FORM 10-K

AGENUS INC - AGEN

Filed: March 15, 2016 (period: December 31, 2015)

Annual report with a comprehensive overview of the company

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2015

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission File Number: 000-29089

Agenus Inc.

(exact name of registrant as specified in its charter)

Delaware	**06-1562417**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

3 Forbes Road, Lexington, Massachusetts 02421
(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code:

(781) 674-4400

Securities registered pursuant to Section 12(b) of the Act:

Common Stock, $.01 Par Value	**The NASDAQ Capital Market**
(Title of each class)	**(Name of each exchange on which registered)**

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☑

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulations S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). ☑

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☑

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	☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

The aggregate market value of voting stock held by non-affiliates of the registrant as of June 30, 2015 was: $571.0 million. There were 86,516,484 shares of the registrant's Common Stock outstanding as of February 29, 2016.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement for the registrant's 2016 Annual Meeting of Stockholders, which definitive proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the registrant's fiscal year end of December 31, 2015, are incorporated by reference into Part III of this Annual Report on Form 10-K.

TABLE OF CONTENTS

Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K and other written and oral statements the Company makes from time to time contain forward-looking statements. You can identify these forward-looking statements by the fact they use words such as “could,” “expect,” “anticipate,” “estimate,” “target,” “may,” “project,” “guidance,” “intend,” “plan,” “believe,” “will,” “potential,” “opportunity,” “future” and other words and terms of similar meaning. Forward-looking statements include discussion of future operating or financial performance. You also can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. Forward-looking statements involve risks and uncertainties that could delay, divert or change any of them, and could cause actual outcomes to differ materially. These statements relate to, among other things, our business strategy, our research and development, our product development efforts, our ability to commercialize our product candidates, the activities of our licensees, our prospects for initiating partnerships or collaborations, the timing of the introduction of products, the effect of new accounting pronouncements, our future operating results and our potential profitability, availability of additional capital as well as our plans, objectives, expectations, and intentions.

Although we believe we have been prudent in our plans and assumptions, no assurance can be given that any goal or plan set forth in forward-looking statements can be achieved, and readers are cautioned not to place undue reliance on such statements, which speak only as of the date of this report. We undertake no obligation to release publicly any revisions to forward-looking statements as a result of new information, future events or otherwise.

The risks identified in this Annual Report on Form 10-K, including, without limitation, the risks set forth in Part I-Item 1A. “Risk Factors,” could cause actual results to differ materially from forward-looking statements contained in this Annual Report on Form 10-K. We encourage you to read those descr iptions carefully. Such statements should be evaluated in light of all the information contained in this document.

PART I

Item 1. *Business*

Our Business

We are an immuno-oncology company focused on the discovery and development of revolutionary new treatments that engage the body's immune system to benefit patients suffering from cancer. We have focused on immuno-oncology since our inception over 20 years ago, and today we have a series of platforms and capabilities across an array of immunological modalities. At Agenus, we have embraced the concept that cancers are complicated diseases requiring multi-pronged approaches to treatment. We believe that the future of cancer therapy will depend upon the ability to identify and possess the best treatment regime for an individual based on the specific cancer and patient profile. We are building the capabilities and platforms to address these complex needs.

We are developing a comprehensive immuno-oncology portfolio driven by the following platforms and programs, which we intend to utilize individually and in combination:

- our antibody discovery platforms, including our Retrocyte Display™, SECANT® yeast display, and phage display technologies designed to produce quality human antibodies;
- our antibody candidate programs, including our checkpoint modulator, or CPM, programs;
- our vaccine programs, including Prophage™ and AutoSynVax™; and
- our saponin-based vaccine adjuvants, principally our QS-21 Stimulon® adjuvant, or QS-21 Stimulon.

Our programs aim to stimulate the immune system to recognize and eradicate cancer cells and to disable the mechanisms that cancer cells employ to evade detection and destruction by the immune system. By combining multiple powerful antibody platforms, we have established a highly integrated approach to target identification and validation, and for the discovery, development and manufacture of monoclonal antibodies that modulate targets of interest. The breadth of our portfolio gives us the ability to combine our proprietary antibodies, vaccines, and adjuvants to explore and optimize cancer treatments. Our strategy is to develop these agents either alone or in combinations to yield best-in-class treatments.

We assess development, commercialization and partnering strategies for each of our product candidates periodically based on several factors, including pre-clinical and clinical trial results, competitive positioning and funding requirements and resources. We are currently collaborating with companies such as Incyte Corporation, Merck Sharpe & Dohme and Recepta Biopharma SA. Through these alliances, as well as our own internal programs, we currently have over a dozen antibody programs, including our anti-CTLA-4 (partnered with Recepta for certain South America territories) and anti-GITR (partnered with Incyte) antibody programs that each received U.S. Federal Drug Administration, or FDA, clearance to commence clinical trials in January 2016. We expect to initiate these trials in the first half of 2016.

We are also advancing a series of Heat Shock Protein, or HSP, peptide-based vaccines to treat cancer. In July 2014, we reported positive results from a Phase 2 clinical trial with our Prophage vaccine, which showed that patients with newly-diagnosed glioblastoma, or ndGBM, who were treated with a combination of our Prophage vaccine and standard of care showed substantial improvement both in progression-free survival and median overall survival, each as compared to historical control data. We plan to advance our Prophage vaccine into a randomized, well-controlled clinical trial for ndGBM in the second half of 2016. We also reported positive results in June 2014 from a Phase 2 clinical trial with our synthetic HerpV vaccine candidate for genital herpes. Although we determined not to advance this product candidate in herpes, based on our findings we launched our AutoSynVax, or ASV, synthetic cancer vaccine program in 2015, and we plan to initiate our first clinical trial for this program in the second half of 2016.

Our QS-21 Stimulon adjuvant is partnered with GlaxoSmithKline plc., or GSK, and is a key component in multiple GSK vaccine programs that target prophylactic or therapeutic impact in a variety of infectious diseases and cancer. These programs are in various stages, with the most advanced being GSK's shingles and malaria programs, for which GSK announced positive Phase 3 results in December 2014 and October 2013, respectively. In September 2015, we monetized a portion of the future royalties we are contractually entitled to receive from GSK from sales of its shingles and malaria vaccines and received net proceeds of approximately $78.2 million.

Our business activities include product research and development, intellectual property prosecution, manufacturing, regulatory and clinical affairs, corporate finance and development activities, and support of our collaborations. Our product candidates require clinical trials and approvals from regulatory agencies, as well as acceptance in the marketplace. Part of our strategy is to develop and commercialize some of our product candidates by continuing our existing arrangements with academic and corporate collaborators and licensees and by entering into new collaborations.

Our common stock is currently listed on The Nasdaq Capital Market under the symbol "AGEN."

Our Antibody Discovery Platforms and CPM Programs

In February 2014, we acquired our Retroviral B Lymphocyte Display, or Retrocyte Display, platform as a result of our acquisition of 4-Antibody AG, or 4-AB, a private European-based biopharmaceutical company. Retrocyte Display is a proprietary antibody discovery platform designed for the rapid discovery and optimization of fully-human and humanized monoclonal antibodies against a wide array of molecular targets. Our Retrocyte Display platform uses a high-throughput approach incorporating human antibody libraries expressed in mammalian B-lymphocytes and is designed to screen and generate therapeutic antibody drug candidates. We complemented this platform in April 2015 with the acquisition of our SECANT yeast display antibody discovery platform from Celexion, LLC, or Celexion, and in September 2015 with the exclusive license to a phage display library. The addition of the phage display library and SECANT yeast display platform in combination with our Retrocyte Display platform gives us broad, integrated and highly productive antibody discovery platforms. Each of these complementary platforms is designed to yield diverse antibody candidates, and together they increase the variety of addressable targets and diversity of antibody candidates. These approaches are intended to combine the speed, diversity, and selectivity of our discovery platforms to yield high affinity antibodies and bolster our antibody discovery capabilities internally and for our partners. We now have the potential to integrate three high quality complementary antibody display technologies with innovative computational, structured-based design approaches to discover and optimize best-in-class monoclonal antibodies as future medicines.

In addition to the use of our antibody discovery platforms that are designed to drive the discovery of future CPM antibody candidates, we may also employ a variety of techniques to identify and optimize our antibody candidates. We will use our recently acquired capabilities to accelerate the development of our portfolio of CPM candidates for our own programs and those of our partners and potential collaborators. These added capabilities will position us to exploit new technological and development capabilities and also to facilitate new partnership opportunities beyond our current portfolio.

There are dozens of checkpoints as well as ligands that interact with these checkpoints, each of which are expressed on various cell types involved in immune responses. In most instances, these checkpoints and ligands work to control and shape our immune responses and promote our health. In the last decade, the biotechnology industry has begun to understand that these checkpoint processes can also intensify diseases, including cancer and auto-immune diseases. Understanding the roles that checkpoint processes can play in cancer has led to advances in the treatment of many patients with advanced cancer. We have learned that, while cancer can be recognized by the immune system as "non-self" and trigger potential immune control, cancer can hijack checkpoint processes to protect itself from either immune detection or immune destruction. Advances in cancer treatment are emerging based on therapeutic monoclonal antibodies targeting checkpoint receptors or their ligands, facilitating immune response against cancers. Some of the CPM antibodies that have been developed to date include Bristol-Myers Squibb's Yervoy® (CTLA-4 antagonist) and Opdivo® (PD-1 antagonist) and Merck's Keytruda® (PD-1 antagonist). Agents like these have not only led to increased protracted survival for many patients with certain forms of cancer, such as melanoma and lung cancer, but they are also leading to apparent cures in some patients with advanced metastatic cancer.

Our strategy includes identifying opportunities to advance our portfolio of CPMs as single agents and in optimized combinations, including potential combinations with our vaccines and other agents. We and our partners currently have pre-clinical and clinical programs exploring fully human and humanized monoclonal antibodies against several important checkpoint targets including GITR, OX40, CTLA-4, PD-1, TIM-3, LAG-3, CEACAM1 and other undisclosed targets. We are working to discover and develop monoclonal CPM antibodies to modulate the activity of these targets, selectively reactivate the immune system and thwart attempts by cancer to evade destruction. We believe these CPM antibodies will be beneficial in the treatment of cancer patients by allowing the immune system to more effectively recognize and destroy cancer cells.

In 2015, we filed investigational new drug applications (INDs) for antibodies targeting CTLA-4 and GITR (filed with Incyte), and in January 2016 we announced that the FDA gave clearance to begin clinical trials with these two CPM candidates. Clinical trials with these CPMs are planned to initiate in the first half of 2016. In addition, we have product candidates targeting OX40 and PD-1 advancing into IND-enabling studies, and we expect to initiate clinical trials for one or more of these compounds during the second half of 2016.

Partnered CPM Programs

In January 2015, we entered into a broad, global alliance with Incyte to discover, develop and commercialize novel immuno-therapeutics using our antibody platforms. The collaboration was initially focused on four CPM programs targeting GITR, OX40, TIM-3 and LAG-3, and in November 2015 we expanded our alliance by adding three additional novel undisclosed CPM targets. Pursuant to the terms of the collaboration, Incyte made non-creditable, non-refundable upfront payments to us totaling $25.0 million. Targets under the collaboration are designated as either profit-share programs, where the parties share all costs and profits equally, or royalty-bearing programs, where Incyte funds all costs, and we are eligible to receive milestones and royalties. The programs targeting

GITR, OX40 and two of the undisclosed targets are profit-share programs, while the other targets currently under collaboration are royalty-bearing programs. For each profit-share product, we are eligible to receive up to $20.0 million in future contingent development milestones. For each royalty-bearing product, we are eligible to receive (i) up to $155.0 million in future contingent development, regulatory, and commercialization milestones and (ii) tiered royalties on global net sales at rates generally ranging from 6%-12%. For each royalty-bearing product, we also have the right to elect to co-fund 30% of the development costs incurred following initiation of pivotal clinical trials in return for increased royalties. In addition, we and Incyte have the option to jointly nominate and pursue the development and commercialization of CPM programs that target additional checkpoint targets during a five-year discovery period. For each antibody arising from a program that the parties elect to bring into our collaboration, we will have the option to designate that program as a profit-share or royalty-bearing program. Concurrent with the execution of the collaboration agreement, we and Incyte also entered into a stock purchase agreement pursuant to which Incyte purchased approximately 7.76 million shares of our common stock for an aggregate purchase price of $35.0 million, or approximately $4.51 per share.

In addition, in April 2014, we entered into a collaboration and license agreement with Merck to discover and optimize fully-human antibodies against two undisclosed CPM targets. Under the terms of the agreement, Merck is responsible for the clinical development and commercialization of antibodies generated under the collaboration, and we are eligible to receive approximately $100.0 million in potential payments associated with the completion of certain clinical, regulatory and commercial milestones, as well as royalty payments on any worldwide product sales. We also continue to collaborate with Recepta SA on the development of antibodies targeting CTLA-4 and PD-1, and we expect to continue exploring additional future collaborations.

Vaccine Platform Programs

Our current vaccine platform programs for the treatment of cancer include our HSP based Prophage vaccine candidates, and our synthetic vaccine candidates, ASV and PhosphoSynVax™, or PSV™.

HSPs are a group of proteins present at high levels in most mammalian cells. Their expression is increased when cells are exposed to elevated temperatures or other stresses. A potential role for HSPs in regulating immune responses was revealed when it was first discovered that HSP complexes purified from cancer cells produced immunity to cancer, whereas HSP complexes purified from normal tissue did not. This discovery led to the understanding that HSPs bind to and carry a broad sampling of the protein environment within cells, including mutant proteins that might arise from genetic mutations within cancer cells. It was further shown that immunization with HSP complexes purified from tumors and used as vaccines to interact with antigen-presenting cells that then cross present the HSP-associated antigenic peptides to generate a CD4 and CD8 positive T-cell immune response. These activated T-cells target the cancer cells of the tumor from which the HSP complexes were derived. In order to provide effective immunization in this manner, HSP complexes isolated from cancer cells are particularly effective. Since HSPs are expressed in all tumor cells, the approach of immunizing with the HSP complexes isolated from a particular tumor is broadly applicable to a variety of cancer types. We believe that we pioneered the use of gp96, an HSP, purified from a patient's own tumor tissue, as a way to make vaccines tailored to stimulating immune recognition and potential immune control of a specific patient's cancer.

Because cancer is a highly variable disease from one patient to another, due to extensive mutation of cancer cells, we believe that a patient-specific vaccination approach is optimal to generate a more robust and targeted immune response against the disease.

Prophage Vaccine Candidates

Our Prophage cancer vaccine candidates are autologous therapies derived from patient cancer tissues that are surgically removed. As a result, a Prophage vaccine tailored for a patient is produced from a broad sampling of potentially antigenic mutant proteins from such patient's tumor. Prophage vaccines are designed to program the body's immune system to target only the specific cells expressing these mutant antigens, thereby reducing the risk that the body's immune response against the tumor after vaccination will also affect healthy tissue and cause debilitating side effects often associated with chemotherapy and radiation therapy.

To date, more than 1,000 patients have been treated with Prophage vaccines in clinical trials, covering a broad range of cancer types, and no serious immune-mediated side effects have been observed. The results of these trials have been published and/or presented at scientific conferences. These results indicate observable clinical and/or immunological activity across many types of cancer. Taken together, these trials show promising evidence of clinical benefit from Prophage vaccines and also establish that such vaccines can be effectively manufactured under current good manufacturing practices ("cGMP"), conditions and internationally distributed.

Our Prophage vaccines are currently being studied in two different settings of GBM: patients who have been newly diagnosed as well as those with recurrent disease. Glioblastoma is the most common primary malignant brain tumor and accounts for the majority of diagnoses of malignant cancers of the brain.

GBM is a cancer affecting the central nervous system arising from glial cells that become malignant, and it is currently a rapidly fatal disease. The American Cancer Society estimates that 23,770 new cases of brain and other nervous system cancer will be diagnosed in the United States during 2016, and that 16,050 people in the United States will die from these tumors during 2016.

In December 2013, we published our Phase 2 results demonstrating that more than 90% of the patients treated with Prophage vaccine were alive at six months after surgery and 30% were alive at 12 months after surgery. Additionally, the median overall survival was approximately 11 months. This compares favorably to historical control data with expected median survival for recurrent GBM patients of three to nine months. The data were published in a manuscript in *Neuro-Oncology*, the official journal of the Society of Neuro-Oncology.

In July 2014, we announced final results from a single-arm, multiple-center, open-label Phase 2 clinical trial in 46 patients with ndGBM treated with our Prophage vaccine in combination with standard of care: surgical resection, radiation and temozolomide. These results showed that patients treated with Prophage vaccine had a median progression free survival, or PFS, of 18 months, with 33% of patients progression free at 24 months. These results indicate improvement compared to historical data for patients treated with the standard of care, for which median PFS is six to nine months. Median overall survival, or OS, the primary endpoint of the trial, was 23.8 months and remains durable in patients treated with Prophage. In this study, the 12 month survival rate was 85% with many surviving beyond the 24 month study period. For the standard of care alone, studies have shown the historical median OS is approximately 16-19 months. Potential benefit from Prophage appears to be more evident in patients with less elevated expression of the checkpoint ligand PD-L1 on their white blood cells. This defines a potential group of responders to Prophage plus standard of care and also suggests a potential benefit from the combination of Prophage with CPMs like PD-1 antagonists in patients with more elevated PD-L1 on peripheral mononuclear white blood cells. In data reported at the American Society of Clinical Oncology, or ASCO, in 2015, a pre-defined subgroup of patients with less elevated monocyte PD-L1 expression (below the median of 54.5%) showed substantially longer PFS (~27.2 months vs historical median PFS of six to nine months) and OS (~47 months vs a historical median of 16-18.8 months). Durability of a response was evident in this cohort with approximately one third of the patients with less elevated PD-L1 living four years or longer.

In addition to the Phase 2 trial in patients with ndGBM, the Alliance for Clinical Trials in Oncology, a cooperative group of the National Cancer Institute, or NCI, is supporting a randomized Phase 2 clinical trial of the Prophage vaccine in combination with bevacizumab in 222 patients with surgically resectable, recurrent GBM. This trial is the largest vaccine trial ever funded by the NCI in brain tumors and the largest vaccine study ever conducted in combination with bevacizumab. The study is designed to compare the efficacy of the Prophage vaccine administered with bevacizumab either concomitantly or at progression to treatment with bevacizumab alone. The primary endpoint of this study is overall survival. This study design is supported in part by previous research indicating a potential synergistic effect between the mechanisms of action behind both the Prophage vaccine and bevacizumab. While the NCI Alliance has confirmed a commitment to completion of the trial, to date, it has been slow to recruit patients.

ASV Vaccine Program

In June 2014 we reported positive results from a Phase 2 clinical trial with our synthetic HerpV vaccine candidate for genital herpes. This candidate was the first potential recombinant, off-the-shelf application of our HSP technology. The study demonstrated that the HSP70-peptide-QS21 vaccine produced significant CD4 and CD8 positive T-cell responses to antigenic peptides, and that the side effects were mild to moderate and tolerable. We decided not to advance with this technology in herpes but based on our findings we launched our ASV synthetic cancer vaccine program in 2015. We plan to initiate clinical trials for this program in the second half of 2016.

The objective of our ASV program is to develop a fully synthetic, yet individual patient specific tumor vaccine targeting the neo-epitope landscape of each patient's cancer. With a small amount of a patient's tumor as a sample, our ASV program is designed to utilize highly complex bioinformatics and next generation sequencing technologies to identify mutations in a tumor's DNA and RNA. Once these mutations have been identified, we will manufacture synthetic peptides, load these peptides on to our recombinant HSP70 and deliver a fully synthetic polyvalent vaccine to the patient. We believe that the HSP70 platform will shuttle the mutated peptides to sites where they are recognized by the immune system and elicit a cytotoxic and helper T cell response in patients with cancer. We expect that once identified, these tumor cells will be killed and cleared by the immune system.

Sequencing a tumor's genome has become increasingly common and more cost effective compared to sequencing techniques utilized only a decade ago. ASV represents an unprecedented opportunity to integrate advances in information technology, including next generation sequencing and bioinformatics, with advances in biotechnology to develop individualized cancer vaccines. Tumors harbor a unique set of genetic mutations, some of which can result in mutant proteins. Tumor cells naturally degrade these mutant proteins to produce mutant peptides, and because over 98% of mutations are unique to individual tumors, advances in high-performance computing infrastructure make it feasible to target and synthesize these mutations.

Identifying and manufacturing selected synthetic immunogenic mutant peptides is anticipated to recapitulate the potential benefits of Prophage as an autologous cancer vaccine in patients where tumor material is insufficient for standard Prophage processing. Assembling synthetically predicted antigens with a recombinant HSP vaccine should allow us to create quantities of autologous vaccines producing lasting benefits for patients with cancer. We plan to initiate the first clinical trial with our ASV vaccine in the second half of 2016.

PSV Vaccine Candidate

PSV is a vaccine candidate designed to induce immunity against a novel class of tumor specific neo-epitopes: those arising from dysregulated phosphorylation of various proteins in malignant cells, rather than from mutations producing abnormal protein sequences. In cancer cells, protein sequences that can become phosphorylated (a phosphate group is added to particular amino acid residues) that are not normally phosphorylated, as a consequence of dysregulated biochemical processes. Some of these mis-phosphorylated peptides can be processed by the cellular machinery that leads to antigen presentation of the surface of cells, and there they can potentially be recognized by specific cytotoxic T cells. PhosImmune has described many hundreds of such phosphoprotein neo-epitopes characterizing different forms of cancer, such as lung cancer, specific leukemias, ovarian cancer, colon cancer and others. When this happens, it can lead to the destruction of the cancer cells. PSV is a group of potential product candidates intended to induce cellular immunity to abnormal phosphopeptide neo-epitopes characterizing various forms of cancer. Phosphopeptides (or phosphopeptide analogues) can be synthesized and complexed with HSP70, in a manner analogous to that used in the generation of Agenus' previous HerpV vaccine candidate. HerpV has successfully completed a placebo-controlled Phase 2 study, which demonstrated good cellular and humoral responses to synthetic peptide immunogens complexed with HSP70. We believe that similar responses can be obtained to phosphopeptide or phosphopeptide analogues bound to HSP70 used as vaccines. Mutation-based neo-epitopes, which will form the basis for the immunogens used in ASV, are almost always particular to a given patient. Therefore, ASV will need to be a largely individualized vaccine product. In contrast to this, some phosphorylation-based neo-epitopes are apparently found on specific types of cancer in many patients, suggesting that the immunogens used in PSV, while tailored to a particular patient, will be useful in other patients with related forms of cancer. Studies to optimize the immunogens to be used in PSV are on-going. PSV could prove to be particularly useful in enabling activation of immunity against cancer that contains fewer mutation-based neo-epitopes. Currently, scientists believe that it will be difficult to extend immune-based treatments to address these less mutant tumors. As with ASV, the HSP70 platform shuttles the phosphopeptide tumor targets, or PTTs to sites where they are recognized by the immune system and safely elicit an immune response in patients killing and clearing the tumor cells.

We acquired the phosphopeptide-based neo-epitope technology from PhosImmune in December 2015. Under the terms of the agreement, we paid PhosImmune's equity holders an upfront payment of $2.5 million in cash and $7.4 million in common stock at closing. In addition, payments of up to $35.0 million in cash and/or common stock at our election are payable upon the achievement of certain milestones.

The acquisition of PhosImmune allows us to benefit from the peptide analytics expertise of PhosImmune's founders to create both patient-specific and off-the-shelf cancer vaccines products while leveraging our ASV vaccine developments.

QS-21 Stimulon Adjuvant

QS-21 Stimulon is an adjuvant, a substance added to a vaccine or other immunotherapy that is intended to enhance immune response to the target antigens. A natural product, QS-21 Stimulon is a triterpene glycoside, or saponin, purified from the bark of the Chilean soapbark tree, *Quillaja saponaria*. QS-21 Stimulon has the ability to stimulate antibody immune response and has also been shown to activate cellular immunity. QS-21 Stimulon has become a key component in the development of investigational preventive vaccine formulations across a wide variety of diseases. These studies have been carried out by academic institutions and pharmaceutical companies in the United States and internationally. A number of these studies have shown QS-21 Stimulon to be significantly more effective in stimulating immune responses than aluminum hydroxide or aluminum phosphate, the adjuvants most commonly used in approved vaccines in the United States today.

Partnered QS-21 Stimulon Programs

In July 2006, we entered into a license agreement and a supply agreement with GSK for the use of QS-21 Stimulon (the "GSK License Agreement" and the "GSK Supply Agreement," respectively). In January 2009, we entered into an Amended and Restated Manufacturing Technology Transfer and Supply Agreement (the "Amended GSK Supply Agreement") under which GSK has the right to manufacture all of its requirements of commercial grade QS-21 Stimulon. GSK is obligated to supply us, or our affiliates, licensees, or customers, certain quantities of commercial grade QS-21 Stimulon for a stated period of time. In March 2012, we entered into a First Right to Negotiate and Amendment Agreement amending the GSK License Agreement and the Amended GSK Supply Agreement to clarify and include additional rights for the use of QS-21 Stimulon (the "GSK First Right to Negotiate Agreement"). In addition, we granted GSK the first right to negotiate for the purchase of the Company or certain of our assets, which right expires in March 2017. As consideration for entering into the GSK First Right to Negotiate Agreement, GSK paid us an upfront, non-refundable

payment of $9.0 million, $2.5 million of which is creditable toward future royalty payments. We refer to the GSK License Agreement, the Amended GSK Supply Agreement and the GSK First Right to Negotiate Agreement collectively as the GSK Agreements. As of December 31, 2015, we had received $23.3 million of a potential $24.3 million in upfront and milestone payments under the GSK Agreements. Under the terms of the Agreement, we are generally entitled to receive 2% royalties on net sales of prophylactic vaccines for a period of 10 years after the first commercial sale of a resulting GSK product, with some exceptions. The GSK License and Amended GSK Supply Agreements may be terminated by either party upon a material breach if the breach is not cured within the time specified in the respective agreement. The termination or expiration of the GSK License Agreement does not relieve either party from any obligation which accrued prior to the termination or expiration. Among other provisions, the milestone payment obligations survive termination or expiration of the GSK Agreements for any reason, and the license rights granted to GSK survive expiration of the GSK License Agreement. The license rights and payment obligations of GSK under the Amended GSK Supply Agreement survive termination or expiration, except that GSK's license rights and future royalty obligations do not survive if we terminate due to GSK's material breach unless we elect otherwise.

In September 2015, we monetized a portion of the royalties associated with the GSK License Agreement to an investor group led by Oberland Capital Management for up to $115.0 million in the form of a non-dilutive royalty transaction. Under the terms of a Note Purchase Agreement with the investor group (the "Note Purchase Agreement") we received $100.0 million at closing for which the investors will have the right to receive 100% of our worldwide royalties under the GSK License Agreement on sales of GSK's shingles (HZ/su) and malaria (RTS,S) prophylactic vaccine products that contain our QS-21 Stimulon adjuvant to pay down principle and interest. Once all principle and interest under the Note Purchase Agreement has been paid, any and all remaining royalties from the GSK License Agreement will accrue to us. The Note Purchase Agreement is designed to allow us to capture both the near and longer term benefit associated royalties from GSK's vaccine products containing our QS-21 Stimulon. At our option, we are entitled to receive an additional $15.0 million in cash from the investors after approval of HZ/su by the FDA, provided such approval does not occur later than June 30, 2018. Also at our option, we have the right to buy back the loan at any time under pre-specified terms. The monetization of these royalty rights allows us to advance a significant portion of the future value of our royalty stream while still allowing us to retain any future monetary upside after the Note Purchase Agreement terms have been satisfied.

QS-21 Stimulon is a key component included in certain of GSK's proprietary adjuvant systems, and we believe that a number of GSK's vaccine candidates currently in development are formulated using adjuvant systems containing QS-21 Stimulon, including its shingles and malaria vaccine candidates which have successfully completed Phase 3 clinical trials. In December 2014, GSK reported that its ZOE-50 Phase 3 clinical trial evaluating the efficacy of its shingles vaccine candidate, HZ/su, met its primary endpoint. Analysis of the primary endpoint showed that HZ/su reduced the risk of shingles by 97.2% in adults aged 50 years and older compared to placebo. In addition, GSK has reported two positive Phase 3 clinical trials of its RTS,S malaria vaccine candidate containing QS-21 Stimulon, which was accepted by the EMA for regulatory review in July 2014. In November 2013, Phase 3 data were reported that demonstrated that RTS,S helps protect children and infants from clinical malaria up to 18 months post vaccination. In November 2012, The New England Journal of Medicine published results of a second Phase 3 trial for RTS,S. In this study, infants aged 6-12 weeks receiving the RTS,S vaccine candidate experienced one-third fewer episodes of both clinical and severe malaria and experienced similar reactions to the injection when compared to those who received the control meningococcal C conjugate vaccine. GSK met both of its co-primary endpoints in the large ongoing efficacy clinical trial. In October 2011, The New England Journal of Medicine published results of the first Phase 3 clinical trial of GSK's RTS,S malaria vaccine candidate containing QS-21 Stimulon. Results of the study, the largest malaria vaccine efficacy and safety clinical trial ever conducted, demonstrate that RTS,S provided African children with significant protection against clinical and severe malaria, reducing risk by 56% and 47%, respectively, for the 12-month period following vaccination.

Assuming regulatory approval, the first products containing QS-21 Stimulon are anticipated to be launched by GSK in 2018. We do not incur clinical development costs for products partnered with GSK. Our other licensee, Janssen Science Ireland UC, recently notified us that they were terminating their license for use of QS-21 Stimulon.

Manufacturing

Antibody manufacturing

In December 2015, we acquired XOMA Corporation's antibody manufacturing pilot plant in Berkeley, CA. A team of former XOMA employees with valuable chemistry, manufacturing and controls experience has joined us and will continue to operate the facility. The pilot plant, referred to as "Agenus West," was acquired to enable us to manufacture antibodies for some of our own CPM programs and those of existing and potential third party collaborators. We expect the pilot plant to provide antibody production development expertise, antibody drug substance to support clinical proof-of-concept studies, and to facilitate our future GMP antibody production requirements. We also expect to utilize our Agenus West pilot plant capabilities to accelerate antibody delivery speed, improve quality and increase product yield while providing us with greater manufacturing flexibility all at reduced costs. We believe our Agenus West pilot plant manufacturing facility could accelerate the time to the clinic and into product commercialization.

Prophage

Prophage vaccines are manufactured in our Lexington, MA facility. We estimate that this facility could support the production of up to 4,000 batches per year.

Each Prophage vaccine is manufactured using a patient's own tumor. After the patient undergoes surgery to remove cancerous tumor tissue, the tumor is shipped frozen in a specially designed kit provided we provide to our Lexington, Massachusetts facility. Each Prophage vaccine is produced in approximately ten hours, after which it undergoes extensive quality testing for approximately two weeks. The turnaround time from the date of surgery to delivery of vaccine is approximately three to four weeks, which generally fits well with the patient's recovery time from surgery. Once we release the vaccine, it is shipped frozen overnight to the hospital pharmacy or clinician. Prophage vaccines are given as a simple intradermal injection. Agenus has established, within a single facility, well-defined, cost efficient manufacturing under GMPs.

After manufacturing, Prophage vaccines are tested and released by our quality systems staff. The quality control organization performs a series of release assays designed to ensure that the product meets all applicable specifications. Our quality assurance staff also reviews manufacturing and quality control records prior to batch release in an effort to assure conformance with current GMP, or cGMP, as mandated by the FDA and foreign regulatory agencies.

Our manufacturing staff is rigorously trained and routinely evaluated for conformance to manufacturing procedures and quality standards. This oversight is intended to ensure compliance with FDA and foreign regulations and to provide consistent vaccine output. Our quality control and quality assurance staff is similarly trained and evaluated as part of our effort to ensure consistency in the testing and release of the product, as well as consistency in materials, equipment and facilities.

QS-21 Stimulon

Except in the case of GSK, we have retained worldwide manufacturing rights for QS-21 Stimulon, and we have the right to subcontract manufacturing for QS-21 Stimulon. In addition, under the terms of our agreement with GSK, upon request by us, GSK is committed to supply certain quantities of commercial grade QS-21 Stimulon to us and our licensees for a fixed period of time.

Intellectual Property Portfolio

We seek to protect our technologies through a combination of patents, trade secrets and know-how, and we currently own, co-own or have exclusive rights to approximately 50 issued United States patents and approximately 120 issued foreign patents. Our issued patents include those that cover uses of our core technologies in combination with other agents. Such core technologies include HSP-based vaccines for the treatment of cancers and treatment/prevention of infectious diseases, and saponin adjuvants. We also own, co-own or have exclusive rights to approximately 50 pending United States patent applications and approximately 50 pending foreign patent applications. We may not have rights in all territories where we may pursue regulatory approval for Prophage vaccine candidates.

Through our acquisitions of 4-AB, PhosImmune and certain assets of Celexion, we own, co-own, or have exclusive rights to a number of patents and patent applications directed to various methods and compositions, including methods for identifying therapeutic antibodies and product candidates arising out of such entities' technology platforms. In particular, we own patents and patent applications relating to our Retrocyte Display technology platform, a high throughput antibody expression platform for the identification of fully-human and humanized monoclonal antibodies. This patent family is projected to expire between 2029 and 2031. Through our acquisition of PhosImmune, we own, co-own, or have exclusive rights to patents and patent applications directed to various methods and compositions, including a patent directed to methods for identifying phosphorylated proteins using mass spectrometry. This patent is projected to expire in 2023. We also own patents and patent applications relating to the SECANT platform, a platform used for the generation of novel monoclonal antibodies. This patent family is projected to expire between 2028 and 2029. In addition, as we advance our research and development efforts with our institutional and corporate collaborators, we intend to seek patent protection for newly identified therapeutic antibodies and product candidates. We can provide no assurance that any of our patents, including the patents that were acquired or in-licensed in connection with our acquisitions of 4-AB, PhosImmune and certain assets of Celexion, will have commercial value, or that any of our existing or future patent applications, including the patent applications that were acquired or in-licensed in connection with our acquisitions of 4-AB, PhosImmune and certain assets of Celexion, will result in the issuance of valid and enforceable patents. Our issued patents covering Prophage vaccines and methods of use thereof, alone or in combination with other agents, expired or will expire at various dates between 2015 and 2024. In particular, our issued U.S. patents covering Prophage composition of matter expired in 2015. In addition, our issued patents covering QS-21 Stimulon composition of matter expired in 2008. We continue to explore means of extending the life cycle of our patent portfolio.

Various patents and patent applications have been exclusively licensed to us by the following entities:

University of Virginia

In connection with our acquisition of PhosImmune in December 2015, we obtained exclusive rights to a portfolio of patent applications and one issued patent relating to PTTs under a patent license agreement with the University of Virginia (UVA). The UVA license gives us exclusive rights to develop and commercialize the PTT technology and an exclusive option to license any further PTT technology arising from ongoing research at UVA until December 2018. Under the license agreement, we will pay low to mid-single digit running royalties on net sales of PTT products, and a modest flat percentage of sublicensing income. In addition, we may be obligated to make milestone payments of up to $2.7 million for each indication of a licensed PTT product to complete clinical trials and achieve certain sales thresholds. The term of the UVA license agreement ends when the last of the licensed patents expires or becomes no longer valid. The UVA license agreement may be terminated as follows: (i) by UVA in connection with our bankruptcy or cessation of business relating to the licensed technology, (ii) by UVA if we commit a material, uncured breach or (iii) by us for our convenience on 180 days written notice.

Ludwig Institute for Cancer Research

On December 5, 2014, 4-AB entered into a license agreement with the Ludwig Institute for Cancer Research Ltd. (Ludwig), which replaced and superseded a prior agreement entered into between the parties in May 2011. Pursuant to the terms of the license agreement, Ludwig granted 4-AB an exclusive, worldwide license under certain intellectual property rights of Ludwig and Memorial Sloan Kettering Cancer Center arising from the prior agreement to further develop and commercialize GITR, OX40 and TIM-3 antibodies. On January 25, 2016, we and 4-AB entered into a second license agreement with Ludwig, on substantially similar terms, to develop CTLA-4 and PD-1 antibodies. Pursuant to the December 2014 license agreement, 4-AB made an upfront payment of $1.0 million to Ludwig. The December 2014 license agreement also obligates 4-AB to make potential milestone payments of up to $20.0 million for events prior to regulatory approval of licensed GITR, OX40 and TIM-3 products, and potential milestone payments in excess of $80.0 million if such licensed products are approved in multiple jurisdictions, in more than one indication, and certain sales milestones are achieved. Under the January 2016 license agreement, we are obligated to make potential milestone payments of up to $12.0 million for events prior to regulatory approval of CTLA-4 and PD-1 licensed products, and potential milestone payments of up to $32.0 million if certain sales milestones are achieved. Under each of these license agreements, we and/or 4-AB will also be obligated to pay low to mid-single digit royalties on all net sales of licensed products during the royalty period, and to pay Ludwig a percentage of any sublicensing income, ranging from a low to mid-double digit percentage depending on various factors. The license agreements may each be terminated as follows: (i) by either party if the other party commits a material, uncured breach; (ii) by either party if the other party initiates bankruptcy, liquidation or similar proceedings; or (iii) by 4-AB or us (as applicable) for convenience upon 90 days' prior written notice. The license agreements also contain customary representations and warranties, mutual indemnification, confidentiality and arbitration provisions.

Mount Sinai School of Medicine

In November 1994, we entered into a patent license agreement with the Mount Sinai School of Medicine (the "Mount Sinai Agreement"). Through the Mount Sinai Agreement, we obtained an exclusive, worldwide license to patent rights relating to the heat shock protein technology that resulted from the research and development performed by Dr. Pramod Srivastava, our founding scientist and a former member of our Board of Directors. We agreed to pay Mount Sinai a royalty on the net sales of products covered by the licensed patent rights and also provided Mount Sinai with a 0.45% equity interest in the Company, or approximately 10,300 shares, valued at approximately $90,000 at the time of issuance. The term of the Mount Sinai Agreement ends when the last of the licensed patents expires in 2016 or becomes no longer valid.

University of Connecticut Health Center

In May 2001, we entered into a license agreement with the University of Connecticut Health Center ("UConn") which was amended in March 2003 and June 2009. Through the license agreement, we obtained an exclusive, worldwide license to patent rights resulting from inventions discovered under a research agreement that was effective from February 1998 until December 2006. The term of the license agreement ends when the last of the licensed patents expires in 2024 or becomes no longer valid. UConn may terminate the agreement: (1) if, after 30 days written notice for breach, we continue to fail to make any payments due under the license agreement, or (2) we cease to carry on our business related to the patent rights or if we initiate or conduct actions in order to declare bankruptcy. We may terminate the agreement upon 90 days written notice. We are required to make royalty payments on any obligations created prior to the effective date of termination of the license agreement. Upon expiration or termination of the license agreement due to breach, we have the right to continue to manufacture and sell products covered under the license agreement which are considered to be works in progress for a period of six months. The license agreement contains aggregate milestone payments of approximately for each product we develop covered by the licensed patent rights. These milestone payments are contingent upon regulatory filings, regulatory approvals, and commercial sales of products. We have also agreed to pay UConn a royalty on the net sales of products covered by the license agreement as well as annual license maintenance fees beginning in May 2006. Royalties otherwise due on the net sales of products covered by the license agreement may be credited against the annual license maintenance

fee obligations. Under the March 2003 amendment, we agreed to pay UConn an upfront payment and to make future payments for each patent or patent application with respect to which we exercised our option under the research agreement. As of December 31, 2015, we had paid approximately $745,000 to UConn under the license agreement. The license agreement gives us complete discretion over the commercialization of products covered by the licensed patent rights but also requires us to use commercially reasonable diligent efforts to introduce commercial products within and outside the United States. If we fail to meet these diligence requirements, UConn may be able to terminate the license agreement.

Regulatory Compliance

Governmental authorities in the United States and other countries extensively regulate the preclinical and clinical testing, manufacturing, labeling, storage, record keeping, advertising, promotion, export, marketing and distribution, among other things, of our investigational product candidates. In the United States, the FDA under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and other federal statutes and regulations, subject pharmaceutical products to rigorous review.

In order to obtain approval of a new product from the FDA, we must, among other requirements, submit proof of safety and efficacy as well as detailed information on the manufacture and composition of the product. In most cases, this proof entails extensive preclinical, clinical, and laboratory tests. Before approving a new drug or marketing application, the FDA may also conduct pre-licensing inspections of the company, its contract research organizations and/or its clinical trial sites to ensure that clinical, safety, quality control, and other regulated activities are compliant with Good Clinical Practices, or GCP, or Good Laboratory Practices, or GLP, for specific non-clinical toxicology studies. The FDA may also require confirmatory trials, post-marketing testing, and extra surveillance to monitor the effects of approved products, or place conditions on any approvals that could restrict the commercial applications of these products. Once approved, the labeling, advertising, promotion, marketing, and distribution of a drug or biologic product must be in compliance with FDA regulatory requirements.

In Phase 1 clinical trials, the sponsor tests the product in a small number of patients or healthy volunteers, primarily for safety at one or more doses. Phase 1 trials in cancer are often conducted with patients who have end-stage or metastatic cancer. In Phase 2, in addition to safety, the sponsor evaluates the efficacy of the product in a patient population somewhat larger than Phase 1 trials. Phase 3 trials typically involve additional testing for safety and clinical efficacy in an expanded population at geographically dispersed test sites. The FDA may order the temporary or permanent discontinuation of a clinical trial at any time.

The sponsor must submit to the FDA the results of preclinical and clinical testing, together with, among other things, detailed information on the manufacture and composition of the product, in the form of a new drug application, or NDA, or in the case of biologics, like the Prophage vaccines, a biologics license application, or BLA. In a process that can take a year or more, the FDA reviews this application and, when and if it decides that adequate data are available to show that the new compound is both safe and effective for a particular indication and that other applicable requirements have been met, approves the drug or biologic for marketing.

Whether or not we have obtained FDA approval, we must generally obtain approval of a product by comparable regulatory authorities of international jurisdictions prior to the commencement of marketing the product in those jurisdictions. We are also subject to cGMP, GCP, and GLP compliance obligations and are subject to inspection by international regulatory authorities. International requirements may in some circumstances be more rigorous than U.S. requirements and may require additional investment in manufacturing process development, non-clinical studies, clinical studies, and record keeping that are not required for U.S. regulatory compliance or approval. The time required to obtain this approval may be longer or shorter than that required for FDA approval and can also require significant resources in time, money and labor.

Under the laws of the United States, the countries of the European Union and other nations, we and the institutions where we sponsor research are subject to obligations to ensure the protection of personal information of human subjects participating in our clinical trials. We have instituted procedures that we believe will enable us to comply with these requirements and the contractual requirements of our data sources. The laws and regulations in this area are evolving, and further regulation, if adopted, could affect the timing and the cost of future clinical development activities.

We are also subject to regulation under the Occupational Safety and Health Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act, and other current and potential future federal, state, or local regulations. Our research and development activities involve the controlled use of hazardous materials, chemicals, biological materials, various radioactive compounds, and for some experiments we use recombinant DNA. We believe that our procedures comply with the standards prescribed by local, state, and federal regulations; however, the risk of injury or accidental contamination cannot be completely eliminated. We conduct our activities in compliance with the National Institutes of Health Guidelines for Recombinant DNA Research.

Additionally, the U.S. Foreign Corrupt Practices Act, or FCPA, prohibits U.S. corporations and their representatives from offering, promising, authorizing or making payments to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business abroad. The scope of the FCPA includes interactions with certain healthcare professionals in many countries. Other countries have enacted similar anti-corruption laws and/or regulations.

Competition

Competition in the pharmaceutical and biotechnology industries is intense. Many pharmaceutical or biotechnology companies have products on the market and are actively engaged in the research and development of products for the treatment of cancer.

Many competitors have substantially greater financial, manufacturing, marketing, sales, distribution, and technical resources, and more experience in research and development, clinical trials, and regulatory matters, than we do. Competing companies developing or acquiring rights to more efficacious therapeutic products for the same diseases we are targeting, or which offer significantly lower costs of treatment, could render our products noncompetitive or obsolete. See Part I-Item 1A. "Risk Factors-Risks Related to our Business-Our competitors may have superior products, manufacturing capability, selling and marketing expertise and/or financial and other resources."

Academic institutions, governmental agencies, and other public and private research institutions conduct significant amounts of research in biotechnology, medicinal chemistry and pharmacology. These entities have become increasingly active in seeking patent protection and licensing revenues for their research results. They also compete with us in recruiting and retaining skilled scientific talent.

We have CPM antibody programs currently in early stage development targeting GITR, OX40, CTLA-4, LAG-3, TIM-3, PD-1, CEACAM1 and other undisclosed targets. We are aware of many companies that have antibody-based products on the market or in clinical development that are directed to the same biological target as some of our programs, including, without limitation, the following: (1) Bristol-Myers Squibb markets ipilimumab, an anti-CTLA-4 antibody, and nivolumab, an anti-PD-1 antibody, and is developing an anti-LAG-3 antibody and agonist to OX-40 (2) Merck has an approved anti-PD-1 antibody in the United States, and is developing an anti-GITR agonist and anti-CEACAM antibodies, (3) Ono Pharmaceuticals has an approved anti-PD-1 antibody in Japan, (4) AstraZeneca /Medimmune has anti-CTLA-4, OX-40 and PD1 antibodies in development, (5) Curetech has an anti-PD-1 antibody in development, (6) Pfizer has an anti-CTLA-4 antibody in development, (7) Tesaro has antibody programs targeting PD-1, TIM-3 and LAG-3, which include both monospecific and dual reactive antibody drug candidates, (8) Novartis has anti-PD-1 and anti-TIM-3 antibodies in discovery, and anti-LAG-3 and GITR agonist in clinical trials and (9) Roche/Genetech has an anti-OX40 agonist in development. There is no guarantee that our antibody product candidates will be able to compete with our competitors' antibody products and product candidates.

We have autologous vaccines programs in development including our Prophage vaccine in clinical development for GBM and our neo-antigen based AutoSynVax vaccine in preclinical development. We are aware of many companies pursuing cancer vaccines and/or immunotherapies clinical development, including, without limitation, the following: (1) Neon Therapeutics is developing a personalized neoantigen vaccine; (2) Gritstone Oncology is discovering and developing a novel tumor-specific neo-antigen (TSNA) based immunotherapies, with an initial focus on lung cancer; (3)Aduro Biotech and Advaxis Inc. are developing immunotherapy platforms (Listeria, cyclic dinucleotides, and B-select antibodies); (4) Inovio Pharmaceutical Inc. and Medimmune are collaborating on developing DNA based immunotherapies for cancer and infectious disease; (5) Oncolytics Biotech Inc. is developing oncolytic virus based cancer therapeutics in lung, colorectal and pancreatic cancers; and (6) Oncothyreon is developing synthetic vaccines for cancer therapeutics.

Several companies have products that utilize similar technologies and/or patient-specific medicine techniques that compete with our HSP based vaccines. For treatment of recurrent glioma, Roche markets bevacizumab and Eisai and Arbor Pharmaceuticals market carmustine. Schering Corporation, a subsidiary of Merck, markets temozolmide for treatment of patients with ndGBM and refractory astrocytoma. Other companies are developing vaccines for the treatment of patients with newly diagnosed glioma, such as Innocell Corp (Immuncell-LC), ImmunoCellular Therapeutics (ICT-107), Northwest Biotherapeutics (DC-Vax), Immatics (IMA-950) and Activartis Biotech (GBM-Vax).

We are aware of compounds that claim to be comparable to QS-21 Stimulon that are being used in clinical trials. Several other vaccine adjuvants are in development and could compete with QS-21 Stimulon for inclusion in vaccines in development. These adjuvants include, but are not limited to, (1) oligonucleotides, under development by Pfizer, Idera, Colby, and Dynavax, (2) MF59, under development by Novartis, (3) IC31, under development by Intercell, and (4) MPL, under development by GSK. In the past, we have provided QS-21 Stimulon to other entities under materials transfer arrangements. In at least one instance, it is possible that this material was used unlawfully to develop synthetic formulations and/or derivatives of QS-21. In addition, companies such as Adjuvance Technologies, Inc., CSL Limited, and Novavax, Inc., as well as academic institutions and manufacturers of saponin extracts, are developing saponin adjuvants, including derivatives and synthetic formulations. These sources may be competitive to our ability to execute future partnering and licensing arrangements involving QS-21 Stimulon. The existence of products developed by these and other competitors, or other products of which we are not aware or which other companies may develop in the future, may adversely affect the marketability of products developed or sold using QS-21 Stimulon.

We are also aware of a third party that manufactures pre-clinical material purporting to be comparable to QS-21 Stimulon. The claims being made by this third party may create marketplace confusion and have an adverse effect on the goodwill generated by us and our partners with respect to QS-21 Stimulon. Any diminution of this goodwill may have an adverse effect on our ability to commercialize future products, if any, incorporating this technology, either alone or with a third party.

We anticipate that we will face increased competition in the future as new companies enter markets we seek to address and scientific developments surrounding immunotherapy and other traditional cancer and infectious disease therapies continue to accelerate.

Employees

As of February 29, 2016, we had 230 employees, of whom 70 were PhDs and four were MDs. None of our employees are subject to a collective bargaining agreement. We believe that we have good relations with our employees.

Corporate History

Antigenics L.L.C. was formed as a Delaware limited liability company in 1994 and was converted to Antigenics Inc., a Delaware corporation, in February 2000 in conjunction with our initial public offering of common stock. On January 6, 2011, we changed our name from Antigenics Inc. to Agenus Inc.

Availability of Periodic SEC Reports

Our Internet website address is *www.agenusbio.com*. We make available free of charge through our website 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 Securities Exchange Act of 1934, as amended ("Exchange Act"), as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the Securities and Exchange Commission (the "SEC"). The contents of our website are not part of, or incorporated into, this document. In addition, we regularly use our website to post information regarding our business, product development programs and governance, and we encourage investors to use our website, particularly the information in the sections entitled "Financial" and "News," as sources of information about us.

The public may read and copy any materials filed by Agenus with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Room 1580, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at www.sec.gov.

The contents of the websites referred to above are not incorporated into this filing. Further, our references to the URLs for these websites are intended to be inactive textual references only.

Item 1A. ***Risk Factors***

Our future operating results could differ materially from the results described in this Annual Report on Form 10-K due to the risks and uncertainties described below. You should consider carefully the following information about risks below in evaluating our business. If any of the following risks actually occur, our business, financial conditions, results of operations and future growth prospects would likely be materially and adversely affected. In these circumstances, the market price of our common stock would likely decline.

We cannot assure investors that our assumptions and expectations will prove to be correct. Important factors could cause our actual results to differ materially from those indicated or implied by forward-looking statements. See "Note Regarding Forward-Looking Statements" in this Annual Report on Form 10-K. Factors that could cause or contribute to such differences include those factors discussed below.

Risks Related to our Business

If we incur operating losses for longer than we expect, or we are not able to raise additional capital, we may be unable to continue our operations, or we may become insolvent.

Our net losses for the years ended December 31, 2015, 2014, and 2013, were $87.9 million, $42.5 million, and $30.1 million, respectively. We expect to incur additional losses over the next several years as we continue to research and develop our technologies and pursue partnering opportunities, regulatory strategies, commercialization, and related activities. Furthermore, our ability to generate cash from operations is dependent on the success of our licensees and collaboration partners, as well as the likelihood and timing of new strategic licensing and partnering relationships and/or successful development and commercialization of product candidates, including through our collaboration with Incyte, our HSP-based vaccines, and vaccines containing QS-21 Stimulon® adjuvant.

On December 31, 2015, we had $171.7 million in cash and cash equivalents and short-term investments. We believe that, based on our current plans and activities, our working capital resources at December 31, 2015, will be sufficient to satisfy our liquidity requirements through the first half of 2017. We expect to attempt to secure additional funds before our current funds are depleted although additional funding may not be available on favorable terms, or at all.

To date, we have financed our operations primarily through the sale of equity and debt securities. In order to finance future operations going forward, we will be required to raise additional funds in the capital markets, through arrangements with collaboration partners or from other sources. Additional financing may not be available on favorable terms, or at all. If we are unable to raise additional funds when we need them or if we incur operating losses for longer than we expect, we may not be able to continue some or all of our operations, or we may become insolvent. We also may be forced to license or sell technologies to others under agreements that are on unfavorable terms or allocate to third parties substantial portions of the potential value of these technologies.

There are a number of factors that will influence our future capital requirements, including, without limitation, the following:

- the number and characteristics of the product candidates we and our partners pursue;
- our ability to successfully develop, manufacture, and commercialize product candidates, including pursuant to our collaboration agreement with Incyte;
- the scope, progress, results and costs of researching and developing our future product candidates and conducting pre-clinical and clinical trials;
- the timing of, and the costs involved in, obtaining regulatory approvals for our and our licensees' product candidates;
- the cost of manufacturing;
- our ability to establish and maintain strategic partnerships, licensing or other arrangements and the financial terms of such arrangements;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our intellectual property rights;
- the costs associated with any successful commercial operations; and
- the timing, receipt and amount of sales of, or royalties on, our future products and those of our partners, if any.

