

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

Form 10-K

(Mark One)  
☒ 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 001-36783

Bellicum Pharmaceuticals, Inc.  
(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of incorporation or organization)  
20-1450200  
(I.R.S. Employer Identification No.)  
2130 W. Holcombe Blvd., Ste. 800, Houston, TX  
(Address of principal executive offices)  
77030  
(Zip Code)  
(832) 384-1100  
(Registrant's telephone number, including area code)  
Securities registered pursuant to Section 12(b) of the Act:

| Title of each class                      | Name of each exchange on which registered |
|--|---|
| Common Stock, par value \$0.01 per share | The NASDAQ Global Market                  |

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 Regulation S-T (§229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐  
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K 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 | <input type="checkbox"/> | Accelerated filer                             | <input checked="" type="checkbox"/> |
| Non-accelerated filer   | <input type="checkbox"/> | (Do not check if a smaller reporting company) |                                     |
|                         |                          | Smaller reporting company                     | <input type="checkbox"/>            |

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

The approximate aggregate market value of the voting common stock held by non-affiliates of the Registrant, based upon the last sale price of the common stock reported on The NASDAQ Global Market was \$395,442,502 as of June 30, 2015.\*  
As of February 29, 2016, there were 26,974,648 shares of the registrant's common stock, par value \$0.01 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive Proxy Statement relating to its 2016 Annual Meeting of Stockholders are incorporated by reference into Part III of this Annual Report on Form 10-K. Such Proxy Statement will be filed with the U.S. Securities and Exchange Commission within 120 days following the Registrant's fiscal year ended December 31, 2015

\*Excludes 7,826,145 shares of common stock held by directors and officers and by stockholders whose beneficial ownership is known by the Registrant to exceed 10 percent of the common stock outstanding at June 30, 2015. Exclusion of shares held by any person should not be construed to indicate that such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the Registrant, or that such person is controlled by or under common control with the Registrant.

---

**BELLICUM PHARMACEUTICALS, INC.**  
**Form 10-K**  
**For the Fiscal Year Ended December 31, 2015**  
**TABLE OF CONTENTS**

**PART I**

|          |   |                    |
|----------|---|--------------------|
| Item 1.  | <a href="#">Business</a>                  | <a href="#">3</a>  |
| Item 1A. | <a href="#">Risk Factors</a>              | <a href="#">28</a> |
| Item 1B. | <a href="#">Unresolved Staff Comments</a> | <a href="#">54</a> |
| Item 2.  | <a href="#">Properties</a>                | <a href="#">54</a> |
| Item 3.  | <a href="#">Legal Proceedings</a>         | <a href="#">54</a> |
| Item 4.  | <a href="#">Mine Safety Disclosures</a>   | <a href="#">54</a> |

**PART II**

|          |  |                    |
|----------|--|--------------------|
| Item 5.  | <a href="#">Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</a> | <a href="#">55</a> |
| Item 6.  | <a href="#">Selected Financial Data</a>  | <a href="#">58</a> |
| Item 7.  | <a href="#">Management’s Discussion and Analysis of Financial Condition and Results of Operations</a>                        | <a href="#">59</a> |
| Item 7A. | <a href="#">Quantitative and Qualitative Disclosures About Market Risk</a>   | <a href="#">72</a> |
| Item 8.  | <a href="#">Financial Statements and Supplementary Data</a>  | <a href="#">72</a> |
| Item 9.  | <a href="#">Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</a>                         | <a href="#">98</a> |
| Item 9A. | <a href="#">Controls and Procedures</a>  | <a href="#">98</a> |
| Item 9B. | <a href="#">Other Information</a>  | <a href="#">98</a> |

**PART III**

|          |  |                    |
|----------|--|--------------------|
| Item 10. | <a href="#">Directors, Executive Officers and Corporate Governance</a>   | <a href="#">99</a> |
| Item 11. | <a href="#">Executive Compensation</a>   | <a href="#">99</a> |
| Item 12. | <a href="#">Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</a> | <a href="#">99</a> |
| Item 13. | <a href="#">Certain Relationships and Related Transactions, and Director Independence</a>                      | <a href="#">99</a> |
| Item 14. | <a href="#">Principal Accounting Fees and Services</a>   | <a href="#">99</a> |

**PART IV**

|          |   |                     |
|----------|---|---------------------|
| Item 15. | <a href="#">Exhibits, Financial Statement Schedules</a> | <a href="#">100</a> |
|----------|---|---------------------|

[Signatures](#)

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including the sections entitled “Business,” “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” may contain “forward-looking statements.” We may, in some cases, use words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would” or the negative of those terms, and similar expressions that convey uncertainty of future events or outcomes to identify these forward-looking statements. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. Forward-looking statements in this Annual Report include, but are not limited to, statements about:

- the success, cost and timing of our product development activities and clinical trials;
- our ability to advance Chemical Induction of Dimerization (CID) CID-based technologies, including CaspaCIDE, CIDECAR and GoCAR-T;
- our ability to obtain and maintain regulatory approval of BPX-501 and any other product candidates, and any related restrictions, limitations and/or warnings in the label of an approved product candidate;
- our ability to obtain funding for our operations, including funding necessary to complete further development and commercialization of our product candidates;
- the commercialization of our product candidates, if approved;
- our plans to research, develop and commercialize our product candidates;
- our ability to attract collaborators with development, regulatory and commercialization expertise;
- future agreements with third parties in connection with the commercialization of our product candidates and any other approved product;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- the rate and degree of market acceptance of our product candidates;
- regulatory developments in the United States and foreign countries;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- the success of competing therapies that are or may become available;
- our ability to attract and retain key scientific or management personnel;
- our ability to grow our organization and increase the size of our facilities to meet our anticipated growth;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our expectations regarding the period during which we qualify as an emerging growth company under the Jumpstart Our Business Startups Act of 2012, or the JOBS Act;
- our use of cash and other resources; and
- our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates.

