6.

1.57 "**Royalty Term**" shall mean, with respect to each GVAX Product, the period commencing on the Closing Date and continuing on a country-by-country, and product-by-product basis until the later of either (a) the expiration date of the last to expire of the Purchased Patent Rights covering the GVAX Product or any other applicable governmental or regulatory exclusivity period, including orphan drug exclusivity following approval (in either case, the "**Regulatory End Date**"), or (b) the seventh (7th) anniversary of the First Commercial Sale of such GVAX Product in that country; provided, however, that (i) if Net Sales in such country for any twelve-month period ending on the same month and day as the Regulatory End Date (a "**Measurement Year**") but following the Regulatory End Date are less than 80% of the Net Sales in such country for the Measurement Year with the highest Net Sales during the Royalty Term, then the Royalty Term for such country shall expire as of the last day of the most recently completed Measurement Year; and (ii) if Net Sales in such country for any Measurement Year are less than 90% of the Net Sales in such country for the immediately preceding Measurement Year then the Royalty Term for such country shall expire as of the last day of the most recently completed Measurement Year.

1.58 "**Seller Designee**" shall have the meaning set forth in Section 6.2.

1.59 "**Seller Indemnitees**" shall have the meaning set forth in Section 10.1.1.

1.60 "**Sublicensee**" shall mean any Third Party to whom Buyer grants a license or sublicense of some or all of the rights granted to Buyer under this Agreement, but excluding the John P. Hussman Foundation under the Hussman Agreement.

1.61 "**Sublicense Income**" shall mean all payments received by Buyer or its Affiliates from its Sublicensees for the grant by Buyer of a sublicense of the (a) GVAX-Pancreas Patent Rights and Purchased Technology to develop, have developed, make, have made, use have used sell, offer for sale, have sold import, have imported, export, have exported, commercialize or have commercialized a GVAX-Pancreas Product, or (b) the GVAX-Prostate Patent Rights and Purchased Technology to develop, have developed, make, have made, use have used sell, offer for sale, have sold import, have imported, export, have exported, commercialize or have commercialized a GVAX-Prostate Product; it being understood that Sublicense Income shall specifically not include any other amounts received by Buyer from its Sublicensees, including, without limitation, (i) payments made by or on behalf of a Sublicensee which constitute grants or are required to be used to support or fund research, development or commercialization activities to be undertaken by Buyer, (ii) payments made by or on behalf of a Sublicensee which may be required to be repaid by Buyer (such as loans or advances that are subject to reimbursement, including convertible debt), (iii) payments made to JHU under the JHU Agreements, (iv) royalty payments, (v) purchases or grants of equity of Buyer, (vi) purchase of debt, and (vii) patent costs.

1.62 "**Technology**" shall mean and include any and all unpatented, proprietary ideas, inventions, discoveries, Confidential Information, biologic materials, cell lines, CMC data,

drug master files, data, results, formulae, designs, specifications, methods, processes, formulations, techniques, ideas, know-how, technical information (including, without limitation, structural and functional information), manufacturing processes and descriptions, process information, pre-clinical information, clinical information, and any and all proprietary biological, chemical, pharmacological, toxicological, pre-clinical, clinical, assay, control and manufacturing data and materials that was provided to Seller by Cell Genesys upon the acquisition of Cell Genesys by Seller, or is in Seller's possession or control, that is related to GVAX, including, without limitation, vaccines or products related to or necessary or useful in connection with GVAX Products.

1.63 "**Territory**" shall mean all countries and jurisdictions of the world.

1.64 "**Third Party**" shall mean any Person other than Buyer, Seller and their respective Affiliates.

1.65 "**Trademark Assignment**" shall have the meaning set forth in Section 3.2.2.

1.66 "**Transaction Documents**" shall have the meaning set forth in Section 7.1(a).

1.67 "**Transferred Contracts**" shall mean any written, oral, implied or other agreement, contract, understanding, arrangement, instrument, warranty, assignment, power of attorney, certificate, purchase order, work order, commitment, covenant, assurance or undertaking of any nature listed on Schedule A.

1.68 "**UC License Agreements**" shall mean that certain Exclusive License Agreement between The Regents of the University of California and Cell Genesys, Inc., dated March 1, 2007 and that certain Non-exclusive License and Bailment Agreement between The Regents of the University of California and Cell Genesys, Inc., dated March 1, 2007.

1.69 "**Valid Claim**" shall mean a claim in an issued, unexpired patent or in a pending patent application within the Purchased Patent Rights that (a) has not been finally cancelled, withdrawn, abandoned or rejected by any administrative agency or other body of competent jurisdiction, (b) has not been revoked, held invalid, or declared unpatentable or unenforceable in a decision of a court or other body of competent jurisdiction that is unappealable or unappealed within the time allowed for appeal, (c) has not been rendered unenforceable through disclaimer or otherwise, and (d) is not lost through an interference proceeding.

2. SALE AND PURCHASE OF ASSETS

2.1 **Sale and Purchase of Assets**.

2.1.1 Subject to the terms and conditions of this Agreement, and except for the Excluded Assets, at the Closing, Seller shall sell, transfer, convey, assign and deliver to

Buyer, and Buyer shall purchase and accept from Seller, free and clear from any Encumbrances, all right, title and interest of Seller in and to all of the assets of Seller related to or comprising GVAX vaccines and any assets necessary or reasonably useful to make, have made, use, have used, sell, offer for sale, have sold, import, have imported, develop, have developed, commercialize, and have commercialized GVAX Products including, without limitation, (i) all patents, patent applications and other Patent Rights, and all other intellectual property, Technology, Regulatory Approvals, Regulatory Documentation, the JHU License Agreements, the Hussman Agreement, the UC License Agreements, and the MIT License Agreement; (ii) all finished product inventories, work-in-process, inventories, product-in-transit inventories and other inventories of GVAX vaccines; (iii) all laboratory supplies, cell lines, reagents and related research materials owned by Seller as of the Closing Date that are used in connection with or related to GVAX vaccines; and (iv) all assets listed on Schedule A attached hereto (the "**Purchased Assets**").

2.2 **Excluded Assets**.

2.2.1 Notwithstanding anything to the contrary in this Agreement, Seller shall not sell, transfer or assign, and Buyer shall not purchase or otherwise acquire, any right, title or interest of Seller in any of Seller's other assets, including, without limitation, the assets listed on Schedule B attached hereto (collectively, the "**Excluded Assets**").

2.3 **Assumption of Liabilities**.

2.3.1 At the Closing, Buyer shall assume as of the Closing only the Liabilities of Seller specifically identified below in this Section 2.3.1 (the "**Assumed Liabilities**"), unless otherwise specifically excluded under Section 2.4.1:

(a) the Liabilities and obligations of Seller under the Transferred Contracts, but only to the extent such obligations: (i) are to be performed after the Closing; (ii) do not arise from or relate to any breach or default by Seller or any of its Affiliates of any provision of any of the Transferred Contracts or any event, circumstance or condition occurring or existing on or prior to the Closing that, with notice or lapse of time, would constitute or result in a breach or default thereof and (iii) do not arise from actions taken (or omitted from being taken) by Seller or any of its Affiliates on or prior to the Closing (or except to the extent that Buyer expressly agrees to assume from or reimburse Seller for such Liabilities prior to the Closing Date);

(b) Liabilities related to Regulatory Approvals, Regulatory Documentation and other regulatory matters pertaining to the Purchased Assets, including, without limitation, those regulatory obligations owed to the FDA, and any corresponding Foreign Regulatory Authorities, to the extent arising after the Closing Date;

(c) Liabilities related to preparing, filing, prosecuting, obtaining and maintaining all Purchased Patent Rights pertaining to the Purchased Assets after the Closing Date, which filing, prosecution and maintenance shall be in the sole discretion of Buyer; and

(d) Liabilities arising out of or directly relating to ownership or use of the Purchased Assets after the Closing Date.

2.4 **Excluded Liabilities**.

2.4.1 Buyer shall not assume, nor shall Buyer become responsible for, any Liabilities of Seller or Seller's Affiliates other than the Assumed Liabilities, which excluded Liabilities include, without limitation, any Liabilities of Seller arising out of or relating to the ownership or use of the Purchased Assets prior to the Closing Date, known or unknown, contingent or mature, or any Liabilities that do not arise out of or relate to the Purchased Assets (collectively, the "**Excluded Liabilities**").

3. PURCHASE PRICE AND CLOSING

3.1 **Purchase Price.**

3.1.1 Price. Upon and subject to the terms and conditions set forth in this Agreement, Buyer will pay to Seller, by wire transfer of immediately available funds: (a) the Closing Payment on the Closing Date; (b) the Royalty Payments, if any, in accordance with Sections 4.1.2 through 4.1.6; and (c) the Sublicense Income, if any, in accordance with Section 4.2.2. The Closing Payment, the Royalty Payments and the Sublicense Income, if any, are collectively referred to as the "**Purchase Price**."

3.1.2 Taxes. All sales, use, excise, personal property or other such taxes and fees (including any penalties and interest) incurred in connection with this Agreement shall be borne and paid by Seller when due. Each Party shall, at its own expense, timely file any tax return or other document with respect to such taxes or fees that are its responsibility (and the other Party shall cooperate with respect thereto as necessary). In addition, each Party shall be responsible for paying their own income taxes and be responsible for filing their own income tax returns in connection with this Agreement.

3.1.3 Bulk Sales. The Parties hereby waive compliance with the provisions of any bulk sales, bulk transfer or similar laws of any jurisdiction that may otherwise be applicable with respect to the sale of any or all of the Purchased Assets to Buyer; it being understood that any Liabilities arising out of the failure of Seller to comply with the requirements and provisions of any bulk sales, bulk transfer or similar laws of any jurisdiction are Excluded Liabilities.

3.1.4 Exclusive License Agreement. As of the Closing, the Exclusive License Agreement by and between Seller as "Licensor" and Aduro BioTech, Inc., a Delaware corporation as "Licensee" dated March 24, 2011 shall automatically terminate and shall be of no further force or effect.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

3.2 **Closing**.

3.2.1 Closing Date. The closing of the purchase and sale contemplated by this Agreement (the "**Closing**") shall be consummated on or before February 15, 2013, at the offices of Sheppard, Mullin, Richter & Hampton, LLP, 30 Rockefeller Plaza, New York, NY 10112, or at such other place or date as shall be agreed upon by Buyer and Seller. Buyer and Seller shall each endeavor to consummate the Closing by January 31, 2013. The time and date on which the Closing is actually held is referred to herein as the "**Closing Date**."

3.2.2 Sellers' Closing Deliveries. At the Closing, Seller shall (i) take all steps necessary to place Buyer in actual possession and control of the Purchased Assets, and (ii) deliver the following items, duly executed by Seller, as applicable, all of which shall be in form and substance attached as an exhibit to this Agreement or otherwise mutually agreed upon by Buyer and Seller:

(a) A Bill of Sale, substantially in the form of Exhibit A hereto (the "**Bill of Sale**");

(b) A trademark assignment, substantially in the form of Exhibit B hereto (the "**Trademark Assignment**");

(c) A patent assignment, substantially in the form of Exhibit C hereto (the "**Patent Assignment**");

(d) A domain name assignment, substantially in the form of Exhibit D attached hereto (the "**Domain Name Assignment**");

(e) A copyright assignment, substantially in the form of Exhibit E hereto (the "**Copyright Assignment**");

(f) Duly executed consent of all Third Parties required by Seller to consummate the transactions contemplated hereby, in form and substance reasonably satisfactory to Buyer, including consents to the assignment of the Transferred Contracts;

(g) Payoff and release letters from creditors of Seller, together with UCC termination or amendments, as applicable, with respect to financing statements filed against any of the Purchased Assets, terminating all Encumbrances on any of the Purchased Assets, in form and substance reasonably satisfactory to Buyer;

(h) Resolutions of Seller's board of directors authorizing the execution, delivery and performance of this Agreement and of all other documents to be executed and delivered in connection herewith;

(i) A certificate executed on behalf of Seller by its President or Chief Executive Officer, dated as of the Closing Date, certifying that: (i) the representations and warranties of Seller set forth in this Agreement, or in any written statement or certificate that shall be delivered to Buyer by Seller under this Agreement are true and correct on and as of the date made and as of the Closing Date as if made on the date thereof; and (ii) Seller has

performed all obligations and covenants required to be performed by it under this Agreement and any other agreement or document entered into in connection herewith prior to the Closing Date; and

(j) The Books and Records.

3.2.3 Buyer's and Seller's Closing Deliveries. At the Closing, Buyer and Seller shall deliver the following items, duly executed:

(a) An Assignment and Assumption Agreement, substantially in the form of Exhibit F hereto (the "**Assignment and Assumption Agreement**");

(b) An Assignment of Contracts, substantially in the form of Exhibit G hereto (the "**Assignment of Contracts**");

(c) A certificate executed on behalf of Buyer by its President or Chief Executive Officer, dated as of the Closing Date, certifying that: (i) the representations and warranties of Buyer set forth in this Agreement, or in any written statement or certificate that shall be delivered to Seller by Buyer under this Agreement are true and correct on and as of the date made and as of the Closing Date as if made on the date thereof; and (ii) Buyer has performed all obligations and covenants required to be performed by it under this Agreement and any other agreement or document entered into in connection herewith prior to the Closing Date; and

(d) Such other certificates, instruments or documents required pursuant to the provisions of this Agreement or otherwise necessary or appropriate to transfer the Purchased Assets and Assumed Liabilities in accordance with the terms hereof and consummate the transaction contemplated hereby, and to vest in Buyer full and complete title to the Purchased Assets, free and clear of all Encumbrances.

3.2.4 Pre-Closing Actions. From the Effective Date until the Closing Date, Seller shall not take any action with respect to the Purchased Assets except in the ordinary course of business, and shall use commercially reasonable efforts to preserve intact the Purchased Assets. Seller shall promptly notify Buyer of any event or occurrence not in the ordinary course of business of Seller that it proposes to take with respect to the Purchased Assets, each of which shall require the prior written consent of Buyer, and shall promptly notify Buyer of any event of which Seller is aware which reasonably could be expected to have an adverse effect on Seller or the Purchased Assets.

4. PAYMENTS AND ROYALTIES

4.1 **Payments for Purchased Assets**.

4.1.1 Closing Payment. Buyer shall pay to Seller One Million Dollars ($1,000,000) at the Closing (the "**Closing Payment**").

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4.1.2 GVAX-Pancreas Product Royalty Payments. In further consideration of the Purchased Assets, and subject to the other terms of this Agreement (including the remainder of this Section 4), (a) commencing on the date of the First Commercial Sale of each GVAX-Pancreas Product sold by Buyer and/or its Affiliates in each country in the Territory and continuing for the duration of the Royalty Term in such country, Buyer shall pay to Seller a royalty equal to **[*]** of Net Sales of any GVAX-Pancreas Product sold by Buyer and/or its Affiliates in such country in the Territory; and (b) Buyer shall pay to Seller a one time milestone payment of **[*]** upon reaching **[*]**. Notwithstanding anything to the contrary in this Section 4.1.2, in no event shall the cumulative, aggregate payments made to Seller by Buyer pursuant to this Section 4.1.2 during the Royalty Term exceed the amount of **[*]**.

4.1.3 GVAX-Prostate Product Royalty Payments. In further consideration of the Purchased Assets, and subject to the other terms of this Agreement (including the remainder of this Section 4), (a) commencing on the date of the First Commercial Sale of each GVAX-Prostate Product sold by Buyer and/or its Affiliates in each country in the Territory and continuing for the duration of the Royalty Term in such country, Buyer shall pay to Seller a royalty equal to **[*]** of Net Sales of any GVAX-Prostate Product sold by Buyer and/or its Affiliates in such country in the Territory; and (b) Buyer shall pay to Seller a one time milestone payment of **[*]** upon **[*]**. Notwithstanding anything to the contrary in this Section 4.1.3, in no event shall the cumulative, aggregate payments made to Seller by Buyer pursuant to this Section 4.1.3 during the Royalty Term exceed the amount of **[*]**.

4.1.4 GVAX-Other Product Royalty Payments. In further consideration of the Purchased Assets, and subject to the other terms of this Agreement (including the remainder of this Section 4), (a) commencing on the date of the First Commercial Sale of each GVAX-Other Product sold by Buyer and/or its Affiliates in each country in the Territory and continuing for the duration of the Royalty Term in such country, Buyer shall pay to Seller a royalty equal to **[*]** of Net Sales of any GVAX-Other Product sold by Buyer and/or its Affiliates in such country in the Territory; and (b) Buyer shall pay to Seller a one time milestone payment in the following amounts upon reaching the corresponding milestones for each GVAX-Other Product reaching such milestone, as follows:

(a) **[*]** upon **[*]**;

(b) **[*]** upon **[*]**;

(c) **[*]** upon **[*]**; and

(d) **[*]** upon **[*]**.

4.1.5 Notwithstanding anything to the contrary in this Section 4.1, in no event shall the cumulative, aggregate payments made to Seller by Buyer pursuant to this Section 4.1 during the Royalty Term exceed the amount of **[*]**, excluding the Closing Payment and milestone payments set forth in clauses (a) – (d) of Section 4.1.4.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4.1.6 One Royalty. Only one royalty, calculated at the highest applicable royalty rate under this Section 4.1, shall be payable to Seller hereunder for each sale of a GVAX Product.

4.2 **Other Consideration**.

4.2.1 Hussman Agreement. In further consideration for the Purchased Assets, Buyer will pay to Seller **[*]** of all amounts received by Buyer or any Affiliate of Buyer from milestones and royalties under the Hussman Agreement, net of related costs borne by Buyer.

4.2.2 Sublicensing Income.

(a) **Sublicense Income – Pancreas Products.** Buyer shall pay Seller the percentage of Sublicense Income received by Buyer or any Affiliate of Buyer pursuant to any sublicenses of GVAX-Pancreas Patent Rights and/or related Technology granted hereunder as set forth below: (i) **[*]** of applicable Sublicense Income with respect to sublicenses entered into **[*]**; and (ii) **[*]** of applicable Sublicense Income with respect to sublicenses entered into **[*]**. Notwithstanding anything to the contrary set forth in the preceding sentence, in the case of any sublicense entered into after Buyer has spent at least **[*]** in the aggregate for all expenses of any kind incurred in connection with the development, testing and commercialization of all GVAX Products, each percentage specified in the preceding sentence shall be reduced to **[*]**, Notwithstanding anything to the contrary in this Section 4.2.2(a), in no event shall the cumulative, aggregate payments made to Buyer by Seller pursuant to this Section 4.2.2(a) exceed the amount of **[*]**.

(b) **Sublicense Income – Prostate Products**. Buyer shall pay Seller the percentage of Sublicense Income received by Buyer or any Affiliate of Buyer pursuant to any sublicenses of GVAX-Prostate Patent Rights and/or related Technology granted hereunder as set forth below: (i) **[*]** of applicable Sublicense Income with respect to sublicenses entered into **[*]**; (ii) **[*]** of applicable Sublicense Income with respect to sublicenses entered into **[*]**; and (iii) **[*]** of applicable Sublicense Income with respect to sublicenses entered into **[*]**. Notwithstanding anything to the contrary set forth in the preceding sentence, in the case of any sublicense entered into after Buyer has spent at least **[*]** in the aggregate for all expenses of any kind incurred in connection with the development, testing and commercialization of all GVAX Products, each percentage specified in the preceding sentence shall be reduced to **[*]**, Notwithstanding anything to the contrary in this Section 4.2.2(b), in no event shall the cumulative, aggregate payments made to Seller by Buyer pursuant to this Section 4.2.2(b) exceed the amount of **[*]**.

4.3 **Payment Terms**.

4.3.1 Payment of Royalties and Milestones. Unless otherwise expressly provided, Buyer shall make any royalty payments owed to Seller hereunder in arrears, within **[*]** days from the end of each quarter in which the Net Sales giving rise to such payments are received by Buyer. Buyer will pay to Seller the amounts due under the Hussman Agreement

pursuant to Section 4.2.1 within **[*]** days from receipt of such amounts. Buyer shall make any milestone payments owed to Seller hereunder within **[*]** days following the date on which such milestone is achieved. Each royalty payment shall be accompanied by a report specifying: Net Sales in each country's currency; the royalties payable, including an accounting of deductions taken in the calculation of Net Sales; if any proceeds on Net Sales were received in currencies other than United States Dollars, the applicable exchange rate to convert from each country's currency to United States Dollars under this Section 4.3; and the royalties payable in United States Dollars.

4.3.2 Accounting. All payments hereunder shall be made in the United States in United States Dollars. Conversion of foreign currency to United States Dollars shall be made at the conversion rate existing in the United States (as reported in *The Wall Street Journal*) on the last business day of the quarter immediately preceding the applicable calendar quarter. If *The Wall Street Journal* ceases to be published, then the rate of exchange to be used shall be that reported in such other business publication of national circulation in the United States as the Parties reasonably agree.

4.3.3 Tax Withholding; Restrictions on Payment. All payments hereunder shall be made free and clear of any taxes, duties, levies, fees or charges, except for withholding taxes (to the extent applicable). Buyer shall make any applicable withholding payments due on behalf of Seller and shall provide Seller upon request with such written documentation regarding any such payment as available to Buyer relating to an application by Seller for a foreign tax credit for such payment with the United States Internal Revenue Service. If by law, regulations or fiscal policy of a particular country in the Territory, remittance of royalties in United States Dollars is restricted or forbidden, written notice thereof shall promptly be given to Seller, and payment of the royalty shall be made by the deposit thereof in local currency to the credit of Seller in a recognized banking institution reasonably designated by Seller by written notice to Buyer. When in any country in the Territory the law or regulations prohibit both the transmittal and the deposit of royalties on sales in such country, royalty payments shall be suspended for as long as such prohibition is in effect and as soon as such prohibition ceases to be in effect, all royalties that Buyer would have been under an obligation to transmit or deposit but for the prohibition shall forthwith be deposited or transmitted, to the extent allowable.

4.4 **Records Retention; Review**.

4.4.1 Royalties. Commencing as of the date of First Commercial Sale of the first GVAX Product hereunder, Buyer and its Affiliates shall keep for at least **[*]** years from the end of the calendar year to which they pertain accurate records of sales by Buyer or its Affiliates, as the case may be, of each GVAX Product, in sufficient detail to allow the accuracy of the payments hereunder to be confirmed.

4.4.2 Review. Subject to the other terms of this Section 4.4.2, at the request of Seller, which shall not be made more frequently than once per calendar year during the Royalty Term, upon at least **[*]** days' prior written notice from Seller, and at the expense of Seller (except as otherwise provided herein), Buyer shall permit an independent certified public

accountant reasonably selected by Seller and reasonably acceptable to Buyer to inspect (during regular business hours) the relevant records required to be maintained by Buyer under this Section 4.4. In every case the accountant must have previously entered into a confidentiality agreement with both Parties substantially similar to the provisions of Section 5 and limiting the disclosure and use of such information by such accountant to authorized representatives of the Parties and the purposes germane to this Section 4.4. Results of any such review shall be binding on both Parties absent manifest error. Each Party agrees to treat the results of any such accountant's review of the other Party's records under this Section 4.4 as Confidential Information of the other Party subject to the terms of Section 5. If any review reveals a deficiency in the calculation and/or payment of royalties by Buyer, then (a) Buyer shall promptly pay Seller the amount remaining to be paid, and (b) if such underpayment is by ten percent (10%) or more, Buyer shall pay the reasonable out-of-pocket costs and expenses incurred by Seller in connection with the review. If any review reveals an overpayment by Buyer, then Seller shall promptly pay such excess amount to Buyer, or at Buyer's option, Buyer may credit such amount against future royalty payments owed to Seller.

4.4.3 Updates and Reports. Buyer shall provide Seller with brief written reports no less frequently than quarterly during the Royalty Term summarizing Buyer's efforts to Develop and commercialize GVAX Products hereunder. Quarterly reports shall be made no later than **[*]** days following the end of each calendar quarter. In addition, Buyer shall provide Seller with prompt written notice of the occurrence of the First Commercial Sale of any GVAX Product in any country. All reports and updates and other information provided by Buyer to Seller under this Agreement (including under this Section 4), shall be considered Confidential Information of Buyer, subject to the terms of Section 5 hereof.

5. TREATMENT OF CONFIDENTIAL INFORMATION

5.1 Confidential Obligations. Seller and Buyer each recognize that the other Party's Confidential Information constitutes highly valuable and proprietary confidential information. Seller and Buyer each agree that during the Royalty Term and for **[*]** years thereafter, it will keep confidential, and will cause its employees, consultants, Affiliates and sublicensees to keep confidential, all Confidential Information of the other Party. Neither Seller nor Buyer nor any of their respective employees, consultants, Affiliates or sublicensees shall use Confidential Information of the other Party for any purpose whatsoever other than exercising any rights granted to it or reserved by it hereunder. Without limiting the foregoing, each Party may disclose information to the extent such disclosure is reasonably necessary to (a) file and prosecute patent applications and/or maintain patents which are filed or prosecuted in accordance with the provisions of this Agreement, or (b) file, prosecute or defend litigation in accordance with the provisions of this Agreement or (c) comply with Applicable Law or court orders; provided, however, that if a Party is required to make any such disclosure of the other Party's Confidential Information in connection with any of the foregoing, it will give reasonable advance notice to the other Party of such disclosure requirement and will use reasonable efforts to assist such other Party in efforts to secure confidential treatment of such information required to be disclosed. From and after the Closing Date, the Purchased Assets shall be the Confidential Information of Buyer.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.2 **Limited Disclosure and Use**. Seller and Buyer each agree that any disclosure of the other Party's Confidential Information to any officer, employee, consultant or agent of the other Party or any of its Affiliates shall be made only if and to the extent necessary to carry out its rights and responsibilities under this Agreement, shall be limited to the maximum extent possible consistent with such rights and responsibilities and shall only be made to the extent any such Persons are bound by written confidentiality obligations to maintain the confidentiality thereof and not to use such Confidential Information except as expressly permitted by this Agreement. Seller and Buyer each further agree not to disclose or transfer the other Party's Confidential Information to any Third Parties under any circumstance without the prior written approval from the other Party (such approval not to be unreasonably withheld), except as otherwise required by law, and except as otherwise expressly permitted by this Agreement. Each Party shall take such action, and shall cause its Affiliates and sublicensees to take such action, to preserve the confidentiality of each other's Confidential Information as it would customarily take to preserve the confidentiality of its own Confidential Information, using, in all such circumstances, not less than reasonable care. Each Party, upon the request of the other Party, will return all the Confidential Information disclosed or transferred to it by the other Party pursuant to this Agreement, including all copies and extracts of documents and all manifestations in whatever form, within **[*]** days of such request or, if earlier, the termination or expiration of this Agreement; provided however, that a Party may retain one (1) copy of all other Confidential Information in inactive archives solely for the purpose of establishing the contents thereof.

5.3 **Publicity.** Neither Party may publicly disclose the existence or terms or any other matter of fact regarding this Agreement without the prior written consent of the other Party, which consent shall not be unreasonably withheld or delayed; provided, however, that (a) either Party may make such a disclosure to the minimum extent required by law or by the requirements of any nationally recognized securities exchange, quotation system or over-the-counter market on which such Party has its securities listed or traded, or (b) either Party may disclose the existence and high level terms (including without limitation high level financial terms) of this Agreement to any investors, prospective investors, lenders and other potential financing sources, and may provide a copy of this Agreement to any such Persons who have executed a non-disclosure agreement with respect to such copy, and Seller may file a copy of this Agreement with the SEC as an exhibit to its public filing to the extent required to comply with applicable securities laws, provided that Seller seeks confidential treatment thereof. In the event that such disclosure is required as aforesaid, the disclosing Party shall make reasonable efforts to provide the other Party with notice beforehand and to coordinate with the other Party with respect to the wording, content, scope and timing of any such disclosure. The Parties, upon the execution of this Agreement, will mutually agree to a press release with respect to this transaction for publication. Once such press release or any other written statement is approved for disclosure by both Parties, either Party may make subsequent public disclosure of the contents of such statement without the further approval of the other Party.

5.4 **Use of Name.** Except as provided in Section 5.3, neither Party shall employ or use the name of the other Party in any promotional materials or advertising without the prior express written permission of the other Party.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6. POST-CLOSING COVENANTS

6.1 **Hussman Agreement**. Following the Closing, Buyer shall have the option, in its sole discretion, of finalizing the Hussman Agreement. In the event that Buyer elects to finalize the Hussman Agreement, Buyer will receive a credit for 75% of the costs incurred by Buyer in connection therewith including, without limitation, legal costs against any payment obligations to Seller, except that it may not apply such credit to the Closing Payment or to the pass-through payment obligations to licensors in connection with the Transferred Contracts. Buyer will provide Seller with an accounting of its expenses related to the Hussman Agreement every six (6) months.

6.2 **Observer Rights.** Following the Closing, Buyer will grant observer rights status to one Seller designee who has at least **[*]** years of expertise in the development of GVAX and who is not involved in supporting directly or indirectly any competitive products, and approved in advance by Buyer in its reasonable discretion (the "**Seller Designee**"), to attend scientific advisory board meetings related solely to the Purchased Assets, to the extent Seller desires such rights. The Seller Designee shall agree in writing with Buyer to hold such meetings and all discussions and information received in confidence and trust. Buyer reserves the right to withhold any information and to exclude the Seller Designee from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between Buyer and its counsel or result in disclosure of trade secrets or a conflict of interest, or any other competitive information.

6.3 **Technology Transfer Assistance.** In order to enable Buyer to exercise its rights in the Purchased Assets, following the Closing Seller will promptly provide to Buyer all necessary cooperation and assistance reasonably requested by Buyer in connection with transferring any Technology related to the Purchased Assets. The foregoing may include providing Buyer access to Seller's employees Stephen M. Simes, Phillip B. Donenberg and Jeffrey W. Winkelman, as long as they remain employees of Seller, in order for Buyer to ask questions and causing its employees to furnish to Buyer such information as Buyer may reasonably request from time to time. In any event, the Technology transfer shall be completed within **[*]** days after the Closing Date.

7. REPRESENTATIONS, WARRANTIES AND COVENANTS

7.1 **Seller Representations**. Seller represents and warrants to Buyer that:

(a) The execution and delivery of this Agreement and the other documents to be executed and delivered by Seller in connection with this Agreement (the "**Transaction Documents**") and the performance of the transactions contemplated hereby and thereby have been duly authorized by (i) all appropriate Seller corporate action, and (ii) is permitted pursuant to the terms of that certain Agreement and Plan of Merger dated as of October 3, 2012 between Seller and ANIP Acquisition Company d/b/a ANI Pharmaceuticals, Inc.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(b) This Agreement and the other Transaction Documents are legal and valid obligations binding upon Seller and enforceable in accordance with their terms, and the execution, delivery and performance of this Agreement and the other Transaction Documents by the Parties do not conflict with any agreement, instrument or understanding to which Seller is a party or by which it is bound.

(c) Seller has the full right and legal authority to enter into this Agreement and the other Transaction Documents and to consummate the transaction contemplated therein without violating the rights of any Third Party and no consent, approval, license, permit, order or authorization of, or registration, declaration, notice or filing with, the FDA or any other Governmental Entity is required in connection with the execution, delivery and performance by Seller of this Agreement or the other Transaction Documents to which it is a party or the consummation by Seller of the transactions contemplated hereby and thereby.

(d) Schedule A sets forth a true, correct and complete list of all Purchased Assets, including all patents, patent applications and other Patent Rights, and all other intellectual property, contracts, Technology, Regulatory Approvals, Regulatory Documentation, related to or comprising the GVAX vaccines.

(e) The Purchased Assets constitute all of the assets, tangible and intangible, of any nature whatsoever of Seller related to or comprising GVAX vaccines and any assets necessary or reasonably useful to make, have made, use, have used, sell, offer for sale, have sold, import, have imported, develop, have developed, commercialize, and have commercialized GVAX Products, and Seller has good and marketable title to all the Purchased Assets free and clear of all Encumbrances.

(f) Seller is the sole and exclusive owner, or is the exclusive licensee (unless specifically designated as non-exclusive on Schedule A) pursuant to the Transferred Contracts, of the Purchased Assets.

(g) To the best of Seller's knowledge, Purchased Patent Rights have been properly filed and prosecuted and Seller is not aware of any Third Party patent, patent application or other intellectual property rights that would be infringed (i) by practicing any process or method or by making, using or selling any composition which is claimed or disclosed in, or which constitutes, Purchased Technology, or (ii) by making, using, offering for sale, selling or importing GVAX Products. To the best of Seller's knowledge, Seller is not aware of any infringement or misappropriation by a Third Party of the Purchased Technology.

(h) Except as specifically set forth on Schedule C attached hereto, each Transferred Contract is assignable by Seller to Buyer without the consent of any other Person. True and complete copies of all Transferred Contracts (including all amendments, modifications, supplements and waivers thereof) have been delivered to Buyer by Seller. Each Transferred Contract is currently valid and in full force and effect, and is enforceable by Seller in accordance with its terms. Seller is not in material default, and no party has notified Seller that it is in material default, under any Transferred Contract, and no event has occurred, and no circumstance or conditions exists that might, with or without notice or lapse of time, result in any

default, breach or acceleration of performance, cancellation, termination or modification to any Transferred Contract. Except as set forth in the Transferred Contracts, there are no Liabilities of Seller in connection with any of the Transferred Contracts.

(i) All patents and technology and all rights therein that are licensed to Hussman under the Hussman Agreement are included as part the Purchased Assets, including without limitation, MIT Patents, JHU Patents, BioSante Patents and BioSante Technology (each as defined in the Hussman Agreement) and have been delivered to Hussman in connection with the Hussman Agreement. As of the Closing Date, all obligations of BioSante under the Hussman Agreement have been duly fulfilled. Buyer has no obligation to Hussman to deliver to Hussman any additional intellectual property and the consummation of the transactions contemplated hereunder shall not give rise to an obligation for Seller to deliver any further intellectual property to Hussman.

(j) All rights and obligations of Cell Genesys under the JHU License Agreements have been duly and validly assigned to Seller. Neither JHU nor Seller is in default of any of its obligations under the JHU License Agreements, nor has either party to the JHU License Agreements asserted that the other party is in default of its obligations under the JHU License Agreements. The JHU License Agreements are valid and binding agreements, enforceable by Seller against JHU in accordance with its terms, and Seller has not consented to any amendment or waiver to such agreements.

(k) As of the Effective Date, the Seller has not entered into any licenses, sub-licenses or assignments with respect to any GVAX vaccines or other bacterial vaccines or related intellectual property rights licensed by Seller under the JHU License Agreements, other than pursuant to the Hussman Agreement and the Exclusive License Agreement by and between Seller as “Licensor” and Aduro BioTech, Inc., a Delaware corporation as “Licensee” dated March 24, 2011.

(l) Seller is, and at all times during the three (3) years prior to the date hereof, has been, in compliance in all material respects with all Applicable Law with respect to the Purchased Assets, and no event has occurred or circumstance exists that (with or without notice or lapse of time, or both) (A) may constitute or result in a material violation by Seller of, or a failure of Seller to comply with in any material respect, any Applicable Law with respect to the Purchased Assets, or (B) may give rise to any obligation of Seller to undertake, or to bear all or any portion of the cost of, any recall, withdrawal, retrieval or other remedial action with respect to the Purchased Assets.

(m) There is no pending or, to Seller’s knowledge, no threatened litigation relating to the Purchased Assets.

(n) Seller has not received, at any time during the three (3) years prior to the date hereof, any written, or to the knowledge of Seller, oral notice or other communication with respect to the Purchased Assets from any Governmental Entity or any other Person regarding any actual, alleged, possible or potential material violation of, or failure to comply in any material respect with, any Applicable Law, and to the knowledge of Seller, no investigation

or review (other than routine inspections by the FDA and other Governmental Entities concerned with the safety, efficacy, reliability, manufacture, investigation, sale and marketing of pharmaceuticals) by any Governmental Entity is or at any time during the three (3) years prior to the date hereof has been, pending or threatened with respect to the Purchased Assets.

(o) Schedule A contains a complete and accurate list of all Regulatory Approvals held by Seller with respect to the Purchased Assets. Each Regulatory Approval is in the name of Seller and in full force and effect. Seller further represents and warrants that Seller is, and at all times during the three (3) years prior to the date hereof has been, in compliance in all material respects with all of the terms and requirements of each Regulatory Approval. To the knowledge of Seller, no event has occurred or circumstance exists that would reasonably be expected to (with or without notice or lapse of time, or both) constitute or result directly or indirectly in a material violation of or a failure to comply in any material respect with any term or requirement of any Regulatory Approval or result directly or indirectly in the revocation, withdrawal, suspension, cancellation or termination of, or any material modification to, any Regulatory Approval. In the three (3) years prior to the date hereof, Seller has not received any written, or to the knowledge of Seller, any oral notice or other communication from any Governmental Entity or any other Person regarding any actual, alleged, possible or potential material violation of or failure to comply in any material respect with any term or requirement of any Regulatory Approval, or revocation, withdrawal, suspension, cancellation, termination of or material modification to any Regulatory Approval. Seller has provided Buyer with the complete and accurate copy of each Regulatory Approval, and all correspondence with the FDA relating thereto, used to obtain any Regulatory Approval. Seller has not disclosed any of the dossiers relating to the regulatory marketing authorizations, licenses, permits and registrations which are included in the Regulatory Approvals to any Third Party except the appropriate Governmental Entities responsible for regulation of dealings in medicinal products or except as required to comply in any material respect with all Applicable Laws.

(p) In the past three (3) years, no Governmental Entity has stated or declared to Seller, nor to Seller's knowledge to any other Person, that GVAX or any GVAX-related product is defective, unsafe for its intended use or fails to meet in any material respect applicable standards promulgated by such Governmental Entity.

(q) To the knowledge of Seller, all preclinical studies and clinical trials among the Purchased Assets have been conducted in compliance with Applicable Laws in all material respects, and to the knowledge of Seller there are no facts, circumstances or conditions that would reasonably be expected to result in any material adverse effect upon the use, integrity or validity of any pre-clinical or clinical trial or of any related results or conclusions of any clinical trial conducted, supported or permitted by or on behalf of Seller. Seller is not subject to an FDA consent decree or any similar order of a Foreign Regulatory Authority or Governmental Entity.

(r) To the knowledge of Seller, no Person working on any research, study or trial conducted, supported or permitted by or on behalf of Seller has been or is currently, to the knowledge of Seller, debarred or disqualified by the FDA or any other Governmental Entity from participating in such research, studies or trials, or any healthcare program.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(s) Neither Seller, nor any officer, employee, or, to the knowledge of Seller, agent of Seller, has made any false statement or failed to disclose a material fact in, the applications, approvals, reports or other submissions to the FDA or other Governmental Entity or in or from any other records and documentation prepared or maintained to comply with the requirements of the FDA or other Governmental Entity, or committed an act, made a statement or failed to make a statement, that (in any such case) establishes a reasonable basis for the FDA to invoke its policy respecting "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities," set forth in 56 Fed. Reg. 46191 (September 10, 1991). Neither Seller, nor any officer, employee or, and to the knowledge of Seller, agent of Seller or principal investigator or sub-investigator of any clinical investigation sponsored by Seller has, on account of actions taken for or on behalf of Seller, been convicted of any crime under 21 U.S.C. Section 335a(a) or any similar state or non-U.S. Applicable Law or under 21 U.S.C. Section 335a(b) or any similar state or non-U.S. Applicable Law.

7.2 **Buyer Representations.** Buyer represents and warrants to Seller that:

(a) The execution and delivery of this Agreement and the other Transaction Documents and the performance of the transactions contemplated hereby and thereby have been duly authorized by all appropriate Buyer corporate action; and

(b) This Agreement and the other Transaction Documents are legal and valid obligations binding upon Buyer and enforceable in accordance with their terms, and the execution, delivery and performance of this Agreement and the other Transaction Documents by the Parties do not conflict with any agreement, instrument or understanding to which Buyer is a party of or by which it is bound.

(c) Buyer has the full right and legal authority to enter into this Agreement and the other Transaction Documents and to consummate the transaction contemplated therein without violating the rights of any Third Party and no consent, approval, license, permit, order or authorization of, or registration, declaration, notice or filing with, the FDA or any other Governmental Entity is required in connection with the execution, delivery and performance by Buyer of this Agreement or the other Transaction Documents to which it is a party or the consummation by Buyer of the transactions contemplated hereby and thereby.

7.3 **No Additional Warranties**. Except as otherwise set forth herein, EACH PARTY ACKNOWLEDGES AND AGREES THAT ALL TECHNOLOGY TRANSFERRED OR SERVICES PROVIDED HEREUNDER ARE PROVIDED WITHOUT ANY ADDITIONAL WARRANTIES WHATSOEVER, WHETHER EXPRESS, IMPLIED OR STATUTORY, WITH RESPECT THERETO, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8. CONDITIONS TO CLOSING

8.1 **Conditions Precedent to Obligations of Buyer**. The obligations of Buyer to close are subject to the satisfaction of the following conditions, unless waived by Buyer in writing:

8.1.1 Representations and Warranties. The representations and warranties of Seller set forth in this Agreement, or in any written statement or certificate that shall be delivered to Buyer by Seller under this Agreement, shall be true and correct on and as of the date made and as of the Closing Date as if made on the date thereof.

8.1.2 Performance of Obligations. Seller shall have performed in all material respects all obligations and covenants required to be performed by Seller under this Agreement and any other agreement or document entered into in connection herewith prior to the Closing Date.

8.1.3 No Material Adverse Change. There shall have been no material adverse change, loss or damage with respect to the Purchased Assets from the date hereof through the Closing Date.

8.1.4 Due Diligence. Buyer shall have completed to its sole satisfaction a due diligence review of the Purchased Assets.

8.1.5 Bridge Financing. Buyer shall have signed agreements from investors to purchase debt or equity of Buyer in a bridge financing of at least $5,500,000 on terms satisfactory to Buyer in its sole discretion.

8.1.6 JHU. Buyer and JHU shall have entered into a Patent and Technology License and Material Transfer Agreement in a form satisfactory to Buyer in its sole discretion.

8.1.7 Closing Deliveries. Seller shall have delivered to Buyer all of the closing documents and agreements set forth in Sections 3.2.2 and 3.2.3.

8.2 **Conditions Precedent to Obligations of Seller**. The obligations of Seller to close are subject to the satisfaction of the following conditions, unless waived by Seller in writing:

8.2.1 Representations and Warranties. The representations and warranties of Buyer set forth in this Agreement, or in any written statement or certificate that shall be delivered to Seller by Buyer under this Agreement shall be true and correct on and as of the date made and as of the Closing Date as if made on the date thereof.

8.2.2 Performance of Obligations. Buyer shall have performed in all material respects all obligations and covenants required to be performed by it under this Agreement and any other agreement or document entered into in connection herewith prior to the Closing Date.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8.2.3 Closing Deliveries. Buyer shall have delivered to Sellers all of the closing documents and agreements set forth in Section 3.2.3.

8.2.4 Closing Payment. Buyer shall be ready to wire the Closing Payment in immediately available funds to an account designated by Seller in writing.

9. TERMINATION

9.1 **Circumstances for Termination**. At any time prior to the Closing, this Agreement may be terminated by written notice:

9.1.1 by the mutual written consent of Buyer and Seller;

9.1.2 by either Buyer or Seller if the other party is in material breach of any provision of this Agreement, which breach would give rise to a failure to satisfy any condition set forth in Section 8.1.1 and 8.1.2, or Section 8.2.1 and 8.2.2, as applicable, provided that the terminating party is not, on the date of termination, in material breach of any material provision of this Agreement;

9.1.3 by either Buyer or Seller if the Closing has not occurred on or prior to Febuary 15, 2013, or such later date as agreed to by Buyer and Seller in writing, for any reason, provided that the terminating party shall not have breached its obligations hereunder in any manner that shall have contributed to the failure to consummate the Closing by such date; and

9.1.4 by either Buyer or Seller if satisfaction of a closing condition of the terminating party in Section 8 is impossible, provided that the terminating party is not, on the date of termination, in material breach of any material provision of this Agreement.

9.2 **Effect of Termination**. If this Agreement is terminated in accordance with Section 9.1, all obligations of the parties hereunder shall terminate, except for the obligations set forth in this Section 9, Section 11 and Section 12; provided, however, that such termination shall not release either party from any Liability that has already accrued as of the effective date of such termination, and shall not constitute a waiver or release of, or otherwise be deemed to prejudice or adversely affect, any rights, remedies or claims, whether for damages or otherwise, which a party may have hereunder, at law, equity or otherwise or which may arise out of or in connection with such termination.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

10. INDEMNIFICATION

10.1 **Indemnification**.

10.1.1 Buyer Indemnity. Buyer shall indemnify, defend and hold harmless Seller, its Affiliates and their respective directors, officers, employees, stockholders and agents and their respective successors, heirs and assigns (the "**Seller Indemnitees**") from and against any Liability, damage, loss or expense (including reasonable attorneys' fees and expenses of litigation) incurred by or imposed upon such Seller Indemnitees, or any of them, in connection with any claims, suits, actions, demands or judgments, including, without limitation, personal injury and product liability matters, to the extent arising out of (a) Buyer's breach of any of its representations, warranties or obligations under this Agreement, and (b) the Assumed Liabilities, including the ownership or use of the Purchased Assets from and after the Closing Date.

10.1.2 Seller Indemnity. Subject to Section 10.1.1 above, Seller shall indemnify, defend and hold harmless Buyer, its Affiliates and their respective directors, officers, employees, stockholders and agents, and their respective successors, heirs and assigns (the "**Buyer Indemnitees**"), from and against any Liability, damage, loss or expense (including reasonable attorneys' fees and expenses of litigation) incurred by or imposed upon such Buyer Indemnitees, or any of them, in connection with any claims, suits, actions, demands or judgments, including, without limitation, personal injury and product liability matters, to the extent arising out of (a) Seller's breach of any of its representations, warranties or obligations under this Agreement, and (b) any Excluded Liability. Notwithstanding the foregoing, the maximum indemnification obligation of Seller under Section 10.1.2(a) relating to any breach of any representation or warranty set forth in Section 7.1, other than a breach of any representation or warranty set forth in Sections 7.1(a), (b), (c), (e), or (f) shall not exceed the aggregate amount paid or payable by Buyer under this Agreement. The limitations provided for in this Section 10.1.2 shall not apply to any indemnification obligation of Seller arising from the fraud or willful misconduct of Seller.

10.2 **Survival**. The representations and warranties contained herein shall survive the Closing and shall remain in full force and effect until the date that is two years from the Closing Date; provided, that the representations and warranties in Sections 7.1(a), (b), and (c) and 7.2(a), (b) and (c) shall survive indefinitely. All covenants and agreements of the Parties contained herein shall survive the Closing indefinitely or for the period explicitly specified therein. Notwithstanding the foregoing, any claims asserted in good faith with reasonable specificity (to the extent known at such time) and in writing by notice from the non-breaching Party to the breaching Party prior to the expiration date of the applicable survival period shall not thereafter be barred by the expiration of the relevant representation or warranty and such claims shall survive until finally resolved.

10.3 **Indemnification Procedures**. In the event that any Indemnitee is seeking indemnification under Section 10.1 above from a Party (the "**Indemnifying Party**"), the other Party shall notify the Indemnifying Party of such claim with respect to such Indemnitee as soon as reasonably practicable after the Indemnitee receives notice of the claim, and the Party (on

behalf of itself and such Indemnitee) shall permit the Indemnifying Party to assume direction and control of the defense of the claim (including the right to settle the claim solely for monetary consideration) and shall cooperate as requested (at the expense of the Indemnifying Party) in the defense of the claim. The indemnification obligations under Section 10 shall not apply to any harm suffered as a direct result of any delay in notice to the Indemnifying Party hereunder or to amounts paid in settlement of any claim, demand, action or other proceeding if such settlement is effected without the consent of the Indemnifying Party, which consent shall not be withheld or delayed unreasonably. The Indemnitee, its employees and agents, shall reasonably cooperate with the Indemnifying Party and its legal representatives in the investigation of any claim, demand, action or other proceeding covered by Section 10.1.

10.4 **Right of Set-Off**. Buyer shall have the right, in its sole discretion, to off-set against any Royalty Payments or other payments owed by Buyer to Seller under this Agreement, other than the Closing Payment, the aggregate amount of any Liabilities, damages, losses or expenses incurred by or imposed upon Buyer as a result of (a) any indemnification obligations of Seller under Section 10.2, and/or (b) Seller's breach of this Agreement; provided, however, that the foregoing shall not have the effect of limiting any Liability of Seller to Buyer for the prompt payment to Buyer of any amounts owed. The remedies provided in this Agreement shall be cumulative and shall not preclude any Party from asserting any other right, or seeking any other remedies, against the other Party.

11. DISPUTES

11.1 **Jurisdiction and Venue**. The Parties agree that all actions or proceedings arising in connection with this Agreement shall be initiated and tried exclusively in the state and federal courts located in New York City, New York. The aforementioned choice of venue is intended by the Parties to be mandatory and not permissive in nature, thereby precluding the possibility of litigation between the Parties with respect to or arising out of this Agreement in any jurisdiction other than that specified in this Section 11.1. Each Party hereby waives any right it may have to assert the doctrine of *forum non conveniens* or similar doctrine or to object to venue with respect to any proceeding brought in accordance with this paragraph, and stipulates that the state and federal courts located in New York City, New York shall have *in personam* jurisdiction and venue over each of them for the purposes of litigating any dispute, controversy or proceeding arising out of or related to this Agreement. Each Party hereby authorizes and accepts service of process sufficient for personal jurisdiction in any action against it as contemplated by this Section 11 by registered or certified mail, return receipt requested, postage prepaid, to its address for the giving of notices as set forth in this Agreement, or in the manner set forth in Section 12.1 of this Agreement for the giving of notice. Any final judgment rendered against a party in any action or proceeding shall be conclusive as to the subject of such final judgment and may be enforced in other jurisdictions in any manner provided by Applicable Law.

12. MISCELLANEOUS

12.1 **Notification**. All notices, requests and other communications hereunder shall be in writing, shall be addressed to the receiving Party's address set forth below or to such other address as a Party may designate by notice hereunder, and shall be either (i) delivered by

hand, (ii) made by facsimile transmission (to be followed with written fax confirmation), (iii) sent by private courier service providing evidence of receipt, or (iv) sent by registered or certified mail, return receipt requested, postage prepaid. The addresses and other contact information for the Parties are as follows:

If to Seller:	BioSante Pharmaceuticals, Inc 111 Barclay Boulevard, Suite 400 Lincolnshire, Illinois 60069 Attn: President & CEO
With a copy to:	Oppenheimer, Wolff & Donnelly Campbell Mithum Building, Suite 2000 222 South Ninth Street Minneapolis, Minnesota 55402-1609 Attn: Ms. Amy Culbert, Esq.
If to Buyer:	Aduro GVAX Inc. 626 Bancroft Way, #3C Berkeley, CA 94710-2224 Attn: President & CEO
With a copy to:	Sheppard, Mullin, Richter & Hampton LLP 4 Embarcadero Center, Suite 1700 San Francisco, CA 94111 Attn: William Manierre, Esq.

All notices, requests and other communications hereunder shall be deemed to have been given either (i) if by hand, at the time of the delivery thereof to the receiving Party at the address of such Party set forth above, (ii) if made by telecopy or facsimile transmission, at the time that receipt thereof has been acknowledged by the recipient, (iii) if sent by private courier, on the day such notice is delivered to the recipient, or (iv) if sent by registered or certified mail, on the fifth (5th) business day following the day such mailing is made.

12.2 **Language.** This Agreement has been prepared in the English language and the English language shall control its interpretation.

12.3 **Governing Law.** This Agreement will be construed, interpreted and applied in accordance with the laws of the State of New York (excluding its body of law controlling conflicts of law).

12.4 **Entire Agreement.** This is the entire Agreement between the Parties with respect to the subject matter hereof and supersedes all prior representations, understandings and agreements between the Parties with respect to the subject matter hereof. No modification shall be effective unless in writing with specific reference to this Agreement and signed by the Parties.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

12.5 **Waiver.** The terms or conditions of this Agreement may be waived only by a written instrument executed by the Party waiving compliance. The failure of either Party at any time or times to require performance of any provision hereof shall in no manner affect its rights at a later time to enforce the same. No waiver by either Party of any condition or term shall be deemed as a continuing waiver of such condition or term or of another condition or term.

12.6 **Headings.** Section and subsection headings are inserted for convenience of reference only and do not form part of this Agreement.

12.7 **Assignment.** Neither this Agreement nor any right or obligation hereunder may be assigned, delegated or otherwise transferred, in whole or part, by either Party without the prior express written consent of the other; provided, however, that either Party may, without the written consent of the other, assign this Agreement and its rights and delegate its obligations hereunder to its Affiliates, or in connection with the transfer or sale of all or substantially all of such Party's assets or business related to this Agreement, or in the event of its merger, consolidation, change in control or similar transaction. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment in violation of this Section 12.7 shall be void. The terms and conditions of this Agreement shall be binding upon and inure to the benefit of the permitted successors and assigns of the Parties.

12.8 **Force Majeure.** Neither Party shall be liable for failure of or delay in performing obligations set forth in this Agreement, and neither shall be deemed in breach of its obligations, if such failure or delay is due to natural disasters or any causes beyond the reasonable control of such Party. In event of such force majeure, the Party affected thereby shall use reasonable efforts to cure or overcome the same and resume performance of its obligations hereunder.

12.9 **Construction.** The Parties hereto acknowledge and agree that: (a) each Party and its counsel reviewed and negotiated the terms and provisions of this Agreement and have contributed to its revision; (b) the rule of construction to the effect that any ambiguities are resolved against the drafting Party shall not be employed in the interpretation of this Agreement; and (c) the terms and provisions of this Agreement shall be construed fairly as to all Parties hereto and not in favor of or against any Party, regardless of which Party was generally responsible for the preparation of this Agreement.

12.10 **Severability.** If any provision(s) of this Agreement are or become invalid, are ruled illegal by any court of competent jurisdiction or are deemed unenforceable under then current Applicable Law from time to time in effect during the Term hereof, it is the intention of the Parties that the remainder of this Agreement shall not be affected thereby provided that a Party's rights under this Agreement are not materially affected. The Parties hereto covenant and agree to renegotiate any such term, covenant or application thereof in good faith in order to provide a reasonably acceptable alternative to the term, covenant or condition of this Agreement or the application thereof that is invalid, illegal or unenforceable, it being the intent of the Parties that the basic purposes of this Agreement are to be effectuated.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

12.11 **Further Assurances.** Each Party agrees to execute, acknowledge and deliver such further instructions and documents, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

12.12 **Counterparts.** This Agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[Remainder of page intentionally left blank]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representative in two (2) originals.

ADURO GVAX INC.

By: /s/ Stephen T. Isaacs
Name: Stephen T. Isaacs
Title: President & CEO

BIOSANTE PHARMACEUTICALS, INC.

By: /s/ Stephen M. Simes
Name: Stephen M. Simes
Title: President & CEO

SOLELY FOR PURPOSES OF SECTION 3.1.4:

Aduro BioTech, Inc.

By: /s/ Stephen T. Isaacs
Name: Stephen T. Isaacs
Title: President & CEO

[SIGNATURE PAGE TO ASSET PURCHASE AGREEMENT]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit 10.24

PATENT AND TECHNOLOGY LICENSE AND MATERIALS TRANSFER AGREEMENT

BY AND BETWEEN

THE JOHNS HOPKINS UNIVERSITY

&

ADURO BIOTECH, INC.

JHU Agreement: # -A21083

PATENT AND TECHNOLOGY LICENSE AND MATERIALS TRANSFER AGREEMENT

THIS PATENT AND TECHNOLOGY LICENSE AND MATERIALS TRANSFER AGREEMENT (this "Agreement") is dated as of January 31, 2013 (the "Effective Date") and entered into by and between THE JOHNS HOPKINS UNIVERSITY, a Maryland corporation having an address at 3400 N. Charles Street, Baltimore, Maryland, 21218-2695 ("JHU") and ADURO BIOTECH, INC., a Delaware corporation having an address at 626 Bancroft Way, Suite 3C, Berkeley, California 94710-2225 ("Company"):

RECITALS

WHEREAS, as a center for research and education, JHU is interested in licensing intellectual property and proprietary materials in a manner that will benefit the public by facilitating the distribution of useful products and the utilization of new processes, but is without capacity to commercially develop, manufacture, and distribute any such products or processes; and

WHEREAS, valuable invention(s) were developed during the course of research at JHU and are listed as follows: "Formulation of Toll-like Receptor Ligand with Whole Cell Tumor Vaccine to Enhance Anti-tumor Responses" (JHU Ref No. C05152) invented by Drs. Kim Young, Megan Davis, Charles Drake and Drew Pardoll; "Combinatorial TEGVAX with Blockade of Immune Checkpoint Pathways Augments Anti-tumor Responses In Vivo" (JHU Ref No. C11641) invented by Drs. Kim Young, Juan Fu and Drew Pardoll; and "GVAX Formulated with Cyclic Dinucleotide (STINGVAX) is a Potent Cancer Vaccine" (JHU Ref No. C12043) invented by Juan Fu and Drew Pardoll; and,

WHEREAS, JHU has certain rights in GVAX cell lines and technologies described in JHU Ref No. C12266 "Breast Cancer Cell Lines" disclosed by Leisha Emens; JHU Ref#: C12273 "Myeloma Cell Lines" disclosed by Ivan Borrello and Kimberly Noonan; JHU Ref#: C12276 "An Allogeneic Colon Cancer Cell Vaccine Administered with a GM-CSF Producing Bystander Cell Line" disclosed by Lei Zheng, Richard Schulick, Drew Pardoll, Elizabeth Jaffee and Daniel Laheru; JHU Ref No. C12267 "IND filing ref#: BB IND 11019" disclosed by Leisha Emens; JHU Ref#: C12274 "Myeloma IND Filing" disclosed by Ivan Borrello and Kimberly Noonan; JHU Ref#: C12275 "Prostate cancer IND Filing" disclosed by George Drake; (all hereinafter, "Inventors")

WHEREAS, JHU has acquired rights, title and interest, with the exception of certain retained rights by the United States Government and joint rights of Company, to the inventions as part of the Licensed Patent Rights; and

WHEREAS, Company desires to obtain certain rights in such patent rights, cell lines, and technology as herein provided, and to commercially develop, manufacture, use and distribute products and processes based upon or embodying said valuable inventions, cell lines, and/or technologies throughout the United States;

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

NOW THEREFORE, in consideration of the premises and the mutual promises and covenants contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

ARTICLE 1
DEFINITIONS

All references to particular Exhibits, Articles or Sections shall mean the Exhibits to, and Articles and Sections of, this Agreement, unless otherwise specified. For the purposes of this Agreement and the Exhibits hereto, the following words and phrases shall have the following meanings:

1.1 "ADDITIONAL CELL LINES" shall have the meaning set forth in Section 5.8.

1.2 "AFFILIATE(S)" means any corporation, company, partnership, joint venture or other entity which controls or is controlled by Company. Control shall mean the direct or indirect ownership of at least fifty percent (50%) of the securities or other ownership interests representing the equity, voting stock, general partnership or membership interest of such entity.

1.3 "CELL LINES" shall mean cell lines listed in Exhibit B hereto. Cell Lines shall also include any additional cell lines transferred to Company pursuant to Section 5.8 of this Agreement.

1.4 "COMBINATION PRODUCT" shall have the meaning set forth in Section 1.18.

1.5 "DEVELOPED IP" shall have the meaning set forth in Section 2.5.

1.6 "EUROPEAN UNION" shall mean the member states listed as member states in www.europa.eu or any successor web site.

1.7 "FDA" shall mean the U.S. Food and Drug Administration.

1.8 "FIELD" shall mean any use of GVAX-related products (including without limitation GVAX in combination with other elements) including, without limitation, human, veterinarian or diagnostic uses.

1.9 "FIRST COMMERCIAL SALE" shall mean, with respect to any Licensed Product or Licensed Service and any country of the world, the first sale of such Licensed Product or Licensed Service under this Agreement by Company, its Affiliates, or Sublicensee(s) to a non-affiliate third party in such country.

1.10 "GVAX" shall mean an allogeneic cell line or cell lines of the same tumor type as the cancer of interest that (i) has been genetically modified to express GM-CSF, and (ii) has been rendered proliferation-incompetent by irradiation.

1.11 "INDEMNITEE" shall have the meaning set forth in Section 7.1.