General economic conditions in the United States economy and abroad may have a material adverse effect on our liquidity and financial condition, particularly if our ability to raise additional funds is impaired. The ability of potential patients and/or health care payers to pay for our future products, if any, could also be adversely impacted, thereby limiting our potential revenue. In addition, any negative impacts from any deterioration in the credit markets on our collaboration partners could limit potential revenue from our product candidates.

Our and our subsidiaries' obligations related to our monetization of royalties payable to us by GSK in respect of its shingles vaccine, HZ/su, along with our 2015 Subordinated Notes, could materially and adversely affect our liquidity.

In September 2015, we and our wholly-owned subsidiary, Antigenics LLC ("Antigenics"), entered into the Note Purchase Agreement with Oberland Capital SA Zermatt LLC, as collateral agent, an affiliate of Oberland as the lead purchaser and certain other purchasers, pursuant to which Antigenics issued $100.0 million aggregate principal amount of limited recourse notes (the "Notes") to the purchasers. Antigenics has the option to issue an additional $15.0 million aggregate principal amount of Notes (the "Additional Notes") to the purchasers within 15 days after approval of GSK's shingles vaccine, HZ/su, by the FDA, provided such approval occurs on or before June 30, 2018. The Notes accrue interest at a rate of 13.5% per annum, compounded quarterly, from and after September 8, 2015 (the "Closing Date"). Principal and interest payments are due on each of March 15, June 15, September 15 and December 15, and shall be made solely from the royalties paid from GSK to Antigenics on sales of GSK's shingles and malaria

vaccines. GSK will send all royalty payments to a segregated bank account, and to the extent there are insufficient royalties deposited into the account to fund a quarterly interest payment, the interest will be capitalized and added to the aggregate principal balance of the loan. The final legal maturity date of the Notes is the earlier of (i) the 10th anniversary of the first commercial sale of GSK's shingles or malaria vaccines and (ii) September 8, 2030 (the "Maturity Date").

On September 8, 2018, each purchaser has the option to require Antigenics to repurchase up to 15% of the Notes issued to such purchaser on the Closing Date (the "Put Notes") at a purchase price equal to the principal amount thereof plus accrued and unpaid interest thereon (the "Put Payment"). On the earlier of (i) September 8, 2027 and (ii) the Maturity Date, Antigenics is required to pay the purchasers an amount equal to the following (the "Make-Whole Payment"): $100.0 million (or $115.0 million if the Additional Notes are sold) minus the aggregate amount of all payments made in respect of the Notes (regardless of whether characterized as principal or interest at the time of payment), including the original principal amount of any repaid Put Notes.

The Note Purchase Agreement specifies a number of events of default (some of which are subject to applicable cure periods), including (i) failure to cause royalty payments to be deposited into the segregated bank account, (ii) payment defaults, (iii) breaches of representations and warranties made at the time the Notes were, or the Additional Notes are, issued, (iv) covenant defaults, (v) a final and unappealable judgment against Antigenics for the payment of money in excess of $1.0 million, (vi) bankruptcy or insolvency defaults, (vii) the failure to maintain a first-priority perfected security interest in the collateral in favor of the collateral agent and (viii) the occurrence of a change of control of Agenus. Upon the occurrence of an event of default, subject to cure periods in certain circumstances and some limited exceptions, the collateral agent may declare the Notes immediately due and payable, in which case Antigenics would owe a payment equal to the following (the "Accelerated Default Payment"): the outstanding principal amount of the Notes, plus all accrued and unpaid interest thereon, plus a premium payment that would yield an aggregate internal rate of return ("IRR") for the purchasers as follows: (i) an IRR of 20% if the event of default occurs within 24 months of the Closing Date, (ii) an IRR of 17.5% if the event of default occurs after 24 months but within 48 months of the Closing Date, and (iii) an IRR of 15% if the event of default occurs more than 48 months after the Closing Date. Upon the occurrence and during the continuance of any event of default, interest on the Notes also increases by 2.5% per annum.

We are a party to the Note Purchase Agreement as a guarantor of Antigenics, and we generally guarantee the Put Payment, the Make-Whole Payment and the Accelerated Default Payment. If we are obligated to make the Put Payment or the Make-Whole Payment, our liquidity would be materially and adversely affected. If we or Antigenics default on the Notes and we are obligated to pay the Accelerated Default Payment, our liquidity would be materially and adversely affected. Satisfaction of the Notes will depend upon the future sales of GSK's shingles and malaria vaccines, if approved, and, if we are obligated to make the Put Payment, the Make-Whole Payment or the Accelerated Default Payment, our future performance, which is subject to many factors, including the factors identified in this "Risk Factors" section and other factors beyond our control.

In February 2015, we exchanged senior subordinated promissory notes that we issued in 2013 for new senior subordinated promissory notes in the aggregate principal amount of $5.0 million with annual interest at 8%, and we issued an additional $9.0 million principal amount of such notes, or the 2015 Subordinated Notes. The 2015 Subordinated Notes are due February 2018 and include default provisions that allow for the acceleration of the principal payment of the 2015 Subordinated Notes in the event we become involved in certain bankruptcy proceedings, become insolvent, fail to make a payment of principal or (after a grace period) interest on the 2015 Subordinated Notes, default on other indebtedness with an aggregate principal balance of $13.5 million or more if such default has the effect of accelerating the maturity of such indebtedness, or become subject to a legal judgment or similar order for the payment of money in an amount greater than $13.5 million if such amount will not be covered by third-party insurance. If we default on the 2015 Subordinated Notes and the repayment of such indebtedness is accelerated, our liquidity could be materially and adversely affected.

If we do not have sufficient cash on hand to pay any of the Put Payment, the Make-Whole Payment or the Accelerated Default Payment when due, or to otherwise service our 2015 Subordinated Notes, we may be required, among other things, to:

- seek additional financing in the debt or equity markets;
- refinance or restructure all or a portion of our indebtedness;
- sell, out-license, or otherwise dispose of assets; and/or
- reduce or delay planned expenditures on research and development and/or commercialization activities.

Such measures might not be sufficient to enable us to make principal and interest payments. In addition, any such financing, refinancing, or sale of assets might not be available on favorable terms, if at all.

We are dependent upon our collaboration with Incyte to further develop, manufacture and commercialize CPM antibodies against certain targets. If we or Incyte fail to perform as expected, the potential for us to generate future revenues under the

collaboration would be significantly reduced, the development and/or commercialization of these CPM antibodies may be terminated or substantially delayed, and our business would be severely harmed.

Under the terms of our collaboration agreement with Incyte, we and Incyte have a joint steering committee that oversees and manages worldwide regulatory, development, manufacturing, and commercialization activities for our CPM antibody product candidates pursuant to the collaboration agreement with equal representation from both parties. For each program, we serve as the lead for pre-clinical development activities through the filing of an investigational new drug application, or IND, and Incyte serves as the lead for clinical development activities. Accordingly, the timely and successful completion by Incyte of clinical development activities will significantly affect the timing and amount of any revenues we may receive under the collaboration agreement. Incyte's activities will be influenced by, among other things, the efforts and allocation of resources by Incyte, which we cannot control. If Incyte does not perform in the manner we expect or fulfill its responsibilities in a timely manner, or at all, the clinical development, manufacturing, regulatory approval, and commercialization efforts related to CPM antibodies under the collaboration could be delayed or terminated, and it could become necessary for us to assume the responsibilities for the clinical development, manufacturing, regulatory approval or commercialization of the CPM antibodies at our own expense. Accordingly, there can be no assurance that any of the development, regulatory or sales milestones will be achieved, that we will receive any future milestone or royalty payments under the collaboration agreement, or that we will share in any revenues under the collaboration agreement.

Each program in the collaboration falls under either (i) a cost sharing model, in which we share all costs and profits on a 50:50 basis with Incyte and we are eligible for potential milestones, or (ii) a royalty-bearing model, in which Incyte funds 100% of the costs, with Agenus eligible for potential milestones and royalties. Incyte has far greater resources than us, and it may be difficult for us to meet our obligation to fund 50% of all costs for the cost-sharing programs, including the GITR and OX40 programs. Moreover, clinical programs under the collaboration could be accelerated due to better than expected clinical outcomes, thus requiring us to spend more money than anticipated on a given program and in a shorter period of time. We can elect to cease sharing costs 50:50 and convert the arrangements to royalty-bearing on twelve months prior written notice. If we fail to meet this notice obligation and do not meet our funding commitments, we would be in breach of our obligations under the agreement.

In addition, our collaboration with Incyte may be unsuccessful due to other factors, including, without limitation, the following:

- Incyte may terminate the agreement or any individual program for convenience upon 12 months' notice;
- We may have disagreements with Incyte that are not settled amicably or in our favor, particularly on the joint steering committee where Incyte will under most circumstances have the deciding vote in the event of a disagreement;
- Incyte may change the focus of its development and commercialization efforts or prioritize other programs more highly and, accordingly, reduce the efforts and resources allocated to our collaboration;
- Incyte may choose not to develop and commercialize CPM products, if any, in all relevant markets or for one or more indications, if at all; and
- If Incyte is acquired during the term of our collaboration, the acquirer may have competing programs or different strategic priorities that could cause it to reduce its commitment to our collaboration.

If Incyte terminates our collaboration agreement, we would need to raise additional capital and may need to identify and come to agreement with another collaboration partner to advance our CPM programs. Even if we are able to find another partner, this effort could cause delays in our timelines and/or additional expenses, which could adversely affect our business prospects and the future of our CPM antibody product candidates.

Our CPM programs are in early stage development, and there is no guarantee that we will be successful in advancing from CPM antibody product candidates through clinical development.

Our CPM programs are currently in early stage development, and the majority of our CPM programs are pre-clinical. Even if our pre-clinical studies or Phase 1 trials produce positive results, they may not necessarily be predictive of the results of future clinical trials in humans. Many companies in the pharmaceutical, biopharmaceutical and biotechnology industries have suffered significant setbacks in clinical trials after achieving positive results in pre-clinical development or Phase 1 trials, and we cannot be certain that we will not face similar setbacks. These setbacks have been caused by, among other things, pre-clinical findings made while clinical trials were underway or safety or efficacy observations made in clinical trials, including adverse events. Moreover, pre-clinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that believed their product candidates performed satisfactorily in pre-clinical studies and clinical trials nonetheless failed to obtain regulatory approval. If we fail to produce positive results in future clinical trials of CPM antibodies, our business and financial prospects would be materially adversely affected.

We are undergoing significant growth across multiple locations, and we may encounter difficulties in managing this growth, which could disrupt our operations.

As of February 29, 2016 we had 230 employees. From January 1, 2014 to February 29, 2016, we added 162 new employees, 69 of whom are employees of our wholly-owned subsidiary 4-Antibody AG (4-AB) that we acquired in February 2014, and 28 of whom are employees of our wholly-owned subsidiary Agenus West, LLC who joined us in connection with our acquisition of XOMA Corporation's antibody manufacturing pilot plant in December 2015. In addition, through various acquisitions, we have expanded our research and development activities both nationally and internationally to California, Virginia, Switzerland, Germany and the United Kingdom. We expect to continue increasing our headcount as we continue to build our research and development capabilities and integrate our acquired technology platforms. To manage this growth and expansion, we must continue to implement and improve our managerial, operational and financial systems and continue to recruit, train and retain qualified personnel. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate revenue could be reduced, and we may not be able to implement our business strategy.

We may not receive anticipated QS-21 Stimulon revenues from our licensees.

We currently rely upon and expect to continue to rely upon our third party licensee, GSK, to develop, test, market and manufacture vaccines that utilize our QS-21 Stimulon adjuvant. Our other licensee, Janssen Science Ireland UC, recently notified us that they were terminating their license for use of QS-21 Stimulon.

GSK owns their product development process, and we cannot predict their requirements for QS-21 Stimulon in the future or to what extent, if any, they will develop and commercialize vaccines that use QS-21 Stimulon as an adjuvant. GSK may initiate or terminate programs containing QS-21 Stimulon at any time. In addition, even if GSK successfully completes clinical trials with vaccine candidates using QS-21 Stimulon or these vaccine candidates receive positive decisions from regulatory bodies, there is no guarantee that these products will ultimately obtain regulatory approval or, if so approved, will have a successful commercial launch or generate any future milestones or royalty payments. In September 2015, we entered into the Note Purchase Agreement and partially monetized the potential royalties we are entitled to receive from GSK on future sales of its shingles and malaria vaccines, if any. All of the royalties that are payable to us from GSK on sales of these products candidates, if any, will be used entirely to satisfy our obligations to the purchasers of the Notes. However, there is no guarantee that GSK's shingles and malaria vaccines will be approved in any territories for which they seek regulatory approval. Even if GSK's shingles and/or malaria vaccines are approved, there is no guarantee that GSK will have a successful commercial launch of either product or generate any revenues from sales to help satisfy our obligations under the Note Purchase Agreement. Any inability to receive anticipated revenues, or a reduction in revenues, generated from QS-21 Stimulon could have a material adverse effect on our business, financial condition and results of operations.

Our synthetic HSP peptide-based platform is in early stage development, and there is no guarantee that a product candidate will progress from this platform.

In June 2014, we reported positive results from a Phase 2 trial with HerpV™, a vaccine candidate for genital herpes from our synthetic HSP peptide-based platform. While the HerpV Phase 2 trial met its formal endpoints, it was unclear whether the magnitude of the effect on viral load would be sufficient to significantly reduce the incidence, severity, or duration of herpetic lesions or reduce the risk of viral transmission. We do not expect to advance this program into a Phase 3 trial, but we have initiated our AutoSynVax™ synthetic cancer vaccine program based on our prior findings with this platform. Although we are targeting to initiate clinical trials for our first AutoSynVax product candidate in the second half of 2016, there is no guarantee that we will be able to do so. There is no guarantee that a product candidate will progress from this platform at all or that results of any potential future clinical trials will be positive. Furthermore, it is possible that research and discoveries by others will render any product candidate from this platform as obsolete or noncompetitive.

We may not be able to advance clinical development or commercialize Prophage™ vaccines or realize any benefits from this program.

The probability of future clinical development efforts leading to marketing approval and commercialization of Prophage vaccines is highly uncertain. Prophage vaccines have been in clinical development for over 15 years, including multiple Phase 1 and 2 trials in eight different tumor types as well as randomized Phase 3 trials in metastatic melanoma and adjuvant renal cell carcinoma. To date, none of our clinical trials with Prophage vaccines have resulted in a marketing approval, except in Russia where commercialization of the approved product was unsuccessful. Although we are targeting to initiate our next Prophage clinical trial in ndGBM in the second half of 2016, there is no guarantee that we will be able to do so. In addition, while we believe Prophage vaccines may provide clinical benefit to some patients as a monotherapy and in combination with other therapies, there is no guarantee that, if completed, subsequent Prophage trials would yield useful translational and/or efficacy data.

We do not currently sponsor any of the on-going clinical trials with Prophage vaccines and therefore we lack the ability to control trial design, timelines, and data availability. Current and future studies may eventually be terminated due to, among other

things, slow enrollment, lack of probability that they will yield useful translational and/or efficacy data, lengthy timelines, or the unlikelihood that results will support timely or successful regulatory filings. Currently, the only actively enrolling Prophage vaccine clinical trial is a Phase 2 trial of Prophage vaccine in combination with bevacizumab in patients with surgically resectable recurrent glioma. This trial is being conducted under the sponsorship of the Alliance for Clinical Trials in Oncology, a cooperative group of the National Cancer Institute (NCI). While the NCI Alliance has confirmed a commitment to completion of the trial, to date, clinical site activation and patient enrollment have not met expectations, which could curtail the viability of sustaining the trial. Furthermore, potential changes in clinical practices trending away from the administration of bevacizumab for the treatment of recurrent glioma could exacerbate enrollment issues and/or render the trial design impractical. Lastly, the NCI operationalization of the clinical trial includes limited onsite training for tumor tissue procurement, which may result in improper tissue handling and increase the risk of vaccine manufacturing failures.

Changes in our manufacturing strategies, manufacturing problems, or increased demand may cause delays, unanticipated costs, or loss of revenue streams within or across our programs.

Our CPM antibody programs, including those partnered with Incyte, will require substantial manufacturing development and investment to progress. We are currently progressing a portfolio of CPM antibody programs that are at different stages of development. If these efforts are delayed or do not produce the desired outcomes, this will cause delays in development timelines and increased costs, which may cause us to limit the size and scope of our efforts and studies. Although we recently secured our own antibody manufacturing capabilities with the purchase of a manufacturing pilot plant from XOMA Corporation, we only expect this facility to provide us with antibody supply requirements through clinical proof-of-concept studies and not for larger, registrational studies or any commercial supply requirements. Furthermore, we currently still rely on contract manufacturing organizations ("CMOs") and contract research organizations ("CROs") to support some of our existing CPM antibody programs. Our dependence on external CMOs for the manufacture of certain antibodies results in intrinsic risks to our performance, timelines, and costs of our accelerated development plans. We may also need to develop or secure later phase and/or commercial manufacturing capabilities, all of which would cause us to incur additional costs and risk, and which could divert resources away from our CPM antibody programs and/or lead to delays in the development of our product candidates. In the event that our CPM antibody programs require progressively larger production capabilities, our options for qualified CMOs may become more limited.

The long-term success of the antibody pilot plant manufacturing facility and capabilities that we acquired from XOMA Corporation will depend, in part, on our ability to realize the anticipated synergies, business opportunities and growth prospects from combining our manufacturing facilities in Lexington, MA with the antibody pilot plant manufacturing facility in Berkeley, CA. We may never realize these anticipated synergies, business opportunities and growth prospects. Assumptions underlying estimates of expected cost savings as a result of the acquisition of the antibody pilot plant manufacturing facility may be inaccurate. If any of these factors limit our ability to successfully manufacture CPM antibodies to support our planned clinical trials, the expectations of future results of operations, including certain cost savings and synergies expected to result from the acquisition of XOMA Corporation's antibody pilot plant manufacturing facility, might not be met.

We currently manufacture our Prophage vaccines in our Lexington, MA facility. Manufacturing of the Prophage vaccines is complex, and various factors could cause delays or an inability to supply the vaccine. Deviations in the processes controlling manufacture or deficiencies in size or quality of source material could result in production failures. In addition, regulatory bodies may require us to make our manufacturing facility a single product facility. In such an instance, we would no longer have the ability to manufacture Prophage vaccines in addition to other product candidates in our current facility.

We have given our corporate QS-21 Stimulon licensee, GSK, manufacturing rights for QS-21 Stimulon for use in their product programs. If GSK or its third party CMO encounters problems with QS-21 Stimulon manufacturing, any of their programs containing QS-21 Stimulon could be delayed or terminated, and this could have an adverse effect on our potential license fees, milestone payments and royalties that we may otherwise receive from these programs and use to satisfy our obligations under the Note Purchase Agreement. We have retained the right to manufacture QS-21 for ourselves and third parties, although no other such programs are anticipated to bring us substantial revenues in the near future, if ever.

Our ability to efficiently manufacture our product candidates is contingent, in part, upon our own, and our CMOs' ability to ramp up production in a timely manner without the benefit of years of experience and familiarity with the processes, which we may not be able to adequately transfer. We currently rely upon and expect to continue to rely upon third parties, potentially including our collaborators or licensees, to produce materials required to support our product candidates, pre-clinical studies, clinical trials, and any future commercial efforts. A number of factors could cause production interruptions at either our manufacturing facility or the facilities of our CMOs or suppliers, including equipment malfunctions, labor or employment retention problems, natural disasters, power outages, terrorist activities, or disruptions in the operations of our suppliers. Alternatively, there is the possibility we may have excess manufacturing capacity if product candidates do not progress as planned.

As mentioned above, reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured all of our product candidates ourselves, including reliance on the third party for regulatory compliance, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control, and the possibility of termination or non-renewal of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for us.

Biopharmaceutical manufacturing is also subject to extensive government regulation. Components of a finished therapeutic product approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with current good manufacturing practices or cGMP. These regulations govern manufacturing processes and procedures (including record keeping) and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Our facilities and quality systems and the facilities and quality systems of some or all of our third party contractors must pass a pre-approval inspection for compliance with the applicable regulations as a condition of regulatory approval of a product candidate. In addition, facilities are subject to on-going inspections, and minor changes in manufacturing processes may require additional regulatory approvals, either of which could cause us to incur significant additional costs and lose revenue.

Risks associated with doing business internationally could negatively affect our business.

We have research and development operations in Switzerland, Germany and the United Kingdom. We expect to pursue pathways to develop and commercialize our product candidates in both U.S. non-U.S. jurisdictions. Various risks associated with foreign operations may impact our success. Possible risks of foreign operations include fluctuations in the value of foreign and domestic currencies requirements to comply with various jurisdictional requirements such as data privacy regulations, disruptions in the import, export, and transportation of patient tumors and our products or product candidates, the product and service needs of foreign customers, difficulties in building and managing foreign relationships, the performance of our licensees or collaborators, geopolitical instability, unexpected regulatory, economic, or political changes in foreign markets and limitations on the flexibility of our operations and costs imposed by local labor laws. For example, in 2008 our Oncophage® vaccine was approved for sale in Russia, but we have never received, and do not expect to receive, any revenues from sales in Russia. See "Risk Factors- Even if we receive marketing approval for our product candidates, such product approvals could be subject to restrictions or withdrawals. Regulatory requirements are subject to change. Further, even if we receive marketing approval, we may not receive sufficient coverage and adequate reimbursement for our products."

Our competitors may have superior products, manufacturing capability, selling and marketing expertise and/or financial and other resources.

Our product candidates and the product candidates in development by our collaboration partners may fail because of competition from major pharmaceutical companies and specialized biotechnology companies that market products, or that are engaged in the development of product candidates, directed at cancer, infectious diseases and degenerative disorders. Many of our competitors, including large pharmaceutical companies, have greater financial and human resources and more experience than we do. Our competitors may:

- develop safer or more effective therapeutic drugs or preventive or therapeutic vaccines and other products;
- establish superior intellectual property positions;
- discover technologies that may result in medical insights or breakthroughs, which render our drugs or vaccines obsolete, possibly before they generate any revenue, if ever;
- adversely affect our ability to recruit patients for our clinical trials;
- solidify partnerships or strategic acquisitions that may increase the competitive landscape;
- develop or commercialize their product candidates sooner than we commercialize our own, if ever; or
- implement more effective approaches to sales and marketing and capture some of our potential market share.

There is no guarantee that our product candidates will be able to compete with potential future products being developed by our competitors.

We have CPM antibody programs currently in early stage development targeting GITR, OX40, CTLA-4, LAG-3, TIM-3, PD-1 and CEACAM1. We are aware of many companies that have antibody-based products on the market or in clinical development that are directed to the same biological target as some of our programs, including, without limitation, the following: (1) Bristol-Myers Squibb markets ipilimumab, an anti-CTLA-4 antibody, and nivolumab, an anti-PD-1 antibody, and is developing an anti-LAG-3 antibody and agonist to OX-40 (2) Merck has an approved anti-PD-1 antibody in the United States, and is developing an anti-GITR agonist and anti-CEACAM antibodies, (3) Ono Pharmaceuticals has an approved anti-PD-1 antibody in Japan, (4) AstraZeneca

/Medimmune has anti-CTLA-4, OX-40 and PD1 antibodies in development, (5) Curetech has an anti-PD-1 antibody in development, (6) Pfizer has an anti-CTLA-4 antibody in development, (7) Tesaro has antibody programs targeting PD-1, TIM-3 and LAG-3, which include both monospecific and dual reactive antibody drug candidates, (8) Novartis has anti-PD-1 and anti-TIM-3 antibodies in discovery, and anti-LAG-3 and GITR agonist in clinical trials and (9) Roche/Genetech has an anti-OX40 agonist in development. There is no guarantee that our antibody product candidates will be able to compete with our competitors' antibody products and product candidates.

We have autologous vaccines programs in development including our Prophage vaccine in clinical development for GBM and our neo-antigen based AutoSynVax vaccine in preclinical development. We are aware of many companies pursuing cancer vaccines and/or immunotherapies in clinical development, including, without limitation, the following: (1) Neon Therapeutics is developing a personalized neoantigen vaccine; (2) Gritstone Oncology is discovering and developing a novel tumor-specific neo-antigen (TSNA) based immunotherapies, with an initial focus on lung cancer; (3) Aduro Biotech is developing immunotherapy platforms (Listeria, cyclic dinucleotides, and B-select antibodies); (4) Inovio Pharmaceutical Inc. and Medimmune are collaborating on developing DNA-based immunotherapies for cancer and infectious disease; (5) Oncolytics Biotech Inc. is developing oncolytic virus based cancer therapeutics in lung, colorectal and pancreatic cancers; and (6) Oncothyreon is developing synthetic vaccines for cancer therapeutics.

We are aware of compounds that claim to be comparable to QS-21 Stimulon that are being used in clinical trials. Several other vaccine adjuvants are in development and could compete with QS-21 Stimulon for inclusion in vaccines in development. These adjuvants include, but are not limited to, (1) oligonucleotides, under development by Pfizer, Idera, Colby, and Dynavax, (2) MF59, under development by Novartis, (3) IC31, under development by Intercell, and (4) MPL, under development by GSK. In the past, we have provided QS-21 Stimulon to other entities under materials transfer arrangements. In at least one instance, it is possible that this material was used unlawfully to develop synthetic formulations and/or derivatives of QS-21. In addition, companies such as Adjuvance Technologies, Inc., CSL Limited, and Novavax, Inc., as well as academic institutions and manufacturers of saponin extracts, are developing saponin adjuvants, including derivatives and synthetic formulations. These sources may be competitive to our ability to execute future partnering and licensing arrangements involving QS-21 Stimulon. The existence of products developed by these and other competitors, or other products of which we are not aware or which other companies may develop in the future, may adversely affect the marketability of products we and our partners develop.

We are also aware of a third party that manufactures pre-clinical material purporting to be comparable to QS-21 Stimulon. The claims being made by this third party may create marketplace confusion and have an adverse effect on the goodwill generated by us and our partners with respect to QS-21 Stimulon. Any diminution of this goodwill may have an adverse effect on our ability to commercialize future products, if any, incorporating this technology, either alone or with a third party.

In competition with our Prophage product candidates, Genentech markets bevacizumab, and Eisai and Arbor Pharmaceuticals market carmustine. In addition, TVAX Biomedical and Stemline Therapeutics are developing immunotherapy candidates TVI-Brain-1 and SL-701, respectively, for recurrent glioma. Other companies are developing vaccine candidates for the treatment of patients with newly diagnosed glioma, such as ImmunoCellular Therapeutics (ICT-107), Northwest Biotherapeutics (DC-Vax), Immatics (IMA-950), Activartis Biotech (GBM-Vax), Annias Immunotherapeutics (CMV Vaccine) and Celldex (CDX-110). Other companies may begin development programs as well.

As we develop our vaccines, such as Prophage and AutoSynVax, in other indications or in combination with other product candidates, such as available standard of care agents (Avastin®), or with CPMs, they could face additional competition in those indications or in those combinations. In addition, and prior to regulatory approval, if ever, our vaccines and our other product candidates may compete for access to patients with other products in clinical development, with products approved for use in the indications we are studying, or with off-label use of products in the indications we are studying. We anticipate that we will face increased competition in the future as new companies enter markets we seek to address and scientific developments surrounding immunotherapy and other traditional cancer therapies continue to accelerate.

Failure to capture the anticipated benefits or our strategic acquisitions and licensing transactions could adversely affect our business, operations and financial condition.

An important part of our business strategy to date has been to identify and advance a pipeline of product candidates by acquiring and in-licensing product candidates, technologies and businesses that we believe are a strategic fit with our existing business. Since we acquired 4-AB in February 2014, we have completed numerous additional strategic acquisitions and licensing transactions. The ultimate success of these strategic transactions entails numerous operational and financial risks, including:

- higher than expected development and integration costs;
- difficulty in combining the technologies, operations and personnel of acquired businesses with our technologies, operations and personnel;

- exposure to unknown liabilities;
- difficulty or inability to form a unified corporate culture across multiple office sites both nationally and internationally;
- inability to retain key employees of acquired businesses;
- disruption of our business and diversion of our management's time and attention; and
- difficulty or inability to secure financing to fund development activities for such acquired or in-licensed product candidates, technologies or businesses.

We have limited resources to integrate acquired and in-licensed product candidates, technologies and businesses into our current infrastructure, and we may fail to realize the anticipated benefits of our strategic transactions. Any such failure could have an adverse effect on our business, operations and financial condition.

Failure to enter into and/or maintain significant licensing, distribution and/or collaboration agreements on favorable terms to us may hinder or cause us to cease our efforts to develop and commercialize our product candidates, increase our development timelines, and/or increase our need to rely on partnering or financing mechanisms, such as sales of debt or equity securities, to fund our operations and continue our current and anticipated programs.

As previously noted, our ability to advance our CPM programs depends in part on collaboration agreements such as our collaboration with Incyte. See "Risk Factors—Risks Related to Our Business—We are dependent upon our collaboration with Incyte to further develop, manufacture and commercialize CPM antibodies against certain targets using our proprietary antibody discovery platforms. If we or Incyte fail to perform as expected, the potential for us to generate future revenues under the collaboration would be significantly reduced, the development and/or commercialization of these CPM antibodies may be terminated or substantially delayed, and our business would be severely harmed." In addition, from time to time we engage in efforts to enter into licensing, distribution and/or collaboration agreements with one or more pharmaceutical or biotechnology companies to assist us with development and/or commercialization of our other product candidates. If we are successful in entering into such agreements, we may not be able to negotiate agreements with economic terms similar to those negotiated by other companies. We may not, for example, obtain significant upfront payments, substantial royalty rates or milestones. If we fail to enter into any such agreements, our efforts to develop and/or commercialize our product candidates may be undermined. In addition, if we do not raise funds through any such agreements, we will need to rely on other financing mechanisms, such as sales of debt or equity securities, to fund our operations. Such financing mechanisms, if available, may not be sufficient or timely enough to advance our programs forward in a meaningful way in the short-term.

While we have been pursuing these business development efforts for several years for our Prophage vaccine, we have not entered into a substantial agreement other than the agreement with NewVac to sell Oncophage in Russia, which was unsuccessful and expired in 2014. In addition, other companies may not be interested in pursuing patient-specific vaccines like our Prophage vaccines, and many other companies have been and may continue to be unwilling to commit to an agreement prior to receipt of additional clinical data, if at all.

Because we rely on collaborators and licensees for the development and commercialization of many of our product candidate programs, these programs may not prove successful, and/or we may not receive significant payments from such parties.

Part of our strategy is to develop and commercialize many of our product candidates by continuing or entering into arrangements with academic, government, or corporate collaborators and licensees. Our success depends on our ability to negotiate such agreements on favorable terms and on the success of the other parties in performing research, pre-clinical and clinical testing, completing regulatory applications, and commercializing product candidates. Our research, development, and commercialization efforts with respect to antibody candidates from our technology platforms are, in part, contingent upon the participation of institutional and corporate collaborators. For example, in February 2015 we began a broad collaboration with Incyte to pursue the discovery and development of CPMs. See "Risk Factors-Risks Related to our Business-We are dependent upon our collaboration with Incyte to further develop, manufacture and commercialize CPM antibodies against certain targets using our proprietary antibody discovery platforms. If we or Incyte fail to perform as expected, the potential for us to generate future revenues under the collaboration would be significantly reduced, the development and/or commercialization of these CPM antibodies may be terminated or substantially delayed, and our business would be severely harmed." Furthermore, we have a collaboration arrangement with Recepta for CTLA-4 and PD-1, giving Recepta rights to certain South American countries and requiring us to agree upon development plans for these candidates. Disagreements or the failure of either party to perform satisfactorily could have an adverse impact on these programs.

In addition, substantially all product candidates containing QS-21 Stimulon depend on the success of our collaboration partners or licensees, and our relationships with these third parties. Such product candidates depend on our collaborators and licensees successfully enrolling patients and completing clinical trials, being committed to dedicating the resources necessary to advance these product candidates, obtaining regulatory approvals, and successfully manufacturing and commercializing product candidates.

To date, the development of Prophage vaccine for the treatment of patients with glioma is dependent, in large part, on the efforts of the Alliance for Clinical Trials in Oncology, a NCI cooperative group, which is sponsoring a Phase 2 clinical trial of this product candidate in this indication. When our licensees or third party collaborators sponsor clinical trials using our product candidates, we cannot control the timing of enrollment, data readout, or quality of such trials or related activities. In addition, substantially all product candidates containing QS-21 Stimulon depend on the success of our collaboration partners or licensees, and our relationships with these third parties. Such product candidates depend on our collaborators and licensees successfully enrolling patients and completing clinical trials, being committed to dedicating the resources to advance these product candidates, obtaining regulatory approvals, and successfully manufacturing and commercializing product candidates.

Development activities for our collaboration programs may fail to produce marketable products due to unsuccessful results or abandonment of these programs, failure to enter into future collaborations or license agreements, or the inability to manufacture product supply requirements for our collaborators and licensees. Several of our agreements also require us to transfer important rights and regulatory compliance responsibilities to our collaborators and licensees. As a result of these collaboration agreements, we will not control the nature, timing, or cost of bringing these product candidates to market. Our collaborators and licensees could choose not to, or be unable to, devote resources to these arrangements or adhere to required timelines, or, under certain circumstances, may terminate these arrangements early. They may cease pursuing product candidates or elect to collaborate with different companies. In addition, these collaborators and licensees, outside of their arrangements with us, may develop technologies or products that are competitive with those that we are developing. From time to time, we may also become involved in disputes with our collaborators or licensees. Such disputes could result in the incurrence of significant expense, or the termination of collaborations. We may be unable to fulfill all of our obligations to our collaborators, which may result in the termination of collaborations. As a result of these factors, our strategic collaborations may not yield revenue. Furthermore, we may not be able to enter into new collaborations on favorable terms or at all. Failure to generate significant revenue from collaborations could increase our need to fund our operations through sales of debt or equity securities and would negatively affect our business prospects.

Our internal computer systems, or those of our third-party CROs, CMOs, licensees, collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption in our business and operations.

Despite the implementation of security measures, our internal computer systems and those of our current and future CROs, CMOs, licensees, collaborators and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we are not aware of any such material system failure, accident 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, on-going or future clinical trials could result in delays in our regulatory approval efforts and significant costs to recover or reproduce the data. Likewise, we rely on third parties to manufacture our drug candidates and 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 liabilities and the further development and commercialization of our product candidates could be delayed.

We are highly reliant on our Chief Executive Officer, President of R&D and other members of our management team. In addition, we have limited internal resources and if we fail to recruit and/or retain the services of key employees and external consultants as needed, we may not be able to achieve our strategic and operational objectives.

Both Garo H. Armen, Ph.D., the Chairman of our Board of Directors and our Chief Executive Officer who co-founded the Company in 1994, and Dr. Robert Stein, our President of R&D who joined the Company in February 2014, are integral to building our company and developing our technology. If either Dr. Armen or Dr. Stein is unable or unwilling to continue his relationship with Agenus, our business may be adversely impacted.

Effective December 31, 2005, we entered into an employment agreement with Dr. Armen. Subject to the early termination of the agreement, the agreement had an original term of one year and is automatically extended thereafter for successive terms of one year each, unless either party provides notice to the other at least 90 days prior to the expiration of the original or any extension term. Effective June 30, 2015, we entered into an employment agreement with Dr. Stein. Subject to the early termination of the agreement, the agreement has an original term of one year and is automatically extended thereafter for successive terms of one year each, unless either party provides notice to the other at least 120 days prior to the expiration of the original or any extension term. Dr. Armen and Dr. Stein play important roles in our day-to-day activities. We do not carry key employee insurance policies for Dr. Armen, Dr. Stein or any other employee.

Our future growth success depends to a significant extent on the skills, experience and efforts of our executive officers and key members of our clinical and scientific staff. We face intense competition for qualified individuals from other pharmaceutical, biopharmaceutical and biotechnology companies, as well as academic and other research institutions. We may be unable to retain our

current personnel or attract or assimilate other highly qualified management and clinical personnel in the future on acceptable terms. The loss of any or all of these individuals could harm our business and could impair our ability to support our collaboration with Incyte or to support our growth. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate revenue could be reduced and we may not be able to implement our business strategy.

We rely on a small staff of highly trained and experienced senior management and scientific, administrative and operations personnel and consultants to conduct our business in certain key areas of our organization. The competition for qualified personnel in the biotechnology field is intense, and if we are not able to continue to attract and retain qualified personnel and/or maintain positive relationships with our outside consultants, we may not be able to achieve our strategic and operational objectives.

Calamities, power shortages or power interruptions could disrupt our business and materially adversely affect our operations.

In December 2015, we acquired an antibody pilot plant manufacturing facility and leased additional office space in Berkeley, CA. This location is in an area of seismic activity near active earthquake faults. Any earthquake, terrorist attack, fire, power shortage or other calamity affecting our facilities or those of third parties upon whom we depend may disrupt our business and could have a material adverse effect on our business, results of operations, financial condition and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our facilities, that damaged critical infrastructure (such as our manufacturing facility) or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our manufacturing capabilities for a substantial period of time. The disaster recovery and business continuity plans we have in place currently are limited and are unlikely to prove adequate in the event of a serious disaster or similar event. We may incur substantial expenses and delays as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business.

Risks Related to Regulation of the Biopharmaceutical Industry

The drug development and approval process is uncertain, time-consuming, and expensive.

Clinical development, including pre-clinical testing and the process of obtaining and maintaining regulatory approvals for new therapeutic products, is lengthy, expensive, and uncertain. For example, as of December 31, 2015, we had spent approximately 20 years and $473.5 million on our research and development program in heat shock proteins for cancer. The development and regulatory approval process also can vary substantially based on the type, complexity, and novelty of the product. We must provide regulatory authorities with manufacturing, product characterization, and pre-clinical and clinical data demonstrating that our product candidates are safe and effective before they can be approved for commercial sale. It may take us many years to complete our testing, and failure can occur at any stage of testing. Interim results of pre-clinical studies or clinical trials do not necessarily predict their final results, and acceptable results in early studies might not be seen in later studies. Any pre-clinical or clinical test may fail to produce results satisfactory to regulatory authorities for many reasons, including but not limited to insufficient product characterization, poor study structure conduct or statistical analysis planning, failure to enroll a sufficient number of patients or failure to prospectively identify the most appropriate patient eligibility criteria, and collectability of data. Pre-clinical and clinical data can be interpreted in different ways, which could delay, limit, or prevent regulatory approval. Negative or inconclusive results from a pre-clinical study or clinical trial, adverse medical events during a clinical trial, or safety issues resulting from products of the same class of drug could require a pre-clinical study or clinical trial to be repeated or cause a program to be terminated, even if other studies or trials relating to the program are successful. We or the FDA, other regulatory agencies, or an institutional review board may suspend or terminate human clinical trials at any time on various grounds.

The timing and success of a clinical trial is dependent on obtaining and maintaining sufficient cash resources, successful production of clinical trial material, enrolling sufficient patients in a timely manner, avoiding serious or significant adverse patient reactions, and demonstrating efficacy of the product candidate in order to support a favorable risk versus benefit profile, among other considerations. The timing and success of our clinical trials, in particular, are also dependent on clinical sites and regulatory authorities accepting each trial's protocol, statistical analysis plan, product characterization tests, and clinical data. In addition, regulatory authorities may request additional information or data that is not readily available. Delays in our ability to respond to such requests would delay, and failure to adequately address concerns would prevent, our commercialization efforts. We have encountered in the past, and may encounter in the future, delays in initiating trial sites and enrolling patients into our clinical trials. Future enrollment delays will postpone the dates by which we expect to complete the impacted trials and the potential receipt of regulatory approval. There is no guarantee we will successfully initiate and/or complete our clinical trials.

Delays or difficulties in obtaining regulatory approvals or clearances for our product candidates may:

- adversely affect the marketing of any products we or our licensees or collaborators develop;
- impose significant additional costs on us or our licensees or collaborators;
- diminish any competitive advantages that we or our licensees or collaborators may attain;

- limit our ability to receive royalties and generate revenue and profits; and
- adversely affect our business prospects and ability to obtain financing.

Delays or failures in our receiving regulatory approval for our product candidates in a timely manner may result in us having to incur additional development expense and subject us to having to secure additional financing. As a result, we may not be able to commercialize them in the time frame anticipated, and our business will suffer.

Even if we receive marketing approval for our product candidates, such product approvals could be subject to restrictions or withdrawals. Regulatory requirements are subject to change. Further, even if we receive marketing approval, we may not receive sufficient coverage and adequate reimbursement for our products.

Regulatory authorities generally approve products for particular indications. If an approval is for a limited indication, this limitation reduces the size of the potential market for that product. Product approvals, once granted, are subject to continual review and periodic inspections by regulatory authorities. Our operations and practices are subject to regulation and scrutiny by the United States government, as well as governments of any other countries in which we do business or conduct activities. Later discovery of previously unknown problems or safety issues, and/or failure to comply with domestic or foreign laws, knowingly or unknowingly, can result in various adverse consequences, including, among other things, possible delay in approval or refusal to approve a product, warning letters, fines, injunctions, civil penalties, recalls or seizures of products, total or partial suspension of production, refusal of the government to renew marketing applications, complete withdrawal of a marketing application, corrective action requirements, and/or criminal prosecution, withdrawal of an approved product from the market, and/or exclusion from government health care programs. Such regulatory enforcement could have a direct and negative impact on the product for which approval is granted and could have a negative impact on the approval of any pending applications for marketing approval of new drugs or supplements to approved applications.

Because we operate in a highly regulated industry, regulatory authorities could take enforcement action against us in connection with our licensees' or collaborators', and/or our business and marketing activities for various reasons. For example, the FCPA prohibits U.S. companies and their representatives from offering, promising, authorizing, or making payments to foreign governmental officials for the purpose of obtaining or retaining business abroad.

From time to time, new legislation is passed into law that could significantly change the statutory provisions governing the approval, manufacturing, and marketing of products regulated by the FDA and other foreign health authorities. Additionally, regulations and guidance are often revised or reinterpreted by health agencies in ways that may significantly affect our business and our products. It is impossible to predict whether further legislative changes will be enacted, or whether regulations, guidance, or interpretations will change, and what the impact of such changes, if any, may be. For example, the Patient Protection and Affordable Care Act and the Health Care and Education Affordability Reconciliation Act of 2010, collectively, the ACA, enacted in March 2010, substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacted the pharmaceutical industry. With regard to pharmaceutical products, among other things, ACA is expected to expand, increase, and change the methodology regarding industry rebates for drugs covered under Medicaid programs; impose an annual, nondeductible fee on any entity that manufactures or imports specific branded prescription drugs and biologic agents, apportioned among those entities according to market share in certain government healthcare programs; expand eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level; expand the entities eligible for discounts under the Public Health Service pharmaceutical pricing program; create a new Patient Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and make changes to the coverage requirements under the Medicare D program.

We expect both government and private health plans to continue to require healthcare providers, including healthcare providers that may one day purchase our products, to contain costs and demonstrate the value of the therapies they provide. Even if our product candidates are approved, the commercial success of our products will depend substantially on the extent to which they are covered by third-party payors, including government health authorities and private health insurers. In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors, and coverage and reimbursement for products can differ significantly from payor to payor. If coverage and reimbursement are not available, or reimbursement is available only to limited levels, we or our collaborators may not be able to successfully commercialize our product candidates.

New data from our research and development activities, and/or resource considerations could modify our strategy and result in the need to adjust our projections of timelines and costs of programs.

Because we are focused on novel technologies, our research and development activities, including our nonclinical studies and clinical trials, involve the ongoing discovery of new facts and the generation of new data, based on which we determine next steps for a relevant program. These developments can occur with varying frequency and constitute the basis on which our business is conducted. We make determinations on an ongoing basis as to which of these facts or data will influence timelines and costs of

programs. We may not always be able to make such judgments accurately, which may increase the costs we incur attempting to commercialize our product candidates. We monitor the likelihood of success of our initiatives and we may need to discontinue funding of such activities if they do not prove to be commercially feasible, due to our limited resources.

We may need to successfully address a number of technological challenges in order to complete development of our product candidates. Moreover, these product candidates may not be effective in treating any disease or may prove to have undesirable or unintended side effects, toxicities, or other characteristics that may preclude our obtaining regulatory approvals or prevent or limit commercial use.

Risks Related to Intellectual Property Rights

If we are unable to obtain and enforce patent protection for our product candidates and related technology, our business could be materially harmed.

We rely upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our product candidates and technology. Any disclosure to or misappropriation by third parties of our confidential proprietary information could enable competitors to duplicate or surpass our technological achievements, eroding our competitive position in the market. Our patent applications may not result in issued patents, and, even if issued, the patents may be challenged and invalidated. Moreover, our patents and patent applications may not be sufficiently broad to prevent others from practicing our technologies or developing competing products. We also face the risk that others may independently develop similar or alternative technologies or may design around our proprietary property.

Issued patents may be challenged, narrowed, invalidated or circumvented. In addition, court decisions may introduce uncertainty in the enforceability or scope of patents owned by biotechnology companies. The legal systems of certain countries do not favor the aggressive enforcement of patents, and the laws of foreign countries may not allow us to protect our inventions with patents to the same extent as the laws of the United States. Because patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing, or in some cases not at all, and because publications of discoveries in scientific literature lag behind actual discoveries, we cannot be certain that we were the first to make the inventions claimed in our issued patents or pending patent applications, or that we were the first to file for protection of the inventions set forth in our patents or patent applications. As a result, we may not be able to obtain or maintain protection for certain inventions. Therefore, the enforceability and scope of our patents in the United States and in foreign countries cannot be predicted with certainty and, as a result, any patents that we own or license may not provide sufficient protection against competitors. We may not be able to obtain or maintain patent protection from our pending patent applications, from those we may file in the future, or from those we may license from third parties. Moreover, even if we are able to obtain patent protection, such patent protection may be of insufficient scope to achieve our business objectives.

Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time. Patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after its effective filing date. Various extensions may be available; however the life of a patent, and the protection it affords, is limited. Without patent protection for our product candidates, we may be open to competition from generic versions of our product candidates. Furthermore, the product development timeline for biotechnology products is lengthy and it is possible that our issued patents covering our product candidates in the United States and other jurisdictions may expire prior to commercial launch. For example, if we encounter delays in our development efforts, including our clinical trials, the period of time during which we could market our product candidates under patent protection could be reduced.

Our strategy depends on our ability to identify and seek patent protection for our discoveries. This process is expensive and time consuming, and we and our current or future licensors may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner or in all jurisdictions where protection may be commercially advantageous. It is also possible that we or our current licensors, or any future licensors or licensees, may not identify patentable aspects of inventions made in the course of development and commercialization activities in time to obtain patent protection on them. Therefore, these and any of our patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. Defects of form in the preparation or filing of our patents or patent applications may exist, or may arise in the future, for example with respect to proper priority claims, inventorship, etc. If we or our current licensors, or any future licensors or licensees, fail to establish, maintain or protect such patents and other intellectual property rights, such rights may be reduced or eliminated. If our current licensors, or any future licensors or licensees, are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised. If there are material defects in the form or preparation of our patents or patent applications, such patents or applications may be invalid and unenforceable. Despite our efforts to protect our proprietary rights, unauthorized parties may be able to obtain and use information that we regard as proprietary. The issuance of a patent does not ensure that it is valid or enforceable, so even if we obtain patents, they may not be valid or enforceable against third parties. In addition, the issuance of a patent does not give us the right to practice the patented invention. Third parties may have

blocking patents that could prevent us from marketing our own patented product and practicing our own patented technology. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business.

The patent landscape in the field of therapeutic antibody development, manufacture and commercialization is crowded. For example, we are aware of third party patents directed to methods for identifying and producing therapeutic antibodies. We are also aware of third party patents directed to antibodies to numerous targets for which we also seek to identify, develop, and commercialize antibodies, including without limitation CTLA-4, PD-1, GITR, OX40, TIM-3, LAG-3, and CEACAM1. For example, some patents claim antibodies based on competitive binding with existing antibodies, some claim antibodies based on specifying sequence or other structural information, and some claim various methods of discovery, production, or use of such antibodies.

These or other third party patents could impact our freedom to operate in relation to our technology platforms, as well as in relation to development and commercialization of antibodies identified by us as therapeutic candidates. As we discover and develop our candidate antibodies, we will continue to conduct analyses of these third party patents to determine whether we believe we might infringe them, and if so, whether they would be likely to be deemed valid and enforceable if challenged. If we determine that a license for a given patent or family of patents is necessary or desirable, there can be no guarantee that a license would be available on favorable terms, or at all. Inability to obtain a license on favorable terms, should such a license be determined to be necessary or desirable, could, without limitation, result in increased costs to design around the third party patents, delay product launch, or result in cancellation of the affected program or cessation of use of the affected technology.

Third parties may also seek to market biosimilar versions of any approved products. Alternatively, third parties may seek approval to market their own products similar to or otherwise competitive with our products. In these circumstances, we may need to defend and/or assert our patents, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court or agency with jurisdiction may find our patents invalid and/or unenforceable. Even if we have valid and enforceable patents, these patents still may not provide protection against competing products or processes sufficient to achieve our business objectives.

We own, co-own or have exclusive rights to approximately 50 issued United States patents and approximately 120 issued foreign patents. We also own, co-own or have exclusive rights to approximately 50 pending United States patent applications and approximately 50 pending foreign patent applications. However, our patents may not protect us against our competitors. Our patent positions, and those of other biopharmaceutical, pharmaceutical and biotechnology companies, are generally uncertain and involve complex legal, scientific, and factual questions. The standards which the United States Patent and Trademark Office, or USPTO, uses to grant patents, and the standards which courts use to interpret patents, are not always applied predictably or uniformly and can change, particularly as new technologies develop. Consequently, the level of protection, if any, that will be provided by our patents if we attempt to enforce them, and they are challenged, is uncertain. In addition, the type and extent of patent claims that will be issued to us in the future is uncertain. Any patents that are issued may not contain claims that permit us to stop competitors from using similar technology.

Through our acquisitions of 4-AB, PhosImmune and certain assets of Celexion, we own, co-own, or have exclusive rights to a number of patents and patent applications directed to various methods and compositions, including methods for identifying therapeutic antibodies and product candidates arising out of such entities' technology platforms. In particular, we own patents and patent applications relating to Retrocyte Display™ technology platform, a high throughput antibody expression platform for the identification of fully-human and humanized monoclonal antibodies. This patent family is projected to expire between 2029 and 2031. Through our acquisition of PhosImmune, we own, co-own, or have exclusive rights to patents and patent applications directed to various methods and compositions, including a patent directed to methods for identifying phosphorylated proteins using mass spectrometry. This patent is projected to expire in 2023. We also own patents and patent applications relating to the SECANT® platform, a platform used for the generation of novel monoclonal antibodies. This patent family is projected to expire between 2028 and 2029. In addition, as we advance our research and development efforts with our institutional and corporate collaborators, we intend to seek patent protection for newly identified therapeutic antibodies and product candidates. We can provide no assurance that any of our patents, including the patents that we acquired or in-licensed in connection with our acquisitions of 4-AB, PhosImmune and certain assets of Celexion, will have commercial value, or that any of our existing or future patent applications, including the patent applications that we acquired or in-licensed in connection with our acquisitions of 4-AB, PhosImmune and certain assets of Celexion, will result in the issuance of valid and enforceable patents.

Our issued patents covering Prophage vaccine and methods of use thereof, alone or in combination with other agents, expired or will expire at various dates between 2015 and 2024. In particular, our issued U.S. patents covering Prophage composition of matter expired in 2015. In addition, our issued patents covering QS-21 Stimulon composition of matter expired in 2008. We continue to explore means of extending the life cycle of our patent portfolio.

The patent position of biopharmaceutical, pharmaceutical or biotechnology companies, including ours, is generally uncertain and involves complex legal and factual considerations. The standards which the USPTO and its foreign counterparts use to grant patents are not always applied predictably or uniformly and can change. There is also no uniform, worldwide policy regarding the

subject matter and scope of claims granted or allowable in biopharmaceutical, pharmaceutical or biotechnology patents. The laws of some foreign countries do not protect proprietary information to the same extent as the laws of the United States, and many companies have encountered significant problems and costs in protecting their proprietary information in these foreign countries. Outside the United States, patent protection must be sought in individual jurisdictions, further adding to the cost and uncertainty of obtaining adequate patent protection outside of the United States. Accordingly, we cannot predict whether additional patents protecting our technology will issue in the United States or in foreign jurisdictions, or whether any patents that do issue will have claims of adequate scope to provide competitive advantage. Moreover, we cannot predict whether third parties will be able to successfully obtain claims or the breadth of such claims. The allowance of broader claims may increase the incidence and cost of patent interference proceedings, opposition proceedings, post-grant review, inter partes review, and/or reexamination proceedings, the risk of infringement litigation, and the vulnerability of the claims to challenge. On the other hand, the allowance of narrower claims does not eliminate the potential for adversarial proceedings, and may fail to provide a competitive advantage. Our issued patents may not contain claims sufficiently broad to protect us against third parties with similar technologies or products, or provide us with any competitive advantage.

We may become involved in lawsuits to protect or enforce our patents, which could be expensive, time consuming and unsuccessful.

Third parties may infringe or misappropriate our intellectual property, including our existing patents, patents that may issue to us in the future, or the patents of our licensors to which we have a license. As a result, we may be required to file infringement claims to stop third-party infringement or unauthorized use. Further, we may not be able to prevent, alone or with our licensors, misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States.