These forward-looking statements reflect our management’s beliefs and views with respect to future events and are based on estimates and assumptions as of the filing date of this Annual Report and are subject to risks and uncertainties. We discuss many of these risks in greater detail under the heading “Risk Factors.” Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

You should carefully read this Annual Report and the documents that we reference in this Annual Report completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this Annual Report by these cautionary statements.

Except as required by law, we undertake no obligation to update these forward-looking statements publicly, or to update the reasons that actual results could differ materially from those anticipated in any forward-looking statements, whether as a result of new information, future events or otherwise.

## ITEM 1. Business

### Overview

We are a clinical stage biopharmaceutical company focused on discovering and developing novel cellular immunotherapies for various forms of cancer, including both hematological cancers and solid tumors, as well as orphan inherited blood disorders. Cellular immunotherapy has the potential to transform medicine by harnessing immune cells, principally T cells, to attack and eliminate harmful diseased cells in the body. Unlike traditional small molecule and biologic therapies, which are predictably metabolized and eliminated from the body, cellular immunotherapies are unpredictable and uncontrollable. We are using our proprietary Chemical Induction of Dimerization, or CID, technology platform to engineer and then control components of the immune system. By incorporating our CID platform, our product candidates may offer better safety and efficacy outcomes than are seen with current cellular immunotherapies.

We are developing next-generation product candidates in some of the most important areas of cellular immunotherapy, including hematopoietic stem cell transplantation, or HSCT, and CAR T and TCR cell therapies. HSCT, also known as bone marrow transplantation, can be a curative treatment, and is standard of care for a wide range of life-long and deadly diseases. However, the majority of patients that could benefit from HSCT do not get the procedure because a compatible, or fully “matched” donor cannot be located. By contrast, a haploidentical, or “partial match” donor, such as a parent, sibling or child, can almost always be identified. To date, haplo-transplant procedures have not been widely adopted due to heightened risks of the procedure. Specifically, if T cells, which are important for rebuilding immunity and infection control, are included in the haplo-transplant graft, the patient will be at risk of developing Graft versus Host Disease, or GvHD, an often deadly reaction in which some of the mismatched T cells attack the patient’s liver, skin, mucosa and gastro-intestinal tract. For that reason, a haplo-transplant is either avoided, which has historically been the case, or if it is performed, the T cells are first depleted from the graft. A T-depleted transplant lowers the risk of GvHD, but morbidity and mortality rates increase as a result of infections, slow engraftment and delayed immune recovery due to the lack of T cells. To address these issues, we developed BPX-501 as an adjunct T cell therapy of genetically modified donor T cells incorporating our proprietary CaspaCIDE safety switch. The product candidate is designed to provide a safety net to eliminate the alloreactive T cells should GvHD occur, enabling physicians to perform haploidentical stem cell transplants and add back the BPX-501 genetically engineered T cells to speed immune reconstitution and provide control over infections.

Adoptive T cell therapy is an innovative approach in which a patient’s T cells are genetically modified to carry either chimeric antigen receptors, or CARs, or T cell receptors, or TCRs, which redirect the T cells against cancer cells. While high objective response rates have been reported in some hematological malignancies, serious and sometimes fatal toxicities have arisen in patients treated with CAR T and TCR cell therapies. These toxicities include instances in which the cells have caused high levels of cytokines due to over-activation, referred to as “cytokine release syndrome”, frequent transient neurologic toxicities and cases in which they have attacked healthy organs instead of the targeted tumor, leading to death. In solid tumors, where the behavior of CAR T and TCR cells is particularly unpredictable and results have been inconsistent, researchers are developing enhanced approaches to attain efficacy, such as “armored CARs” that raise even greater safety concerns.

Our proprietary CID platform is designed to address these challenges. Events inside a cell are controlled by cascades of specialized signaling proteins. CID consists of molecular switches, modified forms of these signaling proteins, which are triggered inside the patient by infusion of a small molecule, rimiducid, instead of by natural upstream signals. We include these molecular switches in the appropriate immune cells and deliver the cells to the patient in the manner of conventional cellular immunotherapy. We have developed two such switches: a “safety switch,” designed to initiate programmed cell death, or apoptosis, of the immunotherapy cells, and an “activation switch,” designed to stimulate activation and in some cases proliferation of the immunotherapy cells. Each of our technologies incorporates one of these switches, for enhanced, control of safety and efficacy:

- **CaspaCIDE** is our safety switch, incorporated into our HSCT and T-cell receptor, or TCR, product candidates, where it is inactive unless the patient experiences a serious side effect. In that event, rimiducid is administered to fully or partially eliminate the cells, with the goal of terminating or attenuating the therapy and resolving the serious side effect.
- **CIDECAR** consists of CAR T cells modified to include our CaspaCIDE safety switch and in which the CAR T cell incorporates the signaling domains of two proteins, MyD88 and CD40. Together, these form our proprietary dual co-stimulatory domain, MC, which is designed to activate T cells more potently than co-stimulatory molecules CD28 and 4-1BB, which are used in most investigational CAR T cell therapies. Incorporation of CaspaCIDE in a CIDECAR product candidate is intended to allow the potential enhanced potency of MC co-stimulation to be deployed safely in patients.
- **GoCAR-T** consists of CAR T cells that are modified to include the proprietary dual co-stimulatory domain, MC. In contrast to CIDECAR, MC is structured in GoCAR-T as a molecular switch, separate from the chimeric antigen receptor, which itself contains no co-stimulatory domains. GoCAR-T is designed to allow control of the activation and proliferation of the CAR T cells through the scheduled administration of a course of rimiducid infusions that may continue until the desired patient outcome is achieved. In the event of emergence of side effects, the level of activation of the GoCAR-T

cells is designed to be attenuated by extending the interval between rimiducid doses and/or reducing the dosage per infusion.

By incorporating our novel switch technologies, we are developing product candidates with the potential to elicit positive clinical outcomes and ultimately change the treatment paradigm in various areas of cellular immunotherapy. Our clinical product candidates; each of which is a combination product of genetically modified immune cells and rimiducid, are described below.