1.12 "LICENSED IP" means the Licensed Patent Rights, Licensed Technology, and Cell Lines. For clarity, Licensed IP shall not include (i) any information, technology, patent rights, materials, and cell lines already owned or controlled by Company or to which Company already has access, or independently developed by Company, (ii) any information, technology, patent rights, materials, and cell lines licensed to, provided to or to which access is given, or owned by the Company under an agreement other than this Agreement, and (iii) any intellectual property that is provided to Company as part of this Agreement, but is not accepted by Company or is removed from this Agreement by the Company by written thirty (30) days' notice from the Company to JHU.

1.13 "LICENSED PATENT RIGHTS" include (i) the patent applications listed in Exhibit A hereto, and (ii) any patent or patent application claiming priority thereto or common priority therewith including all divisions, continuations-in-part (but only to the extent that the claims of each such continuation-in-part application are directed to subject matter specifically described in (i)), and all divisions and continuations thereof, all U.S. patents issuing thereon and reissues, reexaminations, renewals and extensions thereof, any corresponding foreign patent applications, and any patents, or other equivalent foreign patent rights issuing, granted or registered thereon.

1.14 "LICENSED PRODUCT(S)" as used herein in either singular or plural shall mean any process or method, material, compositions, drug, or other product, the manufacture, use or sale of which by Company, its Affiliates and/or Sublicensees (i) would constitute, but for a license granted to Company, an infringement of a Valid Claim of Licensed Patent Rights (infringement shall include, but is not limited to, direct, contributory, or inducement to infringe) or (ii) necessarily uses or incorporates Licensed Technology and/or Cell Lines.

1.15 "LICENSED SERVICE(S)" as used herein in either singular or plural shall mean the performance on behalf of a third party by Company, its Affiliates and/or Sublicensees of any method or the manufacture of any product or the use of any product or composition which (i) would constitute, but for a license granted to Company, an infringement of a Valid Claim of Licensed Patent Rights (infringement shall include, but not be limited to, direct, contributory or inducement to infringe) or (ii) necessarily uses or incorporates Licensed Technology and/or Cell Lines.

1.16 "LICENSED TECHNOLOGY" as used herein includes all of JHU's technology, to the extent reasonably required to practice or use, or otherwise specific to, the Licensed Patent Rights, Cell Lines, or GVAX including, without limitation, JHU's unpatented, proprietary data, results, formulae, designs, specifications, methods, processes, formulations, techniques, know-how, technical information (including, without limitation, structural and functional information), process information, regulatory filings, drug master files, pre-clinical information, clinical information, and any and all proprietary biological, chemical, pharmacological, toxicological, pre-clinical, clinical, assay, chemistry, manufacturing and control data created, developed, and fixed in any tangible medium of expression solely by one or more of the JHU inventors prior to the Effective Date of this Agreement and that is owned by JHU and is not subject to any third party encumbrance that would prevent transfer to Company and to the extent that the provision of such information to Company does not violate the Health Insurance Portability and Accountability Act

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(HIPAA) privacy rules. Licensed Technology specifically excludes Licensed Patents and Cell Lines. While such information may be provided as part of the Technology Transfer, Licensed Technology shall not include any information which: (a) is within the public domain prior to the time of provision by JHU or thereafter becomes within the public domain other than as a result of provision to a third party by Company or any of its representatives in violation of this Agreement; (b) was, on or before the date of provision to Company in the possession of Company as evidenced by records, however maintained; (c) is acquired by Company from a third party having the right to provide the same; or (d) is hereafter developed by Company, as evidenced by records, however maintained. Licensed Technology existing as of the Effective Date of this Agreement includes, without limitation, the Licensed Technology listed in Exhibit C hereto.

1.17 "MINIMUM ANNUAL ROYALTIES" shall have the meaning set forth in Section 3.3.

1.18 "NET SALES REVENUES" shall mean consideration received by Company, its Affiliates and Sublicensees from the sale of Licensed Products in the first arm's length transaction, less deductions appropriate under US GAAP (to the extent not already reflected in the cash received) including, without limitation, administrative warehouse and service fees paid by Company for third party commercial wholesalers and distributors, payments that are returned by Company pursuant to applicable law, trade discounts or rebates allowed, refunds, returns and recalls, and sales, use, VAT, tariff, import/export duties, or other excise taxes that to be collected by Company and paid to governmental authorities or are invoiced to purchaser and/or paid and remitted by Company to third parties in connection with sale of such Licensed Product. Net Sales Revenues of a Licensed Product with more than one therapeutically active component ("Combination Product") sold by Company, its Sublicensees or Affiliates shall be calculated by multiplying the Net Sales Revenue of the Combination Product by the fraction A/A+B, where A is the number of all therapeutically active components covered by the Licensed IP hereunder in the Combination Product, and B is the number of all other therapeutically active components in the Combination Product which are not covered by the Licensed IP hereunder. If Licensed Product is given away as part of a kit, or it is not sold but accompanies a product that is sold, then the sale price for the Licensed Product shall be deemed to be the proportional amount of the sale price based on a comparison at the fair market value of each component of the kit or of all products included in the sale. Any noncash consideration received in consideration for the sale of a Licensed Product will be reasonably valued by Company at fair market value.

1.19 "NET SERVICE REVENUES" shall mean cash received by Company or its Affiliates or Sublicensees for the performance of Licensed Services in the first arm's length transaction, less deductions appropriate under US GAAP (to the extent not already reflected in the cash received) such as sales and/or use taxes imposed upon and with specific reference to the Licensed Services. Net Service Revenues of a combination service sold by Company, its Sublicensee(s) and/or its Affiliates shall be calculated by: (i) subtracting the separately available price of therapeutic and/or prophylactic in the combination service from the Net Service Revenues; or (ii) if such therapeutic and/or prophylactic is not sold separately the parties agree to negotiate a reduction in the royalty rate to reflect the fair value that the Licensed Services attributed to the overall combination service sold, but in no event shall the royalty rates be reduced by greater than **[*]**. In the event that such therapeutic and/or prophylactic is a Licensed

Product, the Net Service Revenues for purposes of royalty payments shall be based on the sales revenues and fees received from sale of the entire combination service, provided however, that the running royalty hereunder shall be imposed only once with respect to the sale of a single unit of a Licensed Product. Any noncash consideration received in consideration for the sale of a Licensed Services will be reasonably valued by Company at fair market value.

1.20 "PHASE 1 CLINICAL TRIAL" shall mean the initial introduction of an investigational new drug into humans in a study designed to determine the metabolism and pharmacological actions of the drug in humans, the side effects associated with the increasing doses, and, if possible, to gain early evidence of effectiveness, which study meets the requirements of 21 C.F.R. § 312.21(a), as may be amended from time to time, or a similar clinical study prescribed by the regulatory authorities in a market other than the United States.

1.21 "PHASE 2 CLINICAL TRIAL" shall mean clinical studies conducted to evaluate the effectiveness of the drug for a particular indication or indications in patients with the disease or condition under study and to determine the common short-term side effects and risks associated with the drug, which studies meet the requirements of 21 C.F.R. § 312.21(b), as may be amended from time to time, or a similar clinical study prescribed by the regulatory authorities in a market other than the United States.

1.22 "PHASE 3 CLINICAL TRIAL" shall mean expanded clinical studies intended to gather the additional information about effectiveness and safety that is needed to evaluate the overall benefit-risk relationship of the drug and to provide an adequate basis for the physician labeling, which trials meet the requirements of 21 C.F.R. § 312.21(c), or a similar clinical study prescribed by the regulatory authorities in a market other than the United States.

1.23 "REGULATORY APPROVAL" shall mean all approvals, including licenses, registrations, and authorizations, of all governmental agencies in a country necessary for the manufacture, use or sale of a Licensed Product or Licensed Service in the applicable country. As used herein, Regulatory Approval shall not include pricing or reimbursement approval.

1.24 "STINGVAX" shall mean GVAX plus cyclic dinucleotides and/or derivatives and/or formulations of cyclic dinucleotides.

1.25 "SUBLICENSE INCOME" shall have the meaning set forth in Section 3.8.

1.26 "SUBLICENSEE(S)" as used herein in either singular or plural shall mean any person or entity other than an Affiliate to which Company has granted a sublicense under this Agreement. Sublicensee(s) shall also include any person or entity to which Company's Sublicensee(s) has granted a sublicense subject to JHU's approval and the conditions hereunder.

1.27 "TEGVAX" shall mean GVAX plus toll-like receptor ligands.

1.28 "TERRITORY" shall mean world-wide.

1.29 "VALID CLAIM" shall mean those claims of a patent or patent application in any country that (i) have not expired; (ii) have not been disclaimed; (iii) have not been revoked,

held invalid, or otherwise declared unenforceable or not allowable by a tribunal or patent authority of competent jurisdiction over such claim in such country from which no further appeal has or may be taken; and (iv) in the case of a pending application, was filed and is being prosecuted in good faith towards allowance for not more than **[*]** years.

ARTICLE 2
LICENSE GRANT

2.1 Grant. Subject to the terms and conditions of this Agreement, JHU hereby grants to Company (i) an exclusive license with the right to grant sublicenses in accordance with Section 2.2, hereof, to the Licensed Patent Rights and (ii) an exclusive license with the right to grant sublicenses in accordance with Section 2.2, hereof, to JHU's interest in Cell Lines; to make, have made, use, have used, sell, offer for sale, have sold, import, have imported, develop and commercialize, Licensed Products and to provide Licensed Services in the Territory for the Field and (iii) a nonexclusive license, with the right to grant sublicenses in accordance with Section 2.2, hereof, to use Licensed Technology to make, have made, use, have used, sell, offer for sale and have sold, import, have imported, develop and commercialize, Licensed Products and to provide Licensed Services in the Territory for the Field.

The grant of patent rights herein may be subject to rights retained by the United States government in accordance with 35 U.S.C. 200-205 and P.L. 96-517, as amended by P.L. 98-620, and subject to the retained right of JHU to make, have made, provide and use for its and The Johns Hopkins Health Systems' noncommercial research, educational and clinical testing purposes Licensed Product and Licensed Service, including the ability to distribute any biological material covered under Licensed Patent Rights and/or Cell Lines for nonprofit academic research use to nonprofit entities as is customary in the scientific community. If such biological materials are shared for nonprofit academic research use by a third party, JHU will transfer the biological materials through an agreement that prohibits commercial use of the transferred material, as well as any progeny or derivatives, including, without limitation, master cell banks and working cell lines. In addition, the United States Government may have acquired a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the inventions described in Licensed Patent Rights throughout the world. The rights granted herein are additionally subject to: the requirement that any Licensed Product(s) produced for use or sale within the United States shall be substantially manufactured in the United States (unless a waiver under 35 USC § 204 or equivalent is granted by the appropriate United States government agency), and the right of the United States government to require JHU, or its licensees, including Company, to grant sublicenses to responsible applicants on reasonable terms when necessary to fulfill health or safety needs.

Company acknowledges that its rights are therefore subject to the foregoing paragraph.

2.2 Sublicense. Company may sublicense to one or more Sublicensees the rights granted by JHU under this Agreement, and upon notification to JHU, may extend the right to further sublicense such sublicensed rights subject to the terms and conditions of this Section 2. As a condition to its validity and enforceability, each sublicense agreement shall: (a) incorporate by reference the terms and conditions of this Agreement, (b) be consistent with the terms,

conditions and limitations of this Agreement, (c) name JHU as an intended third-party beneficiary of the obligations of Sublicensee without imposition of obligation or liability on the part of JHU or its Inventors to the Sublicensee, and (d) specifically incorporate Sections 6.2 “Representations by JHU”, 7.1 “Indemnification”, 10.1 “Use of Name”, 10.4 “Product Liability” into the body of the sublicense agreement, and cause the terms used in therein to have the same meaning as in this Agreement. Company and its Sublicensee(s) shall provide to JHU each proposed sublicense agreement, executed by both Company and Sublicensee. To the extent that any terms, conditions or limitations of any sublicense agreement are inconsistent with this Agreement, those terms, conditions and limitations are null and void against JHU.

2.3 Other Third-party Obligations. JHU and Company agree that the rights granted to Company to the Cell Lines and Licensed IP are subject to the Third-party Obligations specifically identified in Exhibit B and D hereto.

2.4 Global Access for Essential Medicines. This Agreement is subject to the provisions of Exhibit E: *GLOBAL ACCESS FOR ESSENTIAL MEDICINES.*

2.5 Certain Developed IP. If JHU, working independently (including having obtained funding to conduct additional clinical trials), develops new and useful proprietary data, information and/or other intellectual property of any kind relating to the Licensed IP (“Developed IP”), to the extent that JHU has the right to offer to Company and grant a license to such Developed IP, JHU will disclose the Developed IP to Company and Company agrees to negotiate in good faith with JHU for the right to use the Developed IP as part of the development and commercialization of Licensed Products

ARTICLE 3
FEES, ROYALTIES, & PAYMENTS

3.1 License Fee. Company agrees to pay to JHU the license fee set forth in Exhibit F payable in two equal installments as follows: (i) within **[*]** days following execution of this Agreement and (ii) on the first anniversary of the Effective Date of this Agreement, assuming that the Technology Transfer has been completed to the reasonable satisfaction of the Company, including, without limitation, the transfer to Company of all Cell Lines Company has reasonably requested.

3.2 Milestones License Fees. Company will pay to JHU milestone payments for the Licensed Products developed by Company, its Affiliates, and/or Sublicensees within **[*]** days of achieving the milestones listed in Exhibit F.

3.3 Minimum Annual Royalties. Company will pay the minimum annual royalties (“Minimum Annual Royalties”) as set forth in Exhibit F. These Minimum Annual Royalties shall be due within **[*]** days of each anniversary of the Effective Date beginning with the second anniversary of the Effective Date (running royalties accrued and paid to JHU during the one-year period preceding an anniversary of the relevant Effective Date of this Agreement shall be credited against the Minimum Annual Royalties due on that anniversary date). The amount of all Minimum Annual Royalties paid for any year in excess of the actual running royalties for such year shall be carried forward and credited against running royalties owed in future years.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

3.4 Running Royalties. Company shall pay to JHU a running royalty as set forth in Exhibit F for each Licensed Product sold and for each Licensed Service provided by Company, its Affiliates and Sublicensee(s) based on Net Sales Revenues and Net Service Revenues for the term of this Agreement. Running royalty payments shall be made quarterly within **[*]** days of the end of the calendar quarter. The royalty rate shall be reduced by **[*]** in the event there is no Valid Claim of the Licensed Patent Rights in the relevant country covering the Licensed Product or Licensed Service, as the case may be.

3.5 Royalty Offset. In the event that a license to third party intellectual property is required in order to make, have made, use, have used, import, have imported, offer for sale, sell and have sold a Licensed Product or Licensed Service, the royalty rate shall be abatable by up to **[*]** of the consideration payable to the third party (i.e. up to **[*]**), provided that the applicable running royalty payable to JHU shall not drop below **[*]** of the running royalty herein calculated before the abatement.

3.6 One Royalty/One Set of Milestones. In no event shall a Licensed Product or Licensed Service require the payment of two royalties and/or two sets of milestones by Company under the agreements listed below between the Parties. For clarity, this provision applies to amounts that may be owed by Company hereunder and also under that certain Restated and Amended License Agreement between JHU and BioSante Pharmaceuticals, Inc., dated as of March 3, 2011, which amends and restates in the entirety that certain License Agreement between JHU and Cell Genesys, Inc. ("Cell Genesys") dated as of June 15, 2000, as amended by a First Amendment to the License Agreement dated as of March 27, 2008, that certain License Agreement between JHU and Cell Genesys, Inc., dated March 12, 2001, as amended by a First Amendment to the License Agreement dated as of March 27, 2008, and that certain License Agreement between JHU and Cell Genesys, Inc., dated October 1, 1999, as amended by a First Amendment to the License Agreement dated as of August 30, 2003 (the "JHU Agreements"). If there is an overlap in payment obligations on a single Licensed Product or Licensed Service under the agreements listed herein, the higher royalty rate or the larger set of milestones (when taken in the aggregate) shall be the amount payable by Company. In addition, Company shall not be required to pay any milestones already paid prior to the date hereof, or pay milestones twice for a single indication or Licensed Product. JHU has not received any written notice that would indicate that any milestones are currently due or due and payable under any of the foregoing agreements.

3.7 Taxes. All required non-U.S. withholding related to Licensed Product or Licensed Service sold under this Agreement shall be paid by Company or its Affiliates and shall not be deducted from royalty or other payments due to JHU. If Company is required by law to withhold non-U.S. taxes, JHU will provide reasonable assistance to Company in its efforts to file such requests as are available under the regulations applicable to the jurisdiction and the taxing agency to eliminate the withholding and/or qualify the royalty payments made hereunder for reduced rates of income tax withholding under any applicable income tax treaty.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

3.8 Sublicense Consideration. In addition to the running royalty as set forth under Section 3.4, Company shall pay to JHU the agreed percentage set forth below of the cash value of compensation received by Company from a third party in consideration of the grant of a sublicense to such third party of the rights granted by JHU to Company under this Agreement, including all relevant sublicensing licensing fees, milestone payments, and equity investments in Company or its Affiliate(s) to the extent such investments exceed **[*]** of Fair Market Value (as defined herein below), provided that the following are specifically excluded from this provision: running royalties, loans, debt financing, equity investments at or below **[*]** of Fair Market Value (as defined herein below), payments or other consideration or reimbursement for services, research or development, sales and/or marketing activities, and reimbursement for patent costs or milestones payable to JHU under this Agreement ("Sublicense Income"). As documentation, Company will provide to JHU all relevant information in its possession to the extent reasonably required to confirm amounts payable hereunder in respect of Sublicense Income and which is not the confidential information of a third party, including, but not limited to, copies of research contracts or other contracts with a performance plan and commensurate budget for research, development, sales and/or marketing activities to be performed by Company, providing that the absence of such information shall not preclude exclusion from Sublicense Income.

(i) **[*]** if **[*]**;

(ii) **[*]** if **[*]**; and

(iii) For **[*]**, **[*]**.

In the event that equity in lieu of cash or other consideration is received by Company in return for granting a sublicense, Company shall either arrange for JHU's share of such equity to be issued directly to JHU and in the name of "The Johns Hopkins University" or Company shall pay in cash to JHU the Fair Market Value, as defined below, of JHU's share of such equity. The term "Fair Market Value" shall mean (i) if the stock is publicly traded, the average price that the stock in question is publicly trading at for **[*]** days prior to the announcement of the sublicense agreement, or (ii) if the stock is not publicly traded, the value of such stock as determined in its most recent round of financing.

Notwithstanding anything to the contrary in this Agreement or any JHU Agreement, if (i) Company sublicenses to a third party intellectual property rights licensed to Company by JHU pursuant to multiple agreements and (ii) in two or more of such agreements with JHU, Company has agreed to pay to JHU a percentage of sublicense income (as defined in each such agreement) that Company receives from Sublicensees, then the relevant percentages of sublicense income shall not be aggregated and applied to all sublicense income. Instead Company shall calculate the sublicense income payable to JHU under each relevant agreement based on Company's reasonable estimate of the value allocable to each set of sublicensed rights, when considered in light of the entire transaction and all other relevant factors.

3.9 Form of Payment. All payments under this Agreement shall be made in U.S. Dollars by either check or wire transfer.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

3.10 Payment Information. All check payments from Company to JHU shall be sent to:

Executive Director
Johns Hopkins Technology Transfer
The Johns Hopkins University
100 N. Charles Street, 5th Floor
Baltimore, MD 21201
Attn: JHU Agreement # A21083

or such other addresses which JHU may designate in writing from time to time. Checks are to be made payable to "The Johns Hopkins University". Wire transfers may be made through:

ACH - currently a domestic system (U.S. payments)
[*]
Transit/routing/ABA number: **[*]**
Account number: **[*]**
Type of account: **[*]**
CTX format is preferred; CCD+ is also accepted

Reference: JHU Tech Transfer

(JHU Agreement A21083)

FED WIRE - Domestic
[*]
Transit/routing/ABA number: **[*]**
Account number: **[*]**

Type of account: **[*]**

Reference: JHU Tech Transfer

(JHU Agreement A21083

FED WIRE - International
[*]
SWIFT code: **[*]**
Account number: **[*]**
Type of account: **[*]**

Reference: JHU Tech Transfer

(JHU Agreement A21083)

CHIPS ABA number: N/A
IBAN number: N/A

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Company shall provide notice of the date and amount of all ACH payments to JHU's Financial Manager by email or telephone. Company shall be responsible for any and all costs associated with wire transfers.

3.11 Late Payments. In the event that any payment due hereunder is not made when due, the payment shall accrue interest beginning on the **[*]** day following the due date thereof, calculated at the annual rate of the sum of (a) **[*]** plus (b) the prime interest rate quoted by The Wall Street Journal on the date said payment is due, the interest being compounded on the last day of each calendar quarter, provided however, that in no event shall said annual interest rate exceed the maximum legal interest rate for corporations. Each such payment when made shall be accompanied by all interest so accrued. Said interest and the payment and acceptance thereof shall not negate or waive the right of JHU to seek any other remedy, legal or equitable, to which it may be entitled because of the delinquency of any payment including, but not limited to termination of this Agreement as set forth in Section 9.2.

ARTICLE 4
PATENT PROSECUTION, MAINTENANCE, & INFRINGEMENT

4.1 Prosecution & Maintenance.

(a) JHU shall be responsible for the maintenance and prosecution of the TEGVAX patent rights among the Licensed Patent Rights (JHU Ref# C05152 and C11641). JHU shall (a) cause its patent counsel to timely copy Company on all official actions and written correspondence with any patent office, and (b) allow Company a reasonable opportunity to comment and advise JHU. JHU shall consider and reasonably incorporate all comments and advice. Company shall be responsible for the maintenance and prosecution of the STINGVAX Patent Rights (JHU Ref# C12043). JHU will be notified, in advance, of the filing and prosecution of all patents and patent applications and have a full opportunity for input, which will be carefully considered by Company. By concurrent written notification to JHU and its patent counsel at least **[*]** days in advance (or later at JHU's discretion) of any filing or response deadline, or fee due date, Company may elect not to have a patent application filed in any particular country or not to pay expenses associated with the prosecution or maintaining any patent application or patent, provided that Company pays for all costs incurred up to JHU's receipt of such notification. Failure to provide such notification can be considered by JHU to be Company's authorization to proceed at Company's expense. Upon such notification, JHU may file, prosecute, and/or maintain such patent applications or patent at its own expense and for its own benefit, and any rights or license granted hereunder held by Company, Affiliates or Sublicensee(s) relating to the Licensed Patent Rights which comprise the subject of such patent applications or patent and/or apply to the particular country, shall terminate.

(b) Company will reimburse JHU for all reasonable documented past costs, and all reasonable future costs associated with preparing, filing, maintaining and prosecuting the Licensed Patent Rights within the Field. JHU shall provide an invoice of all past patent costs (to the extent not already invoiced and/or paid) after execution of this Agreement. Unreimbursed past patent expenses are currently estimated at about $**[*]** (this amount does not include estimate for national phase filings for TEGVAX IP (JHU Ref# C11641)). The patent costs shall be due within **[*]** days of receipt of an invoice from JHU.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4.2 Notification. Each party will notify the other promptly in writing when any infringement by another is uncovered or suspected.

4.3 Patent Enforcement. Company shall have the first right to enforce and defend any patent within Licensed Patent Rights and in the Field against any infringement or alleged infringement thereof, and shall at all times keep JHU informed as to the status thereof. Before Company commences an action with respect to any infringement of such patents, Company shall give careful consideration to the views of JHU and to potential effects on the public interest in making its decision whether or not to sue. Thereafter, Company may, at its own expense, institute suit against any infringer or alleged infringer and control and defend such suit in a manner consistent with the terms and provisions hereof and recover any damages, awards or settlements resulting therefrom subject to Section 4.5. However, no settlement, consent judgment or other voluntary final disposition of the suit may be entered into without the prior written consent of JHU, which consent shall not be unreasonably withheld. This right to sue for infringement shall not be used in an arbitrary and capricious manner. JHU shall reasonably cooperate in any such litigation at Company's expense, including by allowing itself to be joined as a party to such litigation if required for purposes of standing. If Company elects not to enforce any patent within the Licensed Patent Rights, then it shall so notify JHU in writing within **[*]** days of receiving notice that an infringement exists, and JHU may, in its sole judgment and at its own expense, take steps to enforce any patent and control, settle, and defend such suit in a manner consistent with the terms and provisions hereof, and recover, for its own account, any damages, awards or settlements resulting therefrom.

4.4 Patent Invalidity Suit. If a declaratory judgment action is brought naming Company as a defendant and alleging invalidity of any of the Licensed Patent Rights, JHU may elect to take over the sole defense of the action at its own expense. Company shall cooperate fully with JHU in connection with any such action.

4.5 Recovery. Any recovery of ordinary (non-punitive) damages by Company under Section 4.3 shall be deemed to reflect loss of commercial sales, and Company shall pay to JHU an amount calculated by applying the royalty rate defined in Section 3.4 to the non-punitive damages of the recovery net of all costs and expenses associated with each suit or settlement. In the event a court awards punitive damages to Company in addition to ordinary damages, Company shall pay to JHU **[*]** of such punitive damages awarded in respect of the Licensed IP, net of all reasonable costs and expenses associated with each suit or settlement. If the cost and expenses exceed the recovery, then **[*]** of the excess shall be credited against royalties payable by Company to JHU hereunder in connection with sales of Licensed Product covered in the Licensed Patent Rights which are the subject of the infringement suit, in the country of such legal proceedings, provided, however, that any such credit under this Section shall not exceed **[*]** of the royalties otherwise payable to JHU with regard to sales in the country of such action in any one calendar year, with any excess credit being carried forward to future calendar years.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE 5
OBLIGATIONS OF THE PARTIES

5.1 Reports. Company shall provide to JHU the following written reports according to the following schedules.

(a) Company shall provide calendar-quarterly royalty reports, substantially in the form of Exhibit G and due within **[*]** days of the end of each calendar quarter following the Effective Date of this Agreement beginning after the First Commercial Sale of a Licensed Product or Licensed Service. Royalty Reports shall disclose the amount of Licensed Product(s) and Licensed Service(s) sold, the total Net Sales Revenues and Net Service Revenues of such Licensed Product(s) and Licensed Service(s), and the running royalties due to JHU as a result of Net Sales Revenues and Net Service Revenues by Company, Affiliates and Sublicensee(s) thereof. Payment of any such royalties due shall accompany such Royalty Reports.

(b) Until Company, an Affiliate or a Sublicensee(s) has achieved a First Commercial Sale of a Licensed Product or Licensed Service, or received FDA market approval, Company shall provide semiannual Diligence Reports, due within **[*]** days of the end of every June and December following the Effective Date of this Agreement. These Diligence Reports shall describe Company's, Affiliate(s)'s or any Sublicensee(s)'s technical efforts towards meeting its obligations under the terms of this Agreement.

(c) Company shall provide Annual Reports within **[*]** days of the end of every December following the Effective Date of this Agreement. Annual Reports shall include:

(i) evidence of insurance as required under Section 10.4, or, a statement of why such insurance is not currently required, and

(ii) identification of all Affiliates which have exercised rights pursuant to Section 2.1, or, a statement that no Affiliate has exercised such rights, and

(iii) notice of all FDA approvals of any Licensed Product(s) or Licensed Service(s) obtained by Company, Affiliate or Sublicensee, the patent(s) or patent application(s) licensed under this Agreement upon which such product or service is based, and the commercial name of such product or service, or, in the alternative, a statement that no FDA approvals have been obtained.

5.2 Records. Company shall make and retain, for a period of **[*]** years following the period of each report required by Section 5.1, true and accurate records, files and books of account containing all the data reasonably required for the full computation and verification of sales and other information required in Section 5.1. Such books and records shall be in accordance with generally accepted accounting principles consistently applied. Company shall permit the inspection and copying of such records, files and books of account by JHU or its agents during regular business hours upon **[*]** business days' written notice to Company. Such inspection shall not be made more than once each calendar year. All costs of such inspection and copying shall be paid by JHU, provided that if any such inspection shall reveal that an error has been made in an amount equal to **[*]** or more of that owed for any calendar year, such costs shall

be borne by Company. As a condition to entering into any such agreement, Company shall include in any agreement with its Affiliates or its Sublicensee(s) which permits such party to make, use, sell or import the Licensed Product(s) or provide Licensed Service(s), a provision requiring such party to retain records of sales of Licensed Product(s) and records of Licensed Service(s) and other information as required in Section 5.1 and permit JHU to inspect such records as required by this Section.

5.3 Diligence. Company shall use commercially reasonable efforts to develop and to introduce the Licensed Product(s) and Licensed Service(s) into the commercial market as soon as practicable, consistent with sound and reasonable business practice and judgment; thereafter, until the expiration or termination of this Agreement, Company shall use commercially reasonable efforts to endeavor to keep Licensed Product(s) and Licensed Service(s) reasonably available to the public. Company shall also exercise commercially reasonable efforts to develop Licensed Product(s) suitable for different indications within the Field. In addition to the foregoing, Company shall use its commercially reasonable efforts to meet the following milestones.

(a) **[*]** by **[*]**;

(b) **[*]** by **[*]**;

(c) **[*]** by **[*]**;

(d) **[*]** by **[*]**;

(e) **[*]** by **[*]**; and

(f) **[*]** by **[*]**.

In the event that unforeseen circumstances prevent the Company from achieving a diligence milestone, the Company and JHU will agree to discuss alternative commercially reasonable milestones. Company shall provide JHU with notice, as provided hereunder in Section 10.6, within **[*]** days of achieving each diligence milestone. The foregoing diligence obligations are the only obligations of the Company with respect to GVAX products.

5.4 Other Products. Beginning on **[*]** and thereafter, if JHU provides the Company in writing with clinical or other compelling scientific, safety and commercial evidence demonstrating a significant commercial opportunity within the Licensed Field which is not being developed or commercialized by Company, Company shall make reasonable efforts either to provide JHU with a development plan and start development or attempt to sublicense the particular market or use to a third party. If within **[*]** months of such notification by JHU, Company has not initiated reasonable efforts to finance, develop or sublicense that particular significant commercial opportunity, JHU may on written notice to the Company terminate this license, but only for the relevant indication, so long as JHU has (i) a bona fide offer to enter into a license for the development of the indication on terms which are consistent with the terms herein when considered in light of market rates and the breadth and scope of the license, along with a detailed development plan, (ii) JHU and Company have agreed in writing that development of the indication as planned will not adversely affect current or anticipated development and

commercialization of Licensed Products and Licensed Services, and (iii) the proposed licensee can demonstrate it has sufficient current funding to fund the development for not less than **[*]** years. In addition, the termination of any indication permitted by this Section shall not be effective until JHU enters into the proposed license and in any event any such license shall be executed by both the parties thereto within six (6) months of the initiation of negotiation. If the license is not executed prior to the end of such period, then the license shall not be granted by JHU and the termination of the relevant indication shall not be effective. If any license granted under this provision is terminated for any reason (in whole or in part), written notice of the same will be delivered to Company and the terminated rights shall be automatically restored as part of Company's rights under this Agreement as of the date of termination, unless requested otherwise by the Company. For clarity, this Section shall not be applicable if Company reasonably demonstrates to JHU that commercializing such Licensed Product(s) or Licensed Service(s) or granting such a sublicense in said market or use would have a potentially adverse commercial effect upon development, marketing or sales, or future development, marketing or sales, of the Licensed Product(s).

5.5 Patent Acknowledgement. Company agrees that all packaging containing individual Licensed Products(s) sold by Company, Affiliates and Sublicensee(s) of Company will be marked with the number of the applicable patent(s) licensed hereunder in accordance with each country's patent laws.

5.6 Technology Transfer. In order to enable Company to exercise the licenses granted herein, JHU, through its inventors, will promptly disclose and provide to Company all information and materials (including without limitation biological materials) comprising the Licensed IP. The parties acknowledge that this process will be collaborative and will be executed based upon Company's needs and the inventors' reasonable capabilities to complete the transfer. In any event, the Licensed Technology Transfer shall be completed within **[*]** after the Effective Date. Company and JHU shall agree on a reasonable fee not exceed $**[*]** payable to JHU to fund the costs of the technology transfer including without limitation costs for clerical support. Company shall not be responsible for paying any consideration related to Licensed IP that is not transferred to Company. JHU shall ship Licensed Technology to the addresses indicated by the Company, at times reasonably acceptable to Company.

5.7 Cell Line Transfer and Reimbursement. JHU shall deliver to Company not less than the quantity of each Cell Line referenced in Exhibit B (Section 1) of this Agreement. JHU shall ship the Cell Lines to Company at addresses designated by Company and under physical conditions and at times reasonably requested by the Company. In support of the foregoing, upon transfer of such Cell Lines, Company shall pay to JHU up to $**[*]**, based upon the amounts set forth in Exhibit B (Section 1). In addition, the parties will agree after the Effective Date on a plan for the transfer, security and preservation of the Cell Lines so as to enable the continued use of all the lines for research by JHU and for research, development and commercialization of products by Company.

5.8 Additional Cell Lines. At Company's request, JHU may transfer to Company additional GVAX cell lines existing prior to the Effective Date of this Agreement and not listed in Exhibit B ("Additional Cell Lines"), including any melanoma lines that become available. Such

transfer of Additional Cell Lines shall be made only to the extent Additional Cell Lines are unencumbered by any third party rights and subject to availability and reimbursement of agreed and documented costs of JHU in connection with the transfer and replacement of material. Such transfer shall be accomplished by written amendment to this Agreement with appropriate terms and conditions to be negotiated in good faith between the parties, provided the parties acknowledge that the terms of this Agreement represent appropriate terms and conditions for similar materials that were negotiated in good faith. The foregoing notwithstanding, JHU is under no obligation to transfer to Company Additional Cell Lines.

ARTICLE 6
REPRESENTATIONS

6.1 Duties of the Parties. JHU is not a commercial organization. It is an institute of research and education. Therefore, JHU has no ability to evaluate the commercial potential of any Licensed Patent Rights or Licensed Product or other license or rights granted in this Agreement. It is therefore incumbent upon Company to evaluate the rights and products in question, to examine the materials and information provided by JHU, and to determine for itself the validity of any Licensed Patent Rights, its freedom to operate, and the value of any Licensed Products or Licensed Services or other rights granted.

6.2 Representations by JHU. JHU warrants that it has good and marketable title to its interest in the inventions claimed under Licensed Patent Rights with the exception of certain retained rights of the United States Government, which may apply if any part of the JHU research was funded in whole or in part by the United States Government. To the best of JHTT's knowledge, JHU has the right to grant the rights, and transfer the materials, to Company that are granted and transferred hereunder on the terms set forth herein. The parties acknowledge that the transfer of the 3SKBR3 cell line from JHU is not possible until Company receives permission for transfer from Memorial Sloan Kettering. If and when such permission is obtained, then JHU agrees that it will cooperate in such transfer. JHU does not warrant the validity of any patents or that practice under such patents shall be free of infringement. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, COMPANY, AFFILIATED COMPANIES AND SUBLICENSEE(S) AGREE THAT THE LICENSED IP ARE PROVIDED "AS IS", AND THAT JHU MAKES NO REPRESENTATION OR WARRANTY WITH RESPECT TO THE PERFORMANCE OF LICENSED PRODUCT(S) AND LICENSED SERVICE(S) INCLUDING THEIR SAFETY, EFFECTIVENESS, OR COMMERCIAL VIABILITY. JHU DISCLAIMS ALL WARRANTIES WITH REGARD TO PRODUCT(S) AND SERVICE(S) LICENSED UNDER THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, ALL WARRANTIES, EXPRESSED OR IMPLIED, OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, JHU ADDITIONALLY DISCLAIMS ALL OBLIGATIONS AND LIABILITIES ON THE PART OF JHU AND INVENTORS, FOR DAMAGES, INCLUDING, BUT NOT LIMITED TO, DIRECT, INDIRECT, SPECIAL, AND CONSEQUENTIAL DAMAGES, ATTORNEYS' AND EXPERTS' FEES, AND COURT COSTS (EVEN IF JHU HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, FEES OR COSTS), ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, USE, OR SALE OF THE PRODUCT(S) AND SERVICE(S) LICENSED UNDER THIS AGREEMENT.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

COMPANY, AFFILIATED COMPANIES AND SUBLICENSEE(S) ASSUME ALL RESPONSIBILITY AND LIABILITY FOR LOSS OR DAMAGE CAUSED BY A PRODUCT AND/OR SERVICE MANUFACTURED, USED, OR SOLD BY COMPANY, ITS SUBLICENSEE(S) AND AFFILIATED COMPANIES WHICH IS A LICENSED PRODUCT(S) OR LICENSED SERVICE(S) AS DEFINED IN THIS AGREEMENT.

ARTICLE 7
INDEMNIFICATION

7.1 Indemnification. Company, Affiliates and Sublicensee(s) shall indemnify, defend with counsel reasonably acceptable to JHU and hold JHU, The Johns Hopkins Health Systems, their present and former trustees, officers, inventors of Licensed IP, agents, faculty, employees and students ("Indemnitee") harmless as against any judgments, fees, expenses, or other costs arising from or incidental to any product liability or other lawsuit, claim, demand or other action brought as a consequence of the practice of said inventions by any of the foregoing entities, whether or not JHU or said inventors, either jointly or severally, is named as a party defendant in any such lawsuit and whether or not JHU or the inventors are alleged to be negligent or otherwise responsible for any injuries to persons or property. Practice of the inventions covered by Licensed Product(s) and Licensed Service(s), by an Affiliate or an agent or a Sublicensee(s) or a third party on behalf of or for the account of Company or by a third party who purchases Licensed Product(s) and Licensed Service(s) from Company, shall be considered Company's practice of said inventions for purposes of this Section. The obligation of Company to defend and indemnify as set out in this Section shall survive the termination of this Agreement, shall continue even after assignment of rights and responsibilities to an Affiliate or Sublicensee, and shall not be limited by any other limitation of liability elsewhere in this Agreement.

7.2 Indemnity Procedure. Any Indemnitee seeking indemnification under this Agreement shall promptly notify Company of any claim, demand, action or other proceeding for which such Indemnitee intends to claim such indemnification. Company shall have the right to participate in consideration by the Indemnitee of the financial aspect only of the settlement of any claim, demand, action or other proceeding, but Company may not unreasonably withhold or delay approval of the financial aspect of any settlement. The failure of the Indemnitee to deliver notice to Company within a reasonable time after actual notice of any such claim or demand, or the commencement of any such action or other proceeding, if materially prejudicial to the ability to defend such claim, demand, action or other proceeding, shall relieve Company of any liability under this Section 7 with respect thereto. Each Indemnitee, its employees and agents, shall reasonably cooperate with Company and its legal representatives in the investigation of any claim, demand, action or other proceeding covered by this Section 7 at the expense of Company.

ARTICLE 8
CONFIDENTIALITY

8.1 Confidentiality. If necessary, the parties will exchange information, which they consider to be confidential. The recipient of such information agrees to accept the disclosure of said information which is marked as confidential at the time it is sent to the recipient, and to employ all reasonable efforts to maintain the information secret and confidential, such efforts to

be no less than the degree of care employed by the recipient to preserve and safeguard its own confidential information. The information shall not be disclosed or revealed to anyone except employees of the recipient who have a need to know the information and who have entered into a secrecy agreement with the recipient under which such employees are required to maintain confidential the proprietary information of the recipient and such employees shall be advised by the recipient of the confidential nature of the information and that the information shall be treated accordingly.

The obligations of this Section 8.1 shall also apply to Affiliates and/or Sublicensee(s) provided such information by Company. JHU's, Company's, Affiliates, and Sublicensee(s)'s obligations under this Section 8.1 shall extend until **[*]** years after the termination of this Agreement.

8.2 Exceptions. The recipient's obligations under Section 8.1 shall not extend to any part of the information:

(a) that can be demonstrated to have been in the public domain or publicly known and readily available to the trade or the public prior to the date of the disclosure; or

(b) that can be demonstrated, from written records to have been in the recipient's possession or readily available to the recipient from another source not under obligation of secrecy to the disclosing party prior to the disclosure; or

(c) that becomes part of the public domain or publicly known by publication or otherwise, not due to any unauthorized act by the recipient; or

(d) that is demonstrated from written records to have been developed by or for the receiving party without reference to confidential information disclosed by the disclosing party.

(e) that is required to be disclosed by law, government regulation or court order.

8.3 Right to Publish. JHU may publish manuscripts, abstracts or the like describing the Licensed Patent Rights and inventions contained therein provided confidential information of Company as defined in Section 8.1, is not included or without first obtaining approval from Company to include such confidential information. Otherwise, JHU and the Inventors shall be free to publish manuscripts and abstracts or the like directed to the work done at JHU related to the Licensed Technology without prior approval.

ARTICLE 9
TERM & TERMINATION

9.1 Term. Unless earlier terminated as permitted herein, the term of this Agreement shall commence on the Effective Date and shall continue for thirty (30) years after the First Commercial Sale of a Licensed Product, provided the term may be extended for multiple additional ten (10) year periods upon the mutual agreement of Company and JHU, such agreement not to be unreasonably withheld by JHU. In connection with any such extension or

consideration thereof, the following shall apply: (i) JHU agrees that it will not ask for any additional or increased consideration and (ii) so long as a Licensed Product or Licensed Service is being marketing and sold commercially and Company is not in material breach of the Agreement, then JHU shall not object to such extension of term.

9.2 Termination by Either Party. This Agreement may be terminated by either party if the other party (a) files or has filed against it a petition under the Bankruptcy Act, makes an assignment for the benefit of creditors, has a receiver appointed for it or a substantial part of its assets, or otherwise takes advantage of any statute or law designed for relief of debtors and it is not dismissed within ninety (90) days thereafter, or (b) breaches any of its material obligations hereunder, if, following the giving of notice by the terminating party of the breach and its intent to terminate and stating the grounds therefor, the breaching party shall not have cured the breach within sixty (60) days (thirty (30) days for nonpayment and amounts due and payable). In no event, however, shall such notice or intention to terminate be deemed to waive any rights to damages or any other remedy which the party giving notice of breach may have as a consequence of such failure or breach. Accrued obligations, such as payment of owed royalties, are not affected by termination.

9.3 Termination by Company. Company may terminate this Agreement and the license granted herein, for any reason, upon giving JHU ninety (90) days' written notice. Company may remove any Licensed IP from the license on thirty (30) days written notice to JHU.

9.4 Obligations and Duties upon Termination. If this Agreement is terminated other than for the uncured material breach of JHU, both parties shall be released from all obligations and duties imposed or assumed hereunder to the extent so terminated, except as expressly provided to the contrary in this Agreement. Upon termination, both parties shall cease any further use of the confidential information disclosed to the receiving party by the other party. Termination of this Agreement, for whatever reason, shall not affect any accrued obligations including without limitation any obligation of either party to make any payments for which it is liable prior to or upon such termination. Termination shall not affect JHU's right to recover unpaid royalties, fees, reimbursement for patent expenses, or other forms of financial compensation incurred prior to termination. Upon termination Company shall submit a final royalty report to JHU and any royalty payments, fees, unreimbursed patent expenses and other financial compensation due JHU shall become immediately payable and all Cell Lines and Licensed Technology shall be returned to JHU. Furthermore, upon termination of this Agreement, all rights in and to the Licensed IP shall revert immediately to JHU at no cost to JHU. Upon termination of this Agreement, any Sublicensee(s) shall become a direct licensee of JHU, provided that JHU's obligations to Sublicensee(s) are no greater than JHU's obligations to Company under this Agreement. Company shall provide written notice of such to each Sublicensee(s) with a copy of such notice provided to JHU.

ARTICLE 10
MISCELLANEOUS

10.1 Use of Name. Company, Affiliates and Sublicensee(s) shall not use the name of The Johns Hopkins University or The Johns Hopkins Health System or any of its constituent

parts, such as the Johns Hopkins Hospital or any contraction thereof or the name of Inventors in any advertising, promotional, sales literature or fundraising documents without prior written consent from an authorized representative of JHU. Company, Affiliates and Sublicensee(s) shall allow at least seven (7) business days' notice of any proposed public disclosure for JHU's review and comment or to provide written consent.

10.2 No Partnership. Nothing in this Agreement shall be construed to create any agency, employment, partnership, joint venture or similar relationship between the parties other than that of a licensor/licensee. Neither party shall have any right or authority whatsoever to incur any liability or obligation (express or implied) or otherwise act in any manner in the name or on the behalf of the other, or to make any promise, warranty or representation binding on the other.

10.3 Notice of Claim. Each party shall give the other or its representative immediate notice of any suit or action filed, or prompt notice of any claim made, against them arising out of the performance of this Agreement or arising out of the practice of the inventions licensed hereunder.

10.4 Product Liability. Prior to initial human testing or First Commercial Sale of any Licensed Product(s) or Licensed Service(s) as the case may be in any particular country, Company shall establish and maintain, for each country in which Company or an Affiliate, or Sublicencee(s) shall test or sell Licensed Product(s) and Licensed Service(s), product liability, or other appropriate insurance coverage, in the minimum amount of (i) for Phase 2 Clinical Trials or earlier, Five Million Dollars per occurrence ($5,000,000) and Five Million Dollars ($5,000,000) in the aggregate, and (ii) for Phase 3 Clinical Trials and after, Seven Million Five Hundred Thousand Dollars ($7,500,000) per occurrence (which will increase to $10M as of commercialization of a Licensed Product) and Ten Million Dollars ($10,000,000) in the aggregate, and will annually present evidence to JHU that such coverage is being maintained. Upon JHU's request, Company will furnish JHU with a Certificate of Insurance of each product liability insurance policy obtained. JHU shall be listed as an additional insured in Company's said insurance policies. If such product liability insurance is underwritten on a 'claims-made' basis, Company agrees that any change in underwriters during the term of this Agreement will require the purchase of 'prior acts' coverage to ensure that coverage will be continuous throughout the term of this Agreement. A change in underwriters will not be made unless claims arising prior to the date of the change during the term of this Agreement are covered.

10.5 Governing Law. This Agreement shall be construed, and legal relations between the parties hereto shall be determined, in accordance with the laws of the State of New York applicable to contracts solely executed and wholly to be performed within the State of New York without giving effect to the principles of conflicts of laws. Any disputes between the parties to this Agreement shall be brought in the state or federal courts of Maryland. Both parties agree to waive their right to a jury trial.

10.6 Notice. All notices or communication required or permitted to be given by either party hereunder shall be deemed sufficiently given if mailed by registered mail or certified mail, return receipt requested, or sent by overnight courier, such as Federal Express, to the other party

at its respective address set forth below or to such other address as one party shall give notice of to the other from time to time hereunder. Mailed notices shall be deemed to be received on the third business day following the date of mailing. Notices sent by overnight courier shall be deemed received the following business day.

If to Company:	Aduro BioTech 626 Bancroft Way, Suite 3C Berkeley, CA 94710-2225 Attn: Chief Executive Officer
If to JHU:	Executive Director Johns Hopkins Technology Transfer The Johns Hopkins University 100 N. Charles Street 5th Floor Baltimore, MD 21201 Attn: Agreement #A21083

10.7 Compliance All Laws. In all activities undertaken pursuant to this Agreement, both JHU and Company covenant and agree that each will comply with such Federal, state and local laws and statutes, as may be in effect at the time of performance and all valid rules, regulations and orders thereof regulating such activities.

10.8 Successors and Assigns. Neither this Agreement nor any of the rights or obligations created herein, except for the right to receive any remuneration hereunder, may be assigned by either party, in whole or in part, without the prior written consent of the other party, except that either party shall be free to assign this Agreement in connection with any sale of substantially all of its assets related to this Agreement without the consent of the others; provided that: (a) any such assignee shall agree in writing to be bound by the terms and conditions of this Agreement; and (b) the assigning party shall notify the other party of any such assignment. This Agreement shall bind and inure to the benefit of the successors and permitted assigns of the parties hereto.

10.9 No Waivers; Severability. No waiver of any breach of this Agreement shall constitute a waiver of any other breach of the same or other provision of this Agreement, and no waiver shall be effective unless made in writing. Any provision hereof prohibited by or unenforceable under any applicable law of any jurisdiction shall as to such jurisdiction be deemed ineffective and deleted herefrom without affecting any other provision of this Agreement. It is the desire of the parties hereto that this Agreement be enforced to the maximum extent permitted by law, and should any provision contained herein be held by any governmental agency or court of competent jurisdiction to be void, illegal and unenforceable, the parties shall negotiate in good faith for a substitute term or provision which carries out the original intent of the parties.

10.10 Entire Agreement; Amendment. Company and JHU acknowledge that they have read this entire Agreement and that this Agreement, including the attached Exhibits and, to the

extent relevant, the JHU Agreements and the side letter between the parties dated the date hereof, constitutes the entire understanding and contract between the parties hereto and supersedes any and all prior or contemporaneous oral or written communications with respect to the subject matter hereof, all of which communications are merged herein. It is expressly understood and agreed that (i) there being no expectations to the contrary between the parties hereto, no usage of trade, verbal agreement or another regular practice or method dealing within any industry or between the parties hereto shall be used to modify, interpret, supplement or alter in any manner the express terms of this Agreement; and (ii) this Agreement shall not be modified, amended or in any way altered except by an instrument in writing signed by both of the parties hereto.

10.11 Delays or Omissions. Except as expressly provided herein, no delay or omission to exercise any right, power or remedy accruing to any party hereto, shall impair any such right, power or remedy to such party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or in any similar breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

10.12 Force Majeure. If either party fails to fulfill its obligations hereunder (other than an obligation for the payment of money), when such failure is due to an act of God, or other circumstances beyond its reasonable control, including but not limited to fire, flood, civil commotion, riot, war (declared and undeclared), revolution, or embargoes, then said failure shall be excused for the duration of such event and for such a time thereafter as is reasonable to enable the parties to resume performance under this Agreement; provided, however, that in no event shall such time extend for a period of more than one hundred eighty (180) days.

10.13 Further Assurances. Each party shall, at any time, and from time to time, prior to or after the Effective Date of this Agreement, at reasonable request of the other party, execute and deliver to the other such instruments and documents and shall take such actions as may be required to more effectively carry out the terms of this Agreement.

10.14 Survival. All representations, warranties, covenants and agreements made herein and which by their express terms or by implication are to be performed after the execution and/or termination hereof, or are prospective in nature, shall survive such execution and/or termination, as the case may be. This shall include Sections 3 (to the extent accrued monies are unpaid) and Articles 7, 8, 9.4, and 10 (as applicable).

10.15 No Third-Party Beneficiaries. Nothing in this Agreement shall be construed as giving any person, firm, corporation or other entity, other than the parties hereto and their successors and permitted assigns, any right, remedy or claim under or in respect of this Agreement or any provision hereof.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

10.16 Headings. Article headings are for convenient reference and not a part of this Agreement. All Exhibits are incorporated herein by this reference.

10.17 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which when taken together shall be deemed but one instrument.

[Signatures on following page.]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, this Agreement shall take effect as of the Effective Date when it has been executed below by the duly authorized representatives of the parties.

THE JOHNS HOPKINS UNIVERSITY

/s/ Wesley D. Blakeslee, J.D
Wesley D. Blakeslee, J.D., CLP
Executive Director
Johns Hopkins Technology Transfer

ADURO BIOTECH, INC.

/s/ Stephen T. Isaacs
Stephen T. Isaacs
President and CEO

EXHIBIT A. LICENSED PATENT RIGHTS
EXHIBIT B. CELL LINES AND ENCUMBRANCES
EXHIBIT C. CERTAIN LICENSED TECHNOLOGY
EXHIBIT D. ALL THIRD-PARTY OBLIGATIONS FOR LICENSED TECHNOLOGY
EXHIBIT E. GLOBAL ACCESS FOR ESSENTIAL MEDICINES
EXHIBIT F. LICENSE FEES AND ROYALTIES
EXIHIBIT G. QUARTERLY SALES & ROYALTY REPORT

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT A

LICENSED PATENT RIGHTS

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT B

CELL LINES AND ENCUMBRANCES

1. CELL LINES

[*]

2. CELL LINE DESCRIPTION AND ENCUMBRANCES

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT C

CERTAIN LICENSED TECHNOLOGY[1]

[*]

1 All Attachments referenced herein have been provided to Company under separate cover.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT D

ALL THIRD-PARTY OBLIGATIONS FOR LICENSED TECHNOLOGY

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT E

GLOBAL ACCESS FOR ESSENTIAL MEDICINES

Subject to any requirements of relevant laws, rules, regulations, guidelines and standards of all relevant jurisdictions, as well as all obligations and retained rights applicable to the Licensed Patent Rights, including without limitation those set forth in Section 2.1 and 2.2 of this Agreement, the following terms shall be deemed to be a part of this Agreement. For clarity, this provision does not require Company to license, or permit JHU to license on its behalf, any of its information or intellectual property or products to any third party.

1) DEFINITIONS

"**GAVI Country**" shall mean any country listed as eligible to receive support from the GAVI Alliance (as such list may be amended from time to time, provided it shall not include any major market countries or Brazil, Russia, India or China.)

"Humanitarian Purpose" shall mean practice of the Licensed Patent Rights by a Qualified Humanitarian Organization to manufacture Licensed Products in GAVI Countries for which no reasonable alternatives exist in such GAVI Countries, for the sole and express purposes of distribution of such Licensed Products in one or more GAVI Countries solely in the Public Charitable Market for end use by low-income end users in such GAVI Country at actual cost (with no profit) or no cost to the end user or the end user's governmental entities.

"Non-GAVI Country" shall mean any country that is not a GAVI Country.

"Qualified Humanitarian Organization" shall mean any not-for-profit organization that addresses the public health needs of underserved populations solely on a not-for-profit basis. For clarity, Qualified Humanitarian Organizations do not include governmental organizations, foundations, generic biological or pharmaceutical companies, and foundations or non-for-profit organizations that are formed or established for the benefit of, or which partner with, or support, any for-profit or governmental entity.

"**Public Charitable Market**" shall mean markets that, due to economic circumstance and public health emergency cannot afford to purchase Licensed Products at the cost for which such Licensed Products are available in their country. The Public Charitable Market shall not include product tender markets (such as PAHO or UNICEF) or private markets.

2) Limited Retained Rights.

Should Company have no plans to commercialize Licensed Product in GAVI Countries, subject to all other terms and requirements herein, JHU has the right to grant a nonexclusive license to the Licensed Patent Rights (but not jointly-owned Licensed Patent Rights) to a Qualified Humanitarian Organization solely for Humanitarian Purposes in the Public Charitable Market, but only as needed to produce products for end use in GAVI Countries. Such a license shall not be granted until (i) Company has developed a Licensed Product or Licensed Service that is proven to be capable of scalable

manufacture that permits distribution (including all relevant logistical considerations) and sale of the Licensed Product or Licensed Service in GAVI Countries at locally-affordable prices (with a reasonable profit and while reasonably protecting other markets) and with consistent quality, and (b) after the Company has a bona fide offer to do so with a viable manufacturing and commercial partner proven to be capable of effectively working in the GAVI Country in compliance with all relevant laws, rules, regulations, guidelines and standards, and the Company refuses such opportunity without a reasonable explanation as to the reasons why the same would not be commercially reasonable. The third-party license shall terminate automatically if (i) any Licensed Product (whether or not in development) is made available in any Non-GAVI Country directly or indirectly by the licensee, or if any other intellectual property of Company or JHU is infringed or misappropriated by the making, using, selling or importation of any relevant products, or (ii) a compulsory license is granted in such jurisdiction. Prior to entering any licenses with third parties pursuant to this provision, JHU will give at least twelve (12) months' prior written notice to Company of JHU's intent to consider or enter into such a license or manufacture and distribute in such market on its own, which notice will include all pertinent information concerning the opportunity, and Company shall have the first right to negotiate a license directly with the organization.

3) Expansion into New Markets.

The Company shall consider how it might effectively and efficiently manufacture and sell Licensed Product and Licensed Services into GAVI Countries and whether such plans are reasonable and feasible in light of the logistical, quality, manufacturing, economic and scientific challenges related thereto, as well as the demonstrated need therefor in light of medical alternatives and other relevant factors. In connection therewith, JHU agrees to consider reasonable requests of Company for a commensurate reduction of royalty and sublicensing fees in circumstances where Company demonstrates to the satisfaction of JHU that Licensed Products are or will be made available in such developing nations at reduced cost, as compared to the U.S. market and taking into account a reasonable profit.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT F

LICENSE FEES AND ROYALTIES

1. The License Fee due pursuant to Section 3.1 is Two Hundred Fifty Thousand U.S. Dollars ($250,000).

2. The Milestone License fees due pursuant to Section 3.2 shall be paid only once for a TEGVAX-based Licensed Product, once for a STINGVAX-based Licensed Product, and once for one other Licensed Product that does not fall into one of the two (2) foregoing categories:

(i) **[*]** upon **[*]**;

(ii) **[*]** upon **[*]**;

(iii) **[*]** upon **[*]**;

(iv) **[*]** upon **[*]**; and

(v) **[*]** upon **[*]**.

Milestone License Fees are not payable on Licensed Services.

As STINGVAX is jointly-owned by JHU and Company, milestones will be reduced for STINGVAX by **[*]** for milestones (i) - (iii) above.

3. The Minimum Annual Royalties due pursuant to Section 3.3 are:

[*]

4. The running royalty rate payable under Section 3.4 is equal to **[*]**, subject to any offsets or reductions including without limitation those in Sections 3.4 and 3.5, provided that in no event shall the royalty payable hereunder be reduced below **[*]**.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT G

QUARTERLY SALES & ROYALTY REPORT

FOR LICENSE AGREEMENT BETWEEN
ADURO BIOTECH INC.
AND
THE JOHNS HOPKINS UNIVERSITY
DATED _____

JHU Reference Number(s) _____, _____

PERIOD: From _____ To _____

TOTAL ROYALTIES DUE FOR THIS PERIOD $_____

PRODUCT ID	PRODUCT NAME	*JHU REF #	1st COMMERCIAL SALE DATE	TOTAL NET SALES/ SERVICES	ROYALTY RATE	AMOUNT DUE

*** Please provide the JHU Reference Number or Patent Reference**

This report format is to be used to report quarterly royalty statements to JHU. It should be placed on Company letterhead and accompany any royalty payments due for the reporting period. After the first sale on which royalties accrue, his report shall be submitted even if no sales are reported.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit 10.25

RESTATED AND AMENDED LICENSE AGREEMENT

This Restated and Amended License Agreement ("Restated and Amended Agreement", JHU Ref. No. A18558) is made as of the EFFECTIVE DATE by and between The Johns Hopkins University, a corporation of the State of Maryland, having a principal place of business at 3400 N. Charles St., Baltimore, MD 21218 (hereinafter referred to as "JHU") and BioSante Pharmaceuticals, Inc, a Delaware corporation (hereinafter referred to as "Company"), having an address at 111 Barclay Boulevard, Suite 280, Lincolnshire, IL 60069.

WITNESSETH:

WHEREAS, Cell Genesys, Inc. and JHU entered into a License Agreement effective June 15, 2000, and as amended on March 27, 2008 (JHU Ref. Nos. C09769, C03007 and C03096; JHU Agreement No. A00552) ("LICENSE AGREEMENT");

WHEREAS, Company acquired Cell Genesys, Inc on October 14, 2009 and is the successor-in-interest to the LICENSE AGREEMENT;

WHEREAS, Company and JHU wish to restate and amend certain provisions of the LICENSE AGREEMENT;

NOW, THEREFORE, in consideration of the foregoing premises and the following mutual covenants, and other good and valuable consideration the receipt of which is hereby acknowledged, and intending to be legally bound hereby, the parties agree as follows:

ARTICLE 1 - DEFINITIONS

1.1 “AFFILIATED COMPANY” or “AFFILIATED COMPANIES” shall mean any corporation, company, partnership, joint venture or other entity which controls, is controlled by or is under common control with the Company. For purposes of this Paragraph 1.1, control shall mean the direct or indirect ownership of at least fifty percent (50%) (or, the maximum ownership percentage allowed in the applicable jurisdiction, if lower) of the shares of the subject entity entitled to vote in the election of directors (or, in the case of an entity that is a corporation, for the election of the corresponding managing authority).

1.2 “BIOLOGICAL MATERIALS” shall mean all cells, cell lines and other materials provided to Company under this Agreement and covered by the PATENT RIGHTS.

1.3 “EFFECTIVE DATE” of this Restated and Amended Agreement shall mean the date the last party hereto has executed this Agreement.

1.4 “**[*]** PATENT” shall mean that invention entitled **[*]**, U.S. Patent Application Serial No. **[*]** filed on **[*]**, which was conducted during the course of research conducted by **[*]**, and licensed to **[*]** under the license agreement effective **[*]**.