If we or one of our licensors were to initiate legal proceedings against a third party to enforce a patent covering our product candidates, the defendant could counterclaim that the patent covering our product candidates is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace, and there are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent.

In addition, within and outside of the United States, there has been a substantial amount of litigation and administrative proceedings, including interference and reexamination proceedings before the USPTO or oppositions and other comparable proceedings in various foreign jurisdictions, regarding patent and other intellectual property rights in the biopharmaceutical industry. Recently, the AIA introduced new procedures, including inter partes review and post grant review. These procedures may be used by competitors to challenge the scope and/or validity of our patents, including those that patents perceived by our competitors as blocking entry into the market for their products, and the outcome of such challenges.

Even after they have been issued, our patents and any patents which we license may be challenged, narrowed, invalidated or circumvented. If our patents are invalidated or otherwise limited or will expire prior to the commercialization of our product candidates, other companies may be better able to develop products that compete with ours, which could adversely affect our competitive business position, business prospects and financial condition.

The following are examples of litigation and other adversarial proceedings or disputes that we could become a party to involving our patents or patents licensed to us:

- we or our collaborators may initiate litigation or other proceedings against third parties to enforce our patent rights;
- third parties may initiate litigation or other proceedings seeking to invalidate patents owned by or licensed to us or to obtain a declaratory judgment that their product or technology does not infringe our patents or patents licensed to us;
- third parties may initiate opposition proceedings, post-grant review, inter partes review, or reexamination proceedings challenging the validity or scope of our patent rights, requiring us or our collaborators and/or licensors to participate in such proceedings to defend the validity and scope of our patents;
- there may be a challenge or dispute regarding inventorship or ownership of patents currently identified as being owned by or licensed to us;
- the USPTO may initiate an interference or derivation proceeding between patents or patent applications owned by or licensed to us and those of our competitors, requiring us or our collaborators and/or licensors to participate in an interference or derivation proceeding to determine the priority of invention, which could jeopardize our patent rights; or
- third parties may seek approval to market biosimilar versions of our future approved products prior to expiration of relevant patents owned by or licensed to us, requiring us to defend our patents, including by filing lawsuits alleging patent infringement.

These lawsuits and proceedings would be costly and could affect our results of operations and divert the attention of our managerial and scientific personnel. There is a risk that a court or administrative body could decide that our patents are invalid or not infringed by a third party's activities, or that the scope of certain issued claims must be further limited. An adverse outcome in a litigation or proceeding involving our own patents could limit our ability to assert our patents against these or other competitors, affect our ability to receive royalties or other licensing consideration from our licensees, and may curtail or preclude our ability to exclude third parties from making, using and selling similar or competitive products. An adverse outcome may also put our pending patent applications at risk of not issuing, or issuing with limited and potentially inadequate scope to cover our product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. Additionally, it is also possible that prior art of which we are aware, but which we do not believe affects the validity or enforceability of a claim, may, nonetheless, ultimately be found by a court of law or an administrative panel to affect the validity or enforceability of a claim, for example, if a priority claim is found to be improper. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we could lose at least part, and perhaps all, of the patent protection on our relevant product candidates. Such a loss of patent protection could have a material adverse impact on our business.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, during the course of litigation or administrative proceedings, there could be public announcements of the results of hearings, motions or other interim proceedings or developments or public access to related documents. If investors perceive these results to be negative, the market price for our common stock could be significantly harmed. Any of these occurrences could adversely affect our competitive business position, business prospects, and financial condition.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage. The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- others may be able to develop a platform that is similar to, or better than, ours in a way that is not covered by the claims of our patents;
- others may be able to make compounds that are similar to our product candidates but that are not covered by the claims of our patents;
- we might not have been the first to make the inventions covered by patents or pending patent applications;
- we might not have been the first to file patent applications for these inventions;
- any patents that we obtain may not provide us with any competitive advantages or may ultimately be found invalid or unenforceable; or
- we may not develop additional proprietary technologies that are patentable.

Our commercial success depends significantly on our ability to operate without infringing the patents and other proprietary rights of third parties.

Our success will depend in part on our ability to operate without infringing the proprietary rights of third parties. Other entities may have or obtain patents or proprietary rights that could limit our ability to make, use, sell, offer for sale or import our future approved products or impair our competitive position. In particular the patent landscape around the discovery, development, manufacture and commercial use of our pre-clinical CPM antibody programs and therapeutic antibodies is crowded.

Third parties may have or obtain valid and enforceable patents or proprietary rights that could block us from developing product candidates using our technology. Our failure to obtain a license to any technology that we require may materially harm our business, financial condition and results of operations. Moreover, our failure to maintain a license to any technology that we require may also materially harm our business, financial condition, and results of operations. Furthermore, we would be exposed to a threat of litigation.

In the biopharmaceutical industry, significant litigation and other proceedings regarding patents, patent applications, trademarks and other intellectual property rights have become commonplace. The types of situations in which we may become a party to such litigation or proceedings include:

- we or our collaborators may initiate litigation or other proceedings against third parties seeking to invalidate the patents held by those third parties or to obtain a judgment that our products or processes do not infringe those third parties' patents;
- if our competitors file patent applications that claim technology also claimed by us or our licensors, we or our licensors may be required to participate in interference, derivation or other proceedings to determine the priority of invention, which could jeopardize our patent rights and potentially provide a third party with a dominant patent position;

- if third parties initiate litigation claiming that our processes or products infringe their patent or other intellectual property rights, we and our collaborators will need to defend against such proceedings; and
- if a license to necessary technology is terminated, the licensor may initiate litigation claiming that our processes or products infringe or misappropriate their patent or other intellectual property rights and/or that we breached our obligations under the license agreement, and we and our collaborators would need to defend against such proceedings.

These lawsuits would be costly and could affect our results of operations and divert the attention of our management and scientific personnel. There is a risk that a court would decide that we or our collaborators are infringing the third party's patents and would order us or our collaborators to stop the activities covered by the patents. In that event, we or our collaborators may not have a viable alternative to the technology protected by the patent and may need to halt work on the affected product candidate or cease commercialization of an approved product. In addition, there is a risk that a court will order us or our collaborators to pay the other party damages. An adverse outcome in any litigation or other proceeding could subject us to significant liabilities to third parties and require us to cease using the technology that is at issue or to license the technology from third parties. We may not be able to obtain any required licenses on commercially acceptable terms or at all. Any of these outcomes could have a material adverse effect on our business.

The biopharmaceutical industry has produced a significant number of patents, and it may not always be clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform or predictable. If we are sued for patent infringement, we would need to demonstrate that our products or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid, and we may not be able to do this. Proving invalidity is difficult. For example, in the United States, proving invalidity requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Even if we are successful in these proceedings, we may incur substantial costs and divert management's time and attention in pursuing these proceedings, which could have a material adverse effect on us. If we are unable to avoid infringing the patent rights of others, we may be required to seek a license, defend an infringement action or challenge the validity of the patents in court. Patent litigation is costly and time consuming. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, if we do not obtain a license, develop or obtain non-infringing technology, fail to defend an infringement action successfully or have infringed patents declared invalid, we may incur substantial monetary damages, encounter significant delays in bringing our product candidates to market and be precluded from manufacturing or selling our product candidates.

The cost of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the cost of such litigation and proceedings more effectively than we can because of their substantially greater resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Patent litigation and other proceedings may also absorb significant management time.

If we fail to comply with our obligations under our intellectual property licenses with third parties, we could lose license rights that are important to our business.

We are currently party to various intellectual property license agreements. These license agreements impose, and we expect that future license agreements may impose, various diligence, milestone payment, royalty, insurance and other obligations on us. These licenses typically include an obligation to pay an upfront payment, yearly maintenance payments and royalties on sales. If we fail to comply with our obligations under the licenses, the licensors may have the right to terminate their respective license agreements, in which event we might not be able to market any product that is covered by the agreements. Termination of the license agreements or reduction or elimination of our licensed rights may result in our having to negotiate new or reinstated licenses with less favorable terms, which could adversely affect our competitive business position and harm our business.

If we are unable to protect the confidentiality of our proprietary information, 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, and other proprietary information. To maintain the confidentiality of trade secrets and proprietary information, we enter into confidentiality agreements with our employees, consultants, collaborators and others 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 and our personnel policies 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. Thus, despite such agreement, such inventions may become assigned to third parties. 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. To the extent that an individual who is not obligated to assign rights in intellectual property to us is rightfully an inventor of intellectual property, we may need to obtain an assignment or a license to that intellectual property from that individual, or a third party or from that individual's assignee. Such assignment or license may not be available on commercially reasonable terms or at all.

Adequate remedies may not exist in the event of unauthorized use or disclosure of our proprietary information. The disclosure of our trade secrets would impair our competitive position and may materially harm our business, financial condition and results of operations. Costly and time consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to maintain trade secret protection could adversely affect our competitive business position. In addition, others may independently discover or develop our trade secrets and proprietary information, and the existence of our own trade secrets affords no protection against such independent discovery.

As is common in the biopharmaceutical industry, we employ individuals who were previously or concurrently employed at research institutions and/or other biopharmaceutical, biotechnology or pharmaceutical companies, including our competitors or potential competitors. We may be subject to claims that these employees, or we, have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers, or that patents and applications we have filed to protect inventions of these employees, even those related to one or more of our product candidates, are rightfully owned by their former or concurrent employer. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

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

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to the USPTO and various foreign patent offices at various points over the lifetime of our patents and/or applications. We have systems in place to remind us to pay these fees, and we rely on our outside counsel or service providers to pay these fees when due. Additionally, the USPTO and various foreign patent offices require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with rules applicable to the particular jurisdiction. However, 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. If such an event were to occur, it could have a material adverse effect on our business. In addition, we are responsible for the payment of patent fees for patent rights that we have licensed from other parties.

If any licensor of these patents does not itself elect to make these payments, and we fail to do so, we may be liable to the licensor for any costs and consequences of any resulting loss of patent rights.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.

Obtaining and enforcing patents in the biopharmaceutical industry involves both technological and legal complexity, and therefore, is costly, time-consuming and inherently uncertain. In addition, the United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Further, recent U.S. Supreme Court rulings have either narrowed the scope of patent protection available in certain circumstances or weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained.

For our U.S. patent applications containing a claim not entitled to priority before March 16, 2013, there is a greater level of uncertainty in the patent law. In September 2011, the Leahy-Smith America Invents Act, or the American Invents Act, or AIA, was signed into law. The AIA includes a number of significant changes to U.S. patent law, including provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. The USPTO is currently developing regulations and procedures to govern administration of the AIA, and many of the substantive changes to patent law associated with the AIA. It is not clear what other, if any, impact the AIA will have on the operation of our business. Moreover, the AIA 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, all of which could have a material adverse effect on our business and financial condition.

An important change introduced by the AIA is that, as of March 16, 2013, the United States transitioned to a "first-to- file" system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention. A third party that files a patent application in the USPTO after that date but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by the third party. This will

require us to be cognizant going forward of the time from invention to filing of a patent application. Furthermore, our ability to obtain and maintain valid and enforceable patents depends on whether the differences between our technology and the prior art allow our technology to be patentable over the prior art. Since patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to either (i) file any patent application related to our product candidates or (ii) invent any of the inventions claimed in our patents or patent applications.

Among some of the other changes introduced by the AIA are changes that limit where a patentee may file a patent infringement suit and providing opportunities for third parties to challenge any issued patent in the USPTO. This applies to all of our U.S. patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal court necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We may have received confidential and proprietary information from third parties. In addition, we employ individuals who were previously employed at other biopharmaceutical, biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise improperly used or disclosed confidential information of these third parties or our employees' former employers. Further, we may be subject to ownership disputes in the future arising, for example, from conflicting obligations of consultants or others who are involved in developing our product candidates. We may also be subject to claims that former employees, consultants, independent contractors, collaborators or other third parties have an ownership interest in our patents or other intellectual property. Litigation may be necessary to defend against these and other claims challenging our right to and use of confidential and proprietary information. If we fail in defending any such claims, in addition to paying monetary damages, we may lose our rights therein. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against these claims, litigation could result in substantial cost and be a distraction to our management and employees.

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

Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive. The requirements for patentability may differ in certain countries, particularly developing countries. For example, China has a heightened requirement for patentability, and specifically requires a detailed description of medical uses of a claimed drug. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection, but enforcement on infringing activities is inadequate. These products may compete with our product candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in 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 patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. In addition, certain countries in Europe and certain developing countries, including India and China, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we may have limited remedies if our patents are infringed or if we are compelled to grant a license to our patents to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license. Finally, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws.

Risks Related to Litigation

We may face litigation or regulatory investigations that could result in substantial damages and may divert management's time and attention from our business.

From time to time we may become a party to legal proceedings, claims and investigations that arise in the ordinary course of business such as, but not limited to, patent, employment, commercial and environmental matters. While we currently believe that the ultimate outcome of any of these proceedings will not have a material adverse effect on our financial position, results of operations, or liquidity, litigation is subject to inherent uncertainty. Furthermore, litigation consumes both cash and management attention.

We maintain property and general commercial insurance coverage as well as errors and omissions and directors and officers insurance policies. This insurance coverage may not be sufficient to cover us for future claims.

If we or our employees fail to comply with laws or regulations, it could adversely impact our reputation, business and stock price.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include intentional and/or negligent failures to comply with FDA regulations, to provide accurate information to the FDA, to comply with manufacturing standards we have established, to comply with federal and state health care fraud and abuse, transparency, and/or data privacy and security laws and regulations, to report financial information or data accurately or to disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices; to promote transparency; and to protect the privacy and security of patient data. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements.

While we have adopted a corporate compliance program, we may not be able to protect against all potential issues of noncompliance. Efforts to ensure that our business complies with all applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations, or case law involving applicable laws and regulations.

Employee misconduct could also involve the improper use or disclosure of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. In addition, during the course of our operations, our directors, executives and employees may have access to material, nonpublic information regarding our business, our results of operations or potential transactions we are considering. We may not be able to prevent a director, executive or employee from trading in our common stock on the basis of, or while having access to, material, nonpublic information. If a director, executive or employee was to be investigated, or an action was to be brought against a director, executive or employee for insider trading, it could have a negative impact on our reputation and our stock price. Such a claim, with or without merit, could also result in substantial expenditures of time and money, and divert attention of our management team.

Product liability and other claims against us may reduce demand for our products and/or result in substantial damages.

We face an inherent risk of product liability exposure related to testing our product candidates in human clinical trials and manufacturing antibodies in our Berkeley, CA facility and may face even greater risks if we ever sell products commercially. An individual may bring a product liability claim against us if one of our product candidates causes, or merely appears to have caused, an injury. Product liability claims may result in:

- regulatory investigations;
- injury to our reputation;
- withdrawal of clinical trial volunteers;
- costs of related litigation; and
- substantial monetary awards to plaintiffs; and
- decreased demand for any future products.

We manufacture the Prophage vaccines from a patient's cancer cells, and medical professionals must inject the vaccines into the same patient from which they were manufactured. A patient may sue us if a hospital, a shipping company, or we fail to receive the removed cancer tissue or deliver that patient's vaccine. We anticipate that the logistics of shipping will become more complex if the number of patients we treat increases and that shipments of tumor and/or vaccines may be lost, delayed, or damaged. Additionally, complexities unique to the logistics of commercial products may delay shipments and limit our ability to move commercial product in an efficient manner without incident. We do not have any other insurance that covers loss of or damage to the Prophage vaccines or

tumor material, and we do not know whether such insurance will be available to us at a reasonable price or at all. We have limited product liability coverage for use of our product candidates. Our product liability policy provides $10.0 million aggregate coverage and $10.0 million per occurrence coverage. This limited insurance coverage may be insufficient to fully cover us for future claims.

We are also subject to laws generally applicable to businesses, including but not limited to, federal, state and local wage and hour, employee classification, mandatory healthcare benefits, unlawful workplace discrimination and whistle-blowing. Any actual or alleged failure to comply with any regulation applicable to our business or any whistle-blowing claim, even if without merit, could result in costly litigation, regulatory action or otherwise harm our business, results of operations, financial condition, cash flow and future prospects.

If we do not comply with environmental laws and regulations, we may incur significant costs and potential disruption to our business.

We use or may use hazardous, infectious, and radioactive materials, and recombinant DNA in our operations, which have the potential of being harmful to human health and safety or the environment. We store these hazardous (flammable, corrosive, toxic), infectious, and radioactive materials, and various wastes resulting from their use, at our facilities pending use and ultimate disposal. We are subject to a variety of federal, state, and local laws and regulations governing use, generation, storage, handling, and disposal of these materials. We may incur significant costs complying with both current and future environmental health and safety laws and regulations. In particular, we are subject to regulation by the Occupational Safety and Health Administration, the Environmental Protection Agency, the Drug Enforcement Agency, the Department of Transportation, the Centers for Disease Control and Prevention, the National Institutes of Health, the International Air Transportation Association, and various state and local agencies. At any time, one or more of the aforementioned agencies could adopt regulations that may affect our operations. We are also subject to regulation under the Toxic Substances Control Act and the Resource Conservation Development programs.

Although we believe that our current procedures and programs for handling, storage, and disposal of these materials comply with federal, state, and local laws and regulations, we cannot eliminate the risk of accidents involving contamination from these materials. Although we have a workers' compensation liability policy, we could be held liable for resulting damages in the event of an accident or accidental release, and such damages could be substantially in excess of any available insurance coverage and could substantially disrupt our business.

Risks Related to our Common Stock

Provisions in our organizational documents could prevent or frustrate attempts by stockholders to replace our current management.

Our certificate of incorporation and bylaws contain provisions that could make it more difficult for a third party to acquire us without the consent of our Board of Directors. Our certificate of incorporation provides for a staggered board and removal of directors only for cause. Accordingly, stockholders may elect only a minority of our Board at any annual meeting, which may have the effect of delaying or preventing changes in management. In addition, under our certificate of incorporation, our Board of Directors may issue additional shares of preferred stock and determine the terms of those shares of stock without any further action by our stockholders. Our issuance of additional preferred stock could make it more difficult for a third party to acquire a majority of our outstanding voting stock and thereby effect a change in the composition of our Board of Directors. Our certificate of incorporation also provides that our stockholders may not take action by written consent. Our bylaws require advance notice of stockholder proposals and director nominations and permit only our president or a majority of the Board of Directors to call a special stockholder meeting. These provisions may have the effect of preventing or hindering attempts by our stockholders to replace our current management. In addition, Delaware law prohibits a corporation from engaging in a business combination with any holder of 15% or more of its capital stock until the holder has held the stock for three years unless, among other possibilities, the board of directors approves the transaction. Our Board of Directors may use this provision to prevent changes in our management. Also, under applicable Delaware law, our Board of Directors may adopt additional anti-takeover measures in the future.

The first right to negotiate provision contained in our agreement with GSK could hinder or delay a change of control of our company or the sale of certain of our assets.

We have entered into a First Right to Negotiate and Amendment Agreement with GSK that affords GSK, one of our licensees, a first right to negotiate with us in the event we determine to initiate a process to effect a change of control of our company with, or to sell certain of our assets to, an unaffiliated third party or in the event that a third party commences an unsolicited tender offer seeking a change of control of our company. In such event, we must provide GSK a period of time to determine whether it wishes to negotiate the terms of such a transaction with us. If GSK affirmatively so elects, we are required to negotiate with GSK in good faith towards effecting a transaction of that nature for a specified period. During the negotiation period, we are obligated not to enter into a definitive agreement with a third party that would preclude us from negotiating and/or executing a definitive agreement with GSK. If

GSK determines not to negotiate with us or we are unable to come to an agreement with GSK during this period, we may enter into the specified change of control or sale transaction within the following 12 months, provided that such a transaction is not on terms in the aggregate that are materially less favorable to us and our stockholders (as determined by our Board of Directors, in its reasonable discretion) than terms last offered to us by GSK in a binding written proposal during the negotiation period. The first right to negotiate terminates on March 2, 2017. Although GSK's first right to negotiate does not compel us to enter into a transaction with GSK nor prevent us from negotiating with or entering into a transaction with a third party, the first right to negotiate could inhibit a third party from engaging in discussions with us concerning such a transaction or delay our ability to effect such a transaction with a third party.

Our stock has historically had low trading volume, and its public trading price has been volatile.

For the period from our initial public offering on February 4, 2000 to December 31, 2015, and for the year ended December 31, 2015, the closing price of our common stock has fluctuated between $1.80 (or $0.30 pre-reverse stock split) and $315.78 (or $52.63 pre-reverse stock split) per share and $3.88 and $9.78 per share, respectively. The average daily trading volume for the year ended December 31, 2015 was approximately 1,652,962 shares, while the average daily trading volume for the year ended December 31, 2014 was approximately 728,000. The market may experience significant price and volume fluctuations that are often unrelated to the operating performance of individual companies. In addition to general market volatility, many factors may have a significant adverse effect on the market price of our stock, including:

- continuing operating losses, which we expect over the next several years as we continue our development activities;
- announcements of decisions made by public officials or delays in any such announcements;
- results of our pre-clinical studies and clinical trials or delays in anticipated timing;
- delays in our regulatory filings or those of our partners;
- announcements of new collaboration agreements with strategic partners or developments by our existing collaboration partners;
- announcements of acquisitions;
- announcements of technological innovations, new commercial products, failures of products, or progress toward commercialization by our competitors or peers;
- failure to realize the anticipated benefits of acquisitions;
- developments concerning proprietary rights, including patent and litigation matters;
- publicity regarding actual or potential results with respect to product candidates under development;
- quarterly fluctuations in our financial results, including our average monthly cash used in operating activities;
- variations in the level of expenses related to any of our product candidates or clinical development programs;
- additions or departures of key management or scientific personnel;
- conditions or trends in the biopharmaceutical, biotechnology and pharmaceutical industries generally;
- other events or factors, including those resulting from war, incidents of terrorism, natural disasters or responses to these events;
- changes in accounting principles;
- general economic and market conditions and other factors that may be unrelated to our operating performance or the operating performance of our competitors, including changes in market valuations of similar companies; and
- sales of common stock by us or our stockholders in the future, as well as the overall trading volume of our common stock.

In the past, securities class action litigation has often been brought against a company following a significant decline in the market price of its securities. This risk is especially relevant for us because many biopharmaceutical, biotechnology and pharmaceutical companies experience significant stock price volatility.

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. 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 would likely decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price and trading volume to decline.

The sale of a significant number of shares could cause the market price of our stock to decline.

The sale by us or the resale by stockholders of a significant number of shares of our common stock could cause the market price of our common stock to decline. As of December 31, 2015, we had 86,390,697 shares of common stock outstanding. All of these shares are eligible for sale on NASDAQ, although certain of the shares are subject to sales volume and other limitations. We have filed registration statements to permit the sale of approximately 16,200,000 shares of common stock under our equity incentive plans, to permit the sale of 1,500,000 shares of common stock under our 2015 Inducement Equity Plan, and to permit the sale of 150,000 shares of common stock under an inducement grant. We have also filed registration statements to permit the sale of approximately 167,000 shares of common stock under our employee stock purchase plan, to permit the sale of 325,000 shares of common stock under our Directors' Deferred Compensation Plan, to permit the sale of approximately 19,943,489 shares of common stock pursuant to various private placement agreements (including 1,400,000 shares of common stock issuable upon the exercise of certain warrants that we issued in February 2015) and to permit the sale of approximately 10,000,000 shares of our common stock pursuant to our At Market Issuance Sales Agreement. As of December 31, 2015, an aggregate of approximately 25 million of these shares remained available for sale. In connection with our acquisition of 4-AB in February 2014, we are obligated to make contingent milestone payments to the former shareholders of 4-AB, payable in cash or shares of our common stock at our option, as follows (i) $10.0 million upon our market capitalization exceeding $750.0 million for 30 consecutive trading days prior to the earliest of (a) the tenth anniversary of the Closing Date (b) the sale of 4-AB or (c) the sale of Agenus and (ii) $10.0 million upon our market capitalization exceeding $1.0 billion for 30 consecutive trading days prior to the earliest of (a) the tenth anniversary of the Closing Date, (b) the sale of 4-AB or (c) the sale of Agenus. In addition, as additional consideration for assets that we purchased from Celexion, we agreed to pay to Celexion $4.0 million on each of the 12-month and 24-month anniversaries of the Closing Date payable at our discretion in cash, shares of our common stock, or any combination thereof. In connection with our acquisition of PhosImmune in December 2015, we issued 1,631,521 shares of our common stock to the shareholders of PhosImmune and other third parties having a fair market value of approximately $7.4 million at closing. In addition, we may be obligated in the future to pay certain contingent milestones payments, payable at our election in cash or shares of our common stock of up to $35.0 million in the aggregate. We are also obligated to file registration statements covering any additional shares that may be issued to Celexion, XOMA or the former shareholders of PhosImmune in the future pursuant to the terms of our agreements with Celexion, XOMA and PhosImmune, respectively. The market price of our common stock may decrease based on the expectation of such sales. The market price of our common stock may decrease based on the expectation of such sales.

As of December 31, 2015, warrants to purchase approximately 4,351,450 shares of our common stock with a weighted average exercise price per share of $9.01 were outstanding.

As of December 31, 2015, options to purchase 8,345,835 shares of our common stock with a weighted average exercise price per share of $4.77 were outstanding. These options are subject to vesting that occurs over a period of up to four years following the date of grant. As of December 31, 2015 we had 7,649,324 vested options and 1,730,604 nonvested shares outstanding.

As of December 31, 2015, our outstanding shares of Series A-1 Convertible Preferred Stock were convertible into 333,333 shares of our common stock.

We may issue additional common stock, preferred stock, restricted stock units, or securities convertible into or exchangeable for our common stock. Furthermore, substantially all shares of common stock for which our outstanding stock options or warrants are exercisable are, once they have been purchased, eligible for immediate sale in the public market. The issuance of additional common stock, preferred stock, restricted stock units, or securities convertible into or exchangeable for our common stock or the exercise of stock options or warrants would dilute existing investors and could adversely affect the price of our securities. In addition, such securities may have rights senior to the rights of securities held by existing investors.

We do not intend to pay dividends on our common stock and, consequently your ability to obtain a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividend on our common stock and do not intend to do so in the foreseeable future. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business. Therefore, the success of an investment in shares of our common stock will depend upon any future appreciation in their value. There is no guarantee that shares of our common stock will appreciate in value or maintain their current value.

Failure to maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act of 2002 and to comply with changing regulation of corporate governance and public disclosure could have a material adverse effect on our operating results and the price of our common stock.

The Sarbanes-Oxley Act of 2002 and rules adopted by the SEC and NASDAQ have resulted in significant costs to us. In particular, our efforts to comply with Section 404 of the Sarbanes-Oxley Act of 2002 and related regulations regarding the required

assessment of our internal control over financial reporting, and our independent registered public accounting firm's audit of internal control over financial reporting, have required commitments of significant management time. We expect these commitments to continue.

Our internal control over financial reporting (as defined in Rules 13a-15 of the Exchange Act) is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our consolidated financial statements for external purposes in accordance with U.S. GAAP. Because of its inherent limitations, internal control over financial reporting may not prevent or detect all deficiencies or weaknesses in our financial reporting. While our management has concluded that there were no material weaknesses in our internal control over financial reporting as of December 31, 2015, our procedures are subject to the risk that our controls may become inadequate because of changes in conditions or as a result of a deterioration in compliance with such procedures. No assurance is given that our procedures and processes for detecting weaknesses in our internal control over financial reporting will be effective.

Changing laws, regulations and standards relating to corporate governance and public disclosure, are creating uncertainty for companies. Laws, regulations and standards are subject to varying interpretations in some cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided, which could result in continuing uncertainty regarding compliance matters and higher costs caused by ongoing revisions to disclosure and governance practices. If we fail to comply with these laws, regulations and standards, our reputation may be harmed and we might be subject to sanctions or investigation by regulatory authorities, such as the SEC. Any such action could adversely affect our operating results and the market price of our common stock.

Item 1B. ***Unresolved Staff Comments***

None.

Item 2. ***Properties***

We lease our manufacturing, research and development, and corporate offices in Lexington, Massachusetts occupying approximately 82,000 square feet. This lease agreement terminates in August 2023 with an option to renew for one additional ten-year period. We have sublet portions of this facility under two subleases that expire in July 2016 and December 2017, respectively.

During December 2012 we entered into a commercial lease for approximately 5,600 square feet of office space in New York, New York for use as corporate offices that terminates in May 2020.

We also have research and office facilities in Jena, Germany and Basel, Switzerland whose lease expire in June 2018 and June 2016, respectively.

In December 2015, we entered into a commercial lease in Berkeley, California for approximately 10,900 square feet to be used for corporate offices which expires in December 2020. We additionally executed two commercial sublease agreements in Berkeley, California for approximately 4,300 square feet and 8,200 square feet to be used for manufacturing, warehouse and corporate offices; both subleases expire in December 2016. We additionally entered into a sublease in Berkeley, California for parking that expires in May 2020.

In December 2015, we also entered in a commercial lease agreement for approximately 15,300 square feet for laboratory and office space in Cambridge, United Kingdom for research and development that expires in December 2025.

In December 2015, we acquired and now own a manufacturing facility with approximately 24,000 square feet in Berkeley, California to be used in the production and manufacture of product candidates.

We believe substantially all of our property and equipment is in good condition and that we have sufficient capacity to meet our current operational needs. We do not anticipate experiencing significant difficulty in retaining occupancy of any of our manufacturing or office facilities and will do so through lease renewals prior to expiration or through replacing them with equivalent facilities.

Item 3. ***Legal Proceedings***

We are not party to any material legal proceedings.

Item 4. ***Mine Safety Disclosures***

Not applicable.

Executive Officers of the Registrant

Set forth below is certain information regarding our current executive officers, including their age, as of March 1, 2016:

Name	Age	Title
Garo H. Armen, PhD	63	Chairman of the Board and Chief Executive Officer
C. Evan Ballantyne	56	Chief Financial Officer
Christine M. Klaskin	50	Vice President, Finance
Ozer Baysal	60	Chief Business Officer
Robert Stein, MD PhD	65	President, Research and Development
Karen H. Valentine	44	Chief Legal Officer and General Counsel

Garo H. Armen, PhD—Garo Armen has been Chairman and CEO since the Company's founding in 1994. From mid-2002 through 2004, he was Chairman of the Board of Directors for the biopharmaceutical company Elan Corporation, plc, which he helped restructure. Dr. Armen is also the founder and Chairman of the Children of Armenia Fund, a philanthropic organization established in 2000 that is dedicated to the positive development of the children and youth of rural Armenia. He holds a PhD degree in physical organic chemistry from the City University of New York.

C. Evan Ballantyne—C. Evan Ballantyne joined the Company as Chief Financial Officer in June 2015. Prior to Agenus, Mr. Ballantyne served as Chief Financial Officer for Synthetic Biologics (NYSE: SYN) from February 2012 until May 2015. From 2006 until its acquisition in April 2011, Mr. Ballantyne served as Executive Vice President and Chief Financial Officer of Clinical Data (NASDAQ: CLDA), Inc., a publicly-traded biopharmaceutical company which was acquired by Forest Laboratories, Inc. for $1.3 billion. While at Clinical Data, he was instrumental in leading corporate financings totaling approximately $220.0 million as well as a number of acquisition and divestitures totaling $116.0 million. Mr. Ballantyne has also served as Chief Financial Officer of a number of private medical technology companies, including Avedro and ZymeQuest. Earlier in his career, he served as Vice President and Chief Operating Officer for ACNielsen Europe Middle East & Africa (NYSE: ART) and also held the position of Chief Financial Officer. There, Mr. Ballantyne was responsible for all aspects of operations, strategic planning and finance in more than 45 countries for a corporation with over 9,700 employees. Mr. Ballantyne also served as Director of Finance for IMS Health (NYSE: IMS). He began his career at the Dun & Bradstreet Corporation where he held several senior financial positions. Mr. Ballantyne earned a BA from the University of Western Ontario, and took a post-graduate degree in Business Administration with Honors from the University of Windsor.

Christine M. Klaskin—Christine M. Klaskin has been Vice President, Finance since October 2006. Since joining Agenus Inc. in 1996 as finance manager, Ms. Klaskin has held various positions within the finance department and has been involved in all equity and debt offerings of the Company including its IPO. Ms. Klaskin is currently a member of the board of directors of American DG Energy Inc. Prior to joining Agenus, Ms. Klaskin was employed by Arthur Andersen as an audit manager. Ms. Klaskin received her Bachelor of Accountancy from The George Washington University.

Ozer Baysal —Ozer Baysal has been Chief Business Officer since January 2013. His principal role is to lead Agenus' efforts in establishing commercial capability and accelerating Agenus' transition to becoming a fully integrated biopharmaceutical company. Prior to joining Agenus Mr. Baysal spent more than 30 years with Pfizer in a broad number of functional and geographic areas, most recently serving as President of Europe, Emerging Markets Region. While at Pfizer, he held key leadership positions in Marketing, Sales, and Manufacturing, and was actively involved with numerous licensing and M&A activities. Mr. Baysal holds a bachelor's degree from Bosphorus University in Industrial Engineering and has completed the Programs for Leadership and Management Development at Harvard Business School.

Robert Stein, MD, PhD—Bob Stein has been President, Research and Development since September 2015. Dr. Stein joined the Company as Chief Scientific Officer in February 2014. Dr. Stein leads our Research, Preclinical Development and Translational Medicine functions and leads our global research and development efforts. Dr. Stein brings over 30 years of experience and accomplishments in the pharmaceutical and biotech industry to the Agenus leadership team. Over the course of his career Dr. Stein has played a pivotal role in bringing eight drugs to the market including Sustiva®, Fablyn®, Viviant®, PanRetin®, TargRetin®, Promacta®, & Eliquis®. Prior to joining Agenus he held a number of senior management positions including Chief Scientific Officer & Senior Vice President of Research for Ligand Pharmaceuticals, Executive Vice President of Research & Preclinical Development for Dupont Merck, President and Chief Scientific Officer for Incyte Pharmaceuticals, President of Roche Palo Alto and CEO of KineMed. Dr. Stein spent the early part of his career at Merck, Sharp and Dohme Research Laboratories. He holds an MD and a PhD in

Physiology & Pharmacology from Duke University. Dr. Stein filed a personal voluntary bankruptcy petition under Chapter 7 in August of 2012 and the bankruptcy was discharged in May 2013.

Karen H. Valentine—Karen Higgins Valentine has been Chief Legal Officer and General Counsel since September 2015. From January 2008 to September 2015, Ms. Valentine was Vice President and General Counsel and also has served as Secretary since 2007 and Chief Compliance Officer of the Company since 2008. Prior to joining Agenus Inc. in 2004, Ms. Valentine was an associate in the biotechnology practice of Palmer & Dodge LLP (now Locke Lorde). Ms. Valentine is currently a member of the board of directors of the Northeast Chapter of the Association of Corporate Counsel. Ms. Valentine graduated cum laude with a bachelor's degree in neuroscience from Colgate University, and received her law degree, magna cum laude, from Boston University School of Law.

PART II

Item 5. ***Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

Our common stock is currently listed on The Nasdaq Capital Market under the symbol "AGEN."

The following table sets forth, for the periods indicated, the high and low sale prices per share of our common stock.

	High	Low
2014		
First Quarter	$ 5.27	$ 2.65
Second Quarter	3.95	2.27
Third Quarter	4.05	2.75
Fourth Quarter	4.28	2.56
2015		
First Quarter	6.49	3.80
Second Quarter	10.16	4.90
Third Quarter	9.64	4.33
Fourth Quarter	5.36	3.75

As of January 7, 2016, there were approximately 826 holders of record and approximately 26,174 beneficial holders of our common stock.

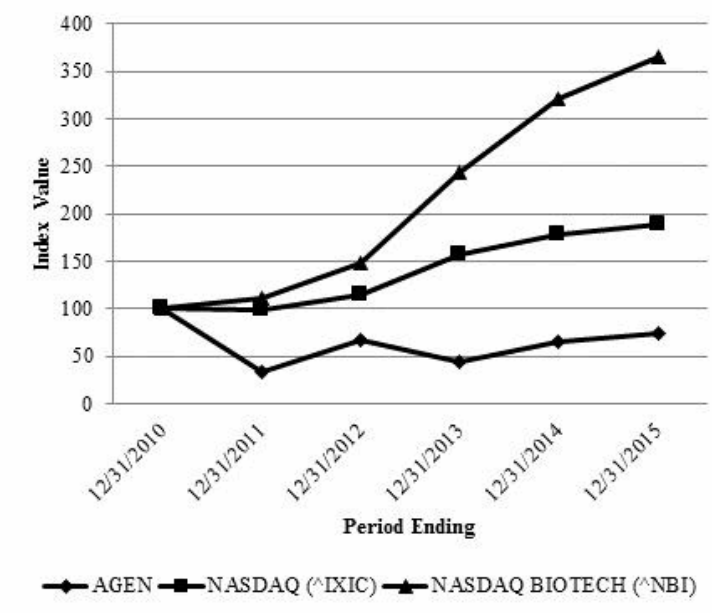
We have never paid cash dividends on our common stock, and we do not anticipate paying any cash dividends in the foreseeable future. We currently intend to retain future earnings, if any, for the future operation and expansion of our business. Any future payment of dividends on our common stock will be at the discretion of our Board of Directors and will depend upon, among other things, our earnings, financial condition, capital requirements, level of indebtedness, and other factors that our Board of Directors deem relevant.

Stock Performance

The following graph shows the cumulative total stockholder return on our common stock over the period spanning December 31, 2010 to December 31, 2015, as compared with that of the Nasdaq Stock Market (U.S. Companies) Index and the Nasdaq Biotechnology Index, based on an initial investment of $100 in each on December 31, 2010. Total stockholder return is measured by dividing share price change plus dividends, if any, for each period by the share price at the beginning of the respective period, and assumes reinvestment of dividends.

This stock performance graph shall not be deemed "filed" with the SEC or subject to Section 18 of the Exchange Act, nor shall it be deemed incorporated by reference in any of our filings under the Securities Act of 1933, as amended (the "Securities Act").

COMPARISON OF CUMULATIVE TOTAL RETURN OF AGENUS INC., NASDAQ STOCK MARKET (U.S. COMPANIES) INDEX AND NASDAQ BIOTECHNOLOGY INDEX



	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015
Agenus Inc.	100.00	33.00	67.66	43.56	65.51	74.92
NASDAQ Stock Market (U.S. Companies) Index	100.00	98.20	113.82	157.44	178.53	188.75
NASDAQ Biotechnology Index	100.00	111.81	147.48	244.24	321.34	364.93

Item 6. ***Selected Financial Data***

We have derived the condensed consolidated balance sheet data set forth below as of December 31, 2015 and 2014, and the condensed consolidated statement of operations data for each of the years in the three-year period ended December 31, 2015, from our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

You should read the selected condensed consolidated financial data in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations," our consolidated financial statements, and the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Changes in cash, cash equivalents, and short-term investments, total current assets, total assets, total current liabilities, long-term debt and stockholders' equity (deficit) in the periods presented below include the effects of the receipt of net proceeds from our debt offerings, equity offerings, the exercise of stock options, and employee stock purchases that totaled approximately $202.4 million, $57.0 million, $36.6 million, $10.5 million, and $8.1 million in the years ended December 31, 2015, 2014, 2013, 2012, and 2011, respectively.

	For the Year Ended December 31,				
	2015	2014	2013	2012	2011
	(in thousands except per share data)				
Condensed Consolidated Statement of Operations Data:					
Revenue	$ 24,817	$ 6,977	$ 3,045	$ 15,961	$ 2,756
Operating expenses:					
Cost of goods sold	—	—	(536)	(672)	—
Research and development	(70,444)	(22,349)	(13,005)	(10,564)	(11,023)
General and administrative	(28,370)	(21,250)	(14,484)	(11,465)	(10,820)
Contingent purchase price consideration fair value adjustment	(6,704)	(6,699)	—	—	—
Operating loss	(80,701)	(43,321)	(24,980)	(6,740)	(19,087)
Non-operating (expense) income	(5,968)	2,096	(2,673)	110	2
Interest expense, net	(6,599)	(1,261)	(2,420)	(4,695)	(4,191)
Loss before taxes	(93,268)	(42,486)	(30,073)	(11,325)	(23,276)
Income tax benefit (1)	5,387	—	—	—	—
Net loss	(87,881)	(42,486)	(30,073)	(11,325)	(23,276)
Dividends on Series A-1 convertible preferred stock	(203)	(204)	(3,159)	(792)	(790)
Net loss attributable to common stockholders	$ (88,084)	$ (42,690)	$ (33,232)	$ (12,117)	$ (24,066)
Net loss attributable to common stockholders per common share, basic and diluted	$ (1.13)	$ (0.71)	$ (1.12)	$ (0.51)	$ (1.21)
Weighted average number of common shares outstanding, basic and diluted	78,212	59,754	29,766	23,629	19,899

	As of December 31,				
	2015	2014	2013	2012	2011
	(in thousands)				
Condensed Consolidated Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$ 171,668	$ 40,224	$ 27,352	$ 21,468	$ 10,748
Total current assets	184,095	42,670	28,175	22,615	12,004
Total assets	242,228	74,527	34,835	29,093	19,808
Total current liabilities	28,934	9,229	10,296	4,813	4,754
Long-term debt, less current portion	114,326	4,769	5,384	35,714	32,726
Stockholders' equity (deficit)	70,728	23,018	(4,481)	(17,600)	(20,831)

(1) Given our history of incurring operating losses, no income tax benefit has been recognized in our consolidated statements of operations for the years ended December 31, 2014, 2013, 2012 and 2011 because of the loss before income taxes, and the need to recognize a valuation allowance on the portion of our deferred tax assets which will not be offset by the reversal of deferred tax liabilities. For the year ended December 31, 2015, we recognized an income tax benefit as a result of the deferred tax liabilities recognized in connection with the PhosImmune and XOMA antibody manufacturing facility acquisitions.

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations***

Overview

We are an immuno-oncology company focused on the discovery and development of revolutionary new treatments that engage the body's immune system to benefit patients suffering from cancer. By combining multiple powerful platforms, we have established a highly integrated approach to target identification and validation, and for the discovery, development and manufacturing of monoclonal antibodies that modulate targets of interest. Our broad portfolio of novel checkpoint modulator and other immuno-modulatory monoclonal antibodies, vaccines and adjuvants, work in combination to provide the opportunity to create best-in-class therapeutic regimens. Our heat shock protein-based vaccine, Prophage™, has successfully completed Phase 2 studies in newly-diagnosed glioblastoma.

We are developing a comprehensive immuno-oncology portfolio driven by the following platforms and programs, which we intend to utilize individually and in combination:

- our antibody discovery platforms, including our Retrocyte Display™, SECANT® yeast display, and phage display technologies designed to produce quality human antibodies;
- our antibody candidate programs, including our checkpoint modulator, or CPM, programs;
- our vaccine programs, including Prophage™ and AutoSynVax™; and
- our saponin-based vaccine adjuvants, principally our QS-21 Stimulon® adjuvant, or QS-21 Stimulon.

We assess development, commercialization and partnering strategies for each of our product candidates periodically based on several factors, including pre-clinical and clinical trial results, competitive positioning and funding requirements and resources. We are currently collaborating with companies such as Incyte Corporation, Merck Sharpe & Dohme and Recepta Biopharma SA. Through these alliances, as well as our own internal programs, we currently have over a dozen antibody programs, including our anti-CTLA-4 (partnered with Recepta for certain South America territories) and anti-GITR (partnered with Incyte) antibody programs that each received FDA clearance to commence clinical trials in January 2016. We anticipate commencing these trials in the first half of 2016.

We are also advancing a series of HSP peptide-based vaccines to treat cancer. In July 2014, we reported positive results from a Phase 2 clinical trial with our Prophage vaccine, which showed that patients with newly-diagnosed GBM, or ndGBM, who were treated with a combination of our Prophage vaccine and standard of care showed substantial improvement both in progression-free survival and median overall survival, each as compared to historical control data. We plan to advance our Prophage vaccine into a randomized, well-controlled clinical trial for ndGBM in the second half of 2016. We also reported positive results in June 2014 from a Phase 2 clinical trial with our synthetic HerpV vaccine candidate for genital herpes. Although we determined not to move forward with this product candidate in herpes, based on our findings we launched our AutoSynVax synthetic cancer vaccine program in 2015, and we plan to initiate our first clinical trial for this program in the second half of 2016.

Our QS-21 Stimulon adjuvant is partnered with GlaxoSmithKline, or GSK, and is a key component in multiple GSK vaccine programs that target prophylactic or therapeutic impact in a variety of infectious diseases and cancer. These programs are in various stages, with the most advanced being GSK's shingles and malaria programs, which GSK announced positive Phase 3 results for in December 2014 and October 2013, respectively. In September 2015, we monetized a portion of the future royalties we are contractually entitled to receive from GSK from sales of its shingles and malaria vaccines through a Note Purchase Agreement and received net proceeds of approximately $78.2 million.

Our business activities include product research and development, intellectual property prosecution, manufacturing, regulatory and clinical affairs, corporate finance and development activities, and support of our collaborations. Our product candidates require clinical trials and approvals from regulatory agencies, as well as acceptance in the marketplace. Part of our strategy is to develop and commercialize some of our product candidates by continuing our existing arrangements with academic and corporate collaborators and licensees and by entering into new collaborations.

Our common stock is currently listed on The Nasdaq Capital Market under the symbol "AGEN."

Our research and development expenses for the years ended December 31, 2015, 2014, and 2013, were $70.4 million, $22.3 million, and $13.0 million, respectively. We have incurred significant losses since our inception. As of December 31, 2015, we had an accumulated deficit of $779.2 million.

To date, we have financed our operations primarily through the sale of equity and debt securities. We believe that, based on our current plans and activities, our working capital resources at December 31, 2015 will be sufficient to satisfy our liquidity requirements through the first half of 2017. We may attempt to raise additional funds by: (1) pursuing collaboration, out-licensing and/or partnering opportunities for our portfolio programs and product candidates with one or more third parties, (2) renegotiating third party agreements, (3) selling assets, (4) securing additional debt financing and/or (5) selling equity securities. Satisfying long-term liquidity needs may require the successful commercialization and/or substantial out-licensing or partnering arrangements for our antibody discovery platforms, CPM antibody programs, HSP-based vaccines, and vaccines containing QS-21 Stimulon under development by our licensees. Our long-term success will also be dependent on the successful identification, development and commercialization of potential other product candidates, each of which will require additional capital with no certainty of timing or probability of success. If we incur operating losses for longer than we expect and/or we are unable to raise additional capital, we may become insolvent and be unable to continue our operations.

Historical Results of Operations

Year Ended December 31, 2015 Compared to the Year Ended December 31, 2014

Revenue: We generated revenue of $24.8 million and $7.0 million during the years ended December 31, 2015 and 2014, respectively. Revenue primarily includes fees earned under our license agreements, including approximately $14.4 million for the year ended December 31, 2015, related to reimbursement of development costs under our Collaboration Agreement with Incyte. In 2014, revenues included license fees earned and grant revenue. The increase in revenue for the year ended December 31, 2015 is primarily attributable to the amortization of deferred revenue and reimbursement of development costs under our Collaboration Agreement with Incyte. During the years ended December 31, 2015 and 2014, we recorded revenue of $9.3 million and $3.5 million, respectively, from the amortization of deferred revenue.

Research and Development: Research and development expenses include the costs associated with our internal research and development activities, including compensation and benefits, occupancy costs, clinical manufacturing costs, costs of consultants, and administrative costs. Research and development expense increased 215% to $70.4 million for the year ended December 31, 2015 from $22.3 million for the year ended December 31, 2014. Increased expenses in 2015 primarily includes the $19.1 million increase in third-party services and other expenses relating largely to the advancement of our CPM antibody programs, our $13.2 million asset acquisition which was expensed as in-process research and development, a $5.6 million increase in payroll related costs due to increased headcount, and $3.6 million in one-time license technology fees.

General and Administrative: General and administrative expenses consist primarily of personnel costs, facility expenses, and professional fees. General and administrative expenses increased 34% to $28.4 million for the year ended December 31, 2015 from $21.2 million for the year ended December 31, 2014. Increased general and administrative expenses in 2015 primarily relate to a $4.1 million increase in professional fees related to our corporate activities, $1.3 million increase in payroll related expenses due to increased headcount and $1.4 million increase in share-based compensation.

Contingent purchase price consideration fair value adjustment: Contingent purchase price consideration fair value adjustment represents the change in the fair value of our purchase price consideration during the year ended December 31, 2015 which resulted in expense of $6.7 million related to the changes in our market capitalization, including the achievement of the first milestone under our 4-AB Share Exchange Agreement. The fair value of our contingent purchase price consideration is based on estimates from a Monte Carlo simulation of our market capitalization.

Non-operating (expense)income: Non-operating expense for the year ended December 31, 2015 represents the change in the fair value of our contingent royalty obligation of $6.9 million, our foreign currency exchange loss and our loss on extinguishment of our 2013 Notes offset by the $1.5 million gain on the purchase related to the antibody manufacturing facility acquisition from XOMA Corporation in December 2015 described in Note 4 to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K. Non-operating income for the year ended December 31, 2014 represents primarily the decrease in the fair value of our contingent royalty obligation due to the termination of GSK's Phase 3 MAGE-A3 trial in non-small cell lung cancer, which occurred during the first quarter of 2014.

Interest Expense, net: Interest expense, net increased to $6.6 million for the year ended December 31, 2015 from $1.3 million for the year ended December 31, 2014 due to the issuance of our 2015 Subordinated Notes in February 2015 and the issuance of the Notes under our NPA which was executed in September 2015.

Income tax benefit: For the year ended December 31, 2015, an income tax benefit arose from deferred tax liabilities recognized in connection with our PhosImmune and XOMA acquisitions during the year and relates to the resulting release of our existing valuation allowance on our deferred tax assets.

Year Ended December 31, 2014 Compared to the Year Ended December 31, 2013

Revenue: We generated revenue of $7.0 million and $3.0 million during the years ended December 31, 2014 and 2013, respectively. Revenue primarily includes license fees earned, in 2014, grant revenue, and in 2013, service revenue. The increase in revenue for the year ended December 31, 2014 is primarily attributable to (i) the amortization of deferred revenue associated with the acquisition of 4-AB and (ii) a milestone payment received. During the years ended December 31, 2014 and 2013, we recorded revenue of $3.5 million and $1.6 million, respectively, from the amortization of deferred revenue.

Research and Development: Research and development expense increased 72% to $22.3 million for the year ended December 31, 2014 from $13.0 million for the year ended December 31, 2013. Increased expenses in 2014 primarily relate to the $2.2 million increase in third-party services and other expenses relating largely to the advancement of our CPM antibody programs and a $4.0 million increase in payroll related costs due to increased headcount, in each case as a result of the acquisition of 4-AB.

General and Administrative: General and administrative expenses increased 47% to $21.2 million for the year ended December 31, 2014 from $14.5 million for the year ended December 31, 2013. Increased expenses in 2014 primarily related to $2.9 million increase in professional fees related to our corporate activities, and $1.9 million increase in payroll related expenses due to increased headcount as a result of the acquisition of 4-AB.

Contingent purchase price consideration fair value adjustment: Contingent purchase price consideration fair value adjustment represents the increase in the fair value of our contingent purchase price consideration issued in connection with our acquisition of 4-AB during the year ended December 31, 2014. The fair value of our contingent purchase price consideration is based on estimates from a Monte Carlo simulation of our market capitalization and increased primarily due to an increase in our market capitalization from the initial valuation during February 2014 to December 31, 2014.

Non-operating (expense) income: Non-operating income for the year ended December 31, 2014 represents primarily the decrease in the fair value of our contingent royalty obligation due to the termination of GSK's Phase 3 MAGE-A3 trial in non-small cell lung cancer, which occurred during the first quarter of 2014. For the year ended December 31, 2013, the non-operating expense resulted primarily from the loss on extinguishment of our convertible notes of approximately $3.3 million.

Interest Expense, net: Interest expense decreased to $1.3 million for the year ended December 31, 2014 from $2.4 million for the year ended December 31, 2013 due to the extinguishment of our 2006 Notes during 2013.

Dividends on Series A and A-1 convertible preferred stock: Dividends decreased to approximately $204,000 for the year ended December 31, 2014 from approximately $3.2 million for the year ended December 31, 2013 due to the deemed dividend of 666,666 shares of our common stock issued during the exchange of the Series A for Series A-1 convertible preferred stock during the quarter ended March 31, 2013 and the related reduced dividend obligation subsequent to that exchange.

Inflation

We believe that inflation has not had a material adverse effect on our business, results of operations, or financial condition to date.

Research and Development Programs

For the year ended December 31, 2015, our research and development programs consisted largely of our CPM antibody programs as indicated in the following table (in thousands).

Research and Development Program	Product	For the Year Ended December 31, 2015	2014	2013	Prior to 2013	Total
Heat shock proteins for cancer	Prophage Vaccines	$ 5,508	$ 6,153	$ 5,882	$ 297,646	$ 315,189
Checkpoint modulator programs*		63,290	13,422	—	—	76,712
Heat shock proteins for infectious diseases	HerpV	293	2,443	6,358	23,950	33,044
Vaccine adjuvant	QS-21 Stimulon	142	321	753	12,583	13,799
Other research and development programs		1,211	10	12	33,544	34,777
Total research and development expenses		$ 70,444	$ 22,349	$ 13,005	$ 367,723	473,521

* Prior to 2014, costs were incurred by 4-AB, which we acquired in February 2014.