- **BPX-501.** Our lead product candidate, BPX-501, is an adjunct T cell therapy administered after allogeneic HSCT using genetically modified donor T cells incorporating the CaspaCIDE® safety switch. BPX-501 is currently being evaluated in multiple Phase 1/2 clinical trials in adults and pediatric patients with leukemias, lymphomas, and genetic blood diseases in the U.S. and Europe. We believe that BPX-501 could enable physicians to maximize the benefits of T cell therapy for allogeneic HSCT, such as immune system reconstitution, prevention or treatment of relapse of underlying disease and improvement in stem cell engraftment, while mitigating some of the safety issues, such as high grade GvHD, associated with a stem cell transplant. BPX-501 is currently being evaluated in multiple Phase 1/2 clinical trials in the United States and Europe to assess whether BPX-501 T cells from haplo-identical donors administered following HCST are safe and can help speed immune reconstitution. In December 2015, interim data from the lead site in the ongoing BP-004 Phase 1/2 clinical trial was presented at the 57th Annual Meeting of the American Society of Hematology, or ASH. Pediatric patients in the study with a variety of genetic diseases achieved disease-free outcomes from a haploidentical T cell-depleted hematopoietic stem cell transplant, followed by an add-back of BPX-501 donor T cells. We are making preparations for dialogue with regulators in Europe and the U.S., expected to occur in the second quarter of 2016, with the goal of defining the path to regulatory approval initially for non-malignant pediatric diseases. Additionally, BPX-501 clinical trials in different transplant settings are ongoing, in which we are accumulating longer-term data to assess relevant clinical outcomes in malignant disease settings. The FDA has granted orphan drug designation for the combination of BPX-501 genetically modified T cells and activator agent rimiducid as "replacement T-cell therapy for the treatment of immunodeficiency and GvHD after allogeneic hematopoietic stem cell transplant."

In addition, our preclinical product candidates are designed to overcome the current limitations of CAR-T and TCR therapies and include the following:

- **BPX-601** is a GoCAR-T™ product candidate containing Bellicum's proprietary iMC, or inducible MyD88/CD40, activation switch, designed to treat solid tumors expressing prostate stem cell antigen, or PSCA, such as some prostate, pancreatic, bladder, esophageal and gastric cancers. We have obtained positive proof-of-principle preclinical data showing enhanced T-cell proliferation, persistence and in vivo anti-tumor activity compared to standard CAR T therapies. The initial planned indication for BPX-601 development is non-resectable pancreatic cancer. We expect to begin enrolling patients in a Phase 1 trial of BPX-601 in mid-2016.
- **BPX-701** is a CaspaCIDE®-enabled natural high affinity T cell receptor, or TCR, product candidate designed to target malignant cells expressing the preferentially-expressed antigen in melanoma, or PRAME. Based on *in vitro* studies, BPX-701 has demonstrated strong affinity to panels of cancer cells presenting PRAME peptides and low affinity to non-tumor cells. In other *in vitro* studies, rimiducid administration has shown the ability to eliminate BPX-701 cells. We are developing BPX-701 in collaboration with Leiden University Medical Center. Initial planned indications for BPX-701 development are Refractory or Relapsed Acute Myeloid Leukemia, or AML, and Myelodysplastic Syndromes, or MDS, with an additional study planned for metastatic uveal melanoma. Each of these are orphan indications where PRAME is highly expressed and for which current treatment options are limited. We expect to begin enrolling patients in a Phase 1 trial of BPX-701 in mid-2016.
- **BPX-401** is a CIDECAR™ product candidate incorporating Bellicum's proprietary MC co-stimulatory domain and the CaspaCIDE safety switch, and is designed as a next-generation CAR T cell therapy for hematological cancers expressing the CD19 antigen. CD19 is expressed in many hematological cancers, including acute lymphocytic leukemia, or ALL, chronic lymphocytic leukemia, or CLL, and certain non-Hodgkin's lymphomas. While there are several competitive programs where the activity of CD19 CAR T cell therapy has been established, we believe that safety issues, such as cytokine release syndrome and neurological toxicity remain a concern which may be addressed by BPX-401. We expect to begin enrolling patients in a Phase 1 trial of BPX-401 in the second half of 2016.

Our IND-enabling activities for each of these preclinical product candidates include manufacturing key components and developing a robust process to produce cell products that comply with regulations of the U.S. Food and Drug Administration, or FDA, and other regulatory agencies. We have developed proprietary methods and processes to manufacture genetically modified T cells of high quality and purity. We have utilized to date third-party contract manufacturers to produce BPX-501 for our clinical trials. In 2016 we plan to build-out facilities at our headquarters in Houston to enable in-house cell therapy manufacturing to supply clinical trials. We expect to leverage our resources, capabilities and expertise derived from our experience with our BPX-501 program for the manufacture of our CAR-T and TCR product candidates.

## Recent Developments

On March 10, 2016, or the Closing Date, we entered into a Loan and Security Agreement, or the Loan Agreement, with Hercules Capital, Inc., or Hercules, as agent and a lender, Hercules Technology II, L.P., as a lender and Hercules Technology III, L.P., as a lender, under which we borrowed \$15.0 million on the Closing Date and may borrow an additional \$5.0 million on or prior to September 15, 2016. Subject to the terms and conditions of the Loan Agreement, including approval by Hercules' investment committee, and our achievement of specified milestones in the Loan Agreement, or the Milestones, we may borrow an additional \$10.0 million through March 15, 2017. We intend to use the proceeds received under the Loan Agreement for funding the build out of our manufacturing facilities and general corporate purposes.

On February 22, 2016, the Company announced that the FDA granted orphan drug designation for the combination of BPX-501 genetically modified T cells and activator agent rimiducid as "replacement T-cell therapy for the treatment of immunodeficiency and graft versus host disease, or GvHD, after allogeneic hematopoietic stem cell transplant." BPX-501 is an adjunct T-cell therapy incorporating the Company's proprietary CaspaCIDE safety switch.