1.5 “LICENSED FIELD” shall mean all applications (including all allogeneic and autologous forms of immunotherapy).

1.6 “LICENSED MELANOMA PRODUCT(S)” shall mean any material, composition, drug, cell preparation, or other product (a) the manufacture, use or sale of which would constitute, but for the license granted to Company pursuant to this Agreement, an infringement of a claim of the JHU/NIH MELANOMA PATENT RIGHTS

(infringement shall include, but is not limited to, direct, contributory, or inducement to infringe), is covered by a pending claim of JHU/NIH MELANOMA PATENT RIGHTS or incorporates a BIOLOGICAL MATERIAL, and (b) has received FDA or other regulatory approval to be marketed, sold, or used (or is marketed or sold) in the treatment of melanoma.

1.7 “LICENSED NON-MELANOMA PRODUCT(S)” shall mean any material, composition, drug, cell preparation, or other product other than a LICENSED MELANOMA PRODUCT.

1.8 “LICENSED PRODUCT(S)” shall mean LICENSED MELANOMA PRODUCT(S) and/or LICENSED NON-MELANOMA PRODUCT(S).

1.9 “LICENSED MELANOMA SERVICE(S)” means the commercial performance on behalf of a third party of any method including therapeutic service or the manufacture of any product or the use of any product or composition which (a) would constitute, but for the license granted to Company pursuant to this Agreement, an infringement of a claim of the JHU/NIH MELANOMA PATENT RIGHTS, (infringement shall include, but not be limited to, direct, contributory or inducement to infringe) or is covered by a pending claim of JHU/NIH MELANOMA PATENT RIGHTS or incorporates a BIOLOGICAL MATERIAL, and (b) has received FDA or other regulatory approval to be marketed, sold, or used (or is marketed or sold) in the treatment of melanoma.

1.10 “LICENSED NON-MELANOMA SERVICE(S)” means any commercial performance on behalf of a third party of any method including therapeutic service or the manufacture of any product or the use of any product or composition other than a LICENSED MELANOMA SERVICE.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.11 “LICENSED SERVICE(S)” shall mean LICENSED MELANOMA SERVICE(S) and/or LICENSED NON-MELANOMA SERVICE(S).

1.12 “NET SALES”, subject to Paragraph 4.10 below, shall mean gross sales revenues and fees billed by Company, AFFILIATED COMPANY and SUBLICENSEES from the sale of LICENSED PRODUCT(S) less (i) trade discounts allowed, refunds, returns and recalls, (ii) sales taxes and other governmental charges and duties (including value added tax) actually paid, and (iii) provisions for uncollectible accounts determined in accordance with generally accepted accounting principles, consistently applied to all products of the selling party. Except as set forth in Paragraph 4.5, in the event that Company, AFFILIATED COMPANY, or SUBLICENSEE sells a LICENSED PRODUCT(S) in combination with another drug as part of a combination product (as such drug is defined in the marketing application to the FDA), the NET SALES for purposes of royalty payments shall be calculated by multiplying the NET SALES of that combination by the fraction A/A+B, where A is Company’s then gross selling price of the LICENSED PRODUCT sold separately and B is the lowest, then-current fair market gross selling price of the other drug sold separately, provided that no deduction shall be made for costs for drugs not defined in the marketing application, provided further that in no event shall the NET SALES be reduced below an amount equal to the product of the number of combinations sold multiplied by Company’s then selling price for the LICENSED PRODUCT(S) if sold on a stand-alone basis, and provided further that any drug that is not an FDA-approved, therapeutically active, stand-alone product (even if noted in the marketing application) in its own right shall be disregarded in respect to this Paragraph 1.12.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.13 “NET SERVICE REVENUES”, subject to Paragraph 4.10 below, shall mean actual billings for the performance of LICENSED SERVICE(S) less (i) sales and/or use taxes and other governmental charges and duties (including value added tax) imposed upon and with specific reference to the LICENSED SERVICE and (ii) provisions for uncollectible accounts determined in accordance with generally accepted accounting principles, consistently applied to all products/services of the selling party.

1.14 “PATENT RIGHTS” shall mean the JHU/WHITEHEAD PATENTS, the JHU ALLOGENEIC PARACRINE PATENT APPLICATIONS, or the JHU/NIH MELANOMA PATENT APPLICATION, as each are further described on Exhibit “A” attached hereto, and the inventions disclosed and claimed therein, and all continuations, divisions, continuation in part applications (to the extent the new subject matter reads on claims in the originally filed U.S. utility application), substitutions, extensions, reexaminations, and reissues based thereof, and any corresponding foreign patent applications, and any patents, patents of addition, or other equivalent foreign patent rights issuing, granted or registered thereon.

1.15 “SUBLICENSEE” shall mean any third party (other than an AFFILIATED COMPANY) to whom Company has granted a sublicense under this Restated and Amended Agreement.

1.16 “VALID CLAIM” shall mean a claim of an issued and unexpired patent or a claim of a patent application within PATENT RIGHTS that has been pending for less than **[*]** years from its filing date.

ARTICLE 2 - GRANTS

2.1 Subject to the terms and conditions of this Agreement (particularly Paragraph 2.2 below), JHU hereby grants to Company a license under the PATENT RIGHTS to

make, have made, use, import and sell the LICENSED PRODUCT(S) and to provide the LICENSED SERVICE(S) in the United States and worldwide under the PATENT RIGHTS in the LICENSED FIELD. This Grant shall apply to the Company and any AFFILIATED COMPANY, except that any AFFILIATED COMPANY shall not have the right to sublicense others as set forth in Paragraph 2.3 below. If any AFFILIATED COMPANY exercises rights under this Agreement, such AFFILIATED COMPANY shall be bound by all terms and conditions of this Agreement, including but not limited to indemnity and insurance provisions and royalty payments, which shall apply to the exercise of the rights, to the same extent as would apply had this Agreement been directly between JHU and the AFFILIATED COMPANY. In addition, Company shall remain fully liable to JHU for all acts and obligations of AFFILIATED COMPANY such that acts of the AFFILIATED COMPANY shall be considered acts of the Company.

2.2 The license granted in respect to the JHU/WHITEHEAD PATENTS shall be subject to the rights of The Whitehead Institute for Biological Research to exploit and enforce its co-interest (and to authorize others to do so, including, without limitation, granting and authorizing other licenses to grant and authorize sublicenses). The license granted in respect to the JHU/NIH MELANOMA PATENT RIGHTS shall be subject to: (a) the right of the Public Health Service (“PHS”) to require JHU, or its licensees (including Company), to grant sublicenses to responsible applicants, on reasonable terms, when necessary to fulfill health or safety needs; (b) the requirement that any LICENSED PRODUCT(S) that practice(s) any claim under the JHU/NIH MELANOMA PATENT RIGHTS and is/are produced for use and sale within the United States shall be substantially manufactured in the United States; (c) the rights of the United States

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

government as set forth under 37 C.F.R. Part 401, and (d) the Public Health Service Interinstitutional Agreement between JHU and the PHS dated 17 January 1997 and attached hereto as Exhibit B "". A letter providing written approval from the NIH for the granting of an exclusive license to Company by JHU for JHU/NIH MELANOMA PATENT APPLICATION is attached hereto as Exhibit C"'. The license granted pursuant to this Agreement shall be subject to: (a) the rights retained by the United States government in accordance with P.L. 96-517, as amended by P.L. 98-620; and (b) the rights retained by JHU to make, have made, provide and use for its and The Johns Hopkins Health Systems' non-profit purposes the LICENSED PRODUCT(S) and the LICENSED SERVICE(S).

2.3 Except as provided herein, Company may grant and authorize sublicenses to others under this Agreement and shall provide a copy of each such sublicense agreement to JHU promptly after it is executed provided that Company shall have the right to redact such portions of such sublicense agreement not applicable to obligations of Company or such SUBLICENSEE under this Agreement, and further provided that such agreement shall be considered confidential information under Paragraph 5.3. Each sublicense shall be consistent with the terms of this Agreement. As a condition to its validity and enforceability, each sublicense agreement shall: (a) incorporate by reference the terms and conditions of this Agreement, (b) be consistent with the terms, conditions and limitations of this Agreement, (c) prohibit SUBLICENSEE's further sublicense of the rights delivered hereunder, (d) name JHU as an intended third party beneficiary of the obligations of SUBLICENSEE without imposition of obligation or liability on the part of JHU or its Inventors to the SUBLICENSEE, (e) specifically

incorporate Paragraphs 9.6, 9.7, 9.8 and 9.9 into the body of the sublicense agreement, and cause the terms used in therein to have the same meaning as in this Agreement. To the extent that any terms, conditions or limitations of any sublicense agreement are inconsistent with this Agreement, those terms, conditions and limitations are null and void against JHU.

ARTICLE 3 - PATENT INFRINGEMENT

3.1 Each party will notify the other promptly in writing when any infringement of PATENT RIGHTS by another is uncovered or suspected.

3.2 Subject to Paragraph 3.4 below, Company shall have the first right (through itself or others) to enforce any patent within the PATENT RIGHTS against any infringement or alleged infringement thereof and/or to defend any declaratory judgment action with respect thereto, and shall at all times keep JHU informed as to the status thereof. Company may, in sole judgment and at its own expense, institute suit against any such infringer or alleged infringer and control, settle, and defend such suit in a manner consistent with the terms and provisions hereof and recover, for its account, any damages, awards or settlements resulting therefrom, subject to Paragraph 3.5. This right to sue for infringement shall not be used in an arbitrary or capricious manner. JHU shall reasonably cooperate in any such litigation at Company's expense, including without limitation, by joining as a party plaintiff and executing such documents as Company may request.

3.3 If Company elects not to enforce any patent within the PATENT RIGHTS, then it shall so notify JHU in writing within **[*]** months of receiving notice that an infringement

exists, and JHU may, in its sole judgment and at its own expense, take steps to enforce any patent and control, settle, and defend such suit in a manner consistent with the terms and provisions hereof, and recover, for its own account, any damages, awards or settlements resulting therefrom.

3.4 JHU shall have the first right to enforce any patent rights granted under the JHU/NIH MELANOMA PATENT APPLICATION. Company shall only have the right to enforce patent rights granted under the JHU/NIH MELANOMA PATENT APPLICATION if both JHU and PHS elect not to enforce such rights, whether jointly or separately. In no such event shall Company take any action to compel PHS to initiate or join in any suit for patent infringement, except to the extent possible under the JHU/PHS agreement. Should PHS be made a party to any suit as a result of Company action, Company shall pay all costs, fees, and expenses incurred by PHS, including all costs, fees, and expense incurred by opposing any such action. PHS shall have the right (but not the obligation) to join in any suit brought by the Company.

3.5 Any recovery by Company of compensatory (i.e., non-punitive damages net of legal fees and out-of-pocket costs of the action) under Paragraph 3.2 or 3.4 shall be deemed to reflect loss of commercial sales, and Company shall pay to JHU the applicable royalty rate on infringing NET SALES. Infringing NET SALES shall be determined by and calculated from the amount of infringing sales on which the award of compensatory damages is based. With respect to any recovery of punitive damages with respect to royalty-bearing products, Company shall pay to JHU an amount equal to **[*]** thereof.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE 4 - PAYMENTS. ROYALTIES. AND RESEARCH SUPPORT

4.1 Company will reimburse JHU for the reasonable costs of preparing, filing, maintaining and prosecuting the PATENT RIGHTS prior to the effective date (except that the Company shall be directly responsible for all future costs associated with preparing, filing, maintaining and prosecuting the JHU/WHITEHEAD PATENTS). In accordance with Paragraph 5.1 below, Company will reimburse JHU, within **[*]** days of the receipt of an invoice from JHU, for all costs associated with the preparation, filing, maintenance, and prosecution of PATENT RIGHTS incurred by JHU subsequent to the EFFECTIVE DATE of this Agreement.

4.2 The Company shall pay to JHU a **[*]** annual license fee due within **[*]** days of each anniversary of the EFFECTIVE DATE of the Restated and Amended Agreement. **[*]** Dollars ($**[*]**) of such fee shall be allocated to the JHU/WHITEHEAD PATENT RIGHTS and **[*]** Dollars ($**[*]**) shall be allocated to the JHU ALLOGENEIC PARACRINE PATENT RIGHTS and the JHU/NIH MELANOMA PATENT RIGHTS. Such fees are nonrefundable and shall not be credited against royalties or other fees.

4.3 Throughout the term of this Agreement, Company shall pay to JHU an annual royalty for each LICENSED PRODUCT(S) sold and each LICENSED SERVICE(S) provided worldwide by the Company, AFFILIATED COMPANIES and SUBLICENSEES so long as such LICENSED PRODUCT(S) or LICENSED SERVICE(S) is covered by a VALID CLAIM under any PATENT RIGHTS. Annual royalties shall be paid quarterly as provided in Paragraph 4.8.

4.4 The Company shall pay to JHU a running royalty in an amount equal to **[*]** of the NET SALES and **[*]** of NET SERVICE REVENUES of such LICENSED PRODUCT(S) or LICENSED SERVICE(S).

In the event that JHU receives any royalties in respect to the JHU/NIH MELANOMA PATENTS, JHU shall pay the Public Health Service any sums due under the Public Health Service Interinstitutional Agreement between JHU and PHS.

4.5 Royalties owed pursuant to Paragraph 4.4 shall not be subject to deductions or reductions because of third party patents or other royalties and shall be determined upon the price of the entire final LICENSED PRODUCT(S) or LICENSED SERVICE(S). Notwithstanding anything in the aforegoing to the contrary, the determination of the royalty for the sale of any LICENSED PRODUCT shall exclude any other product if such other product is administered as part of a combination treatment regimen with a LICENSED PRODUCT and such other product has been separately approved by the FDA or an equivalent agency.

4.6 Sublicense Consideration. In addition to the running royalty as set forth under Paragraph 4.4, Company shall pay to JHU **[*]** of the cash value of any and all consideration received for sublicenses under this Agreement. This sublicense consideration shall be due, without the need for invoice from JHU, within **[*]** days of Company's receipt of a payment. Such consideration shall mean consideration of any kind received by the Company or AFFILIATED COMPANIES from a SUBLICENSEE(S) for the grant of a sublicense under this Agreement, such as upfront fees or milestone fees and including any premium paid by the SUBLICENSEE(S) over Fair Market Value for stock of the Company or an AFFILIATED COMPANY in consideration for such sublicense. However, not included in such sublicense consideration are amounts paid to the Company or an AFFILIATED COMPANY by the SUBLICENSEE(S) for (i) running royalties on LICENSED PRODUCT(S) and LICENSED SERVICE(S), and (ii) product development, research work, clinical studies and regulatory

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

approvals to be performed by or for the Company or AFFILIATED COMPANIES (including third parties on their behalf) subsequent to the EFFECTIVE DATE of this Restated and Amended Agreement, each pursuant to **[*]**, the **[*]**. The term "Fair Market Value" shall mean the average price that the stock in question is publicly trading at for **[*]** days prior to the announcement of its purchase by the SUBLICENSEE(S) or if the stock is not publicly traded, the value of such stock as determined by the most recent private financing through a financial investor (an entity whose sole interest in the Company or AFFILIATED COMPANY is financial) of the Company or AFFILIATED COMPANY that issued the shares.

4.7 The Company shall pay to JHU the following milestone payments (not creditable against earned royalties) within **[*]** days of the events indicated below:

(A) For JHU/WHITEHEAD PATENT: **[*]**

(B) For JHU ALLOGENEIC PARACRINE PATENT APPLICATION:

(1) **[*]**:

[*]

(2) **[*]**:

[*]

(3) **[*]**:

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(4) **[*]**:

[*]

Milestones (2) through (4) above, however, shall be paid only for the first three (3) LICENSED NON-MELANOMA PRODUCTS or LICENSED NON-MELANOMA SERVICES covered by a claim under the JHU ALLOGENEIC PARACRINE PATENT RIGHTS.

(C) For JHU/NIH MELANOMA PATENT APPLICATION:

(1) **[*]**:

[*]

(2) **[*]**:

[*]

(3) **[*]**:

[*]

(4) **[*]**:

[*]

Milestones (2) through (4) above, however, shall be paid only for the first LICENSED MELANOMA PRODUCT or LICENSED MELANOMA SERVICE covered by a claim under the JHU/NIH MELANOMA PATENT APPLICATION. Milestones (2) and (3) above are understood to occur and be paid prior to FDA or other regulatory approval for marketing.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4.8 Up until the time of the Company receiving FDA approval for a LICENSED PRODUCT or LICENSED SERVICE, the Company shall provide to JHU within **[*]** days of the end of each December after the EFFECTIVE DATE, an annual written report to JHU of the amount of LICENSED PRODUCTS sold and LICENSED SERVICES sold, the total NET SALES and NET SERVICE REVENUES of such LICENSED PRODUCTS and LICENSED SERVICES, and the running royalties due to JHU as a result of NET SALES and NET SERVICE REVENUES by Company, AFFILIATED COMPANIES and SUBLICENSEES thereof. Payment of any such royalties due shall accompany such report. Upon receipt of FDA approval for a LICENSED PRODUCT or LICENSED SERVICE, the Company shall provide thereafter a written report within **[*]** days after each March, June, September and December including the amount of approved LICENSED PRODUCT sold and approved LICENSED SERVICE provided, the total NET SALES and NET SERVICE REVENUES of such LICENSED PRODUCT and LICENSED SERVICE, and the running royalties due to JHU. Until the Company, an AFFILIATED COMPANY or a SUBLICENSEE has initiated a clinical trial and has achieved a first commercial sale of a LICENSED MELANOMA PRODUCT or LICENSED MELANOMA SERVICE and a LICENSED NON-MELANOMA PRODUCT or LICENSED NON-MELANOMA SERVICE (and has received FDA market approval for such LICENSED PRODUCT(S) or LICENSED SERVICES), a report shall be submitted at the end of every December after the EFFECTIVE DATE and will include a full written report describing the Company's, AFFILIATED COMPANIES and SUBLICENSEE'S technical efforts towards meeting the milestones in Article 6.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4.9 The Company shall make and retain, for a period of **[*]** years following the period of each report required by Paragraph 4.8, true and accurate records, files and books of account containing all the data reasonably required for the full computation and verification of sales and other information required in Paragraph 4.8. Such books and records shall be in accordance with generally accepted accounting principles consistently applied. The Company shall permit the inspection and copying of such records, files and books of account by JHU or its agents during regular business hours upon **[*]** business days' written notice to the Company. Such inspection shall not be made more than once each calendar year. All costs of such inspection and copying shall be paid by JHU, provided that if any such inspection shall reveal that an error has been made in the amount equal to **[*]** or more of such payment, such costs shall be borne by the Company. The Company shall include in any agreement with its AFFILIATED COMPANIES or any SUBLICENSEE which permits such party to make, use or sell the LICENSED PRODUCT(S) or provide the LICENSED SERVICE(S), a provision requiring such party to retain records of sales of such LICENSED PRODUCT(S) and records of LICENSED SERVICE(S) and other information as required in Paragraph 4.8 and permit JHU to inspect such records as required by this Paragraph 4.9. Notwithstanding the foregoing, if Company does not have the right to grant to JHU the right to audit any SUBLICENSEES' books and records, Company shall obtain for itself such right and, at JHU's request, Company shall exercise such audit right with respect to such SUBLICENSEES; provided, that (i) Company shall provide the results of such audit for inspection by JHU pursuant to this Paragraph 4.9, and (ii) Company shall use an independent auditor reasonably acceptable to JHU to conduct such audit. In such event, Company shall obtain for itself such right to audit at least once per calendar year.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4.10 In order to insure JHU the full royalty payments contemplated hereunder, the Company agrees that in the event any LICENSED PRODUCT shall be sold or any LICENSED SERVICE shall be provided to an AFFILIATED COMPANY or SUBLICENSEE or to a corporation, firm or association with which Company shall have any agreement, understanding or arrangement with respect to consideration (such as, among other things, an option to purchase stock or actual stock ownership, or an arrangement involving division of profits or special rebates or allowances) the royalties to be paid hereunder for such LICENSED PRODUCT(S) shall be based upon the greater of: 1) the net selling price at which the purchaser of LICENSED PRODUCT(S) or LICENSED SERVICE(S) resells such product to the end user, 2) the NET SERVICE REVENUE received from using the LICENSED PRODUCT(S) or LICENSED SERVICE(S) in providing a service, 3) the fair market value of the LICENSED PRODUCT(S) or LICENSED SERVICE(S), or 4) the net selling price of LICENSED PRODUCT(S) or LICENSED SERVICE(S) paid by the purchaser.

4.11 Form of Payment. All payments under this Agreement shall be made in U.S. Dollars. Checks are to be made payable to “The Johns Hopkins University” and sent to

Director
Technology Transfer
The Johns Hopkins University
100 N. Charles Street
5th Floor
Baltimore, MD 21201
Attn: A18558

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

or such other addressee which JHU may designate in writing from time to time. Checks are to be made payable to “The Johns Hopkins University”. Wire transfers may be made through:

[*]
Transit/Routing/ABA number: **[*]**
SWIFT code: **[*]**
CHIPS ABA number: **[*]**
Account Number: **[*]**
Type of account: **[*]**

or ACH
[*]
Transit/routing/ABA number: **[*]**
Account number: **[*]**
Type of account:**[*]**

Reference: JHU Tech Transfer
(JHU Ref. No.: A18558)
Attn: Financial Manager

Company shall be responsible for any and all costs associated with wire transfers.

ARTICLE 5 - PROSECUTION OF PATENT RIGHTS AND CONFIDENTIAL INFORMATION

5.1 Except for the JHU/WHITEHEAD PATENT, for which Company shall hereafter be directly responsible for the prosecution and maintenance of such, JHU, at the Company’s expense, shall file, prosecute and maintain all patents and patent applications specified under PATENT RIGHTS upon authorization of the Company and the Company shall be licensed thereunder. Title to all patents and patent applications shall reside in JHU. JHU shall have full and complete control over all patent matters in connection therewith except that Company shall be copied directly on all patent

correspondence, provided copies of all correspondence received from any patent office and provided drafts of any papers or applications to be filed at least **[*]** weeks prior to patent office submission for Company comment and Company comments shall be considered and reasonably incorporated. The Company will provide payment authorization to JHU at least **[*]** before an action is due, provided that the Company has received timely notice of such action from JHU. Failure to provide authorization can be considered by JHU as a Company decision not to authorize an action. In any country where the Company elects not to have a patent application filed or to pay expenses associated with filing, prosecuting, or maintaining a patent application or patent (or if such is the case with the JHU/WHITEHEAD PATENT), JHU may file, prosecute, and/or maintain a patent application or patent at its own expense and for its own exclusive benefit and the Company thereafter shall not be licensed under such, patent or patent application.

5.2 Company agrees that all packaging containing individual LICENSED PRODUCT(S) sold by Company, AFFILIATED COMPANIES and SUBLICENSEES and all materials in respect to LICENSED SERVICE(S) provided by company, AFFILIATED COMPANIES and SUBLICENSEES of Company will be marked with the number of the applicable patent(s) licensed hereunder in accordance with each country's patent laws.

5.3 If necessary, the parties will exchange information which they consider to be confidential. The recipient of such information agrees to accept the disclosure of said information which is marked as confidential at the time it is sent to the recipient (collectively, "Confidential Information"), and to employ all reasonable efforts to maintain the Confidential Information as secret and confidential, such efforts to be no less than the

degree of care employed by the recipient to preserve and safeguard its own confidential information. The Confidential Information of the other party shall not be disclosed or revealed to anyone except employees or agents of the recipient who have a need to know the information and who have entered into a secrecy agreement with the recipient under which such employees are required to maintain the confidentiality of information such as the Confidential Information and such employees or agents shall be advised by the recipient of the confidential nature of the Confidential Information and that the Confidential Information shall be treated accordingly. The recipient's obligations under this Paragraph 5.3 shall not extend to any part of the Confidential Information:

a. that can be demonstrated to have been in the public domain or publicly known and readily available to the trade or the public prior to the date of the disclosure; or

b. that can be demonstrated, from written records to have been in the recipient's possession or readily available to the recipient from another source not under obligation of secrecy to the disclosing party prior to the disclosure: or

c. that becomes part of the public domain or publicly known by publication or otherwise, not due to any unauthorized act by the recipient; or

d. that is demonstrated from written records to have been developed by or for the receiving party without reference to Confidential Information disclosed by the disclosing party; or

e. that is required to be disclosed by law, government regulation, or court order.

The obligations of this Paragraph 5.3 shall also apply to AFFILIATED COMPANIES and/or SUBLICENSEES. JHU's, Company's, AFFILIATED COMPANIES', and SUBLICENSEES' obligations under this Paragraph 5.3 shall continue until **[*]** years after the termination of this Agreement. Notwithstanding the foregoing, the receiving party may use or disclose Confidential Information of the disclosing party to the extent necessary to exercise its rights hereunder (including commercialization and/or sublicensing of the PATENT RIGHTS) or fulfill its obligations and/or duties hereunder and in prosecuting or defending litigation and/or submitting information to tax or other governmental authorities; provided, that if the receiving party is required by law to make any public disclosures of Confidential Information of the disclosing party, to the extent it may legally do so, it will give reasonable advance notice to the disclosing party of such disclosure and will use its reasonable efforts to secure confidential treatment of Confidential Information prior to its disclosure (whether through protective orders or otherwise).

ARTICLE 6 - TERM AND COMMERCIAL EFFORTS

6.1 This Agreement shall expire in each country on the date of expiration of the last to expire patent included within PATENT RIGHTS in that country or if no patents issue then twenty (20) years from the EFFECTIVE DATE of this Agreement.

6.2 Company shall use reasonable commercial efforts to develop and commercialize the LICENSED PRODUCT(S) and LICENSED SERVICE(S) using good scientific judgment. Specifically, with respect to the development of an allogeneic cell line for a particular tumor type, Company shall meet the milestones set forth in Paragraphs 6.3 through 6.7.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6.3 Company may give written notice to JHU requesting to undertake commercially reasonable efforts to file either a corporate IND or a corporate drug master file with respect to any tumor types or JHU may give written notice to Company that JHU is requesting that Company then agree to undertake commercially reasonable efforts to file either a corporate IND or a corporate drug master file with respect to tumor types. (In the event that any Company-sponsored research in the JHU laboratories of Dr. Drew Pardoll or Dr. Elizabeth Jaffee addresses any of these tumor types, the definition of "tumor types" may then be defined in greater detail in a subsequent agreement to specify a product based on a cell line developed by either researcher.)

6.4 In reply to written notice by Company or by JHU, JHU shall provide, to the extent known by JHU, a detailed, final clinical data report and reports from all prior clinical trials and other materials for the tumor type justifying the commencement of commercially reasonable efforts by Company to file either a corporate IND or a corporate drug master file. If JHU is conducting such clinical research and developing an allogeneic cell line, JHU will provide Company with a clinical progress report at least **[*]** months prior to the submission of the final clinical report. Such data may be auditable by Company or its designee upon request.

6.5 Upon receipt of written notice by JHU or Company, Company shall have **[*]** months to evaluate and decide whether to commence commercially reasonable efforts itself or through a third party to file a corporate IND or a corporate drug master file within **[*]** months after Company's decision to proceed. If Company decides

to commence such an effort, it will notify JHU in writing of its intent and shall deliver to JHU an appropriate clinical plan and timeline. The parties agree that if manufacturing or other technical issues beyond Company's control prevent Company from so filing, Company shall be given additional time equal to the length of the delay. If Company does not agree to commence such commercially reasonable efforts, Company upon request of JHU will enter into good faith negotiations with any reputable third party identified by JHU for an exclusive license to JHU's interest in the intellectual property for the LICENSED PRODUCTS OR LICENSED SERVICES. Company will use commercially reasonable efforts to consummate such a license within **[*]** months of JHU notifying Company of the name of a reputable third party that has expressed definitive interest in obtaining such an exclusive license. The terms of such a license shall be commercially reasonable and shall consider the contributions of Company and/or its partners in developing the GVAX® platform. In the event: (a) the Company has not agreed to commence commercially reasonable efforts itself or through a third party to file a corporate IND or a corporate drug master file; and (b) JHU has identified a reputable third party which is interested in an exclusive license as described above; and (c) the Company has not consummated such a license within **[*]** months of JHU's notifying the Company of such third party's interest then except if the third party does not agree to commercially reasonable terms, in such event, the license granted hereunder shall be terminated as of the last day of such **[*]** month period.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6.6 If the Parties so agree to commence efforts to file a corporate IND or a corporate drug master file, JHU shall then license exclusively to Company the allogeneic cell line regarding the particular tumor type. In such event, Company shall: (i) reimburse JHU for the cost of development and testing the particular cell line in excess of the funding provided to Dr. Jaffee (pursuant to paragraph 7.1) up to a maximum of **[*]** per cell line; (ii) pay JHU's customary licensing processing fee of **[*]** and an annual fee of **[*]**; and (iii) reimburse JHU for all reasonable patent costs. Said reimbursements and payments shall be the sole economic consideration for any such license.

6.7 If Company agrees to commence efforts to file a corporate IND or corporate drug master file for the particular tumor type subject to JHU's notice, it is understood that Company will use reasonable commercial efforts to:

- Develop a scaleable manufacturing process
- Conduct an appropriate "bridging study" to confirm that the scaleable manufacturing process yields a product comparable to that evaluated in the preliminary clinical studies performed by JHU
- Conduct a Phase II clinical trial
- Conduct an end of Phase II meeting with FDA
- Conduct Phase Ill clinical trials consistent with FDA

Upon request, Company shall provide JHU with periodic progress reports showing Company's reasonable commercial efforts to achieve the above milestones at a frequency not to exceed every **[*]** months.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6.8 Company shall not be required to act upon JHU's written notice if Company has commenced or can provide written documentation that it has plans to commence the development of a product similar to the one for JHU's intended tumor type.

6.9 JHU, through JHU inventors of PATENT RIGHTS, shall provide Company periodic updates on clinical trials for products covered under the PATENT RIGHTS and under development by the JHU inventors of the PATENT RIGHTS in order to evaluate for potential clinical development by Company as contemplated hereunder. Company will not publicly disclose any information contained in said updates, unless approved by JHU in accordance with Section 9.6.

ARTICLE 7 - CLINICAL TRIALS

7.1 Company shall consider in good faith JHU's participation as a clinical site for future Phase I and Phase II clinical trials for LICENSED PRODUCTS in accordance with a customary Clinical Trials Agreement. Such consideration shall include, but not be limited to, consideration as a site for renal cancer trials. Company shall consider the following factors when determining whether JHU shall serve as the clinical sites for such studies: (i) resources available at JHU for trial; (ii) personnel available at JHU for trial; and (iii) the patient referral base at JHU that is available for trial. In the event Company chooses not to use JHU as the site for such studies Company shall notify JHU of such decision in writing and give a detailed explanation concerning the reason JHU was not chosen for such clinical trial. JHU shall have **[*]** days to respond to such notice. If JHU responds in writing within such **[*]** day period Company shall reasonably and in good faith consider JHU's response before making its final determination.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE 8 - BREACH AND TERMINATION

8.1 Upon breach or default of any of the terms and conditions of this Agreement, the defaulting party shall be given written notice of such default in writing and a period of sixty (60) days after receipt of such notice to correct the default or breach. If the default or breach is not corrected within said sixty (60) day period, the party not in default shall have the right to terminate this Agreement. Failure by Company to use commercially reasonable efforts to make any payments hereunder, including patent reimbursements, shall be considered a breach.

8.2 Company may terminate this Agreement and the license granted herein, for any reason, upon giving JHU sixty (60) days written notice.

8.3 Termination shall not affect JHU's right to recover unpaid royalties or fees or reimbursement for patent expenses incurred prior to termination. Upon termination all rights in and to the licensed technology shall revert to JHU at no cost to JHU. In the event this Agreement is terminated for any reason, Company shall provide JHU with a written inventory of all LICENSED PRODUCTS and LICENSED SERVICES that Company and its AFFILIATED COMPANIES have the right to sell or otherwise dispose of, all subject to the payment to JHU of royalties pursuant to Article 4 hereof. Upon termination of this Agreement by either party for any reason, any sublicense granted by the Company hereunder shall survive, provided that (i) the SUBLICENSEE is not in breach of its sublicense agreement, (ii) the SUBLICENSEE agrees to be bound directly to JHU as a licensor under the terms and conditions of the sublicense agreement, and (iii) JHU's obligations to SUBLICENSEE(S) are no greater than JHU's obligations to Company under this Agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE 9 - MISCELLANEOUS

9.1 All notices pertaining to this Agreement shall be in writing and sent certified mail, return receipt requested, or by courier, to the parties at the following addresses or such other address as such party shall have furnished in writing to the other party in accordance with this Paragraph 9.1:

FOR JHU: The Johns Hopkins University
Johns Hopkins Technology Transfer
100 N. Charles Street, 5th Floor
Baltimore, Maryland 21201
Notices to be sent to: The Director.
Agreement Ref. No.: A18558

FOR COMPANY: BioSante Pharmaceuticals, Inc
111 Barclay Boulevard, Suite 280
Lincolnshire, Illinois 60069
Notices to be sent to: President & CEO.

9.2 All written progress reports, and any other related correspondence shall be in writing and sent to:

The Johns Hopkins University
Johns Hopkins Technology Transfer
100 N. Charles Street, 5th Floor
Baltimore, Maryland 21201
Notices to be sent to: The Director.
Agreement Ref. No.: A18558

or such other addressee which JHU may designate in writing from time to time.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

9.3 This Agreement binding upon and shall inure to the benefit of both parties, their successors and assignees and shall not be assignable without the written consent of the other party, which consent shall not be unreasonably withheld, except that the Company shall have the right to assign this Agreement to another party without the consent of JHU in the case of the sale or transfer by the Company of all, or substantially all, of its assets or business relating to the LICENSED PRODUCT or LICENSED SERVICE, to that party by sale, merger, operation of law, or otherwise.

9.4 In the event that any one or more of the provisions of this Agreement should for any reason be held by any court or authority having jurisdiction over this Agreement, or over any of the parties hereto to be invalid, illegal or unenforceable, such provision or provisions shall be reformed to approximate as nearly as possible the intent of the parties, and if unreformable, shall be divisible and deleted in such jurisdictions; elsewhere, this Agreement shall not be affected.

9.5 The construction, performance, and execution of this Agreement shall be governed by the laws of the State of Maryland. Any disputes between the parties to the Agreement shall be brought in the state or federal courts of Maryland. Both parties agree to waive their right to a jury trial.

9.6 The Company shall not use the name of THE JOHNS HOPKINS UNIVERSITY or THE JOHNS HOPKINS HEALTH SYSTEM or any of its constituent parts, such as the Johns Hopkins Hospital or any contraction thereof or the name of Inventors of PATENT RIGHTS in any press releases, advertising, promotional, sales literature or fundraising documents without prior written consent from an officer of JHU. Company shall allow at least seven (7) business days notice of any proposed public disclosure for JHU's review and comment or to provide written consent.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

9.7 JHU warrants that it has good and marketable title to its interest in the inventions claimed under PATENT RIGHTS with the exception of certain retained rights of the United States government and others as stated herein and that it has the right and authority to enter into this Agreement and grant the licenses contemplated hereunder. JHU does not warrant the validity of any patents or that practice under such patents shall be free of infringement. EXCEPT AS EXPRESSLY SET FORTH IN THIS PARAGRAPH 9.7, COMPANY, AFFILIATED COMPANIES AND SUBLICENSEES AGREE AND ACKNOWLEDGE THAT THE PATENT RIGHTS ARE PROVIDED "AS IS", AND THAT JHU MAKES NO REPRESENTATION OR WARRANTY WITH RESPECT TO THE PERFORMANCE OF LICENSED PRODUCT(S) AND LICENSED SERVICE(S) INCLUDING THEIR SAFETY, EFFECTIVENESS, OR COMMERCIAL VIABILITY, JHU DISCLAIMS ALL WARRANTIES WITH REGARD TO PRODUCT(S) AND SERVICE(S) LICENSED UNDER THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, ALL WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, JHU ADDITIONALLY DISCLAIMS ALL OBLIGATIONS AND LIABILITIES ON THE PART OF JHU AND INVENTORS, FOR DAMAGES, INCLUDING, BUT NOT LIMITED TO, DIRECT, INDIRECT, SPECIAL, AND CONSEQUENTIAL DAMAGES, ATTORNEYS' AND EXPERTS' FEES, AND COURT COSTS (EVEN IF JHU HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, FEES OR COSTS), ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, USE, OR SALE OF THE PRODUCT(S) AND SERVICE(S) LICENSED UNDER THIS AGREEMENT. COMPANY, AFFILIATED COMPANIES AND SUBLICENSEES ASSUME

ALL RESPONSIBILITY AND LIABILITY FOR LOSS OR DAMAGE CAUSED BY A PRODUCT AND SERVICE MANUFACTURED, USED, OR SOLD BY COMPANY, ITS SUBLICENSEES AND AFFILIATED COMPANIES WHICH IS A LICENSED PRODUCT OR LICENSED SERVICE AS DEFINED IN THIS AGREEMENT.

9.8 JHU and the Inventors of LICENSED PRODUCT(S) and LICENSED SERVICE(S) will not, under the provisions of this Agreement or otherwise, have control over the manner in which Company or its AFFILIATED COMPANIES or its SUBLICENSEES or those operating for its account or third parties who purchase LICENSED PRODUCT(S) or LICENSED SERVICE(S) from any of the foregoing entities, practice the inventions of LICENSED PRODUCT(S) and LICENSED SERVICE(S). The Company, AFFILIATED COMPANIES and SUBLICENSEE(S) shall indemnify, defend, with counsel reasonably acceptable to JHU, and hold JHU, The Johns Hopkins Health Systems, their present and former trustees, officers, Inventors of PATENT RIGHTS, agents, faculty, employees and student (collectively, “lndemnitees”) harmless as against any judgments, fees, expenses, or other costs arising from or incidental to any product liability or other lawsuit, claim, demand or other action brought as a consequence of the practice of said inventions by any of the foregoing entities, whether or not JHU or said Inventors, either jointly or severally, is named as a party defendant in any such lawsuit and whether or not JHU or the Inventors are alleged to be negligent or otherwise responsible for any injuries to persons or property; provided, that any party that intends to claim indemnification under this Paragraph 9.8 shall: (i) promptly notify Company in writing of any claim with respect to which the party intends to claim such

indemnification, (ii) give Company sole control of the defense and/or settlement thereof (provided that there shall be no settlement without the indemnified party's consent, which shall not be unreasonably withheld or delayed), and (iii) provide Company, at Company's expense, with reasonable assistance and full information with respect to such claim. As used in the previous sentence, "former" means an Indemnitee that is not associated with JHU at the time of the defense by Company but was associated with JHU (e.g., was a trustee of JHU) as of the EFFECTIVE DATE. Practice of the inventions covered by LICENSED PRODUCT(S) and LICENSED SERVICE(S), by an AFFILIATED COMPANY or an agent or a SUBLICENSEE or a third party on behalf of or for the account of the Company or by a third party who purchases LICENSED PRODUCT(S) and LICENSED SERVICE(S) from the Company, shall be considered the Company's practice of said inventions for purposes of this Paragraph 9.8. Notwithstanding the foregoing, Company shall have no obligations for any claim, fee, expense or otherwise if the party seeking indemnification, prior to Company assuming such defense, makes any settlement, damaging admission or other communication regarding the same without the prior written consent of Company, which consent shall not be unreasonably withheld. The obligation of Company to defend and indemnify as set out in this Paragraph shall survive the termination of this Agreement, shall continue even after assignment of rights and responsibilities to an affiliate, and shall not be limited by any other limitation of liability elsewhere in this Agreement.

9.9 Prior to initial human testing or first commercial sale by Company, an AFFILIATED COMPANY, or SUBLICENSEE of any LICENSED PRODUCT(S) or commercial performance of any LICENSED SERVICE(S) as the case may be in any

particular country, Company shall establish and maintain, in each country in which Company, an AFFILIATED COMPANY or SUBLICENSEE shall test or sell LICENSED PRODUCT(S) and LICENSED SERVICE(S), product liability or other appropriate insurance coverage in the minimum amount of five million dollars ($5,000,000) per claim and will annually present evidence to JHU that such coverage is being maintained. Upon JHU's request, Company will furnish JHU with a Certificate of Insurance of each product liability insurance policy obtained. JHU shall be listed as an additional insured in Company's said insurance policies. If such Product Liability insurance is underwritten on a 'claims made' basis, Company agrees that any change in underwriters during the term of this Agreement will require the purchase of 'prior acts' coverage to ensure that coverage will be continuous throughout the term of this Agreement.

9.10 JHU may publish manuscripts, abstracts or the like describing the PATENT RIGHTS and inventions contained therein provided Confidential Information of Company as set forth in Paragraph 5.3, is not included or without first obtaining approval from the Company to include such Confidential Information. If Company believes that a disclosure of patentable, Company-provided material is contained in the proposed publication, JHU agrees to withhold publication and disclosure of such materials until a patent application is filed. JHU and the Inventors shall be free to publish manuscripts and abstracts or the like directed to the work done at JHU related to the licensed technology without prior approval.

9.11 This Agreement, including the exhibits hereto, constitutes the entire understanding between the parties with respect to the obligations of the parties with respect to the subject matter hereof, and supersedes and replaces all prior agreements, understandings, writings, and discussions between the parties relating to said subject matter.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

9.12 This Agreement may be amended and any of its terms or conditions may be waived only by a written instrument executed by the authorized officials of the parties or, in the case of a waiver, by the party waiving compliance. The failure of either party at any time or times to require performance of any provision hereof shall in no manner affect its right at a later time to enforce the same. No waiver by either party of any condition or term in any one or more instances shall be construed as a further or continuing waiver of such condition or term or of any other condition or term.

9.13 This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors and permitted assigns.

9.14 Upon termination of this Agreement for any reason, Paragraphs 5.3, 8.3, 9.6, 9.7, 9.8 and 9.9 shall survive termination of this Agreement.

9.15 This Agreement is expressly conditioned upon the prior written approval of PHS of those provisions relating to the JHU/NIH MELANOMA PATENT APPLICATION and LICENSED MELANOMA PRODUCTS and LICENSED MELANOMA SERVICES.

9.16 The relationship of JHU and Company established by this Agreement is that of independent contractors. Nothing in this Agreement shall be construed to create any other relationship between JHU and Company. Neither party shall have any right, power or authority to assume, create or incur any expense, liability or obligation, express or implied, on behalf of the other.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

9.17 Except as expressly provided herein, each party agrees not to disclose any financial terms of this Agreement to any third party without the consent of the other party, except as required by securities or other applicable laws, to prospective and other investors, prospective and actual collaborators and such party's accountants, attorneys and other professional advisors.

9.18 In the event either party hereto is prevented from or delayed in the performance of any of its obligations hereunder by reason of acts of God, war, strikes, riots, storms, fires, or any other cause whatsoever beyond the reasonable control of the party, the party so prevented or delayed shall be excused from the performance of any such obligation to the extent and during the period of such prevention or delay.

9.19 EXCEPT WITH RESPECT TO EACH PARTY'S LIABILITY FOR INDEMNIFYING THE OTHER AS PROVIDED HEREIN, NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR ANY SPECIAL, CONSEQUENTIAL, EXEMPLARY OR INCIDENTAL DAMAGES (INCLUDING LOST OR ANTICIPATED REVENUES OR PROFITS RELATING TO THE SAME), ARISING FROM ANY CLAIM RELATING TO THIS AGREEMENT, WHETHER SUCH CLAIM IS BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, EVEN IF AN AUTHORIZED REPRESENTATIVE OF SUCH PARTY IS ADVISED OF THE POSSIBILITY OR LIKELIHOOD OF SAME.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF the respective parties hereto have executed this License Agreement by their duly authorized officers on the date appearing below their signatures.

THE JOHNS HOPKINS UNIVERSITY	**BIOSANTE PHARMACEUTICALS, INC**
/s/ Glen L. Steinbach	/s/ Stephen M. Simes
Glen L. Steinbach Senior Director Johns Hopkins Technology Transfer	Stephen M. Simes President and CEO
2/28/11	3/3/11
(Date)	(Date)

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT “A”

JHU/WHITEHEAD PATENTS (DM-9769)

[*]

EXHIBIT “A” (continued)

JHU ALLOGENEIC PARACRINE PATENT APPLICATIONS (DM-3007)

[*]

EXHIBIT “A” (continued)

JHU/NIH MELANOMA PATENT APPLICATION (JHU DM-3096)

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT “B”

<9 pages omitted>

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EXHIBIT “C”

National Institutes of Health Consent

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health SS vice
National institutes! of Health
Office of Technology 'Minster
National Institutes of Health
6011 ºxecutivel8outevercl
Rockville, MD 20B62

Via Federal Express

May 8, 2000

Nina Ossanna, Ph.D.
Director, Office of Technology Licensing
The Johns Hopkins University School of *Medicine*
111 Market Place, Suite 906
Baltimore, MD 21202

Dear Dr. Ossanna:

This letter serves to provide you with the written approval of the **NIH** for the granting of exclusive license to Cell Genesys by The Johns Hopkins University for U.S. Patent Applications Serial No. **[*]** and Serial No. **[*]**, entitled "Melanoma Cell Lines xpreasing Shared lmmunodominant Melanoma Antigens and Methods of Using Same", and including any divisions or continuations thereof, all foreign counterpart applications, and any patents issued thereon or reissues *or* extensions thereof; as per the draft license agreement which was submitted rn the NTH Office of Technology Transfer via electronic mail on May 1, 2000.

In granting this approval, NIH recognizes that The Johns Hopkins University is in compliance with the portion of Paragraph 5.3 of PHS Interinstitutional Agreement Reference No. L-045-97/0, which states *thal* "Thc institution [i.e. The Johns Hopkins University] shall not grant any licenses or sublicenses for the Tnvention(s) without first submitting the license or sublicense agreement: to PHS for review and obtaining **PHS's** written approval thereon". ft is our understanding that, also per Paragraph 5.3 of L-045.97/0, The Johns Hopkins University will provide PHS with a copy of the license with Cell **Gencsys *once*** it has been executed, It is also our understanding that PHS will be provided with any subliccnses for review and written approval prior to their execution.

Please let me know if you have *any* questions or require additional information.

Sincerely,

/s/ Jack Spiegel
Jac Spiegel, Ph.D,, Director
Division of Technology Development and Transfer
Office of Technology Transfer
National Institutes of Health

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit 10.26

LICENSE AGREEMENT

This License Agreement (this "Agreement") is made effective as of June 20, 2012 (the "Effective Date") by and between **Karagen Pharmaceuticals, Inc.**, a Maryland close corporation with a principal place of business at 4 Club Road, Baltimore, Maryland 21210 ("Licensor"), and **Aduro BioTech, Inc.** ("Licensee"), a Delaware corporation with a place of business at 626 Bancroft Way, Berkeley, CA 94710. Licensor and Licensee are each hereafter referred to individually as a "Party" and together as the "Parties".

WHEREAS, Licensor is the owner of or otherwise Controls certain proprietary Licensed Patent Rights and Licensed Technology (as defined below);

WHEREAS, Licensee desires to obtain certain licenses from Licensor under such Licensed Patent Rights and Licensed Technology to develop and commercialize Licensed Products, which licenses will include both exclusive and nonexclusive license rights as well as options;

WHEREAS, Licensor has represented to Licensee that Licensor has entered into a license agreement (the "Preexisting License") with a Third Party ("Preexisting Licensee") for non-exclusive rights with an option to convert its current licensed rights in the Product Rights, all of which are nonexclusive, to exclusive with regard to one or more infectious diseases on a disease-by-disease basis (the "Preexisting Options")) on the terms as they exist on the date hereof and specifically described in Exhibit A hereto ("Preexisting Rights");

WHEREAS, Licensee has relied on those representations of Licensor relating to the Preexisting License and Preexisting Rights as one basis for entering into this Agreement; and

WHEREAS, Licensor desires to grant such license to Licensee on the terms and subject to the conditions of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereby agree as follows.

1. DEFINITIONS

Whenever used in the Agreement with an initial capital letter, the terms defined in this Article 1 shall have the meanings specified.

1.1 "**Affiliate**" shall mean any corporation, firm, limited liability company, partnership or other entity that directly controls or is controlled by or is under common control with a Party to this Agreement. For purposes of this Section 1.1, "control" means ownership, directly or indirectly through one or more Affiliates, of fifty percent (50%) or more of the shares of stock entitled to vote for the election of directors, in the case of a corporation, or fifty percent

(50%) or more of the equity interests in the case of any other type of legal entity, status as a general partner in any partnership, or any other arrangement whereby a Party controls or has the right to control the Board of Directors or equivalent governing body of a corporation or other entity.

1.2 "**BLA**" shall mean a biologics license application (as defined in Title 21 of the United States Code of Federal Regulations, as amended from time to time) filed with the FDA seeking Regulatory Approval to market and sell any Licensed Product in the United States for a particular indication within the Exclusive Licensed Field or Non-Exclusive Licensed Field.

1.3 "**Confidential Information**" shall mean with respect to a Party (the "Receiving Party"), all information that is disclosed or has been previously disclosed by the other Party (the "Disclosing Party") to the Receiving Party hereunder or to any of its Affiliates or its or their directors, officers, employees, or agents, except to the extent that the Receiving Party can demonstrate by written record or other suitable physical evidence that such information, (a) as of the date of disclosure is demonstrably known to the Receiving Party or its Affiliates other than by virtue of a prior confidential disclosure to such Party or its Affiliates; (b) as of the date of disclosure is in, or subsequently enters, the public domain, through no fault or omission of the Receiving Party; (c) is obtained from a Third Party having a lawful right to make such disclosure free from any obligation of confidentiality to the Disclosing Party; or (d) is independently developed by or for the Receiving Party without reference to or reliance upon any Confidential Information of the Disclosing Party.

1.4 "**Control**" or "**Controlled**" shall mean with respect to any Patent Rights or Technology, the possession by a Party of the ability to grant a license or sublicense of such Patent Rights or Technology as provided for herein without violating the terms of any arrangement or agreements written or otherwise between such Party and any Third Party or without requiring such Party to make undue payment to any Third Party.

1.5 "**Drug Approval Application**" shall mean any application for Regulatory Approval (including pricing and reimbursement approvals) required prior to any commercial sale or use of a Licensed Product in any country or jurisdiction in the Territory, including, without limitation, (a) any BLA or MAA filed with the FDA or any Foreign Regulatory Authority, and (b) any equivalent application filed with any Foreign Regulatory Authority for Regulatory Approval (including pricing and reimbursement approvals) required prior to any commercial sale or use of a Licensed Product in any country or jurisdiction in the Territory.

1.6 "**Exclusive Licensed Field**" shall mean human medical and veterinary uses of a Licensed Product for therapeutic and/or prophylactic treatment of cancer or precancerous conditions. For the sake of clarity, this Exclusive Licensed Field includes the therapeutic and/or prophylactic treatment of cancer or precancerous conditions caused by infectious agents, but excludes therapeutic and/or prophylactic treatment of the infectious agent itself. For example, the Exclusive Licensed Field includes the prevention and treatment of cervical cancer in humans, but does not include the treatment of human papilloma virus.

1.7 "**FDA**" shall mean the United States Food and Drug Administration and any successor agency or authority thereto.

1.8 "**First Commercial Sale**" shall mean, on a country-by-country basis, the date of the first arm's length sale to a Third Party of a Licensed Product by or on behalf of Licensee or any Affiliate or Sublicensee of Licensee in such country as part of a coordinated country-wide commercialization effort.

1.9 "**Foreign Regulatory Authorities**" shall mean any applicable supranational, national, federal, state or local regulatory agency, department, bureau or other governmental entity of any country or jurisdiction in the Territory (other than the FDA in the United States), having responsibility in such country or jurisdiction for any Regulatory Approvals of any kind in such country or jurisdiction, and any successor agency or authority thereto.

1.10 "**ID**" shall mean infectious disease.

1.11 "**Improvements**" shall mean any enhancement, invention or discovery created or identified by Licensor during the Term that constitutes an improvement to the Licensed Patent Rights or Licensed Technology to their subject matter.

1.12 "**IND**" shall mean an investigational new drug application (as defined in Title 21 of the United States Code of Federal Regulations, as amended from time to time) filed or to be filed with the FDA with regard to any Licensed Product.

1.13 "**Licensed Patent Rights**" means all Patent Rights relating to the Exclusive License Field or the Nonexclusive License Field that are Controlled by Licensor as of the Effective Date or become Controlled by Licensor during the Term, to the extent reasonably necessary or useful for the manufacture, use or sale of the Licensed Products. The Licensed Patent Rights as of the Effective Date are listed in Exhibit B, attached hereto and made a part hereof. Exhibit B shall be updated by Licensor by written notice to Licensee on an annual basis during the Term to include any additional patents and patent applications not previously listed; however, the inclusion or exclusion of a patent or patent application from Exhibit B is not to be deemed a conclusive indication of whether that patent or application is or should be considered a "Licensed Patent Right" for purposes of this Agreement.

1.14 "**Licensed Product**" shall mean any product, the making, using, selling, importing or providing a service the conduct of which would, absent the license granted to Licensee hereunder, infringe any Valid Claim included in the Licensed Patent Rights.

1.15 "**Licensed Technology**" shall mean and include all Technology, whether or not patentable, including but not limited to formulations, techniques and materials, Controlled by Licensor as of the Effective Date or that becomes Controlled by Licensor during the Term that (a) is related to any patent or patent application included in the Licensed Patent Rights or (b) is reasonably necessary or useful for Licensee to practice the license granted to it hereunder.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.16 "**License Term**" shall mean, with respect to each Licensed Product, the period commencing on the Effective Date and continuing on a country-by-country basis until the last to expire of the Licensed Patent Rights covering the Licensed Product in each country.

1.17 "**MAA**" shall mean an application filed with the relevant Foreign Regulatory Authorities in Europe seeking Regulatory Approval to market and sell any Licensed Product in Europe or any country or territory therein for a particular indication within the Exclusive Licensed Field or Non-Exclusive Licensed Field.

1.18 "**Net Sales**" shall mean the amounts invoiced for all Licensed Products sold by Licensee and Affiliates and Sublicensees to Third Parties throughout the Territory during each calendar quarter, less the following deductions, exclusions and other amounts incurred or paid by Licensee or its Affiliates or Sublicensees with respect to sales of Licensed Products regardless of the calendar quarter in which such sales were made, provided that should sales not be sufficient to cover deductions such deductions may be carried to following calendar quarters:

(a) trade, cash and quantity discounts or rebates actually allowed or taken including, without limitation, discounts or rebates to governmental or managed care organizations;

(b) credits or allowances actually given or made for rejection or return of previously sold Licensed Products (including Medicare and similar types of rebates) and amounts attributable to uncollectible and bad accounts;

(c) any charges for insurance, freight, and other transportation costs directly related to the delivery of Licensed Product to the extent included in the gross invoiced sales price;

(d) any tax, tariff, duty or governmental charge levied on the sales, transfer, transportation or delivery of a Licensed Product (including any tax such as a value added or similar tax or government charge) borne by the seller thereof, other than franchise or income tax; and

(e) any import or export duties or their equivalent borne by the seller.

"Net Sales" shall not include (i) intermediate sales or transfers of Licensed Product between Licensee and its Affiliates or Sublicensees that are not arm's length transactions, (ii) samples or quantities of Licensed Product used for access or assistance programs; (iii) Licensed Product used in preclinical and clinical trials or other research, and (iv) charitable and compassionate uses of Licensed Product or product tenders.

If Licensed Product is ever bundled with other products or equipment, in order to determine the portion of the sales price for the bundle that should be allocated to "Net Sales", the Parties shall approve a formula that accurately determines the portion of the sales price for the bundle that reflects the fair market value of the Licensed Product when compared to the sum of the fair market value of all products in the bundle, based on the fair market value of a product when it is sold separately in the relevant sales channel and jurisdiction.

1.19 "**Non-Exclusive Licensed Field**" shall mean all human medical and veterinary uses of Licensed Product other than those used in the Exclusive Licensed Field.

1.20 "**Option Subfield**" shall mean a Subfield designated by Licensee within the Non-Exclusive Licensed Field for inclusion within the Exclusive Licensed Field.

1.21 "**Patent Rights**" shall mean the rights and interests in and to issued patents and pending patent applications (including inventor's certificates and utility models) in any country or jurisdiction within the Territory, including all provisionals, substitutions, continuations, continuations-in-part, divisionals, supplementary protection certificates, renewals, all letters patent granted thereon, and all reissues, reexaminations, extensions, confirmations, revalidations, registrations, patents of addition thereof, PCTs, foreign counterparts, and industrial rights Controlled by a Party.

1.22 "**Phase II Clinical Study**" shall mean, as to a particular Licensed Product for a particular indication, a controlled and lawful study in humans of the safety, dose ranging and efficacy of such Licensed Product for such indication, that is prospectively designed to generate sufficient data (if successful) to commence a Phase III Clinical Trial of such Licensed Product for such indication.

1.23 "**Phase III Clinical Trial**" shall mean, as to a particular Licensed Product for a particular indication, a controlled and lawful study in humans of the safety and efficacy of such Licensed Product for such indication, that is prospectively designed to demonstrate statistically whether such Licensed Product is safe and effective for use in such indication in a manner sufficient to file a BLA to obtain Regulatory Approval to market and sell that Licensed Product in the United States for the indication under investigation in such study.

1.24 "**Regulatory Approval**" shall mean any and all approvals (including pricing and reimbursement approvals), product and establishment licenses, registrations or authorizations of any kind of the FDA or any Foreign Regulatory Authority necessary for the development, pre-clinical and/or human clinical testing, manufacture, quality testing, supply, use, storage, importation, export, transport, marketing and sale of a Licensed Product (or any component thereof) for use in the Exclusive Licensed Field or Non-Exclusive Licensed Field in any country or other jurisdiction in the Territory. "Regulatory Approval" shall include, without limitation, any BLA, MAA or other Drug Approval Application.

1.25 "**Subfield**" shall mean a disease or condition, or set of related diseases or conditions, for which Regulatory Approval can be sought for a Licensed Product. For instance, "autoimmune disorders" and "metabolic disorders and obesity, and related disorders" are both Subfields.

1.26 "**Sublicensee**" shall mean any Third Party to whom Licensee grants a sublicense of some or all of the rights granted to Licensee under this Agreement.

1.27 "**Technology**" shall mean and include any and all unpatented, proprietary ideas, inventions, discoveries, Confidential Information, biologic materials, data, results, formulae, designs, specifications, methods, processes, formulations, techniques, ideas, know-how, technical information (including, without limitation, structural and functional information), process information, pre-clinical information, clinical information, and any and all proprietary biological, chemical, pharmacological, toxicological, pre-clinical, clinical, assay, control and manufacturing data and materials.

1.28 "**Term**" shall have the definition set forth in Section 9.1.

1.29 "**Territory**" shall mean worldwide.

1.30 "**Third Party**" shall mean any person or entity other than Licensee, Licensor and their respective Affiliates.

1.31 "**Valid Claim**" shall mean those claims of a patent or patent application in any country that (i) has not expired; (ii) has not been disclaimed; (iii) has not been revoked, held invalid, or otherwise declared unenforceable or not allowable by a tribunal or patent authority of competent jurisdiction over such claim in such country from which no further appeal has or may be taken; and (iv) in the case of a pending application, was filed and is being prosecuted in good faith towards allowance for a period not to exceed **[*]** years.

2. GRANT OF RIGHTS

2.1 **Licenses**.

2.1.1 Grant of Exclusive License. Licensor hereby grants to Licensee an exclusive, royalty-bearing license, including the right to grant sublicenses in accordance with Section 2.1.3, under the Licensed Patent Rights and Licensed Technology and Licensor's interest in any Improvements, to make, have made, develop, have developed, use, have used, sell, have sold, offer for sale, commercialize, have commercialized, import, have imported, export and have exported Licensed Products in the Territory, for any and all uses within the Exclusive Licensed Field, subject to the terms and conditions of this Agreement.

2.1.2 Grant of Nonexclusive License. Licensor hereby grants to Licensee a non-exclusive royalty-bearing license under the Licensed Patent Rights and Licensed Technology and Licensor's interest in any Improvements to make, have made, develop, have developed, use, have used, sell, have sold, offer for sale, commercialize, have commercialized, import, have imported, export and have exported Licensed Products in the Territory, for any and all uses within the Nonexclusive Licensed Field, subject to the terms and conditions of this Agreement.