Research and development program costs include compensation and other direct costs plus an allocation of indirect costs, based on certain assumptions and our review of the status of each program. Our product candidates are in various stages of development and significant additional expenditures will be required if we start new clinical trials, encounter delays in our programs, apply for regulatory approvals, continue development of our technologies, expand our operations, and/or bring our product candidates to market. The total cost of any particular clinical trial is dependent on a number of factors such as trial design, length of the trial, number of clinical sites, number of patients, and trial sponsorship. The process of obtaining and maintaining regulatory approvals for new therapeutic products is lengthy, expensive, and uncertain. Because our CPM antibody programs are pre-clinical and early stage, and because further development of HSP-based vaccines is dependent clinical trial results, among other factors, we are unable to reliably estimate the cost of completing our research and development programs or the timing for bringing such programs to various markets or substantial partnering or out-licensing arrangements, and, therefore, when, if ever, material cash inflows are likely to commence. Active programs involving QS-21 Stimulon depend on our collaboration partners or licensees successfully completing clinical trials, successfully manufacturing QS-21 Stimulon to meet demand, obtaining regulatory approvals and successfully commercializing product candidates containing QS-21 Stimulon.

Product Development Portfolio

Antibody Discovery Platforms and CPM Programs

In February 2014, we acquired our Retrocyte Display platform when we acquired 4-Antibody AG ("4-AB"), a private European-based biopharmaceutical company. Retrocyte Display (Retroviral B Lymphocyte Display) is a proprietary antibody discovery platform designed for the rapid discovery and optimization of fully-human and humanized monoclonal antibodies against a wide array of molecular targets. Our Retrocyte Display platform uses a high-throughput approach incorporating human antibody libraries expressed in mammalian B-lymphocytes and is designed to screen and generate therapeutic antibody drug candidates. We complimented this platform in April 2015 with the acquisition of our SECANT yeast display antibody discovery platform from Celexion, LLC, and in September 2015 with the exclusive license to a phage display library. The addition of the phage display library and SECANT yeast display platform in combination with our Retrocyte Display platform gives us broad, integrated and highly productive antibody discovery platforms. Each of these complementary platforms is designed to yield diverse antibody candidates, and together they increase the variety of addressable targets and diversity of antibody candidates. These approaches are intended to combine the speed, diversity, and selectivity of our discovery platforms to yield high affinity antibodies and bolster our antibody discovery capabilities internally and for our partners. We now have the potential to integrate three high quality complementary antibody display technologies with innovative computational, structured-based design approaches to discover and optimize best-in-class monoclonal antibodies as future medicines.

We and our partners currently have pre-clinical and clinical programs exploring fully human and humanized monoclonal antibodies against several important checkpoint targets including: GITR, OX40, CTLA-4, PD-1, TIM-3, LAG-3, CEACAM1 and other undisclosed targets. In 2015, we filed INDs for antibodies targeting CTLA-4 and GITR (filed with Incyte), and in January 2016 we announced that the U.S. Food & Drug Administration (FDA) gave clearance to begin clinical trials with these two CPM candidates. Clinical trials with these CPMs are planned to initiate in the first half of 2016. In addition, we have product candidates targeting OX40 and PD-1 advancing into IND-enabling studies, and we expect to initiate clinical trials for one or more of these compounds during the second half of 2016. For additional information regarding our antibody discovery platforms and checkpoint antibody program, please read Part I-Item 1. "Business" of this Annual Report on Form 10-K.

Prophage Vaccine Candidates

To date, more than 1,000 cancer patients have been treated with Prophage vaccines, covering a broad range of cancer types in many clinical trials. The results of these trials have been published and/or presented at major conferences. These results indicate observable clinical and/or immunological activity across many types of cancer.

Because Prophage vaccine are novel therapeutic vaccines that are patient-specific, meaning derived from the patient's own tumor, they are experiencing a long development process and high development costs, either of which could delay or prevent our commercialization efforts.

In addition to the Phase 2 trial in patients with newly diagnosed GBM, the Alliance for Clinical Trials in Oncology, a cooperative group of the National Cancer Institute, or NCI, is supporting a randomized Phase 2 clinical trial of the Prophage vaccine in combination with bevacizumab in 222 patients with surgically resectable, recurrent GBM. This trial is the largest vaccine trial ever funded by the NCI in brain tumors and the largest vaccine study ever conducted in combination with bevacizumab. The study is designed to compare efficacy of the Prophage vaccine administered with bevacizumab either concomitantly or at progression, as compared to treatment with bevacizumab alone. The primary endpoint of this study is overall survival. This study design is supported in part by previous research indicating a potential synergistic effect between the mechanisms of action behind both the Prophage vaccine and bevacizumab. While the NCI Alliance has confirmed a commitment to completion of the trial, to date, it has been slow to recruit patients. For additional information regarding regulatory risks and uncertainties, please read the risks identified under Part I-Item 1A. "Risk Factors" of this Annual Report on Form 10-K.

AutoSynVax (ASV)Vaccine Program

In June 2014 we reported positive results from a Phase 2 clinical trial with our synthetic HerpV vaccine candidate for genital herpes. This candidate was the first potential recombinant, off-the-shelf application of our HSP technology. The study demonstrated that the HSP70-peptide-QS21 vaccine produced significant CD8 and CD4 positive T-cell responses to antigenic peptides, and that the side effects were mild to moderate and tolerable. We decided not to advance with this technology in herpes, and based on our findings we launched our AutoSynVax synthetic cancer vaccine program in 2015. We plan to initiate clinical trials for this program in the second half of 2016.

The objective of our AutoSynVax, or ASV, program is to develop a fully synthetic, yet individual patient specific tumor vaccine targeting the neo-epitope landscape of each patient's cancer. With a small amount of a patient's tumor as a sample, our ASV program is designed to utilize highly complex bioinformatics and next generation sequencing technologies to identify mutations in a tumor's DNA and RNA. Once these mutations have been identified, we will manufacture synthetic peptides, load these peptides on to our recombinant HSP70 and deliver a fully synthetic polyvalent vaccine to the patient. We believe that the HSP70 platform will shuttle the mutated peptides to sites where they are recognized by the immune system and safely elicit a cytotoxic and helper T cell response in patients with cancer. We expect that once identified, these tumor cells will be killed and cleared by the immune system. For additional information regarding HerpV and AutoSynVax, please read Part I-Item 1. "Business" of this Annual Report on Form 10-K.

PhosphoSynVax (PSV) Vaccine Candidate

PSV is a vaccine candidate designed to induce immunity against a novel class of tumor specific neo-epitopes: those arising from dysregulated phosphorylation of various proteins in malignant cells, rather than from mutations producing abnormal protein sequences. In cancer cells, protein sequences that can become phosphorylated (a phosphate group is added to particular amino acid residues) that are not normally phosphorylated, as a consequence of dysregulated biochemical processes. Some of these mis-phosphorylated peptides can be processed by the cellular machinery that leads to antigen presentation of the surface of cells, and there they can potentially be recognized by specific cytotoxic T cells. PhosImmune described many hundreds of such phosphoprotein neo-epitopes characterizing different forms of cancer, such as lung cancer, specific leukemias, ovarian cancer, colon cancer and others. When this happens, it can lead to the destruction of the cancer cells. PSV is a group of potential product candidates intended to induce cellular immunity to abnormal phosphopeptide neo-epitopes characterizing various forms of cancer. Phosphopeptides (or phosphopeptide analogues) can be synthesized and complexed with HSP70, in a manner analogous to that used in the generation of Agenus' previous HerpV vaccine candidate. HerpV has successfully completed a placebo-controlled Phase 2 study, which demonstrated good cellular and humoral responses to synthetic peptide immunogens complexed with HSP70. We believe that similar responses can be obtained to phosphopeptide or phosphopeptide analogues bound to HSP70 used as vaccines. Mutation-based neo-epitopes, which will form the basis for the immunogens used in ASV, are almost always particular to a given patient. Therefore, ASV will need to be a largely individualized vaccine product. In contrast to this, some phosphorylation-based neo-epitopes are apparently found on specific types of cancer in many patients, suggesting that the immunogens used in PSV, while tailored to a particular patient, will be useful in other patients with related forms of cancer. Studies to optimize the immunogens to be used in PSV are on-going. PSV could prove to be particularly useful in enabling activation of immunity against cancer that contains fewer mutation-based neo-epitopes. For additional information regarding PhosphoSynVax, please read Part I-Item 1. "Business" of this Annual Report on Form 10-K.

QS-21 Stimulon

QS-21 Stimulon is an adjuvant, or a substance added to a vaccine or other immunotherapy, that is intended to enhance immune response to the target antigens. The primary corporate licensee of QS-21 Stimulon is GSK. There are several vaccines containing QS-21 Stimulon in clinical development, including two that have successfully completed Phase 3 testing by GSK for malaria and shingles. Assuming regulatory approval, the first products containing QS-21 Stimulon are anticipated to be launched in 2018, and we are generally entitled to royalties for at least ten years after commercial launch, with some exceptions. In September 2015, we monetized a portion of these royalties to an investors group for up to $115.0 million. Under the terms of this transaction, the investors have the right to receive royalties earned on sales of the malaria and shingles vaccines to pay down principal and interest. We do not incur clinical development costs for these products of our licensees. For additional information regarding QS-21 Stimulon, please read Part I-Item 1. "Business" of this Annual Report on Form 10-K.

Liquidity and Capital Resources

We have incurred annual operating losses since inception, and we had an accumulated deficit of $779.2 million as of December 31, 2015. We expect to incur significant losses over the next several years as we continue development of our technologies and product candidates, manage our regulatory processes, initiate and continue clinical trials, and prepare for potential commercialization of products. To date, we have financed our operations primarily through the sale of equity and debt securities, and interest income earned on cash, cash equivalents, and short-term investment balances. From our inception through December 31, 2015, we have raised

aggregate net proceeds of approximately $839.0 million through the sale of common and preferred stock, the exercise of stock options and warrants, proceeds from our employee stock purchase plan, and the issuance of convertible and other notes. In February 2015, we received aggregate proceeds of $60.0 million through our collaboration and stock purchase agreements with Incyte Corporation and issued $9.0 million in new 2015 Subordinated Notes. In May 2015, we received net proceeds of approximately $75.0 million through an underwritten public offering of approximately 12,650,000 shares of our common stock after deducting underwriting discounts and commissions and offering expenses (the "May 2015 Public Offering"). In September 2015, we received net proceeds of approximately $78.0 million from Antigenics' issuance of limited recourse notes under the Note Purchase Agreement (NPA) with Oberland and the other purchasers.

We also maintain an effective registration statement (the "Shelf Registration Statement"), which originally covered the offering of up to $150.0 million of common stock, preferred stock, warrants, debt securities and units. The Shelf Registration was used to complete the May 2015 Public Offering, and as of December 31, 2015, $70.3 million remained available thereunder. The Shelf Registration Statement includes a prospectus covering the offering, issuance and sale of up to ten million shares of our common stock from time to time in "at the market offerings" pursuant to an At Market Sales Issuance Agreement (the "Sales Agreement") entered into with MLV & Co. LLC (the "Sales Agent"). Pursuant to the Sales Agreement, sales will be made only upon instructions by us to the Sales Agent, and we cannot provide any assurances that we will issue any shares pursuant to the Sales Agreement. As of December 31, 2015, we had 10 million shares available for sale under the Sales Agreement.

As of December 31, 2015, we had debt outstanding of $114.1 million in principal. In April 2013, we entered into a Note Purchase Agreement with various investors for senior subordinated notes (the "2013 Notes") in the aggregate principal amount of $5.0 million due in April 2015. In February 2015, we exchanged the 2013 Notes for new senior subordinated notes (the "2015 Subordinated Notes") in the aggregate principal amount of $5.0 million with annual interest at 8% and also issued additional 2015 Subordinated Notes in the aggregate principal amount of $9.0 million, such notes are due February 2018. In addition, we also issued to the holders of the 2015 Subordinated Notes five year warrants to purchase 1.4 million unregistered shares of our common stock at an exercise price of $5.10 per share. In September 2015, we and Antigenics entered into a Note Purchase Agreement with Oberland pursuant to which Antigenics issued, and we guaranteed, limited recourse notes in the aggregate principal amount of $100.0 million, with an option to issue an additional $15.0 million principal amount of limited recourse notes. The limited recourse notes are due on the earlier of (i) the 10th anniversary of the first commercial sale of GSK's shingles or malaria vaccines and (ii) September 8, 2030.

Our cash, cash equivalents, and short-term investments at December 31, 2015 were $171.7 million, an increase of $131.4 million from December 31, 2014, principally as a result of (i) our collaboration and stock purchase agreements with Incyte which generated aggregate proceeds of $60.0 million, (ii) our 2015 Subordinated Notes which generated an aggregate of $9.0 million of new proceeds, (iii) our May 2015 Public Offering in which we received net proceeds of approximately $75.0 million and (iv) our NPA in which we generated net proceeds of approximately $78.0 million. We believe that, based on our current plans and activities, our cash, cash equivalents, and short-term investments of $171.7 million as of December 31, 2015 will be sufficient to satisfy our liquidity requirements through the first half of 2017. We continue to monitor the likelihood of success of our key initiatives and are prepared to discontinue funding of such activities if they do not prove to be feasible, restrict capital expenditures and/or reduce the scale of our operations.

We expect to attempt to raise additional funds in advance of depleting our current funds. We may attempt to raise funds by: (1) pursuing collaboration, out-licensing and/or partnering opportunities for our portfolio programs and product candidates with one or more third parties, (2) renegotiating third party agreements, (3) selling assets, (4) securing additional debt financing and/or (5) selling equity securities. Satisfying long-term liquidity needs may require the successful commercialization and/or substantial out-licensing or partnering arrangements for our antibody discovery platforms, CPM antibody programs, HSP-based vaccines, and vaccines containing QS-21 Stimulon under development by our licensees. Our long-term success will also be dependent on the successful identification, development and commercialization of potential other product candidates, each of which will require additional capital with no certainty of timing or probability of success. If we incur operating losses for longer than we expect and/or we are unable to raise additional capital, we may become insolvent and be unable to continue our operations.

Our future cash requirements include, but are not limited to, supporting clinical trial and regulatory efforts and continuing our other research and development programs. Since inception, we have entered into various agreements with contract manufacturers, institutions, and clinical research organizations (collectively "third party providers") to perform pre-clinical activities and to conduct and monitor our clinical studies. Under these agreements, subject to the enrollment of patients and performance by the applicable third party provider, we have estimated our total payments to be $78.0 million over the term of the related activities. Through December 31, 2015, we have expensed $71.3 million as research and development expenses and $65.0 million has been paid under these agreements. The timing of expense recognition and future payments related to these agreements is subject to the enrollment of patients and performance by the applicable third party provider. We have also entered into sponsored research agreements related to our product candidates that required payments of $6.7 million, all of which have been paid as of December 31, 2015. We plan to enter into additional agreements with third party providers as well as sponsored research agreements, and we anticipate significant additional expenditures will be required to initiate and advance our various programs.

Part of our strategy is to develop and commercialize some of our product candidates by continuing our existing collaboration arrangements with academic and collaboration partners and licensees and by entering into new collaborations. As a result of our collaboration agreements, we will not completely control the efforts to attempt to bring those product candidates to market. For example, our collaboration with Incyte for the development, manufacture and commercialization of CPM antibodies against certain targets is managed by a joint steering committee with equal representation from Agenus and Incyte. We also have agreements with licensees that allow the use of our QS-21 Stimulon adjuvant in numerous vaccines, which grant exclusive worldwide rights in some fields of use and co-exclusive or non-exclusive rights in others. These agreements generally call for royalties to be paid to us on future sales of licensed products that result from these agreements, which may or may not be achieved. As noted above, in September 2015 we monetized the anticipated royalties related to GSK's shingles and malaria vaccines through our NPA with Oberland and the other purchasers.

Net cash used in operating activities for the years ended December 31, 2015 and 2014 was $47.2 million and $38.2 million, respectively. We continue to support and develop our QS-21 Stimulon partnering collaborations. If applications for marketing approval of vaccines that are submitted by our licensees are approved, the first products containing QS-21 Stimulon are anticipated to be launched in 2018. We are generally entitled to royalties on sales by our licensees of vaccines using QS-21 Stimulon for at least ten years after commercial launch, with some exceptions. In September 2015, we entered into a Note Purchase Agreement and partially monetized the potential royalties we are entitled to receive from GSK. Our future ability to generate cash from operations will depend on achieving regulatory approval and market acceptance of our product candidates, achieving benchmarks as defined in existing collaboration agreements, and our ability to enter into new collaborations. Under our Collaboration Agreement with Incyte, we are required to share costs with Incyte on a 50:50 basis under the GITR and OX40 programs as well as the two additional undisclosed programs nominated for development during 2015; there is a potential for these costs to be high and the development program budgets for these antibodies to not be in our complete control. Please see the "Note Regarding Forward-Looking Statements" of this Annual Report on Form 10-K and the risks highlighted under Part I-Item 1A. "Risk Factors" of this Annual Report on Form 10-K.

The table below summarizes our contractual obligations as of December 31, 2015 (in thousands).

		Payments by Period			
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Long-term debt (1)	$ 116,597	$ 1,322	$ 15,275	$ —	$ 100,000
Operating leases (2)	23,281	3,315	6,467	5,605	7,894
Total (3)	$ 139,878	$ 4,637	$ 21,742	$ 5,605	$ 107,894

(1) Includes fixed interest payments. Under the terms of the NPA, interest accrues as 13.5%, compounded quarterly and may vary based on the timing of the royalty stream under our contract with GSK and therefore the table above excludes such interest which was approximately $4.3 million as of December 31, 2015.
(2) The leases and subleases for our properties expire at various times between 2016 and 2025.
(3) Excluded from our contractual obligations table is our required contributions of $147,000 in 2016 to our multiple employer benefit plan; our required contributions for the years beyond 2016 to our multiple employer benefit plan are unknown at this time and cannot be reasonably estimated.

Off-Balance Sheet Arrangements

At December 31, 2015, we had no off-balance sheet arrangements.

Critical Accounting Policies and Estimates

The SEC defines "critical accounting policies" as those that require the application of management's most difficult, subjective, or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods.

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We base those estimates on historical experience and on various assumptions that are believed to be reasonable under the circumstances. Actual results could differ from those estimates.

The following listing is not intended to be a comprehensive list of all of our accounting policies. Our significant accounting policies are described in Note 2 of the notes to our consolidated financial statements contained elsewhere in this Annual Report on Form 10-K. In many cases, the accounting treatment of a particular transaction is dictated by U.S. generally accepted accounting principles, with no need for our judgment in its application. There are also areas in which our judgment in selecting an available alternative would not produce a materially different result. We have identified the following as our critical accounting policies.

Share-Based Compensation

In accordance with the fair value recognition provisions of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 718, *Compensation—Stock Compensation,* we recognize share-based compensation expense net of an estimated forfeiture rate and only recognize compensation expense for those share-based awards expected to vest. Compensation expense is recognized on a straight-line basis over the requisite service period of the award.

Share-based awards granted to certain non-employees have been accounted for based on the fair value method of accounting in accordance with ASC 505-50, *Equity- Equity-Based Payments to Non-Employees.* As a result, the non-cash charge to operations for non-employee awards with vesting or other performance criteria is affected each reporting period by changes in the fair value of our common stock. Under the provisions of ASC 505-50, the change in fair value of vested awards issued to non-employees is reflected in the statement of operations each reporting period, until the options are exercised or expire.

Determining the appropriate fair value model and calculating the fair value of share-based awards requires the use of highly subjective assumptions, including the expected life of the share-based awards and stock price volatility. The assumptions used in calculating the fair value of share-based awards represent management's best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our share-based compensation expense could be materially different in the future. For performance condition awards, we estimate the probability that the performance condition will be met. In addition, if our actual forfeiture rate is materially different from our estimate, the share-based compensation expense could be significantly different from what we have recorded in the current period. See Note 11 of the notes to our consolidated financial statements contained elsewhere in this Annual Report on Form 10-K for a further discussion on share-based compensation.

Revenue Recognition

Revenue recognized from collaborative agreements is based upon the provisions of ASC 605-25, *Revenue Recognition—Multiple Element Arrangements*, as amended by Accounting Standards Update 2009-13. License fees and royalties are recognized as they are earned. Non-refundable milestone payments that represent the completion of a separate earnings process are recognized as revenue when earned. Revenue for services under research and development contracts are recognized as the services are performed, or as clinical trial materials are provided.

Fair Value Measurements

In accordance with ASC 820, *Fair Value Measurements and Disclosures*, we measure fair value based on a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that observable inputs be used when available. The fair value hierarchy is broken down into three levels based on the source of inputs.

We measured our contingent royalty obligation and currently measure our contingent purchase price considerations at fair value in accordance with ASC 825, *Financial Instruments*. The fair value of our contingent royalty obligation and contingent purchase price considerations are based on significant inputs not observable in the market, which require them to be reported as a Level 3 liability within the fair value hierarchy. The valuation of these liabilities uses assumptions we believe would be made by a market participant. In particular, the valuation analysis for the contingent royalty obligation used the income approach based on the sum of the economic income that an asset is anticipated to produce in the future. In this case that asset was the potential royalty income to be paid to us as a result of certain license agreements for QS-21 Stimulon and the potential net sales generated from HerpV. The fair value of the contingent royalty obligation was estimated by applying a risk adjusted discount rate to the probability adjusted royalty revenue stream based on expected approval dates. These fair value estimates are most sensitive to changes in the probability of regulatory approvals. The discounted cash flow method of the income approach was chosen as the method best suited to valuing the contingent royalty obligation.

The fair values of our 4-AB and PhosImmune contingent purchase price considerations are based on estimates from a Monte Carlo simulation of our market capitalization and share price, respectively. Market capitalization and share price were evolved using a geometric brownian motion, calculated daily for the life of the contingent purchase price consideration.

Business Combinations

In February 2014 and December 2015, we acquired all of the outstanding capital stock of 4-AB and PhosImmune, respectively in business combination transactions. In December 2015, we also acquired an antibody manufacturing pilot facility from XOMA Corporation which under the applicable accounting guidance is being accounted for as a business combination. The acquisition method of accounting requires that the assets acquired and liabilities assumed be recorded as of the date of the merger or acquisition at their respective fair values with limited exceptions. Assets acquired and liabilities assumed in a business combination that arise from contingencies are recognized at fair value if fair value can reasonably be estimated. If the acquisition date fair value of an asset acquired or liability assumed that arises from a contingency cannot be determined, the asset or liability is recognized if probable and reasonably estimable; if these criteria are not met, no asset or liability is recognized. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Accordingly, we may be required to value assets at fair value measures that do not reflect our intended use of those assets. Any excess of the purchase price (consideration transferred) over the estimated fair values of net assets acquired is recorded as goodwill. In the event the value of the net assets acquired exceeds the purchase price consideration, then a bargain purchase has occurred. The resulting bargain purchase on the transaction will be recognized as a gain in the period in which the acquisition was executed. The operating results of the acquired businesses are reflected in our consolidated financial statements after the date of the merger or acquisition. If we determine the assets acquired do not meet the definition of a business under the acquisition method of accounting, the transaction will be accounted for as an acquisition of assets rather than a business combination and, therefore, no goodwill will be recorded. The fair values of intangible assets, including acquired in-process research and development ("IPR&D"), are determined utilizing information available near the merger or acquisition date based on expectations and assumptions that are deemed reasonable by management. The judgments made in determining estimated fair values assigned to assets acquired and liabilities assumed in a business combination, as well as asset lives, can materially affect the Company's results of operations.

Acquired Intangible Assets, including IPR&D

IPR&D acquired in a business combination represents the fair value assigned to research and development assets that have not reached technological feasibility. The value assigned to acquired IPR&D is determined by estimating the costs to develop the acquired technology into commercially viable products, estimating the resulting revenue from the projects, and discounting the net cash flows to present value. The revenue and costs projections used to value acquired IPR&D are, as applicable, reduced based on the probability of success of developing a new drug. Additionally, the projections consider the relevant market sizes and growth factors, expected trends in technology, and the nature and expected timing of new product introductions by us and our competitors. The rates utilized to discount the net cash flows to their present value are commensurate with the stage of development of the projects and uncertainties in the economic estimates used in the projections. Upon the acquisition of IPR&D, we complete an assessment of whether our acquisition constitutes the purchase of a single asset or a group of assets. We consider multiple factors in this assessment, including the nature of the technology acquired, the presence or absence of separate cash flows, the development process and stage of completion, quantitative significance and our rationale for entering into the transaction.

We review amounts capitalized as acquired IPR&D for impairment at least annually, as of October 31, and whenever events or changes in circumstances indicate that the carrying value of the assets might not be recoverable. When performing our impairment assessment, we have the option to first assess qualitative factors to determine whether it is necessary to recalculate the fair value of our acquired IPR&D. If we elect this option and believe, as a result of the qualitative assessment, that it is more-likely-than-not that the fair value of our acquired IPR&D is less than its carrying amount, we calculate the fair value using the same methodology as described above. If the carrying value of our acquired IPR&D exceeds its fair value, then the intangible asset is written-down to its fair value. Alternatively, we may elect to bypass the qualitative assessment and immediately recalculate the fair value of our acquired IPR&D.

Goodwill

Goodwill was $22.8 million at December 31, 2015. Goodwill is tested at least annually for impairment on a reporting unit basis. We have concluded that we consist of a single operating segment and one reporting unit. We assess goodwill for impairment by performing a quantitative analysis to determine whether the fair value of our single reporting unit exceeds its carrying value. We perform our annual impairment test as of October 31 of each year and the first step of our impairment analysis compares the fair value to our net book value to determine if there is an indicator of impairment. Fair value is based on the quoted market price of our common stock to derive the market capitalization as of the date of the impairment test.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers,* ("ASU 2014-09"). ASU 2014-09 amends revenue recognition principles and provides a single set of criteria for revenue recognition among all industries. This new standard provides a five step framework whereby revenue is recognized when promised goods or services are transferred to a customer at an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard also requires enhanced disclosures pertaining to revenue recognition in both interim and annual periods. ASU 2014-09 is effective for interim and annual periods beginning after December 15, 2017. We are currently evaluating the potential impact that ASU 2014-09 may have on our financial position and results of operations.

In August 2014, the FASB issued ASU No. 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*, ("ASU 2014-15"). ASU 2014-15 describes how an entity should assess its ability to meet obligations and sets rules for how this information should be disclosed in the financial statements. The standard provides accounting that will be used along with existing auditing standards. ASU 2014-15 applies to all entities and is effective for the annual period ending after December 15, 2016, and for annual and interim periods thereafter with early adoption permitted. We are currently evaluating the potential impact that ASU 2014-15 may have on our consolidated financial statements and related disclosures.

In April 2015, the FASB issued ASU No. 2015-03, *Interest-Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs,* ("ASU 2015-03"*).* ASU 2015-03 simplifies the presentation of debt issuance costs, as this new standard requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The recognition and measurement guidance for debt issuance costs are not affected by this update. This guidance is effective for annual reporting beginning after December 15, 2015, including interim periods within the year of adoption, and calls for retrospective application, with early application permitted. We adopted ASU 2015-03 with the interim period ended September 30, 2015. During the year ended December 31, 2015, in connection with the execution of the NPA as described in Note 16, the Company incurred approximately $1.5 million in debt issuance costs that are classified as a reduction to long-term debt in our consolidated balance sheet. No debt issuance costs required retrospective application as the result of the adoption of ASU 2015-03. The amortization of the debt issuance costs for the year ended December 31, 2015 was not material.

In November 2015, the FASB issued ASU No. 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*, ("ASU 2015-17"). ASU 2015-17 requires entities with a classified balance sheet to present all deferred tax assets and liabilities as noncurrent. ASU 2015-17 is effective for public business entities for interim and annual periods in fiscal years beginning after December 15, 2016. Early adoption is permitted. We early adopted ASU 2015-17 for the year ended December 31, 2015. The adoption of ASU 2015-17 did not have a material impact on our consolidated balance sheets.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* ("ASU 2016-2") which supersedes Topic 840, Leases. ASU2016-02 requires lessees to recognize a right-of-use asset and a lease liability on their balance sheets for all leases with terms greater than twelve months. Based on certain criteria, leases will be classified as either financing or operating, with classification affecting the pattern of expense recognition in the income statement. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election by class of underlying asset not to recognize lease assets and lease liabilities. If a lessee makes this election, it should recognize lease expense for such leases generally on a straight-line basis over the lease term. ASU 2016-2 is effective for fiscal years beginning after December 15, 2018, and interim periods within those years, with early adoption permitted. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The modified retrospective approach includes a number of optional practical expedients primarily focused on leases that commenced before the effective date of Topic 842, including continuing to account for leases that commence before the effective date in accordance with previous guidance, unless the lease is modified. We are evaluating the impact of the adoption of the standard on our consolidated financial statements.

Item 7A. ***Quantitative and Qualitative Disclosures About Market Risk***

Our primary market risk exposure is foreign currency exchange rate risk. International revenues and expenses are generally transacted by our foreign subsidiary and are denominated in local currency. Approximately 4% and 32% of our cash used in operations for the years ended December 31, 2015 and 2014, respectively, was from a foreign subsidiary. Additionally, in the normal course of business, we are exposed to fluctuations in interest rates as we seek debt financing and invest excess cash. We are also exposed to foreign currency exchange rate fluctuation risk related to our transactions denominated in foreign currencies. We do not currently employ specific strategies, such as the use of derivative instruments or hedging, to manage these exposures. Our currency exposures vary, but are primarily concentrated in the Euro and Swiss Franc, in large part due to our wholly-owned subsidiary, 4-AB, a company with operations in Switzerland and Germany. During the year ended December 31, 2015, there has been no material change with respect to our approach toward those exposures.

We had cash, cash equivalents and short-term investments at December 31, 2015 of $171.7 million, which are exposed to the impact of interest and foreign currency exchange rate changes, and our interest income fluctuates as interest rates change. Due to the short-term nature of our investments in money market funds and US Treasury Securities, our carrying value approximates the fair value of these investments at December 31, 2015, however, we are subject to investment risk.

We invest our cash and cash equivalents in accordance with our investment policy. The primary objectives of our investment policy are to preserve principal, maintain proper liquidity to meet operating needs, and maximize yields. We review our investment policy annually and amend it as deemed necessary. Currently, the investment policy prohibits investing in any structured investment vehicles and asset-backed commercial paper. Although our investments are subject to credit risk, our investment policy specifies credit quality standards for our investments and limits the amount of credit exposure from any single issue, issuer, or type of investment. We do not invest in derivative financial instruments. Accordingly, we do not believe that there is currently any material market risk exposure with respect to derivatives or other financial instruments that would require disclosure under this item.

Item 8. ***Financial Statements and Supplementary Data***

INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders

Agenus Inc.:

We have audited the accompanying consolidated balance sheets of Agenus Inc. and subsidiaries (the Company) as of December 31, 2015 and 2014, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2015. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated 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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes 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, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Agenus Inc. and subsidiaries as of December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Agenus Inc. and subsidiaries' internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 15, 2016 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

Boston, Massachusetts
March 15, 2016

AGENUS INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31, 2015	December 31, 2014
ASSETS		
Cash and cash equivalents	$ 136,702,873	$ 25,714,519
Short-term investments	34,964,730	14,509,570
Inventories	88,200	95,700
Accounts Receivable	9,800,342	463,007
Prepaid expenses	1,956,941	1,247,548
Other current assets	582,280	639,957
Total current assets	184,095,366	42,670,301
Property, plant and equipment, net of accumulated amortization and depreciation of $29,488,793 and $28,369,982 at December 31, 2015 and 2014, respectively	15,310,623	5,996,687
Goodwill	22,792,778	17,869,023
Acquired intangible assets, net of accumulated amortization of $987,394 and $462,248 at December 31, 2015 and 2014, respectively	18,759,662	6,773,722
Other long-term assets	1,270,055	1,216,795
Total assets	$ 242,228,484	$ 74,526,528
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current portion, long-term debt	$ 146,061	$ 1,257,178
Current portion, deferred revenue	3,829,371	184,421
Accounts payable	4,488,561	1,710,946
Accrued liabilities	14,165,816	5,501,527
Other current liabilities	6,304,281	575,351
Total current liabilities	28,934,090	9,229,423
Long-term debt	114,326,489	4,769,359
Deferred revenue	15,065,754	3,009,568
Contingent royalty obligation	—	15,279,000
Contingent purchase price consideration	5,608,000	16,420,300
Other long-term liabilities	7,566,601	2,800,491
Commitments and contingencies (Notes 15 and 18)		
STOCKHOLDERS' EQUITY		
Preferred stock, par value $0.01 per share; 5,000,000 shares authorized:		
Series A-1 convertible preferred stock; 31,620 shares designated, issued, and outstanding at December 31, 2015 and 2014; liquidation value of $32,215,432 at December 31, 2015	316	316
Common stock, par value $0.01 per share; 140,000,000 shares authorized; 86,390,697 shares and 62,720,065 shares issued at December 31, 2015 and 2014, respectively	863,907	627,201
Additional paid-in capital	851,103,934	715,667,633
Accumulated other comprehensive loss	(2,053,143)	(1,970,420)
Accumulated deficit	(779,187,464)	(691,306,343)
Total stockholders' equity	70,727,550	23,018,387
Total liabilities and stockholders' equity	$ 242,228,484	$ 74,526,528

See accompanying notes to consolidated financial statements.

AGENUS INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
For the Years Ended December 31, 2015, 2014, and 2013

	2015	2014	2013
Revenue:			
Grant revenue	$ 24,118	$ 504,228	$ —
Service revenue	—	—	1,417,864
Research and development	24,792,907	6,473,227	1,627,343
Total revenues	24,817,025	6,977,455	3,045,207
Operating expenses:			
Cost of service revenue	—	—	(536,118)
Research and development	(70,444,259)	(22,349,327)	(13,005,366)
General and administrative	(28,370,001)	(21,249,710)	(14,483,835)
Contingent purchase price consideration fair value adjustment	(6,703,700)	(6,699,300)	—
Operating loss	(80,700,936)	(43,320,882)	(24,980,112)
Other (expense) income:			
Non-operating (expense) income	(5,968,170)	2,096,334	(2,672,759)
Interest expense, net	(6,599,083)	(1,261,626)	(2,419,798)
Loss before taxes	(93,268,188)	(42,486,174)	(30,072,669)
Income tax benefit	5,387,067	—	—
Net loss	(87,881,121)	(42,486,174)	(30,072,669)
Dividends on Series A-1 convertible preferred stock	(202,960)	(203,832)	(3,159,782)
Net loss attributable to common stockholders	$ (88,084,081)	$ (42,690,006)	$ (33,232,451)
Per common share data:			
Basic and diluted net loss attributable to common stockholders	$ (1.13)	$ (0.71)	$ (1.12)
Weighted average number of common shares outstanding:			
Basic and diluted	78,212,094	59,753,552	29,765,547
Other comprehensive income (loss):			
Foreign currency translation gain (loss)	$ 164,150	$ (1,778,184)	$ —
Unrealized (loss) gain on investments	(1,690)	1,764	—
Pension liability	(245,183)	(194,000)	—
Other comprehensive loss	(82,723)	(1,970,420)	—
Comprehensive loss	$ (88,166,804)	$ (44,660,426)	$ (33,232,451)

See accompanying notes to consolidated financial statements.

AGENUS INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
For the Years Ended December 31, 2015, 2014, and 2013

	Series A Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Series B2 Convertible Preferred Stock		Common Stock			Treasury Stock					
	Number of Shares	Par Value	Number of Shares	Par Value	Number of Shares	Par Value	Number of Shares	Par Value	Additional Paid-In Capital	Number of Shares	Amount	Accumulated Other Comprehensive Loss	Accumulated Deficit	Noncontrolling Interest	Total
Balance at December 31, 2012	31,620	$ 316	—	$ —	3,105	$ 31	24,645,112	$ 246,451	$ 595,917,080	43,490	$ (324,792)	$ —	$ (619,019,367)	$ 5,580,124	$ (17,600,157)
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	(30,072,669)	—	(30,072,669)
Shares sold at the market	—	—	—	—	—	—	4,831,132	48,312	16,942,004	—	—	—	—	—	16,990,316
Common stock issued to preferred shareholder	(31,620)	(316)	31,620	316	—	—	666,666	6,667	(6,667)	—	—	—	—	—	—
Extinguishment of debt	—	—	—	—	—	—	2,500,000	25,000	17,971,813	—	—	—	—	(5,580,124)	12,416,689
Shares sold in registered direct offering	—	—	—	—	—	—	3,333,333	33,333	9,439,161	—	—	—	—	—	9,472,494
Share-based compensation	—	—	—	—	—	—			4,054,561	—	—	—	—	—	4,054,561
Reclassification of liability classified option grants	—	—	—	—	—	—	—	—	(4,347)	—	—	—	—	—	(4,347)
Vesting of nonvested shares	—	—	—	—	—	—	339,800	3,398	(3,398)	—	—	—	—	—	—
Shares issued to CEO in lieu of cash compensation	—	—	—	—	—	—	43,887	439	157,961	—	—	—	—	—	158,400
Exercise of stock options	—	—	—	—	—	—	4,503	45	15,085	—	—	—	—	—	15,130
Employee share purchases	—	—	—	—	—	—	26,758	267	88,613	—	—	—	—	—	88,880
Balance at December 31, 2013	—	$ —	31,620	$ 316	3,105	$ 31	36,391,191	$ 363,912	$ 644,571,866	43,490	$ (324,792)	$ —	$ (649,092,036)	$ —	$ (4,480,703)

See accompanying notes to consolidated financial statements.

AGENUS INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(Continued)
For the Years Ended December 31, 2015, 2014, and 2013

	Series A Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Series B2 Convertible Preferred Stock		Common Stock			Treasury Stock					
	Number of Shares	Par Value	Number of Shares	Par Value	Number of Shares	Par Value	Number of Shares	Par Value	Additional Paid-In Capital	Number of Shares	Amount	Accumulated Other Comprehensive Loss	Accumulated Deficit	Noncontrolling Interest	Total
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	(42,486,174)	—	(42,486,174)
Other comprehensive loss	—	—	—	—	—	—	—	—	—	—	—	(1,970,420)	—	—	(1,970,420)
Shares sold at the market	—	—	—	—	—	—	215,489	2,155	598,504	—	—	—	—	—	600,659
Shares sold in registered direct offering	—	—	—	—	—	—	22,236,000	222,360	55,969,233	—	—	—	—	—	56,191,593
Share-based compensation	—	—	—	—	—	—	—		4,604,713	—	—	—	—	—	4,604,713
Reclassification of liability classified option grants	—	—	—	—	—	—	—	—	(487,227)	—	—	—	—	—	(487,227)
Vesting of nonvested shares	—	—	—	—	—	—	48,239	483	(483)	—	—	—	—	—	—
Issuance of stock for 4AB acquisition	—	—	—	—	—	—	3,334,079	33,341	10,068,918	—	—	—	—	—	10,102,259
Shares issued to CEO in lieu of cash compensation	—	—	—	—	—	—	25,989	260	78,940	—	—	—	—	—	79,200
Shares issued for acquisition liability	—	—	—	—	—	—	35,124	351	119,423	—	—	—	—	—	119,774
Retirement of treasury shares	—	—	—	—	—	—	(43,490)	(435)	(596,224)	(43,490)	324,792	—	271,867	—	—
Retirement of preferred shares	—	—	—	—	(3,105)	(31)	—	—	31	—	—	—	—	—	—
Shares issued to settle convertible notes	—	—	—	—	—	—	383,038	3,830	949,935	—	—	—	—	—	953,765
Exercise of stock options	—	—	—	—	—	—	48,381	484	144,830	—	—	—	—	—	145,314
Employee share purchases	—	—	—	—	—	—	46,025	460	106,137	—	—	—	—	—	106,597
Dividends on series A convertible preferred stock ($14.58 per share)	—	—	—	—	—	—	—	—	(460,963)	—	—	—	—	—	(460,963)
Balance at December 31, 2014	—	$ —	31,620	$ 316	—	$ —	62,720,065	$ 627,201	$ 715,667,633	—	$ —	$ (1,970,420)	$ (691,306,343)	$ —	$ 23,018,387

See accompanying notes to consolidated financial statements.

AGENUS INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(Continued)
For the Years Ended December 31, 2015, 2014, and 2013

	Series A Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Series B2 Convertible Preferred Stock		Common Stock			Treasury Stock					
	Number of Shares	Par Value	Number of Shares	Par Value	Number of Shares	Par Value	Number of Shares	Par Value	Additional Paid-In Capital	Number of Shares	Amount	Accumulated Other Comprehensive Loss	Accumulated Deficit	Noncontrolling Interest	Total
Net loss													(87,881,121)	—	(87,881,121)
Other comprehensive loss	—	—	—	—	—	—	—	—	—	—	—	(82,723)	—		(82,723)
Shares sold in underwritten public offering	—	—	—	—	—	—	12,650,000	126,500	74,543,480	—	—	—	—	—	74,669,980
Share-based compensation	—	—	—	—	—	—	—	—	8,098,650	—	—	—	—	—	8,098,650
Reclassification of liability classified option grants	—	—	—	—	—	—	—	—	(495,742)	—	—	—	—	—	(495,742)
Vesting of nonvested shares	—	—	—	—	—	—	35,332	353	(353)	—	—	—	—	—	—
Issuance of stock for acquisition of SECANT yeast display technology	—	—	—	—	—	—	574,140	5,741	2,994,259	—	—	—	—	—	3,000,000
Shares sold under Stock Purchase Agreement	—	—	—	—	—	—	7,763,968	77,640	34,922,361	—	—	—	—	—	35,000,001
Issuance of shares related to milestone achievement	—	—	—	—	—	—	80,493	805	343,736	—	—	—	—	—	344,541
Issuance of warrants			—	—	—	—	—	—	3,038,438						3,038,438
Issuance of stock in connection with XOMA antibody manufacturing facility acquisition	—	—	—	—	—	—	109,211	1,092	498,908	—	—	—	—	—	500,000
Issuance of stock in connection with PhosImmune acquisition	—	—	—	—	—	—	1,631,521	16,315	7,383,685	—	—	—	—	—	7,400,000
Issuance of stock for settlement of contingent royalty obligation	—	—	—	—	—	—	300,000	3,000	2,139,000	—	—	—	—	—	2,142,000
Exercise of stock options	—	—	—	—	—	—	462,428	4,624	1,762,237	—	—	—	—	—	1,766,861
Employee share purchases	—	—	—	—	—	—	63,539	636	207,642	—	—	—	—		208,278
Balance at December 31, 2015	—	$ —	31,620	$ 316	—	$ —	86,390,697	$863,907	$851,103,934	—	$ —	$ (2,053,143)	$(779,187,464)	$ —	$ 70,727,550

See accompanying notes to consolidated financial statements.

AGENUS INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Years Ended December 31, 2015, 2014, and 2013

	2015	2014	2013
Cash flows from operating activities:			
Net loss	$ (87,881,121)	$ (42,486,174)	$ (30,072,669)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,957,591	1,583,960	586,343
Share-based compensation	7,438,308	4,672,256	4,127,786
Non-cash interest expense	5,626,918	619,846	1,820,787
Loss on disposal of assets	—	4,583	59,110
Change in fair value of contingent obligations	13,567,000	3,579,159	—
In-process research and development purchase	12,245,231	—	—
Loss on extinguishment of debt	154,117	—	3,322,657
Bargain purchase	(1,522,377)	—	—
Deferred tax benefit	(5,387,067)	—	—
Gain on sale of investment	—	—	(355,500)
Change in fair value of assumed convertible notes	—	(201,092)	—
Change in fair value of derivative liability	—	—	(291,517)
Changes in operating assets and liabilities:			
Accounts receivable	(9,331,622)	1,200	551,134
Inventories	7,500	(95,700)	16,022
Prepaid expenses	(703,424)	(254,045)	(112,505)
Accounts payable	2,668,064	(45,902)	189,638
Deferred revenue	15,957,820	(3,610,811)	(1,474,171)
Accrued liabilities and other current liabilities	9,565,639	(1,316,169)	1,916,467
Other operating assets and liabilities	(11,538,019)	(685,696)	183,473
Net cash used in operating activities	(47,175,441)	(38,234,585)	(19,532,945)
Cash flows from investing activities:			
Cash paid for acquisitions	(7,182,069)	—	—
Cash acquired in acquisition	—	514,470	—
Purchases of plant and equipment	(3,591,335)	(2,819,764)	(813,520)
Purchases of available-for-sale securities	(34,993,100)	(14,507,806)	
Proceeds from sale of available-for-sale securities	14,534,486		450,000
Net cash used in investing activities	(31,232,018)	(16,813,100)	(363,520)
Cash flows from financing activities:			
Net proceeds from sale of equity	109,669,980	56,792,252	26,462,810
Proceeds from employee stock purchases and option exercises	1,975,139	251,911	104,010
Financing of plant and equipment	—	(39,156)	(53,297)
Proceeds from issuance of long-term debt	109,000,000	—	10,000,000
Debt issuance costs	(1,774,323)	—	(177,802)
Payments of debt	(1,111,111)	(3,333,334)	(555,556)
Payment of contingent purchase price consideration	(8,180,000)	—	—
Payment of preferred stock dividends	—	(460,963)	—
Payment of contingent royalty obligation	(20,000,000)	(400,000)	—
Payments of convertible notes	—	—	(10,000,000)
Net cash provided by financing activities	189,579,685	52,810,710	25,780,165
Effect of exchange rate changes on cash	(183,873)	599,525	—
Net increase in cash and cash equivalents	110,988,354	(1,637,450)	5,883,700
Cash and cash equivalents, beginning of period	25,714,519	27,351,969	21,468,269
Cash and cash equivalents, end of period	$ 136,702,873	$ 25,714,519	$ 27,351,969
Supplemental cash flow information:			
Cash paid for interest	$ 1,053,447	$ 675,391	$ 579,650
Supplemental disclosures - non-cash activities:			
Purchases of plant and equipment in accounts payable and accrued liabilities	$ 105,245	$ —	$ —

	2015	2014	2013
Issuance of common stock, $0.01 par value, issued in connection with the settlement of the contingent royalty obligation	2,142,000	—	—
Issuance of common stock, $0.01 par value, in connection with acquisition of PhosImmune	7,400,000		
Issuance of common stock, $0.01 par value, in connection with the acquisition the XOMA antibody manufacturing facility	500,000	—	—
Issuance of common stock, $0.01 par value, in connection with the acquisition of the SECANT yeast display technology	3,000,000		
Issuance of common stock, $0.01 par value, in connection with the acquisition of 4-Antibody AG	—	10,102,259	—
Issuance of common stock, $.01 par value, in connection with payment of the contingent purchase price obligation	344,541	—	—
Contingent purchase price consideration in connection with the acquisition of PhosImmune	2,484,000	—	—
Contingent purchase price consideration in connection with the acquisition of 4-Antibody AG	—	9,721,000	—
Deemed dividend on series A convertible preferred stock	—	—	2,906,664
Issuance of common stock, $0.01 par value, as payment of long-term debt including accrued and unpaid interest	—	953,765	11,275,000
Contingent royalty obligation	—	—	19,090,658
Elimination of non-controlling interest	—	—	5,580,124

See accompanying notes to consolidated financial statements.

(1) Description of Business

Agenus Inc. (including its subsidiaries, collectively referred to as "Agenus," the "Company," "we," "us," and "our") is an immuno-oncology company focused on the discovery and development of revolutionary new treatments that engage the body's immune system to benefit patients suffering from cancer. We are developing a comprehensive immuno-oncology portfolio driven by the following platforms and programs, which we intend to utilize individually and in combination:

- our antibody discovery platforms, including our Retrocyte Display™, SECANT® yeast display, and phage display technologies designed to produce quality human antibodies;
- our antibody candidate programs, including our checkpoint modulator, or CPM, programs;
- our vaccine programs, including Prophage™ and AutoSynVax™; and
- our saponin-based vaccine adjuvants, principally our QS-21 Stimulon® adjuvant, or QS-21 Stimulon.

We have a portfolio of programs in pre-clinical and clinical stages, including a series of CPMs in early stage development and investigational new drug (IND)-enabling studies, our Prophage vaccine, a Phase 3 ready Heat Shock Protein (HSP)-based autologous vaccine for a form of brain cancer and a number of advanced QS-21 Stimulon-containing vaccine candidates in late stage development by our licensee.

Our core technologies include our antibody discovery platforms that are designed to effectively discover and produce quality human antibodies against antigens of interest. We and our partners currently have pre-clinical and clinical programs targeting GITR, OX40, CTLA-4, LAG-3, TIM-3, PD-1, CEACAM1 and other undisclosed targets. We have completed the following Phase 2 trials for HSP-based vaccines for cancer and infectious disease: (1) Prophage autologous HSP-based vaccine in newly diagnosed glioblastoma multiforme (GBM) and (2) HerpV recombinant HSP70-synthetic peptide vaccine for the treatment of herpes simplex virus 2 (HSV2) infection. Our QS-21 Stimulon adjuvant platform is extensively partnered with GlaxoSmithKline (GSK).

Our business activities have included product research and development, intellectual property prosecution, manufacturing, regulatory and clinical affairs, corporate finance and development activities, and support of our collaborations. Our product candidates require clinical trials and approvals from regulatory agencies, as well as acceptance in the marketplace. Part of our strategy is to develop and commercialize some of our product candidates by continuing our existing arrangements with academic and corporate collaborators and licensees and by entering into new collaborations.

We have incurred significant losses since our inception. As of December 31, 2015, we had an accumulated deficit of $779.2 million. Since our inception, we have financed our operations primarily through the sale of equity and convertible and other notes, and interest income earned on cash, cash equivalents, and short-term investment balances. We believe that, based on our current plans and activities, our cash, cash equivalents and short-term investments balance of $171.7 million as of December 31, 2015 will be sufficient to satisfy our liquidity requirements through the first half of 2017. We continue to monitor the likelihood of success of our key initiatives and are prepared to discontinue funding of such activities if they do not prove to be feasible, restrict capital expenditures and/or reduce the scale of our operations.

Research and development program costs include compensation and other direct costs plus an allocation of indirect costs, based on certain assumptions, and our review of the status of each program. Our product candidates are in various stages of development and significant additional expenditures will be required if we start new trials, encounter delays in our programs, apply for regulatory approvals, continue development of our technologies, expand our operations, and/or bring our product candidates to market. The eventual total cost of each clinical trial is dependent on a number of factors such as trial design, length of the trial, number of clinical sites, and number of patients. The process of obtaining and maintaining regulatory approvals for new therapeutic products is lengthy, expensive, and uncertain. Because our CPM antibody programs are pre-clinical and because further development of our Prophage vaccines are dependent on successful partnering or funding efforts, among other factors, we are unable to reliably estimate the cost of completing research and development programs, the timing of bringing such programs to various markets, or substantial partnering or out-licensing arrangements, and, therefore, are unable to determine when, if ever, material cash inflows from operating activities are likely to commence. We will continue to adjust our spending as needed in order to preserve liquidity.

(2) Summary of Significant Accounting Policies

(a) Basis of Presentation and Principles of Consolidation

The consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles and include the accounts of Agenus and our wholly-owned subsidiaries. All significant intercompany transactions and accounts have been eliminated in consolidation. Certain reclassifications have been made to previously reported amounts to conform to the current presentation.

(b) Segment Information

We are managed and operated as one business segment. The entire business is managed by a single executive operating committee that reports to the chief executive officer. We do not operate separate lines of business with respect to any of our product candidates or geographic locations. Accordingly, we do not prepare discrete financial information with respect to separate product areas or by location and do not have separately reportable segments as defined by Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 280, *Segment Reporting*.

(c) Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. We base those estimates on historical experience and on various assumptions that are believed to be reasonable under the circumstances. Actual results could differ from those estimates.

(d) Cash and Cash Equivalents

We consider all highly liquid investments purchased with maturities at acquisition of three months or less to be cash equivalents. Cash equivalents consist primarily of money market funds and U.S. Treasury Bills.

(e) Investments

We classify investments in marketable securities at the time of purchase. At December 31, 2015, all marketable securities are classified as available for sale and as such, the investments are recorded at fair value. Gains and losses on the sale of marketable securities are recognized in operations based on the specific identification method. At December 31, 2015, our investments consisted of institutional money market funds and U.S. Treasury Bills.

(f) Concentrations of Credit Risk

Financial instruments that potentially subject us to concentrations of credit risk are primarily cash equivalents, investments, and accounts receivable. We invest our cash, cash equivalents and short-term investments in accordance with our investment policy, which specifies high credit quality standards and limits the amount of credit exposure from any single issue, issuer, or type of investment. We carry balances in excess of federally insured levels, however, we have not experienced any losses to date from this practice.

(g) Inventories

Inventories are stated at the lower of cost or market. Cost has been determined using standard costs that approximate the first-in, first-out method. Inventory as of December 31, 2015 consisted solely of finished goods.

(h) Accounts Receivable

Accounts receivable are primarily amounts due from our collaboration partner as a result of research and development services provided and reimbursements under co-funded research and development programs. We considered the need for an allowance for doubtful accounts and have concluded that no allowance was needed as of December 31, 2015 and 2014, as the estimated risk of loss on our accounts receivable was determined to be minimal.