On January 15, 2016, we filed a shelf Registration Statement on Form S-3, or the Shelf Registration Statement, to enable us to sell securities from time to time as described in the prospectus in one or more offerings up to a total aggregate offering price of \$150,000,000. The SEC declared the Shelf Registration Statement effective on February 1, 2016.

## Cellular Immunotherapy

Cellular immunotherapy harnesses a patient's own immune cells to attack and eliminate harmful disease cells in the body. The immune system is the body's defense network. It consists of a number of cells and organs that, working together, recognize and respond to threats in the form of pathogens. T cells are a type of white blood cell that recognize pathogens and can target and eliminate them upon full activation through the addition of appropriate co-stimulatory signals.

The following therapeutic applications of cellular immunotherapy have been primary areas of research and development by research institutes and biopharmaceutical companies, given their promise of effectively treating patients suffering from severe and life-threatening diseases.

**HSCT.** HSCT is the transplantation of stem cells and other immune cells derived from bone marrow, peripheral blood or umbilical cord blood. The transplantation may be autologous, using the patient's own cells, or allogeneic, using a donor's cells. HSCT is often the only curative option for a wide range of treatment-refractory hematological cancers, such as ALL, acute myeloid leukemia, or AML, and chronic myeloid leukemia, or CML. HSCT is also used as a high-risk treatment for orphan inherited blood disorders, such as sickle cell disease, beta-thalassemia and certain immune disorders.

**Genetically Modified T-cell Therapy (CAR-T and TCR).** This approach entails collecting a patient's T cells, genetically modifying them *ex vivo*, or outside of the body, to incorporate specific receptors which target cancer cells and then re-infusing the modified T cells back into the patient. Two types of cancer-specific receptors are typically used, CARs that recognize whole antigens on the surface of cancer cells, and TCRs that bind to cancer-associated peptides, or fragments of proteins, from either inside or on the surface of the cancer cells. In early human clinical trials, CAR T cell therapy has demonstrated an unprecedented ability to achieve durable complete responses in some leukemias and lymphomas, even in patients who have suffered multiple relapses.

### Limitations of Current Cellular Immunotherapy Approaches.

Despite rapid advances in various approaches to cellular immunotherapy and the biopharmaceutical industry's considerable investment in research and development, certain challenges have prevented these therapies from realizing their maximum potential. Some of these obstacles and issues are highlighted below:

| Cellular Immunotherapy Approach | Safety Challenges  | Efficacy Challenges   |
|---------------------------------|--|---|
| Allogeneic HSCT                 | <ul style="list-style-type: none"> <li>• GvHD and viral infections are frequent and potentially fatal side effects</li> </ul>  | <ul style="list-style-type: none"> <li>• Attempts to control GvHD (steroids, T-Cell depletion, etc.) increase likelihood of non-engraftment, relapse of underlying disease and viral infection</li> </ul>   |
| CAR-T                           | <ul style="list-style-type: none"> <li>• Serious immune toxicity (cytokine release syndrome) or neurotoxicity</li> <li>• Standard-of-care (steroids) and/or cytokine receptor antagonists, such as tocilizumab, can be ineffective; long ICU stay, relapse of underlying disease, infections and death</li> <li>• Other safety approaches* have slow onset of action or have safety issues of their own</li> </ul> | <ul style="list-style-type: none"> <li>• CARs have not demonstrated the same high response rates to solid tumor antigens as have been seen against CD19-targeted leukemias</li> <li>• Small number of validated tumor antigens that can be targeted</li> <li>• For certain antigen targets, severe toxicity from treatment prevents sufficient therapeutic window for clinical benefit</li> </ul> |
| TCR                             | <ul style="list-style-type: none"> <li>• High risk of off-target or off-organ toxicities</li> </ul>  | <ul style="list-style-type: none"> <li>• Human clinical data still early</li> </ul>   |

\* See discussion of other approaches below under "Our Proprietary Switch Technologies - CaspaCIDE."

### Our Proprietary CID Technology Platform

Our proprietary CID technology platform is designed to address the challenges of current cellular immunotherapies. Cellular activities and functions, such as growth, activation, proliferation and cell death, are controlled by cascades of specialized signaling proteins. Our CID platform consists of molecular switches, modified forms of these signaling proteins, which are triggered inside the patient by infusion of a small molecule, rimiducid, instead of by natural upstream signals. Our current product candidates are based on either a "safety switch," or an "activation switch." After rimiducid is administered, the "safety switch" is designed to lead to programmed cell death, or apoptosis, and the "activation switch" is designed to lead to proliferation and/or activation and/or persistence of immune cells.

We incorporate the molecular switches in the appropriate immune cells and administer them to the patient. After the modified immune cells are inside the patient's body, specific functions of these cells may be controlled by administering rimiducid by intravenous, or IV, infusion. Rimiducid has been designed to bind to a specifically designed domain of CID switch proteins. Once introduced, rimiducid couples, or dimerizes, CID switch proteins together to create a cluster that triggers the signaling cascade. Aside from its impact on CID-modified immune cells bearing switch proteins, rimiducid has no other known effect on the body. To date, rimiducid has been used in more than 150 infusions in humans without any reported serious adverse events related to rimiducid.

Our proprietary CID-based product candidates depend on the following signaling molecules to trigger signaling cascades, resulting in different cell activities:

- **Caspase-9: Signaling Molecule for Apoptosis.** Caspase-9 is the initiating enzyme in the apoptosis pathway. When activated, caspase-9 starts a signaling cascade, including the activation of caspase-3, which ultimately leads to apoptosis, a non-inflammatory process of cell elimination.
- **MyD88/CD40: Signaling Molecules for Activation and Proliferation.** Myeloid differentiation primary response gene, or MyD88, is a protein that has functions in cellular responses to stimuli such as stress, cytokines and bacteria or viruses. CD40 is a co-stimulatory protein found on antigen-presenting cells, such as dendritic cells and B cells and is required for their activation. Although the effects of MyD88 and CD40 have been studied previously in dendritic cell therapies, our novel approach applies them to T cell based immunotherapies.