2.1.3 Right to Sublicense. Licensee shall have the right to grant sublicenses to any Sublicensee to all or any portion of its rights under the license granted pursuant to this Article 2; provided, however, that (a) Licensor shall be notified of any and all Sublicenses, and (b) Licensee shall remain obligated for the payment to Licensor of all of its

payment obligations hereunder, including, without limitation, the payment of any royalties described in Section 4.2 hereof. Licensee shall be permitted to require a Sublicensee to pay royalties directly to Licensor, but such requirement shall not alter Licensee's payment obligations hereunder.

2.1.4 Conversion Option.

(a) Subject to the Preexisting Rights, at any time during the term of the Agreement, Licensee shall have the option from time to time to designate an Option Subfield within the Nonexclusive Licensed Field for inclusion within the Exclusive Licensed Field (a "Conversion Option"). Upon such designation by Licensee in writing to Licensor, Licensee shall pay to Licensor the Conversion Option Fee, as defined in Section 4.2.4, at which time such Option Subfield shall be considered subject to all terms of the Agreement that are applicable to the Exclusive Licensed Field and this Agreement shall be deemed automatically amended *mutatis mutandis* with no further action of either Party.

(b) If Licensee has converted pursuant to Section 2.1.4(a) its rights in the Nonexclusive Field relating to ID from nonexclusive to exclusive, then to the extent any additional rights licensed to the Preexisting Licensee in the field of ID are no longer subject to the Preexisting License (including the related option described herein) ("Available Rights"), such Available Rights shall be automatically deemed a part of the Exclusive Field under this Agreement. If Licensee has not converted its rights in the Nonexclusive Field relating to ID from nonexclusive to exclusive pursuant to the Conversion Option in Section 2.1.4(a), then such Available Rights shall be automatically deemed a part of the Nonexclusive Field.

2.1.5 Exclusive Right of First Refusal. During the Term of this Agreement, Licensor shall not enter into any licenses with any Third Party or its or Licensee's Affiliates for use of Licensed Patent Rights, Licensed Technology or Improvements for use in any fields within the Nonexclusive Licensed Field without first carrying out the following procedure. When Licensor receives from the Third Party or its or Licensee's Affiliates a binding offer to obtain a license to Licensed Patent Rights, Licensed Technology or Improvements for use in any field(s) in the Nonexclusive Licensed Field that, if agreed to by the Licensee, would prevent Licensee from exercising the Conversion Option for such field(s) in the Nonexclusive Field, Licensor shall provide Licensee with written notice thereof with full details and confirmation of the binding nature of the offer. Licensee shall notify Licensor as soon as practicable thereafter, but not more than **[*]** days after receipt of such written notice, as to whether or not Licensee is exercising its Conversion Option with regard to such field(s). Should Licensee opt not to exercise its Conversion Option within the **[*]** day period, or not respond within such period, then Licensor shall have **[*]** days to enter into the proposed license on the terms disclosed to Licensee. Should the license not be executed within such period, or should the license terms change in any material way or the identity of the licensee change, then Licensor agrees to repeat the foregoing procedure.

2.1.6 Notification Regarding Preexisting Rights. Licensor shall provide Licensee with prompt written notification with full details of any material changes or developments related to the rights of the Preexisting Licensee including, without limitation, the

exercise by the Preexisting Licensee under the Preexisting Rights of any option to convert any rights therein from nonexclusive to exclusive, or the expiration, termination or lapse of any rights of the Preexisting Licensee under the Preexisting Rights. Such written notice shall be delivered to Licensee no later than **[*]** days after such material change.

3. DEVELOPMENT AND COMMERCIALIZATION OF LICENSED PRODUCTS.

3.1 **Development and Commercialization**.

3.1.1 Licensee shall use commercially reasonable efforts to develop and commercialize Licensed Product(s) in the U.S. and E.U., provided that such efforts are consistent with sound and reasonable business and scientific and medical practice and judgment and are considered in light of all relevant factors. All activities relating to Development and commercialization under this Agreement shall be undertaken at Licensee's sole cost and expense, except as otherwise expressly provided in this Agreement.

3.1.2 From and after the Effective Date, Licensee shall have full control and authority over the development and commercialization of Licensed Products, including without limitation, (a) all pre-clinical development activities, including any pharmaceutical development work on formulations or process development relating to any Licensed Product, (b) all activities related to human clinical trials, including all clinical studies**,** (c) all activities relating to manufacture and supply of all Licensed Products (including all required process development and scale up work with respect thereto), (d) all marketing, promotion, sales, distribution, import and export activities relating to any Licensed Product, and (e) all activities relating to any regulatory filings, registrations, applications and Regulatory Approvals relating to any of the foregoing including any INDs or foreign equivalents, any manufacturing facility validation and/or licensure, any Drug Approval Applications and any other Regulatory Approvals**.** Licensee shall own all data, results and all other information arising from any such activities under this Agreement, including without limitation, all regulatory filings, registrations, applications and Regulatory Approvals relating to Licensed Products, including any INDs or foreign equivalents, any Drug Approval Applications and any other Regulatory Approvals**,** and all of the foregoing information, documentation and materials shall be considered Confidential Information and Technology solely owned and Controlled by Licensee.

4. FEES, ROYALTIES AND MILESTONES

4.1 **License Fee**. In consideration of the grant of the licenses described in Article 2 hereof and its other rights hereunder, Licensee hereby agrees to pay Licensor a license fee in the sum of Seventy-five Thousand U.S. Dollars ($75,000) within **[*]** days following execution of this Agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4.2 **Payment of Royalties; Royalty Rates; Minimum Royalties**.

4.2.1 Royalty Payments. In further consideration of the grant of the licenses described in Article 2 hereof and its other rights hereunder, Licensee shall pay to Licensor on the terms set forth herein the following royalties:

in respect of each Licensed Products sold for use in the Nonexclusive Licensed Field, a royalty equal to **[*]** of Net Sales of such Licensed Product and

in respect of each Licensed Products sold for use in the Exclusive Licensed Field, a royalty equal to **[*]** of Net Sales of such Licensed Product.

Only one royalty shall be payable to Licensor hereunder for each sale of a Licensed Product.

4.2.2 Minimum Royalties.

Licensee agrees to pay to Licensor an annual minimum royalty of **[*]**, creditable against any royalty due under the Agreement (even if such credit is taken in a calendar year, other than the one in which the payment is made), beginning at the first anniversary of the Agreement and continuing annually thereafter.

4.2.3 Third Party Royalty Offset. If Licensee, in its commercially reasonable discretion, obtains a license to any Third Party intellectual property rights related to Licensed Product, payments due to such Third Party licensor for such rights will be creditable at times determined by Licensee against the royalty owed to Licensor, provided that (i) Licensee shall keep Licensor reasonably informed of all related negotiations (after reaching a termsheet) with Third Parties and consult Licensor in connection therewith and (ii) royalties owed to Licensor hereunder shall not be reduced by more than **[*]** in the aggregate. For clarity, any information provided by Licensee to Licensor pursuant to this provision is the Confidential Information of Licensee and Licensee shall not attempt to contact any such Third Party absent the express written consent of Licensee.

4.2.4 Conversion Option Fee. For each Option Subfield for which Licensee exercises a Conversion Option, Licensee shall pay to Licensor a nonrefundable, non-creditable Conversion Option Fee in the sum of **[*]** within **[*]** days following exercise of such Conversion Option.

4.3 **Milestone Payments**.

4.3.1 Payment. In further consideration of the grant of the licenses described in Article 2 hereof and its other rights hereunder, on a Licensed Product-by-Licensed Product basis, Licensee shall make the following payments to Licensor within **[*]** days of the occurrence of the following events by Licensee or its Affiliates or Sublicensees**,** as such date is reasonably determined by Licensee to have occurred:

(i) **[*]** upon **[*]**;

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(ii) **[*]** upon **[*]**;

(iii) **[*]** upon **[*]**; and

(iv) **[*]** upon **[*]**.

The foregoing milestones shall be payable one time per Licensed Product (without regard to such Licensed Product's indications for use or whether the Licensed Product is modified, re-formulated, re-launched, or modified). In addition, only one set of milestones shall be payable per Subfield.

4.3.2 Determination That Payments Are Due. Licensee shall promptly (and in any event within **[*]** days) provide Licensor with written notice upon its achievement of each of the milestones set forth in Section 4.3.1.

4.4 **Sublicensing Consideration**.

4.4.1

(a) Subject to the other terms hereof, Licensee shall pay to Licensor a share of the cash value of compensation as and when received by Licensor to the extent attributable to the grant of a sublicense of the rights granted by Licensor to Licensee under this Agreement, including all sublicensing income, licensing fees, milestone payments, patent infringement damage awards, equity investments in Licensee or its Affiliate(s) to the extent such investments exceed **[*]** of Fair Market Value (as defined below), and any other sublicensing revenue other than Excluded Payments (in the aggregate, "Attributed Income"). Such Attributed Income shall not include the following ("Excluded Payments"): payments received from Sublicensee(s) for royalties on sales of Licensed Products; payments received for debt financing; payments for equity investments at or below **[*]** of Fair Market Value; payments or other consideration for research contracts or development, sales and/or marketing activities; reimbursement for patent costs; and milestones payments payable to Licensee under the sublicense agreement. Licensee will provide relevant information in its possession regarding exclusions from sublicense consideration to the extent such information is not the confidential information of a Third Party. All such information shall be treated as the Confidential Information of Licensee.

(b) In the event that equity in lieu of cash or other consideration is received by Licensee in return for granting a sublicense, Licensee shall either arrange for Licensor's share of such equity to be issued directly to Licensor and in the name of "Karagen Pharmaceuticals", if permitted and commercially reasonable, or Licensee shall pay in cash to Licensor the Fair Market Value (as defined below) of Licensor's share of such equity. The term "Fair Market Value" shall mean (i) if the stock is publicly traded, the average closing price at which the stock in question is publicly traded at for **[*]** trading days prior to the execution of the sublicense agreement, or (ii) if the stock is not publicly traded, the value of such stock shall be (x) the price of the stock during the most recent round of financing, provided the round shall have been completed not more than **[*]** months prior, or (y) if there has not been a round in the

[*] months prior to the execution of the sublicense agreement, then price determined by a single independent appraisal of an appraiser chosen by Licensee and approved by Licensor, such approval not unreasonably withheld, conditioned or delayed.

4.4.2 Licensor's share of Attributed Income shall be determined as follows, based on the stage of development of the most advanced Licensed Product candidate that is the subject of the sublicense:

(i) **[*]** if **[*]**;

(ii) **[*]** if **[*]**;

(iii) **[*]** if **[*]**; and

(iv) **[*]**.

4.4.3 In the event that Aduro exercises its Conversion Option, Licensor's share of Attributed Income for the grant of a sublicense of such rights shall be determined as follows, based on the stage of development of the most advanced relevant Licensed Product candidate that is the subject of the sublicense:

(i) **[*]** if **[*]**;

(ii) **[*]** if **[*]**;

(iii) **[*]** if **[*]**; and

(iv) **[*]**.

4.5 **Payment Terms**.

4.5.1 Payment of Royalties. Licensee shall make any royalty payments owed to Licensor hereunder in arrears, within **[*]** days after the end of each quarter in which such payment accrues. For purposes of determining when a sale of any Licensed Product occurs under this Agreement, the sale shall be deemed to occur when the payment is received on invoice. Each royalty payment shall be accompanied by a report for each country in the Territory in which sales of Licensed Products occurred in the calendar quarter covered by such statement, specifying: the gross sales (if available) and Net Sales in each country's currency; the applicable royalty rate under this Agreement; the royalties payable in each country's currency; the applicable exchange rate to convert from each country's currency to United States Dollars under this Section 4.4; and the royalties payable in United States Dollars.

4.5.2 Accounting. All payments hereunder shall be made in the United States in United States dollars. Conversion of foreign currency to United States dollars shall be based on the average of the conversion rate for the **[*]** business days prior to the date such payment is due and payable hereunder (as such conversion rates are reported in *The Wall Street Journal*). If *The Wall Street Journal* ceases to be published, then the rate of exchange to be used shall be that reported in such other business publication of national circulation in the United States as the Parties reasonably agree.

4.5.3 Tax Withholding; Restrictions on Payment. (a) Licensee shall make any applicable withholding payments due on behalf of Licensor and shall provide Licensor upon request with such written documentation regarding any such payment as available to Licensee relating to an application by Licensor for a foreign tax credit for such payment with the United States Internal Revenue Service. Licensor shall fully cooperate with Licensee in Licensee determining whether withholding is required, provided the final decision whether or not to withhold will be Licensee's alone. (b) If by law, regulations or fiscal policy of a particular country in the Territory, remittance of royalties in United States Dollars is restricted or forbidden, written notice thereof shall promptly be given to Licensor, and payment of the royalty shall be made by the deposit thereof in local currency to the credit of Licensor in a recognized banking institution reasonably designated by Licensor by written notice to Licensee. When in any country in the Territory the law or regulations prohibit both the transmittal and the deposit of royalties on sales in such country, royalty payments shall be suspended for as long as such prohibition is in effect and as soon as such prohibition ceases to be in effect, all royalties that Licensee would have been under an obligation to transmit or deposit but for the prohibition shall forthwith be deposited or transmitted, to the extent allowable.

4.5.4 Payment of Fees and Milestones. Fees and Milestones shall be paid as set forth herein.

4.6 **Records Retention; Review**.

4.6.1 Royalties. Commencing as of the date of First Commercial Sale of the first Licensed Product hereunder, Licensee and its Affiliates and Sublicensees shall keep for at least one year from the end of the calendar year to which they pertain complete and accurate records of sales by Licensee or its Affiliates and Sublicensees, as the case may be, of each Licensed Product, in sufficient detail to allow the accuracy of the payments hereunder to be confirmed.

4.6.2 Review. Subject to the other terms of this Section 4.6.2, at the request of Licensor, which shall not be made more frequently than once per calendar year during the Term, upon at least **[*]** days' prior written notice from Licensor, and at the expense of Licensor, Licensee shall permit an independent certified public accountant reasonably acceptable to Licensee to inspect during regular business hours the relevant records required to be maintained by Licensee under this Section 4.6. In every case the accountant must have previously entered into a confidentiality agreement with Licensee that permits the accountant to share with the Parties any variances in payments the accountant believes apply to the audited period and the basis therefore, but in no event shall Licensor be permitted free access to the books and records of Licensee as to sales so long as any other licensees to the Licensed Patents, Licensed Technology or Improvements have any valid rights to the same. Any deficiencies or overpayments shall be promptly paid or repaid, as the case may be, by the owing Party.

5. TREATMENT OF CONFIDENTIAL INFORMATION

5.1 **Confidential Obligations**. Licensor and Licensee each recognize that the other Party's Confidential Information constitutes highly valuable and proprietary confidential information. Licensor and Licensee each agree that during the Term and for **[*]** years thereafter, it will keep confidential, and will cause its employees, consultants, Affiliates and Sublicensees to keep confidential, all Confidential Information of the other Party. Neither Licensor nor Licensee nor any of their respective employees, consultants, Affiliates or Sublicensees shall use Confidential Information of the other Party for any purpose whatsoever other than exercising any rights granted to it or reserved by it hereunder. Without limiting the foregoing, each Party may disclose information to the extent such disclosure is reasonably necessary to (a) with respect to Licensee, file and prosecute patent applications and/or maintain patents that are filed or prosecuted in accordance with the provisions of this Agreement, or (b) comply with applicable laws, regulations or court orders; provided, however, that if a Party is required to make any such disclosure of the other Party's Confidential Information in connection with any of the foregoing, it will give reasonable advance notice to the other Party of such disclosure requirement and will use reasonable efforts to assist such other Party in efforts to secure confidential treatment of such information required to be disclosed.

5.2 **Limited Disclosure and Use**. Licensor and Licensee each agree that any disclosure of the other Party's Confidential Information to any officer, employee, consultant or agent of the other Party or any of its Affiliates or Sublicensees shall be made only if and to the extent necessary to carry out its rights and responsibilities under this Agreement, shall be limited to the maximum extent possible consistent with such rights and responsibilities and shall only be made to the extent any such persons are bound by written confidentiality obligations to maintain the confidentiality thereof and not to use such Confidential Information except as expressly permitted by this Agreement. Licensor and Licensee each further agree not to disclose or transfer the other Party's Confidential Information to any Third Parties under any circumstance without the prior written approval from the other Party (such approval not to be unreasonably withheld), except as otherwise required by law, and except as otherwise expressly permitted by this Agreement. Each Party shall take such action, and shall cause its Affiliates or Sublicensees to take such action, to preserve the confidentiality of each other's Confidential Information as it would customarily take to preserve the confidentiality of its own Confidential Information, using, in all such circumstances, not less than reasonable care. Each Party, upon the request of the other Party, will return all the Confidential Information disclosed or transferred to it by the other Party pursuant to this Agreement, including all copies and extracts of documents and all manifestations in whatever form, within **[*]** days of such request or, if earlier, the termination or expiration of this Agreement; provided however, that a Party may retain (a) any Confidential Information of the other Party relating to any license that expressly survives such termination and (b) one (1) copy of all other Confidential Information in inactive archives solely for the purpose of establishing the contents thereof. Licensor agrees that, under written terms of Confidentiality, Licensee may share this Agreement with potential Sublicensees, partners, acquirers, and funding sources, provided financial terms shall be redacted unless such party would be ultimately responsible for their payment.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.3 **Publicity**. Licensee may publicly disclose the existence or terms or any other matter of fact regarding this Agreement without the prior written consent of the Licensor. Either Party may make such a disclosure (a) to the extent required by law or by the requirements of any nationally recognized securities exchange, quotation system or over-the-counter market on which such Party has its securities listed or traded, or (b) to any investors, prospective investors, lenders and other potential financing sources who are obligated to keep such information confidential. In the event that such disclosure is required as aforesaid, the disclosing Party shall make reasonable efforts to provide the other Party with notice beforehand and to coordinate with the other Party with respect to the wording and timing of any such disclosure. The Parties, upon the execution of this Agreement, will mutually agree to a press release with respect to this transaction for publication. Once such press release or any other written statement is approved for disclosure by both Parties, either Party may make subsequent public disclosure of the contents of such statement without the further approval of the other Party.

5.4 **Use of Name**. Neither Party shall employ or use the name of the other Party in any promotional materials or advertising without the prior express written permission of the other party.

6. PROVISIONS CONCERNING THE FILING, PROSECUTION AND MAINTENANCE OF PATENT RIGHTS

6.1 **Patent Filing, Prosecution and Maintenance**.

(a) Subject to the other terms of this Agreement, Licensor shall be responsible for preparing, filing, prosecuting, obtaining and maintaining, at its sole cost, expense and discretion**,** and using patent counsel reasonably acceptable to Licensee, all Licensed Patent Rights in the Territory. Licensor (i) will provide Licensee with a copy of any and all proposed patent applications within Licensed Patent Rights and relevant to the Exclusive Licensed Field and Nonexclusive Licensed Field for review and comment reasonably in advance of filing which shall under no circumstances be less than **[*]** days, and (ii) will keep Licensee fully and timely informed of the status of such filing, prosecution and maintenance, including, without limitation, (A) by providing Licensee with copies of all communications and key strategy received from or filed in patent office(s) with respect to such filing, and (B) by providing Licensee, a reasonable time prior to taking or failing to take any action that might affect the scope or validity of any such of any such filing (including the substantially narrowing, cancellation or abandonment of any claim(s) without retaining the right to pursue such subject matter in a separate application, or the failure to file or perfect the filing of any claim(s) in any country), with prior written notice of such proposed action or inaction so that Licensee has a reasonable opportunity to review and comment.

(b) If Licensor fails to undertake the filing(s) of any patent application or submission with respect to any invention under such Licensed Patent Rights, then not less than **[*]** days prior to the last date for making the applicable filing or submission to preserve rights under such patent application (the "Last Date"), Licensee may undertake such filing(s) at its own expense, the cost of which may be offset against amounts owed to Licensor ("Licensee Intervention"). In such case, Licensor will assign to Licensee all of its rights to such patent application and invention and any subsequently issued patent thereon in the country or countries in which Licensee undertakes such filing(s), each of which thereafter will be owned solely by

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Licensee, unless Licensor repays to Licensee within **[*]** days after the Last Date all of Licensee's costs and expenses (including reasonable attorney fees, agent fees and filing fees) in preparing and making such filings (the "Licensor Option to Cure"). The Licensor Option to Cure may be exercised by Licensor only after the first two occurrences of a Licensee Intervention, after which Licensor shall no longer be permitted the Licensor Option to Cure.

(c) Should this Agreement be validly terminated for Licensee's uncured material breach, then Licensed Patent Rights assigned to Licensee pursuant to this Section shall be re-conveyed to Licensor by Licensee.

6.2 **Notice of Infringement**. If, during the License Term, either Party learns of any actual, alleged or threatened infringement by a Third Party of any Licensed Patent Rights under this Agreement, such Party shall promptly notify the other Party and shall provide such other Party with available evidence of such infringement.

6.3 **Infringement of Patent Rights**.

(a) Licensor shall have the first right to enforce any Patent Rights among the Licensed Patent Rights and/or Improvements relating to Licensed Products in the Nonexclusive License Field against any infringement or alleged infringement at Licensee's expense, such expense to be pro-rated according to the number of licensees, provided that if Licensor does not take an appropriate action within **[*]** days after notice, or if it fails to diligently prosecute such action(s), then Licensee may take or assume such actions in its own name (with the cooperation of Licensor) and Licensee will thereafter have the right to enforce such License Patent Rights and/or Improvements. Licensor shall cooperate fully therewith, including agreeing to be joined as a party to such action if necessary or helpful.

(b) Licensee shall have the first right to enforce any Patent Rights among the Licensed Patent Rights and/or Improvements relating to Licensed Products indicated for use in the Exclusive Licensed Field against any infringement or alleged infringement. Licensor shall fully cooperate in any such litigation at Licensee's expense, including by agreeing to be joined as a party to such litigation if necessary or helpful.

(c) Any damages, monetary awards or other amounts recovered, whether by judgment or settlement, pursuant to any suit, proceeding or other legal action taken under this Section 6.3, shall applied as follows:

(i) first, **[*]**;

(ii) second, **[*]**; and

(iii) third, any amounts remaining go to **[*]**.

If a Party brings any such action or proceeding hereunder, the other Party agrees to be joined as party plaintiff if necessary to prosecute such action or proceeding, and to give the Party bringing such action or proceeding reasonable assistance and authority to file and

prosecute the suit; provided, however, that neither Party shall be required to transfer any right, title or interest in or to any property to the other Party or any Third Party to confer standing on a Party hereunder.

7. REPRESENTATIONS, WARRANTIES, AND CERTAIN COVENANTS

7.1 **Licensor Representations**. Licensor represents, warrants and covenants to Licensee as follows.

(a) The execution and delivery of this Agreement and the performance of the transactions contemplated hereby have been duly authorized by all appropriate Licensor corporate action.

(b) This Agreement is a legal and valid obligation binding upon Licensor and enforceable in accordance with its terms, and the execution, delivery and performance of this Agreement by the Parties does not conflict with any agreement, instrument or understanding to which Licensor is a party or by which it is bound.

(c) Licensor has the full right and legal capacity to grant the rights granted to Licensee hereunder without violating the rights of any Third Party.

(d) The Licensed Patent Rights have been properly filed, prosecuted, and maintained, and Licensor is the sole owner of the Licensed Patent Rights and Licensed Technology.

(e) Licensor is not aware of any Third Party patent, patent application or other intellectual property rights that would be infringed (i) by practicing any process or method or by making, using or selling any composition that is claimed or disclosed in, or that constitutes, Licensed Technology, or (ii) by making, using, offering for sale, selling or importing Licensed Products.

(f) Licensor is not aware of any infringement or misappropriation by a Third Party of the Licensed Technology.

(g) Licensor represents and warrants that, other than the Preexisting Rights, no other licenses have been granted to the Licensed Patent Rights, Licensed Technology or Improvements. In connection therewith and described herein and in Exhibit A, the Preexisting Licensee has a nonexclusive license to the Licensed Patent Rights only to use c-di-GMP only in the field of ID and a limited option to convert its rights for c-di-GMP on an ID on a field-by-field basis. Licensor covenants that it will not extend the term of the Preexisting License or expand or extend the option rights under the Preexisting Licensee. The Preexisting License was an arm's length transaction and Licensor, its directors, officers, and employees and their family members have no interest in the Preexisting Licensee or its Affiliates.

(h) Except as set forth in this Section 7.1 and in Exhibit A hereto, the Preexisting Licensee has no other rights and the Preexisting License does not contain any other provisions that might adversely affect Licensee's rights or increase Licensee's obligations under this Agreement.

(i) Exhibit A is true, correct and complete in all respects.

(j) All agreements effective on or after the Effective Date related to the License Patent Rights or Licensed Technology Rights, including without limitation any agreement with the Preexisting Licensee or its Affiliates or development partners, shall (i) only contain provisions that are subject to those set forth in this Agreement, (ii) will not include rights outside the field of ID and (iii) will permit Licensee to review copies of the agreements redacted to remove key information identifying the party and financial terms (to the extent not already publicly available).

(k) Licensor shall keep Licensee fully informed of any infringement of the License Patent Rights or appropriation of the License Technology by the Preexisting Licensee in the Exclusive Field, Nonexclusive Field and outside of ID. Licensor agrees to fully cooperate in the enforcement of all of the terms of this Agreement and the terms of the Preexisting License and any successor agreement, and permit Aduro to lead such enforcement and offset against payments owed to Licensor hereunder the reasonable costs thereof.

7.2 **Licensee Representations**. Licensee represents and warrants to Licensor as follows.

(a) The execution and delivery of this Agreement and the performance of the transactions contemplated hereby have been duly authorized by all appropriate Licensee corporate action.

(b) This Agreement is a legal and valid obligation binding upon Licensee and enforceable in accordance with its terms, and the execution, delivery and performance of this Agreement by the Parties does not conflict with any agreement, instrument or understanding to which Licensee is a party of or by which it is bound.

(c) Licensee acknowledges that Licensor has represented to Licensee that Licensor has entered into a Preexisting License and, while Licensee's exclusive rights hereunder are unaffected thereby, certain of Licensee's nonexclusive rights and related options are subject to those Preexisting Rights to the extent demonstrated herein. For clarity, Licensee has not been permitted to see or review any version of the Preexisting License and Licensee is relying entirely on Licensor's account of its provisions.

7.3 **No Warranties**.

Except as expressly set forth in this Agreement, NEITHER PARTY MAKES ANY REPRESENTATION OR EXTENDS ANY WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR OF NON-INFRINGEMENT OF ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER RIGHTS OF THIRD PARTIES, OR ANY OTHER EXPRESS OR IMPLIED WARRANTIES.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8.INDEMNIFICATION

8.1 **Indemnification**.

8.1.1 Licensee Indemnity. Licensee shall indemnify, defend and hold harmless Licensor, its Affiliates and their respective directors, officers, employees, stockholders and agents and their respective successors, heirs and assigns (the "Licensor Indemnitees") from and against any liability, damage, loss or expense (including reasonable attorneys' fees and expenses of litigation) incurred by or imposed upon such Licensor Indemnitees, or any of them, in connection with any Third Party claims, suits, actions, demands or judgments, including, without limitation, personal injury and product liability matters, to the extent arising out of (a) Licensee's making, using, selling or importation of a Licensed Product (or any component thereof), (b) any material breach of this Agreement by Licensee, or (c) the negligence or willful misconduct on the part of Licensee or any Affiliate or Sublicensee.

8.1.2 Licensor Indemnity. Subject to Section 8.1.1 above, Licensor shall indemnify, defend and hold harmless Licensee, its Affiliates and Sublicensees and their respective directors, officers, employees, stockholders, and agents, and their respective successors, heirs and assigns (the "Licensee Indemnitees"), from and against any liability, damage, loss or expense (including reasonable attorneys' fees and expenses of litigation) incurred by or imposed upon such Licensee Indemnitees, or any of them, in connection with any Third Party claims, suits, actions, demands or judgments, including, without limitation, personal injury and product liability matters (but excluding any patent infringement matters, which are governed by Article 6 above), to the extent arising out of (a) any actions or omissions of Licensor under this Agreement, (b) any material breach of this Agreement by Licensor, (c) the negligence or willful misconduct on the part of Licensor, or (d) any acts or omissions of the Preexisting Licensee or any other licensee of Licensor.

8.2 **Indemnification Procedures**. In the event that any indemnitee is seeking indemnification under Section 8.1 above from a Party (the "Indemnifying Party"), the other Party shall notify the Indemnifying Party of such claim with respect to such Indemnified Party as soon as reasonably practicable after the Indemnified Party receives notice of the claim, and the Party (on behalf of itself and such Indemnified Party) shall permit the Indemnifying Party to assume direction and control of the defense of the claim (including the right to settle the claim solely for monetary consideration) and shall cooperate as requested (at the expense of the Indemnifying Party) in the defense of the claim. The indemnification obligations under Article 8 shall not apply to any harm suffered as a direct result of any delay in notice to the Indemnifying Party hereunder or to amounts paid in settlement of any claim, demand, action or other proceeding if such settlement is effected without the consent of the Indemnifying Party, which consent shall not be withheld or delayed unreasonably. The Indemnified Party, its employees and agents, shall reasonably cooperate with the Indemnifying Party and its legal representatives in the investigation of any claim, demand, action or other proceeding covered by Section 8.1.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8.3 **Certain Limitations of Liability**.

8.3.1 **IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER FOR INDIRECT DAMAGES OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST PROFITS, OPPORTUNITIES OR REVENUES, PROVIDED NO LIMITATION HEREIN SHALL LIMIT ANY AMOUNT PAYABLE BY A PARTY UNDER SECTION 8.1.1 OR 8.1.2 HEREOF, OR LOSSES ARISING FROM GROSS NEGLIGENCE, WILLFUL MISCONDUCT, FRAUD, OR A BREACH OF ARTICLE 5 OF THIS AGREEMENT.**

8.3.2 **NOTWITHSTANDING ANYTHING TO THE CONTRARY, THE PARTIES ACKNOWLEDGE THAT ANY LOST PROFITS OF LICENSEE OR ITS AFFILIATES OR SUBLICENSEES ARISING FROM A BREACH BY LICENSOR OF SECTION 7.1 OR EXHIBIT A SHALL BE DEEMED DIRECT DAMAGES FOR THE PURPOSE OF CALCULATING LICENSEE LOSSES**.

9.TERM AND TERMINATION

9.1 **Term; Expiration**. The term of this Agreement ("Term") shall expire upon the expiration of the last Valid Claim in Patent Rights, unless earlier terminated as permitted herein. Upon the termination or expiration of the License Term in each country, all licenses hereunder shall be fully paid and perpetual in each country.

9.2 **Termination Rights for Breach**.

9.2.1 Termination for Breach. Subject to the other terms of this Agreement, this Agreement and the rights and options granted herein may be terminated by either Party upon any material breach by the other Party of any material obligation or condition, effective ninety (90) days after giving written notice to the breaching Party of such termination, which notice shall describe such breach in reasonable detail. The foregoing notwithstanding, if such default or breach is cured or remedied within the aforesaid ninety (90) day period, the notice shall be automatically withdrawn and of no effect. However, prior to giving any notice of termination for breach, the Parties shall first attempt to resolve any disputes as to the existence of any breach as set forth in Article 10.

9.2.2 Voluntary Termination. Licensee shall have the right to terminate this Agreement at any time upon ninety (90) days' written notice to Licensor.

9.3 **Termination for Bankruptcy**. In the event that either Party files for protection under bankruptcy laws, makes an assignment for the benefit of creditors, appoints or suffers appointment of a receiver or trustee over its property, files a petition under any bankruptcy or insolvency act or has any such petition filed against it that is not discharged within sixty (60) days of the filing thereof, then the other Party may terminate this Agreement effective immediately upon written notice to such Party.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

9.4 **Effects of Termination**.

9.4.1 Termination for Licensee Breach. Upon any termination of this Agreement by Licensor under Section 9.2.1 as of the effective date of such termination all relevant licenses and sublicenses granted by Licensor to Licensee hereunder shall terminate automatically. Notwithstanding the foregoing, (a) no such termination of this Agreement shall be construed as a termination of any valid sublicense of any Sublicensee hereunder, and thereafter each such Sublicensee shall be considered a direct licensee of Licensor, provided that (i) such Sublicensee is then in full compliance with all terms and conditions of its sublicense, (ii) all accrued payments obligations to Licensor have been paid, and (iii) such Sublicensee agrees in writing to assume all applicable obligations of Licensee under this Agreement, and (b) Licensee and its Affiliates and Sublicensees shall have the right, for twelve (12) months or such longer time period (if any) on which the Parties mutually agree in writing, to sell or otherwise dispose of all Licensed Products then on hand, with royalties to be paid to Licensor on all Net Sales of such Licensed Products as provided for in this Agreement.

9.4.2 Other Terminations.

(a) Upon any termination of this Agreement by Licensee under Section 9.2.1 for Licensor's material breach, or under Section 9.3 where Licensor has filed for protection under bankruptcy laws or has an involuntary bankruptcy petition filed against it that is not discharged within sixty (60) days of the filing, as of the effective date of such termination, Licensee thereafter automatically shall have a fully sublicensable and transferable, fully paid up (subject to the remainder of this Section 9.4), nonexclusive or exclusive (as the case may be) license in the Territory under the Licensed Patent Rights and Licensed Technology, to develop, have developed, make, have made, use, have used, sell, have sold, offer for sale, import and have imported any and all Licensed Products and to practice the Licensed Technology in the Territory, provided that Licensee shall pay, for the remainder of any royalty term under Section 4.4 above, in lieu of any payments including milestones or royalties it would otherwise owe to Licensor under this Agreement, a royalty equal to sixty-six percent (66%) of the royalty rate that would otherwise apply with respect to the Licensed Product under Sections 4.2.1, 4.2.2, 4.2.3 and 4.2.4 of this Agreement.

(b) In the event of a transfer under Section 9.2.2, the Parties shall return to one another their respective Confidential Information, provided Licensee may retain one copy of the same for legal archives and one copy for any countries in which it has a fully paid license.

9.5 **Remedies**. Except as otherwise expressly set forth in this Agreement, the termination provisions of this Article 9 are in addition to any other relief and remedies available to either Party at law.

9.6 **Surviving Provisions**. Notwithstanding any provision herein to the contrary, the rights and obligations of the Parties set forth in Sections 1 (as relevant), 5, 7, 8,9.1, 9.4.2 and 11, as well as any rights or obligations otherwise accrued hereunder (including any accrued payment obligations), shall survive the expiration or termination of the Term. Without limiting the generality of the foregoing, Licensee shall have no obligation to make any milestone or royalty payment to Licensor that has not accrued prior to the effective date of any termination of this Agreement, but shall remain liable for all such payment obligations accruing prior to the effective date of such termination.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

10. DISPUTES

The Parties recognize that a bona fide dispute relating to either Party's rights or obligations hereunder, may from time to time arise during the Term. In the event of the occurrence of such a dispute, either Party may, by written notice to the other Party, have such dispute referred to their respective senior officials designated below or their successors, for attempted resolution by good faith negotiations within **[*]** days after such notice is received. Said designated senior officials are as follows:

For Licensee: Chief Executive Officer

For Licensor: President

In the event the designated senior officials are not able to resolve such dispute within the **[*]** day period, either Party may seek any remedies available to it; provided that the foregoing shall not be construed to prohibit a Party from immediately seeking protection or relief it deems reasonable in light of the circumstances.

11. MISCELLANEOUS

11.1 **Notices**. All notices, requests and other communications hereunder shall be in writing, addressed to the receiving party's address set forth below or to such other address as a party may designate by notice hereunder, and be either (i) delivered by hand, (ii) made by facsimile transmission (to be followed with written fax confirmation), (iii) sent by private courier service providing evidence of receipt, or (iv) sent by registered or certified mail, return receipt requested, postage prepaid. The addresses and other contact information for the parties are as follows:

If to Licensor:	Lize Davis-Karaolis President Karagen Pharmaceuticals, Inc. 4 Club Road Baltimore, MD 21210
With a copy to:	Royal W. Craig Ober, Kaler, Grimes & Shriver 100 Light Street Baltimore, MD 21202

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

If to Licensee:	Stephen T. Isaacs Chairman and CEO Aduro BioTech, Inc. 626 Bancroft Way, Suite 3C Berkeley, CA 94563 FAX: **[*]** **[*]**
With a copy to:	Steven Bodovitz Associate Director, Strategic Development Aduro BioTech, Inc. 626 Bancroft Way, Suite 3C Berkeley, CA 94563 FAX: **[*]** **[*]**

All notices, requests and other communications hereunder shall be deemed to have been given either (i) if by hand, at the time of the delivery thereof to the receiving party at the address of such party set forth above, (ii) if made by telecopy or facsimile transmission, at the time that receipt thereof has been acknowledged by the recipient, (iii) if sent by private courier, on the day such notice is delivered to the recipient, or (iv) if sent by registered or certified mail, on the fifth (5^{th}) business day following the day such mailing is made.

11.2 **Language**. This Agreement has been prepared in the English language and the English language shall control its interpretation.

11.3 **Governing Law**. This Agreement will be construed, interpreted and applied in accordance with the laws of the California (excluding its body of law controlling conflicts of law).

11.4 **Limitations**. Except as expressly set forth in this Agreement, neither Party grants to the other Party any right or license to any of its intellectual property.

11.5 **Entire Agreement**. This is the entire Agreement between the Parties with respect to the subject matter hereof and supersedes all prior representations, understandings and agreements between the Parties with respect to the subject matter hereof. No modification shall be effective unless in writing with specific reference to this Agreement and signed by the Parties.

11.6 **Waiver**. The terms or conditions of this Agreement may be waived only by a written instrument executed by the Party waiving compliance. The failure of either Party at any time or times to require performance of any provision hereof shall in no manner affect its rights at a later time to enforce the same. No waiver by either Party of any condition or term shall be deemed as a continuing waiver of such condition or term or of another condition or term.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

11.7 **Headings**. Section and subsection headings are inserted for convenience of reference only and do not form part of this Agreement.

11.8 **Assignment**. Neither this Agreement nor any right or obligation hereunder may be assigned, delegated or otherwise transferred, in whole or part, by either Party without the prior express written consent of the other; provided, however, that either Party may, without the written consent of the other, assign this Agreement and its rights and delegate its obligations hereunder to its Affiliates, or in connection with the transfer or sale of all or substantially all of such Party's assets or business related to this Agreement, or in the event of its merger, consolidation, change in control or similar transaction. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment in violation of this Section 11.8 shall be void. The terms and conditions of this Agreement shall be binding upon and inure to the benefit of the permitted successors and assigns of the parties.

11.9 **Force Majeure**. Neither Party shall be liable for failure of or delay in performing obligations set forth in this Agreement, and neither Party shall be deemed in breach of its obligations, if such failure or delay is due to natural disasters or any causes beyond the reasonable control of such Party. In event of such force majeure, the Party affected thereby shall use reasonable efforts to cure or overcome the same and resume performance of its obligations hereunder.

11.10 **Construction**. The Parties hereto acknowledge and agree that: (i) each Party and its counsel reviewed and negotiated the terms and provisions of this Agreement and have contributed to its revision; (ii) the rule of construction to the effect that any ambiguities are resolved against the drafting Party shall not be employed in the interpretation of this Agreement; and (iii) the terms and provisions of this Agreement shall be construed fairly as to all Parties hereto and not in favor of or against any Party, regardless of which Party was generally responsible for the preparation of this Agreement.

11.11 **Severability**. If any provision(s) of this Agreement are or become invalid, are ruled illegal by any court of competent jurisdiction or are deemed unenforceable under then current applicable law from time to time in effect during the Term hereof, it is the intention of the Parties that the remainder of this Agreement shall not be affected thereby provided that a Party's rights under this Agreement are not materially affected. The Parties hereto covenant and agree to renegotiate any such term, covenant or application thereof in good faith in order to provide a reasonably acceptable alternative to the term, covenant or condition of this Agreement or the application thereof that is invalid, illegal or unenforceable, it being the intent of the Parties that the basic purposes of this Agreement are to be effectuated.

11.12 **Status**. Nothing in this Agreement is intended or shall be deemed to constitute a partner, agency, employer-employee, or joint venture relationship between the Parties.

11.13 **Section 365(n)**. All licenses granted under this Agreement are deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code, licenses of right to "intellectual property" as defined in Section 101 of such Code. The Parties agree that Licensee may fully

exercise all of its rights and elections under the U.S. Bankruptcy Code, regardless of whether either Party files for bankruptcy in the United States or other jurisdiction. The Parties further agree that, in the event Licensee elects to retain its rights as a licensee under such Code, Licensee shall be entitled to complete access to any technology licensed to it hereunder and all embodiments of such technology. Such embodiments of the technology shall be delivered to the Licensee not later than:

(a) the commencement of bankruptcy proceedings against the Licensor, upon written request, unless the Licensor elects to perform its obligations under the Agreement, or

(b) if not delivered under Section 11.14 above, upon the rejection of this Agreement by or on behalf of Licensee, upon written request.

11.14 **Export Compliance**. Licensee and its Affiliates and Sublicensees shall comply with all United States laws and regulations controlling the export of certain commodities and technical data, including without limitation all Export Administration Regulations of the United States Department of Commerce. Among other things, these laws and regulations prohibit or require a license for the export of certain types of commodities and technical data to specified countries. Licensee hereby gives written assurance that it will comply with, and will cause its Affiliates and Sublicensees to comply with, all United States export control laws and regulations, that it bears sole responsibility for any violation of such laws and regulations by itself or its Affiliates or Sublicensees, and that it will indemnify, defend, and hold Licensor harmless (in accordance with Article 8) for the consequences of any such violation.

11.15 **Further Assurances**. Each Party agrees to execute, acknowledge and deliver such further instructions, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

11.16 **Counterparts**. This Agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[Remainder of page intentionally left blank]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representative as of the Effective Date.

KARAGEN PHARMACEUTICALS, INC.		ADURO BIOTECH, INC.	
By:	/s/ Lize Davis-Karaolis	By:	/s/ Stephen T. Issacs
Title:	President	Title:	Chairman & CEO

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit A

Preexisting Rights Description

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit B

Licensed Patent Rights

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit 10.27

UNIVERSITY OF CALIFORNIA, BERKELEY
OFFICE OF TECHNOLOGY LICENSING

EXCLUSIVE LICENSE

BETWEEN

ADURO BIOTECH INC

AND

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

FOR

CYCLIC-DI-NUCLEOTIDES THAT STIMULATE HUMAN STING VARIANTS

AND

STIMULATOR OF INTERFERON GENE

UC Case No.: **[*]**
U.S. Patent application Serial Nos. **[*]**

EXCLUSIVE LICENSE
FOR
CYCLIC-DI-NUCLEOTIDES THAT STIMULATE HUMAN STING VARIANTS
AND
STIMULATOR OF INTERFERON GENE

UC Case Nos.: **[*]**
U.S. patent applications **[*]**

This Exclusive License Agreement ("Agreement") is effective September 25, 2014 ("Effective Date") by and between **THE REGENTS OF THE UNIVERSITY OF CALIFORNIA**, a California corporation, whose legal address is 1111 Franklin Street, 12th Floor, Oakland, California 94607-5200, acting through its Office of Technology Licensing, at the University of California, Berkeley, 2150 Shattuck Avenue, Suite 510, Berkeley, CA 94704-1347 ("REGENTS") and **ADURO BIOTECH, INC**, a Delaware corporation having a principal place of business at 626 Bancroft Way, Berkeley, CA 94710-2224 ("LICENSEE"). The parties agree as follows.

1. BACKGROUND

1.1 REGENTS has an assignment of the invention entitled, "**[*]**," invented by **[*]**, employed by the University of California, as described in REGENTS' Case No. **[*]**, and the invention entitled "**[*]**," invented by **[*]**, employees of Aduro Biotech, as described in REGENTS' Case No. **[*]** (the "INVENTION") and to the patents and patent applications under REGENTS' PATENT RIGHTS and JOINT PATENT RIGHTS as defined below, which are directed to the INVENTION.

1.2 LICENSEE entered into a Secrecy Agreement with REGENTS effective April 16, 2013 and a Letter Agreement with REGENTS effective May 2, 2013 for the purpose of evaluating the INVENTION and granting LICENSEE an exclusive right to negotiate an option or exclusive license in REGENT PATENT RIGHTS to the INVENTION.

1.3 LICENSEE has provided REGENTS with a commercialization plan for the INVENTION and business strategy in order to evaluate its capabilities as a LICENSEE.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.4 The development of the INVENTION was sponsored in part by various grants by U.S. Government agencies, and as a consequence, REGENTS elected to retain title to the INVENTION subject to the rights of the U.S. Government under 35 USC 200-212 and implementing regulations, including that REGENTS, in turn, has granted back to the U.S. Government a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced the INVENTION for or on behalf of the U.S. Government throughout the world. These U.S. Government grants are National Institutes of Health Contract Nos. AI063302, AI075039, AI080749, AI082357 and OD008677.

1.5 REGENTS and LICENSEE wish to have the INVENTION developed and commercialized so that products resulting therefrom may be available for public use and benefit on a timeline that is reasonable in light of the financing and development requirements of such products.

1.6 LICENSEE wishes to acquire, and REGENTS wishes to grant to LICENSEE, an exclusive license under the REGENTS' PATENT RIGHTS and REGENT's right title and interest in the JOINT PATENT RIGHTS for the purpose of developing and commercializing LICENSED PRODUCT(S) on the terms set forth herein.

2. DEFINITIONS

2.1 "AFFILIATE" of LICENSEE means any entity that, directly or indirectly, Controls LICENSEE, is Controlled by LICENSEE, or is under common Control with LICENSEE. "Control" means (i) having the actual, present capacity to elect a majority of the directors of such affiliate, (ii) having the power to direct at least **[*]** of the voting rights entitled to elect directors, or (iii) in any country where the local law will not permit foreign equity participation of a majority, ownership or control, directly or indirectly, of the maximum percentage of such outstanding stock or voting rights permitted by local law so long as control is secured by such ownership.

2.2 "CRE" shall mean efforts and diligence in developing and commercializing LICENSED PRODUCTS, LICENSED METHOD, or LICENSED SERVICE and in undertaking investigations and actions required to obtain regulatory approvals, necessary to market LICENSED PRODUCTS, LICENSED METHOD or LICENSED SERVICE in the LICENSED FIELD, such reasonable efforts and diligence to be, on a country-by-country basis, in accordance with the efforts and resources LICENSEE would use for a product candidate owned or licensed by it or to which it has similar rights, which is of similar market potential as the applicable LICENSED PRODUCT, LICENSED METHOD or LICENSED SERVICE taking into account all relevant factors including without limitation the competitiveness of the marketplace; the proprietary position of the LICENSED PRODUCT, LICENSED METHOD or LICENSED SERVICE; the relative potential safety and efficacy of the LICENSED PRODUCT, LICENSED METHOD or LICENSED SERVICE; any third party intellectual property required for development or commercialization, logistical challenges; applicable laws, rules, and regulations; timing of market entry and competitive landscape; the cost of goods and availability

of capacity to manufacture and supply the LICENSED PRODUCT, LICENSED METHOD or LICENSED SERVICE at commercial scale, the profitability of the applicable LICENSED PRODUCT, and technical, legal, scientific or medical factors. CRE does not include LICENSEE, (i) prior to filing for the first regulatory approval for LICENSED PRODUCT, LICENSED METHOD or LICENSED SERVICE **[*]** for a LICENSED PRODUCT, LICENSED METHOD or LICENSED SERVICE for **[*]** or (ii) after First Commercial Sale, **[*]** related to LICENSED PRODUCT, LICENSED METHOD or LICENSED SERVICE for **[*]**.

2.3 "FIRST COMMERCIAL SALE" means, with respect to a LICENSED PRODUCT, LICENSED METHOD or LICENSED SERVICE, the first sale in the United States in an arms-length transaction of such LICENSED PRODUCT, LICENSED METHOD or LICENSED SERVICE to a Third-Party by LICENSEE, its Affiliates or a Sublicensee as part of a national commercialization effort after NDA approval.

2.4 "IND APPROVAL" means the expiration of the thirty-day waiting period for IND effectiveness, or earlier approval to proceed with clinical trial(s) under the IND, or, if a clinical hold is imposed, notification from a Division Director that the clinical trial may proceed.

2.5 "Joint PATENT RIGHTS" means (i) U.S. Patent Application Serial Number **[*]** and assigned to REGENTS and LICENSEE; (ii) U.S. Patent Application Serial Number **[*]** and assigned to REGENTS and LICENSEE; (iii) U.S. Patent Application Serial Number **[*]** and assigned to REGENTS and LICENSEE; (iv) PCT Application Serial Number **[*]** and assigned to REGENTS and LICENSEE; (v) any patent applications, utility models, inventors certificates, invention registrations, continuing applications, divisional applications, substitutions, continuation-in-part applications, and equivalents thereof in any jurisdiction anywhere in the world, in each case to the extent that claims in such filings are entitled to the filing date of the patent applications in (i)-(iv); and (vi) any granted patents issuing on (i)-(v) including any reissues, re-examinations, or extensions thereof.

2.6 "LICENSED FIELD OF USE" means any and all uses in all fields.

2.7 "LICENSED METHOD" means any process or method the use or practice of which, but for the license pursuant to this Agreement, would infringe any VALID CLAIM under REGENT PATENT RIGHTS or JOINT PATENT RIGHTS in that country in which the LICENSED METHOD is used or practiced.

2.8 "LICENSED PRODUCTS" means all products or component parts of a product the manufacture, use, SALE, offer for SALE, or import of which: a) would require the performance of the LICENSED METHOD; or b) but for the license granted pursuant to this Agreement, would infringe a VALID CLAIM under REGENT PATENT RIGHTS or JOINT PATENT RIGHTS.

2.9 “LICENSED SERVICE” means provision of a service for a third party, the performance of which would infringe a VALID CLAIM under REGENT PATENT RIGHTS or JOINT PATENT RIGHTS.

2.10 “LICENSED TERRITORY” means any country or jurisdiction having a VALID CLAIM within the REGENT PATENT RIGHTS or JOINT PATENT RIGHTS.

2.11 “NDA” shall mean a new drug application (as defined in Title 21 of the United States Code of Federal Regulations, as amended from time to time) filed with the FDA seeking Regulatory Approval to commercialize LICENSED PRODUCTS.

2.12 “NET SALES” means amounts invoiced by LICENSEE or a sublicensee for SALES of LICENSED PRODUCTS, LICENSED SERVICES, and LICENSED METHODS, less the sum of customary deductions to the extent permitted under U.S. Generally Accepted Accounting Principles and actually taken, which may include cash, trade or quantity discounts, discounts or rebates to governmental, supranational, buying groups (such as PAHO, UNICEF, GAVI, or the Gulf Consortium), or managed care organizations, credits or deductions for rejected product, returns, expired product or bad debts; sales, use, tariff, import/export duties or other excise taxes or duties (but not income taxes derived from such sales); and handling and transportation charges; and value added taxes but only to the extent such tax is not subject to a credit and deduction to a taxing authority. Sales of a LICENSED PRODUCT by and between LICENSEE and its Affiliates and Sublicensees are not sales to third parties and shall be excluded from Net Sales calculations for all purposes; provided that any resale by the purchaser to a third-party distributor or to a third-party for end use, shall be included in Net Sales. Compassionate use, “named patient sales”, sales made in connection with clinical trials, and product donations shall be excluded from Net Sales calculations.

In the event that LICENSED PRODUCTS, LICENSED SERVICES or LICENSED METHODS are COMBINATION PRODUCTS, the NET SALES of such COMBINATION PRODUCT, for the purposes of determining royalty payments pursuant to this Agreement, shall be determined by multiplying the NET SALES of the COMBINATION PRODUCT (as defined below) during the applicable royalty reporting period, by the fraction A/(A+B), where A is the fair market value of the LICENSED PRODUCTS, LICENSED SERVICES or LICENSED METHODS, and B is the fair market value of all OTHER COMPONENTS included in the COMBINATION PRODUCT. If a COMBINATION PRODUCT is sold, whether or not the OTHER COMPONENTS are also sold separately, LICENSEE and the REGENTS shall make a good faith determination of the respective fair market values of the LICENSED PRODUCT, LICENSED SERVICES or LICENSED METHODS and all OTHER COMPONENTS included in the COMBINATION PRODUCT. If neither such LICENSED PRODUCT nor any other active ingredient in the COMBINATION PRODUCT is sold separately, the adjustment to NET SALES shall be determined by the REGENTS and the LICENSEE in good faith to reasonably reflect the fair market value of the contribution of such Product in the COMBINATION PRODUCT to the total fair market value of such COMBINATION PRODUCT.

2.13 "COMBINATION PRODUCT" means a LICENSED PRODUCT, LICENSED SERVICE or LICENSED METHOD that incorporates at least one OTHER COMPONENT. For clarity, all references to "LICENSED PRODUCTS, LICENSED SERVICES or LICENSED METHODS" in this Agreement shall be deemed to include COMBINATION PRODUCTS.

2.14 "OTHER COMPONENT" means a proprietary active therapeutic ingredient or a delivery device, in each case that is not itself a LICENSED PRODUCT, LICENSED SERVICE or LICENSED METHOD.

2.15 "REGENTS' PATENT RIGHTS" means REGENTS' rights in (i) U.S. Patent Application, Serial Number **[*]**, and assigned to REGENTS; (ii) U.S. Patent Application, Serial Number **[*]**, and assigned to REGENTS; (iii) International Patent Application, Serial Number **[*]**, and assigned to REGENTS; (iv) any patent applications, utility models, inventors certificates, invention registrations, continuing applications, divisional applications, substitutions, continuation-in-part applications, and equivalents thereof in any jurisdiction anywhere in the world, in each case to the extent that claims in such filings are entitled to the filing date of the patent applications in (i)-(iii)); (v) any granted patents issuing on (i)-(iv) including any reissues, re-examinations, or extensions thereof.

2.16 "SALE" means, for LICENSED PRODUCTS and LICENSED SERVICES, the act of selling, leasing or otherwise transferring, providing, or furnishing such product or service, and for LICENSED METHOD the act of performing such method for any consideration. Correspondingly, "SOLD" means to have made or caused to be made a SALE.

2.17 "VALID CLAIM" shall mean a claim in an issued, unexpired patent included within the REGENT PATENT RIGHTS or JOINT PATENT RIGHTS or in a pending patent application (which claim is pending for no more than **[*]** years) that (a) has not been cancelled, withdrawn, abandoned or rejected by any administrative agency or other body of competent jurisdiction from which no appeal has or can be taken, (b) has not been revoked, held invalid, or declared unpatentable or unenforceable in a decision of a court or other body of competent jurisdiction that is unappealable or unappealed within the time allowed for appeal, (c) has not been rendered unenforceable through disclaimer or otherwise, and (d) is not lost through an interference proceeding**.** If a claim is pending for more than **[*]** years and later issues in a patent, then as of the patent issue date, the claim again becomes a VALID CLAIM.

3. GRANT

3.1 Subject to the terms and conditions set forth in this Agreement, including the license granted to the U.S. Government and the rights reserved in Paragraph 3.3, REGENTS hereby grants to LICENSEE and LICENSEE hereby accepts an exclusive (even as to REGENTS other than as otherwise specifically reserved in Section 3.3) worldwide royalty-bearing sublicensable license under REGENTS'

PATENT RIGHTS and REGENTS'S right, title and interest in JOINT PATENT RIGHTS to make, have made, use, have used, SELL, have SOLD, offer for SALE, import, have imported, export, have exported, develop, have developed, commercialize, and have commercialized LICENSED PRODUCTS and LICENSED SERVICES, and to practice the LICENSED METHOD, in the LICENSED FIELD OF USE in the LICENSED TERRITORY.

3.2 The license under Paragraph 3.1 will be exclusive for a term commencing on the Effective Date and ending on the date of the last-to-expire VALID CLAIM under REGENT PATENT RIGHTS or JOINT PATENT RIGHTS, unless earlier terminated as permitted herein.

3.3 Nothing in this Agreement will be deemed to limit the right of REGENTS to publish any and all technical data resulting from any research performed by REGENTS relating to the INVENTION. REGENTS expressly reserves the right to use the INVENTION and related technology for its educational and research purposes, to permit other nonprofit institutions to practice the INVENTION for educational and research purposes; to disseminate the other tangible materials associated with, or required to practice the INVENTION and/or the REGENT PATENT RIGHTS and JOINT PATENT RIGHTS to researchers at nonprofit institutions for their educational and research purposes.

3.4 This Agreement will terminate ninety (90) days after written notice from REGENTS, if LICENSEE files a claim, including in anyway, the assertion that any portion of the REGENT PATENT RIGHTS or JOINT PATENT RIGHTS is invalid or unenforceable where the filing is by and assuming such claim is not withdrawn, the LICENSEE, a third party on behalf of the LICENSEE, or a third party at the written urging of the LICENSEE.

3.5 LICENSEE will have a continuing responsibility to keep REGENTS informed of the large/small entity status, as defined in 15 U.S.C. 632, of itself and its sublicensees.

3.6 The INVENTION was funded in part by the U.S. Government. In accordance with PL 96-517 as amended by PL 98-620, to the extent required by law or regulation, any products covered by patent applications or patents claiming the INVENTION and sold in the United States will be substantially manufactured in the United States. If such manufacture is not reasonable, REGENTS shall reasonably cooperate with LICENSEE in seeking exemption for such requirement.

4. SUBLICENSES

4.1 REGENTS also grants to LICENSEE the right to sublicense to AFFILIATES and third parties some or all of its rights hereunder provided that LICENSEE has exclusive rights under this Agreement to the rights being sublicensed at the time of sublicensing. LICENSEE agrees to use its CRE to enforce the provisions of any sublicense of the rights hereunder to the extent material to REGENTS. Every such sublicense will include:

(a) a statement setting forth the date upon which LICENSEE'S exclusive rights, privileges, and license hereunder will expire;

(b) as applicable, all the rights of, and require the performance of all the obligations due to, REGENTS (and, if applicable, the United States Government) under this Agreement other than those rights and obligations specified in

(c) as applicable, all the rights of, and require the performance of all the obligations due to, REGENTS (and, if applicable, the United States Government) under this Agreement other than those rights and obligations specified in Article 5 (License Issue Fee) and Paragraph 6.5 (minimum annual royalty);

(d) a provision requiring payment of royalties to LICENSEE in an amount sufficient to permit LICENSEE to meet its royalty obligations to REGENTS at the rates and bases set forth in this Agreement; and

(e) the same provision for indemnification of REGENTS as has been provided for in this Agreement.

4.2 In the event LICENSEE grants a sublicense to the REGENTS' PATENT RIGHTS and JOINT PATENT RIGHTS, LICENSEE shall pay REGENTS the following percentages of any SUBLICENSING REVENUE (the "SUBLICENSING REVENUE PERCENTAGE" or "SLP") received by LICENSEE from such sublicensee based on the LICENSED PRODUCT, LICESED METHOD or LICENSED SERVICE being sublicensed where "SUBLICENSING REVENUE" means, up front license fee payments and/or annual license fees to the extent attributable to the grant of a sublicense of rights under this Agreement, but shall exclude, royalties, minimum royalties, milestone payments (but subject to the last paragraph of this subsection), development services payments at fair market value, legal fees for sublicensing, research funding plus reasonable overhead and profit, amounts at up to **[*]** of fair market value directly for development, sales, and/or marketing activities, debt financing at up to **[*]** of fair market value, purchase of equity at up to **[*]** of fair market value, and/or reimbursement of patent filing, prosecution and maintenance fees and expenses:

(a) **[*]**: **[*]**.

(b) **[*]**: **[*]**.

(c) **[*]**: **[*]**.

(d) **[*]**: **[*]**.

(e) If SUBLICENSING REVENUE is received from any sublicense or other transfer of rights granted under this Agreement where such transaction includes:

i. **[*]** the payments made by LICENSEE to the third party in respect of the Third Party Licensed Rights and

ii. **[*]** the payments made by LICENSEE to such third parties in respect of the Third Party Licensed Rights.

Notwithstanding anything to the contrary the final amount of SUBLICENSING REVENUE payable after permitted reductions shall not be less than **[*]** of the amount payable prior to the application of deductions.

4.3 LICENSEE will notify REGENTS of each sublicense granted hereunder and furnish to REGENTS a copy of each such sublicense agreement, provided any provisions that are not relevant to LICENSEE'S fulfillment of its obligations under this Agreement may be redacted.

4.4 LICENSEE will deliver all reports due REGENTS and received from sublicensees.

4.5 AFFILIATES will have no licenses under REGENT PATENT RIGHTS and JOINT PATENT RIGHTS except as granted by sublicense pursuant to this Agreement.