(i) Property, Plant and Equipment

Property, plant and equipment, including software developed for internal use, are carried at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. Amortization of leasehold improvements is computed over the shorter of the lease term or estimated useful life of the asset. Additions and improvements are capitalized, while repairs and maintenance are charged to expense as incurred. Amortization and depreciation of plant and equipment was $1.4 million, $1.1 million, and $586,000, for the years ended December 31, 2015, 2014, and 2013, respectively.

(j) Fair Value of Financial Instruments

The estimated fair values of all of our financial instruments, excluding debt, approximate their carrying amounts in the consolidated balance sheets. The fair value of our outstanding debt is based on a present value methodology. The outstanding principal amount of our debt, including the current portion, was $114.1 million and $6.3 million at December 31, 2015 and 2014, respectively.

(k) Revenue Recognition

Revenue for services under research and development contracts are recognized as the services are performed, or as clinical trial materials are provided. Non-refundable milestone payments that represent the completion of a separate earnings process are recognized as revenue when earned. License fees and royalties are recognized as they are earned. Grant revenue is recognized when the related expense is recorded. Revenue recognized from collaborative agreements is based upon the provisions of ASC 605-25, *Revenue Recognition – Multiple-Element Arrangements*, as amended by Accounting Standards Update ("ASU") 2009-13. For the year ended December 31, 2015, 95% of our revenue was earned from one collaboration partner. For the years ended December 31, 2014, and 2013, 48%, and 44%, respectively, of our revenue was earned from one research partner. In addition 47%, of our revenue for the year ended December 31, 2013, was earned from one service customer. The revenues from the service customer did not continue past 2013.

(l) Foreign Currency Transactions

Gains and losses from our foreign currency based accounts and transactions, such as those resulting from the translation and settlement of receivables and payables denominated in foreign currencies, are included in the consolidated statements of operations within other (expense) income. We do not currently use derivative financial instruments to manage the risks associated with foreign currency fluctuations. We recorded foreign currency losses of $866,000, $773,000, and $9,000, for the years ended December 31, 2015, 2014, and 2013, respectively.

(m) Research and Development

Research and development expenses include the costs associated with our internal research and development activities, including salaries and benefits, share-based compensation, occupancy costs, clinical manufacturing costs, related administrative costs, and research and development conducted for us by outside advisors, such as sponsored university-based research partners and clinical study partners. We account for our clinical study costs by estimating the total cost to treat a patient in each clinical trial and recognizing this cost based on estimates of when the patient receives treatment, beginning when the patient enrolls in the trial. Research and development expenses also include the cost of clinical trial materials shipped to our research partners. Research and development costs are expensed as incurred.

(n) Share-Based Compensation

We account for share-based compensation in accordance with the provisions of ASC 718, *Compensation—Stock Compensation* and ASC 505-50, *Equity-Based Payments to Non-Employees.* Share-based compensation expense is recognized based on the estimated grant date fair value, and is recognized net of an estimated forfeiture rate such that we recognize compensation cost for those shares expected to vest. Compensation cost is recognized on a straight-line basis over the requisite service period of the award. The non-cash charge to operations for non-employee awards with vesting or other performance criteria is affected each reporting period by changes in the fair value of our common stock. Under the provisions of ASC 505-50, the change in fair value of vested options issued to non-employees is reflected in the statement of operations each reporting period, until the options are exercised or expire. See Note 11 for a further discussion on share-based compensation.

(o) Income Taxes

Income taxes are accounted for under the asset and liability method with deferred tax assets and liabilities recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and net operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which such items are expected to be reversed or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the consolidated statement of operations in the period that includes the enactment date. Deferred tax assets are recognized when they are more likely than not expected to be realized.

(p) Net Loss Per Share

Basic income and loss per common share is calculated by dividing the net loss attributable to common stockholders by the weighted average number of common shares outstanding (including common shares issuable under our Directors' Deferred Compensation Plan). Diluted income per common share is calculated by dividing net income attributable to common stockholders by the weighted average number of common shares outstanding (including common shares issuable under our Directors' Deferred Compensation Plan) plus the dilutive effect of outstanding instruments such as warrants, stock options, nonvested shares, convertible preferred stock, and convertible notes. Because we reported a net loss attributable to common stockholders for all periods presented, diluted loss per common share is the same as basic loss per common share, as the effect of utilizing the fully diluted share count would have reduced the net loss per common share. Therefore, the following potentially dilutive securities have been excluded from the computation of diluted weighted average shares outstanding as of December 31, 2015, 2014, and 2013, as they would be anti-dilutive:

	Year Ended		
	2015	2014	2013
Warrants	4,351,450	2,951,450	3,280,396
Stock options	8,345,835	6,525,724	4,163,100
Nonvested shares	1,730,604	78,828	147,274
Convertible preferred stock	333,333	333,333	333,333

(q) Goodwill

Goodwill represents the excess of cost over the fair value of net assets of businesses acquired. Goodwill is not amortized, but instead tested for impairment at least annually. Annually we assess whether there is an indication that goodwill is impaired, or more frequently if events and circumstances indicate that the asset might be impaired during the year. We perform our annual impairment test as of October 31 of each year. The first step of our impairment analysis compares our fair value to our net book value to determine if there is an indicator of impairment. We operate as a single operating segment and single reporting unit and our fair value is based on our quoted market price of our common stock to derive the market capitalization as of the date of the impairment test. ASC 350, *Intangibles, Goodwill and Other* states that if the carrying value of the reporting unit is negative, the second step of the impairment test shall be performed to measure the amount of impairment loss, if any, if qualitative factors indicate that it is more likely than not that a goodwill impairment exists. No goodwill impairment has been recognized for the periods presented.

(r) In-process Research and Development

Acquired in-process research and development ("IPR&D") represents the fair value assigned to research and development assets that have not reached technological feasibility. The value assigned to acquired IPR&D is determined by estimating the costs to develop the acquired technology into commercially viable products, estimating the resulting revenue from the projects, and discounting the net cash flows to present value. The revenue and costs projections used to value acquired IPR&D are, as applicable, reduced based on the probability of success of developing a new drug. Additionally, the projections consider the relevant market sizes and growth factors, expected trends in technology, and the nature and expected timing of new product introductions by us and our competitors. The rates utilized to discount the net cash flows to their present value are commensurate with the stage of development of the projects and uncertainties in the economic estimates used in the projections. Upon the acquisition of IPR&D, we complete an assessment of whether our acquisition constitutes the purchase of a single asset or a group of assets. We consider multiple factors in this assessment, including the nature of the technology acquired, the presence or absence of separate cash flows, the development process and stage of completion, quantitative significance and our rationale for entering into the transaction.

If we acquire an asset or group of assets that do not meet the definition of a business under applicable accounting standards, then the acquired IPR&D is expensed on its acquisition date. Future costs to develop these assets are recorded to research and development expense as they are incurred.

We review amounts capitalized as acquired IPR&D for impairment at least annually, as of October 31, and whenever events or changes in circumstances indicate that the carrying value of the assets might not be recoverable. When performing our impairment assessment, we have the option to first assess qualitative factors to determine whether it is necessary to recalculate the fair value of our acquired IPR&D. If we elect this option and believe, as a result of the qualitative assessment, that it is more-likely-than-not that the fair value of our acquired IPR&D is less than its carrying amount, we calculate the fair value using the same methodology as described above. If the carrying value of our acquired IPR&D exceeds its fair value, then the intangible asset is written-down to its fair value. Alternatively, we may elect to not first assess qualitative factors and immediately recalculate the fair value of our acquired IPR&D. No IPR&D impairments were recognized for the years presented.

(s) Accounting for Asset Retirement Obligations

We record the fair value of an asset retirement obligation as a liability in the period in which we incur a legal obligation associated with the retirement of tangible long-lived assets that result from the acquisition, construction, development, and/or normal use of the assets. A legal obligation is a liability that a party is required to settle as a result of an existing or enacted law, statute, ordinance, or contract. We are also required to record a corresponding asset that is depreciated over the life of the asset. Subsequent to the initial measurement of the asset retirement obligation, the obligation will be adjusted at the end of each period to reflect the passage of time (accretion) and changes in the estimated future cash flows underlying the obligation. Changes in the liability due to accretion are charged to the consolidated statement of operations, whereas changes due to the timing or amount of cash flows are an adjustment to the carrying amount of the related asset. Our asset retirement obligations primarily relate to the expiration of our facility lease and anticipated costs to be incurred based on our lease terms.

(t) Long-lived Assets

If required based on certain events and circumstances, recoverability of assets to be held and used, other than goodwill and intangible assets not being amortized, is measured by a comparison of the carrying amount of an asset to the undiscounted future net cash flows expected to be generated by the asset or asset group. If the carrying amount of an asset exceeds its estimated future undiscounted cash flows, an impairment charge is recognized for the amount by which the carrying amount of the asset exceeds the fair value of the asset. Authoritative guidance requires companies to separately report discontinued operations and extends that reporting to a component of an entity that either has been disposed of (by sale, abandonment, or in a distribution to owners) or is classified as held for sale. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell.

(u) Recent Accounting Pronouncements

In May 2014, the FASB ASU No. 2014-09, *Revenue from Contracts with Customers,* ("ASU 2014-09"). ASU 2014-09 amends revenue recognition principles and provides a single set of criteria for revenue recognition among all industries. This new standard provides a five step framework whereby revenue is recognized when promised goods or services are transferred to a customer at an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard also requires enhanced disclosures pertaining to revenue recognition in both interim and annual periods. ASU 2014-09 is effective for interim and annual periods beginning after December 15, 2017. We are currently evaluating the potential impact that ASU 2014-09 may have on our financial position and results of operations.

In August 2014, the FASB issued ASU No. 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*, ("ASU 2014-15"). ASU 2014-15 describes how an entity should assess its ability to meet obligations and sets rules for how this information should be disclosed in the financial statements. The standard provides accounting that will be used along with existing auditing standards. ASU 2014-15 applies to all entities and is effective for the annual period ending after December 15, 2016, and for annual and interim periods thereafter with early adoption permitted. We are currently evaluating the potential impact that ASU 2014-15 may have on our consolidated financial statements and related disclosures.

In April 2015, the FASB issued ASU No. 2015-03, *Interest-Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs,* ("ASU 2015-03"*).* ASU 2015-03 simplifies the presentation of debt issuance costs, as this new standard requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The recognition and measurement guidance for debt issuance costs are not affected by this update. This guidance is effective for annual reporting beginning after December 15, 2015, including interim periods within the year of adoption, and calls for retrospective application, with early application permitted. We adopted ASU 2015-03 with the interim period ended September 30, 2015. During the quarter ended September 30, 2015, in connection with the execution of the Note Purchase Agreement as described in Note 16, the Company incurred approximately $1.5 million in debt issuance costs that are classified as a reduction to long-term debt in our consolidated balance sheet. No debt issuance costs required retrospective application as the result of the adoption of ASU 2015-03. The amortization of the debt issuance costs for the three and year ended December 31, 2015 was not material.

In November 2015, the FASB issued ASU No. 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*, ("ASU 2015-17"). ASU 2015-17 requires entities with a classified balance sheet to present all deferred tax assets and liabilities as noncurrent. ASU 2015-17 is effective for public business entities for interim and annual periods in fiscal years beginning after December 15, 2016. Early adoption is permitted. We early adopted ASU 2015-17 for the year ended December 31, 2015. The adoption of ASU 2015-17 did not have a material impact on our consolidated balance sheets.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* ("ASU 2016-2") which supersedes Topic 840, Leases. ASU2016-02 requires lessees to recognize a right-of-use asset and a lease liability on their balance sheets for all leases with terms greater than twelve months. Based on certain criteria, leases will be classified as either financing or operating, with classification affecting the pattern of expense recognition in the income statement. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election by class of underlying asset not to recognize lease assets and lease liabilities. If a lessee makes this election, it should recognize lease expense for such leases generally on a straight-line basis over the lease term. ASU 2016-2 is effective for fiscal years beginning after December 15, 2018, and interim periods within those years, with early adoption permitted. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The modified retrospective approach includes a number of optional practical expedients primarily focused on leases that commenced before the effective date of Topic 842, including continuing to account for leases that commence before the effective date in accordance with previous guidance, unless the lease is modified. We are evaluating the impact of the adoption of the standard on our consolidated financial statements.

(3) Business Acquisitions

4-Antibody

On January 10, 2014, we entered into a Share Exchange Agreement (the "Share Exchange Agreement") providing for our acquisition of all of the outstanding capital stock of 4-Antibody AG ("4-AB"), from the shareholders of 4-AB (the "4-AB Shareholders"). The transaction closed on February 12, 2014 (the "Closing Date"). In exchange for their shares, the 4-AB Shareholders received an aggregate of 3,334,079 shares of our common stock paid upon closing and valued at $10.1 million. Contingent milestone payments of up to $40.0 million (the "contingent purchase price consideration"), payable in cash or shares of our common stock at our option, are due to the 4-AB Shareholders as follows: (i) $20.0 million upon our market capitalization exceeding $300.0 million for 10 consecutive trading days prior to the earliest of (a) the fifth anniversary of the Closing Date (b) the sale of the 4-AB or (c) the sale of Agenus; (ii) $10.0 million upon our market capitalization exceeding $750.0 million for 30 consecutive trading days prior to the earliest of (a) the tenth anniversary of the Closing Date (b) the sale of 4-AB, or (c) the sale of Agenus, and (iii) $10.0 million upon our market capitalization exceeding $1.0 billion for 30 consecutive trading days prior to the earliest of (a) the tenth anniversary of the Closing Date, (b) the sale of 4-AB, or (c) the sale of Agenus. We assigned an acquisition date fair value of $9.7 million to the contingent purchase price consideration. During January 2015, the first milestone noted above was achieved. This acquisition provided us with the Retrocyte Display technology platform for the rapid discovery and optimization of fully-human and humanized monoclonal antibodies against a wide array of molecular targets and a portfolio of CPM antibodies.

The acquisition of 4-AB was accounted for under the acquisition method of accounting. The purchase price of approximately $19.8 million has been allocated to the tangible and intangible assets acquired and liabilities assumed.

The following table summarizes the purchase price of the 4-AB acquisition, the identified assets acquired and liabilities assumed at the acquisition date (in thousands):

Assets Acquired:		
Cash	$	514
Other current assets		600
Plant and equipment		1,340
In-process research and development		2,100
Patented technology		5,700
Other finite-lived intangible asset		190
Goodwill		16,891
Total assets	$	27,335
Liabilities Assumed:		
Accounts Payable		649
Other current liabilities		2,889
Convertible notes		1,142
Deferred revenue		1,890
Deferred tax liability		420
Other long-term liabilities		522
Total liabilities		7,512
Total purchase price	$	19,823

The fair value of the IPR&D and patented technology was determined using the income approach and the relief from royalty rate method, respectively, using significant inputs, including an 18% discount rate, that are not observable. We consider the fair value of the IPR&D and patented technology to be Level 3 due to the significant estimates and assumptions used by management in establishing the estimated fair values.

All of the convertible notes assumed by us in the acquisition were converted into approximately 383,000 shares of our common stock on May 8, 2014.

The following table summarizes the supplemental statements of operations information on an unaudited pro forma basis as if the 4-AB acquisition had occurred on January 1, 2013 (in thousands except per share data):

	2014	2013
Pro forma revenues	$ 7,183	$ 6,949
Pro forma net loss attributable to common stockholders	(43,282)	(39,065)
Basic and diluted pro forma net loss attributable to common stockholders per share	$ (0.72)	$ (1.18)

The pro forma results presented above are for illustrative purposes only for the periods presented and do not purport to be indicative of the actual results which would have occurred had the transaction been completed as of the beginning of the period, nor are they indicative of results of operations which may occur in the future.

PhosImmune Inc.

On December 23, 2015 (the "PhosImmune Closing Date"), we entered into a Purchase Agreement with PhosImmune Inc., a privately-held Virginia corporation ("PhosImmune"), the securityholders of PhosImmune (the "PhosImmune Securityholders") and Fanelli Haag PLLC, as representative of the PhosImmune Securityholders providing for the acquisition of all outstanding securities of PhosImmune. On the PhosImmune Closing Date, in exchange for their shares, the PhosImmune Securityholders received $2.5 million in cash and an aggregate of 1,631,521 of our common stock paid upon closing and valued at $7.4 million. Contingent milestone payments up to $35.0 million payable in cash and/or stock at our option are due as follows: (i) $5.0 million upon the closing trading price of our common stock equals or exceeds $8.00 for 60 consecutive trading days prior to the earlier of (a) the fifth anniversary of the PhosImmune Closing Date or (b) the sale of Agenus; (ii) $15.0 million if the closing trading price of our common stock equals or exceeds $13.00 for 60 consecutive trading days prior to the earlier of (a) the tenth anniversary of the PhosImmune Closing Date or (b) the sale of Agenus; and (iii) $15.0 million if the closing trading price of our common stock equals or exceeds $19.00 for 60 consecutive trading days prior to the earlier of (a) the tenth anniversary of the PhosImmune Closing Date or (b) the sale of Agenus. We assigned an acquisition date fair value of $2.5 million to the contingent purchase price consideration. This acquisition expands our immuno-oncology pipeline and strengthens our neoantigen capabilities to enable the development of best-in-class cancer vaccines and other novel therapies.

The acquisition of PhosImmune was accounted for under the acquisition method of accounting. The purchase price of approximately $12.4 million has been allocated to the intangible assets acquired; no liabilities were assumed in the transaction.

The following table summarizes the purchase price of the PhosImmune acquisition and the identified assets acquired at the acquisition date (in thousands):

Assets Acquired:		
Non-compete agreements	$	196
Patented and unpatented technology		11,888
Goodwill		4,936
Total assets	$	17,020
Deferred Tax Liability		4,636
Total purchase price	$	12,384

The fair value of the non-compete agreements and patented and unpatented technology was determined using the income approach and the relief from royalty rate method, respectively, using significant inputs, including a 16.9% discount rate, that are not observable.

Antibody Manufacturing Facility

On November 5, 2015, we entered into Asset Purchase Agreement (the "Asset Purchase Agreement") providing for our acquisition of an antibody manufacturing pilot plant and related capabilities from XOMA Corporation ("XOMA"). The transaction closed on December 31, 2015 (the "XOMA Closing Date"). As consideration for the purchased assets, we paid XOMA $4.7 million in cash and issued XOMA 109,211 shares of our common stock valued at $500,000. XOMA is entitled to receive an additional 109,211 shares of our common stock subject to the satisfaction of conditions set forth in the Asset Purchase Agreement. We do not believe it is probable that XOMA will satisfy these conditions and therefore have not ascribed a value to the contingent consideration. The transaction with XOMA provides us with an antibody pilot manufacturing facility enabling the production and manufacture of CPM antibodies under our programs and those of our collaborations.

The acquisition of antibody manufacturing pilot plant and related capabilities was accounted for under the acquisition method of accounting as the acquired assets can be operated as set of integrated assets. The purchase price of approximately $5.2 million has been allocated to the tangible and intangible assets acquired; no liabilities were assumed in the transaction.

The following table summarizes the purchase price of the acquisition and the identified assets acquired at the acquisition date (in thousands):

Total purchase price	$	5,182
Assets Acquired:		
Property, plant and equipment		7,212
Patented technology		250
Favorable Lease		200
Total assets acquired	$	7,662
Deferred tax liability		958
Bargain purchase gain	$	(1,522)

The fair value of the property, plant and equipment acquired was valued using the indirect and direct cost new methodologies.

In accordance with the guidance of ASC 805 *Business Combinations*, when the fair value of the assets acquired exceed the total purchase consideration, a bargain purchase has occurred and the resulting gain is to be recognized in earning as of the date of the transaction. In July 2015, XOMA experienced a set-back in a late-stage clinical trial and as a result of the setback, began the immediate divestiture of their antibody body production capabilities at values less than the prevailing market rates for the assets. For the year ended December 31, 2015, we recorded the gain of approximately $1.5 million on the acquisition of the antibody manufacturing pilot facility and related capabilities in non-operating (expense) income in our consolidated statements of operations and comprehensive loss.

(4) Asset Purchase Agreements

Celexion, LLC

On April 7, 2015 (the "Celexion Closing Date"), we entered into an Asset Purchase Agreement (the "Celexion Purchase Agreement") with Celexion, LLC ("Celexion") and each of the members of Celexion, pursuant to which, we acquired Celexion's SECANT yeast display antibody discovery platform, its full-length IgG antibody library, its technology for the discovery of molecules targeting cell membrane-associated antigens, and certain other related intellectual property assets (collectively, the "Purchased Assets"). As consideration for the Purchased Assets, on the Celexion Closing Date we paid Celexion $1.0 million in cash and issued Celexion 574,140 shares of our common stock valued at approximately $5.23 per share. As additional consideration for the Purchased Assets, we agreed under the Celexion Purchase Agreement to pay to Celexion (i) $1.0 million in cash payable on each of the 9-month and 18-month anniversaries of the Celexion Closing Date and (ii) $4.0 million on each of the 12-month and 24-month anniversaries of the Celexion Closing Date payable at our discretion in cash, shares of our common stock, or any combination thereof. If we elect to pay any of the additional consideration in shares of our common stock, such shares will be issued at a price per share equal to the simple average of the daily closing volume weighted average price over the 20 trading days preceding the date of issuance. We agreed to file one or more registration statements under the Securities Act to cover the resale of all shares issued as consideration under the Celexion Purchase Agreement. In May 2015, we filed a registration statement covering the resale of the 574,140 shares issued to Celexion on the Celexion Closing Date, and the SEC declared the registration statement effective in June 2015. This transaction was accounted for as an asset acquisition in accordance with ASC 805 *Business Combinations*. In accordance with ASC 730 *Research and Development*, the purchase price of approximately $13.2 million was recorded as research and development expense in our consolidated statement of operations and comprehensive loss for the year December 31, 2015 as the IPR&D was deemed to have no future alternative use.

(5) Goodwill and Acquired Intangible Assets

The following table sets forth the changes in the carrying amount of goodwill for year ended December 31, 2015 (in thousands):

Balance, December 31, 2014	$ 17,869
PhosImmune acquisition (Note 3)	4,936
Other	(12)
Balance, December 31, 2015	$ 22,793

Acquired intangible assets consisted of the following at December 31, 2015 and 2014 (in thousands):

	As of December 31, 2015			
	Amortization period (years)	Gross carrying amount	Accumulated amortization	Net carrying amount
Intellectual Property	7-15 years	$ 16,472	$ (542)	$ 15,931
Trademarks	4.5 years	812	(339)	473
Other	2-6 years	567	(107)	460
In-process research and development	Indefinite	1,896	—	1,896
Total		$ 19,747	$ (987)	$ 18,760

	As of December 31, 2014			
	Amortization period (years)	Gross carrying amount	Accumulated amortization	Net carrying amount
Intellectual Property	15 years	$ 4,348	$ (254)	$ 4,094
Trademarks	4.5 years	815	(158)	657
Other	3 years	172	(50)	122
In-process research and development	Indefinite	1,901	—	1,901
Total		$ 7,236	$ (462)	$ 6,774

The weighted average amortization period of our finite-lived intangible assets is approximately 9 years. Amortization expense for the years ended December 31, 2015 and 2014 was $525,000 and $462,000 respectively. No amortization expense was recorded for the year ended December 31, 2013. Amortization expense related to acquired intangibles is estimated at $2.2 million for 2016 and 2017, $2.1 million for 2018, and $1.9 million for each of 2019 and 2020.

The acquired IPR&D asset relates to the six pre-clinical CPM antibody programs acquired in the 4-AB transaction. IPR&D acquired in a business combination is capitalized at fair value until the underlying project is completed and is subject to impairment testing. Once the project is completed, the carrying value of IPR&D is amortized over the estimated useful life of the asset. Post-acquisition research and development expenses related to the acquired IPR&D are expensed as incurred.

(6) Investments

Cash Equivalents and Short-term Investments

Cash equivalents and short-term investments consisted of the following as of December 31, 2015 and 2014 (in thousands):

	December 31, 2015		December 31, 2014	
	Cost	Estimated Fair Value	Cost	Estimated Fair Value
Institutional Money Market Funds	$ 106,370	$ 106,370	$ 25,149	$ 25,149
U.S. Treasury Bills	54,945	54,961	14,508	14,510
Total	$ 161,315	$ 161,331	$ 39,657	$ 39,659

We received proceeds of approximately $14.5 million and $450,000 from the sale of available-for-sale securities for the years ended December 31, 2015 and 2013, respectively. We did not receive proceeds from maturities of available-for-sale securities for the year ended December 31, 2014. No available-for-sale securities were sold before their maturity in 2015. As a result of the short-term nature of our investments, there were minimal unrealized holding gains or losses as of December 31, 2015 and 2014, and none as of December 31, 2013.

Of the investments listed above, $126.4 million and $25.1 million have been classified as cash equivalents on our consolidated balance sheet as of December 31, 2015 and 2014, respectively. Approximately $35.0 million and $14.5 million were classified as short-term investments as of December 31, 2015 and 2014, respectively.

(7) Property, Plant and Equipment

Property, plant and equipment, net as of December 31, 2015 and 2014 consist of the following (in thousands):

	2015	2014	Estimated Depreciable Lives
Land	$ 2,230	$ —	Indefinite
Building and building improvements	2,900	—	35 years
Furniture, Fixtures, and other	2,168	1,930	3 to 10 years
Laboratory and manufacturing equipment	12,241	7,917	4 to 10 years
Leasehold improvements	18,938	18,455	2 to 12 years
Software and computer equipment	6,323	6,065	3 years
	44,800	34,367	
Less accumulated depreciation and amortization	(29,489)	(28,370)	
Total	$ 15,311	$ 5,997	

(8) Income Taxes

We are subject to taxation in the U.S. and various state, local, and foreign jurisdictions. We remain subject to examination by U.S. Federal, state, local, and foreign tax authorities for tax years 2012 through 2015. With a few exceptions, we are no longer subject to U.S. Federal, state, local, and foreign examinations by tax authorities for the tax year 2011 and prior. However, net operating losses from the tax year 2011 and prior would be subject to examination if and when used in a future tax return to offset taxable income. Our policy is to recognize income tax related penalties and interest, if any, in our provision for income taxes and, to the extent applicable, in the corresponding income tax assets and liabilities, including any amounts for uncertain tax positions.

As of December 31, 2015, we had available net operating loss carryforwards of $630.4 million and $128.7 million for Federal and state income tax purposes, respectively, which are available to offset future Federal and state taxable income, if any, and expire between 2018 and 2035. At December 31, 2015, the Company had additional federal and state net operating loss carryforwards of $0.5 million related to excess stock based compensation tax benefits for which the benefit will be recorded to additional paid-in capital when recognized. Our ability to use these net operating losses is limited by change of control provisions under Internal Revenue Code Section 382 and may expire unused. In addition, we have $10.2 million and $14.0 million of Federal and state research and development credits, respectively, available to offset future taxable income. These Federal and state research and development credits expire between 2018 and 2035 and 2017 and 2030, respectively. We also have foreign income tax net operating loss carryforwards of approximately $41.1 million which are available to offset future foreign taxable income, if any, and expire between 2016 and 2022. The potential impacts of such provisions are among the items considered and reflected in management's assessment of our valuation allowance requirements.

The tax effect of temporary differences and net operating loss and tax credit carryforwards that give rise to significant portions of the deferred tax assets and deferred tax liabilities as of December 31, 2015 and 2014 are presented below (in thousands).

	2015	2014
Deferred tax assets:		
U.S. Federal and State net operating loss carryforwards	$ 221,139	$ 192,223
Foreign net operating loss carryforwards	8,412	10,153
Research and development tax credits	19,475	14,393
Share-based compensation	10,339	8,327
Contingent obligations	—	3,370
Other	7,123	6,732
Total deferred tax assets	266,488	235,198
Less: valuation allowance	(260,057)	(234,149)
Net deferred tax assets	6,431	1,049
Deferred tax liabilities	(7,093)	(1,471)
Net deferred tax liability	$ (662)	$ (422)

In assessing the realizablility of deferred tax assets, we consider whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which the net operating loss and tax credit carryforwards can be utilized or the temporary differences become deductible. We consider projected future taxable income and tax planning strategies in making this assessment. In order to fully realize the deferred tax asset, we will need to generate future taxable income sufficient to utilize net operating losses prior to their expiration. Based upon our history of not generating taxable income due to our business activities focused on product development, we believe that it is more likely than not that deferred tax assets will not be realized through future earnings. Accordingly, a valuation allowance has been established for deferred tax assets which will not be offset by the reversal of deferred tax liabilities. The valuation allowance on the deferred tax assets increased by $25.9 million and $21.6 million during the years ended December 31, 2015 and 2014, respectively. The net operating loss includes amounts pertaining to tax deductions relating to stock exercises for which any subsequently recognized tax benefit will be recorded as an increase to additional paid-in capital.

Income tax benefit was $5.4 million for the year ended December 31, 2015 and nil for each of the years ended December 31, 2014 and 2013, respectively. The income tax benefit of $5.4 million for the year ended December 31, 2015 was entirely related to a deferred tax benefit recognized as a result of deferred tax liabilities recorded in connection with our acquisitions of PhosImmune and certain assets from XOMA. Income taxes recorded differed from the amounts computed by applying the U.S. Federal income tax rate of 34% to loss before income taxes as a result of the following (in thousands).

	2015	2014	2013
Computed "expected" Federal tax benefit	$ (31,669)	$ (14,445)	$ (10,225)
(Increase) reduction in income taxes benefit resulting from:			
Change in valuation allowance	25,908	14,043	9,561
Increase due to uncertain tax positions	203	117	102
State and local income benefit, net of Federal income tax benefit	(3,869)	(642)	(1,359)
Net operating loss expirations	—	996	1,778
Foreign rate differential	(314)	726	—
Other, net	4,354	(795)	143
Income tax benefit	$ (5,387)	$ —	$ —

A reconciliation of the beginning and ending amount of gross unrecognized tax benefits is as follows (in thousands):

Balance, December 31, 2014	$	5,778
Increase related to current year provision		203
Decrease related to previously recognized positions		(500)
Balance, December 31, 2015	$	5,481

These unrecognized tax benefits would all impact the effective tax rate if recognized. There are no positions which we anticipate could change within the next twelve months.

(9) Accrued and Other Current Liabilities

Accrued liabilities consist of the following as of December 31, 2015 and 2014 (in thousands):

	December 31, 2015	December 31, 2014
Payroll	$ 4,600	$ 3,134
Professional fees	3,343	1,438
Contract Manufacturing Costs	3,886	—
Other	2,336	930
Total	$ 14,166	$ 5,502

Other current liabilities consisted of the following as of December 31, 2015 and 2014 (in thousands):

	December 31, 2015	December 31, 2014
Current portion of deferred purchase price (Note 4)	$ 5,906	$ —
Other	398	575
Total	$ 6,304	$ 575

(10) Equity

Effective April 24, 2014, our certificate of incorporation was amended to increase the authorized number of shares of our common stock from 70,000,000 to 140,000,000.

In a private placement in September 2003, we sold 31,620 shares of our series A convertible preferred stock, par value $0.01 per share ("Series A Preferred Stock") for net proceeds of $31.6 million. In February 2013, we entered into a Securities Exchange Agreement (the "Exchange Agreement") with the holder of our Series A Preferred Stock pursuant to which the holder exchanged all 31,620 of the outstanding shares of our Series A Preferred Stock for an equivalent number of shares of our Series A-1 Preferred Stock to be issued by us. The terms of the Series A-1 Preferred Stock are materially identical to the Series A Preferred Stock, except that the Series A-1 Preferred Stock accrues a 0.63% annual dividend, as compared to a 2.5% annual dividend for the Series A Preferred Stock. In exchange for this reduction in dividend obligations, we issued to the holder 666,666 shares of our common stock. After giving effect to the transactions contemplated by the Exchange Agreement, no shares of Series A Preferred Stock remain outstanding.

Under the terms and conditions of the Certificate of Designation creating the Series A-1 Preferred Stock, this stock is convertible by the holder at any time into our common stock, is non-voting, has an initial conversion price of $94.86 per common share, subject to adjustment, and is redeemable by us at its face amount ($31.6 million), plus any accrued and unpaid dividends, on or after September 24, 2013. The Certificate of Designation does not contemplate a sinking fund. The Series A-1 Preferred Stock ranks senior to our common stock. In a liquidation, dissolution, or winding up of the Company, the Series A-1 Preferred Stock's liquidation preference must be fully satisfied before any distribution could be made to the holders of the common stock. Other than in such a liquidation, no terms of the Series A-1 Preferred Stock affect our ability to declare or pay dividends on our common stock as long as the Series A-1 Preferred Stock's dividends are accruing. The liquidation value of this Series A-1 Preferred stock is equal to $1,000 per share outstanding plus any accrued unpaid dividends. Dividends in arrears with respect to the Series A-1 Preferred Stock were approximately $595,000 or $18.82 per share, at December 31, 2015, and dividends in arrears with respect to the Series A Preferred Stock were approximately $392,000, or $12.40 per share, at December 31, 2014.

In September 2007, we issued 270,562 shares of our common stock at a price of $18.48 per share to a single institutional investor. In conjunction with this transaction, we also issued to the investor 10,000 shares of our new series B1 convertible preferred stock and 5,250 shares of our new series B2 convertible preferred stock. All shares of the series B1 convertible preferred stock have been converted. Shares of the series B2 convertible preferred stock permit the investor to purchase common shares for consideration of up to 35% of the total dollar amount previously invested pursuant to the agreement with the investor, including conversions of the series B1 convertible preferred stock, at a purchase price equal to the lesser of $24.96 per common share or a price calculated based on the then-prevailing price of our common stock, with such right expiring seven years from the date of issuance. In April 2009, we issued 988,202 shares of our common stock upon conversion of 2,145 shares of our series B2 convertible preferred stock via cashless conversions. Upon completion of the conversions, 3,105 shares of our series B2 convertible preferred stock were still outstanding although no further shares could be converted into shares of common stock (other than in the event of a change of control) as the maximum number of shares (as defined in the agreement) had been issued. The total number of shares of common stock issued or issuable to the holder of the class B convertible preferred stock cannot exceed 19.9% of our outstanding common stock. No dividends are paid on the class B convertible preferred stock and there are no liquidation preferences. On September 7, 2014, all 3,105 shares of our issued and outstanding Series B2 Convertible Preferred Stock remained unconverted and were canceled and extinguished in accordance with the Certificate of Designation.

In January 2008, we entered into a private placement agreement (the "January 2008 private placement") pursuant to which we sold 1,451,450 shares of common stock for $18.00 for each share sold. Investors also received (i) 10-year warrants to purchase, at an exercise price of $18.00 per share, up to 1,451,450 shares of common stock and (ii) unit warrants to purchase, at an exercise price of $18.00 per unit, contingent upon a triggering event as defined in the January 2008 private placement documents, (a) up to 1,451,450 shares of common stock and (b) additional 10-year warrants to purchase, at an exercise price of $18.00 per share, up to 1,451,450 additional shares of common stock. In accordance with the terms of the January 2008 private placement, the 10-year warrants became exercisable for a period of 9.5 years as of July 9, 2008. Our private placement in April 2008 qualified as a triggering event, and therefore the unit warrants became exercisable for a period of eighteen months as of July 9, 2008. The unit warrants expired unexercised in January 2010. In February 2008, we filed a registration statement covering the resale of the 1,451,450 shares of common stock issued and the 1,451,450 shares issuable upon the exercise of the 10-year warrants issued in the January 2008 private placement. The Securities and Exchange Commission (the "SEC") declared the resale registration statement effective on February 14, 2008. In connection with the January 2008 private placement, of the 1,451,450 warrants issued, 284,785 of the warrants were issued to Garo Armen, our CEO.

In April 2008, we entered into a private placement agreement (the "April 2008 private placement") under which we sold (i) 1,166,666 shares of common stock and (ii) five-year warrants to acquire up to 1,166,666 shares of common stock at an exercise price of $22.50 per share, for $18.00 for each share and warrant sold. The warrants became exercisable for a period of 4.5 years as of October 10, 2008. In April 2008, we filed a registration statement covering the resale of the 1,166,666 shares of common stock issued and the 1,166,666 shares issuable upon the exercise of the related warrants issued in the April 2008 private placement. The SEC declared the resale registration statement effective on May 7, 2008. These warrants expired unexercised in April 2013.

In July 2009, we entered into a private placement agreement under which we issued and sold (i) 833,333 shares of our common stock, (ii) six-month warrants to purchase up to 416,666 additional shares of common stock at an exercise price of $12.00 per share, and (iii) four-year warrants to purchase up to 362,316 additional shares of common stock at an exercise price of $13.80 per share, for $12.00 for each share sold generating gross proceeds of $10.0 million. Subsequently, we filed, and the SEC declared effective, a registration statement covering the resale of the 833,333 shares of common stock issued and the 778,982 shares issuable upon the exercise of the related warrants issued in this private placement. The six-month and four-year warrants expired unexercised in January 2010 and October 2013, respectively.

In August 2009, we entered into a private placement agreement under which we issued and sold (i) 730,994 shares of our common stock, (ii) six-month warrants to purchase up to 365,495 additional shares of common stock at an exercise price of $13.86 per share, and (iii) four-year warrants to purchase up to 328,946 additional shares of common stock at an exercise price of $15.00 per share, for $13.68 for each share sold generating gross proceeds of $10.0 million. The warrants were not exercisable for the first six months following the closing, which occurred on August 4, 2009. Subsequently, we filed, and the SEC declared effective, a registration statement covering the resale of the 730,994 shares of our common stock issued and the 694,441 shares issuable upon the exercise of the related warrants issued in this private placement. The six-month warrants expired unexercised in July 2010.

As part of all private placement agreements, we agreed to register the shares of common stock and the shares of common stock underlying the warrants (with the exception of the unit warrants from the January 2008 private placement) issued to the investors with the SEC within contractually specified time periods. As noted above, we filed registration statements covering all required shares.

During 2012, we terminated our then existing At Market Issuance Sales Agreement (the "Old ATM Program") and entered into a new At Market Issuance Sales Agreement with MLV & Co. LLC, ("MLV") as sales agent, under which we may sell from time to time up to five million shares of our common stock (the "2012 ATM Program"). In December 2012, we entered into an Amended and

Restated At Market Sales Issuance Agreement with MLV to increase the number of shares of common stock available for offer and sale under the 2012 ATM Program to an aggregate of ten million shares.

During the years ended December 31, 2014 and 2013, we sold an aggregate of 215,000 and 4.8 million shares of our common stock in at the market offerings under the 2012 ATM Program and received net proceeds of $601,000 and $17.0 million, respectively, after deducting offering costs of approximately $20,000 and $499,000, respectively. These offerings were made under effective shelf registration statements and proceeds from the offerings were used for general corporate purposes.

During September 2013, we sold approximately 3,333,000 shares of our common stock and warrants to purchase 1,000,000 shares of our common stock in a registered direct public offering raising net proceeds of approximately $9.5 million, after deducting offering expenses. The common stock and warrants were sold in units, with each unit consisting of one share of common stock and a warrant to purchase 0.3 of a share of common stock. Subject to certain ownership limitations, the warrants will become exercisable beginning 6 months following issuance and will expire five years from the date they become exercisable, at an exercise price of $3.75 per share. The number of shares issuable upon exercise of the warrants and the exercise price of the warrants are adjustable in the event of stock splits, stock dividends, combinations of shares and similar recapitalization transactions.

In February 2014, we issued and sold 22,236,000 shares of our common stock in a public underwritten offering. Net proceeds after deducting offering expenses were approximately $56.0 million. This offering was made under an effective shelf registration statement and proceeds from the offering are being used for general corporate purposes.

In February 2014, our Board of Directors retired 43,490 shares of our treasury stock then outstanding and returned those shares to authorized and unissued shares of our common stock.

In October 2014, we filed a Registration Statement on Form S-3, declared effective by the SEC on October 23, 2014 (the “2014 Registration Statement”), covering the offering of up to $150.0 million of common stock, preferred stock, warrants, debt securities and units. The 2014 Registration Statement included a prospectus covering the offering, issuance and sale of up to 10 million shares of our common stock from time to time in “at the market offerings” pursuant to an At Market Sales Issuance Agreement entered into with MLV on October 10, 2014. On October 10, 2014, we exercised our right under 2012 ATM Program to terminate the 2012 ATM Program upon effectiveness of the 2014 Registration Statement.

On January 9, 2015, in connection with the execution of the Collaboration Agreement, we also entered into the Stock Purchase Agreement (the “Stock Purchase Agreement”) with Incyte Corporation, pursuant to which Incyte purchased approximately 7.76 million shares of our common stock (the “Shares”) in February 2015 for an aggregate purchase price of $35.0 million, or approximately $4.51 per share. Under the Stock Purchase Agreement, Incyte has agreed not to dispose of any of the Shares for a period of 12 months and we agreed to register the Shares for resale under the Securities Act of 1933, as amended (the "Securities Act").

In connection with the January 2015 achievement of the first contingent milestone, pursuant to the 4-AB Share Exchange Agreement, we issued a total of 80,493 shares of our common stock valued at approximately $345,000 as payment of a portion of our obligation.

In May 2015, we issued and sold 12,650,000 shares of our common stock in an underwritten public offering. Net proceeds after deducting offering expenses were approximately $75.0 million.

In September 2015, in accordance with the terms of the Assignment and Termination Agreement detailed in Note 16, we issued 300,000 shares of our common stock to Ingalls valued at $2.1 million.

(11) Share-based Compensation Plans

Our 1999 Equity Incentive Plan, as amended (the “1999 EIP”) authorized awards of incentive stock options within the meaning of Section 422 of the Internal Revenue Code (the “Code”), non-qualified stock options, nonvested (restricted) stock, and unrestricted stock for up to 2.0 million shares of common stock (subject to adjustment for stock splits and similar capital changes and exclusive of options exchanged at the consummation of mergers) to employees and, in the case of non-qualified stock options, nonvested (restricted) stock, and unrestricted stock, to consultants and directors as defined in the 1999 EIP. The plan terminated on November 15, 2009. On March 12, 2009, our Board of Directors adopted, and on June 10, 2009, our stockholders approved, our 2009 Equity Incentive Plan (the “2009 EIP”). The 2009 EIP, as amended, provides for the grant of incentive stock options intended to qualify under Section 422 of the Code, nonstatutory stock options, restricted stock, unrestricted stock and other equity-based awards, such as stock appreciation rights, phantom stock awards, and restricted stock units, which we refer to collectively as Awards, for up to 14.2 million shares of our common stock (subject to adjustment in the event of stock splits and other similar events). The Board of Directors appointed the Compensation Committee to administer the 1999 EIP and the 2009 EIP. No awards will be granted under the 2009 EIP after June 10, 2019.

On March 12, 2009, our Board of Directors adopted, and on June 10, 2009, our stockholders approved, the 2009 Employee Stock Purchase Plan (the "2009 ESPP") to provide eligible employees the opportunity to acquire our common stock in a program designed to comply with Section 423 of the Code. There are currently 166,666 shares of common stock reserved for issuance under the 2009 ESPP. Rights to purchase common stock under the 2009 ESPP are granted at the discretion of the Compensation Committee, which determines the frequency and duration of individual offerings under the plan and the dates when stock may be purchased. Eligible employees participate voluntarily and may withdraw from any offering at any time before the stock is purchased. Participation terminates automatically upon termination of employment. The purchase price per share of common stock in an offering is 85% of the lesser of its fair value at the beginning of the offering period or on the applicable exercise date and may be paid through payroll deductions, periodic lump sum payments, the delivery of our common stock, or a combination thereof. Unless otherwise permitted by the Board of Directors, no participant may acquire more than 3,333 shares of stock in any offering period. No participant is allowed to purchase shares under the 2009 ESPP if such employee would own or would be deemed to own stock possessing 5% or more of the total combined voting power or value of the Company. No offerings will be made under the 2009 ESPP after June 10, 2019.

Our Director's Deferred Compensation Plan, as amended, permits each outside director to defer all, or a portion of, their cash compensation until their service as a director ends or until a specified date into a cash account or a stock account. There are 325,000 shares of our common stock reserved for issuance under this plan. As of December 31, 2015, 48,971 shares had been issued. Amounts deferred to a cash account will earn interest at the rate paid on one-year Treasury bills with interest added to the account annually. Amounts deferred to a stock account will be converted on a quarterly basis into a number of units representing shares of our common stock equal to the amount of compensation which the participant has elected to defer to the stock account divided by the applicable price for our common stock. The applicable price for our common stock has been defined as the average of the closing price of our common stock for all trading days during the calendar quarter preceding the conversion date as reported by The Nasdaq Capital Market. Pursuant to this plan, a total of 227,063 units, each representing a share of our common stock at a weighted average common stock price of $5.68, had been credited to participants' stock accounts as of December 31, 2015. The compensation charges for this plan were immaterial for all periods presented.

On November 4, 2015, our Board of Directors adopted and approved our 2015 Inducement Equity Plan (the "2015 IEP") in compliance with and in reliance on NASDAQ Listing Rule 5635(c)(4), which exempts inducement grants from the general requirement of the NASDAQ Listing Rules that equity-based compensation plans and arrangements be approved by stockholders. There are 1,500,000 shares of our common stock reserved for issuance under the 2015 IEP.

We use the Black-Scholes option pricing model to value options granted to employees and non-employees, as well as options granted to members of our Board of Directors. All stock option grants have 10-year terms and generally vest ratably over a 3 or 4-year period. The non-cash charge to operations for the non-employee options with vesting or other performance criteria is affected each reporting period, until the non-employee options vest, by changes in the fair value of our common stock.

The fair value of each option granted during the periods was estimated on the date of grant using the following weighted average assumptions:

	2015	2014	2013
Expected volatility	77%	84%	87%
Expected term in years	6	6	6
Risk-free interest rate	1.6%	1.7%	1.5%
Dividend yield	0%	0%	0%

Expected volatility is based exclusively on historical volatility data of our common stock. The expected term of stock options granted is based on historical data and other factors and represents the period of time that stock options are expected to be outstanding prior to exercise. The risk-free interest rate is based on U.S. Treasury strips with maturities that match the expected term on the date of grant.

A summary of option activity for 2015 is presented below:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding at December 31, 2014	6,525,724	$ 4.40		
Granted	2,822,944	5.82		
Exercised	(462,428)	3.82		
Forfeited	(407,032)	3.75		
Expired	(133,373)	9.87		
Outstanding at December 31, 2015	8,345,835	$ 4.77	7.44	$ 5,580,689
Vested or expected to vest at December 31, 2015	7,649,324	$ 4.80	7.28	$ 5,065,702
Exercisable at December 31, 2015	4,436,522	$ 4.97	6.50	$ 2,998,504

The weighted average grant-date fair values of options granted during the years ended December 31, 2015, 2014, and 2013, was $3.55, $1.87, and $2.42, respectively.

The aggregate intrinsic value in the table above represents the difference between our closing stock price on the last trading day of fiscal 2015 and the exercise price, multiplied by the number of in-the-money options that would have been received by the option holders had all option holders exercised their options on December 31, 2015 (the intrinsic value is considered to be zero if the exercise price is greater than the closing stock price). This amount changes based on the fair market value of our stock. The total intrinsic value of options exercised during the years ended December 31, 2015, 2014, and 2013, determined on the dates of exercise, was $1.2 million, $45,000, and $5,000, respectively.

During 2015, 2014, and 2013, all options were granted with exercise prices equal to the market value of the underlying shares of common stock on the grant date other than awards dated February 14, 2014. In February 2014, our Board of Directors approved awards subject to forfeiture in the event shareholder approval was not obtained to increase the shares available under our 2009 EIP. This approval was obtained in April 2014. Accordingly, these awards have a grant date of April 2014 with an exercise price as of the date the Board of Director's approved the awards in February 2014.

As of December 31, 2015, there was $7.2 million of total unrecognized compensation cost related to stock options granted to employees and directors expected to be recognized over a weighted average period of 1.8 years.

As of December 31, 2015, unrecognized expense for options granted to outside advisors for which performance (vesting) has not yet been completed but the exercise price of the option was known was $619,000. Such amount is subject to change each reporting period based upon changes in the fair value of our common stock, expected volatility, and the risk-free interest rate, until the outside advisor completes his or her performance under the option agreement.

Certain employees and consultants have been granted nonvested stock. The fair value of nonvested stock is calculated based on the closing sale price of our common stock on the date of issuance.

A summary of nonvested stock activity for 2015 is presented below:

	Nonvested Shares	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2014	78,828	$ 3.93
Granted	1,747,789	8.64
Vested	(35,332)	3.97
Forfeited	(60,681)	7.91
Outstanding at December 31, 2015	1,730,604	$ 8.55

As of December 31, 2015, there was $14.1 million of unrecognized share-based compensation expense related to these nonvested shares which pertained primarily to performance based awards for which, if all milestones are achieved, will be recognized over a period of 3 years. The total intrinsic value of shares vested during the years ended December 31, 2015, 2014, and 2013, was $140,000, $205,000, and $1.6 million, respectively.

Cash received from option exercises and purchases under our 2009 ESPP for the years ended December 31, 2015, 2014, and 2013, was $2.0 million, $252,000, and $104,000, respectively. We issue new shares upon option exercises, purchases under our 2009 ESPP, vesting of nonvested stock, and under the Director's Deferred Compensation Plan. During the years ended December 31, 2015, 2014, and 2013, 63,539 shares, 46,025 shares, and 26,738 shares, were issued under the 2009 ESPP, respectively. During the years ended December 31, 2015, 2014, and 2013, 35,332 shares, 48,239 shares and 339,800 shares, respectively, were issued as a result of the vesting of nonvested stock.

The impact on our results of operations from share-based compensation for the years ended December 31, 2015, 2014, and 2013, was as follows (in thousands).

	Year Ended		
	2015	2014	2013
Research and development	$ 2,654	$ 1,272	$ 1,147
General and administrative	4,784	3,400	2,981
Total share-based compensation expense	$ 7,438	$ 4,672	$ 4,128

(12) License, Research, and Other Agreements

In May 2001, we entered into a license agreement with the University of Connecticut Health Center ("UConn") which was amended in March 2003 and June 2009. Through the license agreement, we obtained an exclusive license to patent rights resulting from inventions discovered under a research agreement that was effective from February 1998 until December 2006. The term of the license agreement ends when the last of the licensed patents expires (2024) or becomes no longer valid. UConn may terminate the agreement: (1) if, after 30 days written notice for breach, we continue to fail to make any payments due under the license agreement, or (2) we cease to carry on our business related to the patent rights or if we initiate or conduct actions in order to declare bankruptcy. We may terminate the agreement upon 90 days written notice. We are still required to make royalty payments on any obligations created prior to the effective date of termination of the license agreement. Upon expiration or termination of the license agreement due to breach, we have the right to continue to manufacture and sell products covered under the license agreement which are considered to be works in progress for a period of 6 months. The license agreement contains aggregate milestone payments of $1.2 million for each product we develop covered by the licensed patent rights. These milestone payments are contingent upon regulatory filings, regulatory approvals and commercial sales of products. We have also agreed to pay UConn a royalty on the net sales of products covered by the license agreement as well as annual license maintenance fees beginning in May 2006. Royalties otherwise due on the net sales of products covered by the license agreement may be credited against the annual license maintenance fee obligations. As of December 31, 2015, we had paid $745,000 to UConn under the license agreement. The license agreement gives us complete discretion over the commercialization of products covered by the licensed patent rights, but also requires us to use commercially reasonable diligent efforts to introduce commercial products within and outside the United States. If we fail to meet these diligence requirements, UConn may be able to terminate the license agreement.

In March 2003, we entered into an amendment agreement that amended certain provisions of the license agreement with UConn. The amendment agreement granted us a license to additional patent rights. In consideration for execution of the amendment agreement, we agreed to pay UConn an upfront payment and to make future payments for licensed patents or patent applications. Through December 31, 2015, we have paid approximately $100,000 to UConn under the license agreement, as amended.

On December 5, 2014, 4-AB, entered into a license agreement with the Ludwig Institute for Cancer Research Ltd., or Ludwig, which replaced and superseded a prior agreement entered into between the parties in May 2011. Pursuant to the terms of the license agreement, Ludwig granted 4-AB an exclusive, worldwide license under certain intellectual property rights of Ludwig and Memorial Sloan Kettering Cancer Center arising from the prior agreement to further develop and commercialize GITR, OX40 and TIM-3 antibodies. On January 25, 2016, we and 4-AB entered into a second license agreement with Ludwig, on substantially similar terms, to develop CTLA-4 and PD-1 antibodies. Pursuant to the December 2014 license agreement, 4-AB made an upfront payment of $1.0 million to Ludwig. The December 2014 license agreement also obligates 4-AB to make potential milestone payments of up to $20.0 million for events prior to regulatory approval of licensed GITR, OX40 and TIM-3 products, and potential milestone payments in excess of $80.0 million if such licensed products are approved in multiple jurisdictions, in more than one indication, and certain sales milestones are achieved. Under the January 2016 license agreement, we are obligated to make potential milestone payments of up to $12.0 million for events prior to regulatory approval of CTLA-4 and PD-1 licensed products, and potential milestone payments of up to $32.0 million if certain sales milestones are achieved. Under each of these license agreements, we and/or 4-AB will also be obligated to pay low to mid-single digit royalties on all net sales of licensed products during the royalty period, and to pay Ludwig a percentage of any sublicensing income, ranging from a low to mid-double digit percentage depending on various factors. The license agreements may each be terminated as follows: (i) by either party if the other party commits a material, uncured breach; (ii) by either party if the other party initiates bankruptcy, liquidation or similar proceedings; or (iii) by 4-AB or us (as applicable) for convenience upon 90 days' prior written notice. The license agreements also contain customary representations and warranties, mutual indemnification, confidentiality and arbitration provisions.