## Our Proprietary Switch Technologies

With the CID platform as the foundation, we have created different molecular switch technologies customized for specific cellular immunotherapy approaches and therapeutic indications. The table below summarizes our key switch technologies.

|                            | CaspaCIDE   | CIDeCAR   | GoCAR-T  |
|----------------------------|---|---|--|
| Cell Type                  | Donor T cells (HSCT) or patient T cells (CAR-T or TCRs)       | Patient T cells   | Patient T cells  |
| Proprietary Components     | caspase-9 safety switch                                       | caspase-9 safety switch + MC co-stimulation                   | MC co-stimulation switch   |
| Applications               | HSCT and TCR therapy  | CAR-T therapy   | CAR-T therapy  |
| Potential Safety Benefit   | Modulation of effect with rimiducid triggers T-cell apoptosis | Modulation of effect with rimiducid triggers T-cell apoptosis | Modulation of effect with rimiducid triggers T-cell activation & proliferation |
| Potential Efficacy Benefit | Widens therapeutic window for maximum benefit from treatment  | Widens therapeutic window; MC may enhance T-cell activity     | Widens therapeutic window; MC may enhance T-cell activity                      |
| Product Candidates         | BPX-501,BPX-701   | BPX-401   | BPX-601  |

### CaspaCIDE

CaspaCIDE is our CID based safety switch technology designed to eliminate cells in the event of toxicity. The CaspaCIDE switch consists of the CID-binding domain coupled to the signaling domain of caspase-9, an enzyme that is part of the apoptotic, cell death pathway. Infusion of rimiducid is designed to trigger activation of this domain of caspase-9, or iCasp9, which in turn leads to selective apoptosis of the CaspaCIDE-containing cells. Because CaspaCIDE is designed to be permanently incorporated into our cellular therapies, the safety switch has the potential to be available for use long after the initial therapy is delivered. This technology is applied to our lead clinical product candidate, BPX-501, an adjunct T-cell therapy provided after allogeneic HSCT, and to our TCR product candidate, BPX-701.

We believe that CaspaCIDE is the optimal cell therapy safety switch technology described to-date. The only other widely reported clinically validated approach is based on the Herpes simplex virus thymidine kinase, or HSV-tk, a non-human and as such immunogenic protein which is activated to kill the cell by the widely-used anti-viral drug, ganciclovir. Comparative studies have demonstrated CaspaCIDE's superiority to HSV-tk, based on lack of immunogenicity, effectiveness in rescuing animals from toxicities that have progressed, lack of dependence on the cell cycle for cell elimination, and most importantly, speed of elimination. In human trials, CaspaCIDE has demonstrated clinical efficacy in human patients beginning as soon as 30 minutes after administration of the activating drug, rimiducid. Lastly, rimiducid is bio-inert in the absence of cells containing a CID-based switch, and has no other clinical use. In contrast, ganciclovir has side effects, and physicians are reluctant to lose the ability to use it to treat herpes virus family infections in patients treated with HSV-tk-containing cells.

Other cell elimination approaches described in the literature include gene modification of cells to express truncated epidermal growth factor receptor, or EGFRt, or codon-optimized CD20. Administration of the monoclonal antibodies cetuximab or rituximab, respectively, is intended to trigger complement-mediated cytotoxicity, or CMC, or antibody-dependent cellular cytotoxicity, or ADCC, mediated cell elimination. While CaspaCIDE eliminates cells via the apoptotic pathway, the body's non-inflammatory mechanism for this important function, we believe a CMC/ADCC-mediated mechanism may add to complications in patients already in an inflammatory crisis, such as seen with serious cytokine release syndrome, or CRS, after CAR-T cell therapy. Moreover, cetuximab and rituximab, both anti-cancer therapies that have potentially serious side effects, are unlikely to be usable in a titratable manner. Lastly, these approaches have yet to demonstrate efficacy in clinical trials.

CaspaCIDE has been evaluated in both preclinical and clinical studies, with additional Phase 1/2 clinical trials ongoing and planned. In addition to using our CaspaCIDE technology for the substantial elimination of cellular therapy, like an "off" switch, we are studying

partial elimination of a cellular therapy, like a “dimmer” switch, by delivering reduced doses of rimiducid. We observed the dose response to rimiducid by measuring the viability of BPX-501 cells in culture following the addition of increasing amounts of rimiducid to the culture medium, as well as by measuring the survival of BPX-501 cells *in vivo* in immune-deficient mice following injection of increasing doses of rimiducid. In these preclinical studies, rimiducid rapidly and consistently reduced or eliminated CaspaCIDE-containing cells in a dose-dependent manner.

In addition to our internal preclinical and clinical development activities, we have selectively entered into agreements with renowned cancer research centers with expertise in cellular immunotherapy to allow the use of our CaspaCIDE safety switch with the collaborators’ CAR-T product candidates. While we are not the sponsor of these clinical trials, we believe that they may facilitate the adoption of CaspaCIDE in the CAR T cell setting and provide opportunities for license arrangements of our technology in the future.

### **CIDeCAR**

CIDeCAR consists of a CAR T cell expressing MC, our proprietary novel dual co-stimulatory domain, for improved T-cell activation and proliferation, and the CaspaCIDE safety switch. CAR interaction with cancer cell antigens complements MC signaling, which then leads to activation of T cells. In the event of serious toxicity, rimiducid activation of caspase-9 is designed to eliminate the CIDeCAR T cells.

In order to improve the effectiveness of CAR T cells in settings other than blood cancers located principally in the bone marrow, such as leukemia, some researchers have been working to develop “armored CARs” in which supplemental co-stimulatory signals or pro-inflammatory cytokines are added to the CAR-T cells. Like an “armored CAR,” we include MC in our CIDeCAR technology in order to increase the potency and durability of the therapy in these indications. While promising, these approaches may exacerbate safety issues found in standard CARs, such as CRS. We incorporate CaspaCIDE into CIDeCAR to address these safety concerns.