4.6 LICENSEE remains responsible for the payment of all monies and other consideration due REGENTS as a consequence of sublicenses, and deliver all reports due REGENTS and received from sublicensees, provided LICENSEE may require sublicensees to make reports and payments directly to REGENTS in the interests of timing. Should a sublicensee breach its payment obligations under a sublicense, LICENSEE shall pay to REGENTS its proportional share of any monies actually recovered from the sublicensee after payment by LICENSEE of its reasonable collection costs and legal fees and costs related thereto.

4.7 To the extent permitted under the sublicense agreement, a sublicensee shall have the right to grant further sublicenses to its AFFILIATE and third parties to the extent such sublicensee deems such further sublicense to be commercially reasonable, useful or necessary for the development and/or commercialization of LICENSED PRODUCT(S), LICENSED SERVICE or LICENSED METHOD(S) in accordance with this Agreement; provided that (i) such further sublicense is subject to a written sublicense agreement and is bound by all of the applicable terms, conditions, obligations, restrictions and other covenants of this Agreement that protect or benefit the REGENTS' (and, if applicable, the U.S. Government's) rights and interests under this Agreement, and (ii) the sublicensee shall, within **[*]** days after issuing any further sublicense, furnish to LICENSEE for delivery to REGENTS, subject to any confidentiality provisions with third parties, a copy of each such sublicense agreement, provided any provisions that are not relevant to LICENSEE'S fulfillment of its obligations under this Agreement may be redacted..

4.8 Upon termination of this Agreement for any reason, all sublicenses that are granted by LICENSEE pursuant to this Agreement where the sublicensee is in compliance with its sublicense agreement as of the date of such termination will remain in effect and, will be assigned to REGENTS except that REGENTS will not be bound to perform any duties or obligations set forth in any sublicenses that extend beyond the duties and obligations of REGENTS set forth in this Agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4.9 Beginning on **[*]** and thereafter:

(a) If REGENTS provides the LICENSEE written clinical or other compelling and reliable scientific, safety and commercial evidence demonstrating a significant commercial opportunity within the LICENSED FIELD OF USE, which use was undiscovered as of the Effective Date and at the time of notice from REGENTS is not currently being developed or commercialized, and is not the subject of a plan to be developed or commercialized, by LICENSEE, its Affiliates or sublicensees (the "NEW FIELD"), LICENSEE shall use CRE either to provide REGENTS with a development plan and start development in the NEW FIELD, or attempt to sublicense the NEW FIELD use to a third party.

(b) If within **[*]** months of such written notification by REGENTS, LICENSEE has not initiated reasonable efforts to finance, develop or sublicense the NEW FIELD, REGENTS may for the following **[*]** months (the "Negotiation Period") on written notice to the LICENSEE enter into negotiations with a third party for a license to the NEW FIELD. If (i) REGENTS has during the Negotiation Period a bona fide offer from a third party ("Third Party Licensee") to enter into a license for the development of the NEW FIELD on terms that reflect fair market value for the rights to be granted, (ii) the Third Party Licensee has submitted a bona fide development and commercialization plan for the NEW FIELD, and (iii) REGENTS and LICENSEE have agreed in writing that development of the indication as planned will not adversely affect current or anticipated development and commercialization of LICENSED PRODUCTS and LICENSED SERVICES including, without limitation, obtaining approval or sales for LICENSED PRODUCTS for anticipated indications for use, REGENTS may enter into the license contemplated in 4.9(b)(ii) in the NEW FIELD with such Third Party Licensee. Upon execution of the new license meeting all the requirements herein, the LICENSED FIELD OF USE shall be amended *mutatis mutandis*. For clarity, such amendment to the LICENSED FIELD OF USE permitted by this Section shall not be effective until REGENTS and the third party licensee enters into the proposed license.

(c) If a license meeting the requirements herein is not executed by REGENTS and the Third Party Licensee prior to the end of such Negotiation Period, then the license shall not be granted by REGENTS and the termination of the relevant indication and amendment of the LICENSED FIELD OF USE shall not be effective. If any license with the Third Party Licensee that is permitted under this provision is terminated, written notice of the same will be delivered to LICENSEE and the terminated rights shall be automatically restored as part of LICENSEE's rights under this Agreement as of the date of termination, unless requested otherwise by the LICENSEE. Following such restoration, the terms and conditions under this Section 4.9 will be reinstated and restored in full force as of the termination date.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

4.10 For clarity, this Section shall not be applicable if LICENSEE reasonably demonstrates to REGENTS that commercializing such LICENSED PRODUCT(S) or LICENSED SERVICE(S) or granting such a sublicense in the NEW FIELD would have a potentially adverse commercial effect upon development, marketing or sales, or future development, marketing or sales, of the LICENSED PRODUCT(S) or LICENSED SERVICES.

5. LICENSE ISSUE FEE

LICENSEE will pay to REGENTS a license issue fee of Fifty Thousand US Dollars (US$50,000) due within **[*]** days of signing this Agreement by both parties. This fee is non-refundable and is not an advance against royalties or other payments due under this Agreement.

6. ROYALTIES, ANNUAL LICENSE MAINTENANCE FEE AND MINIMUM ROYALTIES

6.1 For the duration of the term of this Agreement, LICENSEE will pay to REGENTS earned royalties at the rate of **[*]** of the NET SALES of LICENSED PRODUCT(S) OR LICENSED METHOD; subject to the following:

(a) If LICENSEE **[*]** to make any payment (including upfront payments, milestones, royalties or other license fees or payments) to a third party to obtain a license or other patent rights **[*]**, such third party payments will be creditable against amounts owed to REGENTS in the order such amounts are owed until fully credited, provided that **[*]** will credits reduce any amounts owed to REGENTS by more than **[*]** of amounts owed to REGENTS **[*]**. When making payment under this Paragraph 6.1 (i), LICENSEE shall provide REGENTS with supporting information and documentation used to determine the amount of any such credit.

6.2 Royalties accruing to REGENTS will be paid to REGENTS quarterly within **[*]** days after the end of each calendar quarter, and **[*]** days with respect to NET SALES by sublicensees.

6.3 LICENSEE will also pay to REGENTS an annual license maintenance fee of Twenty Thousand U.S. Dollars (US$20,000) beginning on the first anniversary date of the Effective Date and on each anniversary of the Effective Date thereafter during the term of the AGREEMENT until the FIRST COMMERCIAL SALE by LICENSEE of a LICENSED PRODUCT.

6.4 Beginning with the first calendar year that begins after FIRST COMMERCIAL SALE and for each succeeding calendar year thereafter, LICENSEE will pay to the REGENTS a minimum annual royalty of **[*]** increasing by **[*]** every year

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

thereafter but capped at a total of **[*]** per year in minimum royalties for the remainder of term of this Agreement. This minimum annual royalty will be paid to the REGENTS by January 30 of each such calendar year and will be credited against the earned royalty due and owing for the calendar year in which the minimum payment was made.

6.5 LICENSEE will pay the following one-time milestone payments on the first occurrence of the following:

(a) LICENSEE will pay to REGENTS a non-refundable, non-creditable milestone payment of **[*]** within **[*]** days of **[*]**.

(b) LICENSEE will pay to REGENTS a non-refundable, non-creditable milestone payment of **[*]** within **[*]** days of **[*]**.

(c) LICENSEE will pay to REGENTS a non-refundable, non-creditable milestone payment of **[*]** within **[*]** days of **[*]**.

(d) LICENSEE will pay to REGENTS a non-refundable, non-creditable milestone payment of **[*]** within **[*]** days of **[*]**..

(e) LICENSEE will pay to REGENTS a non-refundable, non-creditable milestone payment of **[*]** within **[*]** days of **[*]**.

6.6 All payments due REGENTS will be payable in United States Dollars. When LICENSED PRODUCTS, LICENSED SERVICES, or LICENSED METHOD are SOLD for monies other than United States Dollars, royalties will first be determined in the foreign currency of the country in which the SALE was made and then converted into equivalent United States Dollars. The exchange rate will be that rate quoted in the *Wall Street Journal* on the average of last **[*]** business days of the reporting period.

6.7 If any patent or patent application, or any claim thereof, included within REGENTS' PATENT RIGHTS or JOINT PATENT RIGHTS does not include a VALID CLAIM all obligation to pay royalties based on such patent, patent application or claim, or any claims patentably indistinct therefrom, will cease as of the date of such expiration or final decision. LICENSEE will not, however, be relieved from paying any royalties that accrued before such expiration or decision or that are based on another VALID CLAIM.

6.8 Payments due and payable to REGENTS for SALES occurring in any country outside the United States will be reduced by any taxes, fees, or other charges or withholding imposed by the government of such country on the remittance of royalty income. LICENSEE will also be responsible for all bank transfer charges, shall reasonably cooperate with REGENTS in the recovery of any amounts paid by LICENSEE on REGENTS' behalf.

6.9 LICENSEE will make all payments under this Agreement by check payable to "The Regents of the University of California" and forward it to: University of California, Innovation Alliances and Services (IAS), Attn: Accounts Receivable, 1111 Franklin Street, 5th Floor, Oakland, CA 94607.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6.10 No earned royalties will be collected or paid to REGENTS hereunder on SALES to, or for use by, the United States Government. LICENSEE will reduce the amount charged for such SALES by an amount equal to the earned royalty otherwise due REGENTS as provided herein.

7. DUE DILIGENCE

7.1 LICENSEE will use its CRE to proceed with the development, manufacture, and SALE of LICENSED PRODUCTS, and will use its CRE to manufacture LICENSED PRODUCT in quantities sufficient to meet the market demand.

7.2 In addition to its obligations under Paragraph 7.1, LICENSEE specifically commits to achieving the following objectives in its due diligence activities under this Agreement:

Key Milestone	Year Completed
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**

7.3 If LICENSEE is unable to meet any of its diligence obligations set forth in Paragraphs 7.1 and 7.2, then REGENTS will so notify LICENSEE of failure to perform. LICENSEE will have the right and option to extend the target date of any such due diligence obligation for periods of **[*]** months upon the payment of **[*]** within **[*]** days of the date to be extended for each such extension option exercised by LICENSEE, and all following milestone dates shall be adjusted accordingly. LICENSEE may further extend the target date of any diligence obligation for an additional **[*]** months upon payment of an additional **[*]**, and all following milestone dates shall be adjusted accordingly. Additional extensions may be granted only by mutual written agreement of the parties to this Agreement. Payments made by LICENSEE in respect of extension periods for the achievement of a Key Milestone are in addition to the minimum royalty payments specified in Paragraph 6.5. Should LICENSEE opt not to extend the obligation or fail to meet it by the extended target date, then REGENTS will have the right and option either to terminate this Agreement or to reduce LICENSEE's exclusive license to a non-exclusive royalty-bearing license. This right, if exercised by REGENTS, supersedes the rights granted in Article 3. The right to terminate this Agreement or

reduce LICENSEE's exclusive license granted hereunder to a non-exclusive license will be REGENTS' sole remedy for breach of Paragraph 7.1 or 7.2. Should REGENTS choose to reduce LICENSEE's exclusive license to a non-exclusive royalty-bearing license, LICENSEE shall have the right to terminate this Agreement on written notice from LICENSEE to REGENTS under Article 12.

7.4 At the written request of either party for arbitration, any controversy or claim arising out of or relating to the diligence provisions of Paragraphs 7.1 and 7.2 will be settled by a single arbitrator with no fewer than **[*]** years' experience in pharmaceutical licensing as part of an arbitration conducted in San Francisco, California in accordance with the then current Licensing Agreement Arbitration Rules of the American Arbitration Association. The arbitrator shall be mutually agreed upon by the parties unless no arbitrator can be agreed within **[*]** days of the initial request for arbitration, in which case American Arbitration Association will appoint an arbitrator, and the arbitration is concluded within **[*]** days after the initial request for arbitration. Judgment upon the award rendered by the arbitrator(s) will be binding on the parties and may be entered by either party in the court or forum having jurisdiction. For clarity, the parties intend that the judgment not be subject to review or modification by any other court or tribunal. In determination of due diligence, the arbitrator may determine solely the issues of fact or law with respect to termination of LICENSEE's rights under this Agreement but will not have the authority to award monetary damages or grant equitable relief.

7.5 To exercise either the right to terminate this Agreement or to reduce the license to a non-exclusive license for lack of diligence under Paragraph 7.1 or 7.2, REGENTS will give LICENSEE written notice of the deficiency. LICENSEE thereafter has **[*]** days to cure the deficiency or to request arbitration. If REGENTS has not received a written request for arbitration or satisfactory tangible evidence that the deficiency has been cured by the end of the **[*]** - day period, then REGENTS may, at its option, either terminate this Agreement or reduce LICENSEE's exclusive license to a non-exclusive license by giving written notice to LICENSEE. If LICENSEE requests arbitration and the arbitrator concludes that LICENSEE has fulfilled all of its obligations under Sections 7.1 and 7.2, then REGENTS shall not have the right to terminate this Agreement or reduce LICENSEE's exclusive license to a non-exclusive license, and LICENSEE's costs and expenses of arbitration shall be offset against any amounts payable to REGENTS until paid in full.. These notices will be subject to Article 23 (Notices).

8. PROGRESS AND ROYALTY REPORTS

8.1 For the period beginning March 2015, LICENSEE will submit to REGENTS a semi-annual progress report covering LICENSEE's activities related to the development and testing of all LICENSED PRODUCTS, LICENSED SERVICES and LICENSED METHOD and the obtaining of necessary governmental approvals, if any, for marketing in the United States. These progress reports will be made for all development activities until FIRST COMMERCIAL SALE.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8.2 Each progress report will be a sufficiently detailed summary of activities of LICENSEE and any sublicensees so that REGENTS may evaluate and determine LICENSEE's progress in development of LICENSED PRODUCTS, LICENSED SERVICES, and LICENSED METHOD, and in meeting its diligence obligations under Article 7, and will include (to the extent relevant at the time of reporting) the following: summary of work completed and in progress; current schedule of anticipated events and milestones, including diligence milestones under Paragraph 7.2; anticipated market introduction dates for the licensed territories; and sublicensee's activities during the reporting period. For clarity, any discussion by LICENSEE in a progress report as to anticipated events is speculative in all respects and subject to change and, as a result, may not be relied on by REGENTS.

8.3 LICENSEE also will report to REGENTS in its immediately subsequent progress and royalty reports, the date of first SALE.

(a) After the FIRST COMMERCIAL SALE anywhere in the world, LICENSEE will make quarterly royalty reports to REGENTS within **[*]** days after the quarters ending March 31, June 30, September 30, and December 31, of each year. Each such royalty report will include at least the following: The number of LICENSED PRODUCTS manufactured and the estimated number SOLD;

(b) Gross revenue from SALE of LICENSED PRODUCTS, LICENSED SERVICES and LICENSED METHOD;

(c) NET SALES pursuant to Paragraph 2.8;

(d) Total royalties due REGENTS; and

(e) Names and addresses of any new sublicensees along with a summary of the material terms of each new sublicense agreement entered into during the reporting quarter.

8.4 If no SALES have occurred during the report period, a statement to this effect is required in the royalty report for that period.

9. BOOKS AND RECORDS

9.1 LICENSEE will keep full, true, and accurate books and records containing all particulars that may be necessary for the purpose of showing the amount of royalties payable to REGENTS and LICENSEE's compliance with other obligations under this Agreement. Said books and records will be kept at LICENSEE's principal place of business or the principal place of business of the appropriate division of LICENSEE to which this Agreement relates. Said books and records and the supporting data will be open at all reasonable times during normal business hours upon reasonable notice, for **[*]** years following the end of the calendar year to which they pertain, to the inspection and audit by representatives of REGENTS for the purpose of verifying LICENSEE's royalty statement or compliance in other respects with this Agreement. Such

representatives will be bound to hold all information in confidence except as necessary to communicate LICENSEE's non-compliance with this Agreement to REGENTS.

9.2 The fees and expenses of REGENTS' representatives performing such an examination will be borne by REGENTS. However, if an error in underpaid royalties to REGENTS of more than **[*]** of the total royalties due for any year is discovered, then the fees and expenses of these representatives will be borne by LICENSEE.

10. TERM OF THE AGREEMENT

10.1 Unless earlier terminated as permitted in this Agreement, the term of this Agreement shall begin on the Effective Date and will continue until the termination of the last VALID CLAIM of the REGENTS' PATENT RIGHTS and JOINT PATENT RIGHTS.

10.2 Any termination of this Agreement shall not affect the rights and obligations set forth in the following articles:

Article 2	Definitions
Article 4	Sublicenses
Article 9	Books and Records
Article 10	Term of the Agreement
Article 13	Disposition of Licensed Products Upon Termination
Article 16	Use of Names and Trademarks
Article 17	Limited Warranties and Limit of Liability
Article 19	Indemnification
Article 23	Notices
Article 24	Late Payments
Article 26	Confidentiality
Article 29	Applicable Law; Venue

10.3 Any termination of this Agreement will not relieve LICENSEE of its obligation to pay any monies due or owing at the time of such termination and will not relieve any obligations, of either party to the other party, accruing prior to termination.

11. TERMINATION BY REGENTS

If LICENSEE materially breaches any material term of this Agreement, then REGENTS may give written notice of such material breach ("Notice of Default") to LICENSEE. If LICENSEE should fail to remedy such material breach within ninety (90) days of the effective date of such notice, REGENTS will have the right to terminate this Agreement and the licenses herein by a second written notice ("Notice of Termination") to LICENSEE. If a Notice of Termination is sent to LICENSEE, this Agreement will

automatically terminate on the effective date of such notice. Such termination will not relieve LICENSEE of its obligation to pay any royalty or license fees owing at the time of such termination and will not impair any accrued rights of REGENTS. These notices will be subject to Article 23 (Notices).

12. TERMINATION BY LICENSEE

12.1 LICENSEE will have the right at any time to terminate this Agreement in whole or as to any portion of REGENT PATENT RIGHTS or JOINT PATENT RIGHTS by giving notice in writing to REGENTS. Such notice of termination will be subject to Article 23 (Notices) and termination of this Agreement will be effective ninety (90) days after the effective date of such notice.

12.2 Any termination pursuant to Paragraph 12.1 will not relieve LICENSEE of any obligation or liability accrued hereunder prior to such termination or rescind anything done by LICENSEE or any payments made to REGENTS hereunder prior to the time such termination becomes effective, and such termination will not affect in any manner any rights of REGENTS arising under this Agreement prior to such termination.

13. DISPOSITION OF LICENSED PRODUCTS UPON TERMINATION

Upon termination of this Agreement, for a period of one year after the date of termination LICENSEE may complete and SELL any LICENSED PRODUCTS in stock, in process or subject to binding purchase orders, and continue to render any previously commenced LICENSED SERVICES under existing agreements, and continue the practice of LICENSED METHOD only to the extent necessary to do so; provided, however, that all such SALES will be subject to the terms of this Agreement including, but not limited to, the payment of royalties at the rate and at the time provided herein and the rendering of reports thereon.

14. PATENT PROSECUTION AND MAINTENANCE

14.1 REGENTS will diligently prosecute and maintain the United States and foreign patent applications and patents under REGENTS' PATENT RIGHTS, subject to LICENSEE'S reimbursement of REGENTS' out of pocket costs under Article 14.4 below, and all patent applications and patents under REGENTS' PATENT RIGHTS will be held in the name of REGENTS. REGENTS will have sole responsibility for retaining and instructing patent counsel with regards to U.S. Patent Applications, Serial No. **[*]**, and continuing applications thereof including divisions, substitutions, extensions and continuation-in-part applications any patents issuing on said application or continuing applications including reissues; and any corresponding foreign patents or applications, but continued use of such counsel at any point in the patent prosecution process subsequent to initial filing of a U.S. patent application covering the INVENTION shall be subject to the approval of LICENSEE. If LICENSEE rejects three of REGENTS' choices of prosecution counsel, then REGENTS may select new prosecution counsel without LICENSEE's consent. REGENTS shall promptly provide LICENSEE with copies of all relevant documentation so that LICENSEE may be currently informed and apprised of the

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

continuing prosecution and LICENSEE agrees to keep this documentation confidential in accordance with Article 26. LICENSEE may comment upon such documentation, provided, however, that if LICENSEE has not commented upon such documentation in reasonable time for REGENTS to sufficiently consider LICENSEE's comments prior to the deadline for filing a response with the relevant government patent office, REGENTS will be free to respond appropriately without consideration of LICENSEE's comments. LICENSEE and LICENSEE's patent counsel will have the right to consult with patent counsel chosen by REGENTS.

14.2 LICENSEE will diligently prosecute and maintain the United States and foreign patent applications and patents under JOINT PATENT RIGHTS and all patent applications and patents under JOINT PATENT RIGHTS will be held in the name of REGENTS and LICENSEE. LICENSEE will have sole responsibility for retaining and instructing patent counsel with regards to U.S. Patent Applications, Serial Nos. **[*]**, and continuing applications thereof including divisions, substitutions, extensions and continuation-in-part applications any patents issuing on said application or continuing applications including reissues; and any corresponding foreign patents or applications. LICENSEE shall promptly provide REGENTS with copies of all relevant documentation so that REGENTS may be currently informed and apprised of the continuing prosecution and REGENTS agrees to keep this documentation confidential in accordance with Article 26. REGENTS may comment upon such documentation, provided, however, that if REGENTS has not commented upon such documentation in reasonable time for LICENSEE to sufficiently consider REGENTS's comments prior to the deadline for filing a response with the relevant government patent office, LICENSEE will be free to respond appropriately without consideration of REGENTS comments. REGENTS and REGENTS' patent counsel will have the right to consult with patent counsel chosen by LICENSEE. If LICENSEE decided to not file or cease patent prosecution on a patent application or maintenance of a JOINT PATENT RIGHTS, the LICENSEE will notify the REGENTS so the REGENTS may continue the patent prosecution or maintenance at its own cost.

14.3 REGENTS and LICENSEE will use reasonable efforts to prepare or amend any patent application to include claims reasonably requested by LICENSEE and REGENTS to protect the LICENSED PRODUCTS contemplated to be SOLD or to be practiced under this Agreement.

14.4 Subject to Paragraphs 14.4 and 14.5, all past (unreimbursed), present, and future costs for preparing, filing, prosecuting, and maintaining all United States and foreign patent applications, and patents under REGENTS' PATENT RIGHTS will be borne by LICENSEE, so long as the licenses granted to LICENSEE herein are exclusive. To date the unreimbursed past patent costs are approximately Four Thousand One Hundred and Seven U.S. Dollars (US$4,107.00) Payments are due within **[*]** days after receipt of invoice from REGENTS. If, however, REGENTS reduces the exclusive licenses granted herein to non-exclusive licenses pursuant to Paragraphs 7.3, 7.4, or 7.5 and REGENTS grants additional license(s), the costs of preparing, filing, prosecuting and maintaining such patent applications and patents will be divided equally among the licensed parties from the effective date of each subsequently granted license agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

14.5 LICENSEE's obligation to underwrite and to pay all domestic and foreign patent filing, prosecution, and maintenance costs will continue for so long as this Agreement remains in effect, provided, however, that LICENSEE may terminate its obligations with respect to any given patent application or patent in any or all designated countries upon **[*]** months' written notice to REGENTS. REGENTS will use its best efforts to curtail patent costs when such a notice is received from LICENSEE. REGENTS may continue prosecution and/or maintenance of such applications or patents at its sole discretion and expense; provided, however, that LICENSEE will have no further right or licenses thereunder.

15. MARKING

LICENSEE agrees to mark LICENSED PRODUCT(S) (or their containers or labels) made, sold, licensed or otherwise disposed of in the United States under the license granted in this Agreement with the patent numbers of any applicable U.S. patent(s) in accordance with applicable U.S. laws. All LICENSED PRODUCTS shipped to, manufactured, or sold in other countries will be marked in such manner as to conform with the patent laws and practice of such countries.

16. USE OF NAMES AND TRADEMARKS

Nothing contained in this Agreement will be construed as conferring any right to use in advertising, publicity or other promotional activities any name, trademark, trade name, or other designation of either party hereto by the other (including any contraction, abbreviation, or simulation of any of the foregoing). Unless required by law or consented to in writing by REGENTS, the use by LICENSEE of the name "The Regents of the University of California" or the name of any University of California campus in advertising, publicity or other promotional activities is expressly prohibited.

17. LIMITED WARRANTIES AND LIMITATION OF LIABILITY

17.1 REGENTS warrants to LICENSEE that it has the lawful right to grant this license.

17.2 This license and the associated INVENTION are provided WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED. REGENTS MAKES NO REPRESENTATION OR WARRANTY THAT THE INVENTION, REGENTS' PATENT RIGHTS OR JOINT PATENT RIGHTS, LICENSED PRODUCT(S), LICENSED SERVICES OR LICENSED METHOD WILL NOT INFRINGE ANY PATENT OR OTHER PROPRIETARY RIGHT.

17.3 SUBJECT TO LICENSEE'S DUTIES UNDER ARTICLE 19 FOR CLAIMS OF THIRD PARTIES, IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER FOR ANY INCIDENTIAL, SPECIAL, INDIRECT OR CONSEQUENTIAL OR PUNITIVE DAMAGES RESULTING FROM EXERCISE OF THIS LICENSE OR THE USE OF THE INVENTION, REGENTS' PATENT RIGHTS AND JOINT PATENT RIGHTS, LICENSED METHOD, OR LICENSED PRODUCT(S).

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

17.4 Nothing in this Agreement is or will be construed as:

(a) A warranty or representation by REGENTS as to the validity, enforceability or scope of any REGENT PATENT RIGHTS or JOINT PATENT RIGHTS; or

(b) A warranty or representation that anything made, used, or SOLD under any license granted in this Agreement is or will be free from infringement of patents of third parties; or

(c) An obligation to bring or prosecute actions or suits against third parties for patent infringement, except as provided in Article 18; or

(d) Conferring by implication, estoppel, or otherwise any license or rights under any patents of REGENTS other than REGENTS' PATENT RIGHTS AND JOINT PATENT RIGHTS as defined herein, regardless of whether such patents are dominant or subordinate to REGENTS' PATENT RIGHTS AND JOINT PATENT RIGHTS; or

(e) An obligation to furnish any know-how not provided in the patents and patent applications under REGENT PATENT RIGHTS or JOINT PATENT RIGHTS.

18. PATENT INFRINGEMENT

18.1 In the event that a party (for the REGENTS, to the extent of actual knowledge of the licensing professional responsible for administration of this Agreement) learns of the substantial infringement of any REGENT PATENT RIGHTS or JOINT PATENT RIGHTS under this Agreement, they will promptly provide the other party with notice and reasonable evidence of such infringement ("Infringement Notice"). During the period and in a jurisdiction where LICENSEE has exclusive rights under this Agreement, neither party will notify a third party, including the infringer, of the infringement without first obtaining consent of the other party, which shall not be unreasonably withheld. The parties will cooperate to terminate such infringement without litigation.

18.2 If the infringing activity of potential commercial significance has not been abated within **[*]** days following the effective date of the Infringement Notice, LICENSEE may institute suit for patent infringement against the infringer. REGENTS may voluntarily join such suit at its own expense, but may not thereafter commence suit against the infringer for the acts of infringement that are the subject of LICENSEE's suit or any judgment rendered in that suit. LICENSEE may not join REGENTS in a suit initiated by LICENSEE without REGENTS' prior written consent, If, in a suit initiated by LICENSEE, REGENTS is involuntarily joined

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

other than by LICENSEE, LICENSEE will pay the out-of-pocket costs incurred by REGENTS arising out of such suit, including but not limited to, any legal fees of counsel that REGENTS selects and retains to represent it in the suit, assuming REGENTS will use reasonable efforts to pursue a joint defense if there are no related conflicts that make such joint defense unreasonable. For the avoidance of doubt, REGENTS will determine reasonableness.

18.3 If, within **[*]** days following the effective date of the Infringement Notice, the infringing activity of potential commercial significance has not been abated and if LICENSEE has not brought suit against the infringer, REGENTS may institute suit for patent infringement against the infringer. If REGENTS institutes such suit, LICENSEE may not join such suit without REGENTS' consent and may not thereafter commence suit against the infringer for the acts of infringement that are the subject of REGENTS' suit or any judgment rendered in that suit.

18.4 Such legal action as is decided upon will be at the expense of the party on account of whom suit is brought and all recoveries recovered thereby will belong to such party, provided that legal action brought jointly by REGENTS and LICENSEE and participated in by both, will be at the joint expense of the parties and all recoveries will be allocated in the following order: a) to each party reimbursement in equal amounts of the attorney's costs, fees, and other related expenses to the extent each party paid for such costs, fees, and expenses until all such costs, fees, and expenses are paid in full; and b) any remaining amount shared jointly by them in proportion **[*]**, but in no event will REGENTS' share be less than **[*]** of such remaining amounts if REGENTS is a party.

18.5 Each party will cooperate with the other in litigation instituted hereunder but at the expense of the party on account of whom suit is brought. Such litigation will be controlled by the party bringing the action, except that REGENTS may, at its own expense, be represented by counsel of its choice in any suit brought by LICENSEE.

19. INDEMNIFICATION

19.1 LICENSEE will, and will require its sublicensees, to indemnify, hold harmless, and defend REGENTS, its officers, employees, and agents, sponsor(s) of the research that led to the INVENTION, the inventors of any patents and patent applications in REGENTS' PATENT RIGHTS and JOINT PATENT RIGHTS, and their employers ("REGENTS INDEMNITEES") against any and all claims, suits, losses, damages, costs, fees, and expenses resulting from or arising of exercise of this license or any sublicense including, without limitation, any cause of action relating to product liability This indemnification will include but not to be limited to any product liability.

19.2 LICENSEE, at its sole cost and expense, will insure its activities in connection with any work performed hereunder and will obtain, keep in force, and maintain the following insurance:

(a) prior to clinical trials, Commercial Form General Liability Insurance (contractual liability included) with limits as follows:

Each Occurrence	$ 500,000
Products/Completed Operations Aggregate	$ 0.
Personal and Advertising Injury	$ 0.
General Aggregate	$1,000,000

(b) upon the earlier of any clinical trials, Commercial Form General Liability Insurance (contractual Liability included) with limits as follows:

Each Occurrence	$5,000,000
Products/Completed Operations Aggregate	$5,000,000
Personal and Advertising Injury	$0.
General Aggregate	$3,000,000

(c) upon the earlier of the First Commercial Sale of a LICENSED PRODUCT or LICENSED SERVICE, Commercial Form General Liability Insurance (contractual Liability included) with limits as follows:

Each Occurrence	$ 5,000,000
Products/Completed Operations Aggregate	$10,000,000
Personal and Advertising Injury	$ 5,000,000
General Aggregate	$10,000,000

If the above insurance is written on a claims-made form, it shall continue for three (3) years following termination or expiration of this Agreement. The insurance shall have a retroactive date of placement prior to or coinciding with the First Commercial Sale of LICENSED PRODUCT; and

(d) worker's compensation as legally required in the jurisdiction in which LICENSEE is doing business.

19.3 The coverage and limits referred to in Subparagraphs 19.2a, 19.2b and 19.2c above will not in any way limit the liability of LICENSEE under this Article. Upon the execution of this Agreement, LICENSEE will furnish REGENTS with certificates of insurance evidencing compliance with all requirements. Such certificates will:

(a) indicate that REGENTS has been endorsed as an additional insured under the coverage described above in Subparagraph l9.2.

(b) include a provision that the coverage will be primary and will not participate with, nor will be excess over, any valid and collectable insurance or program of self-insurance maintained by REGENTS.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

LICENSEE will promptly notify REGENTS of any cancellation of insurance coverages; LICENSEE will promptly notify REGENTS of any material reduction of the insurance coverages below the amounts required hereunder.

19.4 LICENSEE will provide prompt written notice of any cancellation of insurance coverages or any material reduction of the insurance coverages below the amounts required above in Subparagraph 19.2.

19.5 REGENTS will promptly notify LICENSEE in writing of any claim or suit brought against REGENTS for which REGENTS intends to invoke the provisions of this Article 19. LICENSEE will keep REGENTS informed of its defense of any claims pursuant to this Article 19.

20. COMPLIANCE WITH LAWS

LICENSEE will comply with all applicable international, national, state, regional, and local laws and regulations in performing its obligations hereunder and in its use, manufacture, SALE or import of the LICENSED PRODUCTS, LICENSED SERVICES, or practice of the LICENSED METHOD. LICENSEE understands that REGENTS is subject to United States laws and regulations (including the Arms Export Control Act, as amended, and the Export Administration Act of 1979), controlling the export of technical data, computer software, laboratory prototypes and other commodities, and REGENTS' obligations under this Agreement are contingent on compliance with such laws and regulations. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances by LICENSEE that LICENSEE will not export such technical data and/or commodities to certain foreign countries without prior approval of such agency. REGENTS neither represents that a license will not be required nor that, if required, it will be issued.

21. GOVERNMENT APPROVAL OR REGISTRATION

If this Agreement or any associated transaction is required by the law of any nation to be either approved or registered with any governmental agency, LICENSEE will assume all legal obligations to do so. LICENSEE will notify REGENTS if it becomes aware that this Agreement is subject to a United States or foreign government reporting or approval requirement. LICENSEE will make all necessary filings and pay all costs including fees, penalties, and all other out-of-pocket costs associated with such reporting or approval process.

22. ASSIGNMENT

This Agreement is binding upon and shall inure to the benefit of REGENTS, its successors and assigns. This Agreement will be personal to LICENSEE and is only assignable by LICENSEE only with the written consent of REGENTS, except that LICENSEE may freely assign this Agreement to its AFFILIATE, or an acquirer of all or substantially all of LICENSEE's stock, assets or business to which this Agreement relates. If LICENSEE assigns this Agreement to a non-AFFILIATE third party, then upon execution of the assignment, LICENSEE will (i) provide REGENTS with the updated contact information, and (ii) pay REGENTS Three Hundred Thousand Dollars ($300,000) within **[*]** days after

the effective date of the assignment. The REGENTS may assign to an invention management organization without LICENSEES approval, provided that the organization is managing the inventions on behalf of the University of California, Berkeley.

23. NOTICES

All notices under this Agreement shall be in writing and may be delivered in person, or mailed by registered or certified U.S. mail, or sent by nationally recognized overnight courier. All such notices shall be deemed delivered at the following address.

To REGENTS:	Office of Technology Licensing 2150 Shattuck Avenue, Suite 510 Berkeley, CA 94704-1347 Attn.: Director (UC Case No.: **[*]**)
To LICENSEE:	Aduro Biotech 626 Bancroft Way Berkeley, CA 94710-2224 Attn.: Steven Bodovitz <sbodovitz@adurobiotech.com>

If received on a day other than a business day, then such notice shall be deemed delivered on the next business day at the address of receipt. Either party may change its address upon written notice to the other party.

24. LATE PAYMENTS

If monies owed to REGENTS under this Agreement are not received by REGENTS when due, LICENSEE will pay to REGENTS interest charges at a rate of **[*]** per annum. Such interest will be calculated from the date payment was due until actually received by REGENTS. Such accrual of interest will be in addition to, and not in lieu of, enforcement of any other rights of REGENTS related to such late payment. Acceptance of any late payment will not constitute a waiver under Article 25 (Waiver) of this Agreement.

25. WAIVER

The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement will not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party. None of the terms and conditions of this Agreement can be waived except by the written consent of the party waiving compliance.

26. CONFIDENTIALITY

26.1 Each party will secure and hold the other party's proprietary business and technical information, patent prosecution material and other proprietary information, including the negotiated terms of this Agreement, in confidence and against disclosure to third parties with at least the same degree of care as it exercises to protect its own data and license agreements of a similar nature. This obligation will expire **[*]** years after the termination or expiration of this Agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

26.2 Nothing contained herein will in any way restrict or impair the right of LICENSEE or REGENTS to use, disclose, or otherwise deal with any information or data which:

(a) at the time of disclosure to a receiving party is generally available to the public or thereafter becomes generally available to the public by publication or otherwise through no act of the receiving party;

(b) the receiving party can show by written record was in its possession prior to the time of disclosure to it hereunder and was not acquired directly or indirectly from the disclosing party;

(c) is independently made available to the receiving party without restrictions as a matter of right by a third party; or

(d) is subject to disclosure under the California Public Records Act or other requirements of law.

26.3 REGENTS will be free to release to the inventors and senior administrators employed by REGENTS the terms and conditions of this Agreement upon their request. If such release is made, REGENTS will inform such employees of the confidentiality obligations set forth above and will request that they do not disclose such terms and conditions to others. Should a third party inquire whether a license to REGENT PATENT RIGHTS or JOINT PATENT RIGHTS is available, REGENTS may disclose the existence of this Agreement and the extent of the grant in Articles 3 and 4 to such third party, but will not disclose the name of LICENSEE unless LICENSEE has already made such disclosure publicly, except where REGENTS is required to release information under either the California Public Records Act or other applicable law, provided REGENTS gives prior written notice to LICENSEE of such disclosure. REGENTS can publicly identify LICENSEE's corporate name and contact information as an entity with which REGENTS has an agreement that involves the commercialization of technology developed at the University of California, Berkeley; however this exception does not cover other information about this AGREEMENT, including INVENTIONS and INVENTORS, when used in association with LICENSEE's name

26.4 LICENSEE and REGENTS agree to destroy or return to the disclosing party proprietary information received from the other in its possession within **[*]** days following the effective date of termination of this Agreement. However, each party may retain one copy of proprietary information of the other solely for archival purposes in non-working files for the sole purpose of verifying the ownership of the proprietary information, provided such proprietary information will be subject to the confidentiality provisions set forth in Article 26.1. LICENSEE and REGENTS agree to provide each other, within **[*]** days following termination of this Agreement, with a written notice that proprietary information has been returned or destroyed.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

27. FORCE MAJEURE

Except for LICENSEE's obligation to make any payments to REGENTS hereunder (assuming that the ability of LICENSEE to recover revenue and make payments is unimpaired by the force majeure), the parties to this Agreement shall be excused from any performance required hereunder if such performance is rendered impossible or unfeasible due to any catastrophes or other major events beyond their reasonable control, including, without limitation, war, riot, and insurrection; laws, proclamations, edicts, ordinances, or regulations; strikes, lockouts, or other serious labor disputes; and floods, fires, explosions, or other natural disasters. When such events have abated, the parties' respective obligations hereunder will resume.

28. SEVERABILITY

The provisions of this Agreement are severable, and in the event that any provision of this Agreement will be determined to be invalid or unenforceable under any controlling body of law, such invalidity or enforceability will not in any way affect the validity or enforceability of the remaining provisions hereof.

29. APPLICABLE LAW AND VENUE

THIS AGREEMENT WILL BE CONSTRUED, INTERPRETED, AND APPLIED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, excluding any choice of law rules that would direct the application of the laws of another jurisdiction, but the scope and validity of any patent or patent application under REGENT PATENT RIGHTS or JOINT PATENT RIGHTS will be determined by the applicable law of the country of such patent or patent application. Any legal action brought by the parties relating to this Agreement will be conducted in San Francisco, California.

30. SCOPE OF AGREEMENT

This Agreement (except for the Confidentiality Agreement dated April 16, 2013, which will continue to the extent it is not inconsistent with this Agreement) incorporates the entire agreement between the parties with respect to the subject matter hereof, and this Agreement may be altered or modified only by written amendment duly executed by the parties hereto.

31. HEADINGS

Section and subsection headings are inserted for convenience of reference only and do not form part of this Agreement.

32. COUNTERPARTS

This Agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

33. ELECTRONIC COPY

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

The parties to this document agree that a copy of the original signature (including an electronic copy) may be used for any and all purposes for which the original signature may have been used. The parties further waive any right to challenge the admissibility or authenticity of this document in a court of law based solely on the absence of an original signature.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate originals by their duly authorized officers or representatives.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By /s/ Carol Mimura

Carol Mimura, Ph.D.
Assistant Vice Chancellor
Office of Technology Licensing

Date 10/6/2014

ADURO BIOTECH INC

By /s/ Gregory W. Schafer

Printed Name Gregory W. Schafer
Title COO

Date 26 September 2014

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit 10.28

EXCLUSIVE LICENSE AGREEMENT

for INSTITUTIONS' TECHNOLOGY

"Compositions & Methods for Altering Second Messenger Signaling"

Reference Numbers:
Rutgers: L2015-0995_LFSC
Rockefeller: RU 1136
University of Bonn: V-20141215-0766
MSK: SK2014-1899

TABLE OF CONTENTS

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

This Exclusive License Agreement is effective as of December 18, 2014 ("Effective Date"), and is by and between **Memorial Sloan Kettering Cancer Center**, a New York not-for-profit corporation with principal offices at 1275 York Avenue, New York, NY 10065 ("MSK"), **The Rockefeller University,** a New York not-for-profit corporation with principal offices at 1230 York Avenue, New York, NY 10065, **Rutgers, The State University of New Jersey,** having its statewide Office of Technology Commercialization at 3 Rutgers Plaza, New Brunswick, New Jersey 08901, and **University of Bonn** ("UB"), all of which will be collectively referred to as "INSTITUTIONS" and **Aduro Biotech, Inc.**, a corporation with principal offices located at 626 Bancroft Way, #3C, Berkeley, CA 94710 ("LICENSEE"). INSTITUTIONS and LICENSEE are sometimes referred to singly as "Party" and collectively as "Parties".

WITNESSETH

WHEREAS, the INSTITUTIONS are the sole owners of certain Licensed Rights (as later defined herein) associated with technology relating to unique chemical linkages in compounds that alter second messenger signaling (hereinafter defined as "Technology") and has the right to grant licenses under said Licensed Rights; and

WHEREAS, the INSTITUTIONS desire to have the Licensed Rights utilized in the public interest and is willing to grant a license to its interest thereunder; and

WHEREAS, LICENSEE seeks to commercially develop the Licensed Rights through a thorough, vigorous and diligent program of exploiting the Licensed Rights whereby public utilization shall result therefrom;

WHEREAS, the Licensed Rights were developed, at least in part, by Dr. Thomas Tuschl, an employee of the Howard Hughes Medical Institute ("HHMI") at his laboratory at The Rockefeller University;

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, the parties hereto agree as follows:

ARTICLE I
DEFINITIONS

For the purpose of this Agreement, the following words and phrases shall have the following meanings:

1.1 "Affiliate" as used herein in either singular or plural means, with respect to a party, any corporation, company, partnership, joint venture or other entity, which directly or indirectly: (a) Controls, is Controlled by or is under common Control with the specified entity; or (b) both (i) owns, is owned by, or is under common ownership with the specified entity, in whole or in part, and (ii) conducts business under a trade identifier of the specified entity, with the authorization of the specified entity. For purposes of this definition, "Control" of an entity means the direct or indirect ownership or control of at least fifty percent (50%) of the right to direct or cause the direction of the policies and management of such person or entity, whether by the ownership of

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

stock, by contract or otherwise. In any jurisdiction where 50% control is not permitted by applicable law, the “greater than 50%” threshold shall be deemed satisfied by the possession of substantially the maximum percentage allowable in such jurisdiction. The term “control” wherever used in this Agreement shall mean ownership, directly or indirectly, of more than fifty percent (50%) of the equity capital.

1.2 “Agreement” means this Exclusive License Agreement between the Parties effective on the Effective Date.

1.3 “Confidential Information” shall mean all confidential and proprietary information disclosed by one Party to the other Party regarding the Technology, including any uses, processes, methods, formulations, clinical data, test results, research and development plans, pricing policies, business plans, sales, information relating to customer identities, characteristics and agreements, financial information and projections, work in progress, future development, marketing, and investors whether in oral, graphic, electronic or any other media or form. The Confidential Information of LICENSEE shall include the existence and terms of this Agreement. “Confidential Information” shall not include information: (a) which is now, or becomes in the future, public knowledge other than through acts or omissions of receiving party; (b) which is lawfully obtained by the receiving party without a confidentiality restriction and without breach of this Agreement from a source other than a party hereto; or (c) which the receiving party can demonstrate was independently developed by employees of the receiving party having no knowledge of the Confidential Information. The Confidential Information of UB shall be deemed to include all related Confidential Information disclosed by the employees of PROvendis GmbH in connection with this Agreement.

1.4 “Contract Quarter-Year” shall mean the three month periods ending on March 31, June 30, September 30 and December 31 of each year.

1.5 “Field of Use” shall mean therapeutic and/or prophylactic use in humans.

1.6 “First Commercial Sale” means the first commercial sale of a Licensed Product in a country in the Territory, which product is sold as part of commercialization effort. Licensed Product provided for: (i) clinical study purposes; (ii) compassionate use; (iii) similar uses by a limited number to support regulatory approval (provided that the Licensed Product is not otherwise generally available for purchase in such country); and (iv) early access programs; shall not constitute a First Commercial Sale.

1.7 “Know-How” means the proprietary and confidential know-how, skills, data, techniques, knowledge, protocols, regulatory filings, assays, results of experimentation and testing, inventions, methods and other information, whether or not patentable, existing prior to the Effective Date of this Agreement as described in Exhibit B and that are necessary for the commercial exploitation of the Patent Rights.

1.8 “Licensed Rights” shall mean Know-How and Patent Rights.

1.9 “Licensed Products” means any product or component (whether alone or in combination with other products or ingredients) thereof (i) the making, using, selling or

importation of which is covered, in whole or in part, by a Valid Claim, or (ii) which is manufactured using Know-How. For purposes of clarity, Licensed Product refers only to a product that incorporate INSTITUTIONS' proprietary chemical linkages described in the Licensed Rights in LICENSEE'S compounds contained in Exhibit C.

1.10 "Net Sales" means LICENSEE'S and its Sublicensees' invoiced sales price for Licensed Products less the sum of the following: a) discounts actually allowed and granted; b) credits, rebates, or allowances actually granted; c) freight out, postage, shipping and insurance charges; e) bad debts and uncollectible receivables; provided that, in any calendar year, such deduction will not exceed **[*]** of the total billings for sales of Licensed Products sold in that year; and (f) any other deductions permitted under U.S. generally accepted accounting principles.

No deductions shall be made for commissions paid to commercial sales force members whether they be with independent sales agencies or regularly employed by LICENSEE and on its payroll, provided that LICENSEE shall not be responsible for paying royalty on any amounts paid or payable to wholesalers and distributors for the Licensed Product.

Licensed Products shall be considered sold when billed and invoiced.

Customary distribution of samples of Licensed Product by LICENSEE or Affiliates shall not be included in any calculation of Net Sales provided that the total volume of samples of Licensed Products distributed is less than **[*]** of the total volume of Licensed Products sold.

Net Sales of a Combination Product in a country shall be calculated in accordance with Section 5.1(b)(i).

Net Sales shall not accrue in respect of Licensed Product used for charitable uses or Licensed Product used for development, community access programs, and sampling.

1.11 "Other Consideration" shall mean any payments received by LICENSEE or its Affiliates from a Sublicensee(s) to the extent attributable specifically to the grant of a Sublicense to the Patent Rights **[*]**, but not including royalties; purchases of equity or debt except to the extent the purchase price is more than **[*]** of fair market value.

1.12 "Patent Rights" shall mean rights in all of the following intellectual property owned by INSTITUTIONS:

(a) the United States patent applications listed in Exhibit A;

(b) any United States and foreign patents, utility models, inventors certificates, invention registrations, continuing applications, divisional applications, substitutions, and equivalents thereof in any jurisdiction, that claim priority to the provisional applications listed in Exhibit A;

(c) any United States and foreign patents issued from the applications listed in Exhibit A, and from divisionals and continuations of these applications;

(d) continuation-in-part applications, and equivalents thereof in any jurisdiction anywhere in the world, and any United States and foreign patents issued therefrom, in each case solely regarding claims in such filings that are entitled to the filing date of the patent applications in (a) and are directed to subject matter specifically described in the applications in Exhibit A; and

(e) any reissues, re-examinations or extensions of patents described in (a), (b), or (c); and any reissues, re-examinations or extensions of patents described in (d) solely regarding claims that are directed to subject matter specifically described in the applications listed in Exhibit A.

1.13 “Royalty Term” shall mean with respect to a given country in the Territory, the period beginning on the First Commercial Sale of Licensed Product in such country and ending on the later of: (a) expiration of the last Patent Right covering such Licensed Product in such country or (b) ten (10) years from the First Commercial Sale in such country.

1.14 “Royalty Year” shall mean each twelve (12) month period commencing January 1 and ending December 31 during the term of this Agreement. For the first year of this Agreement, the Royalty Year shall be the period of time between the signing of the Agreement and December 31.

1.15 “Sublicense” means the license from LICENSEE to a non-affiliated third party some or all of the Licensed Rights. For clarity, any licenses granted to a third party in order to enable LICENSEE or its Affiliates or a Sublicensee to develop or commercialize Licensed Product or to otherwise fulfill its obligations hereunder shall not be considered a Sublicense. Examples of the foregoing shall include, without limitation, licenses to contract manufacturers and wholesalers and distributors but shall not include sublicenses of Licensed Rights from Licensee to a third party bona fide collaborator or third party bona fide Licensed Product development and commercialization partner in exchange for a payment to LICENSEE or material Other Consideration.

1.16 “Sublicensee” means any business entity to which a Sublicense is granted under Section 3.1.

1.17 “Term” shall mean the term of this Agreement which begins on the Effective Date and expires on the date of the expiration of the last Royalty Term for any Licensed Product, unless earlier terminated pursuant to the Article 16 of this Agreement.

1.18 “Territory” shall mean worldwide.

1.19 “Valid Claim” shall mean a claim of (i) an issued and unexpired patent included within the Patent Rights unless the claim has been held unenforceable or invalid by the final, un-reversed, and un-appealable decision of a court or other government body of competent jurisdiction, has been irretrievably abandoned or disclaimed, or has otherwise been finally admitted or determined to be invalid, unpatentable or unenforceable, whether through reissue, reexamination, disclaimer or otherwise, or (ii) a pending patent application within the Patent Rights to the extent the claim continues to be prosecuted in good faith, but not to exceed **[*]** years.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE II
GRANT

2.1 License Grant. Subject to the terms of this Agreement, the INSTITUTIONS hereby grant to LICENSEE and its Affiliates (i) an exclusive worldwide royalty-bearing license under their interest in and to the Patent Rights and (ii) a non-exclusive worldwide royalty-bearing license under the Know-How, with respect to clauses (i) and (ii), to make, have made, use, have used, sell, have sold, offer for sale, import, have imported, export, have exported, develop, have developed, commercialize and have commercialized Licensed Products in the Field of Use (whether alone or in combination with other products or ingredients) throughout the Term hereof in the Territory. LICENSEE acknowledges that on the Effective Date there is not an issued Valid Claim of the Patent Rights in every country in the Territory.

2.2 Notwithstanding any other provisions of this Agreement, the rights granted herein are subject to the right of the INSTITUTIONS and their respective Affiliates to freely practice the Patent Rights and Know-How, provided that INSTITUTIONS will not grant to a commercial third party the same rights granted to LICENSEE to the Patent Rights hereunder. The INSTITUTIONS also reserve the right to permit others at academic, government, and non-profit institutions to use the Licensed Rights for their own internal, non-commercial, and educational research purposes, including teaching and patient care activities. All rights reserved to the United States Government and others under 35 USC §§200-212, as amended, shall remain and shall in no way be affected by this Agreement.

2.3 INSTITUTIONS reserve all rights not expressly granted in the Agreement. The license granted hereunder to LICENSEE shall not be construed to confer any rights upon LICENSEE by implication, estoppel or otherwise as to any technology not included in the Licensed Rights.

2.4 LICENSEE acknowledges that it has been informed that the Patent Rights and Know-How were developed, at least in part, by employees of HHMI and that HHMI has a fully paid-up, non-exclusive, irrevocable, worldwide license to exercise any intellectual property rights with respect to the Patent Rights and Know-How for research purposes, but with no rights to assign or sublicense (the foregoing research license, the “HHMI License”). This Agreement is explicitly made subject to the HHMI License.

2.5 LICENSEE acknowledges that it has been informed that the Patent Rights and Know-How were developed, at least in part, by employees of UB and that UB has a fully paid-up, non-exclusive, irrevocable, worldwide license to exercise any intellectual property rights with respect to the Patent Rights and Know-How for research purposes, but with no rights to assign or sublicense (the foregoing research license, the “UB License”). This Agreement is explicitly made subject to the UB License.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE III
SUBLICENSES

3.1 LICENSEE shall have the unrestricted right to grant Sublicenses of its rights granted under this Agreement, subject to written notice, and a confidential copy of such Sublicense will be provided to INSTITUTIONS with any competitive information redacted unless the redaction of such competitive information would prevent INSTITUTIONS from confirming LICENSEE's compliance with this Agreement including without limitation LICENSEE's compliance with any financial provisions. In addition, upon request of an INSTITUTION and solely to permit INSTITUTION to confirm LICENSEE's compliance with its obligations related to the Sublicense, LICENSEE will make available an unredacted copy of the document in a format in which further reproduction or distribution is disabled, such as electronically through a data room and/or physically through a reading room. LICENSEE agrees that any Sublicenses granted by it shall provide that the obligations to INSTITUTIONS set forth in Articles 2, 4, 6, 7, 8, 9, 10, 12, 13, and 14 and section 18.12 of this Agreement shall be binding upon the Sublicensee as if it were a party to this Agreement. Each sublicensee must be subject to a written agreement that also contains obligations, terms and conditions in favor of HHMI or the HHMI Indemnitees and, as applicable, that are substantially similar to those undertaken by LICENSEE in favor of HHMI or the HHMI Indemnitees, as applicable, under this Agreement and intended for the protection of the HHMI Indemnitees, including, without limitation, the obligations, terms and conditions regarding indemnification, insurance and HHMI's third party beneficiary status. If a material breach of any of the clauses of the forgoing provision is caused by Sublicensee, INSTITUTIONS shall have the right to require LICENSEE to terminate the Sublicense unless the material breach is cured within sixty (60) days after LICENSEE provides written notice of such material breach to the Sublicensee, provided that INSTITUTIONS agree that if Sublicensee disagrees that there has been a material breach of the Sublicense and implements dispute resolution on that matter, then the cure period shall be tolled during completion of the dispute resolution process.

3.2 Any subcontractor engaged by LICENSEE to perform for LICENSEE any of its rights and obligations under this Agreement (a "Third Party Subcontractor") shall be party to a written agreement consistent with the terms and conditions of this Agreement, including without limitation, and as applicable, those provisions pertaining to confidentiality, intellectual property rights, regulatory/safety matters, indemnification, insurance and HHMI's third party beneficiary status. In all cases, LICENSEE remains fully responsible (i) for the performance of its obligations hereunder regardless of whether such performance has been delegated to a Third Party Subcontractor, and (ii) for the actions and conduct of the Third Party Subcontractor in performance of LICENSEE's obligations.

ARTICLE IV
DILIGENCE

4.1 LICENSEE and its Sublicensees shall use commercially reasonable efforts to develop and commercialize a Licensed Product.

(a) Specifically, the LICENSEE will:

(i) **[*]** within **[*]** of the Effective Date or pay **[*]**;

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

(ii) **[*]** within **[*]** of the Effective Date or pay **[*]** to postpone this diligence milestone and the remaining diligence milestones by **[*]** one time;

(iii) **[*]** within **[*]** of the Effective Date; and

(iv) **[*]** within **[*]** of the Effective Date or pay **[*]** to postpone this diligence milestone by **[*]** one time;

(v) In the event LICENSEE fails to achieve any of the milestones above or make the relevant payment, INSTITUTIONS may treat such failure as a material breach in accordance with Section 16.4, subject to the following. Notwithstanding the above, if INSTITUTIONS determine reasonably and in good faith that the LICENSEE is using commercially reasonable efforts to develop and commercialize Licensed Product(s), INSTITUTIONS will agree to negotiate in good faith with LICENSEE to extend the diligence time requirements by a period not less than **[*]**.

LICENSEE shall not be responsible for, and the foregoing periods shall be extended to reflect, circumstances beyond the reasonable control of the LICENSEE. Such circumstances may include technical difficulties or delays in preclinical or clinical studies or regulatory processes.

(b) LICENSEE agrees to give INSTITUTIONS written notice and evidence within **[*]** days of the achievement of each of the milestones set forth in Section 4.1(a) above.

(c) LICENSEE will have delivered to INSTITUTIONS prior to the execution of this Agreement, its detailed business plan for the development of the Licensed Rights, substantially in the form attached hereto as Exhibit D. LICENSEE shall provide similar reports to INSTITUTIONS annually.

(d) LICENSEE will be solely responsible, at LICENSEE's sole cost and expense, for securing any federal (including FDA), state, or local regulatory approval necessary for commercial sale of Licensed Products ("Regulatory Approval"). INSTITUTIONS will provide reasonable cooperation through providing LICENSEE, upon LICENSEE's written request and in a timely fashion, with all documentation and information reasonably necessary to secure such Regulatory Approval. LICENSEE shall advise INSTITUTIONS, through annual reports described in Section 4.1(c) above of its program of development for obtaining said approvals.

4.2 If LICENSEE is the subject of an inquiry or inspection by a governmental authority or certification agency in relation to any Licensed Product, LICENSEE will notify INSTITUTIONS as soon as reasonably possible and keep INSTITUTIONS reasonably apprised of the results of such inspection.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE V
PAYMENTS

5.1 INSTITUTIONS acknowledge and agree that all payments to be made under or in connection with this Agreement shall be made to MSK on behalf of INSTITUTIONS, and LICENSEE does not have an obligation to make payments directly to any INSTITUTION other than MSK unless specifically agreed to otherwise by all the Parties in writing. MSK agrees to share such payments with the other INSTITUTIONS as agreed in writing among them and LICENSEE is not responsible therefor. In partial consideration of its rights hereunder, LICENSEE shall pay to MSK in the manner hereinafter provided, until the end of the Term:

(a) License Fee: LICENSEE shall pay to MSK a license issue fee of Fifty Thousand US Dollars (US$50,000) within **[*]** days of execution of this Agreement.

(b) Royalties on Licensed Products:

(x) LICENSEE shall pay to MSK a running royalty equal to **[*]** of the worldwide annual Net Sales of Licensed Products covered by a Valid Claim during the Royalty Term.

(y) LICENSEE shall pay to MSK a running royalty equal to **[*]** of the worldwide annual Net Sale of Licensed Products not covered by a Valid Claim during the Royalty Term.

(i) Such royalties shall be payable for each calendar quarter and shall be due and payable to MSK within **[*]** days after the end of each such calendar quarter.If a Licensed Product is sold in combination with other services or products (“Combination Product”), Net Sales are determined on a country-by-country basis by multiplying the Net Sales by the fraction A / (A + B) wherein “A” is the value of the Net Sales of the Licensed Product in a given country and “B” is the is the net sales of the other service(s) or product(s) of the Combination Product when sold separately during the same calendar quarter in the same country. If there is no substantial data on separate pricing, then the Parties shall agree upon the appropriate allocation of value between the products and services in the Combination Product, such agreement not to be unreasonably withheld.

(ii) Annual minimum royalty payments: LICENSEE shall pay to MSK minimum annual royalties of:

(A) **[*]** on the **[*]** anniversaries of the Effective Date;

(B) **[*]** on the **[*]** anniversaries of the Effective Date;

(C) **[*]** commencing on the **[*]** anniversary of the Effective Date and due and payable on each subsequent anniversary until the end of the Term.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Such minimum royalty payments shall be prorated for the year of issuance. The minimum royalty payments shall be credited against the earned royalty payments due and payable in respect of the same Royalty Year.

(iii) No multiple royalties shall be payable by LICENSEE including without limitation because any Licensed Product, its manufacture, use, lease, sale, import or provision is or shall be covered by more than one of the Licensed Rights granted under this Agreement.

(c) Milestones:

Milestone payments are one time payments that LICENSEE will pay to MSK for each Licensed Product as follows:

(i) **[*]** upon **[*]**;

(ii) **[*]** upon **[*]**;

(iii) **[*]** upon **[*]**;

(iv) **[*]** upon **[*]**.

(v) **[*]** upon **[*]**.

(d) Sharing of Other Consideration: Subject to subsection (e) below, LICENSEE shall pay to MSK a portion of Other Consideration received from a Sublicensee based on the date of receipt as follows:

(i) **[*]**: **[*]**

(ii) **[*]**: **[*]**

(iii) **[*]**: **[*]**

(iv) **[*]**: **[*]**

(e) If consideration is received by LICENSEE for the sublicense or other transfer of the licenses and rights granted to LICENSEE and the transaction giving rise to such consideration constitutes:

(i) **[*]** due to MSK under this Agreement.

(ii) **[*]** due to MSK under this Agreement.