In connection with the December 2015 acquisition of PhosImmune, we obtained exclusive rights to a portfolio of patent applications and one issued patent relating to phosphopeptide tumor targets (PTTs) under a patent license agreement with the University of Virginia (UVA). The UVA license gives us exclusive rights to develop and commercialize the PTT technology and an exclusive option to license any further PTT technology arising from ongoing research at UVA until December 2018. Under the license agreement, we will pay low to mid-single digit running royalties on net sales of PTT products, and a modest flat percentage of sublicensing income. In addition, we may be obligated to make milestone payments of up to $2.7 million for each indication of a licensed PTT product to complete clinical trials and achieve certain sales thresholds. If we fail to meet certain diligence milestones, we may also be required to pay penalties in excess of $150,000. The term of the UVA license agreement ends when the last of the licensed patents expires or becomes no longer valid. The term of the UVA license agreement ends when the last of the licensed patents expires or becomes no longer valid. The UVA license agreement may be terminated as follows: (i) by UVA in connection with our bankruptcy or cessation of business relating to the licensed technology, (ii) by UVA if we commit a material, uncured breach or (iii) by us for our convenience on 180 days written notice.

We have entered into various agreements with contract manufacturers, institutions, and clinical research organizations (collectively "third party providers") to perform pre-clinical activities and to conduct and monitor our clinical studies. Under these agreements, subject to the enrollment of patients and performance by the applicable third party provider, we have estimated our total payments to be $78.0 million over the term of the studies. For the years ended December 31, 2015, 2014, and 2013, $19.9 million, $895,000, and $2.7 million, respectively, have been expensed in the accompanying consolidated statements of operations related to these third party providers. Through December 31, 2015, we have expensed $71.3 million as research and development expenses and $65.0 million of this estimate has been paid. The timing of expense recognition and future payments related to these agreements is subject to the enrollment of patients and performance by the applicable third party provider.

We have various comprehensive agreements with collaborative partners that allow for the use of QS-21 Stimulon, an investigational adjuvant used in numerous vaccines under development for a variety of diseases including, but not limited to, hepatitis, HIV, influenza, cancer, Alzheimer's disease, malaria, and tuberculosis. These agreements grant exclusive worldwide rights in some fields of use, and co-exclusive or non-exclusive rights in others. The agreements call for royalties to be paid to us by the collaborative partner on the future sales of licensed vaccines that include QS-21 Stimulon.

In July 2006, we entered into a license agreement and a supply agreement with GlaxoSmithKline ("GSK") for the use of QS-21 Stimulon (the "GSK License Agreement" and the "GSK Supply Agreement", respectively). In January 2009, we entered into an Amended and Restated Manufacturing Technology Transfer and Supply Agreement (the "Amended GSK Supply Agreement") under which GSK has the right to manufacture all of its requirements of commercial grade QS-21 Stimulon. GSK is obligated to supply us (or our affiliates, licensees, or customers) certain quantities of commercial grade QS-21 Stimulon for a stated period of time. In March 2012 we entered into a First Right to Negotiate and Amendment Agreement amending the GSK License Agreement and the Amended GSK Supply Agreement to clarify and include additional rights for the use of QS-21 Stimulon (the "GSK First Right to Negotiate Agreement"). In addition, we granted GSK the first right to negotiate for the purchase of the Company or certain of our assets. The first right to negotiate will expire after five years. As consideration for entering into the GSK First Right to Negotiate Agreement, GSK paid us an upfront, non-refundable payment of $9.0 million, $2.5 million of which is creditable toward future royalty payments. We sometimes refer to the GSK License Agreement, the Amended GSK Supply Agreement and the GSK First Right to Negotiate Agreement, the "GSK Agreements". As of December 31, 2015, we had received $23.3 million of a potential $24.3 million in upfront and milestone payments related to the GSK Agreements. We are generally entitled to receive 2% royalties on net sales of prophylactic vaccines for a period of 10 years after the first commercial sale of a resulting GSK product, with some exceptions. The GSK License and Amended GSK Supply Agreements may be terminated by either party upon a material breach if the breach is not cured within the time specified in the respective agreement. The termination or expiration of the GSK License Agreement does not relieve either party from any obligation which accrued prior to the termination or expiration. Among other provisions, the milestone payment obligations survive termination or expiration of the GSK Agreements for any reason, and the license rights granted to GSK survive expiration of the GSK License Agreement. The license rights and payment obligations of GSK under the Amended GSK Supply Agreement survive termination or expiration, except that GSK's license rights and future royalty obligations do not survive if we terminate due to GSK's material breach unless we elect otherwise.

For the years ended December 31, 2014, and 2013, we recognized revenue of $3.3 million, and $1.3 million, respectively, related to payments received under our GSK License and Amended GSK Supply Agreements. For the year ended December 31, 2015, no revenue was recognized under our GSK License and Amended GSK Supply Agreements. Deferred revenue of $2.5 million related to the GSK Agreements is included in deferred revenue on our consolidated balance sheet as of December 31, 2015.

(13) Collaboration Agreement

Incyte Corporation-

On January 9, 2015 and effective February 19, 2015, we entered into a global license, development and commercialization agreement (the "Collaboration Agreement") with Incyte Corporation pursuant to which the parties plan to develop and commercialize novel immuno-therapeutics using our antibody discovery platforms. The Collaboration Agreement was initially focused on four checkpoint modulator programs directed at GITR, OX40, LAG-3 and TIM-3. In addition to the four identified antibody programs, the parties have an option to jointly nominate and pursue the development and commercialization of antibodies against additional targets during a five year discovery period which, upon mutual agreement of the parties for no additional consideration, can be extended for an additional three years. In November 2015, we and Incyte jointly nominated and agreed to pursue the development and commercialization of three additional undisclosed CPM targets.

On January 9, 2015 we also entered into the Stock Purchase Agreement with Incyte Corporation whereby, for an aggregate purchase price of $35.0 million, Incyte purchased approximately 7.76 million shares of our common stock; see Note 10 for more details.

Agreement Structure

Under the terms of the Collaboration Agreement, we received non-creditable, nonrefundable upfront payments totaling $25.0 million. In addition, the parties will share all costs and profits for the GITR, OX40 and two of the additional antibody programs on a 50:50 basis (profit-share products), and we are eligible to receive up to $20.0 million in future contingent development milestones under these programs. Incyte is obligated to reimburse us for all development costs that we incur in connection with the TIM-3, LAG-3 and one of the additional antibody programs (royalty-bearing products) and we are eligible to receive (i) up to $155.0 million in future contingent development, regulatory, and commercialization milestone payments and (ii) tiered royalties on global net sales at rates generally ranging from 6% to 12%. For each royalty-bearing product, we will also have the right to elect to co-fund 30% of development costs incurred following initiation of pivotal clinical trials in return for an increase in royalty rates. Additionally, we retain co-promotion participation rights in the United States on any profit-share product. Through the direction of a joint steering committee, the parties anticipate that, for each program, we will serve as the lead for pre-clinical development activities through investigational new drug application filing, and Incyte will serve as the lead for clinical development activities. The parties expect to initiate the first clinical trials of antibodies arising from these programs in 2016. For each additional program beyond GITR, OX40, TIM-3 and LAG-3 that the parties elect to bring into the collaboration, we will have the option to designate it as a profit-share product or a royalty-bearing product.

The Collaboration Agreement will continue as long as (i) any product is being developed or commercialized or (ii) the discovery period remains in effect. After the first anniversary of the effective date of the Collaboration Agreement, Incyte may terminate the Collaboration Agreement or any individual program for convenience upon 12 months' notice. The Collaboration Agreement may also be terminated by either party upon the occurrence of an uncured material breach of the other party or by us if Incyte challenges patent rights controlled by us. In addition, either party may terminate the Collaboration Agreement as to any program if the other party is acquired and the acquiring party controls a competing program.

Collaboration Revenue

For the year ended December 31, 2015 we recognized revenue of approximately $23.5 million under the Collaboration Agreement, of which, $9.1 million is related to the amortization of the $25.0 million non-creditable, nonrefundable upfront payment. No revenue was recognized under the Collaboration Agreement for the years ended December 31, 2014 and 2013. As of December 31, 2015, we had deferred revenue remaining under the Collaboration Agreement of approximately $15.8 million, of which approximately $3.6 million and $12.2 million are classified as current and long-term, respectively, on our consolidated balance sheet.

(14) Certain Related Party Transactions

Effective February 12, 2014, in connection with our acquisition of the capital stock of 4-Antibody and pursuant to the Share Exchange Agreement, our Board of Directors elected Shahzad Malik, M.D. as a director. Dr. Malik is a General Partner of Advent Venture Partners LLP ("Advent"). Advent, through its affiliated entities, was 4-AB largest shareholder prior to the completion of the acquisition. Upon completion of the acquisition, Advent and its affiliates received 996,088 shares of our common stock, having a value of approximately $3.0 million. In connection with the achievement of the first milestone in January 2015 under the Share Exchange Agreement, Advent and its affiliates received consideration of approximately $6.2 million. The above listed consideration was received by Advent and its affiliated entities, not Dr. Malik in his individual capacity.

In May 2015, we issued and sold 12,650,000 shares of our common stock in an underwritten public offering for net proceeds of approximately $75.0 million. Of the 12,650,000 shares of our common stock issued and sold, 1,587,302 of these shares of common stock were issued and sold to Advent.

(15) Leases

We lease manufacturing, research and development, and office facilities under various lease arrangements. Rent expense (before sublease income) was $2.3 million, $2.1 million, and $1.6 million, for the years ended December 31, 2015, 2014, and 2013, respectively.

We lease a facility in Lexington, Massachusetts for our manufacturing, research and development, and corporate offices. During December 2012 we entered into a commercial lease for approximately 5,600 square feet of office space in New York, New York for use as corporate offices. Through our acquisition of 4-AB, we lease facilities in Jena, Germany and Basel, Switzerland for 4-AB's manufacturing, research and development and corporate offices.

In December 2015, in connection with the XOMA antibody manufacturing facility asset acquisition, we executed lease agreements in Berkeley, California for manufacturing and corporate offices. In December 2015, we additionally executed a lease for research and development, and corporate offices in Cambridge, United Kingdom.

The future minimum rental payments under our lease agreements, which expire at various times between 2016 and 2023, are as follows (in thousands).

Year ending December 31,		
2016	$	3,315
2017		3,296
2018		3,171
2019		3,040
2020		2,566
Thereafter		7,893
Total	$	23,281

In connection with the Lexington facility, we maintain a fully collateralized letter of credit of $1.0 million. No amounts had been drawn on the letter of credit as of December 31, 2015. In addition, for our properties, we are required to have an aggregate deposit of $270,000 with the landlords as interest-bearing security deposits pursuant to our obligation under the leases.

We sublet a portion of our facilities and received rental payments of $780,000, $365,000, and $481,000 for the years ended December 31, 2015, 2014, and 2013, respectively. We are contractually entitled to receive rental payments of $644,000 in 2016.

(16) Debt

Debt obligations consisted of the following as of December 31, 2015 and 2014 (in thousands):

Debt instrument	Principal at December 31, 2015	Non-cash Interest	Unamortized Debt Issuance Costs	Unamortized Debt Discount	Balance at December 31, 2015
Current Portion:					
Debentures	$ 146	$ —	$ —	$ —	$ 146
Long-term Portion:					
2015 Subordinated Notes	14,000	—	—	(2,292)	11,708
Note Purchase Agreement	100,000	4,342	(1,481)	(243)	102,619
Total long-term	$ 114,000	$ 4,342	$ (1,481)	$ (2,535)	$ 114,326
Total	$ 114,146	$ 4,342	$ (1,481)	$ (2,535)	$ 114,473

Debt instrument	Principal at December 31, 2014	Non-cash Interest	Unamortized Debt Issuance Costs	Unamortized Debt Discount	Balance at December 31, 2014
Current Portion:					
Debentures	$ 146	$ —	$ —	$ —	$ 146
SVB Loan	1,111	—	—	—	1,111
Total current	$ 1,257	$ —	$ —	$ —	$ 1,257
Long-term Portion:					
2013 Notes	5,000	—	—	(231)	4,769
Total	$ 6,257	$ —	$ —	$ (231)	$ 6,026

Subordinated Notes

On February 20, 2015, we, certain existing investors and certain additional investors entered into an Amended and Restated Note Purchase Agreement, pursuant to which we (i) canceled our senior subordinated promissory notes issued in April 2013 (the "2013 Notes") in exchange for new senior subordinated promissory notes (the "2015 Subordinated Notes") in the aggregate principal amount of $5.0 million, (ii) issued additional 2015 Subordinated Notes in the aggregate principal amount of $9.0 million and (iii) issued five year warrants to purchase 1,400,000 shares of our common stock at an exercise price of $5.10 per share.

The 2015 Subordinated Notes bear interest at a rate of 8% per annum, payable in cash on the first day of each month in arrears. Among other default and acceleration terms customary for indebtedness of this type, the 2015 Subordinated Notes include default provisions which allow for the noteholders to accelerate the principal payment of the 2015 Subordinated Notes in the event we become involved in certain bankruptcy proceedings, become insolvent, fail to make a payment of principal or (after a grace period) interest on the 2015 Subordinated Notes, default on other indebtedness with an aggregate principal balance of $13.5 million or more if such default has the effect of accelerating the maturity of such indebtedness, or become subject to a legal judgment or similar order for the payment of money in an amount greater than $13.5 million if such amount will not be covered by third-party insurance. The 2015 Subordinated Notes are not convertible into shares of our common stock and will mature on February 20, 2018, at which point we must repay the outstanding balance in cash. The Company may prepay the 2015 Subordinated Notes at any time, in part or in full, without premium or penalty.

The exchange of the 2013 Notes for the 2015 Subordinated Notes was accounted for as a debt extinguishment under the guidance of ASC 470 *Debt*. For the year ended December 31, 2015 we recorded a loss on debt extinguishment of approximately $154,000 in non-operating (expense) income in our consolidated statements of operations and comprehensive loss. The debt discount of approximately $3.0 million, which relates to the warrants issued in connection with the 2015 Subordinated Notes, is being amortized using the effective interest method over three years, the expected life of the 2015 Subordinated Notes.

Note Purchase Agreement Related to Future Royalties

On September 4, 2015, we and our wholly-owned subsidiaries, Antigenics LLC ("Antigenics") and Aronex Pharmaceuticals, Inc. ("Aronex"), entered into a Note Purchase Agreement (the "NPA") with Oberland Capital SA Zermatt LLC, as collateral agent ("Oberland"), an affiliate of Oberland as the lead purchaser and other purchasers. Pursuant to the terms of the NPA, on September 8, 2015 (the "Closing Date"), Antigenics issued $100.0 million aggregate principal amount of limited recourse notes (the "Notes") to the purchasers. Antigenics has the option to issue an additional $15.0 million aggregate principal amount of Notes (the "Additional Notes") to the purchasers within 15 days after approval of GSK's shingles vaccine, HZ/su, by the Food and Drug Administration, provided such approval occurs on or before June 30, 2018.

The Notes accrue interest at a rate of 13.5% per annum, compounded quarterly, from and after the Closing Date computed on the basis of a 360-day year and the actual number of days elapsed. Principal and interest payments are due on each of March 15, June 15, September 15 and December 15, and shall be made solely from the royalties paid from GSK to Antigenics on sales of GSK's shingles and malaria vaccines. The Notes are limited recourse and secured solely by a first priority security interest in the royalties and accounts and payment intangibles relating thereto plus various rights of Antigenics related to the royalties under its contracts with GSK (the "Collateral"). GSK will send all royalty payments to a segregated bank account, and to the extent there are insufficient royalties deposited into the account to fund a quarterly interest payment, the interest will be capitalized and added to the aggregate principal balance of the loan. As of December 31, 2015 we have capitalized $4.3 million. The final legal maturity date of the Notes is the earlier of (i) the 10th anniversary of the first commercial sale of GSK's shingles or malaria vaccines and (ii) September 8, 2030 (the "Maturity Date"). Antigenics' obligation to repay all principal and accrued and unpaid interest by the Maturity Date is secured only by the Collateral.

At our option, we may redeem all, but not less than all, of the Notes at any time prior to the Maturity Date. The redemption price is equal to the outstanding principal amount of the Notes, plus all accrued and unpaid interest thereon, plus a premium payment that would yield an aggregate internal rate of return ("IRR") for the purchasers as follows: (i) an IRR of 20% if the redemption occurs within 24 months of the Closing Date, (ii) an IRR of 17.5% if the redemption occurs after 24 months but within 48 months of the Closing Date, and (iii) an IRR of 15% if the redemption occurs more than 48 months after the Closing Date (the "Redemption Payment").

On September 8, 2018, each purchaser has the option to require Antigenics to repurchase up to 15% of the Notes issued to such purchaser on the Closing Date (the "Put Notes") at a purchase price equal to the principal amount thereof plus accrued and unpaid interest thereon (the "Put Payment"). Antigenics is required to complete any such repurchase within 90 days after September 8, 2018.

On the earlier of (i) September 8, 2027 and (ii) the Maturity Date, Antigenics is required to pay the purchasers an amount equal to the following (the "Make-Whole Payment"): $100.0 million (or $115.0 million if the Additional Notes are sold) minus the aggregate amount of all payments made in respect of the Notes (regardless of whether characterized as principal or interest at the time of payment), including the original principal amount of any repaid Put Notes.

The NPA specifies a number of events of default (some of which are subject to applicable cure periods), including (i) failure to cause royalty payments to be deposited into the segregated bank account, (ii) payment defaults, (iii) breaches of representations and warranties made at the time the Notes were issued, (iv) covenant defaults, (v) a final and unappealable judgment against Antigenics for the payment of money in excess of $1.0 million, (vi) bankruptcy or insolvency defaults, (vii) the failure to maintain a first-priority perfected security interest in the Collateral in favor of the collateral agent and (viii) the occurrence of a change of control of Agenus. Upon the occurrence of an event of default, subject to cure periods in certain circumstance and some limited exceptions, Oberland may declare the Notes immediately due and payable, in which case Antigenics would owe a payment equal to the Redemption Payment (the "Accelerated Default Payment"). Upon the occurrence and during the continuance of any event of default, interest on the Notes also increases by 2.5% per annum.

Agenus and Aronex (together, the "Guarantors"), are parties to the NPA as guarantors of certain of Antigenics' obligations under the NPA. The Guarantors generally guarantee the Put Payment, the Make-Whole Payment, the Redemption Payment and the Accelerated Default Payment.

In accordance with the guidance of ASC 470 *Debt*, we determined the NPA represents a debt transaction and does not purport to be a sale; the balance of the outstanding notes and interest will be repaid over the estimated term of the NPA.

We will periodically assess the expected royalties using a combination of historical results, internal projections and forecasts from external sources. To the extent such payments are greater or less than our initial estimates or the timing of such payments is materially different than our original estimates, we will prospectively adjust the estimated time period over which the debt and interest will be repaid. There are a number of factors that could materially affect the amount and timing of royalty payments from GSK, all of which are not within our control. Such factors include, but are not limited to, changing standards of care, the introduction of competing products, manufacturing or other delays, biosimilar competition, patent protection, adverse events that result in governmental health authority imposed restrictions on the use of the drug products, significant changes in foreign exchange rates, and other events or circumstances that could result in reduced royalty payments from GSK, all of which would result in a reduction of royalty revenues and the interest expense over the life of the NPA.

As royalties are remitted to the purchasers, we will record non-cash royalty revenues and non-cash interest expense within our consolidated statements of operations and comprehensive loss over the term of the NPA as interest accrues and royalties are generated. We did not recognize any royalty revenue and recorded $4.3 million in non-cash interest expense for the year ended December 31, 2015 within our consolidated statement of operations and comprehensive loss.

In connection with the execution of the NPA, we reimbursed the purchasers for legal fees of $250,000 and incurred debt issuance costs of approximately $1.5 million. Under the relevant accounting guidance, legal fees and debt issuance costs have been recorded as a reduction to the gross proceeds. These amounts are being amortized over 12 years, the expected term of the Notes, using the effective interest rate method.

Other

In April 2015, we made our final payment under our $5.0 million Loan and Security Agreement with Silicon Valley Bank (the "SVB Loan") in accordance with the terms of the SVB Loan. We have no further outstanding indebtedness or obligations under the SVB Loan.

At December 31, 2015, approximately $146,000 of debentures we assumed in our merger with Aquila Biopharmaceuticals are outstanding. These debentures carry interest at 7% and are callable by the holders. Accordingly they are classified as part of our long-term debt.

Revenue Interest Assignment Termination

On April 15, 2013, we and Antigenics entered into a Revenue Interests Assignment Agreement (the "Original Agreement") with Ingalls & Snyder Value Partners, L.P. and Arthur Koenig (together, "Ingalls"), pursuant to which we and Antigenics sold to Ingalls 20% of all the royalties Antigenics was entitled to receive from GSK and Janssen Sciences Ireland Uc on products associated with Agenus's QS-21 Stimulon (collectively, the "Assigned Interests").

On September 4, 2015, we and Antigenics entered into a Revenue Interest Assignment and Termination Agreement (the "Assignment and Termination Agreement") with Ingalls, pursuant to which we terminated the Original Agreement and repurchased the Assigned Interests in exchange for (i) $20.0 million in cash and (ii) 300,000 shares of Agenus common stock for total consideration of approximately $22.1 million. The closing under the Assignment and Termination Agreement took place on September 8, 2015 immediately prior to the closing under the NPA. Effective September 8, 2015, we have no further obligations under the Original Agreement.

For the year ended December 31, 2015 we recorded a fair value adjustment of approximately $6.9 million recorded within non-operating (expense) income in our consolidated statement of operations and comprehensive loss.

(17) Fair Value Measurements

We measure our cash equivalents and short-term investments, contingent purchase price considerations and in the past, our contingent royalty obligation, at fair value. Our cash equivalents and short-term investments are comprised solely of U.S. Treasury Bills that are valued using quoted market prices with no valuation adjustments applied. Accordingly, these securities are categorized as Level 1 assets.

We measure our contingent purchase price consideration at fair value. The fair values of our 4-AB and PhosImmune contingent purchase price consideration, $3.1 million and $2.5 million, respectively, are based on significant inputs not observable in the market, which require them to be reported as Level 3 liabilities within the fair value hierarchy. The valuation of the liabilities uses assumptions we believe would be made by a market participant. The fair value of our 4-AB and PhosImmune contingent purchase price consideration is based on estimates from a Monte Carlo simulation of our market capitalization and share price, respectively, and other factors impacting the probability of triggering the milestone payments. Market capitalization and share price were evolved using a geometric brownian motion, calculated daily for the life of the contingent purchase price consideration.

We completed the valuation analysis for the contingent royalty obligation using discounted cash flow based on the sum of the economic income that an asset is anticipated to produce in the future. In this case, that asset was the potential royalty income to be paid to us as a result of certain license agreements for QS-21 Stimulon. The fair value of the contingent royalty obligation was estimated by applying a risk adjusted discount rate (10.2%) to the probability adjusted royalty revenue stream based on expected approval dates. These fair value estimates were most sensitive to changes in the probability of regulatory approvals.

Assets and liabilities measured at fair value are summarized below (in thousands):

Description	December 31, 2015	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash equivalents	$ 19,996	$ 19,996	$ —	$ —
Short-term investments	34,965	34,965	—	—
Total	$ 54,961	$ 54,961	$ —	$ —
Liabilities:				
Contingent purchase price consideration	5,608	—	—	5,608

Description	December 31, 2014	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Short-term investments	$ 14,510	$ 14,510	$ —	$ —
Liabilities:				
Contingent royalty obligation	15,279	—	—	15,279
Contingent purchase price consideration	16,420	—	—	16,420
Total	$ 31,699	$ —	$ —	$ 31,699

The following table presents our liabilities measured at fair value using significant unobservable inputs (Level 3), as of December 31, 2015 (amounts in thousands):

Balance, December 31, 2014	$ 31,699
PhosImmune Inc. contingent purchase price consideration (Note 3)	2,484
Change in fair value of contingent royalty obligation during the period	6,863
Change in fair value of contingent purchase price consideration during the period	6,704
Payment of contingent purchase price milestone	(20,000)
Settlement of contingent royalty obligation	(22,142)
Balance, December 31, 2015	$ 5,608

The change in fair value of the contingent royalty obligation liability is included in non-operating (expense) income in our consolidated statement of operations and comprehensive loss for the year ended December 31, 2015. There were no changes in the valuation techniques during the period and there were no transfers into or out of Levels 1 and 2.

On January 23, 2015, we achieved the first contingent milestone pursuant to the terms of our Share Exchange Agreement dated January 10, 2014, by and among us, 4-AB, the former shareholders of 4-AB and Vischer AG, as Representative (the "Share Exchange Agreement"), and accordingly we paid $20.0 million.

As outlined in Note 16, we settled our contingent royalty obligation owed to Ingalls for consideration of $22.1 million as of the transaction date, which we concluded approximated its fair value.

The fair value of our outstanding debt balance at December 31, 2015 and 2014 was $115.9 million and $6.1 million, respectively, based on the Level 2 valuation hierarchy of the fair value measurements standard using a present value methodology which was derived by evaluating the nature and terms of each note and considering the prevailing economic and market conditions at the balance sheet date. The principal amount of our outstanding debt balance at December 31, 2015 and 2014 was $114.1 million and $6.3 million, respectively.

In connection with the acquisition of 4-AB, we assumed convertible notes which upon a change of control of 4-AB had the ability to convert into shares of our common stock. All of the convertible notes assumed in connection with the acquisition of 4-AB were converted into approximately 383,000 shares of our common stock on May 8, 2014. We elected to account for these convertible notes using fair value as a Level 1 liability. The fair value of our convertible notes on the date of settlement was approximately $954,000.

(18) Contingencies

We may currently be, or may become, a party to legal proceedings. While we currently believe that the ultimate outcome of any of these proceedings will not have a material adverse effect on our financial position, results of operations, or liquidity, litigation is subject to inherent uncertainty. Furthermore, litigation consumes both cash and management attention.

(19) Benefit Plans

We sponsor a defined contribution 401(k) savings plan for all eligible employees, as defined in the savings plan. Participants may contribute up to 60% of their compensation, as defined in the savings plan, with a maximum annual contribution of $18,000 for individuals under 50 years old and $24,000 for individuals 50 years old and older in 2015. Each participant is fully vested in his or her contributions and related earnings and losses. In 2015, we made discretionary contributions of $307,000; no discretionary contributions or expense was recorded for the years ended December 31, 2014 and 2013. For the year ended December 31, 2015, we expensed $307,000 related to the discretionary contribution. No expense was recorded for the years ended December 31, 2014 and 2013.

We also have a multiple employer benefit plan that covers all of our international employees. The annual measurement date for this plan is December 31. Benefits are based upon years of service and compensation. We are required to recognize the funded status (the difference between the fair value of plan assets and the projected benefit obligations) of our multiple employer plan in our consolidated balance sheets which amounted to a liability of approximately $944,000 with a corresponding adjustment to accumulated other comprehensive loss, of $245,000 for the year ended December 31, 2015. During the year ended December 31, 2015 we contributed approximately $119,000 to our international benefit plan and we expect to contribute approximately $147,000 to that plan during 2016. As of December 31, 2015, the benefits expected to be paid under this plan in the next five years and in the aggregate for the five years thereafter are as follows, $110,000 in 2016, $103,000 in 2017, $98,000 in 2018, $93,000 in 2019, $89,000 in 2020 and $407,000 for the years 2021-2025.

(20) Geographic Information

The following is geographical information regarding our revenues for the years ended December 31, 2015, 2014 and 2013 and our long-lived assets as of December 31, 2015 and 2014 (in thousands):

	2015	2014	2013
Revenue:			
United States	$ 23,668	$ 3,664	$ 3,045
Europe	1,149	3,313	—
	$ 24,817	$ 6,977	$ 3,045

Revenue by geographic region is allocated based on the domicile of our respective business operations.

	2015	2014
Long-lived Assets:		
United States	$ 14,434	$ 5,111
Europe	2,147	2,102
Total	$ 16,581	$ 7,213

Long-lived assets include “Property, plant and equipment, net” and “Other long-term assets” from the consolidated balance sheets, by the geographic location where the asset resides.

(21) Quarterly Financial Data (Unaudited)

	Quarter Ended			
	March 31,	June 30,	September 30,	December 31,
2015				
Revenue	$ 3,953	$ 6,377	$ 6,848	$ 7,639
Net loss	(18,741)	(40,410)	(13,122)	(15,607)
Net loss attributable to common shareholders	(18,792)	(40,461)	(13,173)	(15,658)
Per common share, basic and diluted:				
Basic and diluted net loss attributable to common stockholders	(0.28)	(0.53)	(0.16)	(0.18)
2014				
Revenue	$ 721	$ 3,074	$ 1,563	$ 1,619
Net loss	(357)	(8,042)	(8,109)	(25,978)
Net loss attributable to common shareholders	(409)	(8,091)	(8,161)	(26,029)
Per common share, basic and diluted:				
Basic and diluted net loss attributable to common stockholders	$ (0.01)	$ (0.13)	$ (0.13)	$ (0.41)

Net loss attributable to common stockholders per share is calculated independently for each of the quarters presented. Therefore, the sum of the quarterly net loss per share amounts will not necessarily equal the total for the full fiscal year.

Item 9. ***Changes in and Disagreements With Accountants on Accounting and Financial Disclosure***

Not applicable.

Item 9A. ***Controls and Procedures***

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and Principal Financial Officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Exchange Act. Based on this evaluation, our Chief Executive Officer and our Principal Financial Officer concluded that our disclosure controls and procedures were functioning effectively as of the end of the period covered by this Annual Report on Form 10-K to provide reasonable assurance that the Company can meet its disclosure obligations.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Principal Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control —Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2015.

KPMG LLP, our independent registered public accounting firm, has issued their report, included herein, on the effectiveness of our internal control over financial reporting.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the fourth quarter 2015 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders

Agenus Inc.:

We have audited Agenus Inc. and subsidiaries' internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Agenus Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Annual Report on Internal Control Over Financial Reporting*. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit 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 effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Agenus Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Agenus Inc. and subsidiaries as of December 31, 2015 and 2014, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2015, and our report dated March 15, 2016 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Boston, Massachusetts
March 15, 2016

Item 9B. ***Other Information***

None.

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance***

Information regarding our executive officers is incorporated herein by reference to the information contained in Part I of this Annual Report on Form 10-K under the heading "Executive Officers of the Registrant." The balance of the information required by this Item is incorporated herein by reference to the information that will be contained in our proxy statement related to the 2016 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

Item 11. ***Executive Compensation***

The information required by this Item is incorporated herein by reference to the information that will be contained in our proxy statement related to the 2016 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

The information required by this Item is incorporated herein by reference to the information that will be contained in our proxy statement related to the 2016 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence***

The information required by this Item is incorporated herein by reference to the information that will be contained in our proxy statement related to the 2016 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

Item 14. ***Principal Accounting Fees and Services***

The information required by this Item is incorporated herein by reference to the information that will be contained in our proxy statement related to the 2016 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

PART IV

Item 15. ***Exhibits and Financial Statement Schedules***

(a) 1. *Consolidated Financial Statements*

The consolidated financial statements are listed under Item 8 of this Annual Report on Form 10-K.

2. *Financial Statement Schedules*

The financial statement schedules required under this Item and Item 8 are omitted because they are not applicable or the required information is shown in the consolidated financial statements or the footnotes thereto.

3. *Exhibits*

The exhibits are listed below under Part IV Item 15(b).

(b) Exhibits

Exhibit Index

Exhibit No.	Description
3.1	Amended and Restated Certificate of Incorporation of Antigenics Inc. Filed as Exhibit 3.1 to our Current Report on Form 8-K (File No. 0-29089) filed on June 10, 2002 and incorporated herein by reference.
3.1.1	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Antigenics Inc. Filed as Exhibit 3.1 to our Current Report on Form 8-K (File No. 0-29089) filed on June 11, 2007 and incorporated herein by reference.
3.1.2	Certificate of Ownership and Merger changing the name of the corporation to Agenus Inc. Filed as Exhibit 3.1 to our Current Report on Form 8-K (File No. 0-29089) filed on January 6, 2011 and incorporated herein by reference.
3.1.3	Certificate of Second Amendment to the Amended and Restated Certificate of Incorporation of Agenus Inc. Filed as Exhibit 3.1 to our Current Report on Form 8-K (File No. 0-29089) filed on September 30, 2011 and incorporated herein by reference.
3.1.4	Certificate of Third Amendment to the Amended and Restated Certificate of Incorporation of Agenus Inc. Filed as Exhibit 3.1.4 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended June 30, 2012 and incorporated herein by reference.
3.1.5	Certificate of Fourth Amendment to the Amended and Restated Certificate of Incorporation of Agenus Inc. Filed as Exhibit 3.1 to our Current Report on Form 8-K (File No. 0-29089) filed on April 25, 2014 and incorporated herein by reference.
3.2	Fifth Amended and Restated By-laws of Agenus Inc. Filed as Exhibit 3.2 to our Current Report on Form 8-K (File No. 0-29089) filed on January 6, 2011 and incorporated herein by reference.
3.3	Certificate of Designation, Preferences and Rights of the Series A Convertible Preferred Stock of Agenus Inc. filed with the Secretary of State of the State of Delaware on September 24, 2003. Filed as Exhibit 3.1 to our Current Report on Form 8-K (File No. 0-29089) filed on September 25, 2003 and incorporated herein by reference.
3.4	Certificate of Designations, Preferences and Rights of the Class B Convertible Preferred Stock of Agenus Inc. Filed as Exhibit 3.1 to our Current Report on Form 8-K (File No. 0-29089) filed on September 5, 2007 and incorporated herein by reference.
3.5	Certificate of Designations, Preferences and Rights of the Series A-1 Convertible Preferred Stock of Agenus Inc. Filed as Exhibit 3.1 to our Current Report on Form 8-K (File No. 0-29089) filed on February 5. 2013 and incorporated herein by reference.
4.1	Form of Common Stock Certificate. Filed as Exhibit 4.1 to our Current Report on Form 8-K (File No. 0-29089) filed on January 6, 2011 and incorporated herein by reference.
4.2	Form of Amended and Restated Note under the Securities Purchase Agreement dated as of October 30, 2006 (as amended), by and among Agenus Inc., a Delaware corporation and the investors listed on the Schedule of Buyers thereto. Filed as Exhibit 4.4 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2010 and incorporated herein by reference.
4.3	Form of Warrant under the Securities Purchase Agreement dated January 9, 2008. Filed as Exhibit 4.1 to our Current Report on Form 8-K (File No. 0-29089) filed on January 11, 2008 and incorporated herein by reference.
4.4	Purchase Agreement dated August 31, 2007 by and between Agenus Inc. and Fletcher International. Filed as Exhibit 99.1 to our Current Report on Form 8-K (File No. 0-29089) filed on September 5, 2007 and incorporated herein by reference.
4.5	Securities Purchase Agreement dated April 8, 2008. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on April 10, 2008 and incorporated herein by reference.
4.6	Form of Warrant to purchase common stock dated April 9, 2008. Filed as Exhibit 4.1 to our Current Report on Form 8-K (File No. 0-29089) filed on April 10, 2008 and incorporated herein by reference.
4.7	Securities Purchase Agreement by and between Agenus Inc. and the investors identified on Schedule I attached to the agreement, dated January 9, 2008. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on January 11, 2008 and incorporated herein by reference.

Exhibit No.	Description
4.8	Form of 4 Year Warrant under the Securities Purchase Agreement dated July 30, 2009. Filed as Exhibit 4.2 to our Current Report on Form 8-K (File No. 0-29089) filed on August 3, 2009 and incorporated herein by reference.
4.9	Form of 4 Year Warrant under the Securities Purchase Agreement dated August 3, 2009. Filed as Exhibit 4.2 to our Current Report on Form 8-K (File No. 0-29089) filed on August 5, 2009 and incorporated herein by reference.
4.10	Securities Purchase Agreement dated as of July 30, 2009 by and among Agenus Inc. and the investors listed on the Schedule of Buyers thereto. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on August 3, 2009 and incorporated herein by reference.
4.11	Securities Exchange Agreement dated as of February 4, 2013 by and between Agenus Inc., and Mr. Brad Kelley. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on February 5, 2013 and incorporated herein by reference.
4.12	Note Purchase Agreement dated as of April 15, 2013 by and between Agenus Inc., and the Purchasers listed on Schedule 1.1 thereto. Filed as Exhibit 4.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2013 and incorporated herein by reference.
4.13	Form of Senior Subordinated Note under the Note Purchase Agreement dated as of April 15, 2013 by and between Agenus Inc., and the Purchasers listed on Schedule 1.1 thereto. Filed as Exhibit 4.2 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2013 and incorporated herein by reference.
4.14	Form of Warrant under the Note Purchase Agreement dated as of April 15, 2013 by and between Agenus Inc., and the Purchasers listed on Schedule 1.1 thereto. Filed as Exhibit 4.3 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2013 and incorporated herein by reference.
4.15	Securities Exchange Agreement dated as of April 15, 2013 by and among Agenus Inc., Ingalls & Snyder Value Partners L.P. and Arthur Koenig. Filed as Exhibit 4.5 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2013 and incorporated herein by reference.
4.16	Securities Purchase Agreement, dated September 18, 2013, as amended, by and between Agenus Inc. and the investors party thereto. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on September 19, 2013 and incorporated herein by reference.
4.17	Form of Warrant under the Securities Purchase Agreement, dated September 18, 2013, as amended, by and between Agenus Inc. and the investors party thereto. Filed as Exhibit 4.1 to our Current Report on Form 8-K (File No. 0-29089) filed on September 19, 2013 and incorporated herein by reference.
4.18	Share Exchange Agreement, dated January 10, 2014, by and among Agenus Inc., 4-Antibody AG, certain shareholders of 4-Antibody AG and Vischer AG. Filed as Exhibit 2.1 to our Current Report on Form 8-K (File No. 0-29089) filed on January 13, 2014 and incorporated herein by reference.
4.19	Securities Purchase Agreement dated as of August 3, 2009 by and among Agenus Inc. and the investors listed on the Schedule of Buyers thereto. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on August 5, 2009 and incorporated herein by reference.
4.20	Stock Purchase Agreement dated as of January 9, 2015, by and between Agenus Inc. and Incyte Corporation. Filed as Exhibit 4.21 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2014 and incorporated herein by reference.
4.21(1)	Amended and Restated Note Purchase Agreement dated as of February 20, 2015, as amended, by and between Agenus Inc. and the Purchasers listed on Schedule 1.1 thereto. Filed as Exhibit 4.2 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2015 and incorporated herein by reference.
4.22	Form of Senior Subordinated Note under the Amended and Restated Note Purchase Agreement dated as of February 20, 2015, as amended, by and between Agenus Inc. and the Purchasers listed on Schedule 1.1 thereto. Filed as Exhibit 4.3 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2015 and incorporated herein by reference.
4.23	Form of Warrant under the Amended and Restated Note Purchase Agreement dated as of February 20, 2015, as amended, by and between Agenus Inc. and the Purchasers listed on Schedule 1.1 thereto. Filed as Exhibit 4.4 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2015 and incorporated herein by reference.

Exhibit No.	Description
4.24(1)	Note Purchase Agreement, by and among Antigenics LLC, the guarantors named therein, Oberland Capital SA Zermatt LLC, as collateral agent ("*Oberland*"), an affiliate of Oberland as the lead purchaser and the other purchasers, dated September 4, 2015. Filed as Exhibit 4.1 to our Current Report on Form 8-K/A (File No. 0-29089) filed on September 11, 2015 and incorporated herein by reference.
4.25	Form of Limited Recourse Note under the Note Purchase Agreement, by and among Antigenics LLC, the guarantors named therein, Oberland Capital SA Zermatt LLC, as collateral agent ("*Oberland*"), an affiliate of Oberland as the lead purchaser and the other purchasers, dated September 4, 2015. Filed as Exhibit 4.2 to our Current Report on Form 8-K/A (File No. 0-29089) filed on September 11, 2015 and incorporated herein by reference.
4.26	Revenue Interest Assignment and Termination Agreement, by and among Agenus Inc., Antigenics LLC, Ingalls & Snyder Value Partners, L.P. and Arthur Koenig, dated September 4, 2015. Filed as Exhibit 4.3 to our Current Report on Form 8-K/A (File No. 0-29089) filed on September 11, 2015 and incorporated herein by reference.
	Employment Agreements and Compensation Plans
10.1*	1999 Equity Incentive Plan, as amended. Filed as Exhibit 10.1 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2008 and incorporated herein by reference.
10.1.1*	Form of Non-Statutory Stock Option. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on December 15, 2004 and incorporated herein by reference.
10.1.2*	Form of 2007 Restricted Stock Award Agreement. Filed as Exhibit 10.1.5 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2007 and incorporated herein by reference.
10.1.3*	Form of 2008 Restricted Stock Award Agreement. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on March 11, 2008 and incorporated herein by reference.
10.1.4*	Sixth Amendment to the Agenus Inc. 1999 Equity Incentive Plan. Filed as Appendix D to our Definitive Proxy Statement on Schedule 14A filed on April 27, 2009 and incorporated herein by reference.
10.2*	Agenus Inc. 2009 Equity Incentive Plan, as amended. Filed as Appendix B to our Definitive Proxy Statement on Schedule 14A filed on March 10, 2014 and incorporated herein by reference.
10.2.1*	Third Amendment to the Agenus Inc. 2009 Equity Incentive Plan. Filed as Appendix C to our Definitive Proxy Statement on Schedule 14A filed on March 10, 2014 and incorporated herein by reference.
10.2.2*	Fourth Amendment to the Agenus Inc. 2009 Equity Incentive Plan. Filed as Exhibit 10.3 to our Current Report on Form 8-K (File No. 0-29089) filed on June 30, 2015 and incorporated herein by reference.
10.2.3*	Form of Restricted Stock Award Agreement for the Agenus Inc. 2009 Equity Incentive Plan. Filed as Exhibit 10.2 to our Current Report on Form 8-K (File No. 0-29089) filed on June 15, 2009 and incorporated herein by reference.
10.2.4*	Form of Stock Option Agreement for the Agenus Inc. 2009 Equity Incentive Plan. Filed as Exhibit 10.3 to our Current Report on Form 8-K (File No. 0-29089) filed on June 15, 2009 and incorporated herein by reference.
10.3*	Agenus Inc. 2009 Employee Stock Purchase Plan. Filed as Appendix B to our Definitive Proxy Statement on Schedule 14A filed on April 27, 2009 and incorporated herein by reference.
10.4	Agenus Inc. Directors' Deferred Compensation Plan, as amended to date. Filed as Exhibit 10.4 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2012 and incorporated herein by reference.
10.4.1	Seventh Amendment to Agenus Directors' Deferred Compensation Plan. Filed as Appendix C to our Definitive Proxy Statement on Schedule 14A filed on April 30, 2015 and incorporated herein by reference.
10.5*	Amended and Restated Executive Change-in-Control Plan applicable to Christine M. Klaskin. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on November 3, 2010 and incorporated herein by reference.
10.5.1*	Modification of Rights in the Event of a Change of Control, dated as of June 14, 2012, by and between Agenus Inc. and Christine Klaskin. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended June 30, 2012 and incorporated herein by reference.
10.6*	2004 Executive Incentive Plan, as amended. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on January 27, 2011 and incorporated herein by reference.

Exhibit No.	Description
10.7	Form of Indemnification Agreement entered into between Agenus Inc. and its directors and executive officers. Filed as Exhibit 10.4 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
10.8*	Employment Agreement dated December 1, 2005 between Agenus Inc. and Garo Armen. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on December 7, 2005 and incorporated herein by reference.
10.8.1*	First Amendment to Employment Agreement dated July 2, 2009 between Agenus Inc. and Garo Armen. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended September 30, 2009 and incorporated herein by reference.
10.8.2*	Second Amendment to Employment Agreement dated December 15, 2010 between Agenus Inc. and Garo Armen. Filed as Exhibit 10.12.2 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2010 and incorporated herein by reference.
10.9*	Employment Agreement dated September 16, 2008 between Agenus Inc. and Karen Valentine. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on September 19, 2008 and incorporated herein by reference.
10.9.1*	First Amendment to Employment Agreement dated July 2, 2009 between Agenus Inc. and Karen Valentine. Filed as Exhibit 10.3 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended September 30, 2009 and incorporated herein by reference.
10.9.2*	Second Amendment to Employment Agreement dated December 15, 2010 between Agenus Inc. and Karen Valentine. Filed as Exhibit 10.20.2 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2010 and incorporated herein by reference.
10.10*	Employment Agreement dated February 20, 2007 between Agenus Inc. and Kerry Wentworth. Filed as Exhibit 10.2 to our Current Report on Form 8-K (File No. 0-29089) filed on February 26, 2007 and incorporated herein by reference.
10.10.1*	First Amendment to Employment Agreement dated July 2, 2009 between Agenus Inc. and Kerry Wentworth. Filed as Exhibit 10.4 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended September 30, 2009 and incorporated herein by reference.
10.10.2*	Second Amendment to Employment Agreement dated December 15, 2010 between Agenus Inc. and Kerry Wentworth. Filed as Exhibit 10.11.2 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2010 and incorporated herein by reference.
10.11*	Agenus Inc. 2015 Inducement Equity Plan. Filed as Exhibit 4.14 to our Registration Statement on Form S-8 (File No. 333-209074) filed on January 21, 2015 and incorporated herein by reference.
10.11.1*	Form of Stock Option Agreement for the Agenus Inc. 2015 Inducement Equity Plan. Filed as Exhibit 4.15 to our Registration Statement on Form S-8 (File No. 333-209074) filed on January 21, 2015 and incorporated herein by reference.
10.11.2*	Form of Restricted Stock Award Agreement for the Agenus Inc. 2015 Inducement Equity Plan. Filed as Exhibit 4.16 to our Registration Statement on Form S-8 (File No. 333-209074) filed on January 21, 2015 and incorporated herein by reference.
10.11.3*	Form of Restricted Stock Unit Agreement for the Agenus Inc. 2015 Inducement Equity Plan. Filed as Exhibit 4.17 to our Registration Statement on Form S-8 (File No. 333-209074) filed on January 21, 2015 and incorporated herein by reference.
10.12*	Agreement by and between Agenus Inc. and C. Evan Ballantyne dated June 8, 2015. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on June 17, 2015 and incorporated herein by reference.
10.13*	Non-Qualified Stock Option Inducement Award Agreement by and between Agenus Inc. and C. Evan Ballantyne effective June 17, 2015. Filed as Exhibit 10.2 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended June 30, 2015 and incorporated herein by reference.
10.14*	Employment Agreement dated June 30, 2015 between Agenus Inc. and Dr. Robert Stein. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on June 30, 2015 and incorporated herein by reference.
10.15*	Form of Restricted Stock Unit Agreement for the Agenus Inc. 2009 Equity Incentive Plan, as amended. Filed as Exhibit 10.2 to our Current Report on Form 8-K (File No. 0-29089) filed on June 30, 2015 and incorporated herein by reference.

Exhibit No.	Description
	License and Collaboration Agreements
10.16(1)	Patent License Agreement between Agenus Inc. and Mount Sinai School of Medicine dated November 1, 1994, as amended on June 5, 1995. Filed as Exhibit 10.8 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
10.17(1)	License Agreement between the University of Connecticut Health Center and Agenus Inc. dated May 25, 2001, as amended on March 18, 2003. Filed as Exhibit 10.2 to the Amendment No. 1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2003 and incorporated herein by reference.
10.17.1(1)	Letter Agreement by and between Agenus Inc. and The University of Connecticut Health Center dated May 11, 2009. Filed as Exhibit 10.5 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended June 30, 2009 and incorporated herein by reference.
10.17.2(1)	Amendment Number Two to License Agreement by and between Agenus Inc. and The University of Connecticut Health Center dated June 5, 2009. Filed as Exhibit 10.6 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended June 30, 2009 and incorporated herein by reference.
10.18(1)	License Agreement by and between Agenus Inc. and GlaxoSmithKline Biologicals SA dated July 6, 2006. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended June 30, 2006 and incorporated herein by reference.
10.19(1)	Amended and Restated Manufacturing Technology Transfer and Supply Agreement by and between Agenus Inc. and GlaxoSmithKline Biologicals SA dated January 19, 2009. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2009 and incorporated herein by reference.
10.20(1)	First Right to Negotiate and Amendment Agreement between Agenus Inc., Antigenics LLC and GlaxoSmithKline Biologicals SA, dated March 2, 2012. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2012 and incorporated herein by reference.
10.21(1)	Revenue Interests Assignment Agreement dated as of April 15, 2013 by and among Agenus Inc., Ingalls & Snyder Value Partners L.P., Arthur Koenig and Antigenics LLC. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-029089) for the quarter ended March 31, 2013 and incorporated herein by reference.
10.22(1)	License Agreement dated as of December 5, 2014 by and between 4-Antibody AG, a limited liability company organized under the laws of Switzerland (and wholly-owned subsidiary of Agenus Inc.) and Ludwig Institute for Cancer Research Ltd. Filed as Exhibit 10.21 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2014 and incorporated herein by reference.
10.23(1)	License, Development and Commercialization Agreement dated as of January 9, 2015 by and among Agenus Inc., 4-Antibody AG, a limited liability company organized under the laws of Switzerland (and wholly-owned subsidiary of Agenus Inc.), Incyte Corporation and Incyte Europe Sarl, a Swiss limited liability company (and wholly-owned subsidiary of Incyte Corporation). Filed as Exhibit 10.22 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2014 and incorporated herein by reference.
10.24(1)	License Agreement dated March 19, 2013, as amended, by and between the University of Virginia Patent Foundation d/b/a University of Virginia Licensing and Ventures Group and Agenus Inc. (as successor by merger to PhosImmune Inc.). Filed herewith.
10.25(1)	License Agreement dated as of January 25, 2016 by and among Agenus Inc., 4-Antibody AG, a limited liability company organized under the laws of Switzerland (and wholly-owned subsidiary of Agenus Inc.), and Ludwig Institute for Cancer Research Ltd. Filed herewith.
	Real Estate Leases
10.26	Lease of Premises at 3 Forbes Road, Lexington, Massachusetts dated as of December 6, 2002 from BHX, LLC, as Trustee of 3 Forbes Realty Trust, to Agenus Inc. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) filed on January 8, 2003 and incorporated herein by reference.
10.26.1	First Amendment of Lease dated as of August 15, 2003 from BHX, LLC, as trustee of 3 Forbes Road Realty, to Agenus Inc. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2004 and incorporated herein by reference.

Exhibit No.	Description
10.26.2	Second Amendment of Lease dated as of March 7, 2007 from BHX, LLC as trustee of 3 Forbes Road Realty, to Agenus Inc. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2007 and incorporated herein by reference.
10.26.3	Third Amendment to Lease dated April 23, 2008 between TBCI, LLC, as successor to BHX, LLC, as Trustee of 3 Forbes Road Realty Trust, and Agenus Inc. Filed as Exhibit 10.2 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended June 30, 2008 and incorporated herein by reference.
10.26.4	Fourth Amendment to Lease dated September 30, 2008 between TBCI, LLC, as successor to BHX, LLC, as Trustee of 3 Forbes Road Realty Trust, and Agenus Inc. Filed as Exhibit 10.2 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended September 30, 2008 and incorporated herein by reference.
10.26.5	Fifth Amendment to Lease dated April 11, 2011 between TBCI, LLC, as successor to BHX, LLC, as Trustee of 3 Forbes Road Realty Trust, and Agenus Inc. Filed as Exhibit 10.3 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2011 and incorporated herein by reference.
10.27	Standard Form of Office Lease dated December 13, 2012 between 149 Fifth Ave. Corp. and Agenus Inc. Filed as Exhibit 10.22 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2012 and incorporated herein by reference.
10.28	Sublease Agreement between 4-Antibody AG, and Technologie Park Basel AG dated January 28, 2011. Filed as Exhibit 10.3 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2014 and incorporated herein by reference.
10.28.1	Addendum to the Lease Agreement from January 28, 2011 between 4-Antibody AG and Technologie Park Basel AG dated March 31, 2012. Filed as Exhibit 10.3.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2014 and incorporated herein by reference.
10.28.2	Addendum No. 4 to the Lease Agreement from January 28, 2011 between 4-Antibody AG and Technologie Park Basel AG dated June 2013. Filed as Exhibit 10.3.2 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2014 and incorporated herein by reference.
10.28.3	Addendum No. 5 to the Lease Agreement from January 28, 2011 between 4-Antibody AG and Technologie Park Basel AG dated April 30, 2013. Filed as Exhibit 10.3.3 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2014 and incorporated herein by reference.
10.28.4	Addendum No. 6 to the Lease Agreement from January 28, 2011 between 4-Antibody AG and Technologie Park Basel AG dated July 31, 2013. Filed as Exhibit 10.3.4 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2014 and incorporated herein by reference.
10.29	Commercial Lease Agreement No. 01/2003 between BioCentiv GmbH and 4-Antibody AG dated December 1, 2002. Filed as Exhibit 10.4 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2014 and incorporated herein by reference.
10.29.1	20th Addendum to Commercial Lease Agreement No. 01/2003 between BioCentiv GmbH and 4-Antibody AG dated November 1, 2010. Filed as Exhibit 10.4.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2014 and incorporated herein by reference.
10.29.2	28th Addendum to Commercial Lease Agreement No. 01/2003 between BioCentiv GmbH and 4-Antibody AG dated July 2, 2013. Filed as Exhibit 10.4.2 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2014 and incorporated herein by reference.
10.29.3	29th Addendum to Commercial Lease Agreement No. 01/2003 dated between BioCentiv GmbH and 4-Antibody AG August 9, 2013. Filed as Exhibit 10.4.3 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2014 and incorporated herein by reference.
	Sales Agreement
10.30	At Market Issuance Agreement, dated as of October 24, 2014, by and between Agenus Inc. and MLV & Co. LLC. Filed as Exhibit 1.2 to our Registration Statement on Form S-3 (File No. 333-199255) and incorporated herein by reference.
21.1	Subsidiaries of Agenus Inc. Filed herewith.
23.1	Consent of KPMG LLP, independent registered public accounting firm. Filed herewith.