In proof-of-principle preclinical studies of CIDeCAR technology, CIDeCAR candidate BPX-401 and a CIDeCAR targeting Her2 on solid tumors, both of which incorporate MC, in place of the standard co-stimulatory molecules CD28, 4-1BB, or both together, were evaluated *in vitro*. These preclinical studies show that CIDeCAR technology results in enhanced activation, proliferation and tumor cell killing compared to standard comparator CARs. In addition, these studies demonstrate elimination of the CIDeCAR T cells after exposure to rimiducid.

Preclinical animal studies have also shown that BPX-401 cells exhibit both anti-tumor activity and partial or complete elimination of T cells after administration of rimiducid in an NSG mouse Raji tumor model.

### **GoCAR-T**

Our GoCAR-T technology incorporates a switch that activates CAR T cells when triggered by both rimiducid and the targeted antigen expressed on the surface of the cancer cells. Current generation CAR T cell constructs consist of a CD3-ζ domain and one or more co-stimulatory molecules that are both activated when a cancer antigen binds to the portion of the CAR on the surface of the engineered T cell. This reliance on antigen for activation of the CAR-T cell results in an unpredictable and inherently uncontrollable therapeutic effect. For example, CAR T cells that target the CD19 receptor have been shown to proliferate in excess of 100,000-fold in some patients, ultimately comprising over 50% of circulating lymphocytes. Solid tumor CAR T cells, on the other hand, often fail to proliferate or persist at all for more than a few days or weeks and have been largely ineffective. In each situation, the physician has no effective way to intervene to achieve greater consistency once the cells have been administered.

Our GoCAR-T technology is designed to change the current paradigm by separating the CIDeCAR dual co-stimulatory domain, MC, from the antigen recognition domain and moving it onto a separate molecular switch that can be rimiducid controlled. GoCAR-T cells are designed to only be fully activated when exposed to both the cancer cells and rimiducid. This separation is designed to control the degree of activation of the CAR-T cells through adjustments to the schedule of rimiducid administration, but still in a tumor-dependent manner.

In a proof-of-principle *in vitro* study of our GoCAR-T technology, GoCAR-T cells targeting the PSCA antigen can only be fully activated when the GoCAR-T cells are exposed to both their target PSCA-expressing human pancreatic cancer cells and rimiducid. In *in vivo* studies of GoCAR-T technology, target antigen PSCA-expressing HPAC human pancreatic tumors, which were established in immune-deficient NSG, or NOD/scid γc-deficient mice, were eliminated by administration of GoCAR-T cells targeting PSCA along with weekly rimiducid administration.

We believe these studies together provide proof-of-principle that GoCAR-T technology may allow rimiducid to modulate the therapeutic effect from initiation of treatment, turning CAR T cell therapy from an uncontrollable, and largely unpredictable class into a more predictable therapy which can be adjusted, like a small molecule, to the patient’s therapeutic window to the appropriate level.

## Our Product Candidates

### BPX-501: Adjunct T Cell Therapy for Allogeneic Hematopoietic Stem Cell Transplantation

Our lead product candidate, BPX-501, is an adjunct T cell therapy administered after allogeneic HSCT using genetically modified donor T cells incorporating our CaspaCIDE® safety switch. BPX-501, in combination with rimiducid, was recently granted orphan drug designation by the FDA for the treatment of immunodeficiency and GvHD following allogeneic hematopoietic stem cell transplant, and is currently being evaluated in multiple Phase 1/2 clinical trials in adults and pediatric patients with leukemias, lymphomas and genetic blood diseases in the U.S. and Europe. We believe that BPX-501 could enable physicians to maximize the benefits of T cell therapy for allogeneic HSCT, such as immune system reconstitution, prevention or treatment of relapse of underlying disease and improvement in stem cell engraftment, while mitigating some of the safety issues associated with a stem cell transplant. The Company reported initial top-line data from ongoing clinical trials in the HSCT setting in December 2015 at 57th Annual Meeting of the ASH.

The goal of our BPX-501 clinical program is to provide better overall transplant outcomes-lower rates of infection and faster immune recovery-than one would generally expect from an alternative allogeneic transplant procedure. We are currently conducting multiple Phase 1/2 clinical trials of BPX-501 in the United States and Europe. In November 2014, we initiated BP-004, a Phase 1/2 clinical trial in children with leukemias, lymphomas, or orphan inherited blood disorders, such as severe combined immunodeficiency, Wiskott-Aldrich Syndrome and beta thalassemia, all chronic life-long disorders for which HSCT is curative. The trial is being conducted in both European and U.S. pediatric transplant centers. The clinical trial is evaluating whether BPX-501 T cells from a haploidentical donor, typically the child's mother or father, administered following a T-depleted HSCT, are safe and can enhance immune reconstitution. Additional ongoing clinical studies include BP-001 and BP-005 in adults in which BPX-501 is administered after initial allogeneic HSCT for hematological cancers, and BP-003, a single site clinical trial in children with orphan inherited blood disorders in which BPX-501 is administered after initial allogeneic HSCT. In addition, we are planning to initiate additional Phase 1/2 clinical trials in the U.S. and Europe, as part of our strategy to pursue global regulatory approvals and expand the potential addressable patient population for BPX-501.

In July 2015, the intellectual property for BPX-501 was strengthened with a U.S. method of use patent issued to Baylor College of Medicine, or Baylor. The patent, licensed exclusively to Bellicum, is scheduled to expire in 2031.

### BPX-601: GoCAR-T Product Candidate for Solid Tumors

We are developing BPX-601, a GoCAR-T™ product candidate containing Bellicum's proprietary iMC, inducible MyD88/CD40, activation switch, for the treatment of solid tumors expressing PSCA. PSCA is a cancer antigen expressed in many malignancies, including prostate, pancreatic, bladder, esophagus, and gastric cancers. As reported at ASH 2015, preclinical data shows enhanced T-cell proliferation, persistence and *in vivo* anti-tumor activity compared to traditional CAR T therapies.