Under no circumstances shall INSTITUTION'S share of Other Consideration be less than **[*]**. Also, in no circumstances shall MSK's percentage of Other Consideration be less than each other third party(ies) Other Consideration percentage.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

5.2 Payment Terms: Payments shall be due and payable **[*]** days after they are due, paid in United States dollars in New York, NY, or at such other place as MSK may reasonably designate consistent with the laws and regulations controlling in any foreign country, but not in any other currency. If any currency conversion shall be required in connection with the payment of royalties hereunder, such conversion shall be made by using the exchange rate prevailing at the JP Morgan Chase Bank on the last business day of the Contract Quarter-Year reporting period to which such royalty payments relate. The License Fee due under Section 5.1(a) above and the past patent costs in the amount of $100,254.19 due under Section 7.1 below shall be due and payable within **[*]** days after the Effective Date.

5.3 INSTITUTIONS are not-for-profit, tax-exempt, academic and research medical centers. The LICENSEE agrees that if this Agreement is subject to taxation by any governmental authority, the LICENSEE will cooperate with INSTITUTIONS in its efforts to pay only those taxes legally required by the relevant governmental authority. If any withholdings are to be withheld by the LICENSEE on any payment(s) to be made to MSK pursuant to this Agreement, then the LICENSEE will timely inform MSK of the specific withholdings in order to allow MSK to seek exemption. To the extent available to LICENSEE and relevant to the calculation of amounts due and payable under this Agreement, LICENSEE shall verify the related tax amount and payment, and shall provide:

(i) copies of tax assessments from the requesting tax authority, evidencing the amount of the assessed tax that is to be withheld, and the country and authority to whom it should be paid;

(ii) copies of tax receipts from, and tax declarations filed with, the requesting taxing authority, evidencing that the required amount was paid to the appropriate country and authority;

(iii) any other documentation to satisfy compliance with the LICENSEE's royalty reporting obligations under this Agreement; and

(iv) any other information MSK, or its auditors, may reasonably request regarding the payment of taxes.

LICENSEE agrees to provide any translations of the foregoing to the extent the original is not in English and a translation was prepared by LICENSEE.

5.4 In the event the royalties set forth in the Agreement are higher than the maximum royalties permitted by the law or regulations of a particular country, then the royalty payable for sales in such country shall equal to the maximum permitted royalty under such law or regulations. Notice of such an event shall be provided to MSK. An authorized representative of the LICENSEE shall notify MSK, in writing, within **[*]** days of discovering that such royalties are approaching or have reached the maximum amount, and shall provide MSK with written documentation regarding the laws or regulations establishing such maximum, and a translation into English.

5.5 Interest: LICENSEE shall pay to MSK interest on any amounts not paid when due. Such interest will accrue from the **[*]** day after the payment was due and payable at an annual

rate of **[*]** or the highest interest rate permitted by law, whichever is lower. The interest payment will be due and payable on the first day of each calendar month after interest begins to accrue, until full payment of all amounts due and payable MSK is made. MSK rights to receive such interest payments shall be in addition to any other rights and remedies available to MSK.

ARTICLE VI
REPORTS AND RECORDS

6.1 LICENSEE shall keep, and shall require its Affiliates and Sublicensees to keep, full, true and accurate books of account containing all particulars that may be necessary for the purpose of showing the amounts payable to MSK hereunder. Said books and records shall include, but not be limited to: Invoice registers and original invoices, product sales analysis reports, accounting general ledgers, sub-license and distributor agreements, price lists, product catalogs and marketing materials, audited financial statements and/or income tax returns, sales tax returns, inventory and production records and shipping documents. Said books and records shall be maintained for a period of no less than **[*]** years following the period to which they pertain. Such records shall include original data files used to prepare the submitted royalty reports for the term of this Agreement, and at least annually, MSK or their agents shall have the right once per year upon written notice to inspect such books and records for the purpose of verifying LICENSEE's royalty statement or compliance in other respects with this Agreement. Such inspections shall be during normal working hours of LICENSEE. Should such inspection lead to the discovery of an underpayment of greater than **[*]** of the amount owed for the relevant calendar year, LICENSEE agrees to pay all costs for the inspection, in addition to repaying the underpayment with interest.

If the audit determines an error that is due to misinterpretation of the license agreement language or if the error results from the application of an incorrect accounting or clerical methodology, LICENSEE shall be entitled to correct such errors without penalty. Any additional royalties due from the correction of errors from the prior periods will not be subject to late payment interest as called for in Article 5 of the Agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

6.2 Commercialization Reports: LICENSEE, within **[*]** days of the end of each Contract Quarter-Year beginning after First Commercial Sale of a Licensed Product, shall deliver to MSK true and accurate reports setting forth the Net Sales for the prior Contract Quarter-Year. The reports shall include at least the following information, to be itemized per Licensed Product and/ or Licensed Service by country of sales origin:

(a) Extended sales dollars;

(b) Royalty rate;

(c) Extended royalty dollars due;

(d) the portion of Net Sales that was received from Sublicensees; and

(e) any Other Consideration received in the prior quarter.

6.3 With each such report submitted, LICENSEE shall pay to MSK the royalties due and payable under this Agreement. If no royalties shall be due, LICENSEE shall so report. In addition, LICENSEE shall also submit annually a report summarizing LICENSEE's research, development, commercialization and other business progress during the prior year that relates to Licensed Products, and its projections of activity anticipated for the next year.

6.4 Milestone payments shall be reported and paid when due.

6.5 LICENSEE agrees to forward to MSK a copy of all fully executed Sublicense agreements and any reports received by LICENSEE from its sublicensees during the preceding Royalty Year (to the extent required under Section 3.1 hereof).

ARTICLE VII
PATENT PROSECUTION

7.1 Patent Cost Reimbursement. LICENSEE shall reimburse during the term of the Agreement reasonable out-of-pocket expenses borne by INSTITUTIONS for filing, prosecuting and maintaining Patent Rights through an independent third-party counsel of INSTITUTIONS' choice, reasonably acceptable to LICENSEE. LICENSEE shall reimburse INSTITUTIONS for all historic patent costs related to the Patent Rights within **[*]** days of the Effective Date.

7.2 INSTITUTIONS shall diligently file, prosecute, protect, and maintain the Patent Rights in the United States and in such countries as are determined by INSTITUTIONS and agreed to by LICENSEE or as may be designated by LICENSEE in a written notice to INSTITUTIONS within a reasonable time in advance of the required foreign filing dates, using independent third-party counsel. If LICENSEE does not agree to bear the expense of filing or maintaining patent applications in any foreign countries in which INSTITUTIONS wish to obtain patent protection, then INSTITUTIONS may file and prosecute such applications at its own expense and any license granted hereunder shall exclude such countries. If LICENSEE requests filings in additional countries or jurisdictions, INSTITUTIONS shall comply at LICENSEE's cost.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

7.3 LICENSEE shall have the opportunity to advise and cooperate with INSTITUTIONS in the prosecution, filing and maintenance of such patents. INSTITUTIONS shall provide LICENSEE with copies of all relevant patent prosecution documentation so that LICENSEE may be informed and to give LICENSEE reasonable opportunity to advise INSTITUTIONS on the continuing prosecution, and LICENSEE agrees to keep this documentation confidential.

7.4 Patent counsel remains counsel to INSTITUTIONS with an appropriate contract (and shall not jointly represent LICENSEE unless mutually agreed to in writing by the Parties).

7.5 The Parties agree that they share a common legal interest in obtaining valid, enforceable patents and that LICENSEE will maintain confidential all information received pursuant to this Article 7.

7.6 In the event INSTITUTIONS license Patent Rights to third party(ies), INSTITUTIONS shall notify LICENSEE and patent expenses described above shall be shared among the Patent Right licensees according to the rights granted to each licensee.

ARTICLE VIII
INFRINGEMENT

8.1 Monitoring. LICENSEE shall use commercially reasonable efforts to monitor third party infringement of the Patent Rights in the Field of Use. LICENSEE shall keep INSTITUTIONS timely informed of any activities by LICENSEE in regard hereto

8.2 Actions. Each Party shall inform the other promptly in writing of any alleged commercially material infringement of the Patent Rights by a third party, and of any available evidence thereof. This Section sets forth the parties' right of enforcement and defense in relation to the Patent Rights.

(a) First Right. LICENSEE (and its Sublicensees) shall have the first right, but not the obligation, to control the conduct and resolution of any adversarial legal proceeding relating to the Patent Rights (including without limitation any declaratory judgment action, patent infringement action or opposition) during the Term and will be responsible for all expenses related thereto. INSTITUTIONS shall join in any such action, at LICENSEE's request and expense.

(b) Secondary Right. If LICENSEE does not wish to exercise either of the foregoing rights in (a), LICENSEE shall provide INSTITUTIONS with written notice no later than **[*]** calendar days after receipt of notification of alleged infringement, that LICENSEE declines such right, and after receiving such notice, INSTITUTIONS shall have the secondary right to undertake such infringement action or defend against such challenge and will in that case be responsible for all expenses related thereto. INSTITUTIONS are not obligated to take part.

8.3 Cooperation. To the extent either Party (or its Sublicensees) conducts any legal proceedings in relation to the enforcement or defense of Patent Rights in the Field of Use, it shall keep the other Party reasonably informed of such proceedings. The other Party shall cooperate in

all respects and, to the extent reasonably possible, have its employees testify when requested and make available relevant records, papers, information, samples, specimens, and the like at the expense of the requesting party. Notwithstanding anything to the contrary: (a) in any action conducted by INSTITUTIONS, INSTITUTIONS may use the name of LICENSEE as party plaintiff, and LICENSEE will join any such action as may be requested by INSTITUTIONS; (b) in any action conducted by LICENSEE, LICENSEE may affect joinder of INSTITUTIONS, if INSTITUTIONS are indispensable or necessary parties under the applicable law; and (c) no settlement, consent judgment or other voluntary final disposition of any action by LICENSEE that admits or impairs the invalidity or unenforceability of the Patent Rights may be entered into without the prior written consent of INSTITUTIONS, which consent shall not unreasonably be withheld.

8.4 Costs and Recoveries. All costs of any action by either Party to enforce, or to defend against a challenge to, the Patent Rights shall be borne by such party, which shall keep any sums recovered or obtained in connection therewith (whether as damages, reasonable royalties, license fees, or otherwise in judgment or settlement derived therefrom), except that in the case of actions commenced by LICENSEE, the excess of such recoveries after payment of reasonable costs and expenses shall be treated as Net Sales subject to INSTITUTIONS' rights under this Agreement to collect royalties thereon. For the avoidance of doubt, LICENSEE may not otherwise deduct, from Net Sales payable on such overage any portion of LICENSEE'S internal costs or expenses related to any investigation, enforcement, defense, judgment or settlement of any such actions.

8.5 Third Party Patents. In the event LICENSEE is sued for patent infringement or, threatened with such suit, it shall promptly notify INSTITUTIONS. If LICENSEE is permanently enjoined from exercising its license rights granted hereunder LICENSEE may terminate this Agreement upon **[*]** days prior written notice to INSTITUTIONS. In any such action, LICENSEE shall be fully responsible for all its costs, including expenses, judgments and settlements.

8.6 Patent Challenges by LICENSEE. LICENSEE will provide written notice to INSTITUTIONS at least **[*]** months prior to LICENSEE or any of its Affiliates bringing any legal proceeding to challenge the validity or enforceability any claim included in the Patent Rights (a "Patent Challenge"), including: (a) stating the basis for such Patent Challenge; and (b) providing a copy of all relevant prior art or other materials used as the basis for such Patent Challenge. In the event that LICENSEE brings a Patent Challenge: (i) INSTITUTIONS may at any time thereafter terminate this Agreement upon written notice to LICENSEE; (ii) during pendency of the Patent Challenge, all license fees, milestone payments and royalties due under this Agreement will be doubled; and (iii) in the event of an unsuccessful Patent Challenge by LICENSEE, (A) LICENSEE shall reimburse INSTITUTIONS for all reasonable costs and attorney fees that INSTITUTIONS incurs in connection with such Patent Challenge, and (B) starting on the date (if at all) that the Patent Challenge is determined to be Unsuccessful, all license fees, milestone payments and royalty rates due as per this Agreement will be trebled. As used herein, "Unsuccessful" means that, upon the conclusion of the action before the court or other governmental authority in which the Patent Challenge was brought, LICENSEE failed to obtain a judgment that all of the patent claims within the Patent Challenge were invalid or unenforceable.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE IX
CONFIDENTIALITY

Each Party agrees that Confidential Information of the other Party disclosed to it or to its employees under this Agreement shall for **[*]** years after the Term:

(a) be used only in connection with the legitimate purposes of this Agreement;

(b) be disclosed only to those who have a need to know it in connection with the Agreement; and

(c) be safeguarded with the same care normally afforded confidential information in the possession, custody or control of the party holding the Confidential Information but no less than reasonable.

(d) not be disclosed, divulged or otherwise communicated except with the express written consent of the disclosing party.

The foregoing shall not apply when, after and to the extent the Confidential Information disclosed:

(i) can be demonstrated to have been in the public domain prior to the date of the disclosure; or

(ii) enters the public domain through no fault of the receiving party; or

(iii) was already known to the receiving party at the time of disclosure as evidenced by written records in the possession of the receiving party prior to such time; or

(iv) was subsequently received by the receiving party in good faith from a third party without breaching any confidential obligation between the third party and the disclosing party; or

(v) was independently developed, as established by tangible evidence, by the receiving party without reference to information or material provided by the disclosing party; or

(vi) is required to be disclosed for minimal compliance with court orders, statutes or regulations or INSTITUTIONS' audits for compliance with such regulatory requirements, provided that prior to any such disclosure to the extent reasonably practicable, the party from whom disclosure is sought shall promptly notify the other party and shall afford such other party the opportunity to challenge or otherwise lawfully seek limits upon such disclosure of Confidential Information.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE X
INDEMNIFICATION, PRODUCT LIABILITY

10.1 LICENSEE will indemnify, defend and hold harmless (and cause its sublicensees to so indemnify, defer and hold harmless) INSTITUTIONS and their respective trustees, directors, officers, medical and professional staff, employees, students, and agents and their respective successors, heirs, and assigns (each an "Indemnitee"), against all third party claims and expenses (including legal expenses and reasonable attorney's fees) arising out of the death of or injury to any person or persons, or out of any damage to property, against any infringement or misappropriation of intellectual property and against any other claim, proceeding, demand, expense and liability of any kind whatsoever resulting from the production, manufacture, sale, use, lease, consumption, or advertisement of Licensed Products hereunder or from a breach by LICENSEE of any of its representations, warranties or obligations under this Agreement, provided however, that LICENSEE will not be obligated to indemnify, defend and hold harmless any Indemnitee against any claim, proceeding, demand, expense, or liability to the extent it arises out of, results from, or is increased by (a) the material breach of this Agreement by INSTITUTIONS, or (b) INSTITUTIONS' gross negligence or willful misconduct. The Indemnitee will promptly give notice to LICENSEE of any claims or proceedings which might be covered by this Section 10.1 and LICENSEE will have the right to defend the same, including selection of counsel and control of the proceedings; provided that LICENSEE will not, without the written consent of the Indemnitee, settle or consent to the entry of any judgment with respect to such third party claims (i) that does not release the Indemnitee from all liability with respect to such third party claim, or (ii) which may materially adversely affect the Indemnitee or under which the Indemnitee would incur any obligation or liability, other than one as to which LICENSEE has an indemnity obligation hereunder. INSTITUTIONS agree to cooperate and provide reasonable assistance to such defense at LICENSEE's expense. INSTITUTIONS at all times reserve the right to select and retain counsel of its own at its own expense to defend INSTITUTIONS's interests.

10.2 For the term of this Agreement, upon the commencement of clinical use, production, sale, or transfer, whichever occurs first, of any Licensed Product, LICENSEE shall obtain and carry in full force and effect general liability insurance that shall protect LICENSEE, INSTITUTIONS, and HHMI in regard to events covered by Section 10.1 above and Section 10.4 below. Such insurance shall be written by a reputable insurance company, shall list INSTITUTIONS and HHMI as an additional named insured thereunder, shall be endorsed to include liability coverage, and shall provide **[*]** days' prior notice to INSTITUTIONS prior to any cancellation or material change that would result in LICENSEE's coverage being less than the coverage required by this provision. The limits of such insurance shall not be less than two million dollars ($2,000,000) per occurrence with an annual aggregate of five million dollars ($5,000,000) for personal injury, death or property damage. LICENSEE shall provide INSTITUTIONS with Certificates of Insurance evidencing the same and provide INSTITUTIONS with prior written notice of any material change in or cancellation of such insurance.

10.3 This Agreement and the licenses granted herein shall immediately and automatically terminate without notice in the event LICENSEE or its Sublicensees or other party acting under authority of LICENSEE, fails to obtain the insurance required under Section 10.2, or if the insurance lapses or is cancelled. A termination occurring under this paragraph shall occur

and become effective at the time such insurance coverage ends or becomes required and is not obtained, and LICENSEE or its Sublicensees shall then have no right to complete production and sale of Licensed Products. Nothing herein shall be construed to release either party from any obligation that matured prior to the effective date of such termination. Notwithstanding the foregoing, in the **[*]** month period subsequent to the date of such an automatic termination of this Agreement by operation of this paragraph, to the extent that such rights are still available for licensing, LICENSEE shall have the right to reinstate the effectiveness of this Agreement by obtaining the required insurance, whereupon this Agreement shall automatically become effective as of the date of reinstatement of said insurance, and shall remain in full force and effect without any further action of the parties.

10.4 HHMI and its trustees, officers, employees, and agents (collectively, "HHMI Indemnitees"), will be indemnified, defended by counsel acceptable to HHMI, and held harmless by LICENSEE from and against any liability, cost, expense, damage, deficiency, loss, or obligation, of any kind or nature (including, without limitation, reasonable attorneys' fees and other costs and expenses of defense) based upon, arising out of, or otherwise relating to any third-party claim (collectively, "Claims"), based upon, arising out of, or otherwise relating to this Agreement or any sublicense, including without limitation any cause of action relating to product liability. The previous sentence will not apply to any Claim that is determined with finality by a court of competent jurisdiction to result solely from the gross negligence or willful misconduct of an HHMI Indemnitee. Notwithstanding any other provision of this Agreement, Company's obligation to defend, indemnify and hold harmless the HHMI Indemnitees under this paragraph will not be subject to any limitation or exclusion of liability or damages or otherwise limited in any way.

ARTICLE XI
REPRESENTATIONS, WARRANTIES AND DISCLAIMERS

11.1 Representations and Warranties of LICENSEE

(a) LICENSEE hereby represents and warrants to INSTITUTIONS that as of the Effective Date, to its knowledge, the execution and performance of LICENSEE's obligations under this Agreement does not conflict with, cause a default under, or violate any existing contractual obligation that may be owed by LICENSEE to any third party.

(b) LICENSEE hereby represents, warrants and covenants to INSTITUTIONS that all Licensed Products produced under the licenses granted herein will be manufactured in all material respects in accordance with applicable federal, state and local laws, rules and regulations, including, without limitation, in all material respects in accordance with all applicable rules and regulations of the FDA.

(c) LICENSEE hereby represents and warrants to INSTITUTIONS that LICENSEE is a corporation duly organized, validly existing and in good standing and has all requisite corporate power and authority to execute and deliver this agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

11.2 Representations and Warranties of INSTITUTIONS

(a) INSTITUTIONS hereby represent and warrant to LICENSEE that to the best of the INSTITUTIONS' knowledge, they are the sole owners of the Patent Rights and, as of the Effective Date, to the best of INSTITUTIONS knowledge, there is no pending or threatened infringement claim related to any of the Patent Rights granted hereunder. INSTITUTIONS have the right to grant LICENSEE all the rights granted hereunder and have paid, and will pay, in full any amounts due to any relevant inventors in consideration of the PATENT RIGHTS, including any required to be paid under applicable law.

11.3 Disclaimer.

EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, INSTITUTIONS MAKE NO REPRESENTATIONS, NO WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, VALIDITY OF LICENSED RIGHTS, CLAIMS ISSUED OR PENDING OR THAT THE MANUFACTURE, SALE OR USE OF THE LICENSED PRODUCTS WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER PROPRIETARY RIGHTS. IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, SPECIAL, INCIDENTAL, OR PUNITIVE DAMAGES ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO LOSS OF ANTICIPATED PROFIT, FROM ITS PERFORMANCE OR NONPERFORMANCE OF ITS OBLIGATIONS UNDER THIS AGREEMENT.

ARTICLE XII
EXPORT CONTROLS

It is understood that INSTITUTIONS are subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended and the Export Administration Act of 1979), and that its obligations hereunder are contingent on compliance with applicable United States export laws and regulations. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances by LICENSEE that LICENSEE shall not export data or commodities to certain foreign countries without prior approval of such agency. INSTITUTIONS neither represent that a license shall not be required nor that, if required, it shall be issued.

ARTICLE XIII
NON-USE OF NAMES

Neither Party shall use the name of the other Party, nor of any of their employees, nor any adaptation thereof, in any press release, advertising, promotional or sales literature without prior written consent obtained from the other Party in each case. During and after the term of this Agreement, neither Party shall utilize or register any trademark, service mark, tradename, or other trade identifier of the other Party, or that contains (in whole or in part) or is confusingly

similar to the foregoing, or is a translation of any of the foregoing, without the prior express written consent of the other Party. Notwithstanding the above, each Party may freely disclose in the ordinary course of business (but not in a press release, except with prior approval) that it has entered into this Agreement. LICENSEE acknowledges that under HHMI policy, LICENSEE may not use the name of HHMI or of any HHMI employee (including Dr. Tuschl) in a manner that reasonably could constitute an endorsement of a commercial product or service; but that use for other purposes, even if commercially motivated, is permitted provided that (1) the use is limited to accurately reporting factual events or occurrences, and (2) any reference to the name of HHMI or any HHMI employees in press releases or similar materials intended for public release is approved by HHMI in advance.

ARTICLE XIV
PUBLICATION

LICENSEE recognizes and accepts that under INSTITUTIONS' mission as academic medical centers, INSTITUTIONS and their investigators must have a meaningful right to publish without LICENSEE's approval or editorial control. INSTITUTIONS reserve the right to publish the scientific findings from research related to Licensed Rights.

ARTICLE XV
ASSIGNMENT

No party may assign or delegate any or all of its rights or obligations under this Agreement, or transfer this Agreement, without the prior written consent of the other party, except that (a) either party shall have the right to assign any of its rights, delegate any of its obligations, or transfer this Agreement without such consent (i) to an Affiliate or (ii) as part of a merger or acquisition or other transfer of all or substantially all of the assets of its business to which this Agreement pertains, and (b) INSTITUTIONS may without consent of LICENSEE freely assign all or any portion of the payments due under this Agreement to a Third Party. Additionally, LICENSEE shall, on written prior consent of INSTITUTIONS (such consent not to be unreasonably withheld or delayed), be permitted to assign this Agreement in connection with the sale or transfer of a limited portion of its business to which this Agreement pertains. Any assignment, delegation or transfer by any party without the consent of the other party shall be void and of no effect.

ARTICLE XVI
TERMINATION

16.1 Term. This Agreement commences on the Effective Date and shall remain in effect, until the end of the Royalty Term in all countries in the Territory, as provided in Section 1.13 unless sooner terminated in accordance with the provisions herein. After expiration of this Agreement or the valid termination of this Agreement by LICENSEE pursuant to Section 16.5, the licenses granted to LICENSEE hereunder shall survive and are hereby fully paid.

16.2 Bankruptcy or Cessation/Enjoinder of Business. INSTITUTIONS may terminate this Agreement upon written notice to LICENSEE if: (a) a petition in bankruptcy is filed against LICENSEE and is consented to, acquiesced in or remains undismissed for sixty (60) days; (b)

LICENSEE makes a general assignment for the benefit of creditors, or a receiver is appointed for LICENSEE, and LICENSEE does not return to solvency before the expiration of a thirty (30) day period; (c) LICENSEE ceases to do business; or (d) if the enactment of any law, decree, or regulation, or the issuance of any order (including, but not limited to, an injunction), by any governmental authority renders it impracticable or impossible for LICENSEE to perform any of its obligations hereunder.

16.3 Nonpayment. If LICENSEE fails to pay INSTITUTIONS fees, royalties, ongoing patent expenses or other amounts payable hereunder, and, following receipt of notice from INSTITUTIONS of such failure, such payments remain past due for more than [*] days after the date due and payable, and LICENSEE fails to pay any amounts [*], INSTITUTIONS shall have the right to terminate this Agreement on [*] days' prior written notice, unless LICENSEE pays to INSTITUTIONS within the [*] day notice period, all fees, royalties and patent expenses, together with any interest due and payable thereon, [*].

16.4 Breach. In addition to any other termination right specified in this Agreement, either party may terminate this Agreement upon ninety (90) days' written notice (specifying the breach to be cured and demanding it be cured) to the other party, if such other party materially breaches a provision of this Agreement, unless LICENSEE cures any such breach prior to the expiration of the ninety (90) day period; or

16.5 Termination by LICENSEE. LICENSEE may terminate this Agreement, in whole or in part, without cause on thirty (30) days' notice to INSTITUTIONS.

16.6 Product Sell Off. In the event of termination of this Agreement other than by INSTITUTIONS pursuant to Section 16.4, LICENSEE and its Sublicensees shall have the right for **[*]** months thereafter to dispose of all Licensed Products then in its inventory, contingent upon LICENSEE: (a) providing to INSTITUTIONS an inventory identifying the volumes of Licensed Products on hand with LICENSEE that were manufactured or in process prior to the termination date, certified and signed by an officer of the LICENSEE; and (b) continuing to submit all reports and make all payments (including, without limitation, royalties) that would have been required in accordance with this Agreement, if this Agreement had not terminated.

16.7 [*]. The Parties shall negotiate all matters of joint concern in good faith, with the intention of resolving issues between them in a mutually satisfactory manner. If a disagreement between the Parties cannot be resolved through informal discussions, it shall be deemed a "Dispute" upon one party (the "Declaring Party") declaring, by the delivery of a written notice (the "Notice") to the other party, that a Dispute exists. The Notice shall specify the nature and cause of the Dispute and the action that the Declaring Party deems necessary to resolve the Dispute. Following receipt of the Notice, the parties shall use good faith efforts to resolve the Dispute, including making personnel with appropriate decision-making authority available to the other Party to discuss resolution of the Dispute. If a Dispute is not resolved within **[*]** days of the date of the Notice, then the Declaring Party and the other Party shall resolve the Dispute in accordance with the [*] procedures below. The Parties agree that [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

16.8 Effect on Sublicensees. All sublicenses, and rights of Affiliates and Sublicensees, will terminate as of the effective date of termination of this Agreement, provided, however, that if at the effective date of termination any Sublicensee is in good standing with regard to its obligations under its Sublicense and agrees to assume the applicable obligations of LICENSEE hereunder, then, at the request of the Sublicensee, such Sublicense shall survive such termination or expiration of this Agreement and be assigned to INSTITUTIONS; provided, in such case the obligations of INSTITUTIONS to Sublicensee shall not exceed the obligations of INSTITUTIONS to LICENSEE under the Agreement and obligations of Sublicensee to INSTITUTIONS shall not exceed the obligations of LICENSEE to INSTITUTIONS under the Agreement.

16.9 Survival. Upon any expiration or termination of this Agreement, the following shall survive:

(a) any provision expressly indicated to survive, such survival to extend for the period indicated or indefinitely, or if no survival period is indicated;

(b) any liability which any Party has accrued prior to expiration or termination;

(c) LICENSEE's reporting and payment obligations for activities occurring prior to expiration or termination or after termination); and

(d) ARTICLE 1 (entitled Definitions), ARTICLE 9 (entitled Confidentiality), ARTICLE 10 (entitled Indemnification, Product Liability), ARTICLE 11 (entitled Representation, Warranties and Disclaimers), ARTICLE 13 (entitled Non-Use of Names), ARTICLE 17 (entitled Notices and Other Communications), and ARTICLE 18 (entitled Miscellaneous Provisions) and Sections 11.3 (entitled Disclaimer), 16.8 (entitled Effect on Sublicensees), 16.9 (entitled Survival), and 18.12 (entitled HHMI Third-Party Beneficiary).

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ARTICLE XVII
NOTICES AND OTHER COMMUNICATIONS

Except for payments, each notice or other communication pursuant to this Agreement shall be sufficiently made or given when delivered by courier or other means providing proof of delivery to such party at its address below or as it shall designate by written notice given to the other party:

In the case of MSK:

Memorial Sloan Kettering Cancer Center
Office of Technology Development

If by mail:

1275 York Ave., Box 524
New York, NY 10065

If by courier:

600 Third Avenue, 16th floor
New York, NY 10016
Attn: Vice President, Technology Development
Tel: **[*]** (not for notice)
Fax: **[*]** (not for notice)

With copies to:

Memorial Sloan Kettering Cancer Center
Office of General Counsel

If by mail:

1275 York Ave.
New York, NY 10065

If by courier:

1275 York Ave.
New York, NY 10065
Attn: General Counsel
Tel: **[*]** (not for notice)
Fax: **[*]** (not for notice)

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

In the case of LICENSEE:

Aduro Biotech, Inc.
626 Bancroft Way, 3C
Berkeley, California 94710
Attention: CEO and President

ARTICLE XVIII
MISCELLANEOUS PROVISIONS

18.1 Governing Law; Disputes. This Agreement shall be construed, governed, interpreted and applied in accordance with the laws of the State of New York, without giving effect to any choice/conflict of law principles, except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent was filed or granted. Disputes arising from this Agreement shall be resolved as set forth in Section 16.7.

18.2 Assignment. No party may assign or delegate any or all of its rights or obligations under this Agreement, or transfer this Agreement, without the prior written consent of the other party, except that (a) either party shall have the right to assign any of its rights, delegate any of its obligations, or transfer this Agreement without such consent (i) to an Affiliate or (ii) as part of a merger or acquisition or other transfer of all or substantially all of the assets of its business to which this Agreement pertains, and (b) INSTITUTIONS may without consent of LICENSEE freely assign all or any portion of the payments due under this Agreement to a Third Party. Any assignment, delegation or transfer by any party without the consent of the other party shall be void and of no effect.

18.3 Severability. Except to the extent a provision is stated to be essential, or otherwise to the contrary, the provisions of this Agreement are severable, and in the event that any provisions of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.

18.4 Marking. LICENSEE agrees to legibly mark the Licensed Products (and packaging, marketing materials, package inserts, patient information leaflets, and other documentation therefore) sold in the United States with all applicable United States patent numbers, and other notices relating to INSTITUTIONS' Patent Rights, such markings and notices to be in accordance with any written guidelines that may be provided by INSTITUTIONS from time to time. All Licensed Products shipped to or sold in other countries shall be marked in such a manner as to conform to the patent laws and practice of the country of manufacture or sale. In connection with such patent marking, LICENSEE shall also include a statement that the Licensed Product is made under license from INSTITUTIONS.

18.5 Waiver. The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

18.6 Counterparts. This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be an original and all such counterparts shall together constitute but one and the same agreement.

18.7 Force Majeure. Neither party shall lose any rights hereunder or be liable to the other party for damages or losses (except for payment obligations) on account of failure of performance by the defaulting party to the extent such the failure arises from circumstances outside the reasonable control of the party, which may include war, strike, fire, act of God, earthquake, flood, lockout, embargo, governmental or regulatory acts or orders or restrictions (except if imposed due to or resulting from the party's violation of law or regulations), market disruptions, recession, depression, monetary controls, and failure of suppliers; provided, however, that the affected party is using reasonable efforts to bring about an end to the force majeure or to mitigate its effects, to the extent such efforts are possible and commercially reasonable. In connection therewith, in no event shall a party be required to settle any labor dispute or disturbance.

18.8 Further Assurances. At any time or from time to time on and after the date of this Agreement, INSTITUTIONS shall at the written request of LICENSEE execute, and deliver or cause to be delivered, all such consents, documents or further instruments required by law to register or confirm the licenses granted in this Agreement.

18.9 Entire Agreement. This Agreement, including its attachments and exhibits (which attachments and exhibits are incorporated herein by reference), constitutes the entire understanding among and between the parties with respect to the subject matter hereof, and supersedes all prior agreements and communications, whether written, oral or otherwise. This Agreement may only be modified or supplemented in a writing expressly stated for such purpose and signed by the parties to this Agreement.

18.10 Relationship between the Parties. The relationship between the parties under this Agreement is that of independent contractors. Nothing contained in this Agreement shall be construed to create a partnership, joint venture or agency relationship between any of the parties. No party is a legal representative of any other party, and no party can assume or create any obligation, liability, representation, warranty or guarantee, express or implied, on behalf of another party for any purpose whatsoever.

18.11 Construction and Interpretation. Words (including defined terms) denoting the singular shall include the plural and vice versa. The words "hereof", "herein", "hereunder" and words of the like import when used in this Agreement shall refer to this Agreement as a whole, and not to any particular provision of this Agreement. The term "include" (and any variant thereof), and the giving of examples, shall not be construed as terms of limitation unless expressly indicated by the context in which they is used. The headings in this Agreement shall not affect its interpretation. Except as expressly provided herein, the rights and remedies herein provided shall be cumulative and not exclusive of any other rights or remedies provided by law or otherwise. Each of the parties has had an opportunity to consult with counsel of its choice. Each provision of this Agreement shall be construed without regard to the principle of contra proferentum. If any provision of this Agreement is held to be invalid or unenforceable the validity of the remaining

provisions shall not be affected. The parties shall replace the invalid or unenforceable provision by a valid and enforceable provision closest to the intention of the parties when signing this Agreement. This Agreement was negotiated, and shall be construed and interpreted, exclusively in the English language.

18.12 HHMI Third-Party Beneficiary. HHMI is not a party to this Agreement and has no liability to any licensee, sublicensee, or user of anything covered by this Agreement, but HHMI is an intended third-party beneficiary of this Agreement and certain of its provisions are for the benefit of HHMI and are enforceable by HHMI in its own name.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, authorized representatives of the parties have signed and dated this Agreement below.

LICENSEE

By: /s/ Gregory W. Schafer
Name: Gregory W. Schafer
Title: COO

Date: December 18, 2014

MEMORIAL SLOAN KETTERING CANCER CENTER

By: /s/ Gregory Raskin
Name: Gregory Raskin, MD
Title: Vice President
Technology Development

Date: December 18, 2014

THE ROCKEFELLER UNIVERSITY

By: /s/ Kathleen A. Deni
Name: Kathleen A. Denis, Ph.D.
Title: Associate VP, Technology Transfer

Date: December 19, 2014

RUTGERS UNIVERSITY

By: /s/ S. David Kimball
Name: S. David Kimball
Title: Associate Vice President, Research
Commercialization

Date: 12/22, 2014

THE UNIVERSITY OF BONN

By: /s/ Rüdiger Mull
Name: Rüdiger Mull
Title: Rheinische
Friedrich-Wilhelms-Universität
Der Kanzler

Date: December 19, 2014

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit A

Patent Rights

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit B

“Know-How” Related to Licensed Cyclic Dinucleotide (CDN) Structures

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit C

Aduro Proprietary Cyclic Dinucleotide Structures

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit D
Development Plan

<8 pages omitted>

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit 10.29

MANUFACTURING SERVICES AGREEMENT

This Manufacturing Services Agreement (this "**Agreement**") is made as of August 6, 2013, (the "**Effective Date**") between **Lonza Walkersville, Inc.,** a Delaware corporation having its principal place of business at 8830 Biggs Ford Road, Walkersville, Maryland 21793 ("**LWI**"), and **Aduro BioTech, Inc.,** a Delaware corporation located at 626 Bancroft Way, 3C, Berkeley, CA 94710-2224 ("**CLIENT**") (each of LWI and CLIENT, a "**Party**" and, collectively, the "**Parties**").

RECITALS

A. LWI operates a multi-client production facility located at 8830 Biggs Ford Road, Walkersville, Maryland 21793 (the "**Facility**").

B. CLIENT desires to have LWI produce a product containing human cells and intended for therapeutic use in humans, and LWI desires to produce such product.

C. CLIENT desires to have LWI conduct work according to individual Statement of Work, as further defined in Section 1.37 below.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises and covenants hereinafter set forth, and other good and valuable consideration, the receipt and sufficient of which is acknowledged by the Parties, LWI and CLIENT hereby agree as follows.

AGREEMENT

1. DEFINITIONS

When used in this Agreement, capitalized terms will have the meanings as defined below and throughout the Agreement. Unless the context indicates otherwise, the singular will include the plural and the plural will include the singular.

1.1 "**Acceptance Period**" shall have the meaning set forth in Section 5.2.2.

1.2 "**Affiliate**" means, with respect to either Party, any other corporation or business entity that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with such Party. For purposes of this definition, the term "control" and, with correlative meanings, the terms "controlled by" and "under common control with" means direct or indirect ownership of more than fifty percent (50%) of the securities or other ownership interests representing the equity voting stock or general partnership or membership interest of such entity or the power to direct or cause the direction of the management or policies of such entity, whether through the ownership of voting securities, by contract, or otherwise.

1.3 "**Applicable Laws**" means all applicable laws, statutes, regulations, guidelines, guidance and ordinances of the relevant regulatory authorities, including cGMP, in or of the United States and the European Union if agreed in the relevant Statement of Work.

1.4 "**Batch**" means a specific quantity of Product that is intended to have uniform character and quality, within specified limits, and is produced according to a single manufacturing order during the same cycle of manufacture.

1.5 "**Batch Documentation**" has the meaning set forth in Section 5.2.1.

1.6 "**Batch Record**" means the production record pertaining to a Batch.

1.7 "**cGMP**" means, as amended from time to time, the regulatory requirements for current good manufacturing practices promulgated by the FDA under 21 CFR Parts 210 and 211, and, as applicable, Guide to Good Manufacturing Practices for Medicinal Products as promulgated under European Directive 91/356/EEC.

1.8 "**Change Order**" has the meaning set forth in Section 2.2.

1.9 "**CLIENT Development Materials**" has the meaning set forth in Section 2.3.

1.10 "**CLIENT New IP**" has the meaning set forth in Section 11.1.3.

1.11 "**CLIENT Personnel**" has the meaning set forth in Section 4.6.1.

1.12 "**CLIENT Process**" has the meaning set forth in Section 11.1.2.

1.13 "**CLIENT Technology Transfer**" means the transfer of documentation, specifications, and production process by CLIENT to LWI for the development of the Master Production Record for the manufacturing of the Product specifically for the CLIENT.

1.14 "**Confidential Information**" has the meaning set forth in Section 10.1.

1.15 "**Disapproval Notice**" has the meaning set forth in Section 5.2.3.

1.16 "**Delivery Period**" has the meaning set forth in Section 4.3.

1.17 "**Draft Plan**" has the meaning set forth in Section 4.1.

1.18 "**FDA**" means the U.S. Food and Drug Administration, and any successor agency thereof.

1.19 "**Intellectual Property**" means, with respect to a Party, all its worldwide rights to patents, copyrights, trade secrets, know-how and all other intellectual property rights, including all applications and registrations with respect thereto, but excluding all trademarks, trade names, service marks, logos and other corporate identifiers.

1.20 "**Losses**" has the meaning set forth in Section 15.1.

1.21 "**LWI Intellectual Property**" means the proprietary Intellectual Property of LWI, including, but without limitation, LWI New IP and LWI Operating Documents.

1.22 "**LWI New IP**" has the meaning set forth in Section 11.1.4.

1.23 "**LWI Operating Documents**" means LWI's proprietary standard operating procedures, standard manufacturing procedures, raw material specifications, protocols, validation documentation, and supporting documentation used by LWI, such as environmental monitoring, for operation and maintenance of the Facility and LWI equipment used in the process of producing the Product, excluding any of the foregoing that are unique to the manufacture of Product.

1.24 "**LWI Parties**" has the meaning set forth in Section 15.2.

1.25 "**Master Production Record**" means the documentation developed by LWI that contains a detailed description of the Process and any other instructions to be followed by a party in the production of the Product, which record meets the reasonable requirements of CLIENT and is approved by the CLIENT in writing.

1.26 "**Materials**" means all raw materials and supplies, including without limitation cell lines, to be used in the production of a Product.

1.27 "**Process**" means the manufacturing process for the Product developed by LWI pursuant to the terms of this Agreement.

1.28 "**Product**" has the meaning set forth in a Statement of Work.

1.29 "**Product Warranties**" means those warranties relating to the Product or Process specifically set forth in Section 5.2.2.

1.30 "**Production Rerun**" has the meaning set forth in Section 5.4.1.

1.31 "**Production Term**" has the meaning set forth in Section 4.2.

1.32 "**Quality Agreement**" means the Quality Agreement entered into by the Parties simultaneously with the execution hereof relating to a Product.

1.33 "**Regulatory Approval**" means the approval by the FDA to market and sell the Product in the United States.

1.34 "**Remaining CLIENT Property**" has the meaning set forth in Section 7.2.

1.35 "**SOP**" means a standard operating procedure.

1.36 "**Specifications**" means the Product specifications set forth in the Statement of Work or as modified by the Parties in connection with the production of a particular Batch of Product hereunder.

1.37 "**Statement of Work**" means a plan to develop a Process or Product that is executed by the Parties and attached hereto as Appendix A or later becomes attached through an amendment by the Parties. The first Statement of Work, which is attached hereto, shall be numbered Appendix A-1 and, when executed and delivered by the Parties, is hereby incorporated and made a part of this Agreement. It is contemplated that each separate project shall have its own Statement of Work. As each subsequent Statement of Work is agreed to by the Parties, each shall state that it is to be incorporated and made a part of this Agreement and shall be consecutively numbered as A-2, A-3, etc.

1.38 "**Third Party**" means any party other than LWI, CLIENT or their respective Affiliates.

2. STATEMENTS OF WORK - PROCESS AND PRODUCT DEVELOPMENT; CLIENT TECHNOLOGY TRANSFER; PROCESS OR PRODUCT MANUFACTURE

2.1 **Statement of Work**. Prior to performing any Process or Product development, CLIENT Technology Transfer, or Product manufacture, the Parties will collaborate to develop a Statement of Work, describing the activities to be performed by the Parties, or to be subcontracted by LWI to Third Parties. Once agreed to by the Parties, the Statement of Work shall be executed by each of the Parties and appended hereto as part of Appendix A and shall be a part hereof. In the event of a conflict between the terms and conditions of this Agreement and any Statement of Work, the terms and conditions of this Agreement shall control.

2.2 **Modification of Statement of Work**. Should CLIENT want to change a Statement of Work or to include additional services to be provided by LWI, CLIENT may propose to LWI an amendment to the Statement of Work with the desired changes or additional services ("**Change Order**"). After LWI utilizes its best efforts to accommodate CLIENT's reasonable requests, if LWI determines that it has the resources and capabilities to accommodate such Change Order, LWI will prepare a modified version of the Statement of Work reflecting such Change Order (including, without limitation, any changes to the estimated timing, estimated charges or scope of a project) and will submit such modified version of the Statement of Work to CLIENT for review and comment. The modified Statement of Work shall be binding on the Parties only if it refers to this Agreement, states that it is to be made a part thereof, and is signed by both Parties, whereafter such modified version of the Statement of Work will be deemed to have replaced the prior version of the Statement of Work. Notwithstanding the foregoing, if a modified version of the Statement of Work is not agreed to by both Parties, the existing Statement of Work shall remain in effect unless terminated by CLIENT upon **[*]** days prior written notice to LWI, in which case CLIENT shall be responsible for the fees set forth in Section 14.6.3.

2.3 **CLIENT Deliverables**.

2.3.1 Within the time period specified in a Statement of Work, CLIENT will provide LWI with (a) the materials listed in the Statement of Work for which CLIENT is responsible for delivering to LWI, and any handling instructions, protocols, SOPs and other documentation necessary to maintain the properties of such materials for the performance of the Statement of Work, and (b) any related protocols, SOPs and other information and documentation

in possession or control of CLIENT and necessary for the performance of the Statement of Work, and for the preparation of the Master Production Record in conformance with cGMP, including, without limitation, process information, SOPs, development data and reports, quality control assays, raw material specifications (including vendor, grade and sampling/testing requirements), product and sample packing and shipping instructions, and product specific cleaning and decontamination information (collectively, the "**CLIENT Development Materials**"). For clarity, CLIENT Development Materials includes CLIENT's PANC 10.3 and PANC 6.05 cell lines (the "**Cell Lines**").

2.3.2 LWI agrees that the CLIENT Development Materials shall only be used as specified in writing by CLIENT in this Agreement or the applicable Statement of Work, and not for any other purpose. CLIENT Development Materials shall be maintained, handled and stored in accordance with the written directions of CLIENT. Title to the CLIENT Development Materials shall at all times remain in CLIENT. LWI agrees that it shall not make any claim or place any lien or encumbrance on any CLIENT Development Materials. Upon direction of CLIENT, LWI shall provide CLIENT with an accounting of the CLIENT Development Materials and a list of persons with access to the CLIENT Development Materials, and will return to CLIENT all CLIENT Development Materials supplied by CLIENT, except to the extent such CLIENT Development Materials are no longer available to return as the materials have been utilized, or are incorporated in Product or work in process in connection with the services performed hereunder. Risk of loss to Cell Lines shall remain with LWI while CLIENT Developed Materials are in LWI's control, except for any risk of loss that is inherent to the Cell Lines and so long as the loss is unrelated to the negligent or willful acts or omissions of LWI or its agents. CLIENT shall have the absolute right upon reasonable notice and reasonable request to recover the CLIENT Development Materials, except to the extent such CLIENT Development Materials are no longer available to return as the materials have been utilized or are incorporated in Product or work in process in connection with the services performed hereunder, and LWI shall cooperate in the same. Title to each cell line made from Cell Lines shall vest in CLIENT after CLIENT pays LWI for the cost for the creation of each such cell line, as such cost is specifically set forth in the relevant Statement of Work.

2.3.3 LWI covenants not to share any CLIENT Development Materials with any person located outside the United States without the express prior written consent of CLIENT, which consent shall not be unreasonably withheld or delayed if (i) LWI demonstrates to CLIENT that such sharing is essential to the purposes of this Agreement and no reasonable alternative is available and (ii) the receiving party, LWI, and CLIENT have executed appropriate written agreements that secure and protect the CLIENT Development Materials and in which LWI takes responsibility for the same.

2.4 **Performance by LWI**. Subject to the provision by CLIENT of the CLIENT Development Materials pursuant to Section 2.3, LWI will use commercially reasonable efforts to perform, directly or, if specifically contemplated in the Statement of Work or approved in writing in advance by CLIENT (such approval not to be unreasonably withheld or delayed), through a Third Party contractor, the work described in a Statement of Work in a professional and workmanlike manner in accordance with the terms of this Agreement on the timeline set forth in the Statement of Work. LWI will promptly notify CLIENT of any material delays that arise during the performance of the Statement of Work and the Parties will promptly meet to determine whether

there is any reasonable remediation that might lessen the impact of any such delay. LWI shall be responsible for any delays that are within its reasonable control or that of any of its Affiliates or permitted subcontractors. All work will be completed by LWI at the LWI facility located in Walkersville, Maryland, USA, unless otherwise approved in writing by CLIENT.

2.5 **Subcontracting**. LWI may not subcontract with any Third Party to perform any of its Product-specific obligations under this Agreement without the prior written consent of CLIENT, which consent shall not be unreasonably withheld or delayed. LWI shall be entitled to instruct one or more of its Affiliates to perform any of LWI's obligations in this Agreement, but LWI shall remain fully responsible in respect of those obligations. LWI will be solely responsible for the performance of any Affiliate or permitted subcontractor, and for costs, expenses, damages, or losses of any nature arising out of such performance as if such performance had been provided by LWI itself under this Agreement and to which the terms of this Agreement shall apply. LWI will cause any such Affiliate or permitted subcontractor to be bound by, and to comply with, the terms of this Agreement or any other ancillary agreements the Parties may enter into in connection with the provision of the services, as applicable, including, without limitation, all confidentiality, quality assurance, regulatory and other obligations and requirements of LWI.

2.6 **Management**. Each Party shall appoint one person to serve as a point person for matters related to this Agreement. CLIENT will initially be represented by **[*]**. LWI will initially be represented by **[*]**.

3. CLIENT TECHNOLOGY TRANSFER

3.1 **By CLIENT to LWI**. Based on the information provided by CLIENT and including process changes developed by LWI pursuant to any applicable Statement of Work, LWI will prepare the Master Production Record for the Process in accordance with the schedule set forth in the Statement of Work. CLIENT will inform LWI of any specific requirements CLIENT may have relating to the Master Production Record, including, without limitation, any information or procedures CLIENT wishes to have incorporated therein. Except for LWI Operating Documents, if LWI would like CLIENT to consider including as part of the Master Production Record the use of any assay, medium, or other intellectual property or technology that is proprietary to LWI or any Third Party, LWI will inform CLIENT of such desire and the Parties will meet to discuss and attempt to agree in good faith on the terms of use of such materials or technology in the Process. (For clarity, the terms for use of LWI Intellectual Property are set forth in Section 11.2.) In addition, LWI will disclose to CLIENT all reasonable alternatives of which it is aware so that all reasonable alternatives are considered and discussed by the Parties.

3.2 CLIENT will cooperate with LWI to assist LWI to develop the Master Production Record and Process, including, without limitation, by providing LWI with additional information and procedures in CLIENT's control that is required to create the Master Production Record, Process, which may include the following: (i) manufacturing process information, SOPs, development reports, (ii) quality control assays, (iii) raw material specifications (including vendor, grade and sampling/testing requirements), (iv) Product and sample packing and shipping instructions, and (v) Product specific cleaning and decontamination information.

3.3 LWI will deliver a draft version of the Master Production Record to CLIENT for its review and approval in accordance with the schedule set forth in the Statement of Work. CLIENT will notify LWI in writing of any objections it has to the draft Master Production Record, and upon such notification, representatives of LWI and CLIENT will meet promptly to resolve such objections. Upon CLIENT's written acceptance of the draft Master Production Record, or in the event that CLIENT does not submit a written notice setting forth CLIENT's objections to the draft Master Production Record within [*] business days following receipt of such draft by CLIENT, such draft will be deemed approved by CLIENT, provided that CLIENT may request and shall be permitted additional time if reasonably requested by CLIENT, in which case CLIENT shall be responsible for any costs incurred by LWI arising from such additional time.

4. MANUFACTURE OF PRODUCT; ORDER PROCESS; DELIVERIES

4.1 **Draft Plan**. To the extent not already delivered prior to the execution of any Statement of Work, LWI will deliver to CLIENT for review and comment, a proposed draft plan describing the activities to be performed by LWI, or to be subcontracted by LWI to Third Parties, in the production of a Product (the "**Draft Plan**"). Once LWI delivers to CLIENT the proposed Draft Plan, the parties will meet to decide whether to issue a new Statement of Work pursuant to Section 2.1, or to modify an existing Statement of Work pursuant to Section 2.2, based on that Draft Plan and any agreed upon modifications.

4.2 **Manufacture by LWI**. During the time period specified in any Statement of Work during which Process and Product will be developed and manufactured which will end only after completion of the services and delivery of the deliverables set forth in the Statement of Work (the "**Production Term**"), LWI will use its commercially reasonable best efforts to develop, manufacture, package, ship, handle quality assurance and quality control for the Product and perform all other services and deliver all deliverables as set forth in the Statement of Work, and to deliver to CLIENT the quantities of Product requested by CLIENT in the Statement of Work, all in accordance with the terms of this Agreement.

4.3 **Packaging and Shipping**. LWI will package and label the Product for shipment in accordance with the Master Production Record and LWI's standard practices in effect at the time of performance by LWI. LWI will ship the Product **[*]** (Incoterms 2010) **[*]** to a common carrier designated by CLIENT to LWI in writing not less than **[*]** days prior to the delivery date that is either set forth in the Statement of Work or otherwise agreed in writing by the Parties. CLIENT will provide to LWI its account number with the selected carrier and will pay for all shipping costs in connection with each shipment of Product. LWI will use commercially reasonable efforts to deliver each shipment of Product to CLIENT on the requested delivery date for such shipment. LWI will promptly notify CLIENT if LWI reasonably believes that it will be unable to meet a delivery date and the reasons therefor. CLIENT shall be required to take delivery of a Batch of Product within **[*]** days after acceptance of such Batch in accordance with Section 5.2 (the "**Delivery Period**"). Notwithstanding anything to the contrary, title in all Product shall pass to CLIENT upon delivery to the carrier.

4.4 **Quality Agreement**. Promptly after the Effective Date, the Parties shall enter into a separate Quality Agreement setting forth the terms for Product quality. Such Quality Agreement shall be separately appended to this Agreement.

4.5 **Records**. LWI will maintain accurate records for the production of the Product, as required by all Applicable Laws. LWI will retain possession of the Master Production Record, all Batch Records and LWI Operating Documents, and will make copies thereof available to CLIENT upon CLIENT's request and at CLIENT's expense. CLIENT will have the right to use and reference any of the foregoing in connection with a filing for Regulatory Approval of the Product, as per Section 8.4, or as otherwise authorized by the Agreement. LWI Operating Documents will remain LWI Confidential Information.

4.6 **CLIENT Access**.

4.6.1 CLIENT's employees and agents (including its independent contractors) (collectively, "**CLIENT Personnel**") may participate in the development of the Product, Process, and Master Production Record and the production of the Product to the extent agreed in advance by the Parties or as may be contemplated in this Agreement. CLIENT Personnel working at the Facility are required to comply with LWI Operating Documents and any other applicable LWI facility and/or safety policies. For the avoidance of doubt, CLIENT Personnel may not physically participate in the production or manufacture of any Product that may be used in or on humans, provided that CLIENT Personnel shall be permitted to observe preparation for and Product production.

4.6.2 CLIENT Personnel working at the Facility will be and remain employees of CLIENT, and CLIENT will be solely responsible for the payment of compensation for such CLIENT Personnel (including applicable Federal, state and local withholding, FICA and other payroll taxes, workers' compensation insurance, health insurance, and other similar statutory and fringe benefits). CLIENT covenants and agrees to maintain workers' compensation benefits and employers' liability insurance as required by applicable Federal and Maryland laws with respect to all CLIENT Personnel working at the Facility.

4.6.3 CLIENT will pay for the actual cost of repairing or replacing to its previous status any property of LWI damaged or destroyed by CLIENT Personnel, provided CLIENT shall not be liable for repair or replacement costs resulting from ordinary wear and tear.

4.6.4 CLIENT Personnel visiting or having access to the Facility will abide by LWI standard policies, operating procedures and the security procedures established by LWI. CLIENT will be liable for any breaches of security by CLIENT Personnel. All CLIENT Personnel will agree to abide by LWI policies and SOPs established by LWI, and will sign an appropriate confidentiality agreement.

4.6.5 CLIENT will indemnify and hold harmless LWI from and against any and all losses, damages, liabilities, costs and expenses (including reasonable attorneys' fees and expenses) arising out of any injuries suffered by CLIENT Personnel while at the Facility or elsewhere, except to the extent caused by the negligence or willful misconduct on the part of any LWI Party or breach of this Agreement by LWI.

4.7 Disclaimer. LWI covenants that it will not engage in any Product refinement or development of the Product, other than as expressly set forth in this Agreement and the Statement of Work. The Parties certify that (i) as of the Effective Date no LWI Parties have participated in the invention or testing of any Product, and (ii) LWI Parties have not evaluated whether Product is safe and effective for use in humans or otherwise.

5. PRODUCT WARRANTIES; ACCEPTANCE AND REJECTION OF PRODUCTS

5.1 **Product Warranties**. LWI warrants that any Product manufactured by LWI pursuant to this Agreement, at the time of delivery pursuant to Section 4.3: (a) conforms to the Specifications; (b) was manufactured in accordance with the Master Production Record; (c) was manufactured in accordance with cGMP using a process, components and a facility that comply with all Applicable Laws; and (d) is delivered free and clear of any liens or encumbrances of any kind. For the purposes of this Agreement, compliance with the product warranties set forth in Sections 5.1(a) – (c) shall mean the Product is not "adulterated". The foregoing are collectively referred to as the "**Product Warranties**".

5.2 **Approval of Shipment**.

5.2.1 When the Product ordered by CLIENT is ready for delivery, LWI will notify CLIENT and supply CLIENT with the Batch Documentation. If a Batch of Product conforms to the Product Warranties, then a certificate of compliance will be completed and approved by LWI. This certificate of compliance, a certificate of analysis, the Specifications, a complete and accurate copy of the consolidated Batch Records, and the Process description (collectively, the "**Batch Documentation**") for such Batch of Product will be provided to CLIENT within **[*]** calendar days of completing testing, either electronically through a secure portal or by a reputable overnight courier or by registered or certified mail, postage prepaid, return receipt required to verify delivery date. Upon request, LWI will also provide CLIENT with all results relating to the manufacture of each Batch of Product, which results are set forth in the Batch Record.

5.2.2 Within **[*]** calendar days after CLIENT's receipt of such Batch Documentation regarding such Product (the "**Acceptance Period**"), CLIENT shall determine by review of such Batch Documentation whether or not the Batch Documentation reflects that the given Batch conforms to the Product Warranties set forth in Section 5.1 above, except to the extent a warranty cannot be confirmed by reviewing such documentation. Notwithstanding the foregoing, if CLIENT reasonably requests to extend the Acceptance Period and its review of the Batch Documentation has commenced and CLIENT is diligently reviewing the Batch Documentation within such **[*]**-day period, the Acceptance Period shall be extended to a period not to exceed **[*]** days, so long as the CLIENT is making diligent efforts, and assuming LWI cooperates fully therewith.

5.2.3 **Non-Conforming Batch(es)**. If CLIENT asserts that the Product does not comply as described in the prior sentence with the Product Warranties set forth in Section 5.1 above, CLIENT will deliver to LWI, in accordance with the notice provisions set forth in Section 17.3 hereof, written notice of disapproval (the "**Disapproval Notice**") of such Product, stating in reasonable detail the basis for such assertion of non-compliance with the Product Warranties. If a valid Disapproval Notice is received by LWI during the Acceptance Period, then LWI and CLIENT will provide one another with all related paperwork and records (including, but not limited to, quality control tests) relating to both the production of the Product and the Disapproval Notice. If a valid Disapproval Notice is not received during the Acceptance Period, the Product will be deemed accepted and ready for shipment and the Product shall be delivered to CLIENT. CLIENT shall accept delivery thereof within **[*]** days after such acceptance. Risk of loss to such Product shall pass to CLIENT at the time of delivery to the common carrier pursuant to Section 4.3.

5.3 **Dispute Resolution**. LWI and CLIENT will attempt to resolve any dispute regarding the conformity of a shipment of Product with the Product Warranties. If such dispute cannot be settled within **[*]** days of the submission by each Party of such related paperwork and records to the other Party, and if the Product is alleged not to conform with the Product Warranties set forth in Section 5.1, then CLIENT will submit a sample of the Batch of the disputed shipment to an independent testing laboratory of recognized repute selected by CLIENT and approved by LWI (such approval not to be unreasonably withheld) for analysis, under quality assurance approved procedures, of the conformity of such shipment of Product with the Specifications. If the existence or cause of the alleged nonconformity cannot be determined solely by laboratory testing, then the CLIENT shall also select appropriate experts of recognized repute and approved by LWI (such approval not to be unreasonably withheld) in order to conduct an audit of documents and facilities in order to confirm conformity to of Product with Product Warranties. The costs associated with such analyses by such independent testing laboratory and experts will be paid by the Party whose assessment of the conformity of the shipment of Product with the Product Warranties was mistaken.

5.4 **Remedies for Non-Conforming Product**.

5.4.1 Until the Process is submitted as part of a biologic license application and is approved by the FDA, in the event that the Parties agree, or an independent testing laboratory or experts determine, pursuant to Section 5.3, a Batch of Product materially fails to conform to the Product Warranties due to the failure of: (a) LWI to properly execute the Master Production Record in respect of the manufacture of the Product, (b) LWI to comply with cGMP, (c) LWI's negligence or willful misconduct, or (d) LWI facilities or utilities then, at CLIENT's request, LWI will promptly produce for CLIENT sufficient quantities of Product to replace the non-conforming portion of such Batch of Product (the "**Production Rerun**"), in accordance with the provisions of this Agreement and at no additional cost to CLIENT. If the CLIENT has not yet paid for the failed Batch of Product, then CLIENT will be billed when it receives the replacement.

5.4.2 Until the Process is submitted as part of a biologic license application and is approved by the FDA, in the event that the Parties agree, or an independent testing laboratory or experts determine, pursuant to Section 5.3, that a Batch of Product materially fails to conform to

the Product Warranties for any reason other than as set forth in Section 5.4.1, then LWI shall have no liability to CLIENT with respect to such Batch and LWI will, at CLIENT's request, produce for CLIENT as soon as practicable a Production Rerun at CLIENT's expense.