Exhibit No.	Description
31.1	Certification of Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended. Filed herewith.
31.2	Certification of Principal Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended. Filed herewith.
32.1	Certification of Chief Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. Submitted herewith.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Label Linkbase Document
101.PRE	XBRL Taxonomy Presentation Linkbase Document

* Indicates a management contract or compensatory plan.

(1) Certain confidential material contained in the document has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act or Rule 24b-2 of the Securities Exchange Act.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AGENUS INC.

By: /s/ GARO H. ARMEN, PH.D.

Garo H. Armen, Ph.D.

Chief Executive Officer and

Chairman of the Board

Dated: March 15, 2016

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/S/ GARO H. ARMEN, PH.D. **Garo H. Armen, Ph.D.**	Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)	March 15, 2016
/S/ C. EVAN BALLANTYNE **C. Evan Ballantyne**	Chief Financial Officer (Principal Financial Officer)	March 15, 2016
/S/ CHRISTINE M. KLASKIN **Christine M. Klaskin**	Vice President Finance (Principal Accounting Officer)	March 15, 2016
/S/ BRIAN CORVESE **Brian Corvese**	Director	March 15, 2016
/S/ WADIH JORDAN **Wadih Jordan**	Director	March 15, 2016
/S/ SHAHZAD MALIK **Shahzad Malik**	Director	March 15, 2016
/S/ SHALINI SHARP **Shalini Sharp**	Director	March 15, 2016
/S/ TIMOTHY R. WRIGHT **Timothy R. Wright**	Director	March 15, 2016

CONFIDENTIAL TREATMENT REQUESTED: ***Information for which confidential treatment has been requested is omitted and is noted with asterisks. An unredacted version of this document has been filed separately with the Securities and Exchange Commission (the "Commission").***

LICENSE AGREEMENT

University of Virginia Licensing & Ventures Group – PhosImmune, Inc.

This License Agreement (as amended, hereinafter "Agreement") is made this 19th day of March, 2013 ("Effective Date") by and between the University of Virginia Patent Foundation d/b/a University of Virginia Licensing and Ventures Group, a Virginia non-profit corporation, having a principal place of business at 250 W. Main Street, Suite 300, Charlottesville, VA 22902 ("UVA LVG") and PhosImmune, Inc., having a principal place of business at PhosImmune, Inc., c/o Fanelli Haag & Kilger PLLC, 1909 K Street, N.W., Suite 1120, Washington, D.C. 20006 ("Licensee"), (each a "Party" or collectively the "Parties").

WITNESSETH

WHEREAS, UVA LVG, as agent and/or assignee of the University of Virginia ("UVA"), owns or co-owns rights in, and by an inter-institutional agreement, is exclusively authorized to license other patent rights owned by the University of Birmingham ("UoB"), in certain Technology relating to the use of phosphopeptides in immunotherapy, diagnosis and disease progression monitoring of cancer;

WHEREAS, Licensee desires to obtain rights in and to this Technology;

WHEREAS, UVA LVG is willing to grant a license to this Technology to Licensee, under the terms of this Agreement;

NOW THEREFORE, in consideration of the mutual covenants contained herein and intending to be legally bound, the parties agree as follows:

1. DEFINITIONS

As used in this Agreement:

"Affiliate" means any corporation or non-corporate business entity which controls, is controlled by, or is under common control with a party to this Agreement. A corporation or non-corporate business entity shall be regarded as in control of another corporation if it owns, or directly or indirectly controls, at least fifty (50%) percent of the voting stock of the other corporation, or if it possesses, directly or indirectly, the power to direct or cause the direction of the management and policies of such entity.

"Change in Control" means an acquisition of more than 50% of the outstanding shares

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

of Licensee (on a fully diluted basis) by a third party; a merger or consolidation of Licensee with another entity; or the sale or disposition by the company of substantially all of its intellectual property assets.

"Clinical Trial" means use of a Licensed Product in humans as part of an investigation or study approved by an IRB in accordance with 21 C.F.R. §312.

"Commercially Reasonable" or "Reasonable Commercial" means actions, e.g., efforts, taken by the Licensee or its Affiliate or on their behalf by their respective officers, directors, employees, agents and/or consultants in compliance with the business judgment rule taking into account Safety Concerns (if any), technical feasibility, regulatory delay/climate, and governmental and insurance reimbursement policies.

"Equity Securities" means financial instruments, records, or securities that evidence ownership interests in Licensee including, without limitation, common stock in a corporation, membership units, shares, or interests in a limited liability company, or partnership interests or shares of a limited partnership or notes convertible into the same. Stock option awards are excluded from Equity Securities.

"Enrichment Patent" means [**].

"FDA" means the U.S. Food & Drug Administration.

"Field" means immunotherapy, diagnostics, and disease progression monitoring of cancer.

"First Related Work Product" means any product that constitutes, is based on, incorporates or uses, wholly or in part, subject matter associated with the ZARLING-TCR1 invention disclosure identified in Attachment A.

"Foreign Equivalent" means activities or approvals outside the United States that are similar to activities or approvals covered by "Clinical Trial", "FDA", "IND", "Phase I Clinical Trial", "Phase II Clinical Trial", "Phase III Clinical Trial", "NDA", and "NDA Approval".

"IND" means an investigational new drug application submitted to the FDA under 21 C.F.R. §312 concerning use of a new drug or biologic in a Clinical Trial, or Foreign Equivalent.

"Institutional Review Board" or "IRB" means a board, committee, or other group formally designated by an institution to review biomedical research involving human subjects in accordance with 21 C.F.R. §56.

"Investor" means a third party qualified and/or accredited person or entity who acquires Equity Securities in exchange for cash. The definition of Investor expressly excludes the Licensee's founding shareholders and current or future employees, directors or consultants.

"IP Costs" means reasonable and documented expenditures incurred by UVA LVG to obtain or maintain Licensed Patents in the pursuit of maximizing patent protection of Licensed Products. IP Costs include, without limitation, expenditures related to administrative proceedings concerning the validity or invalidity of patent protection for the Licensed Technology, including proceedings pursuant to 35 U.S.C. §§131-135, 251-

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

256, 302-306, or 311-329. For sake of clarity, IP Costs do not include legal fees and expenses associated with litigation. If extraordinary expenditures are anticipated arising from the preparation, filing, or prosecution of any Licensed Patent, UVA LVG shall use reasonable efforts to provide Licensee with full details and shall discuss with Licensee a mutually acceptable course of action prior to incurring any additional expenses. UVA LVG and Licensee hereby agree that expenditures on patent prosecution (including both foreign and domestic filings) in excess of [**] shall be considered "extraordinary."

"Know-How" means inventions, technical data, formulae, standards, technical information, specifications, processes, methods, lab notebooks, code books, raw materials, as well as all information, knowledge, assistance, trade practices and secrets, and improvements thereto; as well as regulatory filings, clinical or pre-clinical protocols, results, data, patient records and documents related to INDs and/or Clinical Trials.

"Licensed Patent(s)" means UVA LVG's and UoB's rights, title and ownership interests in the Jointly-Owned Patents and UVA LVG's rights, title and ownership interests in the UVA LVG-Owned Patents.

"Jointly-Owned Patents" means Patents having inventors, as defined in 35 U.S.C. §100, obligated to assign their patent rights to UVA and/or UVA LVG and one or more inventors not under such an obligation. Licensee understands and agrees that each owner of a Jointly-Owned Patent may grant license rights without restriction and without notice or obligation to other joint owners and, therefore, rights granted by UVA LVG to any Jointly-Owned Patents would be so limited.

"UVA LVG-Owned Patents" means any Patents which have inventors from UVA only.

"Licensed Product" or "Product" means any product that constitutes, is based on, incorporates or uses, wholly or in part, Licensed Technology.

"Licensed Know-How" means Know-How which is in UVA's, UVA LVG's, or UoB's possession or under UVA's, UVA LVG's, or UoB's control, which are related to the Licensed Patents as of the Effective Date. For clarity any Know-How related to UVA investigator initiated Clinical Trials shall constitute Licensed Know-How only in so far as the Know-How is under UVA or UVA LVG control and/or in UVA's or UVA LVG's possession.

"Licensed Technology" means (i) the Licensed Patents and; (ii) the Licensed Know-How. The Technology is provided on "As Is" basis as of the Effective Date.

"NDA" means a new drug application submitted to the FDA under 21 C.F.R. Part 314 or Foreign Equivalent, or a biologic license application submitted to the FDA under 21 C.F.R. Part 601 or Foreign Equivalent.

"NDA Approval" means FDA approval under 21 C.F.R. Part 314 or 21 C.F.R. Part 601 for Licensee to market and distribute commercially a new drug or biologic as a Licensed Product(s) within the Field or Foreign Equivalent.

"Net Sales" means the total Revenues received from the manufacture, use, or Sale of Licensed Products, less the total of all:

1.1.1 discounts allowed in amounts customary in the trade;

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

1.1.2 sales tariffs, duties and/or taxes imposed on the Licensed Products;

1.1.3 outbound transportation prepaid or allowed;

1.1.4 commercially reasonable rebates, chargebacks or retroactive price reductions;

1.1.5 government-mandated rebates; and

1.1.6 amounts allowed or credited on returns.

Net Sales shall not include any transfers of the Licensed Product for Clinical Trial purposes or any transfers of reasonable quantities of the Licensed Product as samples or as donations, provided that no consideration is received by Licensee for transaction or related transactions.

No deduction shall be made for commissions paid to individuals (whether independent sales agents or persons regularly employed by Licensee).

"Patents" refers to subject matter (i) associated with the invention disclosure records identified in Attachment A, and (ii) claimed, disclosed or published in any foreign or domestic patent applications, together with any and all substitutions, extensions, divisionals, continuations, continuations-in-part (to the extent that the claimed subject matter of such continuations-in-part is disclosed in the parent Patent and rights to the continuations-in-part are not obligated to a third party), and any patents or utility models which issue thereon or therefrom anywhere in the world, including reexamined and reissued patents.

"Phase I Clinical Trial" means a Clinical Trial in which human subjects are exposed to or treated with a Licensed Product primarily for the purpose of evaluating safety and tolerability.

"Phase II Clinical Trial" means a Clinical Trial either (i) designed to provide a preliminary evaluation of the activity or effectiveness, common short-term side effects, risks, or other characteristics of a Licensed Product; or (ii) as otherwise indicated as being a Phase II Clinical Trial in its protocol.

"Phase III Clinical Trial" means an adequate and well-controlled Clinical Trial in accordance with 21 C.F.R. §314.126 to demonstrate whether a Licensed Product(s) has sufficient safety and effectiveness as necessary for NDA Approval.

"Related Works" means an invention (and associated Patents) that [**].

"Revenue" means the U.S. dollar value of all consideration realized from the Sale of Licensed Product(s).

"Royalties" means the U.S. dollar amounts to be paid by Licensee to UVA LVG based on a percentage of Net Sales.

"Safety Concern" means any toxicity, serious adverse event, side effect, issue associated with the therapeutic index, or other safety finding, whether in vitro, in animals or in humans, that leads to a determination that a Licensed Product exposes or could expose animals or humans to an unacceptable safety risk in relation to therapeutic benefit.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

"Sale," "Sold" and "Sell" means and includes, without limitation, sales, leases, licenses, rentals, provision of services with, and other transfers of Licensed Product(s).

"Sublicensee" means any non-Affiliated third party to whom Licensee has granted a Sublicense.

"Sublicense" means an agreement in which Licensee:

(i) grants or otherwise transfers any of the rights granted in Section 2.1,

(ii) agrees not to assert the Licensed Rights or agrees not to sue, prevent or seek a legal remedy for the practice of same,

(iii) assigns or otherwise transfers this Agreement other than as permitted under the Assignment Section 23, or

(iv) is under an obligation to do any of the foregoing, or to forbear from offering or doing any of the foregoing with any other entity, including licenses, option agreements, right of first refusal agreements, standstill agreements, settlement agreements or other agreements.

"Sublicensing Revenue" means the fair market cash value of any and all consideration received by Licensee from a Sublicensee under or otherwise in connection with its Sublicenses, including without limitation license issue fees, option fees and other licensing fees, milestone payments, minimum annual royalties (to the extent such minimum annual royalties are not attributed to running royalties of Net Sales), equity securities or other payments of any kind whatsoever (but excluding running royalties for Net Sales of Licensed Products by Sublicensees), or any other consideration, irrespective of the form of payment.

"Technology" means Know-How and Patents.

"Third Amendment Effective Date" means December 23, 2015.

"Valid Claim" means a claim (a) of any issued, unexpired patent that has not been revoked or held unenforceable or invalid by a decision of a court or governmental agency of competent jurisdiction from which no appeal can be taken, or with respect to which an appeal is not taken within the time allowed for appeal, and that has not been disclaimed or admitted to be invalid or unenforceable through reissue, disclaimer or otherwise, or (b) of any patent application that has not been cancelled, withdrawn or abandoned, nor been pending for more than seven (7) years from the filing date of the earliest patent application from which such patent application claims priority.

2. LICENSE

2.1Subject to the terms of this Agreement and the rights of Joint Owners with respect to Jointly-Owned Patents, UVA LVG hereby grants to Licensee and Licensee hereby accepts the following licenses:

2.1.1 an exclusive, world-wide right under UVA LVG's rights, title, and interest in the Licensed Patents to research, develop, commercialize, make, have

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

made, use, offer for Sale, Sell, and import Licensed Products in the Field and to grant Sublicenses in the Field; and

2.1.2 an exclusive, world-wide right under UoB's rights, title, and interest in the Licensed Patents to research, develop, commercialize, make, have made, use, offer for Sale, Sell, and import Licensed Products in the Field and to grant Sublicenses in the Field; and

2.1.3 a non-exclusive, world-wide right under the Licensed Know-How to research, develop, commercialize, make, have made, use, offer for Sale, Sell and import Licensed Products in the Field; and

2.1.4 the right to reference UVA-sponsored INDs and regulatory submissions that are related to trials at UVA using Licensed Products. Licensee understands and agrees that INDs for investigator-initiated trials at UVA are held by individual faculty members, and not UVA as an institution. Accordingly UVA will have fully satisfied all of its obligations hereunder by using best efforts to supply, at Licensee's request and without unreasonable delay, an executed letter on UVA letterhead with authorized signatories, stating the Licensee's (or its Sublicensees', as applicable) right to reference such UVA-sponsored data. This right of reference shall continue for the term of this Agreement with respect to any Clinical Trials that are initiated at UVA prior to the third anniversary of the Effective Date. Licensee acknowledges that UVA is a signatory to this License Agreement for the sole purpose of accepting the obligations in this paragraph, and accordingly, UVA shall have no responsibility for any other obligations contained herein.

2.2Licensee may Sublicense to Affiliates provided that UVA LVG is notified in writing of each such Sublicense. Any act or omission of any Sublicensed Affiliate shall be deemed an act or omission of Licensee.

2.3Licensee shall have the right to Sublicense any or all of the rights licensed hereunder to non-Affiliated third parties, provided that:

2.3.1 Each Sublicense obligates the Sublicensee to comply with the terms of this Agreement including, but not limited to, Sections entitled "Intellectual Property," "Markings, Trademarks, and Trade Names," "Warranty Disclaimer," "Confidentiality," "Indemnification and Liability," "Insurance," "Export Controls," "Interpretation," and Sections 2.6 through 2.12 (concerning rights reserved by UVA LVG, UVA, UoB, and the United States government) and Sections 6.2 and 6.3 (concerning records and audits);

2.3.2 Licensee does not receive and does not agree to receive anything of value other than cash or publically traded securities in consideration for a Sublicense, unless expressly agreed in writing by UVA LVG after review of the proposed transaction as a whole, and in which case such value will be subject to the Sublicensing Revenues provisions set forth below;

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

2.3.3 Each Sublicense is otherwise consistent with the terms and conditions of this Agreement;

2.3.4 A copy of each Sublicense is provided to UVA LVG promptly following its execution, together with a written statement disclosing any and all prior, contemporaneous, planned and proposed contractual relationships between Licensee and the Sublicensee; and

2.3.5 Licensee represents and warrants that no such other contractual relationships contain consideration due to Licensee reasonably attributable to the sublicensed rights. Licensee agrees to be fully responsible for the performance of its Sublicensees hereunder.

2.4 Related Works.

2.4.1 UVA LVG will use commercially reasonable efforts to identify each Related Work. UVA LVG will disclose such Related Work to Licensee in writing promptly upon discovery. With respect to each Related Work, UVA LVG hereby grants Licensee an exclusive option (the "Improvement Option") to [**].

2.4.2 The Improvement Option is granted for a period of [**] days from the receipt by Licensee of written notice from UVA LVG of any Related Work or any extension thereof later agreed upon by the Parties (the "Improvement Option Period"). Licensee may exercise the Improvement Option by delivering written notice to UVA LVG ("Exercise Notice"). If Licensee fails to deliver the Exercise Notice prior to the expiration of the Improvement Option Period, the Improvement Option shall expire with respect to such Related Work.

2.4.3 Upon timely delivery of the Exercise Notice, [**], and UVA LVG shall negotiate with Licensee to enter into an Amendment that adds the Related Work as Licensed Technology ("Improvement Amendment"), [**].

2.4.4 Until termination or expiration of the Improvement Option Period, UVA LVG agrees that it will not offer or grant any rights to any third party relating to any Related Work.

2.4.5 In the event that Licensee fails to enter into an Improvement Amendment within the Improvement Option Period, or in the event the License Agreement is terminated for any reason, then all rights to the Related Work granted hereunder shall revert to UVA LVG for the sole benefit of UVA LVG.

2.4.6 UVA LVG hereby grants to Licensee an exclusive option (the "[**] Option") to negotiate the terms of a license agreement in which UVA LVG grants to Licensee rights to make, have made, use, offer for sale, sell and import the technology described in the invention disclosure titled [**]) and any patent applications, patents or Know How related thereto throughout on reasonable terms and conditions consistent with those set forth in this Agreement, to be negotiated between the Parties for a period not to exceed ninety (90) days from the Third Amendment Effective Date.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

Until termination or expiration of the [**] Option, UVA LVG agrees that it will not grant any rights under the [**] invention disclosure to any third party prior to offering such disclosure to Licensee hereunder.

2.5 Upon termination of this Agreement in whole or in part, for any reason, Licensee shall promptly notify its Sublicensees of such termination, and of the requirements of this paragraph. Upon such termination, Licensee shall no longer have the authority to grant any sublicenses hereunder. However, any license previously granted by Licensee under any Sublicense hereunder will survive provided that within one hundred eighty (180) days of such termination, such Sublicensee enters into a written agreement with UVA LVG through which such Sublicensee shall become bound to UVA LVG on the same terms and conditions under which it was bound to Licensee under the Sublicense. UVA LVG hereby agrees to offer such terms and enter into such written agreement with only such non-financial modifications of a substantially formal nature which would be reasonably necessary to accommodate the functional and structural differences between Licensee and Sublicensee. Failure of a Sublicensee to enter into such an agreement within said one hundred eighty (180) days shall automatically result in the termination of the Sublicense and all rights granted thereunder.

2.6UVA shall not directly or indirectly solicit additional commercial licensees for the Licensed Technology in the Field, however, if a third party contacts UVA LVG and requests in writing to develop the Licensed Technology ("Third Party Contact") for an application in the Field currently not being developed by Licensee (an "Undeveloped Application"), UVA LVG shall notify Licensee in writing of such contact. Licensee will, at UVA LVG's written request and at Licensee's sole election and discretion either (i) negotiate in good faith a Commercially Reasonable sublicense to the Licensed Technology with any such Third Party Contact within the Undeveloped Application or (ii) provide UVA LVG with a business plan describing how Licensee will develop the Undeveloped Application. In the event Licensee chooses not to either: (i) grant a Commercially Reasonable sublicense to such Third Party Contact within the Undeveloped Application; or (ii) itself or through a partner begin development of such Undeveloped Application within one hundred twenty (120) days of the written request by UVA LVG; then UVA LVG may grant a license under the Licensed Technology to such Third Party Contact under the Licensed Patents strictly limited to the Undeveloped Application ("Third Party License").

2.7UVA LVG, UVA, UoB and any universities or non-profit institutions affiliated with UVA or UoB, shall have the right to use, free of charge, any Licensed Product for non-commercial, research, educational, academic, or administrative purposes provided the use(s) are in compliance with the regulatory requirements of the FDA.

2.8This Agreement does not restrict UVA's or UoB's right and/or ability to conduct further research and development in the Field or other fields.

2.9Any Licensed Products manufactured and sold by Licensee (or its authorized contractors and distributors) shall be in compliance with all applicable governmental laws, rules and regulations. Licensee shall keep UVA LVG fully informed of, and shall move expeditiously to resolve, any investigation, inquiry or complaint by a governmental body related to Licensed Products.

2.10If Licensed Technology was developed with any funds of the United States federal government, then (i) the federal government has been or will be granted licensing rights

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

as required under the terms of any funding agreements; (ii) the federal government shall retain all rights set forth in the federal codes and regulations pursuant to 35 U.S.C. §200-212 and 37 C.F.R. §401, as amended; and this Agreement shall be construed or modified to comply with such Act, and (iii) Licensed Products will be manufactured substantially in the United States, unless a waiver of this obligation is obtained, in advance, from the applicable federal funding agency.

2.11To the extent Commercially Reasonable or feasible, Licensee will provide to UVA and UoB, at production cost and for non-commercial research purposes only, reasonable quantities of Licensed Products. However, nothing in this section 2.11 shall obligate Licensee to manufacture or have Licensed Products manufactured or procure Licensed Products, primarily for UVA or UoB use.

2.12Subject to applicable law and regulations, Licensee or a Licensee-retained contract research organization ("CRO") shall (as instructed by Licensee) negotiate exclusively with UVA for a period of thirty (30) days to engage UVA and its affiliated hospitals an industry standard clinical trial agreement, to be a research site participating in a Phase II or Phase III Clinical Trial. Licensee shall make Commercially Reasonable efforts to ensure that UVA and its affiliated hospitals are the first U.S. health care providers to use fully-approved Licensed Products in the care of human patients. Upon expiration of each thirty (30) day period of exclusive negotiation, Licensee shall have no further obligation to UVA with respect to the matters addressed in this Section.

2.13 Notwithstanding anything to the contrary herein, the Parties agree that Licensee's obligations under Section 2.11 and Section 2.12 of this Agreement are limited to good faith consideration of UVA LVG's written requests in connection therewith, and any decision to provide Licensed Products to UVA LVG, UVA, UoB or any affiliated institutions shall be in Licensee's sole discretion. Further, the Parties agree that the rights retained for UVA LVG, UVA, UoB and any affiliated institutions pursuant to Section 2.7 of this Agreement are limited to rights to practice the Licensed Patents and the Licensed Know-How, and shall not extend to any other intellectual property rights owned or controlled by Licensee, its Affiliates or any Sublicensees.

3. DUE DILIGENCE

3.1Licensee shall use Reasonable Commercial efforts to disseminate Licensed Products in commercial markets as soon as possible and, thereafter, to maintain their availability in commercial markets for public use.

3.2 Licensee (and/or Affiliates or permitted Sublicensees) shall use Commercially Reasonable efforts to advance Licensed Products through development and commercialization, including pursuit of the following milestones ("Diligence Milestones"):

3.2.1 [**]

3.2.2 [**]

3.2.3 [**]

3.2.4 [**]

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

3.2.5 [**]

3.2.6 [**]

3.2.7 [**]

3.2.8 [**]

3.3 Licensee shall provide written report on the completion of each Diligence Milestone to UVA LVG within thirty (30) days of completion.

3.4 Licensee's failure to meet any Diligence Milestone shall trigger [**]. Notwithstanding the foregoing, UVA LVG will accept all commercially reasonable revisions to Diligence Milestone dates proposed by Licensee throughout the Term of the License Agreement [**].

4. CONSIDERATION

4.1As partial consideration for the rights granted to Licensee under this Agreement, Licensee shall issue to UVA LVG Equity Securities of Licensee constituting [**] of the ownership of Licensee on a fully diluted basis as of the Effective Date. Such Equity Securities shall be delivered to UVA LVG in a certificate, affidavit, or other applicable form duly signed by authorized officers of Licensee and issued in UVA LVG's name. As anti-dilution protection, Licensee shall issue to UVA LVG (without cost to UVA LVG) Equity Securities sufficient for UVA LVG to preserve its [**] share of ownership until Licensee has obtained paid in capital (i.e., capital contributed by investors through direct purchase of Equity Securities from Licensee) of at least [**].

4.2In the event of a public offering, UVA LVG shall be entitled to have its Equity Securities registered subject only to "lock-up" provisions no more restrictive than those binding any other pre-offering holder of Licensee's Equity Securities. UVA LVG's Equity Securities and related rights shall in no event be subject to revocation, refund or nullification for any reason.

4.3Omitted.

4.4Omitted.

4.5Royalties payable by Licensee to UVA LVG shall be based on the following table:

CUMMULATIVE ANNUAL NET SALES OF LICENSED PRODUCT	ROYALTY PERCENT
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

[**]

If there are multiple Licensed Products that are commercialized during the term of this Agreement, the Net Sales of such Licensed Product shall not be aggregated among those other Licensed Products.

[**]

4.6On each December 31 following the first Sale after NDA Approval of a Licensed Product, or Foreign Equivalent, during the Term, Licensee shall [**].

4.7[**].

4.8Licensee will make a payment to UVA LVG within thirty (30) days of each occurrence of the achievement by Licensee, Affiliate, Sublicense or a Licensee-authorized academic research institution of a Milestone as follows:

MILESTONE	MILESTONE PAYMENT AMOUNT
[**]	$[**]
[**]	$[**]
[**]	$[**]
[**]	$[**]

Each milestone payment above shall only be due once per Licensed Product per indication. For the sake of clarity, each indication referred to in this section 4.8 means a different type of cancer associated with different tissue, e.g. , ovarian vs. breast cancer, regardless of the severity, frequency or route of any treatment, dosage strength or patient class.

4.9[**]

5. ROYALTY REPORTS AND PAYMENT

5.1Licensee shall report Revenues and Net Sales for each calendar quarter in a royalty report ("Royalty Report"), and make payments for Royalties accrued during each calendar quarter, to UVA LVG within sixty (60) days of end of each quarter. Each Royalty Report shall be in the format set forth Attachment B.

5.2Royalties shall be paid by Licensee's check sent in accordance with the Section entitled "Notices".

5.3All overdue payments shall be subject to interest at a rate of one (1) percent per month. Interest payments shall be in addition to, not instead of, any other rights or remedies available to UVA LVG (including termination).

6. PROGRESS REPORTS AND AUDITS

6.1On or before December 31 of each year during the Term, Licensee shall provide

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

to UVA LVG a written annual progress report ("Progress Report"). For each Licensed Product, the Progress Report shall describe Licensee's progress with respect to research and development, manufacturing, sublicensing, marketing and sales during the prior year ending December 31 and plans for the forthcoming year.

6.2Licensee shall maintain accurate books and records respecting Revenues, Net Sales, Royalties and related information.

6.3Once a year, Licensee shall make its books and records related to Revenues, Net Sales, Royalties, and progress toward commercialization of Licensed Products available for inspection or audit by UVA LVG or a representative of UVA LVG's selection from a reputable auditing firm at UVA LVG's cost at Licensee's place of business during normal business hours. Licensee agrees to cooperate fully in any such inspection or audit, provided that the UVA LVG or its representative(s) agree to protect the confidentiality of the information as to the customers of Licensee. In the event that an audit determines the License has paid less than [**] of past-due Royalties, Licensee shall pay all costs of the audit. In the event that an audit determines the License has over paid Royalties, UVA LVG shall issue credit for such an amount to Licensee.

7. IP COSTS

7.1Within thirty (30) days of the Effective Date, Licensee shall reimburse UVA LVG for all IP Costs incurred prior to the Effective Date, which is presently estimated to be [**].

7.2Licensee shall bear all IP Costs incurred subsequent to the Effective Date.

7.3Upon Licensee's request and at Licensee's expense, UVA LVG will apply for and prosecute Licensed Patents (as well as Patents associated with Related Works when requested or pre-approved by Licensee) in any country in which such rights may reasonably be obtained. Such filings and prosecution shall be by counsel of UVA LVG's choosing that is reasonably acceptable to Licensee and shall be in the name of UVA LVG. UVA LVG shall keep Licensee advised as to the prosecution of such applications by promptly forwarding to Licensee copies of all official correspondence (including, but not limited to, applications, office actions, responses, etc.) relating thereto. Licensee shall have the right to comment and advise UVA LVG as to the conduct of such prosecution and maintenance and UVA LVG shall give due good faith consideration to Licensee's input, provided, however, that UVA LVG shall have the right to make the final decisions for all matters associated with such prosecution and maintenance provided that UVA LVG shall use reasonable efforts to minimize cost and maximize patent protection for Licensed Products. UVA LVG shall not abandon prosecution of any Licensed Patents or prosecute Licensed Patents in a manner that is or could reasonably be expected to be materially detrimental to Licensee's interests (including e.g., failing to timely file information disclosure statements; continuation or divisional applications prior to parent application issuance; or taking unreasonable extensions of time) without concurrence by Licensee so long as Licensee is not delinquent in reimbursement or patent expenses and Licensee conveys comments and/or requests with respect to patent prosecution to UVA LVG in a time frame that permits counsel to respond accordingly.

7.4UVA LVG may in consultation with Licensee and at its own expense, pursue Patent rights in any country. If Licensee does not reimburse UVA LVG for IP Costs incurred in a particular country, patent rights obtained by UVA LVG in such country shall be excluded from

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

the license rights granted to Licensee in Section 2.1 of this Agreement.

7.5UVA LVG shall send invoices or other written notice to Licensee for IP Costs subject to reimbursement under Sections 7.1 through 7.5. To the extent Licensee has not raised reasonable objections to invoices associated with the IP Costs, reimbursement payments shall be due and payable within thirty (30) days of Licensee's receipt of each such invoice or notice from UVA LVG.

8. INTELLECTUAL PROPERTY

8.1UVA LVG and UoB own or co-own and shall retain their titles to all Jointly-Owned Patents. UVA LVG owns and shall retain its title to all UVA LVG-Owned Patents.

8.2Licensee shall not contest the validity of the Licensed Patents.

8.3If, notwithstanding Section 8.2, Licensee brings a judicial or administrative action to invalidate, contest enforceability, or prevent issuance of any Licensed Patent (a "Challenge Action") and UVA LVG chooses not to terminate this Agreement, [**].

8.4Except as otherwise explicitly provided in this Section, nothing herein shall be deemed to grant any Party license or rights in any Technology other than or in addition to the Licensed Technology.

8.5Licensee and UVA LVG hereby agree that the Licensed Patents shall be extended by all means provided by law or regulation, including without limitation extensions provided under U.S. law at 35 U.S.C. § 156. Licensee hereby agrees to provide UVA LVG with all reasonable and necessary assistance in securing such extensions, including without limitation, providing all information regarding applications for regulatory approval, approvals granted, and the timing of same. Licensee acknowledges that extensions under 35 U.S.C. § 156 must be applied for within sixty (60) days of the date that a Licensed Product receives permission under the provision of law under which the applicable regulatory review period occurred for commercial marketing or use, and Licensee's failure to promptly provide the necessary information or assistance during such sixty (60) day period will cause serious injury to UVA LVG which Licensee will be liable at law.

9. MARKINGS, TRADEMARKS AND TRADE NAMES

9.1Licensee shall use Commercially Reasonable efforts to have included in all sales, marketing literature and invoices relating to Licensed Products, a statement to the effect, if applicable, of either "Patent Pending" or "U.S. Patent Number <PATENT NUMBER>."

9.2Licensee shall use Commercially Reasonable efforts to have marked the appropriate portions of all Licensed Products with any applicable United States and foreign Patent numbers in accordance with the law of the applicable jurisdiction(s).

9.3Except as expressly provided in this Agreement, Licensee shall not use any UVA, UVA LVG, or UoB technology, trade name or trademarks without the written permission of UVA LVG's Director in advance.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

10. TERM, TERMINATION AND OTHER REMEDIES

10.1Unless terminated earlier as otherwise provided in this Agreement, the term (the "Term") of this Agreement shall commence on the Effective Date and shall continue in full force and effect until the expiration of the last to expire Patents.

10.2Except as otherwise explicitly provided herein, either party shall have thirty (30) days to cure any breach of this Agreement after written notice of such breach by the other party. Thereafter (in the absence of timely cure), the other party may terminate this Agreement upon thirty (30) days written notice to the party in breach.

10.3UVA LVG shall have the right to terminate this Agreement upon the occurrence of a material breach in the absence of a Licensee cure pursuant to Section 10.2. Without limitation, any one or more of the following shall each be deemed a material breach of this Agreement by Licensee:

10.3.1 Failure of Licensee to make any payment at least thirty days (30) from the date due under this Agreement; or

10.3.2 Failure of Licensee to provide timely Progress Reports or Royalty Reports; or

10.3.3 Lack of diligence as set forth in Section 3; or

10.3.4 Assignment by Licensee of substantially all of its assets for the benefit of creditors or placement in the hands of a trustee or a receiver; or

10.3.5 Any Licensee decision to cease developing or quit the business of developing, licensing the rights to, or commercializing Licensed Products; or

10.3.6 Filing a Challenge Action.

10.4In the event of such termination, Licensee's obligation to pay the Annual Minimum Royalty due on the following December 31 shall remain in effect until paid but that the Minimum Royalty for the year in which the Agreement was terminated shall be prorated for the number of days of the year the Agreement remained in force.

10.5Notwithstanding the foregoing, if Licensee fails to obtain and maintain the insurance required pursuant to Section 16 or in the event of Licensee's bankruptcy (as provided in Section 24), this Agreement shall terminate immediately.

10.6Licensee may terminate this Agreement upon one hundred eighty (180) days written notice to UVA LVG, provided that:

10.6.1 Licensee has not committed a material and uncured breach of this Agreement

10.6.2 Upon written request, Licensee delivers to UVA LVG any documents related to INDs and/or Clinical Trials containing Licensed Products in its possession or control (including information held by Licensee's employees, agents, affiliates, contractors, or advisors) provided such materials can reasonably be redacted, distinguished or otherwise separated from Licensee's documents relating to INDs and/or Clinical Trails relating

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

to products that do not constitute Licensed Technology (the "Development Information").

10.6.3 Upon written request Licensee shall grant UVA LVG the right to make unlimited and unrestricted use of the Developmental Information in connection with commercialization of the Licensed Technology.

10.7Termination of this Agreement shall not affect Licensee's payment obligations to UVA LVG or its obligations under the Sections of this Agreement entitled "Definitions," "Progress Reports and Audits (except Section 6.1)," "Intellectual Property," "IP Costs," "Term, Termination, and Other Remedies," "Taxes," "Warranty Disclaimer," "Costs," "Confidentiality," Indemnification and Liability," "Insurance," "Acquiescence," "Integration," "Interpretation," "Notices," "Assignment," "Bankruptcy," "Headings," "Export Controls," "No Third Party Beneficiary," Severability," and "Dispute Resolution."

11. TAXES

Licensee shall pay all taxes assessed or levied on, or on account of, the Licensed Technology, Licensed Products made, used or Sold hereunder, or on account of the amounts payable to, or for the account of, UVA LVG under this Agreement (other than taxes imposed by the United States of America, the Commonwealth of Virginia or jurisdictions therein).

12. WARRANTY DISCLAIMER

ALL TECHNOLOGY, INTELLECTUAL PROPERTY, AND INFORMATION, GRANTED OR PROVIDED BY UVA LVG PURSUANT TO THIS AGREEMENT ("DELIVERABLES") ARE "AS IS". UVA LVG AND UOB MAKES NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, AS TO ANY MATTER INCLUDING, BUT NOT LIMITED TO, WARRANTY OF FITNESS FOR PARTICULAR PURPOSE, MERCHANTABILITY, USEFULNESS, TITLE, OR NONINFRINGEMENT. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES, SUCH AS LOSS OF PROFITS OR INABILITY TO USE DELIVERABLES. UVA LVG AND UOB DO NOT MAKE ANY WARRANTY OF ANY KIND WITH RESPECT TO FREEDOM FROM PATENT, TRADEMARK, OR COPYRIGHT INFRINGEMENT, OR THEFT OF TRADE SECRETS AND DOES NOT ASSUME ANY LIABILITY HEREUNDER FOR ANY INFRINGEMENT OF ANY PATENT, TRADEMARK, OR COPYRIGHT ARISING FROM USE OF DELIVERABLES. LICENSEE AGREES THAT IT WILL NOT MAKE ANY WARRANTY ON BEHALF OF UVA LVG OR UOB TO ANY THIRD PARTY.

13. COSTS

All costs or expenses incurred by Licensee in carrying out its obligations under this Agreement shall be paid by Licensee, and Licensee shall not be entitled to reimbursement from Royalties or otherwise from UVA LVG. Licensee shall obtain at its own expense all necessary licenses and permits and shall comply with all laws, ordinances, rules or regulations affecting the manufacture, import, exportation, use, and/or sale or transfer of Licensed Technology and Licensed Products.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

14. CONFIDENTIALITY

14.1"Confidential Information" means (i) the Licensed Technology; (ii) and information or documents relating to the Licensed Technology, including patent applications, and all related foreign applications, continuations, continuation-in-part and divisional applications; (iii) any reports due hereunder; and/or (iv) any other information marked or designated confidential upon disclosure by a Party (the "Disclosing Party") to the other Party (the "Receiving Party"), including all such information disclosed prior to the date of this Agreement.

14.2 Confidential Information shall not include information (i) already in a Receiving Party's possession prior to disclosure by the Disclosing Party (as established by written documentation prepared in the ordinary course of business); (ii) previously published or published hereafter, unless such publication is a breach of this Agreement; (iii) received by a Receiving Party from a third party not under any obligation of confidentiality with respect thereto; or (iv) independently developed by an employee of a Receiving Party without access to Confidential Information (as established by written documentation prepared in the ordinary course of business) or (v) is required by law or regulation to be disclosed.

14.3Receiving Party shall be permitted to disclose Confidential Information of a Disclosing Party to its Affiliates, agents, consultants and business partners, to the extent they are subject to confidentiality provisions at least as strict as those set forth herein; but shall otherwise maintain the confidentiality of all Confidential Information and not use or exploit it for any purpose not expressly permitted herein, until five (5) years after termination of this Agreement. Receiving Party shall protect Confidential Information from disclosure and unauthorized use with the same care used to protect its most valuable confidential information but in no event less than reasonable care.

14.4Upon termination of this Agreement, Receiving Party shall return to Disclosing Party all originals and copies of all materials (other than this Agreement) containing any Confidential Information. Receiving Party may, however, retain one archival copy of any such information in its corporate legal department for purposes of legal compliance only.

15. INDEMNIFICATION AND LIABILITY

15.1UVA LVG and UoB shall not be liable to Licensee, Affiliates, Sublicensees, or customers of Licensee for compensatory, special, incidental, indirect, consequential or exemplary damages resulting from the manufacture, testing, design, labeling, use or sale of Licensed Products. Licensee shall not be liable to UVA LVG, UoB or their Affiliates for any compensatory, special, incidental, indirect, consequential or exemplary damages of any kind resulting arising out of the exercise of its rights under this Agreement.

15.2Licensee agrees to indemnify, hold harmless and defend UVA, UVA LVG, UoB and their respective trustees, officers, employees, attorneys and agents from all claims or demands made against them (and any related losses, expenses or attorney's fees) arising from the execution of this Agreement or from the exercise of any rights under this Agreement, including without limitation, against any damages, losses or liabilities whatsoever for death, injury to person or damage to property, or for the infringement of third party intellectual property rights,

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

as a result of the making, use, importation, sale, development, design, promotion, possession, operation or other disposition of any Licensed Products, the Patents or the Licensed Technology by Licensee (including but not limited to all of its parents, assigns, successors, officers, trustees, personnel, agents, and employees), its Affiliates, customers, assignees, or other transferees ("Claims"). This obligation shall survive termination of this Agreement.

16. INSURANCE

Throughout the term of this Agreement and for a period of five (5) years thereafter, Licensee shall obtain and maintain, in full force and effect and at Licensee's sole cost and expense, the insurance coverage as set forth in Attachment C, the terms of which are incorporated herein by this reference. This Agreement and the licenses granted herein to Licensee 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 hereunder, 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 and its Sublicensees shall have no right to complete production and sale of Licensed Products under the continued obligations in Section 10.7 above. Nothing herein shall be construed to release either party from any obligation that matured prior to the effective date of such termination.

17. ACQUIESCENCE

acquiescence in any breach of this Agreement by either party shall operate to excuse any subsequent or prior breach.

18. INTEGRATION

:ept for any confidential disclosure agreement executed by the parties, this Agreement supersedes all previous agreements relating to the subject matter hereof, whether oral or in a writing, and constitutes the entire agreement of the parties hereto and shall not be amended or altered in any respect except in a writing executed by the parties.

19. INTERPRETATION

s Agreement shall be governed by, and construed and enforced in accordance with, the laws of the Commonwealth of Virginia, United States of America, without regard to conflict of law principles. All singular terms shall include plural, and vice versa, as necessary to interpret and enforce the intent of this Agreement.

20. DISPUTE RESOLUTION

The parties consent to the exclusive jurisdiction of the courts of City of Charlottesville, Virginia to resolve any and all disputes relating to this Agreement. Licensee hereby irrevocably and unconditionally waives any objection to the laying of venue in any court located in City of Charlottesville, Virginia with respect to any lawsuit relating to this Agreement, consents to receive service of any summons or other legal process by registered or certified mail, postage

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

prepaid, at the address for notices set forth below, and waives all objections to the validity of any such summons or legal fees.

21. INFRINGEMENT

21.1To the extent permitted by law, Licensee shall have the right during the term of this Agreement to commence an action for infringement of the Licensed Patents against any unlicensed third party for any infringement occurring within the Field, provided that Licensee shall provide UVA LVG thirty (30) days prior written notice of such infringement and of Licensee's intent to file such action. UVA LVG shall have the right at its own expense to appear in such action by counsel of its own selection. If, as a matter of law, an infringement action must be prosecuted in the UVA LVG's name, UVA LVG shall voluntarily participate in or pursue such action at Licensee's expense (including without limitation reasonable and documented legal fees and out of pocket expenses). Notwithstanding the foregoing, if an appearance or infringement action would subject UVA LVG to the jurisdiction of a foreign tribunal that could not otherwise assert jurisdiction over UVA LVG, then UVA LVG shall have the right to decline appear or otherwise pursue such action. Settlement of any action initiated and/or paid for by Licensee shall require the consent of UVA LVG and Licensee, which neither shall unreasonably withhold from the other. In the event that Licensee pays all fees and expenses related to an infringement action, any settlement amount or recovery for damages shall be applied as follows: (i) first, to reimburse the parties for their expenses in connection with the litigation; and (ii) second, UVA LVG shall receive compensation for the time of any UVA LVG personnel involved in the action; and (iii) third, Licensee shall receive eighty five percent (85%) and UVA LVG shall receive fifteen percent (15%) of any monies remaining. If Licensee pays less than all such fees and expenses, Licensee's share of any settlement amount or recovery for damages shall be reduced from eighty five percent (85%) in proportion to the percentage of fees and expense paid by UVA LVG (and/or unreimbursed by Licensee prior to such Settlement).

21.2If Licensee fails, within one hundred twenty (120) days after providing or receiving notice of a potential infringement, to institute an action against such infringer or notifies UVALVG that it does not plan to institute such action, then UVA LVG shall have the right to do so at its own expense. Licensee shall cooperate with UVA LVG in such effort including being joined as a party to such action if necessary at UVA LVG cost. UVA LVG shall be entitled to retain all damages or costs awarded in such action. Notwithstanding the pendency of any infringement (or other) claim or action by or against Licensee or UVA LVG, Licensee shall have no right to terminate or suspend (or escrow) payment of any amount payable to UVA LVG.

22. NOTICES

y notice under any of the provisions of this Agreement shall be deemed given when sent by courier or deposited in the mail, postage prepaid, registered or certified first class mail and addressed to the applicable party at the address stated on the signature page hereof, or such other address as such party shall specify for itself by like notice to other party. Each party shall also transmit a copy of such notice by electronic mail to the other party.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

23. NO ASSIGNMENT

ensee shall neither assign nor transfer this Agreement or any interest herein without the prior written consent of UVA LVG. Nevertheless, Licensee shall be entitled to assign this agreement at its sole discretion to a third party acquiring all or substantially all of Licensee's intellectual property assets related to the Licensed Products in a single or series of related transactions, upon thirty (30) days' notice of the assignment to UVA LVG.

24. BANKRUPTCY

he event Licensee by its own actions or the action of any of its shareholders or creditors (if applicable), files or has filed against it, under the Bankruptcy laws of the United States, Licensee hereby waives the benefits of an automatic stay provided in 11 U.S.C. § 362 and consents and agrees to raise no objection to any petition for relief from such stay by UVA LVG. Licensee further agrees that this Agreement shall immediately in the event that a creditor or other claimant takes possession of, or a receiver, administrator or similar officer is appointed over any of the assets of Licensee, or in the event that Licensee makes any voluntary arrangement with its creditors or becomes subject to any court or administration order pursuant to any U.S. Bankruptcy proceedings or insolvency law. Licensee will promptly inform UVA LVG of its intention to file a voluntary petition in bankruptcy or of another's communicated intention to file an involuntary petition in bankruptcy.

25. HEADINGS

section headings contained in this Agreement are set forth for the convenience of the parties only, do not form a part of this Agreement and are not to be considered a part hereof for the purpose of construction or interpretation hereof, or otherwise.

26. EXPORT CONTROLS

A LVG is 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 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 competent agency of the United States and/or written assurances that Licensee shall not export data or commodities to certain foreign countries without prior approval of such agency. UVA LVG neither represents that a license shall not be required nor that, if required, it shall be issued.

27. NO THIRD PARTY BENEFICIARY

person or entity shall be considered a third party beneficiary of this Agreement.

28. SEVERABILITY

Should any provision of this Agreement be determined to be unenforceable or otherwise unlawful, then such provision shall be without effect, as if such provision had not been included herein, the remaining terms of this Agreement shall survive, the Agreement shall be interpreted so as to most fully achieve the intention of the parties.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

e Balance Of This Page Intentionally Left Blank – Signature Page To Follow)

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed in duplicate counterparts, each of which shall be deemed to constitute an original, effective as of Effective Date.

: undersigned verify that they have the authority to bind to this Agreement the party on behalf of which they are executing below.

University of Virginia Patent Foundation
d/b/a University of Virginia Licensing and Ventures Group

By: /s/ Michael P. Straightiff_____
Michael P. Straightiff
Director

By: /s/ Erik L. Hewlett_____
Erik L. Hewlett
Chairman

Address for Notices:

UVA LVG
250 West Main Street, Suite 300
Charlottesville, VA 22902

Attention: Director
Email:

University of Virginia

By: /s/ Robert R. Merhige IV___
Robert R. Merhige IV
Director of Grants & Contracts

PhosImmune, Inc.

By: /s/ Donald F. Hunt_____
Donald F. Hunt
President

Address for Notices:

Dr. Donald Hunt
PhosImmune, Inc.
c/o Fanelli Haag & Kilger PLLC
1909 K Street, N.W., Suite 1120
Washington, D.C. 20006

Attention: Thomas Haag, Ph.D., Esq.
Email:

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

CONFIDENTIAL TREATMENT REQUESTED: ***Information for which confidential treatment has been requested is omitted and is noted with asterisks. An unredacted version of this document has been filed separately with the Securities and Exchange Commission (the "Commission").***

LICENSE AGREEMENT

This License Agreement (this "**Agreement**"), dated as of January 25, 2016 (the "**Effective Date**"), is made by and between Agenus Inc., a Delaware corporation with offices at 3 Forbes Rd, Lexington, MA 02421 ("**Parent**") and its wholly owned subsidiary, 4-Antibody AG, a corporation organized under the laws of Switzerland with an office at Hochbergerstrasse 60C, CH-4057 Basel, Switzerland ("**4AB**," and together with the Parent, "**Agenus**"), and the Ludwig Institute for Cancer Research Ltd., a non-profit corporation organized under the laws of Switzerland with its registered office at Stadelhoferstrasse 22, 8001 Zurich, Switzerland and an office at 666 Third Avenue, New York, New York 10017, USA (" **LICR**"). Each of Agenus and LICR may be referred to in this Agreement individually as a "**Party**" and, collectively, as the "**Parties**".

RECITALS

WHEREAS, Agenus is engaged in the research, development and commercialization of fully human and humanized monoclonal antibodies to treat human diseases;

WHEREAS, LICR has technology and know-how related to the development of immunotherapeutic products;

WHEREAS, 4-Antibody AG, Recepta Biopharma S.A. and LICR entered into a Collaborative Research & Development and Commercial Rights Agreement dated December 21, 2012 (the "**Prior Agreement**");

WHEREAS, the Initial Term of the Prior Agreement has terminated in accordance with its terms, and the Parties desire to clarify and amend their rights and responsibilities under the Prior Agreement;

WHEREAS, Agenus desires to develop and commercialize, for the public benefit, products arising out of technologies developed in the course of research activities conducted under the Prior Agreement; and

WHEREAS, Agenus wishes to obtain a license to products arising out of technologies developed in the course of research activities conducted under the Prior Agreement and LICR wishes to grant such a license in accordance with the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants set forth herein, Agenus and LICR, intending to be legally bound, hereby agree as follows:

ARTICLE I
DEFINITIONS

1.1 "**4AB Territory**" means the Territory other than the Parent Territory.

1.2 "**Accounting Standards**" means (a) U.S. generally accepted accounting principles, consistently applied, or (b) to the extent applicable, International Financial Reporting Standards as issued by the International Accounting Standards Board.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

1.3 "**Affiliate**" means as to a Party or to MSKCC, as applicable, any entity which, directly or indirectly, controls, is controlled by, or is under common control with such Party or MSKCC. For the purposes of this definition, "control" refers to any of the following: (a) direct or indirect ownership of fifty percent (50%) or more of the voting securities entitled to vote for the election of directors in the case of a corporation, or of fifty percent (50%) or more of the equity interest with the power to direct management in the case of any other type of legal entity; (b) status as a general partner in any partnership; or (c) any other arrangement where an entity possesses, directly or indirectly, the power to direct the management or policies of another entity, whether through ownership of voting securities, by contract or otherwise.

1.4 "**Agenus Territory**" means the Territory other than the Recepta Territory.

1.5 "**Business Day**" means a day other than Saturday, Sunday or any other day on which commercial banks located in New York, New York USA are authorized or obligated by applicable laws to close.

1.6 "**Combination Product**" means a product that consists of a Licensed Antibody and other active compounds or active ingredients sold as a single formulation or any combination of a Licensed Product sold together with an Other Product.

1.7 "**Confidential Information**" has the meaning set forth in Section 6.1 of this Agreement.

1.8 "**Dollars**" or "**$**" means U.S. Dollars.

1.9 "**Field**" means the diagnosis, prognosis, prevention, treatment and palliation of human diseases or conditions.

1.10 "**First Commercial Sale**" means, with respect to any Licensed Product, the first sale by Agenus or one of its Affiliates to a Third Party of such Licensed Product in a country in the Territory after the applicable Marketing Approval of such Licensed Product has been obtained in such country. For avoidance of doubt, the following would not constitute a First Commercial Sale: (a) the sale of a Licensed Product by Agenus or one of its Affiliates to another Affiliate; (b) the disposal or use of a Licensed Product in clinical trials, as free samples, or under a compassionate use or patient assistance program; (c) the disposal or use a Licensed Product in a named patient or test marketing program or in non-registrational studies or other similar programs or studies; (d) the donation of Licensed Product by Agenus or one of its Affiliates to non-profit institutions or government agencies for a non-commercial purpose; (e) any free Licensed Product that is supplied to a Third Party in conjunction with the offer for sale, or sale of any other product (in an amount customary in the industry); (f) the use of a Licensed Product for research and development purposes; or (g) sales made to a distributor until such time as Agenus or one of its Affiliates recognizes the revenue for such transfers pursuant to Accounting Standards.