The initial planned indication for BPX-601 development is non-resectable pancreatic cancer. The BPX-501 Phase 1 protocol and related documents were reviewed by the National Institutes of Health, or NIH, Recombinant DNA Advisory Committee, or RAC, in March 2016. We are now preparing our IND submission package, have selected a clinical site and anticipate an initial Phase 1 trial to begin enrolling patients in mid-2016. In December, 2015 we entered into a license agreement with Agensys, an affiliate of Astellas, under which we were granted an exclusive worldwide license for rights to PSCA and related antibodies.

### BPX-701: CaspaCIDE TCR Product Candidate for Solid Tumors

We are developing BPX-701, a TCR-based therapy that incorporates our CaspaCIDE technology, in collaboration with Leiden University Medical Center. BPX-701 is designed to target malignant cells expressing the preferentially-expressed antigen in melanoma, or PRAME. As initially reported in *Clinical Cancer Research* in 2011, PRAME-specific clones showed high reactivity against a panel of PRAME positive tumor cell lines, metastatic melanoma, sarcomas and neuroblastoma tissues, and no reactivity against normal cell types, with the exception of low reactivity against kidney epithelial cells and intermediate reactivity against mature dendritic cells. Based on *in vitro* studies, BPX-701 has demonstrated strong affinity to panels of cancer cells presenting PRAME peptides and low affinity to non-tumor cells. In other *in vitro* studies, BPX-701 cells containing the CaspaCIDE safety switch, have demonstrated complete elimination in response to the administration of rimiducid.

Planned indications for initial BPX-701 clinical development are Refractory or Relapsed Acute Myeloid Leukemia, or AML, and Myelodysplastic Syndromes, or MDS, with an additional study planned for metastatic uveal melanoma. Each of these are orphan indications where PRAME is highly expressed and for which current treatment options are limited. The initial BPX-701 Phase 1 protocol and related documents were reviewed by the RAC in March 2016. We are now preparing our IND submission package, have selected our initial clinical site and anticipate that we will begin enrolling patients in mid-2016. We also expect to submit European regulatory filings to allow initiation of clinical development at a European site after the U.S. IND has been allowed.

## **BPX-401: CIDECAR Product Candidate for Hematological Cancers**

We are developing BPX-401 for the treatment of hematological cancers expressing the CD19 antigen, such as ALL, CLL and certain types of non-Hodgkin's lymphoma. We have generated preclinical proof-of-principle data *in vitro* showing that BPX-401 has significant CAR T cell activation and proliferation potential, and may be more effective in killing cancer cells compared to other CAR-T constructs. We intend to file an IND and begin enrolling patients in a Phase 1 trial of BPX-401 in the second half of 2016.

The current standard of care in these indications, chemotherapy combined with monoclonal antibody therapies, works to varying degrees with high disease relapse rates. CD19-targeted CAR-T therapies have elicited high objective response rates in some of these B cell cancers, but they have demonstrated major safety risks.

## **Discontinued Development Program: BPX-201 - DeCIDE Cancer Vaccine Product Candidate**

In 2013, we initiated a Phase 1 clinical trial of BPX-201 as a dendritic cell cancer vaccine designed to treat Metastatic Castrate Resistant Prostate Cancer, or mCRPC. In August 2015, based on the prioritization of our other pipeline opportunities, we made a strategic decision to not progress BPX-201 into additional clinical trials. The decision to not conduct further BPX-201 development was not based on any safety concerns and does not have implications for our technology platform or other programs.

## **Other Development Programs**

We believe that our CIDECAR, GoCAR-T and CaspaCIDE TCR technologies have broad applicability against a range of cancer targets which form the basis for additional development programs, some of which are described below:

### ***CIDECAR for Solid Tumors***

Beyond hematological cancers, we are studying the full potential of CIDECAR to enable treatment of more challenging solid tumor cancers in which concerns regarding toxicity are paramount in the field of cell therapy. To this end, we are conducting preclinical studies of various CIDECAR product candidates targeting solid tumor antigens.

### ***CaspaCIDE TCR for Hematological Cancers***

We are working with our collaborator, Leiden University Medical Center, to evaluate an additional TCR with high affinity for certain peptides for the treatment of various hematological cancers. The TCR construct incorporates the CaspaCIDE safety switch.

## **Manufacturing, Processing and Delivering to Patients**

Our product candidates require a combination of three critical components: (1) viral vectors with DNA content encoded for our proprietary switch proteins and co-stimulatory and other accessory molecules, (2) patient-specific donor T cells that are genetically modified by our viral vectors, and (3) the synthetic small molecule rimiducid which activates the switch proteins. Each of these components requires a separate supply chain and shares the same regulatory requirements applicable for biological or chemical materials suitable for human use. Details on each of these components are described below:

- ***Viral Vectors.*** We use a retrovirus to transduce our T cell based product candidates. We believe that the retrovirus is optimal for T cell transduction given that it is an integrating vector that induces long-term gene expression, exhibits high transduction efficiency, has sufficient capacity for DNA content, and has been safely used in clinical trials. As an alternative approach, we are investigating in parallel the use of lentivirus for several of our product candidates. In certain embodiments, lentiviral vectors may provide advantages over retroviral vectors. The vector production is performed at multiple third-party supplier facilities under GMP procedures and requirements. These suppliers have significant experience and expertise in vector manufacturing and have dedicated capacity to satisfy demand for large clinical trials and product commercialization.
- ***Genetically Modified T Cells.*** We have agreements with reputable contract manufacturing organizations, or CMOs, with facilities in both the United States and Europe for processing and manufacturing our genetically modified T cells. We have designed and refined a proprietary process for cell engineering that has been improved from lab-based open procedures used in academic and research settings to a functionally closed system that is more appropriate for large-scale clinical trials and commercialization. Our system is compliant with current guidelines and regulations for cell-based manufacturing in the United States and Europe and has been successfully transferred and implemented by our CMOs.
- ***Rimiducid.*** Rimiducid is a synthetic small molecule which has been rationally designed to trigger the proprietary switch proteins in our CID platform. We have separate third-party manufacturers for the active pharmaceutical ingredient, or API, and the finished drug product. Manufacturers of both the API and finished drug product are licensed to manufacture a

variety of marketed drugs worldwide and have been selected based on their ability to provide supplies for our clinical trials and future commercialization.