5.4.3 After the Process is submitted as part of a biologic license application and once it is approved by the FDA, in the event that the Parties agree, or an independent testing laboratory or experts determine, pursuant to Section 5.3, that a Batch of Product materially fails to conform to the Product Warranties and such failure is (a) not the result of an inherent characteristic of the Process, Materials, or CLIENT Development Materials, including any cell lines originally provided by CLIENT, or (b) not the result of circumstances outside of LWI's reasonable control or the control of its Affiliates or permitted contractors, LWI will produce for CLIENT as soon as practicable a Production Rerun, in accordance with the provisions of this Agreement and at no additional cost to CLIENT.

5.4.4 After the Process is submitted as part of a biologic license application and once it is approved by the FDA, in the event that the Parties agree, or an independent testing laboratory or experts determine, pursuant to Section 5.3, that a Batch of Product materially fails to conform to the Product Warranties as a result of (i) an inherent characteristic of the Process, Materials, or CLIENT Development Materials, including any of the cell lines originally provided by CLIENT, or (ii) a failure that is the result of circumstances outside of LWI's reasonable control or the control of its Affiliates or permitted contractors, then LWI shall have no liability to CLIENT with respect to such Batch and LWI will, at CLIENT's request, produce for CLIENT as soon as practicable a Production Rerun at CLIENT's expense.

5.4.5 Except with respect to **[*]**, CLIENT **[*]**, and in furtherance thereof, **[*]**.

5.4.6 Each Party will promptly notify the other in the event that it becomes aware of any circumstance that might be reasonably expected to result in a Product recall or market withdrawal. In the event that the CLIENT determines that a recall or market withdrawal of Product is needed, CLIENT shall manage and lead such recall or withdrawal and LWI shall fully cooperate with CLIENT in connection therewith. The administrative costs of a recall or withdrawal will be borne by CLIENT except to the extent that the recall or withdrawal is the result of a negligent or willful act or omission of LWI.

5.5 **Remedies for Non-Conforming Services**.

5.5.1 Notwithstanding anything to the contrary herein, if LWI provides any services, other than manufacturing of the Product to which Section 5.4 shall apply, which services fail to conform to agreed upon written instructions or which are not performed according to customary professional standards of established practice in the industry or the applicable requirements of this Agreement, CLIENT may require LWI to (i) reperform such services at no additional cost to CLIENT or (ii) if LWI does not or cannot promptly reperform such service, or if CLIENT has a reasonable basis to move the services to another manufacturer taking into account all relevant factors, promptly repay to CLIENT any monies paid by CLIENT to LWI for the performance of such services.

5.5.2 Except with respect to **[*]**, CLIENT **[*]**, and in furtherance thereof, **[*]**.

6. DAMAGE OR DESTRUCTION OF MATERIALS AND/OR PRODUCT

6.1 **Remedies**. If during the manufacture of Product pursuant to this Agreement, Product and/or Materials are destroyed or damaged by LWI Personnel, and such damage or destruction resulted from LWI's failure to execute the Process in conformity with the Master Production Record or is otherwise attributable to the negligence or willful misconduct of LWI Personnel or the breach of this Agreement by LWI, then, except as provided in Section 6.2 below, LWI, as soon as it is commercially practicable to do so, will provide CLIENT with additional Product production time equal to the actual time lost because of the destruction or damage of the Product and/or Materials and will **[*]**. CLIENT acknowledges and agrees that **[*]**, and in furtherance thereof, **[*]**.

6.2 **Limitations**. Notwithstanding anything to the contrary set forth in the preceding Section 6.1, if during the manufacture of Product pursuant to this Agreement, Product or Materials are destroyed or damaged by LWI Personnel while LWI Personnel were acting at the written direction of CLIENT Personnel, unless CLIENT is directing during active production, in which case such direction may not be in writing, then LWI will have no liability to CLIENT as the result of destruction or damage arising from the competent execution of such directions.

7. STORAGE OF MATERIALS

7.1 **Pre-Production**. LWI will store at the expense of CLIENT any CLIENT Development Materials, equipment or other property delivered pursuant to the Statement of Work or the Draft Plan to the Facility by CLIENT more than **[*]** days prior to the commencement date. The storage rates will be set forth in the Statement of Work and may be amended from time to time by LWI. No storage fees will be charged during the period starting **[*]** days prior to the commencement date and ending upon the expiration or termination of the Production Term and for **[*]** days thereafter.

7.2 **Post-Production**. LWI will store at the Facility free of charge any in–process materials, Materials paid for by CLIENT, equipment and other CLIENT property (other than Product manufactured hereunder) that remains at the Facility on the date of expiration or termination of the Production Term (collectively "**Remaining CLIENT Property**"), for up to **[*]** calendar days. In the event that LWI continues to store such Remaining CLIENT Property, CLIENT will pay to LWI a storage charge at LWI's then-standard storage rates for the period beginning on the **[*]** day after the expiration or termination of the Production Term through the date that the storage terminates. LWI shall have no right to destroy Remaining CLIENT Property.

7.3 **Product**. Notwithstanding the foregoing, if CLIENT fails to take delivery of a Product within **[*]** days after the expiration or termination of the Production Term, CLIENT will pay to LWI a storage charge at **[*]** times LWI's then-standard storage rate, which shall begin accruing on the first day following the expiration of the applicable Delivery Period.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

8. REGULATORY MATTERS

8.1 **Permits and Approvals**. During the Production Term, LWI will use commercially reasonable efforts to maintain any licenses, permits and approvals necessary for the manufacture of the Product in the Facility. LWI will promptly notify CLIENT if LWI receives notice that any such license, permit, or approval is or may be revoked or suspended.

8.2 **Inspections/Quality Audit by CLIENT**. Up to one time per calendar year during the Production Term without cause and otherwise with cause, and upon not less than **[*]** days' prior written notice, LWI will permit CLIENT to inspect and audit the parts of the Facility where the manufacture of the Product is carried out in order to assess LWI's compliance with this Agreement, and to discuss any related issues with LWI's management personnel. CLIENT Personnel engaged in such inspection will abide by the terms and conditions set forth in Sections 4.6.1, 4.6.4, and 10. If any deficiencies are noted, LWI shall not more than **[*]** days thereafter provide to CLIENT a remediation plan, which plan will be commented upon by CLIENT. LWI will use commercially reasonable efforts to take all reasonable comments to the plan and then execute the plan as soon as reasonably practicable thereafter so as to attempt to limit the duration of any delay.

8.3 **Inspections by Regulatory Agencies**. LWI will allow representatives of any regulatory agency to inspect the relevant parts of any LWI Facility relevant to Product or this Agreement, and to inspect the Master Production Record and Batch Records to verify compliance with cGMP and other practices or regulations and will promptly notify CLIENT of the scheduling or initiation of any such inspection relating to the manufacture of Product. LWI will notify CLIENT of any planned governmental or regulatory authority inspections that are reasonably likely to involve or impact Product not less than **[*]** calendar days prior to the inspection. CLIENT shall have the right to observe such inspection if any material portion of the inspection relates specifically to Product. LWI will promptly, but in no more than **[*]** business days (i) send to CLIENT a copy of any reports, citations, or warning letters received by LWI and (ii) convey to CLIENT any oral comments of regulatory authorities, in connection with an inspection of a regulatory agency to the extent such documents or comments relate to or affect the manufacture of the Product, and LWI will answer any and all questions that CLIENT may have related thereto. LWI will share with CLIENT its plan to promptly remedy any deficiencies noted by a regulatory agency and LWI will implement such plan as soon as reasonably practicable thereafter. If such remedy is specifically related to Product, LWI will allow CLIENT the opportunity to comment before submitting a response to the governmental or regulatory authority.

8.4 **Regulatory Submissions**. CLIENT will be responsible for obtaining, at its expense, all regulatory and governmental approvals and permits necessary for CLIENT's use of any Product developed and/or manufactured under this Agreement, including, without limitation, IND amendments and any analogous submissions filed with the appropriate governmental or regulatory authority. LWI will be responsible, at CLIENT's expense, for providing CLIENT with relevant supporting data and information relating to the development and/or manufacture of Product (or any component thereof) necessary for obtaining such approvals; however, any trade secrets or confidential or proprietary information of LWI may be provided by LWI directly to the appropriate governmental or regulatory authority in its drug master file ("DMF"), and LWI shall permit CLIENT and/or its licensees to refer to such DMF as part of CLIENT's submissions to such governmental or regulatory authority.

9. FINANCIAL TERMS

9.1 **Payments**. CLIENT will make payments to LWI for professional fees, pass through costs and other fees or costs in the amounts and at the times set forth in the Statement of Work, upon receipt of an invoice from LWI as set forth in Section 9.5. Any agreed advances and terms related thereto shall also be included in any Statement of Work. In the event that CLIENT has not paid an undisputed invoice within **[*]** business days of the applicable due date (as established by this Agreement) and such invoice is not disputed by CLIENT in good faith, LWI may consider such nonpayment a material breach under Section 14.2, subject to the notice and cure provisions set forth therein. Further, in addition to all other remedies available to LWI and remedies and defenses available to CLIENT, in the event that CLIENT has not paid an invoice within **[*]** business days of the applicable due date (as established by this Agreement) and such invoice is not disputed by CLIENT in good faith, LWI may **[*]**, provided that CLIENT shall remain liable for all fees owed pursuant to the Statement of Work **[*]**.

9.2 **Pass-through Costs**. Pass through costs shall be invoiced to CLIENT at actual cost plus any additional fees set forth in the applicable Statement of Work. Payment terms for pass through costs are set forth in each relevant Statement of Work.

9.3 **Advance Payments**. The amount of any advance payment shall be defined in the Statement of Work (the "Advance Payment") and shall not exceed **[*]** of the total estimated payment due under such Statement of Work. For Statements of Work whose term are initially estimated to be less than or equal to **[*]** months, advances shall be applied equally to the final **[*]** invoices. For Statements of Work whose term are initially estimated to be more than **[*]** months, advances shall be applied equally to the final **[*]** invoices.

9.4 **Progress and Estimates**. The Parties shall meet at least one time per month to discuss any active Statements of Work and the progress of each project against the anticipated timelines and costs estimated therefor. At such meetings and otherwise upon the request of CLIENT, LWI will provide to CLIENT with updated estimates of project costs and up to date progress against initial budget. Increases of more than **[*]** percent of any material line item of the budget set forth in a Statement of work must be approved by CLIENT in advance in writing. LWI shall not exceed any estimated budget set forth in a Statement of Work without the prior written consent of CLIENT.

9.5 **Invoices**. Within **[*]** days of the end of each month during which charges were incurred, LWI will provide CLIENT with an invoice setting forth a detailed account of any fees, expenses, or other payments payable by CLIENT under this Agreement for the preceding month. The amounts set forth in each such invoice will be due and payable within **[*]** days of receipt of such invoice by CLIENT.

9.6 **Taxes**. CLIENT agrees that it is responsible for and will pay any sales, use or other taxes (the "**Taxes**") resulting from LWI's production of Product under this Agreement (except for

income or personal property taxes payable by LWI). To the extent not paid by CLIENT, CLIENT will indemnify and hold harmless the LWI Parties from and against any and all penalties, fees, expenses and costs whatsoever in connection with the failure by CLIENT to pay the Taxes. LWI will not collect any sales and use taxes from CLIENT in connection with the production of any Product hereunder if CLIENT provides to LWI the appropriate valid exemption certificates.

9.7 **Interest**. Any fee, charge or other payment due to LWI by CLIENT under this Agreement that is not paid within **[*]** days after it is due will accrue interest on a daily basis at a rate of **[*]**% per month (or the maximum legal interest rate allowed by Applicable Laws, if less) from and after such date.

9.8 **Method of Payment**. All payments to LWI hereunder by CLIENT will be in United States currency and will be by check, wire transfer, money order, or other method of payment approved by LWI. Bank information for wire transfers is as follows:

Mailing address for wire transfer payments:

[*]

ABA# for wires and ACH for our account = **[*]**

Lockbox # **[*]**
Account # **[*]**
Lonza Walkersville, Inc.
12261 Collections Center Drive
Chicago, Illinois, 60693

9.9 **Cost Adjustments**. Beginning **[*]** months after the effective date of a Statement of Work, LWI may **[*]** adjust the various costs and rates, including the professional fees, set forth in the Statement of Work attached hereto **[*]**; provided, however, that any **[*]** shall not exceed **[*]**. LWI agrees to provide CLIENT with written notice not less than **[*]** days prior to such cost adjustment. In the event of a material increase in the costs of LWI, which increase is out of the reasonable control of LWI, for (i) LWI's compliance with a new or changed environmental or regulatory standard or (ii) a component of LWI's suite fees, upon prior written notice to CLIENT of not less than **[*]** days and having provided to CLIENT at the time of such notice, reasonable detail and calculations in justification of such increased costs, as well as answers to all related questions of CLIENT, LWI may increase its fees for such costs, provided that (i) if CLIENT reasonably requests additional information and such **[*]** day notice period expires, LWI shall not increase the price until **[*]** days after such additional information is provided to CLIENT, provided that any such price increase shall be retroactive to the date on which the **[*]** day notice period expires or the date on which LWI's costs are actually increased, whichever is later, (ii) if the change is specific to the Product or Process, CLIENT shall bear all of such increase and (iii) **[*]**.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

10. CONFIDENTIAL INFORMATION

10.1 **Definition**. "**Confidential Information**" means all technical, scientific and other know-how and information, trade secrets, knowledge, technology, means, methods, processes, practices, formulas, instructions, skills, techniques, procedures, specifications, data, results and other material, pre-clinical and clinical trial results, manufacturing procedures, test procedures and purification and isolation techniques, and any tangible embodiments of any of the foregoing, and any scientific, manufacturing, marketing and business plans, any financial and personnel matters relating to a Party or its present or future products, sales, suppliers, customers, employees, investors or business, that has been disclosed by or on behalf of such Party or such Party's Affiliates to the other Party or the other Party's Affiliates either in connection with the discussions and negotiations pertaining to this Agreement or in the course of performing this Agreement. Without limiting the foregoing, the terms of this Agreement will be deemed "Confidential Information" and will be subject to the terms and conditions set forth in this Article 10.

10.2 **Exclusions**. Notwithstanding the foregoing Section 10.1, any information disclosed by a Party to the other Party will not be deemed "Confidential Information" to the extent that such information:

(a) at the time of disclosure is in the public domain;

(b) becomes part of the public domain, by publication or otherwise, through no fault of the Party receiving such information;

(c) at the time of disclosure is already in possession of the Party who received such information, as established by contemporaneous written records;

(d) is lawfully provided to a Party, without restriction as to confidentiality or use, by a Third Party lawfully entitled to possession of such Confidential Information; or

(e) is independently developed by a Party without use of or reference to the other Party's Confidential Information, as established by contemporaneous written records.

10.3 **Disclosure and Use Restriction**. Except as expressly provided herein, the Parties agree that for the term of the Agreement and the five-year period following any termination of the Agreement, each Party and its Affiliates will keep completely confidential and will not publish or otherwise disclose any Confidential Information of the other Party, its Affiliates or sublicensees, except in accordance with Section 10.4. Neither Party will use Confidential Information of the other Party except as necessary to perform its obligations or to exercise its rights under this Agreement. LWI will not share any of CLIENT's Confidential Information with any party outside the United States without CLIENT's express prior written consent.

10.4 **Permitted Disclosures**. Each receiving Party agrees to (i) institute and maintain security procedures to identify and account for all copies of Confidential Information of the disclosing Party and (ii) limit disclosure of the disclosing Party's Confidential Information to its Affiliates and each of its and their respective officers, directors, employees, agents, consultants and independent contractors having a need to know such Confidential Information for purposes of

this Agreement; provided that such Affiliates and each of its and their respective officers, directors, employees, agents, consultants and independent contractors are informed of the terms of this Agreement and are subject to obligations of confidentiality, non-disclosure and non-use similar to those set forth herein.

10.5 **Government-Required Disclosure**. If a duly constituted government authority, court or regulatory agency orders that a Party hereto disclose information subject to an obligation of confidentiality under this Agreement, such Party shall comply with the order, but shall notify the other Party as soon as possible, so as to provide the said Party an opportunity to apply to a court of record for relief from the order.

10.6 **Publicity**. Neither Party will refer to, display or use the other's name, trademarks or trade names confusingly similar thereto, alone or in conjunction with any other words or names, in any manner or connection whatsoever, including any publication, article, or any form of advertising or publicity, except with the prior written consent of the other Party.

11. INTELLECTUAL PROPERTY

11.1 **Ownership**.

11.1.1 Each Party shall own all its respective proprietary Intellectual Property made, conceived or reduced to practice by or for such Party other than in connection with this Agreement and no right shall be granted to other Party in such Intellectual Property unless specifically set forth otherwise herein. Except as expressly otherwise provided herein, ownership of any Intellectual Property that is developed, conceived, invented, first reduced to practice or made in connection with the performance under this Agreement shall be determined in accordance with United States law and ownership shall follow inventorship.

11.1.2 The Process, Specifications, CLIENT New IP and any improvements or modifications thereto developed during the term of this Agreement are hereby the sole and exclusive property of CLIENT (the "**CLIENT Process**"), provided that LWI is the owner of LWI Intellectual Property, LWI New IP, Master Production Record and the LWI Operating Documents and such LWI Operating Documents may not be shared with a Third Party. For clarity, LWI Intellectual Property and LWI New IP that is part of the Master Production Record or Process, and the Master Production Record, except the LWI Operating Documents, is subject to the license set forth in this Agreement. LWI hereby assigns to CLIENT all its right title and interest in and to the Process, Specifications, and any improvements or modifications thereto developed during the term of this Agreement subject to its rights described herein. LWI hereby grants to CLIENT an irrevocable unrestricted royalty-free right to use for **[*]** the Master Production Record (but not including LWI Operating Documents referred to in such Master Production Record and LWI Intellectual Property (including without limitation LWI New IP) included in such Master Production Record, which LWI Intellectual Property will be identified to CLIENT upon CLIENT's request and which is subject to Section 11.2.2), which right is not executory (there being no obligations on the part of CLIENT to be performed) and shall never be subject to contingency, rejection, termination, modification or set off. LWI also hereby grants to CLIENT prompt and full access to, at reasonable times and on reasonable notice to LWI, the original copy of the Master Production Record, and agrees to provide copies to CLIENT as requested.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

11.1.3 As between the Parties, CLIENT is hereby the sole and exclusive owner of all inventions, developments, improvements, know how and discoveries that are (i) made, conceived or reduced to practice in the course of or resulting from this Agreement by either Party or its subcontractors or agents alone or the Parties jointly and (ii) (a) are solely related to the Product or to the Process or (b) are based on, an improvement to or direct derivative of, or incorporates CLIENT Intellectual Property or CLIENT Confidential Information or (c) not LWI New IP ("**CLIENT New IP**"). LWI hereby assigns to CLIENT at its own cost all of LWI's right, title, and interest in and to such CLIENT New IP and shall ensure that its employees, agents and subcontractors do the same.

11.1.4 As between the Parties, LWI is hereby the sole and exclusive owner of all inventions, developments, improvements and discoveries that are (i) made, conceived or reduced to practice in the course of or resulting from this Agreement by LWI and (ii) are not solely related to the Product or Process and are not an improvement to or direct derivative of, or incorporate CLIENT Intellectual Property or CLIENT Confidential Information, and (a) are useful for the manufacture of other products and processes other than the Product and Process or relates generally to LWI's business of developing or producing biological materials or (b) are based on, an improvement or direct derivative of, or incorporates LWI Intellectual Property or LWI Confidential Information ("**LWI New IP**"). CLIENT hereby assigns to LWI all of CLIENT's right, title, and interest in and to such LWI New IP.

11.1.5 LWI shall **[*]**.

11.2 **License Grants**.

11.2.1 During the term of this Agreement, CLIENT hereby grants to LWI the right to use for its performance under this Agreement all CLIENT Intellectual Property provided to it that is necessary for LWI to perform its obligations under this Agreement for the sole and limited purpose of LWI's performance of its obligations under this Agreement, including, without limitation, the development of the Process, Master Production Record and Specifications, and the manufacture of Product for CLIENT.

11.2.2 LWI hereby grants to CLIENT an irrevocable, fully paid, non-exclusive worldwide license, with the right to grant and authorize sublicenses through multiple layers of sublicensees, under any and all LWI Intellectual Property (including without limitation LWI New IP) that LWI incorporates pursuant to this Agreement into the Process, Master Production Record and Specifications, to make, have made, use, have used, sell, offer for sale, have sold, import, have imported, export, have exported, develop, have developed, commercialize and have commercialized any GVAX product including without limitation the Product; provided, however, if CLIENT sublicenses, either directly or through multiple layers of sublicensees, such license to a Third Party manufacturer, which manufacturer (i) **[*]** or (ii) **[*]**, then, in either of such instances, the following additional terms shall apply: (a) prior to any such sublicense or transfer of such LWI Intellectual Property to a Third Party **[*]**, the Parties shall enter into a three-way confidentiality

agreement between CLIENT, LWI, and the Third Party, which shall limit such Third Party's use of such LWI Intellectual Property (and LWI New IP in accordance with the provisions set forth below) to manufacturing Product for CLIENT on terms of confidentiality and non-use at least as stringent as those set forth herein, (b) any related technology transfer of documentation or CLIENT Process from LWI's facility to another Third Party shall be at **[*]** expense, and (c) CLIENT and LWI shall negotiate in good faith and, if agreed, CLIENT shall pay a reasonable technology transfer fee and/or royalty (if any) to LWI, which royalty **[*]**, and which is consistent with industry standards. In no event shall the total amount of transfer fees and/or royalties exceed **[*]** for all such payments to LWI. Should the parties fail to reach an agreement on such transfer fees and/or royalties, CLIENT shall notify LWI in writing of its intent to use alternative, independently derived processes instead of the LWI Intellectual Property and no such LWI Intellectual Property shall be transferred. Notwithstanding the foregoing, in no event shall the license granted herein include LWI Operating Documents unless specifically granted in writing by LWI in its sole discretion. If any such sublicense or transfer of LWI New IP occurs **[*]** years or more after the creation of such LWI New IP, the royalty obligation set forth herein shall not apply to such LWI New IP.

11.3 **Further Assurances**. Each Party agrees to take all necessary and proper acts, and will cause its employees, Affiliates, contractors, and consultants to take such necessary and proper acts, to effectuate the ownership provisions set forth in this Article 11.

11.4 **Prosecution of Patents**.

11.4.1 LWI will have the sole right and discretion to file, prosecute and maintain patent applications and patents claiming LWI New IP at LWI's expense. CLIENT will cooperate with LWI to file, prosecute and maintain patent applications and patents claiming LWI New IP, and will have the right to review and provide comments to LWI relating to such patent applications and patents.

11.4.2 CLIENT will have the sole right and discretion to file, prosecute and maintain patent applications and patents claiming CLIENT New IP at CLIENT's expense. LWI will cooperate with CLIENT to file, prosecute and maintain patent applications and patents claiming CLIENT New IP, and will have the right to review and provide comments to CLIENT relating to such patent applications and patents.

12. REPRESENTATIONS AND WARRANTIES

12.1 **By CLIENT**. CLIENT hereby represents and warrants to LWI that (i) it has the requisite power and authority to enter into this Agreement and perform its obligations hereunder, (ii) it has the requisite intellectual property and legal rights related to the CLIENT Development Materials and the Product to authorize the performance of LWI's obligations under this Agreement related thereto, and (iii) the performance of the Statement of Work and the production by LWI of the Product as contemplated in this Agreement will not give rise to a potential cause of action by a Third Party against LWI for infringement or another violation of intellectual property rights based upon use of the CLIENT Development Materials. Such representation and warranty will not apply to any production equipment supplied by LWI, or LWI Intellectual Property.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

12.2 **By LWI**. LWI hereby represents and warrants to CLIENT that (i) it has the requisite power and authority to enter into this Agreement and perform its obligations hereunder, (ii) it has the requisite intellectual property rights, including without limitation in its equipment and Facility, to be able to perform its obligations under this Agreement, (iii) LWI's use of its equipment and Facility as contemplated in this Agreement will not give rise to a potential cause of action by a Third Party against CLIENT for infringement or another violation of intellectual property rights, (iv) LWI will not incorporate into the Product or utilize in connection with this Agreement any Third Party Intellectual Property without the prior consent of CLIENT unless CLIENT provides to LWI any Third Party Intellectual Property for incorporation into Product, and (v) the Product does not include, and was not manufactured by LWI utilizing, any Third Party Intellectual Property, unless such Third Party Intellectual Property was provided or approved in writing by CLIENT for use in Product, including as part of the CLIENT Development Materials. LWI represents and certifies it will not use in any capacity the services of any person, or organization that employs any person that is or has been debarred under Section 306 of the Generic Drug Enforcement Act, is an excluded party from doing business with the U.S. Federal Government (Excluded Parties List System published by GSA), Office of Inspector General's List of Excluded Individuals/Entities (LEIE), is included on any other government exclusion list of persons or entities with whom U.S. companies and individuals are prohibited from doing business with (e.g. OFAC List of Blocked Persons), is similarly debarred or excluded under the Applicable Law in any other jurisdiction. Upon written request of CLIENT, LWI shall, within **[*]** business days, provide written confirmation that it has complied with the foregoing obligation. LWI agrees to promptly disclose in writing to CLIENT if any employee or agent is debarred or excluded, or if any action or investigation is pending or, to the best of its knowledge, threatened, relating to the debarment or exclusion of it or any person performing services related to this Agreement.

13. DISCLAIMER; LIMITATION OF LIABILITY

13.1 **DISCLAIMER**. EXCEPT FOR THE EXPRESS WARRANTIES SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATIONS OR GRANTS ANY WARRANTIES, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, BY STATUTE OR OTHERWISE, WITH RESPECT TO PRODUCT OR MATERIALS. LWI SPECIFICALLY DISCLAIMS ANY OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, OR EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE WITH RESPECT TO PRODUCT AND MATERIALS.

13.2 **Disclaimer of Consequential Damages**. **[*]**, IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER OR ANY OF ITS AFFILIATES FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL, PUNITIVE OR EXEMPLARY DAMAGES OR FOR LOST PROFITS, BUSINESS OR GOODWILL SUFFERED OR INCURRED BY SUCH OTHER PARTY OR ITS AFFILIATES IN CONNECTION WITH THIS AGREEMENT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

13.3 **Limitation of Liability**. **[*]**, BOTH PARTIES HEREBY AGREE THAT TO THE FULLEST EXTENT PERMITTED BY LAW, EACH PARTY'S LIABILITY TO THE OTHER PARTY FOR ANY AND ALL CLAIMS, LOSSES, EXPENSES, OR DAMAGES

ARISING OUT OF OR IN ANY WAY RELATED TO A STATEMENT OF WORK FROM ANY CAUSE OR CAUSES, INCLUDING, BUT NOT LIMITED TO, NEGLIGENCE, ERRORS, OMISSIONS OR STRICT LIABILITY, SHALL NOT EXCEED THE **[*]** AND EACH PARTY'S LIABLITY TO THE OTHER PARTY FOR ANY AND ALL CLAIMS, LOSSES, EXPENSES, OR DAMAGES THAT **[*]**, SHALL NOT EXCEED **[*]**.

13.4 **Certain Limited Exceptions**.

(a) NOTWITHSTANDING ANYTHING TO THE CONTRARY, NOTHING HEREIN SHALL LIMIT THE LIABILITY OF A PARTY IN RESPECT OF LIABILITIES, LOSSES, DAMAGES OR COSTS ARISING FROM (I) FRAUD, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, OR INTENTIONAL MISREPRESENTATION OR (II) **[*]** OR (III) A BREACH OF ANY CONFIDENTIALITY OR INTELLECTUAL PROPERTY PROVISION OR OBLIGATION.

(b) FOR THE AVOIDANCE OF DOUBT, **[*]**

13.5 TO THE EXTENT THAT ANY CLAUSE IN THIS ARTICLE 13 CONFLICTS WITH ANY OTHER CLAUSE IN THIS AGREEMENT, THE CLAUSE IN ARTICLE 13 SHALL TAKE PRECEDENCE OVER SUCH CONFLICTING CLAUSE. IF APPLICABLE LAW PREVENTS ENFORCEMENT OF ANY CLAUSE IN ARTICLE 13, THEN SUCH CLAUSE SHALL BE DEEMED MODIFIED TO PROVIDE THE MAXIMUM PROTECTION FOR A PARTY AS IS ALLOWABLE UNDER APPLICABLE LAW.

14. TERM AND TERMINATION

14.1 **Term**. The term of this Agreement will commence on the Effective Date and will continue until the fifth anniversary of the Effective Date unless terminated prior to that time or extended by the Parties.

14.2 **Termination for Material Breach**. Either Party may terminate this Agreement or Statement of Work, by written notice to the other Party, for any material breach of, as the case may be, this Agreement or a Statement of Work by the other Party, if such breach is not cured within thirty (30) days after the breaching Party receives written notice of such breach from the non-breaching Party; provided, however, that if such breach is capable of being cured, but not capable of being cured within such thirty-day period, and the breaching Party has commenced and diligently continued actions to cure such breach within such thirty-day period, except in the case of a payment default, the cure period shall be extended to **[*]** days, so long as the breaching Party is making diligent efforts to do so. Such termination shall be effective upon expiration of such cure period.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

14.3 **Termination by Notice**.

14.3.1 **Without Cause**.

(a) By CLIENT. Subject to the fees set forth in Section 14.6.3, CLIENT may terminate this Agreement or any Statement of Work by providing at least **[*]** days' prior written notice of termination to LWI.

(b) By LWI. LWI may terminate this Agreement by providing **[*]** months' prior written notice of termination to CLIENT provided that no such termination shall be effective until **[*]** months after the Effective Date of this Agreement and provided further that any Statement of Work, the duration of which extends beyond the termination of this Agreement, will upon the request of CLIENT continue to be performed for the term of such Statement of Work, and will continue to be governed by the terms of this Agreement. For the avoidance of doubt, in the event of termination by LWI pursuant to this Section 14.3.1, any royalty agreed to in connection with Section 11.2.2 **[*]** and LWI shall transfer the Process to a Third Party **[*]**.

14.3.2 **Other Termination**. Subject to the fees set forth in Section 14.6.3, CLIENT may terminate this Agreement or a Statement of Work (i) upon **[*]** days' prior written notice to LWI in the event that **[*]**, (ii) upon **[*]** days' prior written notice to LWI pursuant to Section 2.2, or (iii) upon prior written notice to LWI after the expiration of the period set forth in Section 17.2.

14.4 **Termination by Insolvency**. Either Party may terminate this Agreement or a Statement of Work upon notice to the other Party, upon (a) the dissolution, termination of existence, or liquidation of the other Party; (b) the appointment of a custodian or receiver for the other Party who has not been terminated or dismissed within ninety (90) days of such appointment; (c) the institution by the other Party of any proceeding under national, federal or state bankruptcy, reorganization, receivership or other similar laws affecting the rights of creditors generally or the making by such Party of a composition or any assignment for the benefit of creditors under any national, federal or state bankruptcy, reorganization, receivership or other similar law affecting the rights of creditors generally, which proceeding is not dismissed within ninety (90) days of filing. All rights and licenses granted pursuant to this Agreement are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title 11 of the United States Code, licenses of rights of "intellectual property" as defined therein.

14.5 **Termination Generally**. LWI agrees that CLIENT has the right to require LWI to cease work under any Statement of Work during a termination notice period. In such event LWI and CLIENT shall meet and discuss the **[*]** that are reasonably required with respect to each Statement of Work.

14.6 **Effects of Termination**.

14.6.1 **Accrued Rights**. Termination of this Agreement for any reason will be without prejudice to any rights that have accrued to the benefit of a Party prior to such termination. Such termination will not relieve a Party of obligations that are expressly indicated to survive the termination of this Agreement.

14.6.2 **Disposition of Remaining CLIENT Property and Confidential Information**. Upon termination or expiration of this Agreement, LWI will store any Remaining CLIENT Property as set forth in Section 7.2 and, at CLIENT's option, return or destroy any CLIENT Confidential Information in the possession or control of LWI. Likewise, CLIENT will, at LWI's option, return or destroy any LWI Confidential Information in the possession or control of CLIENT. Notwithstanding the foregoing provisions: (i) LWI may retain and preserve, at its sole cost and expense, samples and standards of each Product following termination or expiration of this Agreement solely for use in determining LWI's rights and obligations hereunder; and (ii) each Party may retain a single copy of the other Party's Confidential Information for documentation purposes only and which shall remain subject to the obligations of nonuse and confidentiality set forth in this Agreement.

14.6.3 **Payment**.

(a) In the event of any termination of a Statement of Work or the Agreement, except termination by LWI under Section 14.3.1(b) or by CLIENT under Section 14.2, for the lesser of the estimated term remaining under the applicable Statement of Work or **[*]** months from the date of receipt of notice of termination (in the event of termination by CLIENT in connection with Section 2.2, the **[*]** months shall be reduced to **[*]**) (the "Termination Fee Period"), CLIENT shall pay to LWI all documented costs incurred by LWI consisting of the following, but not exceeding any aggregate estimate in the applicable Statement of Work: (i) out-of-pocket losses to LWI for purchase of unmarketable or and unreturnable materials which have become unusable by reason of termination, (ii) all uncancellable labor commitments specifically agreed in the applicable Statement of Work, (iii) suite fees assuming the suite is not used by another LWI client at comparable rates and for a comparable term, (iv) all work or Product in process and all fees for professional services set forth in the applicable Statement of Work rendered through the effective date of such termination of the applicable Statement of Work and (v) reasonable wind-down costs, including, but not limited to, LWI labor costs directly associated with the applicable Statement of Work. LWI shall invoice CLIENT for the fees set forth in Sections 14.6.3(a)(ii) and (iii) and 14.6.3(a)(v) on a monthly basis until the earlier of the expiration of, as the case may be, the Termination Fee Period or LWI's use of the suite for another client at comparable rates and for a comparable term. LWI shall use commercially reasonable efforts to mitigate the damages set forth herein.

(b) For the avoidance of doubt, in the event of termination by LWI pursuant to this Section 14.3.1(b) or by CLIENT pursuant to Section 14.2, **[*]** shall not apply.

14.6.4 **Survival**. Sections 2.3.2, 2.3.3, the last sentence of 4.3, 4.5, 4.6, 4.7, 5, 6, 7, the last sentence of 8.1, 8.3, 8.4, 10, 11, 12, 13, 14.6, 15, and 16, and, as relevant, Sections 1 and 17 of this Agreement, together with any appendices referenced therein, will survive any expiration or termination of this Agreement.

15. INDEMNIFICATION

15.1 **Indemnification of CLIENT**. LWI will indemnify CLIENT, its Affiliates, and their respective directors, officers, employees and agents, and defend and hold each of them harmless, from and against any and all losses, damages, liabilities, costs and expenses (including reasonable attorneys' fees and expenses) in connection with any and all liability suits,

investigations, claims or demands (collectively, "**Losses**") to the extent such Losses arise out of or result from any claim, lawsuit or other action or threat by a Third Party arising out of: (a) any material breach by LWI of this Agreement, or (b) the negligence or willful misconduct on the part of one or more of the LWI Parties in performing any activity contemplated by this Agreement, except for those Losses for which CLIENT has an obligation to indemnify the LWI Parties pursuant to Section 15.2, as to which Losses each Party will indemnify the other to the extent of their respective liability for the Losses.

15.2 **Indemnification of LWI**. CLIENT will indemnify LWI and its Affiliates, and their respective directors, officers, employees and agents (the "**LWI Parties**"), and defend and hold each of them harmless, from and against any and all Losses to the extent such Losses arise out of or result from any claim, lawsuit or other action or threat by a Third Party arising out of: (a) any material breach by CLIENT of this Agreement, (b) the use or sale of Products (including any infringement of Third Party intellectual property rights), except to the extent such Losses arise out of or result from a breach by LWI of Section 5.1 or 12.2, (c) the negligence or willful misconduct on the part of CLIENT or its Affiliates in performing any activity contemplated by this Agreement, or (d) the use or practice by LWI of any process, invention or other intellectual property supplied by CLIENT to LWI under this Agreement, except for those Losses for which LWI has an obligation to indemnify CLIENT pursuant to Section 15.1, as to which Losses each Party will indemnify the other to the extent of their respective liability for the Losses.

15.3 **Indemnification Procedure**.

15.3.1 An "**Indemnitor**" means the indemnifying Party. An "**Indemnitee**" means the indemnified Party, its Affiliates, and their respective directors, officers, employees and agents.

15.3.2 An Indemnitee which intends to claim indemnification under Section 15.1 or Section 15.2 hereof shall promptly notify the Indemnitor in writing of any claim, lawsuit or other action in respect of which the Indemnitee, its Affiliates, or any of their respective directors, officers, employees and agents intend to claim such indemnification. The Indemnitee shall permit, and shall cause its Affiliates and their respective directors, officers, employees and agents to permit, the Indemnitor, at its discretion, to settle any such claim, lawsuit or other action and agrees to the complete control of such defense or settlement by the Indemnitor; provided, however, that in order for the Indemnitor to exercise such rights, such settlement shall not adversely affect the Indemnitee's rights under this Agreement or impose any obligations on the Indemnitee in addition to those set forth herein. No such claim, lawsuit or other action shall be settled without the prior written consent of the Indemnitor and the Indemnitor shall not be responsible for any legal fees or other costs incurred other than as provided herein. The Indemnitee shall cooperate fully with the Indemnitor and its legal representatives in the investigation and defense of any claim, lawsuit or other action covered by this indemnification, all at the reasonable expense of the Indemnitor. The Indemnitee shall have the right, but not the obligation, to be represented by counsel of its own selection and expense.

15.4 **Insurance**.

15.4.1 CLIENT will maintain, at all times during the term of this Agreement and for five years thereafter, a products liability insurance policy (the "**Insurance Policy**"), with a per occurrence limit of at least five million dollars ($5,000,000) and an aggregate limit of at least five million dollars ($5,000,000), and will provide a certificate of insurance to LWI that the Insurance Policy has been endorsed to designate LWI as an additional insured. CLIENT will maintain the Insurance Policy with an insurance company having a minimum AM Best rating of A. CLIENT will provide LWI with at least **[*]** days' written notice prior to termination of such Insurance Policy.

15.4.2 LWI will maintain, at all times during the term of this Agreement and for five years thereafter, a liability insurance policy (the "**LWI Insurance Policy**"), with a per occurrence limit of at least five million dollars ($5,000,000) and an aggregate limit of at least ten million dollars ($10,000,000), and will provide a Certificate of Insurance to CLIENT that the LWI Insurance Policy has been endorsed to designate CLIENT as an additional insured. LWI will maintain the Insurance Policy with an insurance company having a minimum AM Best rating of A. LWI will provide CLIENT with at least **[*]** days' written notice prior to termination of such LWI Insurance Policy.

16. NON-SOLICITATION

During the term of a Statement of Work and for **[*]** months thereafter, each of the Parties agrees not to seek to induce or solicit any employee of the other Party or its Affiliate who performed substantial services related the Statement of Work to discontinue his or her employment with the other Party or its Affiliate in order to become an employee or an independent contractor of the soliciting Party or its Affiliate; provided, however, that neither Party shall be in violation of this Section 16 as a result of making a general solicitation for employees or independent contractors. For the avoidance of doubt, the publication of an advertisement shall not constitute solicitation or inducement.

17. MISCELLANEOUS

17.1 **Independent Contractors**. Each of the Parties is an independent contractor and nothing herein contained shall be deemed to constitute the relationship of partners, joint venturers, nor of principal and agent between the Parties. Neither Party shall at any time enter into, incur, or hold itself out to Third Parties as having authority to enter into or incur, on behalf of the other Party, any commitment, expense, or liability whatsoever.

17.2 **Force Majeure**. Neither Party shall be in breach of this Agreement if there is any failure of performance under this Agreement (except for payment of any amounts due under this Agreement) occasioned by any reason beyond the control and without the fault or negligence of the Party affected thereby, including, without limitation, an act of God, fire, flood, act of government or state, war, civil commotion, insurrection, acts of terrorism, embargo, sabotage, prevention from or hindrance in obtaining energy or other utilities, a shortage of raw materials or other necessary components, labor disputes of whatever nature, or any other reason beyond the

control and without the fault or negligence of the Party affected thereby (a "**Force Majeure Event**"). Notwithstanding the foregoing, in the event of a complete or partial regulatory shutdown of a facility or service or other act by an governmental or regulatory authority that (a) specifically impacts a Party's operations (i.e., without shutting down facilities owned by Third Parties) and (b) is due to a Party's negligence, willful misconduct or non-compliance with Applicable Laws, such shutdown shall not constitute a "Force Majeure Event". Such excuse shall continue as long as the Force Majeure Event continues. Upon cessation of such Force Majeure Event, the affected Party shall promptly resume performance under this Agreement as soon as it is commercially reasonable for the Party to do so. Each Party agrees to give the other Party prompt written notice of the occurrence of any Force Majeure Event, the nature thereof, and the extent to which the affected Party will be unable to fully perform its obligations under this Agreement. Each Party further agrees to use commercially reasonable efforts to correct the Force Majeure Event as quickly as practicable (provided that in no event shall a Party be required to settle any labor dispute) and to give the other Party prompt written notice when it is again fully able to perform such obligations. In the event that a Force Majeure Event prevents LWI from performing under this Agreement for more than **[*]** days, then CLIENT may terminate this Agreement without any further obligation to LWI.

17.3 **Notices**. Any notice required or permitted to be given under this Agreement by any Party shall be in writing and shall be (a) delivered personally, (b) sent by registered mail, return receipt requested, postage prepaid, (c) sent by a nationally-recognized courier service guaranteeing next-day or second day delivery, charges prepaid, or (d) delivered by facsimile (with documented evidence of transmission), to the addresses or facsimile numbers of the other Party set forth below, or at such other addresses as may from time to time be furnished by similar notice by any Party. The effective date of any notice under this Agreement shall be the date of receipt by the receiving Party.

If to LWI:

Lonza Walkersville, Inc.
Attn: Vice President, Cell Therapy Bioservice
8830 Biggs Ford Road
Walkersville, Maryland 21793
Fax: **[*]**

With a copy to:

General Counsel
Lonza America, Inc.
90 Boroline Road
Allendale, NJ 07401
Fax: **[*]**

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

If to CLIENT:

Aduro BioTech, Inc.
Justin Skoble
626 Bancroft Way, 3C
Berkeley, CA 94710
Fax: **[*]**

With a copy to: Aduro Legal at the same address.

Either Party may change its address for notice by giving notice thereof in the manner set forth in this Section 17.3.

17.4 **Entire Agreement; Amendments**. This Agreement, including the Appendices attached hereto and referenced herein, constitutes the full understanding of the Parties and a complete and exclusive statement of the terms of their agreement with respect to the specific subject matter hereof and supersedes all prior agreements and understandings, oral and written, among the Parties with respect to the subject matter hereof. No terms, conditions, understandings or agreements purporting to amend, modify or vary the terms of this Agreement (including any Appendix hereto) shall be binding unless hereafter made in a written instrument referencing this Agreement and signed by each of the Parties.

17.5 **Governing Law**. This Agreement will be governed by and construed in accordance with the internal laws of the State of New York, without giving effect to its conflicts of laws provisions. The Parties consent to the exclusive jurisdiction of the state and federal courts in and for New York for any dispute or claim arising from or relating to this Agreement.

17.6 **Counterparts**. This Agreement and any amendment hereto may be executed in any number of counterparts, each of which shall for all purposes be deemed an original and all of which shall constitute the same instrument. This Agreement shall be effective upon full execution by facsimile or original, and a facsimile signature shall be deemed to be and shall be as effective as an original signature.

17.7 **Severability**. If any part of this Agreement shall be found to be invalid or unenforceable under applicable law in any jurisdiction, such part shall be ineffective only to the extent of such invalidity or unenforceability in such jurisdiction, without in any way affecting the remaining parts of this Agreement in that jurisdiction or the validity or enforceability of the Agreement as a whole in any other jurisdiction. In addition, the part that is ineffective shall be reformed in a mutually agreeable manner so as to as nearly approximate the intent of the Parties as possible.

17.8 **Titles and Subtitles**. All headings, titles and subtitles used in this Agreement (including any Appendix hereto) are for convenience only and are not to be considered in construing or interpreting any term or provision of this Agreement (or any Appendix hereto).

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

17.9 **Exhibits**. All “RECITALS”, “DEFINITIONS”, exhibits and appendices referred to herein form an integral part of this Agreement and are incorporated into this Agreement by such reference.

17.10 **Pronouns**. Where the context requires, (i) all pronouns used herein will be deemed to refer to the masculine, feminine or neuter gender as the context requires, and (ii) the singular context will include the plural and vice versa.

17.11 **Assignment**. This Agreement shall be binding upon the successors and assigns of the Parties and the name of a Party appearing herein shall be deemed to include the names of its successors and assigns. Neither Party may assign its interest under this Agreement without the prior written consent of the other Party, such consent not to be unreasonably withheld; provided, however, either party may be entitled without the prior written consent of the other Party to assign this Agreement to an Affiliate or to any company to which it has transferred all or substantially all of its assets or capital stock relating to the activities contemplated under this Agreement, whether through purchase, merger, consolidation or otherwise; provided that in the event that CLIENT merges, is acquired, consolidates or sells all or substantially all of its business to which this Agreement relates, such successor in interest is not an entity whose business primarily derives from providing contract manufacturing services. Any permitted assignment of this Agreement by either Party will be conditioned upon that Party’s permitted assignee agreeing in writing to comply with all the terms and conditions contained in this Agreement. Any purported assignment without a required consent shall be void. No assignment shall relieve any Party of responsibility for the performance of any obligation that accrued prior to the effective date of such assignment.

17.12 **Waiver**. The failure of any Party at any time or times to require performance of any provision of this Agreement (including any Appendix hereto) will in no manner affect its rights at a later time to enforce the same. No waiver by any Party of any term, provision or condition contained in this Agreement (including any Appendix hereto), whether by conduct or otherwise, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, provision or condition or of any other term, provision or condition of this Agreement (including any Appendix hereto).

17.13 **No Presumption Against Drafter**. For purposes of this Agreement, CLIENT hereby waives any rule of construction that requires that ambiguities in this Agreement (including any Appendix hereto) be construed against the drafter.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

ADURO BIOTECH, INC.

By: /s/ Stephen Isaacs
Name: Stephen Isaacs
Title: CEO

LONZA WALKERSVILLE, INC.

By: /s/ Stephan Kutzer
Name: Stephan Kutzer
Title: COO & President

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

APPENDIX A

STATEMENT OF WORK

TO BE ATTACHED

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

APPENDIX B

QUALITY AGREEMENT

TO BE ATTACHED

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit 10.30

PROCESS DEVELOPMENT AND MANUFACTURING SERVICES AGREEMENT

THIS AGREEMENT is entered into by and between IDT and Aduro BioTech, as of the date indicated below.

Attached to this Agreement, incorporated by reference herein and made an integral part hereof are the following:

PART I:	INTRODUCTORY STATEMENT, DEFINITIONS AND VARIABLE TERMS AND CONDITIONS
PART II:	STANDARD TERMS AND CONDITIONS
PART III:	EXHIBITS

For and in consideration of the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the Parties, the Parties hereto agree to perform and to be bound by their respective obligations and shall have the respective rights set forth in this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of December 12, 2013 (“Effective Date”).

IDT Biologika GmbH

By: /s/ Ralf Pfirman

Dr. Ralf Pfirmann, CEO

By: /s/ Andreas Neubert

Dr. Andreas Neubert,
Vice President Vaccines

ADURO BIOTECH, INC.

By: /s/ Gregory Schafer

Gregory W. Schafer, COO

Table of Contents

PART I: INTRODUCTORY STATEMENT, DEFINITIONS AND VARIABLE TERMS AND CONDITIONS

This Agreement sets forth the understanding of the Parties with respect to ADURO BIOTECH's CRS-207 project relating to the performance of the Services by IDT pursuant to the Work Plan and the payment for Services by ADURO BIOTECH, as well as other matters related thereto, all as more specifically set forth in the terms and provisions of this Agreement.

ARTICLE 1: DEFINITIONS

1.1 **Definitions**. The following terms, whether used in the singular or plural, shall have the meanings assigned to them below for the purposes of this Agreement.

1.1.1 "ADURO BIOTECH" means Aduro BioTech, Inc., and its permitted successors and assigns.

1.1.2 "ADURO BIOTECH Arising IP" shall have the meaning set forth in Section 9.5.

1.1.3 "ADURO BIOTECH Materials" shall mean the materials (including Cell Lines) and information supplied by or on behalf of ADURO BIOTECH to IDT for use in connection with the development of the Process and the development and Manufacture of Product. For clarity, ADURO BIOTECH Materials shall include the CRS-207 master cell bank (the "Cell Lines").

1.1.4 "Affiliate" means any corporation, partnership, or other entity Controlling, Controlled by, or under common Control with (directly or indirectly) either Party.

1.1.5 "Agreement" means this Process Development And Manufacturing Services Agreement including the signature page, Part I – Introductory Statement, Definitions and Variable Terms and Conditions, Part II – Standard Terms and Conditions; and Part III – Exhibits, and all amendments to this Agreement that have been properly executed by the Parties in accordance with the provisions of Section 6.1.4.

1.1.6 "Alliance Manager(s)" has the meaning set forth in Section 14.1.

1.1.7 "Amendment Procedures" has the meaning set forth in Section 6.1.

1.1.8 "Applicable Law" means all U.S., EU, and German applicable laws, rules, regulations, guidelines and standards in effect during performance of this Agreement, including GMP, relating to the Services, the Product, and the facilities where any Services occur.

1.1.9 “Arising IP” shall have the meaning set forth in Section 9.5.

1.1.10 “Batch” means a specific quantity of a Product comprising of number of units mutually agreed upon between IDT and ADURO BIOTECH, and that (a) is intended to have uniform character and quality, within specified limits, and (b) is produced during one cycle of Manufacture.

1.1.11 “Business Day” means a day other than a Saturday or Sunday on which banking institutions in Dessau-Rosslau, Germany and New York, New York, USA are open for business.

1.1.12 “Claim” means any claim, personal injury claim, demand, liability (including any and all liabilities, actions, proceedings, claims and demands), product liability claim, suit, expense, action or proceeding.

1.1.13 “Commercial Supply Period” shall have the meaning set forth in Section 1.3.2.

1.1.14 “Confidential Information” shall have the meaning set forth in Section 8.1.

1.1.15 “Consent” means the consent or approval, in writing, of an authorized officer of a Party to do the act or thing for which such consent or approval is solicited, or the act of granting such written consent or approval, as the context may require.

1.1.16 “Control” refers to the possession, directly or indirectly, of the power to direct, or cause the direction of, the management or policies of either Party, whether through the ownership of voting securities, by contract or otherwise, including, the ownership of fifty percent (50%) or more of the voting stock of such Party.

1.1.17 “Damages” mean damages, losses, costs, and expenses, including reasonable legal fees, arising from Claims.

1.1.18 “Defective Product” has the meaning set forth in Section 7.1.

1.1.19 “Deliverables” mean the reports, data and other deliverables, including Products, to be delivered by IDT to ADURO BIOTECH as well as items to be delivered by ADURO BIOTECH TO IDT, pursuant to the respective Work Packages.

1.1.20 “Delivery” has the meaning set forth in Section 3.1.

1.1.21 “Development Product” has the meaning set forth in Section 2.9.

1.1.22 “Effective Date” means the date set forth on the signature page of this Agreement.

1.1.23 “Equipment” has the meaning set forth in Section 2.7.1.

1.1.24 “Exhibits” mean those documents and materials attached to this Agreement as Exhibits in Part III hereof, incorporated in this Agreement by reference and made an integral part hereof.

1.1.25 “cGMP” means (a) the current Good Manufacturing Practice regulations as promulgated by the EU Guidelines for Good Manufacturing Practice for medicinal products (Eudralex Vol. 4 and Annexes thereto), (b) any other relevant EU or national legislation and guidance documents, and (c) current Good Manufacturing Practice regulations promulgated by the FDA published at 21 CFR Part 210 et seq., as any such regulation may be amended from time to time.

1.1.26 “IDT” means IDT Biologika GmbH, and its permitted successors and assigns.

1.1.27 “IDT Production Facilities” means the Manufacturing facilities of IDT located in Dessau-Roßlau, Germany, where the Services will be performed, except as otherwise set forth in this Agreement.

1.1.28 “Initial Payment” has the meaning set forth in Section 5.6.2.

1.1.29 “Intellectual Property” includes rights in patents, patent applications, formulae, processes, data, know-how, trademarks, trademark applications, trade names, inventions, copyrights, and industrial designs, or any rights in material derived from any of the foregoing.

1.1.30 “Licensee” shall mean any Third Party to which ADURO BIOTECH granted rights and licenses in and to a Product for commercial use, including but not limited to, licensees, partners or joint developers.

1.1.31 “Manufacture” and “Manufacturing” means all steps and activities necessary to produce the Product, including by way of enumeration, the manufacturing, processing, quality control, quality assurance, testing, and release of the Product in compliance with the terms and conditions of this Agreement. For purposes of this Agreement and subject to the provisions of Section 2.9, the manufacturing, processing, quality control, quality assurance, testing, and release of the Product may be included, as required and agreed in writing by the Parties, as part of the Services in a Work Plan.

1.1.32 “Master Production Record” means the documentation that contains the detailed description of the Process and instructions for Product production, as approved by ADURO BIOTECH in writing.

1.1.33 “Milestone” has the meaning set forth in Section 1.3.1.

1.1.34 “Notice” means a writing containing the information required or permitted by this Agreement to be communicated by either Party to the other Party at the address set forth in Section 16.1, or such other address provided by a Party, delivered by overnight courier, two-day international courier, or in person and received by, a Party. Notwithstanding the foregoing provisions, any Notice relating to scheduling of the Manufacture of Product, or other operational issues, or as otherwise expressly permitted by the provisions of this Agreement may be given by electronic mail. For clarity, Notices do not constitute agreements or amendments to this Agreement, all of which must be in writing and executed by both Parties.

1.1.35 “Party” means IDT or ADURO BIOTECH as the context dictates and “Parties” means both IDT and ADURO BIOTECH.

1.1.36 “Process” means the Manufacturing process for the Product as provided by ADURO BIOTECH and further developed hereunder.

1.1.37 “Product” means CRS-207 in any of its forms that include mesothelin as the sole heterologous antigen, including but not limited to the final form for use in clinical trials and the form Manufactured by IDT pursuant to this Agreement (including the Quality Agreement and all of its other Exhibits, and as described in each of the applicable Specifications).

1.1.38 “Quality Agreement” means the Quality Agreement between the Parties attached as Exhibit B.

1.1.39 “Rejection Notice” has the meaning set forth in Section 7.1.

1.1.40 “Regulatory Authority” means any national (such as the FDA), supra-national (such as the European Medicines Agency), or other national, supra-national, regional, state, or local regulatory agency, department, bureau, commission, council, or other governmental entity with authority and/or jurisdiction over any aspect of the Product.

1.1.41 “Service Fees” means the fees for Services performed by IDT pursuant to each Work Package set forth as part of the Work Plan attached hereto as Exhibit A.

1.1.42 “Services” means the work required by ADURO BIOTECH under the relevant Work Packages which is ordered by ADURO BIOTECH and included as a part of the Work Plan.

1.1.43 “Specifications” means those specifications for the Product as set forth in in the respective Work Packages relating to the Product, which shall amend automatically Attachment B of the Quality Agreement (which is attached as Exhibit B to this Agreement), which itself may be amended with the Parties´ prior Consent.

1.1.44 “Term” has the meaning set forth in Section 13.1 of this Agreement.

1.1.45 “Third Party” means a person or entity other than IDT or ADURO BIOTECH or their respective Affiliates.

1.1.46 “Work Plan” means the plan attached hereto as Exhibit A and a part hereof. Said Work Plan sets forth the specific Work Packages which describe, among other things, the Services to be performed by IDT under this Agreement. Each Work Package may designate certain Products as “Development Products” that are subject to the provisions of Section 2.9.

1.1.47 “Work Package” means the document, signed by the Parties, that sets forth the Deliverables of the Parties, including the Services to be performed by IDT. With respect to deliverables of IDT, a Work Package may describe Product quantities and Manufacturing Instructions, Delivery/release date, reports, data and any other documentation or work result as set forth by the Parties in said Work Package. With respect to deliverables of ADURO BIOTECH, a Work Package may describe materials, documentation and approvals to be provided and the respective timelines related thereto, payment terms and other relevant terms and conditions. Each such Work Package shall contain the following terms: (i) Title and Date; (ii) Performance Timelines; (iii) Detailed Description of Deliverables by ADURO BIOTECH; (iv) Detailed Description of Services and Deliverables by IDT; (v) Amendments to this Agreement as required under such Work Package, if any; (vi) Amendments to the Quality Agreement as required under such Work Package, if any; (vii) Price, Payment; and (viii) other terms and conditions.

1.2 **Interpretation**. The interpretation and construction of this Agreement shall be subject to the following provisions:

1.2.1 the words “including” and “include” and words of similar effect shall not be deemed to limit the general effect of the words which precede them such that “including” means “including without limitation”;

1.2.2 where the context requires, (i) all pronouns used herein will be deemed to refer to the masculine, feminine or neuter gender as the context requires, and (ii) the singular context will include the plural and vice versa;

1.2.3 reference to any agreement, contract, document or deed shall be construed as a reference to it as amended in a writing signed by the Parties thereto;

1.2.4 words importing persons shall include firms, companies and bodies, authorities, corporate and vice versa; words importing any one gender shall include either other gender;

1.2.5 construction of this Agreement shall ignore the headings which are for reference only;

1.2.6 references to a numbered Article, Section, Exhibit or paragraph are references to the Article, Section, Exhibit or paragraph of or to this Agreement so numbered;

1.2.7 any reference to any legislative provision shall be deemed to include any subsequent re-enactment or amending provision; and

1.2.8 in the event of a conflict between the provisions of this Agreement and the Quality Agreement regarding any issue not related to a quality control or quality assurance matter, the provisions of this Agreement shall take precedence. The provisions of the Quality Agreement will take precedence regarding any issue solely related to a quality control or quality assurance matter. For the sake of clarity, if there is uncertainty as to whether the provisions of this Agreement or the provisions of the Quality Agreement prevail, any such uncertainty shall be resolved by giving precedence to the provisions in this Agreement.

1.2.9 Subject to the provisions of Section 1.2.8, in the event of a conflict between the provisions of this Agreement and the provision of any Exhibit, the provisions of this Agreement shall take precedence.

1.3 **Development Milestones and Commercial Manufacture**.

1.3.1 **Development Milestones.** As part of the completion of the Work Plan, IDT agrees to use its commercially reasonable efforts to fulfill its obligations to provide the Deliverables which are set forth in the Work Plan as agreed in writing by the Parties and to complete the following milestones (each, a “Milestone”) on the timelines and the other terms and conditions set forth herein which, for clarity, includes the terms and conditions in the Work Plan.

1.3.1.1 Milestone 1. Upon completion of **[*]**, the Parties intend to have **[*]**. **[*]** shall **[*]**.

1.3.1.2 Milestone 2. Upon completion of **[*]**.

1.3.1.3 Milestone 3. Upon completion of **[*]**.

1.3.2 **Commercial Manufacture.** After Milestone 3, ADURO BIOTECH shall purchase and IDT shall Manufacture and Deliver to ADURO BIOTECH the Product for commercial supply to meet **[*]** of the worldwide requirements of ADURO BIOTECH and its Affiliates and its Licensees, for such Product until the end of **[*]** months after **[*]**. Notwithstanding the foregoing provision, in the event that **[*]**, shall be **[*]** after the date of **[*]**, then the **[*]** period shall commence to run independently, i.e. from the date **[*]**. The period of time calculated under the preceding sentences is referred to herein as the "Commercial Supply Period". The Parties agree that all such commercial Product shall (i) be at **[*]** per dose (final product, labeled and in bulk packaging) agreed in good faith by the Parties but not exceeding **[*]** per dose, and (ii) be delivered in whole lot quantities not more than **[*]** days after the same is ordered by ADURO BIOTECH.