1.11 "**Know-How**" means any and all technical information which at the Effective Date is not in the public domain, including information comprising or relating to data, materials, results, inventions, improvements, protocols, formulas, processes, methods, compositions, articles of manufacture, formulations, discoveries, findings, know-how and trade secrets of any kind, including scientific, preclinical, clinical, regulatory, manufacturing, marketing, financial and commercial information or data, sequence information, vectors and host cells that include DNA, in each case (whether or not patented or patentable) in written, electronic or any other form now known or hereafter developed.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

1.12 "**Licensed Antibody**" means one or more molecules, or one or more genes encoding such molecule(s), which comprises or consists of one or more immunoglobulin domains, or a fragment thereof, that specifically bind to a Target.

1.13 "**Licensed Know-How**" means all Know-How owned or controlled by a Licensor or Agenus or any of their respective Affiliates existing as of the Effective Date, that was generated in the course of the research program conducted pursuant to the Prior Agreement.

1.14 "**Licensed Patent Rights**" means any Patent Rights owned or controlled solely or jointly by a Licensor or Agenus or any of their respective Affiliates as of the Effective Date or during the Term that disclose an invention conceived prior to the Effective Date of this Agreement and in the course of the research program conducted pursuant to the Prior Agreement, including without limitation any Product Patents or Program Intellectual Property under the Prior Agreement.

1.15 "**Licensed Product**" means any therapeutic, diagnostic, prognostic or prophylactic preparation that contains one or more Licensed Antibodies: (i) the manufacture, use, sale, offer for sale or importation of which would, but for the licenses granted hereunder, infringe a Valid Claim or (ii) that is developed using Licensed Know-How.

1.16 "**Licensors**" means, together, LICR and MSKCC.

1.17 "**Marketing Approval**" means, with respect to a Licensed Product, all approvals (including supplements, amendments, pre- and post-approvals), permits, licenses, registrations and authorizations necessary for the manufacture, distribution, use, promotion, marketing, transport, offer for sale, sale or other commercialization of such Licensed Product in a regulatory jurisdiction, including, where required, any approval, agreement, determination or decision establishing the price or level of reimbursement for such Licensed Product, as required in a given jurisdiction prior to sale of such Licensed Product in such jurisdiction.

1.18 "**MSKCC**" means the Memorial Sloan-Kettering Cancer Center.

1.19 "**Net Sales**" means, with respect to a given period, the gross amount invoiced for sales of Licensed Products in the Agenus Territory during such period, in arm's length sales by Agenus or its Affiliates or Sublicensees to Third Parties less, in each case solely to the extent relating to such Licensed Products and solely to the extent actually incurred, allowed, paid, accrued or specifically allocated to the gross amount invoiced, and determined in accordance with applicable financial reporting standards:

(a) normal and customary trade, cash and quantity discounts actually given, coupons actually taken, credits, price adjustments or allowances for damaged Licensed Product, returns or rejections of such Licensed Product;

(b) adjustments, allowances, credits, fees, reimbursements, chargeback payments and rebates (or the equivalent thereof) actually given for Licensed Products granted to group purchasing organizations or other buying groups, managed health care organizations, pharmacy benefit management companies, health maintenance organizations or any other providers of health insurance coverage, health care institutions (including hospitals) or other health care organizations, Third Party health care administrators or patient assistance or other similar programs, or to federal, state/provincial, local and other governments, including their agencies, or to wholesalers, distributors or other trade customers;

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

(c) reasonable and customary freight, shipping insurance and other transportation expenses, each directly related to the sale of Licensed Products (if actually borne without reimbursement from any Third Party);

(d) distribution commissions/fees paid or payable to any Third Party providing distribution services to Agenus or its Affiliates or Sublicensees;

(e) sales, value-added or excise taxes, tariffs and duties, and all other taxes and government charges related to the sale of Licensed Products, in each case to the extent that each such item is actually borne by Agenus or its Affiliates or Sublicensees without reimbursement from any Third Party (but excluding taxes properly assessed or assessable against the income derived by Agenus or its Affiliates or Sublicensees from such sale);

(f) actual bad debt expense (but not exceeding 5% of Net Sales);

(g) adjustments for overbilling, errors, rejection, recalls or return of Licensed Product;

(h) rebates payable in connection with state or federal Medicare (Title XVIII of the Social Security Amendments of 1965, as amended), Medicaid (Title XIX of the Social Security Amendments of 1965, as amended) or similar programs in the United States and comparable programs elsewhere in the Territory; and

(i) any item substantially similar in character or substance to any of the foregoing, which is permitted by applicable financial reporting standards to be accounted for in the calculation of Net Sales prevailing at the time and customary in the medical diagnostics industry at the time.

The transfer of any Licensed Product by Agenus or one of its Affiliates to another Affiliate or to a Sublicensee shall not be considered a Net Sale, but the resale of such Licensed Product by any of the foregoing to Third Parties for commercial use shall be included in Net Sales. For the avoidance of doubt, disposal of any Licensed Product for, or use of any Licensed Product in, clinical trials, as free samples, or under compassionate use, patient assistance, named patient or test marketing programs or non-registrational studies or other similar programs or studies where Licensed Product is supplied or delivered without charge, shall not result in any Net Sales. No Licensed Product donated to non-profit institutions or government agencies for a non-commercial purpose shall result in any Net Sales. Similarly, no free Licensed Product that is supplied to a Third Party in conjunction with the offer for sale, or sale of any Licensed Product (such free Licensed Product being in an amount customary in the industry) will result in any Net Sales of such free Licensed Product. The use of any Licensed Product by Agenus or one of its Affiliates or Sublicensees for research and development purposes shall similarly not result in any Net Sales.

In the case where a Licensed Product is sold as part of a Combination Product in a country in the Territory, Net Sales for the Licensed Product included in such Combination Product in such country shall be calculated as follows:

i. if the Licensed Product is sold separately in such country and the Other Product in the Combination Product is sold separately in such country, Net Sales for the Licensed Product shall be calculated by multiplying actual Net Sales of such Combination Product in such country by the fraction A/(A+B), where A is the

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

invoice price of the Licensed Product when sold separately in such country and B is the total invoice price of the Other Product in the Combination Product when sold separately in such country;

ii. if the Licensed Product is sold separately in such country but the Other Product in the Combination Product is not sold separately in such country, Net Sales for the Licensed Product shall be calculated by multiplying actual Net Sales of such Combination Product in such country by the fraction A/D, where A is the invoice price of the Licensed Product when sold separately in such country and D is the invoice price of the Combination Product in such country;

iii. if the Licensed Product is not sold separately in such country but the Other Product in the Combination Product is sold separately in such country, Net Sales for the Licensed Product shall be calculated by multiplying actual Net Sales of such Combination Product by the fraction 1 – (B/D), where B is the invoice price of the Other Product in the Combination Product when sold separately in such country and D is the invoice price of the Combination Product in such country; or

iv. if neither the Licensed Product nor the Other Product in the Combination Product is sold separately in such country, the Parties shall determine Net Sales for the Licensed Product in such Combination Product by mutual agreement based on the relative contribution of the Licensed Product and each Other Product to the Combination Product, and shall take into account in good faith any applicable allocations and calculations that may have been made for the same period in other countries.

1.20 "**Other Product**" means a product that is not a Licensed Product, but excluding drug delivery vehicles, cytotoxic compounds or other therapeutically active ingredients conjugated or otherwise linked to an Licensed Antibody, adjuvant, excipient or diagnostic compound.

1.21 "**Parent Territory**" means all territories in the United States of America, Canada and Mexico.

1.22 "**Patent Rights**" means all the rights and interests in and to all patents and patent applications in any jurisdiction in the Territory, including, without limitation, certificates of invention, applications for certificates of invention and priority rights, provisional patent applications, divisionals, continuations, substitutions, continuations-in-part, and all patents granted thereon; and all re-examinations, re-issues, additions, renewals, extensions, confirmations or registrations based on any such patent or patent application; and any extensions or restorations by existing or future extension or restoration mechanisms, including, without limitation, patent term extensions and supplementary protection certificates.

1.23 "**Phase 3 Clinical Trial**" means a clinical trial in any country that generally meets the requirements of 21 CFR § 312.21(c), as amended (or its successor regulation or comparable laws in countries outside of the United States), that, together with any other such clinical trials that are planned or have been conducted, is intended to (a) serve as a primary basis for establishing that the Licensed Product is safe and efficacious for its intended use, (b) provide an adequate basis to establish physician labeling, including, contraindications, warnings, precautions and adverse reactions and (c) support Marketing Approval for such Licensed Product.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

1.24 **"Recepta Territory"** means the countries within the Territory for which Recepta Biopharma S.A. or its affiliates or sublicensees develop or commercialize Licensed Product.

1.25 "**Royalty Term**" means, Licensed Product-by-Licensed Product and country-by-country basis in the Agenus Territory, the time from the First Commercial Sale of such Licensed Product in such country until the later to occur of (a) the expiration of the last Valid Claim covering the Licensed Product in the country in which such Licensed Product is used, or (b) ten (10) years after the First Commercial Sale of such Licensed Product in such country.

1.26 "**Sublicense Income**" means any non-royalty payments or other consideration that Agenus receives as consideration for a sublicense under the Licensed Patent Rights or Licensed Know-How in the Agenus Territory, other than reimbursement for expenses related to the prosecution, maintenance and defense of the Licensed Patent Rights, reimbursement for, or payments specifically committed to cover, fully loaded costs that have been or will be actually incurred in the research and development of Licensed Products that are the subject matter of the sublicense, and amounts received from any Third Party for the purchase of the publically traded equity securities at fair market value (any amounts paid in excess of fair market value shall be deemed Sublicense Income).

1.27 "**Sublicensee**" means any Third Party expressly licensed by Agenus or its Affiliates under the Licensed Patent Rights or Licensed Know-How to develop, manufacture or commercialize Licensed Products.

1.28 "**Swiss VAT**" means Swiss value added tax as chargeable according to Article 8 (2) (c) of the Swiss Value Added Tax Act 2010.

1.29 "**Target**" means (a) cytotoxic T-lymphocyte-associated protein 4 (CTLA-4), or (b) programmed cell death protein 1 (PD-1).

1.30 "**Term**" has the meaning set forth in Section 7.1 of this Agreement.

1.31 "**Territory**" means all the countries and territories of the world.

1.32 "**Third Party(ies)**" means any party(ies) other than LICR, MSKCC, Agenus and their respective Affiliates (including for the avoidance of doubt, with respect to Agenus, 4-Antibody AG).

1.33 "**Valid Claim**" means a claim in an unexpired and issued patent or patent application included in the Licensed Patent Rights that has not been disclaimed, revoked or held invalid or unenforceable by a final, unappealable decision of a government agency or court of competent jurisdiction, or unappealed within the time limit allowed for appeal, or which has not been admitted to be invalid or unenforceable through reissue, reexamination or disclaimer or otherwise, provided that if any pending patent application is pending for more than seven (7) years, it shall cease to be within the definition of Valid Claim unless and until it issues.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

ARTICLE II
LICENSE GRANTS

2.1 **License Grants**.

(a) **To Parent**. LICR hereby grants to Parent: (i) an exclusive license, with the right to grant sublicenses, under all of the Licensors' right, title and interest in and to the Licensed Patent Rights, and (ii) a non-exclusive license, with the right to grant sublicenses, under all of the Licensors' right, title and interest in and to the Licensed Know-How, in each case, to develop, make, have made, use, sell, offer for sale and import Licensed Products in the Parent Territory and in the Field, subject to the retained rights of the Licensors set forth in Section 2.2.

(b) **To 4AB**. LICR hereby grants to 4AB: (i) an exclusive license, with the right to grant sublicenses, under all of the Licensors' right, title and interest in and to the Licensed Patent Rights, and (ii) a non-exclusive license, with the right to grant sublicenses, under all of the Licensors' right, title and interest in and to the Licensed Know-How, in each case, to develop, make, have made, use, sell, offer for sale and import Licensed Products in the 4AB Territory and in the Field, subject to the retained rights of the Licensors set forth in Section 2.2

(c) Upon the expiration of the Royalty Term applicable to any Licensed Product in any country, the licenses under Section 2.1(a) and (b) with respect to such Licensed Product in such country shall convert to non-exclusive, fully paid-up licenses.

2.2 **Retained Rights**. Each of the Licensors, on behalf of itself and its academic collaborators, retains an irrevocable right to practice or use only for their own educational and non-commercial research purposes (including clinical research involving patient care, but not including a human clinical trial of a Licensed Product unless the protocol for such clinical trial has been approved, in writing in advance, by Agenus, one of its Affiliates, or a Sublicensee), the inventions claimed in the Licensed Patent Rights and the Licensed Know-How.

2.3 **Sublicense Rights**. Agenus shall have the right to extend or sublicense the rights granted to it under Section 2.1 to its Sublicensees, and any such Sublicensees shall have the right to extend or further sublicense (through multiple tiers) the rights granted to it by Agenus. All terms of any sublicense (whether by Agenus or by any Sublicensee) shall be consistent in all respects with the restrictions, exceptions and conditions of this Agreement, and shall include, without limitation, a provision binding sublicensees to (i) reporting and record-keeping obligations with respect to sales of Licensed Products as provided in Sections 2.6 and 3.7; (ii) indemnification under Section 5.4(a)(ii); and (iii) obligations of non-use of name as provided in Section 6.5. Agenus shall use diligent efforts to ensure compliance by its Affiliates and Sublicensees with all applicable terms of this Agreement. Performance or satisfaction of any of the obligations of Agenus under this Agreement by any of its Affiliates or Sublicensees shall be deemed performance or satisfaction of such obligations by Agenus. Agenus shall notify LICR within ten (10) Business Days of executing any such sublicense, identifying each Sublicensee to LICR in writing by name and address, and shall provide LICR with a copy of the sublicense agreement. LICR shall retain this confidential copy for its use solely for the purpose of monitoring compliance by Agenus and its Affiliates and Sublicensees with their respective obligations hereunder and enforcing LICR's (and MSKCC's) rights under this Agreement. Agenus shall not grant a sublicense to a Third Party whose primary business is, to the best of Agenus's knowledge, the manufacture and/or sale of tobacco containing products.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

2.4 **No Implied Licenses**. No rights or licenses (either express or implied) to any intellectual property rights of a Party are granted to the other Party by this Agreement, except as provided in this Agreement.

2.5 **Due Diligence**. From and after the Effective Date, as between the Parties, Agenus and its Affiliates shall be solely responsible, at its own expense, for the research, development, manufacture and commercialization of Licensed Products. Agenus will use commercially reasonable efforts to register an IND filing with the FDA for at least one Licensed Product by [**]. Agenus and its Affiliates will use, and will cause its Sublicensees to use, commercially reasonable efforts, consistent with their prudent business and scientific judgment, to research, develop, manufacture and commercialize one or more Licensed Products to achieve Marketing Approval in at least one of: (a) the United States or (b) any one of France, Germany, Italy, Spain and the United Kingdom.

2.6 **Reporting.** Within sixty (60) days after the end of each calendar year during the Term, Agenus or its Affiliate shall furnish LICR with a written report summarizing its, its Affiliates' and its Sublicensees'efforts during the prior year to develop and commercialize Licensed Products, including: (a) research and development activities completed during the prior year; (b) work in progress, (c) material milestones anticipated during the present calendar year, (d) commercialization efforts; and (e) a summary of resources allocated to the development and commercialization of Licensed Products during the prior year. If LICR reasonably determines that information contained in any written report is insufficient or incomplete, it may request that Agenus or its Affiliate provide reasonable additional information, by written request specifying the additional information which is needed which Agenus or its Affiliate shall use reasonable efforts to provide additional information in such form and substance as mutually agreed. The foregoing reports shall be the Confidential Information of Agenus subject to Article VI.

ARTICLE III
PAYMENTS

3.1 **Milestone Payments**. Agenus or its Affiliates shall make the following milestone payments to LICR upon the first achievement of each of the following milestones in the Agenus Territory by Agenus or any of its Affiliates:

(a) **Development Milestones for the first Licensed Product targeting PD-1 and the first Licensed Product targeting CTLA-4:**

[**]	[**]
[**]	$[**]
[**]	$[**]

(b) **Commercial Milestones for Licensed Products**

[**]	[**]
[**]	$[**]
[**]	$[**]
[**]	$[**]

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

[**]	$[**]

(c) **No Multiple Payments; Notice of Achievement**. For the avoidance of doubt, none of the payments attributable to the achievement of the milestones set forth in Section 3.2(a) above shall be payable more than once per Target, and none of the payments attributable to the achievement of the milestones set forth in Section 3.2(b) above shall be payable more than once. Agenus shall notify LICR of the achievement of each of the foregoing milestones within forty-five (45) days after each such achievement. Any milestone payments shall be reflected on an invoice provided to Agenus by LICR, and any such invoices shall be due and payable by Agenus within forty-five (45) days after the date the invoice is received.

3.2 **Royalties**. Agenus or its Affiliates or Sublicensees shall pay LICR a running royalty of [**] on annual Net Sales of Licensed Products in the Agenus Territory, subject to adjustment as set forth in Section 3.3 below:

Royalties on Net Sales hereunder shall be payable on a Licensed Product-by-Licensed Product and country-by-country basis until the expiration of the last to expire Valid Claim of the Licensed Patent Rights in the country of actual use of the Licensed Product.

3.3 **Royalty Adjustments**.

(a) **Absence of Valid Claim**. If the manufacture, use or sale of a Licensed Product is not covered by a Valid Claim in the country of sale in the Agenus Territory at any time during the Royalty Term for such Licensed Product, the royalty rate applicable under Section 3.2 on Net Sales in such country shall be reduced by [**] for the applicable time no Valid Claim exists.

(b) **Royalty Stacking**. If Agenus or any of its Affiliates or Sublicensees obtains a license from a Third Party under Patent Rights owned or controlled by such Third Party that are necessary to make, use or sell a Licensed Product in any country, it may offset any royalty payments payable under such Third Party license with respect to sales of Licensed Products against the royalty payments that are due to LICR with respect to Net Sales in such country, *provided* that in no event may the royalty payments otherwise due to LICR be reduced by more than [**] by operation of this Section 3.3(b).

3.4 **Sublicense Income**. Agenus shall pay to LICR [**] of Sublicensing Income received from Sublicensees.

3.5 **Manner of Payments**. Following the First Commercial Sale, royalty payments due to LICR hereunder shall be made quarterly by Agenus or its Affiliate or Sublicensees no later than forty-five (45) days following completion of each calendar quarter with respect to Licensed Products sold during the prior calendar quarter. Each payment shall be accompanied by a report setting forth for the relevant calendar quarter the information and basis on which such royalties have been calculated. All reports delivered pursuant to this Agreement shall be deemed Confidential Information of Agenus subject to Article VI. All payments to be made pursuant to this Agreement shall be payable in Dollars by bank wire transfer in immediately available funds to such bank account as LICR shall designate. If any payment is not made on or before the due date specified herein, Agenus will pay interest on the outstanding amount until paid in full if requested to do so by LICR. Interest will be charged at a rate equal to the "Intended Federal Funds Rate" or equivalent plus [**] as specified by the Federal Open Market Committee and published by the US Federal Reserve Board.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

3.6 **Tax Withholding and Swiss VAT**. Any tax, duty or other levy paid or required to be withheld by Agenus on account of royalties payable to LICR under this Agreement shall be deducted from the amount of royalties otherwise due. Agenus shall secure and send to LICR proof of payment of any such taxes, duties or other levies withheld and paid by Agenus for the benefit of LICR, and cooperate at LICR's reasonable request to ensure that amounts withheld are reduced, creditable (or otherwise recoverable) to the fullest extent permitted by the relevant jurisdiction. Notwithstanding the above, if any payments under Sections 3.1 and 3.4 above are considered a taxable supply for Swiss VAT purposes, Swiss VAT at the appropriate rate (currently 8%) shall be charged in addition to the amounts as set out in 3.1 and 3.4.

3.7 **Audit Right**. Following the First Commercial Sale and during the Term of this Agreement and a period of five (5) years thereafter, Agenus shall keep, and shall cause its Affiliates and Sublicensees to keep, full, true and accurate books and records containing all particulars relevant to its sales of Licensed Products in sufficient detail to enable LICR to verify the amounts payable to it under this Agreement for the preceding five (5) year period. LICR shall have the right, not more than once during any calendar year, to have the books and records of Agenus and its Affiliates audited by an independent certified public accounting firm of international standing. Agenus shall include in each sublicense granted by it pursuant to this Agreement a provision requiring the Sublicensee to make reports to Agenus or its Affiliates, to keep and maintain records of sales made pursuant to such sublicense and to grant access to such records to LICR's auditors to the same extent required of Agenus and its Affiliates under this Section. Audits under this Section shall be conducted during normal business hours, upon at least forty-five (45) days' prior written notice, and for the sole purpose of verifying royalties payable to LICR under this Agreement. All information and data reviewed in any audit conducted under this Section shall be used only for the purpose of verifying royalties payable to LICR under this Agreement and shall be treated as Confidential Information of Agenus subject to the terms of this Agreement. LICR shall cause its accounting firm to enter into an acceptable confidentiality agreement with Agenus and its Affiliates and Sublicensees, as applicable. The accounting firm shall disclose to LICR only whether the royalty reports are correct or incorrect and the specific details concerning any discrepancies. No other information shall be provided to LICR. LICR shall bear the full cost of such audits, unless such inspection leads to the discovery of a discrepancy of greater than the greater of ten percent (10%) in reporting to LICR's detriment, or of $50,000, for any calendar year. In such instance, 4AB agrees to pay the reasonable cost of such audit plus interest as stipulated in Section 3.5 from and after the date the audit report is delivered to 4AB.

ARTICLE IV
INTELLECTUAL PROPERTY

4.1 **Licensed Patent Rights.** The Parties acknowledge, agree and confirm that (i) Licensed Antibody results, research data, know-how, materials, compounds and inventions which are created by the LICR or 4AB during the course of and as a direct result of carrying out the program under the Prior Agreement generated under the Prior Agreement are jointly owned between LICR and Agenus (subject to LICR's obligations to MSKCC under the interinstitutional agreements dated September 17, 2007 and January 1, 2013 between LICR and MSKCC) and are included in the license grant to Agenus hereunder, and (ii) all other inventions and know-how shall be owned in accordance with inventorship under U.S. patent laws. Agenus (either directly or through its Affiliates or Sublicensees) shall be responsible, at its expense, for the preparation, filing, prosecution and maintenance of all Licensed Patent Rights (including, for clarity, controlling any interference, derivation, post-grant review, inter-partes review, re-examination, reissue, opposition or cancellation proceeding with respect thereto). Agenus shall consult with and keep LICR informed of material issues relating to the preparation and filing, prosecution and maintenance of the Licensed Patent Rights (including, for clarity, controlling any interference, derivation, post-grant

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

review, *inter-partes* review, re-examination, reissue, opposition or cancellation proceeding with respect thereto), and shall furnish to LICR copies of all material documents relevant to such preparation, filing, prosecution or maintenance. In the event that Agenus desires to abandon any patent or patent application within the Licensed Patent Rights, it shall provide LICR with reasonable prior written notice of such intended abandonment, and LICR shall have the right, at its expense, to prepare, file, prosecute, and maintain the relevant Patent Rights.

4.2 **Enforcement of Licensed Patent Rights; Defense of Infringement Actions**. Each Party shall promptly notify the other in writing of any known or suspected Third Party infringement of any Licensed Patent Rights or if any action for a declaration of non-infringement or invalidity of Licensed Patent Rights is made by a Third Party, or if any allegation of infringement of Third Party patents is made against either Party or any Affiliates or Sublicensees as a result of the manufacture, use or sale of a Licensed Product.

(a) **First Right to Respond**. Agenus (either directly or through its Affiliates or Sublicensees) shall have the first right to respond to any challenge or infringement of the Licensed Patent Rights at its own expense. In the event Agenus elects to so respond, LICR will, at Agenus's sole expense, cooperate with Agenus's legal counsel, join in such suits as may be brought by Agenus to enforce the Licensed Patent Rights, and be available at Agenus's reasonable request to be an expert witness or otherwise to assist in such proceedings, at Agenus's sole expense. During the pendency of any such suit, Agenus may withhold from its royalty payments otherwise due to LICR in relation only to the disputed Licensed Patent Rights, fifty percent (50%) of the costs incurred by Agenus in connection with such suit, *provided* that in no event may the royalty payments otherwise due to LICR in respect of disputed Licensed Patent Rights, be reduced by more than fifty percent (50%) by operation of this Section 4.2(a). Any royalty payments due to LICR in relation to Licensed Patent Rights not in dispute, shall be paid in full. If Agenus recovers monetary damages from a Third Party in connection with any action described in this Section 4.2(a), such damages shall be applied in the following manner: (i) first, Agenus shall be reimbursed for all costs and expenses incurred by it in connection with such action; (ii) second, LICR shall be reimbursed for any royalties withheld during the pendency of such suit; and (iii) any remaining damages shall be divided between the Parties, with LICR receiving the portion equal to the amount of royalties it would have received if such remaining compensatory damages had been an equivalent amount of Net Sales.

(b) **Second Right to Respond**. If, within three (3) months of providing to or receiving from Agenus notice of Third Party infringement pursuant to this Section 4.2, Agenus does not exercise its first right to initiate legal action under this Section or initiate discussions to avert such suit (by license or otherwise), then LICR shall have the option to do so at its sole expense and may, at its option, join Agenus as a party in such suit; *provided* that, in determining whether or not to take action, LICR shall give good faith consideration to the position of Agenus in declining to bring such action. In such event, all amounts recovered from such Third Party shall be retained by LICR, after reimbursement to Agenus for any expenses it may have incurred in connection with such suit.

4.3 **Cooperation**. Each Party hereby agrees: (a) to make its employees, agents and consultants reasonably available to the other Party (or to the other Party's authorized attorneys, agents or representatives), to the extent reasonably necessary to enable such Party to undertake patent prosecution and maintenance as contemplated by this Agreement; (b) to cooperate, if necessary and appropriate, with the other Party in gaining patent term extensions wherever applicable to Patent Rights that are subject to this Agreement; and (c) to endeavor in good faith to coordinate its efforts with the other Party to minimize or avoid interference with the prosecution and maintenance of the other Party's patent applications that are subject to this Agreement. For the avoidance of doubt, each Party agrees that its employees, agents

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

and consultants shall provide any and all information required for the other Party to comply with its relevant duties of disclosure as required by applicable law in the United States or any other jurisdiction.

4.4 **Patent Term Restoration**. Agenus shall retain the sole and exclusive right to make any patent term restoration election or its equivalent, anywhere in the world, including under 35 U.S.C. §156 and its foreign counterparts with respect to any Licensed Patent Rights; *provided, however*, that Agenus shall reasonably consider any input from the Licensors with respect to the extension of any Licensed Patent Right. LICR shall, and shall cause MSKCC to, abide by such elections and cooperate, as reasonably requested by Agenus, in connection with the foregoing (including by providing appropriate information and executing appropriate documents).

4.5 **Recording**. If Agenus deems it necessary or desirable to register or record this Agreement or evidence of this Agreement with any patent office or other appropriate government authorities in one or more jurisdictions throughout the world, then Agenus shall submit to LICR any proposed evidence of such recording. LICR shall execute and deliver, and shall cause MSKCC to execute and deliver, to Agenus any reasonable documents that are consistent with this Agreement and necessary or desirable, in Agenus's reasonable judgment, to complete such registration or recordation and Agenus may make complete such registration or recordation.

ARTICLE V
REPRESENTATIONS, WARRANTIES AND COVENANTS

5.1 **By LICR**. LICR hereby represents and warrants and covenants to Agenus that:

(a) this Agreement is a legal and valid obligation binding upon LICR and enforceable in accordance with its terms and, except as otherwise set forth herein, the execution, delivery and performance of this Agreement by LICR does not conflict with any agreement, instrument or understanding to which LICR is a party or by which it is bound; and

(b) LICR controls all of the Licensors' interest in the Licensed Patent Rights and Licensed Know-How existing as of the Effective Date. LICR is entitled to grant the licenses specified herein on behalf of the Licensors. In particular, MSKCC has consented to the appointment of LICR as the "Exploitation Party" of all Patent Rights licensed to Agenus hereunder as to which MSKCC has an interest, pursuant to the terms of the Agreement effective as of January 1, 2013 or the Agreement effective September 17, 2007, in each case, by and between LICR and MSKCC. LICR has not, and to the best of LICR's knowledge, MSKCC has not, previously assigned, transferred, conveyed or otherwise encumbered its right, title and interest in the Licensed Patent Rights and Licensed Know-How in the Field and the Territory with respect to the Licensed Products, that may be inconsistent with the rights granted to Agenus under this Agreement, and shall not do so during the Term.

5.2 **By Agenus**. Agenus hereby represents and warrants to LICR that:

(a) The execution and delivery of this Agreement by Agenus and the performance by Agenus of the transactions contemplated hereby have been duly authorized by all appropriate Agenus corporate action; and

(b) This Agreement is a legal and valid obligation binding upon Agenus and enforceable in accordance with its terms, and the execution, delivery and performance of this Agreement by Agenus does not conflict with any agreement, instrument or understanding to which Agenus is a party of or by which it is bound.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

5.3 **Warranty Disclaimer**. Except as expressly set forth in this Agreement, NEITHER PARTY MAKES ANY REPRESENTATION OR EXTENDS ANY WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, AND EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, ALL SUCH WARRANTIES ARE HEREBY DISCLAIMED, INCLUDING WARRANTIES ARISING BY COURSE OF DEALING, PERFORMANCE, CUSTOM OR USAGE IN THE TRADE, AND IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

5.4 **Indemnification**.

(a) **Agenus Indemnity**. Agenus shall indemnify, defend and hold harmless each Licensor and their respective directors, officers, employees and agents, and their respective successors, heirs and assigns (the "**LICR Indemnitees**") from and against any liability, damage, loss or expense (including reasonable outside attorneys' fees and expenses of litigation) (collectively, "**Losses**") incurred by or imposed upon such LICR Indemnitees, or any of them, resulting from any claim, action or proceeding brought or initiated by a Third Party (each a " **Claim**") to the extent that such Claim arises out of: (i) the breach or alleged breach of any obligation, representation or warranty of Agenus under this Agreement; or (ii) the negligence or willful misconduct of any Agenus Indemnitee; *provided* that (x) the LICR Indemnitees comply with the procedure set forth in subsection (c) below; and (y) such indemnity shall not apply to the extent such Claim arises from (i) the breach or alleged breach of any obligation, representation or warranty of LICR under this Agreement; or (ii) the negligence or willful misconduct of any LICR Indemnitee.

(b) **LICR Indemnity**. LICR shall indemnify, defend and hold harmless Agenus, its Affiliates and Sublicensees and their respective directors, officers, employees, and agents, and their respective successors, heirs and assigns (the "**Agenus Indemnitees**") from and against any Loss incurred by or imposed upon such Agenus Indemnitees, or any of them, in connection with any Claim arising arises out of: (i) the breach or alleged breach of any obligation, representation or warranty of LICR under this Agreement; or (ii) the negligence or willful misconduct of any LICR Indemnitee; *provided* that (x) the Agenus Indemnitees comply with the procedure set forth in subsection (c) below; and (y) such indemnity shall not apply to the extent such Claim arises from (i) the breach or alleged breach of any obligation, representation or warranty of Agenus under this Agreement; or (ii) the negligence or willful misconduct of any Agenus Indemnitee.

(c) **Indemnification Procedures**. In the event that a Party intends to claim indemnification under this Article V, such Party shall promptly notify the indemnifying Party thereof, and the indemnifying Party shall assume the defense thereof with counsel mutually satisfactory to the Parties; *provided, however,* that an indemnified Party shall have the right to retain its own counsel, with the fees and expenses to be paid by indemnifying Party, if representation of such indemnified Party by the counsel retained by the indemnifying Party would be inappropriate due to actual or potential differing interests between such indemnified Party and any other party represented by such counsel in such proceedings. The indemnity obligation set forth in this Section 5.4 shall not apply to amounts paid in settlement of any claims, suits, actions, demands or judgments if such settlement is effected without the consent of the indemnifying Party, which consent shall not be unreasonably withheld. The failure to deliver notice to the indemnifying Party within a reasonable time after the commencement of such action, if prejudicial to its ability to defend such action, shall relieve the indemnifying Party of any liability to the indemnified Party under this Article V, but the omission to so deliver notice to the indemnifying Party will not relieve it of any liability that it may have to any indemnified Party otherwise than under this Article V. The

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

indemnified Party under this Article V shall cooperate fully with the indemnifying Party and its legal representatives in the investigation of any claim for which indemnification is sought hereunder.

5.5 **Limitation of Liability**. NEITHER PARTY SHALL BE LIABLE TO THE OTHER, OR TO ANY THIRD PARTY CLAIMING THROUGH OR UNDER THE OTHER PARTY, FOR ANY LOST PROFITS OR FOR ANY INDIRECT, EXEMPLARY, PUNITIVE, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND ARISING OUT OF THIS AGREEMENT, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

ARTICLE VI
CONFIDENTIAL INFORMATION

6.1 "**Confidential Information**" shall mean any technical, scientific or business information furnished by or on behalf of one Party or its Affiliates (the "**Disclosing Party**") to the other Party or its Affiliates (the "**Receiving Party**") in connection with this Agreement or the activities contemplated hereunder, regardless of whether such information is specifically designated as confidential and regardless of whether such information is in oral, written, electronic or other form. The terms of this Agreement shall be considered Confidential Information of both Parties, subject to the provisions of this Article VI. Confidential Information shall not include information that:

(a) is generally available in the public domain or thereafter becomes available to the public through no act of the Receiving Party; or

(b) was independently known to the Receiving Party prior to receipt thereof or was discovered independently by an employee of the Receiving Party who had no access to the information supplied by or on behalf of the Disclosing Party; or

(c) was made available to the Receiving Party as a matter of lawful right by a Third Party who had no obligations of confidentiality to the Disclosing Party.

6.2 **Obligations**. The Receiving Party agrees that it shall not, without the prior written consent of the Disclosing Party, directly or indirectly:

(a) make any use of any portion of the Confidential Information of the Disclosing Party for purposes other than those set forth in this Agreement; or

(b) disclose or transfer any portion of the Confidential Information to any person, except that the Receiving Party may disclose or permit the disclosure of Confidential Information to its Affiliates and their respective directors, officers, employees, consultants, and advisors, and, with respect to Agenus and its Affiliates, their (actual or potential) Sublicensees and subcontractors and (actual or potential) partners and investors and potential investors in connection with a general financing transaction, who have an ethical or fiduciary duty to the Receiving Party or are otherwise obligated to maintain the confidential nature of such Confidential Information and who need to know such Confidential Information for the purposes set forth in this Agreement or for other legitimate business purposes.

Notwithstanding the above, the Receiving Party may disclose Confidential Information of the Disclosing Party when required by applicable laws or government rules or regulations (including without limitation, applicable securities regulations), *provided* that to the extent reasonably possible, the

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

Receiving Party provides reasonable prior written notice of such disclosure to the Disclosing Party and takes reasonable efforts to avoid and/or minimize the extent of disclosure.

6.3 Upon expiration or termination of this Agreement and upon request of the Disclosing Party, all copies of any Disclosing Party's Confidential Information shall be returned to the Disclosing Party, except that each Receiving Party may retain one (1) copy of the Confidential Information received hereunder in the possession of its legal counsel, solely for monitoring its obligations under this Agreement.

6.4 No option, license, or conveyance of such rights, express or implied, is granted to the Receiving Party in connection with any Confidential Information disclosed by the Disclosing Party, except for the express licenses granted in Article 2. If any such rights are to be granted to the Receiving Party, such grant shall be expressly set forth in a separate written instrument.

6.5 **Public Announcements**. Other than as required by a Party or its Affiliates to comply with applicable laws or regulations, each Party agrees that the terms of this Agreement are Confidential Information and neither Party shall make any public announcement disclosing the terms of this Agreement without the prior written consent of the other Party (not to be unreasonably withheld) and shall, if required by law to make such public announcement: (a) to the extent possible, notify the other Party if it anticipates that it may be required to make such public announcement; (b) provide such other Party with a copy of such public announcement, or the relevant portions thereof, a reasonable time prior to its release (and any revisions to such public announcement a reasonable time prior to the release thereof); (c) consult with and follow any reasonable directions from the other Party with respect to disclosures in such public announcement; and (d) if disclosure cannot be avoided, only disclose Confidential Information to the extent necessary to comply with law. In each case the Parties shall coordinate with respect thereto. Agenus and its Affiliates shall be entitled to disclose the results of their research, development and commercialization activities related to this Agreement in their sole and absolute discretion. Agenus and its Affiliates will not use the names of a Licensor or the names of any of a Licensors officers, scientific faculty or researchers without such Licensor's prior written consent in any press release, advertising or promotional materials. Public announcements and statements by 4-AB and its Affiliates reporting significant advances in the development and commercialization of Licensed Products will acknowledge Licensors' role in the discovery and validation of the Licensed Antibody(s), consistent with the provisions of Appendix A attached hereto.

6.6 **Publications**. In the event either of the Licensors wish to publish, present, or otherwise disclose any results of the research program conducted under the Prior Agreement, LICR shall provide Agenus with copies of any such publication or presentation at least thirty (30) days prior to submission for publication or presentation. Agenus shall, within a period of thirty (30) days of receipt of such publication or presentation, advise the applicable Licensor whether patent or commercial interests may be prejudiced by the proposed publication or presentation, in which case the Licensor shall delay submission of the publication or presentation for an additional period, not to exceed forty-five (45) days, in order to prepare and file appropriate Patent Rights. If Agenus has not responded to LICR within the initial thirty (30) day time period, the proposed publication or presentation shall be deemed not to prejudice any patent or commercial interests and the Licensor shall be free to proceed with the proposed disclosure.

ARTICLE VII
TERM AND TERMINATION

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

7.1 **Term**. This Agreement shall be effective as of the Effective Date and, unless terminated early pursuant to this Article VII, shall continue on a Licensed Product-by-Licensed Product basis until the end of the applicable Royalty Term (the "**Term**").

7.2 **Termination for Material Breach**. In the event that a Party has materially breached or defaulted in the performance of any of its obligations hereunder, and if such default is not corrected within sixty (60) days after receiving written notice from the other Party with respect thereto, such other Party shall have the right to terminate this Agreement by giving written notice to the breaching Party; *provided* that the time period for providing such notice of termination shall be extended for so long as the breaching Party is engaged in good faith efforts to cure such breach or default.

7.3 **Termination for Convenience**. Agenus may terminate this Agreement at any time, for any reason or no reason, upon ninety (90) days' prior written notice to LICR.

7.4 **Termination for Insolvency**. In the event a Party files for protection under the 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 which is not discharged within ninety (90) days of the filing thereof, then the other Party may terminate this Agreement effective immediately upon written notice to the Party.

7.5 **General Effect of Termination**.

(a) **Termination of Rights.** Upon any early termination of this Agreement by LICR by operation of Sections 7.2 or 7.4, or by Agenus by operation of Section 7.3 the rights and licenses granted to Agenus and its Affiliates under Section 2.1 shall terminate. Notwithstanding the foregoing, any Sublicensee shall become a direct licensee of the Licensors if the Sublicensee is not then in breach of its sublicense agreement with Agenus or its Affiliate and the Sublicensee agrees in writing to abide by the terms and conditions of this Agreement including all financial consideration and other obligations to LICR, applicable to Agenus and its Affiliates, provided that (i) the scope of the direct license granted by Licensors to such Sublicensee shall be co-extensive with the scope of the sublicense granted by Agenus or its Affiliate to such Sublicensee and (ii) any such direct license to a Sublicensee shall not impose any representations, warranties, obligations or liabilities on Licensors that are not included in this Agreement.

(b) **Accrued Obligations**. Termination of this Agreement for any reason shall not release any Party hereto from any liability which, at the time of such termination, has already accrued to the other Party or which is attributable to a period prior to such termination, nor preclude either Party from pursuing any rights and remedies it may have hereunder or at law or in equity which accrued or are based upon any event occurring prior to such termination.

(c) **Survival**. Articles IV, VI and VIII and Sections 3.7, 5.3, 5.4, 5.5, 7.5, 9.1, 9.2, 9.4, 9.9, 9.10 and 9.12 hereof (and related definitions) shall survive the expiration or termination of this Agreement for any reason. In addition, any other provision required to interpret and enforce the Parties' rights and obligations under this Agreement shall also survive, but only to the extent required for the observation and performance of the aforementioned surviving portions of this Agreement.

ARTICLE VIII
DISPUTE RESOLUTION

8.1 **Dispute Resolution**. Except for the right of either Party to apply to a court of competent jurisdiction for a temporary restraining order, a preliminary injunction or other equitable relief to preserve

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

the status quo or prevent irreparable harm, any dispute, other than disputes regarding the construction, validity or enforcement of Patent Rights, arising between the Parties relating to, arising out of or in any way connected with this Agreement or any term or condition hereof, or the performance by either Party of its obligations hereunder, whether before or after termination of this Agreement, shall be resolved in accordance with this Section 8.1.

(a) The chief executive officers of both Parties (or their respective designees) shall meet to attempt to resolve such dispute.

(b) If the chief executive officers of the Parties (or their respective designees) cannot resolve such dispute within thirty (30) days after either Party requests such a meeting in writing, then upon written notice by either Party to the other Party, such dispute, controversy or claim shall be finally resolved by binding arbitration conducted in the English language in New York, New York, USA under the Commercial Arbitration Rules of the American Arbitration Association by three (3) arbitrators. Each Party shall be entitled to appoint one (1) arbitrator. The Parties shall appoint their respective arbitrators within thirty (30) days after submission for arbitration. The two (2) arbitrators so appointed shall agree on the appointment of the third (3rd) arbitrator from the list of arbitrators maintained by the American Arbitration Association. If the Parties' appointed arbitrators shall fail to agree, within thirty (30) days from the date both Parties' arbitrators have been appointed, on the identity of the third (3rd) arbitrator, then such arbitrator shall be appointed by the appropriate administrative body of the American Arbitration Association.

(c) Within ten (10) days of appointment of the full arbitration panel, the Parties shall exchange their final proposed positions with respect to the matters to be arbitrated, which shall approximate as closely as possible the closest positions of the Parties previously taken in previous negotiations. Within thirty (30) days of appointment of the arbitration panel, each Party shall submit to the arbitrators a copy of the proposed position which it previously delivered to the other Party, together with a brief or other written memorandum supporting the merits of its proposed position. The arbitration panel shall promptly convene a hearing, at which time each Party shall have one (1) hour to argue in support of its proposed position. The Parties will not call any witnesses in support of their arguments.

(d) The arbitration panel shall select either Party's proposed position on the issue as the binding final decision to be embodied as an agreement between the Parties. In making their selection, the arbitrators shall not modify the terms or conditions of either Party's proposed position, nor will the arbitrators combine provisions from both proposed positions. In the event the arbitrators seek the guidance of the law of any jurisdiction, the law of the State of New York, USA shall govern.

(e) The arbitrators shall make their decision known to the Parties as promptly as possible by delivering written notice of their decision to both Parties. Such written notice need not justify their decision. The Parties will execute any and all papers necessary to obligate the Parties to the position selected by the arbitration panel within five (5) days of receipt of notice of such selection. The decision of the arbitrators shall be final and binding on the Parties, and specific performance may be ordered by any court of competent jurisdiction. Any arbitration award shall be subject to Section 5.5.

(f) Parties will bear their own costs in preparing for the arbitration. The costs of the arbitrators will be equally divided between the Parties.

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

(g) Any and all activities conducted under this Section 8.1 including any and all proceedings and decisions of the arbitration panel, shall be deemed Confidential Information of each of the Parties, and shall be subject to Article VI.

ARTICLE IX
MISCELLANEOUS

9.1 **Governing Law**. This Agreement shall be deemed to have been made in the State of New York, USA, and its form, execution, validity, construction and effect shall be determined in accordance with, and any dispute arising from the performance or breach hereof shall be governed by and construed in accordance with, the laws of the State of New York, USA, without reference to conflicts of laws principles. Each of the Parties irrevocably submits to the exclusive jurisdiction of the state and federal courts situated in New York, New York, USA for purposes of any suit, action or other proceeding arising out of this Agreement or any transaction contemplated hereby and agrees not to commence any action, suit or proceeding relating hereto except in such courts. No Party hereto shall challenge or contest the subject matter or personal jurisdiction of any such court or its venue or assert the defense of *forum non-conveniens*.

9.2 **Waiver**. Neither Party may waive or release any of its rights or interests in this Agreement except in writing. 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. 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 another condition or term.

9.3 **Assignment**. Unless otherwise expressly stated herein, Parent and 4AB may allocate the rights and obligations of Agenus under this Agreement in accordance with any intercompany agreements between them and otherwise in their reasonable discretion. This Agreement shall not otherwise be assignable by either Party to any Third Party without the written consent of the other Party hereto; except either Party may assign this Agreement (in whole or in part), without such consent, to (a) an Affiliate or (b) an entity that acquires all or substantially all of the capital stock, business or assets of the Party to which this Agreement pertains (whether by merger, reorganization, acquisition, sale, or otherwise) and agrees in writing to be bound by the terms and conditions of this Agreement. The terms and conditions of this Agreement shall be binding on and inure to the benefit of the permitted successors and assigns of the Parties.

9.4 **Notices**. All notices hereunder will be in writing and will be delivered personally, by internationally recognized overnight courier service, registered or certified mail, postage prepaid, or mailed by express mail service to the following addresses of the respective Parties:

If to Agenus: Agenus Inc.
3 Forbes Road
Lexington, Massachusetts 02421-7305, USA
Attention: Legal Department

With copies to: 4-Antibody AG
Hochbergerstrasse 60C
CH-4057 Basel, Switzerland
Attention:

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

Choate, Hall & Stewart LLP
Two International Place
Boston, Massachusetts 02110, USA
Attention: Gerald E. Quirk, Esq.

If to LICR: Ludwig Institute for Cancer Research Ltd.
666 Third Avenue, 28th Floor
New York, New York 10017, USA
Attention: Ed McDermott, Jr., President

With a copy to: Ludwig Institute for Cancer Research Ltd.
666 Third Avenue, 28th Floor
New York, New York 10017, USA
Attention:Jonathan Skipper, Ph.D., Executive Director, Technology Development

Notices will be effective upon receipt if personally delivered, on the third Business Day following the date of mailing if sent by certified or registered mail, and on the second Business Day following the date of delivery if sent by express mail or overnight courier. A Party may change its address listed above by written notice to the other Party provided in accordance with this Section.

9.5 **Independent Contractors**. Nothing contained in this Agreement is intended implicitly, or is to be construed, to constitute Agenus or LICR as partners or joint venturers in the legal sense. No Party hereto shall have any express or implied right or authority to assume or create any obligations on behalf of or in the name of any other Party or to bind any other Party to any contract, agreement or undertaking with any Third Party.

9.6 **Other Obligations**. Except as expressly provided in this Agreement or as separately agreed upon in writing between LICR and Agenus, each Party shall bear its own costs incurred in connection with the implementation of the obligations under this Agreement.

9.7 **Severability**. If any term or provision of this Agreement will for any reason be held invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other term or provision hereof, and in lieu of each such invalid, illegal or unenforceable provision there will be added automatically as a part of this Agreement a provision that is valid, legal and enforceable, and as similar in terms to such invalid, illegal or unenforceable provision as may be possible while giving effect to the benefits and burdens for which the Parties have bargained hereunder.

9.8 **Further Assurances**. At any time or from time to time on and after the date of this Agreement, either Party shall at the request of the other Party (a) deliver to the requesting Party such records, data or other documents consistent with the provisions of this Agreement, (b) execute, and deliver or cause to be delivered, all such consents, documents or further instruments of assignment, transfer or license, and (c) take or cause to be taken all such actions, as the requesting Party may reasonably deem necessary or desirable in order for the requesting Party to obtain the full benefits of this Agreement and the transactions contemplated hereby.

9.9 **Entire Agreement, Waivers, Etc**. This Agreement constitutes the entire agreement, both written or oral, with respect to the subject matter hereof, and supersedes and terminates all prior or contemporaneous understandings or agreements, whether written or oral, between the Parties with respect to the subject matter hereof, including without limitation the Prior Agreement. Upon execution of this

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

Agreement by both Parties hereto, all surviving provisions of the Prior Agreement are and shall be null and void and of no further effect. No terms or provisions of this Agreement shall be varied or modified by any prior or subsequent statement, conduct or act of either of the Parties, except that the Parties may amend this Agreement by written instruments specifically referring to and executed in the same manner as this Agreement.

9.10 **Headings, Construction and Interpretations**. The headings used in this Agreement have been inserted for convenience of reference only and do not define or limit the provisions hereof. The Parties have had the opportunity to consult with counsel, and the Parties and their respective counsel have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement. Whenever the words "include", "includes" or "including" are used in this Agreement, they shall be deemed to be followed by the words "without limitation". The words "hereof", "herein" and "hereunder" and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. All terms defined in this Agreement shall have the defined meanings when used in any certificate or other document made or delivered pursuant hereto unless otherwise defined therein. The definitions contained in this Agreement are applicable to the singular as well as the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such term.

9.11 **Counterparts**. This Agreement may be executed in any number of separate counterparts, including .pdf versions, each of which will be deemed to be an original, but which together will constitute one and the same instrument.

9.12 **Costs**. Each Party shall bear its own costs and expenses in connection with the preparation, negotiation, execution and delivery of this Agreement.

[*signature page follows*]

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

IN WITNESS WHEREOF, the Parties hereto have caused this License Agreement to be duly executed by their authorized representatives as of the Effective Date.

AGENUS INC. **4-ANTIBODY AG.**

By: /s/ Garo H. Armen By: s/ Garo H. Armen

Title: Chairman and CEO Title: Director

Date: January 21, 2016 Date: January 25, 2016

LUDWIG INSTITUTE FOR CANCER RESEARCH LTD.

By: /s/ Edward A. McDermott, Jr. By: /s/ Jonathan Skipper
Title: President Title: Executive Director of Technology Development

Date: January 21, 2016 Date: January 21, 2016

Acknowledged and agreed:

MEMORIAL SLOAN-KETTERING CANCER CENTER

By: /s/ Gregory Raskin

Title: Vice President of Technology Development

Date: January 22, 2016

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

EXHIBIT 21.1

SUBSIDIARIES OF AGENUS INC.

Antigenics LLC., a Delaware limited liability company and a wholly-owned subsidiary of Agenus Inc.

Aronex Pharmaceuticals, Inc., a Delaware corporation and a wholly-owned subsidiary of Agenus Inc.

Antigenics Therapeutics Limited, a company organized under the laws of Ireland and a wholly-owned subsidiary of Agenus Inc.

4-AntibodyAG, a joint stock company organized under the laws of Switzerland and a wholly-owned subsidiary of Agenus Inc.

Agenus West, LLC, a Delaware limited liability company and a wholly-owned subsidiary of Agenus Inc. (as of November 3, 2015).

Agenus UK Limited, a private limited company organized under the laws of England and Wales and a wholly-owned subsidiary of Agenus Inc. (as of September 17, 2015).

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Agenus Inc.:

We consent to the incorporation by reference in the registration statements (Nos. 333-40440, 333-40442, 333-50434, 333-69580, 333-106072, 333-115984, 333-143807, 333-143808, 333-151745, 333-160084, 333-160087, 333-160088, 333-176609, 333-183066, 333-183067, 333-189926, 333-195851 and 333-209074) on Form S-8 and (Nos. 333-161277, 333-163221, 333-189534, 333-195852, 333-199255, 333-203807, 333-206513, 333-208135, 333-208890, 333-209749 and 333-209941) on Form S-3 of Agenus Inc. of our reports dated March 15, 2016, with respect to the consolidated balance sheets of Agenus Inc. as of December 31, 2015 and 2014, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2015, and the effectiveness of internal control over financial reporting as of December 31, 2015, which reports appear in the December 31, 2015 Annual Report on Form 10-K of Agenus Inc.

/s/ KPMG LLP

Boston, Massachusetts
March 15, 2016

Exhibit 31.1

Certification Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended

I, Garo H. Armen, certify that:

1. I have reviewed this Annual Report on Form 10-K of Agenus Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;

4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:

   a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles;

   c. evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent function):

   a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and

   b. any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: March 15, 2016

/s/ GARO H. ARMEN, PH.D.

Garo H. Armen, Ph.D.

Chief Executive Officer and Principal Executive Officer

Exhibit 31.2

Certification Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended

I, C. Evan Ballantyne, certify that:

1. I have reviewed this Annual Report on Form 10-K of Agenus Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;

4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:

    a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles;

    c. evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent function):

    a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and

    b. any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: March 15, 2016

/s/ C. EVAN BALLANTYNE

C. Evan Ballantyne

Chief Financial Officer and Principal Financial Officer

Exhibit 32.1

Certification
Pursuant to 18 U.S.C. Section 1350,
As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report on Form 10-K of Agenus Inc. (the "Company") for the year ended December 31, 2015 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned to his/her knowledge hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(i) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ GARO H. ARMEN, PH.D.

Garo H. Armen, Ph.d.

Chief Executive Officer and Principal Executive Officer

/s/ C. EVAN BALLANTYNE

C. Evan Ballantyne

Chief Financial Officer and Principal Financial Officer

Date: March 15, 2016

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished to the Securities and Exchange Commission as an exhibit to the Annual Report on Form 10-K for the year ended December 31, 2015 and should not be considered filed as part of the Annual Report on Form 10-K.