1.3.3 **Orders Prior to Approval**. ADURO BIOTECH may order any commercial Product prior to the first date of regulatory approval, provided that in such case as in all instances of Product so ordered by ADURO BIOTECH and delivered by IDT to ADURO BIOTECH under IDT's QP release procedures, ADURO BIOTECH shall pay for such Product even though it may not be usable or saleable by ADURO BIOTECH due to IDT Production Facilities not having been approved by Regulatory Authorities for the Manufacture of such Product or due to other regulatory reasons. IDT agrees to supply all such quantities so ordered. For the sake of clarity, IDT shall have no liability for Product ordered by ADURO BIOTECH prior to approval which Product cannot be used or sold by ADURO BIOTECH due to any of the foregoing reasons.

1.3.4 **Commercial Supply Agreement**. By no later than the completion of **[*]**, the Parties shall commence good faith negotiations of a Commercial Supply Agreement covering the purchase and supply of the Product to the end market to be executed by the Parties within **[*]** months after the start of said negotiations. Such Commercial Supply Agreement shall include, among other matters, the terms and conditions set forth in Section 1.3.2.

1.3.5 **License Agreement**. In the event that ADURO BIOTECH during the Term enters into a license agreement Licensee pursuant to which ADURO BIOTECH grants a license to said Licensee to undertake the

Manufacture of Product during the Term ("License Agreement"), then ADURO BIOTECH shall cause the following provision to be included in the License Agreement:

> *Licensee acknowledges that ADURO BIOTECH has contracted with IDT Biologika GmbH ("IDT") for the development of CRS-207 (the "Development Agreement"). Licensee agrees that if it (whether on its own or through an Affiliate or subcontractor) decides within the Term (as defined in the Development Agreement) to have any CRS-207 manufactured in commercial quantities for commercial sale in the US or the EU, said Licensee shall adhere to the terms set forth in Section 1.3 of the Development Agreement. Licensee agrees to insert in any sublicense agreement, in which its relevant rights described herein are sublicensed to a third party, a provision binding the sublicense, and its sub-licensees, to the obligations above set forth.*

IDT hereby agrees that ADURO BIOTECH may share this Agreement with any potential Licensee so such Licensee may fully understand its obligations related hereto.

ARTICLE 2: PERFORMANCE OF SERVICES

2.1 **General**. During the Term, IDT shall undertake the performance of the Services including the Manufacture of Product in accordance with the Work Plan and the terms and conditions of this Agreement and Applicable Law. ADURO BIOTECH shall pay the Service Fees for such Services, or the Product price in case of commercial Manufacture, and perform its obligations in accordance with the Work Plan and the terms and conditions of this Agreement and Applicable Law. The Parties hereby terminate the purchase order and related terms and conditions dated October 9, 2013 between the Parties (the "PO") as of the Effective Date hereof. The PO is of no force or effect and all terms and conditions related to the Services set forth in the PO are hereby governed by this Agreement.

2.2 **Quality Agreement**. Subject to the provisions of Sections 1.2.7 and 2.9, the Quality Agreement attached hereto as Exhibit B shall govern all quality related matters pertaining to each Party's obligations under this Agreement.

2.3 **Work Plan**. The Parties have given their Consent to the Work Plan attached as Exhibit A. Said Work Plan may only be amended in a writing signed by both Parties pursuant to the provisions of Section 6.1.4. It shall contain, or shall be

amended respectively by the Parties to contain, a detailed description of all development work including, but not limited to, Phase 3, consistency and validation batches to be used by ADURO BIOTECH in applications for registration and marketing approval. The Services to be provided under a given Work Package shall commence on receipt by IDT from ADURO BIOTECH of the Initial Payment for such Work Package, which Initial Payment obligation is due as set forth in the respective Work Package. Notwithstanding the foregoing, the start of performance of **[*]** shall be commenced by IDT no later than upon successful completion of **[*]**, upon which commencement IDT shall invoice the Initial Payment for **[*]** and ADURO BIOTECH shall pay such Initial Payment within **[*]** days of receipt of said invoice.

2.4 **Facilities**. At all times during the Term, IDT Production Facilities used in connection with Manufacturing under this Agreement shall comply with all Applicable Laws.

2.5 **Manufacture Compliance**. Subject to the provisions of Section 2.9 relating to Development Product, all of the Manufacturing performed by IDT shall be in accordance with: (a) cGMP; (b) the applicable Specifications; (c) this Agreement, including the Quality Agreement and all other Exhibits; and (d) Applicable Law.

2.6 **Subcontracting**. IDT will Manufacture the Product at the IDT Production Facilities, and may subcontract single quality control tests to qualified test laboratories with ADURO BIOTECH's prior Consent. In the event that IDT subcontracts any of its obligations hereunder, IDT will (i) identify each subcontractor in writing to ADURO BIOTECH; (ii) require the subcontractor to agree in writing to comply with the applicable provisions of this Agreement which shall include written confidentiality obligations not less onerous than those set forth in Article 8; (iii) be responsible in the event of any non-compliance by the subcontractor with the terms of this Agreement and (iv) ensure the rights of ADURO BIOTECH to audit such subcontractors in accordance with the Quality Agreement.

2.7 **Equipment**. Certain new capital equipment is required by IDT in order to perform the Manufacture.

2.7.1 The details and costs of said new capital equipment, including the purchase price of the equipment and ancillary costs relating to installation, qualification and start-up of said equipment, is listed in Exhibit C (hereinafter referred to as "Equipment").

2.7.2 ADURO BIOTECH shall be the owner of said Equipment and reimburse IDT for the costs of said Equipment as further specified in Exhibit C within **[*]** days of receipt of an invoice from IDT for said costs.

2.7.3 During such time period that said Equipment is the property of ADURO BIOTECH, IDT shall maintain and repair said Equipment in accordance with IDT's standard equipment maintenance and repair procedures and ADURO BIOTECH shall pay the reasonable costs of such maintenance and repair within **[*]** days of receipt from IDT of an invoice for the same, any such invoice being issued by IDT to ADURO BIOTECH not more often than quarter-annually.

2.7.4 At the expiration or termination of this Agreement, the items of said Equipment that are installed as part of an IDT production line shall be retained by IDT. With respect to the items of Equipment that are not so installed at the expiration or termination of this Agreement in an IDT production line, IDT will, at IDT's option set forth in a Notice to ADURO BIOTECH, either (a) ship to ADURO BIOTECH, at ADURO BIOTECH's expense, said items of Equipment; (b) dispose, at ADURO BIOTECH's expense, of said items of Equipment, or (c) continue to retain the items of said Equipment as ADURO BIOTECH property to be used for commercial Manufacturing of the Product in commercial quantities if so agreed by the Parties, or (d) pay to ADURO BIOTECH the depreciated book value of said items of Equipment and thereafter retain and own said items of Equipment, which payment shall be made within **[*]** days after the date of the option Notice referenced above.

2.8 **ADURO BIOTECH Materials**. IDT agrees that the ADURO BIOTECH Materials shall only be used as specified in writing by ADURO BIOTECH in this Agreement or the applicable Work Plan, and not for any other purpose. ADURO BIOTECH Materials shall be maintained, handled and stored in accordance with the written directions of ADURO BIOTECH. Title to the ADURO BIOTECH Materials shall at all times remain in ADURO BIOTECH. IDT agrees that it shall not make any claim or place any lien or encumbrance on any ADURO BIOTECH Materials. Upon direction of ADURO BIOTECH, IDT shall provide ADURO BIOTECH with an accounting of the ADURO BIOTECH Materials and a list of persons with access to the ADURO BIOTECH Materials, and will return to ADURO BIOTECH all ADURO BIOTECH Materials supplied by ADURO BIOTECH. Title in all Cell Lines prepared from the ADURO BIOTECH Materials (whether development of the line is in-process or complete) shall vest in ADURO BIOTECH on creation and shall be deemed ADURO BIOTECH Materials and Cell Lines. Risk of loss to Cell Lines, except for any risk of loss that is inherent in the Cell Lines and/or that is due to the negligence or wilful acts of ADURO BIOTECH or its agents, shall remain with IDT while ADURO BIOTECH Materials are in IDT's control pursuant to a written agreement pursuant to which IDT takes receipt of such Materials and which sets forth the replacement value of such Materials. ADURO BIOTECH shall have the absolute right upon reasonable Notice and reasonable request to recover the ADURO BIOTECH Materials and IDT shall cooperate in the same.

2.9 **Development Product**. Certain of the Products are designated in the Work Plan as "Development Products". Notwithstanding any other provision herein set forth, the following terms and conditions apply to Development Products:

2.9.1 The Parties acknowledge and agree that due to the nature of the Work Plan Deliverables relating to any Development Product, IDT cannot and does not guarantee or warrant, and shall provide no indemnity with respect to, any such Work Plan Deliverables or any such Development Product. Notwithstanding this, IDT warrants that any reports comprised in the Work Plan Deliverables will be accurate and complete (except in immaterial respects) and not misleading.

2.9.2 IDT's obligation in respect of its performance of any work or Services in connection with any Development Product is limited to performance of such work or Services in a diligent manner, with reasonable skill and care applying its professional standards and using its commercially reasonable endeavours to meet the estimated timelines and goals set out in the applicable Work Packages.

2.9.3 cGMP shall not apply to the development, Manufacture, Specifications (meaning the "Product Specifications for Development Use" as listed in Attachment B to the Quality Agreement) or any other aspect of any Development Product or to any Work Plan Deliverables relating thereto, except to the extent specified by the Parties in the respective Work Packages.

ARTICLE 3: DELIVERY, SHIPMENT AND STORAGE OF PRODUCT

3.1 **Delivery**. Delivery of each Deliverable shall occur upon release thereof as is set forth in the applicable Work Package ("Delivery"). Risk of loss for each Work Plan Deliverable shall transfer from IDT to ADURO BIOTECH **[*]**. Title shall vest in ADURO BIOTECH **[*]**. On the date of Delivery, IDT shall submit an invoice to ADURO BIOTECH for amounts then due pursuant to the Work Package and the provisions of this Agreement. ADURO BIOTECH shall pay the amount of each said invoice by bank wire transfer within **[*]** days following the date of receipt thereof by ADURO BIOTECH. For the sake of clarity, "release" for purposes of "Delivery" shall be determined pursuant to the applicable provisions of the Quality Agreement.

3.2 **Shipment**. Upon written request from ADURO BIOTECH, IDT shall ship Product directly to ADURO BIOTECH or, on behalf of ADURO BIOTECH, ship Product to the customer/CRO/clinical site of ADURO BIOTECH and in connection therewith render such services and provide such assistance as are set forth by ADURO BIOTECH or, as applicable, in accordance with the instructions for shipping and packaging specified in the applicable Work Package. The procedures relating to each shipment shall be agreed by the Parties and described

in the Quality Agreement. Each shipment of Product shall be **[*]** (Incoterms 2010), unless otherwise agreed by the Parties. ADURO BIOTECH shall reimburse or pay directly all costs of whatever kind incurred in connection with each shipment, including insurance, freight, duties and handling. A bill of lading will be furnished to ADURO BIOTECH with respect to each shipment of Product. IDT shall cooperate in ADURO BIOTECH exporting Product from Germany including providing ADURO BIOTECH all required Manufacturing-related documentation. In no event shall IDT's liability arising in connection with any shipping services rendered by IDT for ADURO BIOTECH under this Agreement exceed **[*]**.

3.3 **Storage**. IDT shall, at ADURO BIOTECH's request, provide storage of Product at IDT for at least **[*]** days after Delivery at no charge to ADURO BIOTECH. Storage of Product longer than said time period shall be subject to IDT's standard storage fee as set forth in Exhibit A hereto, which fees will be billed to ADURO BIOTECH quarterly. IDT shall store all of the raw materials and other ingredients/disposables, primary packaging and the Products as set forth in the respective Specifications and as directed by Applicable Laws. IDT shall be responsible for all loss of or damage to all Product, including drug substance, as well as all materials and other ingredients/disposables used in the Manufacturing of the Products while such items are in the possession or control of IDT, to the extent that such loss or damage is covered by IDT´s insurance; provided, however, that if such loss or damage is a result of IDT's gross negligence or wilful misconduct, IDT shall be responsible for such loss or damage regardless of whether such loss or damage is covered by IDT's insurance. IDT will use commercially reasonable efforts or as governed by provisions in this Agreement to replace and/or reproduce as soon as commercially reasonable, any such Product which is lost or damaged.

PART II: STANDARD TERMS AND CONDITIONS

ARTICLE 4: REGULATORY MATTERS

4.1 Unless otherwise agreed in writing by the Parties, ADURO BIOTECH shall be entitled to and have the sole responsibility for filing all documents with applicable Regulatory Authorities and taking any other actions that may be required or necessary in order to obtain from said Regulatory Authorities approval for the use of the Product in clinical trials or in order to obtain marketing authorization for the Product. IDT shall provide ADURO BIOTECH with assistance and cooperation in connection with the foregoing to the extent described in the Work Plan.

4.2 Within **[*]** Business Days of any contact with, or after receipt of any communication from, a Regulatory Authority that may be reasonably expected to affect the Manufacture of the Product, each Party shall without undue delay forward to the other Party a copy or description of the same and shall confer with

the other Party with respect to the best means to comply with any new or modified requirements of such Regulatory Authority. IDT shall provide ADURO BIOTECH with a copy of all draft responses for comment as soon as possible and shall consider ADURO BIOTECH's comments in good faith. ADURO BIOTECH shall submit any comments on said draft responses within **[*]** Business Days or within such longer period of time as agreed by the Parties. IDT shall also provide ADURO BIOTECH with a copy of all final responses for review and approval, which shall not be unreasonably withheld or delayed, at least **[*]** Business Days prior to submission thereof.

ARTICLE 5: FEES AND PAYMENT

5.1 ADURO BIOTECH agrees to pay IDT in accordance with the provisions set forth in this Article 5 and in the relevant Work Packages. Each invoice shall reference the applicable provisions of the relevant Work Package and this Agreement.

5.2 The Service Fees and other amounts to be paid by ADURO BIOTECH do not include VAT or other taxes to be paid by ADURO BIOTECH, if any, all of which taxes will be estimated in the respective Work Packages. IDT agrees that it is responsible for compliance with federal, state and local tax requirements relating to payments made by ADURO BIOTECH to IDT under this Agreement.

5.3 Payment shall be made by ADURO BIOTECH to IDT by bank wire transfer within **[*]** days following the date of ADURO BIOTECH's receipt of invoice from IDT or as otherwise set forth in the relevant Work Package.

5.4 IDT may charge a fee equal to the current base rate established by the German Federal Bank plus **[*]** annually calculated on a daily basis, on all amounts past due under any invoice issued by IDT to ADURO BIOTECH under this Agreement.

5.5 The Services Fees set forth in any Work Package shall not be changed or amended other than to reflect the written agreement of the Parties relating to any change or amendment of the Services covered by said Work Package. In particular, no Service Fees shall be decreased or increased after execution of a Work Plan unless agreed to in an amendment signed by the Parties.

5.6 ADURO BIOTECH shall pay IDT pursuant to the following payment schedule.

5.6.1 For the **[*]**, ADURO BIOTECH shall pay to IDT **[*]** of the aggregate Services Fees set forth therein, which is agreed to be **[*]**.

5.6.2 For **[*]** and for any subsequent Work Package, ADURO BIOTECH shall pay to IDT **[*]** of the aggregate Service Fees set forth therein (the "Initial Payment") prior to the Services for the Work Package being initiated by IDT on the initiation date as set forth in the Work Package hereto, or alternatively in the Work Plan, Exhibit A. IDT shall invoice the

remaining **[*]** upon Delivery of the Deliverables under said Work Package pursuant to section 3.1 and as such set forth in the respective Work Package.

5.6.3 The payment provisions of Sections 5.1 to 5.4 shall apply to the payments of the above-referenced Service Fees to be made by ADURO BIOTECH to IDT.

5.6.4 In the event that this Agreement is terminated by ADURO BIOTECH for material default or insolvency of IDT pursuant to Section 13.2, IDT shall reimburse to ADURO BIOTECH an amount equal to the Service Fees paid by ADURO BIOTECH pursuant to orders as set forth in the Work Packages, minus the full value of the Deliverables under the Services completed by IDT on or prior to the date of said termination. If the result is a negative number, then IDT shall invoice ADURO BIOTECH for the difference.

ARTICLE 6: AMENDMENTS TO THIS AGREEMENT

6.1 **Amendments**. Set forth in this Article 6 are the procedures to be followed by the Parties in connection with amendments to this Agreement and to its Exhibits, including the Work Plan and the Work Packages ("Amendment Procedures"), except as may be expressly provided otherwise in this Agreement.

6.1.1 If a Party desires an amendment of this Agreement or of its Exhibits, such Party shall send to the other Party a Notice containing an amendment proposal describing in reasonable detail said amendment and the reasons for it and including supporting documentation demonstrating the need for the amendment ("Amendment Proposal"). Each Amendment Proposal shall comply with any specific provisions that may be set forth in the Section of this Agreement under which the Amendment Proposal arises.

6.1.2 The Party receiving said Amendment Proposal shall respond to it with a Notice within **[*]** calendar days from the date of receipt or within such longer period of time as the Parties mutually agree ("Proposal Response"). Said Proposal Response shall either accept the Amendment Proposal or set forth suggestions for changes desired by said receiving Party or reject the Amendment Proposal.

6.1.3 Unless the Amendment Proposal has been rejected pursuant to the provisions of Section 6.1.2, the Parties will negotiate the terms of any such Amendment Proposal in good faith.

6.1.4 All amendments, including any amendment to the provisions of this Section 6.1, shall be in writing and signed by both Parties to be valid.

6.1.5 Notwithstanding the provisions set forth in Section 6.1 above, amendments to the Quality Agreement relating to quality assurance or quality control shall be made in accordance with the applicable change control provisions set forth in the Quality Agreement.

ARTICLE 7: NON-CONFORMING PRODUCTS

7.1 **Defective Product**. Subject to the provisions of Section 2.9, any Product produced by IDT under this Agreement that does not comply with the Specifications and the warranties set forth in Section 10.1.5 at the time of Delivery of such Product ("Defective Product") may be rejected by ADURO BIOTECH pursuant to a Notice sent by ADURO BIOTECH to IDT ("Rejection Notice") within **[*]** days after ADURO BIOTECH's receipt of the alleged Defective Product and all Batch Documentation.

7.2 **Evaluation Report**. The Rejection Notice shall be accompanied by a sample of the alleged Defective Product, if feasible. Within **[*]** days after receipt of the Rejection Notice, IDT shall undertake an evaluation of the sample and give to ADURO BIOTECH a written report of the results of such evaluation. In the event that the Parties disagree upon whether or not any Product is a Defective Product, such disagreement shall be resolved as set forth in Section 7.4 of this Agreement.

7.3 **Defects Discovered After Time of Delivery**. If any defects are not evident immediately to ADURO BIOTECH at the time of Delivery of the Product, the Rejection Notice by ADURO BIOTECH to IDT shall be made no later than **[*]** Business Days after discovery by ADURO BIOTECH.

7.3.1 **Defects Caused by IDT**. If such defect is determined to have been caused by IDT, including, as a result of materials provided to IDT by its suppliers for whom IDT is responsible under the applicable provisions of the Quality Agreement, then IDT shall Manufacture and deliver, at IDT's expense, to ADURO BIOTECH, as soon as commercially reasonable, replacement of Product in accordance with an amended production plan reasonably agreed to by the Parties. If the Defective Product had already been shipped to ADURO BIOTECH or to a Third Party designated by ADURO BIOTECH, the replacement Product will be shipped at IDT's expense. If ADURO BIOTECH has paid for such Defective Product, IDT shall issue to ADURO BIOTECH a refund in the amount of the Service Fees so paid by ADURO BIOTECH. IDT shall be entitled to invoice ADURO BIOTECH for the Service Fees of the replacement Product, provided that the Service Fees of the replacement Product shall not exceed the Service Fees that had been invoiced by IDT for the Defective Product, and ADURO BIOTECH shall pay said invoice within **[*]** days of receipt thereof.

7.3.2 **Defects Caused by ADURO BIOTECH**. If such defect is determined to have been caused by ADURO BIOTECH, including any Product being defective due to ADURO BIOTECH's provision of incomplete or inaccurate Specifications or due to improper handling of Product by ADURO BIOTECH, by any Affiliate of ADURO BIOTECH or by any Third Party (on behalf of ADURO BIOTECH or any of its Affiliates) or due to any defect in ADURO BIOTECH's proprietary production processes being used by IDT in the performance of the Manufacturing (if any), IDT shall Manufacture and deliver to ADURO BIOTECH, as soon as commercially reasonable, replacement Product in accordance with an amended production plan reasonably agreed to by the Parties (and, to the extent possible, prior to the time ADURO BIOTECH is obligated to deliver the Product to its customer). ADURO BIOTECH shall be required to pay the Service Fees of the Product (determined to be Defective Product caused by ADURO BIOTECH) and the Service Fees of the replacement Product.

7.4 **Expert**. If the Parties cannot agree as to whether Product is Defective Product, within **[*]** days after delivery of the aforesaid IDT evaluation report to ADURO BIOTECH, the Parties shall submit the relevant materials to a mutually agreed upon independent testing laboratory or other appropriate expert acceptable to the Parties ("Expert") for evaluation. The Parties shall cooperate fully and promptly with the Expert's reasonable requests for assistance or information in connection with its evaluation hereunder. Within **[*]** days thereafter, the Expert shall determine whether the Products are Defective Products and, if possible, the cause of the defect as soon as reasonably possible. The findings of the Expert shall be final, binding and determinative on the Parties, absent manifest error. The expenses of the Expert(s) shall be borne by IDT if the Expert(s) determines that the Product is Defective Product, but the expert does not attribute the sole cause of the defect to ADURO BIOTECH under Section 7.3.2. If the expert concludes that ADURO BIOTECH is the sole cause of the defect, then the costs will be paid by ADURO BIOTECH.

7.5 **[*]**. The remedies for Defective Product caused by IDT pursuant to this Article 7 shall **[*]**.

7.6 **Recall**. Each Party shall give Notice to the other Party immediately upon learning of any event that would be expected to give rise to a recall of Product or other corrective measure related to the Product. ADURO BIOTECH shall be responsible for all such recalls and actions, provided that IDT shall fully cooperate in the same. All costs of a Product recall or other corrective measure related to the Product shall be the sole responsibility of ADURO BIOTECH except to the extent such recall is due to Defective Product caused by IDT under the provisions of Section 7.3 above, in which event IDT shall also be liable for the direct costs of said recall. Direct costs under this Section 7.6 shall be limited to costs of transport, safe destruction of Defective Product, travel and communication services for the handling of the recall and corrective measures.

ARTICLE 8: CONFIDENTIALITY AND NON-USE

8.1 **Defined**. As used in this Agreement, the term "Confidential Information" shall mean all information disclosed in writing or by oral communications by either Party to the other Party including any information relating to the Product, the Manufacturing Specifications, formulations and compositions; scientific know-how; chemical compound, biological material and composition data; Manufacturing processes; analytical methodology; Product applications including safety and efficacy data; current and future Product and marketing plans and projections; and other information of a technical or economic nature related to the Product, the Manufacture of the Product and the matters set forth in any Work Plan. The existence and content of this Agreement shall also be considered Confidential Information of both Parties. The Process, the Master Production Record, ADURO BIOTECH Intellectual Property, and ADURO BIOTECH Arising IP are Confidential Information of ADURO BIOTECH.

8.2 **Limited Disclosure**. All Confidential Information disclosed hereunder shall remain the property of the disclosing Party and shall be maintained in confidence and not disclosed by the receiving Party to any person except to officers, employees, and consultants to whom it is necessary to disclose the information for the purposes of this Agreement. Each Party shall take all steps it would normally take to protect its own Confidential Information to ensure that the received Confidential Information shall be maintained in confidence and not disclosed, but not less than reasonable care.

8.3 **Use**. Unless otherwise agreed in writing, all Confidential Information disclosed hereunder shall be used by that Party only to fulfill its obligations under this Agreement.

8.4 **Exceptions**. The obligations of the Parties under this Article 8 shall not apply to:

8.4.1 Information which, at the time of disclosure, is in the public domain or thereafter comes into the public domain other than as a result of breach of this Agreement; or

8.4.2 Information which the receiving Party can establish was in its possession at the time of disclosure by the disclosing Party; or

8.4.3 Information which was received by the receiving Party from an Affiliate or from a Third Party not under an obligation of confidentiality towards the disclosing Party; or

8.4.4 Information which the receiving Party can establish was independently developed without reference to Confidential Information received hereunder.

8.5 **Mandatory Disclosure**. Notwithstanding the limitations above, each Party may disclose Confidential Information belonging to the other Party to the extent such disclosure is required by mandatory legal provisions, provided, however, in the event a Party is required to make a disclosure of the other Party's Confidential Information pursuant to this Section 8.5, it will give reasonable advance Notice to the other Party of such disclosure obligation and will cooperate with the other Party's attempt to obtain a protective order or confidential treatment.

8.6 **Return**. Upon termination of this Agreement, each Party agrees to return to the other Party or destroy all written or other physical embodiments of the other Party's Confidential Information, except for one (1) copy, which may be retained in a confidential manner exclusively for legal archival purposes. The obligations under this Article 8 shall be binding on any Affiliate, successor or assignee of IDT or ADURO BIOTECH as if it was a Party to the Agreement.

8.7 **Duration**. The obligations of confidentiality and non-use of the Confidential Information under this Agreement shall continue throughout the Term of this Agreement and shall survive the termination or expiration of this Agreement for **[*]** years.

ARTICLE 9: INTELLECTUAL PROPERTY RIGHTS

9.1 **Ownership**. All Intellectual Property owned or controlled by IDT shall remain the property of IDT. All Intellectual Property owned or controlled by ADURO BIOTECH shall remain the property of ADURO BIOTECH. The Process and the Master Production Record are hereby the sole and exclusive property of ADURO BIOTECH.

9.2 **License to IDT**. ADURO BIOTECH grants to IDT a non-exclusive, royalty-free, license to use for the performance of the Services under this Agreement all of ADURO BIOTECH's Intellectual Property that ADURO BIOTECH provides to IDT to perform the Services under this Agreement. The duration of said license shall be for the Term of this Agreement. In no event shall IDT be permitted to use ADURO BIOTECH's Intellectual Property for any other purpose or for any other customer of IDT without the prior Consent of ADURO BIOTECH.

9.3 **IDT Intellectual Property and Third Party Intellectual Property**. IDT shall not incorporate any of its IDT Intellectual Property or Third Party Intellectual Property into the Process or Master Production Record without the prior Consent of ADURO BIOTECH.

9.4 **IDT's Proprietary Intellectual Property**. IDT hereby agrees to use such of IDT's Intellectual Property as is required in order to perform the Services under

this Agreement. IDT hereby grants to ADURO BIOTECH an irrevocable, fully paid, non-exclusive worldwide license, with the right to grant and authorize sublicenses through multiple layers of sub-licensees, under any and all IDT Intellectual Property including any Arising IP that IDT incorporates pursuant to this Agreement into the Process, Master Production Record, and Specifications, to make, have made, use, have used, sell, offer for sale, have sold, import, have imported, export, have exported, develop, have developed, commercialize, and have commercialized any product.

9.5 **Inventions**. Any Intellectual Property that shall be created or conceived by IDT as a result of, or be derived from, the performance of the Services under this Agreement ("Arising IP") and that is not ADURO BIOTECH Arising IP and relates to any IDT Manufacturing processes or to any other IDT Intellectual Property shall be owned by and be the sole and exclusive property of IDT. Any Arising IP related to the Product or related to, based on, or incorporating any other ADURO BIOTECH Intellectual Property shall be owned by and hereby is the sole and exclusive property of ADURO BIOTECH ("ADURO BIOTECH Arising IP").

9.6 **Other Acts**. Each Party shall undertake all necessary or appropriate acts, including signing assignment or other documents to give effect to the provisions of this Article 9. IDT covenants to take all reasonable actions necessary to obtain all right, title and interest in and to any and all inventions related to this Agreement that are conceived or reduced to practice by any of its employees or contractors including negotiation of necessary agreement and payment of all amounts advisable or required under German or EU law.

ARTICLE 10: WARRANTIES

10.1 **IDT warrants that**:

10.1.1 IDT has the power, authority and legal right to enter into this Agreement and to perform its obligations hereunder. This Agreement has been duly executed and delivered on behalf of IDT, and constitutes a legal, valid, binding obligation, enforceable against IDT in accordance with its terms.

10.1.2 All necessary licenses, permits, consents, approvals and authorizations of all Regulatory Authorities required to be obtained by IDT in connection with this Agreement have been obtained or will be obtained as required prior to undertaking the Manufacture. IDT shall adhere to all Applicable Laws.

10.1.3 The Intellectual Property utilized by IDT, other than the Intellectual Property provided by ADURO BIOTECH, in connection with this Agreement: (i) may be lawfully used in connection therewith, and (ii) such use does not infringe any Third Party rights. IDT has the requisite

intellectual property rights, including in its equipment and facility, to be able to perform its obligations under this Agreement, (iii) IDT's use of its equipment and facility as contemplated in this Agreement will not give rise to a potential Claim by a Third Party against ADURO BIOTECH for infringement or another violation of intellectual property rights, (iv) IDT will not incorporate into the Product or utilize in connection with this Agreement any Third Party Intellectual Property without the prior Consent of ADURO BIOTECH unless ADURO BIOTECH provides to IDT any Third Party Intellectual Property for incorporation into Product, and (v) the Product does not include, and was not Manufactured by IDT utilizing, any Third Party Intellectual Property, unless such Third Party Intellectual Property was provided or approved in writing by ADURO BIOTECH for use in the Product.

10.1.4 IDT has the necessary facilities, equipment, know-how and personnel to carry out the Services in accordance with this Agreement.

10.1.5 Subject to the provisions of Section 2.9, any Product Manufactured by IDT pursuant to this Agreement other than Development Product, at the time of Delivery: (a) conforms to the Specifications; (b) was Manufactured in accordance with the Master Production Record; (c) was Manufactured in accordance with cGMP using a process, components, and a facility that comply with all Applicable Laws; (d) is delivered free and clear of any liens or encumbrances of any kind; and (e) has not been adulterated.

10.1.6 IDT will use commercially reasonable efforts to perform the Services as set forth in the Work Plan and in the operational documents related thereto.

10.1.7 IDT will use commercially reasonable efforts to agree with ADURO BIOTECH on the details of the Work Plan, the Work Packages and the operational documents related thereto.

10.1.8 IDT represents and certifies it will not use in any capacity the services of any person, or organization that employs any person that is or has been debarred under Section 306 of the Generic Drug Enforcement Act, is an excluded party from doing business with the U.S. Federal Government (Excluded Parties List System published by GSA), Office of Inspector General's List of Excluded Individuals/Entities (LEIE), is included on any other government exclusion list of persons or entities with whom U.S. companies and individuals are prohibited from doing business (e.g. OFAC List of Blocked Persons), or is similarly debarred or excluded under the Applicable Law in any other jurisdiction. Upon written request of ADURO BIOTECH, IDT shall, within **[*]** Business Days, provide written confirmation that it has complied with the foregoing obligation.

IDT agrees to promptly disclose in writing to ADURO BIOTECH if any employee or agent is debarred or excluded, or if any action or investigation is pending or, to the best of its knowledge, threatened, relating to the debarment or exclusion of it or any person performing Services related to this Agreement.

10.2 **ADURO BIOTECH warrants that**:

10.2.1 ADURO BIOTECH has the power, authority and legal right to enter into the Agreement and to perform its obligations hereunder. This Agreement has been duly executed and delivered on behalf of ADURO BIOTECH, and constitutes a legal, valid, binding obligation, enforceable against ADURO BIOTECH in accordance with its terms.

10.2.2 All necessary licenses, permits, consents, approvals and authorizations of all Regulatory Authorities required to be obtained by ADURO BIOTECH in connection with this Agreement have been obtained or will be obtained as required prior to undertaking Manufacturing. ADURO BIOTECH shall adhere to all Applicable Laws.

10.2.3 The Intellectual Property provided by ADURO BIOTECH, in connection with the Manufacturing may be lawfully used in connection with such Manufacture.

10.2.4 ADURO BIOTECH will use commercially reasonable efforts to perform its obligations in order for IDT to perform the Services as set forth in the Work Plan and in the operational documents related thereto.

10.2.5 ADURO BIOTECH will use commercially reasonable efforts to agree with IDT on the details of the Work Plan, the Work Packages and the operational documents related thereto

10.3 **LIMITATION OF LIABILITY.** With respect to Claims made by or against IDT, ADURO BIOTECH, or any Affiliate of either, the following provisions shall apply:

10.3.1 **IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOSS OF PROFIT) ARISING OUT OF THIS AGREEMENT, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY, AND WHETHER OR NOT IT HAS BEEN ADVISED OR IS OTHERWISE AWARE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE, HOWEVER CAUSED.**

10.3.2 **FOR ANY CLAIM BASED ON ANY LEGAL THEORY OTHER THAN ALLEGED GROSS NEGLIGENCE, IDT´S MAXIMUM**

DIRECT AND INDIRECT LIABILITY FOR ANY SINGLE CLAIM WHICH IS BEYOND AMOUNTS PAID BY ONE OR MORE OF IDT'S INSURERS AND WHICH IS BROUGHT UNDER THIS AGREEMENT BY ADURO BIOTECH, BY ANY AFFILIATE OF ADURO BIOTECH AND/OR BY ANY THIRD PARTY SHALL NOT EXCEED, DIRECTLY OR INDIRECTLY, AN AMOUNT WHICH EQUALS [*], PROVIDED HOWEVER THAT, SUBJECT TO THE PROVISIONS OF SECTION 10.3.4, IDT'S LIABILITY UNDER THIS SECTION 10.3.2 SHALL NOT EXCEED A MAXIMUM AMOUNT OF [*].

10.3.3 **FOR ANY CLAIM BASED ON ALLEGED GROSS NEGLIGENCE, IDT´S MAXIMUM DIRECT AND INDIRECT LIABILITY FOR ANY SINGLE CLAIM WHICH IS BEYOND AMOUNTS PAID BY ONE OR MORE OF IDT'S INSURERS AND WHICH IS BROUGHT UNDER THIS AGREEMENT BY ADURO BIOTECH, BY ANY AFFILIATE OF ADURO BIOTECH AND/OR BY ANY THIRD PARTY SHALL NOT EXCEED, DIRECTLY OR INDIRECTLY, AN AMOUNT WHICH EQUALS [*], PROVIDED HOWEVER THAT, SUBJECT TO THE PROVISIONS OF SECTION 10.3.4, IDT'S LIABILITY UNDER THIS SECTION 10.3.3 SHALL NOT EXCEED A MAXIMUM AMOUNT OF [*]**

10.3.4 **IDT'S MAXIMUM AGGREGATE LIABILITY FOR ALL SUCH CLAIMS WHICH ARE BEYOND AMOUNTS PAID BY ONE OR MORE OF IDT'S INSURERS AND WHICH ARE BROUGHT UNDER THIS AGREEMENT BY ADURO BIOTECH, BY ANY AFFILIATE OF ADURO BIOTECH AND/OR BY ANY THIRD PARTY SHALL NOT EXCEED, DIRECTLY OR INDIRECTLY, AN AMOUNT WHICH EQUALS [*].**

10.3.5 **THE FOREGOING LIABILITY LIMITATION PROVISIONS SHALL NOT APPLY TO CLAIMS BASED ON ALLEGED WILLFUL MISCONDUCT BY IDT.**

10.3.6 **For the sake of clarity, the Parties expressly agree that, subject to Section 10.3.3, any liability limitation in this Agreement will not limit potential recovery from any insurer of IDT for losses covered by policies issued by such insurer which are incurred in connection with Claims. The scope and extent of liability for IDT's insurers shall be governed exclusively by the terms and limitations of the policies issued by such insurers.**

10.3.7 THE PARTIES' RESPECTIVE LIABILITY SHALL BE FURTHER LIMITED AS PROVIDED IN SECTIONS 12.3 AND 12.4.

10.3.8 ADURO BIOTECH expressly agrees that ADURO BIOTECH will be liable for, and will indemnify IDT against, all Claims of ADURO BIOTECH, of any Affiliate of ADURO BIOTECH, and of any Third Party which Claims are not satisfied by IDT's insurance coverage and/or by payments made by IDT within the maximum aggregate liability limitations provided for in Sections 10.3.2., 10.3.3 and 10.3.4. The forgoing shall not be construed as co-insurance and neither ADURO BIOTECH nor its Affiliates or insurers shall be construed as co-insurers by virtue of this provision.

10.3.9 THE REPRESENTATIONS AND WARRANTIES SET FORTH IN THIS AGREEMENT ARE IN LIEU OF ALL OTHER REPRESENTATIONS AND WARRANTIES NOT EXPRESSLY SET FORTH HEREIN, AND EACH PARTY HEREBY EXPRESSLY DISCLAIMS ANY AND ALL OTHER REPRESENTATIONS AND WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE.

ARTICLE 11: INDEMNITY

11.1 **ADURO BIOTECH's Indemnity**. ADURO BIOTECH shall indemnify, defend and hold harmless IDT (except to the extent IDT is obligated to indemnify ADURO BIOTECH as set forth below) from and against all Claims, Damages and liabilities asserted by a Third Party to the extent arising out of:

11.1.1 the distribution, marketing, sale, and/or use of any Work Plan Deliverable or any Product, including the use of any such Deliverable or Product in any clinical trials;

11.1.2 a material breach of any of this Agreement by ADURO BIOTECH; or,

11.1.3 ADURO BIOTECH's willful misconduct or negligence; or

11.1.4 defective or erroneous or incomplete ADURO BIOTECH Materials, Process or Specifications provided by ADURO BIOTECH to IDT for the Manufacture of Product.

11.2 **IDT's Indemnity.** IDT shall indemnify, defend and hold harmless ADURO BIOTECH (except to the extent ADURO BIOTECH is obligated to indemnify IDT as set forth above) against all Claims, Damages, and liabilities asserted by a Third Party, to the extent arising out of:

11.2.1 subject to the provisions of Section 2.9, any failure of Product supplied by IDT hereunder to conform to Specifications and the requirements of the Agreement at Delivery;

11.2.2 a material breach of any of this Agreement by IDT; or,

11.2.3 IDT's willful misconduct or negligence.

11.3 **Procedures**. The Party seeking indemnification ("Indemnified Party") pursuant to this Article 11 shall promptly provide Notice to the indemnifying Party ("Indemnifying Party") of such Claim in reasonable detail, provided that the failure to provide such Notice shall not affect the obligations of the Indemnifying Party unless and only to the extent said Indemnifying Party is actually materially prejudiced thereby. The Indemnified Party shall furnish promptly to the Indemnifying Party copies of all papers and official documents received in respect of any claim. Commencing within **[*]** days after receipt of the aforesaid Notice, the Indemnifying Party shall undertake, conduct and control, through counsel of its own choosing (but reasonably acceptable to the Indemnified Party) and at its own expense, the settlement or defense of the claim, provided that the Indemnified Party may participate in such settlement or defense through counsel chosen by the Indemnified Party and reasonably acceptable to the Indemnifying Party. The Indemnifying Party shall not, without the Consent of the Indemnified Party, settle or compromise any claim, unless such settlement or compromise includes an unconditional release of the Indemnified Party. The Indemnifying Party and the Indemnified Party shall cooperate fully in all aspects of any investigation, defense, pre-trial activities, trial, compromise, settlement or discharge of any claim in respect of which indemnity is sought pursuant to this Article 11, including, but not limited to, providing the other Party with reasonable access to employees and officers (including as witnesses) and other information.

ARTICLE 12: INSURANCE

12.1 **ADURO BIOTECH General**. ADURO BIOTECH will maintain, at all times during the term of this Agreement and for **[*]** years thereafter, a products liability insurance policy (the "Insurance Policy"), with a per occurrence limit of at least Five Million Dollars ($5,000,000) and an aggregate limit of at least Five Million Dollars ($5,000,000), and will provide a certificate of insurance to IDT that the Insurance Policy has been endorsed to designate IDT as an additional insured. ADURO BIOTECH will provide IDT with at least **[*]** days' Notice prior to termination of or reduction in coverage under such Insurance Policy.

12.2 **IDT General**. IDT will maintain, at all times during the term of this Agreement and for **[*]** years thereafter, a liability insurance policy (the "IDT Insurance Policy"), with a per occurrence limit of at least Five Million Euro (5.000.000 €) and an aggregate limit of at least Five Million Euro (5.000.000 €). IDT will provide ADURO BIOTECH with at least **[*]** days' Notice prior to termination of or reduction in coverage under such IDT Insurance Policy.

12.3 **IDT's Obligation**. IDT shall use commercially reasonable efforts to maintain in force the insurance coverage referenced in Section 12.2 above, provided,

however, that IDT shall have no liability in the event that its insurance provider reduces, cancels or denies any such insurance coverage for reasons outside the reasonable control of IDT. In the event that IDT is not able to procure or maintain the amount of insurance coverage as set forth in Section 12.2, IDT shall inform ADURO BIOTECH without undue delay.

12.4 **ADURO BIOTECH's Obligation**. ADURO BIOTECH shall use commercially reasonable efforts to maintain in force the insurance coverage referenced in Section 12.1 above, provided, however, that ADURO BIOTECH shall have no liability in the event that its insurance provider reduces, cancels or denies any such insurance coverage for reasons outside the reasonable control of ADURO BIOTECH. In the event that ADURO BIOTECH is not able to procure or maintain the amount of insurance coverage as set forth in Section 12.1, ADURO BIOTECH shall inform IDT without undue delay.

ARTICLE 13: TERM AND TERMINATION

13.1 **Term**. This Agreement shall commence on the Effective Date and shall remain in full force and effect until and during the Commercial Supply Period as defined in Section 1.3.2, unless earlier terminated as permitted herein. In the event that no **[*]** within five (5) years of the Effective Date, then this Agreement shall terminate on the tenth (10th) anniversary of said Effective Date, unless earlier terminated as permitted herein. The time period between said Effective Date and the termination date of this Agreement as set forth in this Section 13.1 is herein called the "Term".

13.2 **Early Termination by ADURO BIOTECH**. ADURO BIOTECH may terminate this Agreement or a Work Plan in whole or in part at any time with a prior Notice of termination to IDT in the event that:

13.2.1 **Termination for Default**. ADURO BIOTECH sends to IDT a default Notice alleging IDT's failure to perform a material obligation under this Agreement or a Work Plan, and IDT fails to cure said default within forty-five (45) days of receiving such Notice, ADURO BIOTECH may terminate this Agreement.

13.2.2 **Insolvency**. In the event IDT enters into bankruptcy proceedings (whether voluntary or involuntary) or proceedings leading to bankruptcy, IDT agrees to send to ADURO BIOTECH a Notice setting forth the details of such event. This Notice shall be furnished within ten (10) days of the initiation of the proceedings relating to the bankruptcy. This obligation remains in effect until final payment under this Agreement. Bankruptcy or insolvency is deemed to be a material breach of this Agreement and may, at the sole discretion of ADURO BIOTECH constitute the basis for a termination for default without further Notice.

13.2.3 **Termination for Termination of Development**. ADURO BIOTECH and IDT shall each have the right to terminate this Agreement upon thirty (30) days' Notice to the other Party in the event that ADURO BIOTECH decides to end its program for use of Product, solely for the reasons of clinical inefficacy or safety, or an action of a Regulatory Authority not granting approval despite commercially reasonable efforts to gain approval. In the event of any such termination under the provisions of this Section 13.2.3, ADURO BIOTECH shall certify that during the Term neither ADURO BIOTECH nor its Affiliates, Licensees, permitted assigns and successors, will restart the program for use of the Product, and if said program is restarted , that its purchase obligations and IDT´s related performance obligations shall revive assuming that IDT agrees in writing to fulfill its obligations remaining hereunder as of the date of termination as such obligations may be modified based on the then-current regulatory strategy, and ADURO BIOTECH, its Affiliates, Licensees, permitted assigns and successors shall immediately Notify IDT in this case. In the event of such termination of this Agreement under the provisions of this Section 13.2.3, IDT shall invoice and ADURO BIOTECH shall pay within **[*]** days of the date of invoice **[*]** plus **[*]**, plus all raw materials and external work procured by IDT in order to perform **[*]**, both to the extent not covered by any advanced payment for the Work Plan upon its initiation.

13.2.4 **Other Termination**. Either Party may terminate this Agreement upon Notice to the other Party, if the other Party is not able to procure or maintain its respective amount of insurance coverage as set forth in Sections 12.1 or 12.2, as the case may be.

13.3 **Early Termination by IDT**. IDT may terminate this Agreement in whole or in part at any time with a prior Notice of termination, in the event that:

13.3.1 **Termination for Default**. IDT sends to ADURO BIOTECH a default Notice alleging ADURO BIOTECH's failure to perform a material obligation under this Agreement or a Work Plan, and ADURO BIOTECH fails to cure said default within forty-five (45) days of receiving such Notice, IDT may terminate this Agreement.

13.3.2 **Insolvency**. In the event ADURO BIOTECH enters into bankruptcy proceedings (whether voluntary or involuntary) or proceedings leading to bankruptcy, ADURO BIOTECH agrees to send to IDT a Notice setting forth the details of such event. This Notice shall be furnished within ten (10) days of the initiation of the proceedings relating to the bankruptcy. This obligation remains in effect until final payment under this Agreement. Bankruptcy or insolvency is deemed to be a material breach of this Agreement and may, at the sole discretion of IDT constitute the basis for a termination for default without further Notice.

13.4 **Effects of Termination**.

13.4.1 **Accrued Rights**. Termination of this Agreement for any reason will be without prejudice to any rights that have accrued to the benefit of a Party prior to such termination. Such termination will not relieve a Party of obligations that are expressly indicated to survive the termination of this Agreement.

13.4.2 **Disposition of Remaining ADURO BIOTECH Materials, Property, and Confidential Information**. Upon termination or expiration of this Agreement, IDT will store any remaining ADURO BIOTECH property and, at ADURO BIOTECH's option, return or destroy any ADURO BIOTECH property and Confidential Information in the possession or control of IDT. Likewise, ADURO BIOTECH will, at IDT's option, return or destroy any IDT Confidential Information in the possession or control of ADURO BIOTECH. Notwithstanding the foregoing provisions: (i) IDT may retain and preserve, at its sole cost and expense, samples and standards of each Product following termination or expiration of this Agreement solely for use in determining IDT's rights and obligations hereunder; and (ii) each Party may retain a single copy of the other Party's Confidential Information for documentation purposes only and which shall remain subject to the obligations of nonuse and confidentiality set forth in this Agreement.

13.4.3 Unless the termination of this Agreement (a) is for the uncured material breach of the Agreement by ADURO BIOTECH, or (b) is by ADURO BIOTECH pursuant to the provisions of Section 13.2.3, IDT agrees that it will cooperate with ADURO in performing a technology transfer which includes the transfer of the Process to ADURO BIOTECH or its designee.. Any such technology transfer shall be made pursuant to a written order from ADURO BIOTECH to IDT which has been accepted by IDT, such acceptance not to be unreasonably withheld, and which contains, among other relevant matters, the details of such transfer and the commercially reasonable price to be paid by ADURO BIOTECH.

13.4.4 **Disposition of Remaining IDT Materials, Property, and Confidential Information**. Upon termination or expiration of this Agreement, ADURO BIOTECH will store any remaining IDT property and, at IDT's option, return or destroy any IDT property and Confidential Information in the possession or control of ADURO BIOTECH. Likewise, ADURO BIOTECH will, at IDT's option, return or destroy any IDT Confidential Information in the possession or control of ADURO BIOTECH. Notwithstanding the foregoing provisions: (i) ADURO BIOTECH may retain and preserve, at its sole cost and expense, samples and standards of each Product following termination or expiration of this Agreement solely for use in determining ADURO BIOTECH's rights and obligations

hereunder; and (ii) each Party may retain a single copy of the other Party's Confidential Information for documentation purposes only and which shall remain subject to the obligations of nonuse and confidentiality set forth in this Agreement.

13.5 **No Liability**. Neither Party shall incur any liability whatsoever for any damage, loss or expense of any kind suffered or incurred by the other (or for any compensation to the other) arising from or incident to such Party's termination of this Agreement which complies with the terms of this Agreement whether or not such Party is aware of any such damage, loss or expense.

13.6 **Survival of Certain Provisions**. Termination or expiration this Agreement for any reason shall not affect the rights, obligations and responsibilities of the Parties pursuant to Sections 2.7.4, 2.8, 2.9, 3.3, 5.6.4 and 13.4 and Articles 7, 8, 9, 10, 11, 12, 15 and 16 all of which survive any termination, along with any additional terms in this Agreement necessary to give effect to such provisions.

ARTICLE 14: ALLIANCE MANAGER(S)

14.1 **Alliance Managers**. Each Party shall appoint one or more managers ("Alliance Manager(s)") to serve as the point of contact for communications between the Parties on matters arising under this Agreement.

14.2 **Responsibility**. Each Party's Alliance Manager(s) shall be primarily responsible for reporting to the other Party's Alliance Manager(s) on the progress of the activities for which said Party is responsible as set forth in the Work Plan and each Alliance Manager shall in general provide the opportunity to exchange views and to discuss issues in relation to IDT's and ADURO BIOTECH's obligations under this Agreement.

14.3 **Meetings**. The Alliance Managers from IDT and ADURO BIOTECH shall meet in person or by video or telephone conference not less than once every calendar month during the Term of this Agreement. Written minutes shall be kept of each meeting between the Alliance Managers from IDT and ADURO BIOTECH.

ARTICLE 15: DISPUTE RESOLUTION

15.1 **Dispute Resolution Procedures**. If a Party has a dispute with the other Party, then the Party raising the dispute may send a Notice (the "Notice of Dispute") of the dispute to the other Party. The Notice of Dispute must thoroughly describe the basis for the dispute.

15.1.1 Senior Executives. With respect to a Notice of Dispute, the Parties, through appropriately senior executives who are authorized to resolve the dispute on behalf of their respective company, shall first meet and attempt to resolve the dispute in face-to-face or telephonic negotiations. This first attempt at resolution shall occur within **[*]** days upon receipt of Notice

of Dispute by a Party of such dispute. If no resolution is reached through the Senior Executives within **[*]** days of the first attempt to resolve the dispute, each Party is entitled to have the dispute be resolved by binding arbitration before an arbitrator appointed in accordance with the Rules of Arbitration of the International Chamber of Commerce (the "ICC") with no less than **[*]** years of experience in the biotechnology industry, including experience in manufacturing or other contract disputes with respect thereto. The Parties agree that the Arbitration shall take place only before the ICC (and no other tribunal) and shall be under the rules of procedure of the ICC in conjunction with the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the "New York Convention").

15.1.2 Venue. The venue for any arbitration under this Article shall be New York, and the language of the proceedings (including all documentation) shall be in English.

15.1.3 Damages. Damages shall be governed by the limitation of liability clause in Section 10.3, as well as any other relevant clauses in this Agreement.

15.1.4 Final Judgment. The Parties irrevocably agree that a final judgment in any arbitration proceeding relating to this Agreement shall be binding (except for manifest error) and shall be enforceable in any court having jurisdiction thereof, provided, however, that the arbitrators shall not have authority to alter any explicit provision of this Agreement.

ARTICLE 16: MISCELLANEOUS

16.1 **Notices**. Notices by either Party to the other Party shall be sent to the address below:

If to IDT:

IDT Biologika GmbH
Attn: CEO
Am Pharmapark
D-06861 Dessau-Rosslau
Germany
Fax: **[*]**

If to ADURO BIOTECH:

Aduro BioTech, Inc.
Attn.: Director, Technical Operations and Biodefense
626 Bancroft Way, 3C

Berkeley, CA 94710-2224
USA Fax: **[*]**

or to such other address as the addressee shall have last furnished in writing to the addressor.

16.2 **Severability**. In the event that any provision of this Agreement is judicially determined to be void or unenforceable, such provision shall be construed to be separable from the other provisions of this Agreement and the other provisions of this Agreement shall remain in full force and effect. Notwithstanding the foregoing, if a provision is judicially determined to be void or unenforceable and that provision is essential to the purpose of the Agreement such that separating that provision from the Agreement would frustrate the original purpose of the Agreement, then there shall be no separation and the entirety of the Agreement shall be deemed void and unenforceable.

16.3 **Special Transactions**.

16.3.1 For purposes of this Section 16.3, (a) the assignment by either Party of its rights and obligations under this Agreement to an Affiliate or as part of a merger, consolidation, or a sale of all or substantially all of such Party's assets, to a Third Party, (b) the sale by ADURO BIOTECH to a Third Party of all of its business and/or all of its assets to which this Agreement relates, (c) the sale by ADURO BIOTECH to a Third Party of all of its business and/or assets related to the Product, and (d) the acquisition of Control, directly or indirectly, of either Party by a Third Party or by an Affiliate of said Party, are all referred to herein as "Special Transactions".

16.3.2 Notwithstanding the foregoing provisions, the events described in Sections 16.3.1 (b), (c) and (d) above shall only constitute Special Transactions if the pro forma financial condition of the Third Party or Affiliate referenced therein immediately following consummation of the Special Transaction as reasonably determined by IDT's independent accountants in accordance with internationally generally accepted accounting principles, is comparable to or better than the financial condition of ADURO BIOTECH immediately prior to the consummation of such Special Transaction. ADURO BIOTECH shall cooperate with said accountants in making said determination of financial condition by providing to IDT, without undue delay, such financial statements and documents as are reasonably requested by IDT and reasonably sufficient for said purpose.

16.3.3 Neither Party shall have a right, directly or indirectly, to assign or to transfer or to otherwise make this Agreement part of any transaction, without the Consent of the other Party, which Consent shall not be unreasonably withheld or delayed, provided, however, that each Party

may engage in any Special Transaction without the other Party's Consent, subject to the provisions of Sections 16.3.2, 16.3.4 and 16.3.5. Any permitted assignment of this Agreement by either Party will be conditioned upon such Party's permitted assignee agreeing in writing to comply with all the terms and conditions contained in this Agreement. In the event that such permitted assignee does not agree in writing to so comply, the assignment shall not be permitted.

16.3.4 As part of any such Special Transaction, the Party engaged in such Special Transaction shall cause this Agreement in its entirety, without alteration, modification or amendment of any kind whatsoever (other than minor changes that are necessary to account for the assignment in connection with the Special Transaction), to be assigned or transferred or otherwise made part of the Special Transaction. Not less than **[*]** Business Days prior to the occurrence of any such Special Transaction, said Party engaged therein shall send to the other Party a Notice, signed by an officer of said Party, that: (a) informs the other Party of the date of the Special Transaction; (b) identifies the Third Party or the Affiliate involved in said Special Transaction, as applicable; and (c) certifies that this Agreement in its entirety, without alteration, modification or amendment of any kind whatsoever (other than minor changes that are necessary to account for the assignment of the Special Transaction), will be assigned or transferred pursuant to such Special Transaction and remains in full force and effect in accordance with its terms and that this Agreement has not be amended in any material manner. Notice confirming assignment will be sent without undue delay after the Special Transaction is closed.

16.3.5 The assigning or selling Party shall be liable for all damages incurred by the other Party for the assigning Party's failure to comply with the provisions of Section 16.3.3 and Section 16.3.4 above.

16.4 **Headings**. All headings, titles, and captions in this Agreement are for convenience purposes only and shall not be of any force or substance.

16.5 **Waiver**. Failure by either Party to enforce any rights under this Agreement shall not be construed as a waiver of such rights nor shall a waiver by either Party in one or more instances be construed as constituting a continuing waiver or as a waiver in other instances. No waiver by any Party of any term, provision or condition contained in this Agreement (including any exhibit hereto), whether by conduct or otherwise, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, provision or condition or of any other term, provision or condition of this Agreement (including any exhibit hereto).

16.6 **Public Disclosure**. No Party shall disclose to any Third Party or originate any publicity, news release or public announcement, written or oral, whether to the public or the press, or otherwise, referring to the terms of this Agreement, the performance under it or any of its specific terms and conditions, except by such announcements as are: (i) mutually agreed upon by the Parties in writing; or (ii) required by law or regulation. If a Party believes a public announcement to be required by law or regulation with respect to this Agreement, it will give the other Party such Notice as is reasonably practicable and an opportunity to comment upon the announcement.

16.7 **Independent Contractor**. Each Party is acting under this Agreement as an independent contractor and not as the partner, joint venturer, agent, or employee of the other Party. Each Party understands and agrees that it has no authority to assume any obligation on behalf of the other Parties and that it shall not hold out to Third Parties that it has any authority to act on any other Party's behalf except as expressly permitted herein.

16.8 **Performance by Affiliates**. Each Party may have one or more Affiliates perform or otherwise act on its behalf under this Agreement (including Exhibits). Each Party shall be responsible for the compliance by its Affiliates performing or otherwise acting under this Agreement on its behalf with the terms and conditions of this Agreement.

16.9 **Entire Agreement**. This Agreement (including, the Exhibits hereto) constitutes the entire Agreement between the Parties concerning the subject matter of said Agreement, and supersedes all written or oral Agreements or understandings with respect thereto.

16.10 **Force Majeure**.

16.10.1 **Force Majeure**. Any delay in the performance of any of the duties or obligations of either Party (except the payment of money hereunder) shall not be considered a breach of this Agreement; provided that such delay has been caused by or is the result of circumstances beyond the reasonable control of the relevant Party which may include acts of God, acts of the public enemy, war, civil commotion, terrorism, epidemic disease, quarantine restrictions, freight embargoes, unusually severe weather, insurrections, riots, embargoes, general labor disputes or strikes, fires, explosions, shortages of energy, accident, fire, flood, storm, earthquake, government action or inaction in its sovereign capacity (including acts of any country to which Product is supplied by ADURO BIOTECH or Germany, and/or an act by any political subdivision thereof), or other unforeseen causes, in each case provided that such delay is beyond the reasonable control and without the fault or negligence of the Party so affected (each a "Force Majeure Event"). Notwithstanding the foregoing, in the event of a complete or partial regulatory shutdown of

a facility or service or other act by a Regulatory Authority that (a) specifically impacts a Party's operations (i.e., without shutting down facilities owned by Third Parties) and (b) is due to a Party's negligence, willful misconduct or non-compliance with Applicable Laws, such shutdown shall not constitute a "Force Majeure Event".

16.10.2 **Notice**. If either Party is affected by a Force Majeure Event, the affected Party shall Notify the other Party within three (3) days of the Force Majeure Event which caused, threatens to cause or will cause a delay in performance under this Agreement. The affected Party shall take reasonable actions to avoid, mitigate or remove the cause of the affected Party's non-performance.

16.10.3 **No Breach**. Neither Party shall be in breach of this Agreement, nor otherwise be liable to the other Party by reason of any delay in performance, or non-performance, of any of its obligations hereunder to the extent that such delay or non-performance is due to any Force Majeure Event of which it has notified the other Party and the time for performance of that obligation shall be extended accordingly.

16.10.4 **Cooperation**. The Parties shall cooperate in good faith to reschedule any Manufacture of Product that has been delayed or postponed by reason of a Force Majeure Event.

16.10.5 **Termination**. In the event that a Force Majeure Event continues for more than **[*]** months, the Parties will use good faith efforts to work out a mutually agreeable solution. Should no mutually agreeable solution be found within a further period of six (6) months, either Party may terminate this Agreement upon notice to the other Party.

16.11 **Counterparts**. This Agreement shall be signed in two (2) counterparts each of which shall be deemed to be an original and both of which taken together shall constitute one and the same instrument. Facsimile or e-mail transmission of executed counterparts of this Agreement shall constitute evidence of the execution of this Agreement by the Parties.

16.12 **Governing Law**. This Agreement will be governed by and construed in accordance with the internal laws of the State of New York, without giving effect to its conflicts of law provisions; provided, however, that the arbitration undertaking provided for in Section 15.1.1 of this Agreement shall be governed by and construed and interpreted in accordance with the New York Convention and the implementing U.S. legislation, 9 U.S.C. sections 101 et seq. The 1980 U.N. Convention on the International Sale of Goods shall not apply to this Agreement. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER, IT BEING

AGREED THAT ALL DISPUTES WILL BE RESOLVED PURSUANT TO THE DISPUTE RESOLUTION PROCEDURES SET FORTH IN ARTICLE 15 OF THIS AGREEMENT.

16.13 **Exhibits**. All exhibits referred to herein form an integral part of this Agreement and are incorporated into this Agreement by such reference.

16.14 **No Presumption Against Drafter**. For purposes of this Agreement, the Parties hereby waive any rule of construction that requires that ambiguities in this Agreement (including any exhibit hereto) be construed against the drafter.

PART III: EXHIBITS

EXHIBIT A WORK PLAN AND SERVICE FEES

EXHIBIT B QUALITY AGREEMENT

EXHIBIT C EQUIPMENT

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.