Given that our product candidates are for patients whose conditions can rapidly deteriorate, we are focused on continuously refining our overall cell therapy process, manufacturing, processing and delivery to patients to be more efficient.

Our current process cycles for our product candidates, from collection of white blood cells to infusion of the final product, can be completed in as little as two weeks and are customized to be complementary to the treatment procedure of interest in order to prevent any delays or complications.

## Intellectual Property

We seek to protect proprietary technology, inventions, and improvements that are commercially important to our business by seeking, maintaining, and defending patent rights, whether developed internally or licensed from third parties. We also seek to rely on regulatory protection afforded through orphan drug designations, data exclusivity, market exclusivity and patent term extensions where available as well as contractual agreements with our academic and commercial partners.

To achieve this objective, a strategic focus for us has been to identify and license key patents and patent applications that serve to enhance our intellectual property and technology position. Our intellectual property estate includes: (1) claims directed to core CID technologies and components used in our products; (2) claims directed to methods of treatment for therapeutic indications; (3) claims directed to specific products; and (4) claims directed to innovative methods for generating new constructs for genetically engineering T cells. We believe our patent estate, together with our efforts to develop and patent next generation technologies, provides us with a substantial intellectual property position. However, the area of patent and other intellectual property rights in biotechnology is an evolving one with many risks and uncertainties.

We are aware of third party patents having claims that may be considered as being directed to single-chain antibody fragments that bind to PSCA and these patents may be considered relevant to BPX-601 technologies we are developing. We currently are evaluating whether or not we need to obtain rights to these patents under a license, and if it is determined that we need to obtain such rights, whether these rights can be obtained. Please refer to the section entitled “Item 1A. Risk Factors—Risks Related to Our Intellectual Property” herein for associated risks.

To our knowledge, our patent estate, on a worldwide basis, includes 43 issued patents, 14 of which are in the United States, and 58 pending patent applications, 19 of which are in the United States, which we own or for which we have an exclusive, either in its entirety or within our field of use, commercial license as of February 29, 2016.

- We have internally developed technology disclosed in three pending U.S. utility patent applications and nine pending foreign patent applications which relate to our CIDE CAR technology. If U.S. patents issue therefrom, the estimated expiration date of the last to expire patent is in 2035. If patents are issued in foreign jurisdictions, the anticipated expiration date of the last to expire patent will be in 2035.
- We have internally developed technology disclosed in two pending utility patent applications in the United States and eight pending foreign patent applications which relates to our GoCAR-T technology. If U.S. patents issue from the U.S. applications, the estimated expiration date of the last to expire patent is in 2035. If patents are issued in foreign jurisdictions, the anticipated expiration dates will be in 2035.
- We have internally developed technology disclosed in pending U.S. utility patent applications, and a pending foreign patent application, which relates to a “non-inducible” CAR and “non-inducible” co-stimulatory polypeptide, which may also be used in combination with our CIDE CAR technology. If a U.S. patent issues, the estimated expiration date of the patent is 2035. If patents are issued in foreign jurisdictions, the anticipated expiration dates will be in 2035.
- Pursuant to our licenses from Baylor, we have exclusive commercial rights to five issued U.S. patents expiring in 2024 or later, eight pending U.S. utility patent applications, six issued foreign patents expiring in 2024 or later and 18 pending patent applications in foreign jurisdictions that relate to our GoCAR-T, BPX-501 and certain of our other technologies. If U.S. patents issue from the currently pending U.S. patent applications, the estimated expiration date of the last to expire patent is 2031. If patents from the currently pending patent applications are issued in foreign jurisdictions, the estimated expiration dates range from 2024 to 2031.
- Pursuant to our license agreement with ARIAD Pharmaceuticals, Inc., or ARIAD, as amended, we have exclusive commercial rights within our field of use to 31 patents, eight in the United States and 23 in foreign jurisdictions, which relate to dimerizer technology. The estimated expiration date of the last to expire U.S. patent is 2032. The estimated expiration date of the last to expire foreign patent is 2032.

These provisional, pending, or issued patents include composition of matter and/or method of use claims.

Composition of matter patent coverage on rimiducid, the dimerization molecule AP1903, has expired. However, we believe that additional barriers to entry exist for a competitor attempting to use rimiducid. This is significant because, if true, then potential competitors will not be able to use the abbreviated new drug application pathway for approval of rimiducid. With respect to our investigational products, the FDA has assigned combination product status to BPX-501, and we plan to submit a biologic license application, or BLA, for the combination product. We believe that this will be the case for each future product candidate of ours that incorporates rimiducid. If our investigational products incorporating rimiducid receive FDA approval through BLAs, then the FDA would not approve any biosimilar of these combination products until at least 12 years from the date that we receive FDA approval. Additionally, although ‘biosimilar’ provisions exist for products approved through BLAs, it is not clear if the FDA will permit the biosimilar route to be used for complex biological products such as our investigational products.

Rimiducid is a relatively complex drug substance to manufacture. We have substantial experience in manufacturing rimiducid and in preparing it for patient infusion. Our manufacturing know-how is a valuable asset and we incorporate contractual confidentiality terms in all agreements with our third party manufacturers. We believe that a competitor will face substantial obstacles with respect to time and cost in order to derive a clinically acceptable manufacturing process.

Our strategy is also to develop and obtain additional intellectual property covering manufacturing processes and methods for genetically engineering T cells expressing new constructs. To support this effort, we have established expertise and development capabilities focused in the areas of preclinical research and development, manufacturing and manufacturing process scale-up, quality control, quality assurance, product delivery and storage, regulatory affairs and clinical trial design and implementation. As appropriate, we expect to file additional patent applications to expand this layer of our intellectual property estate.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the date of filing of the first non-provisional application to which priority is claimed. In the United States, a patent’s term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office in granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier-filed patent. The term of a patent that covers an FDA-approved drug or biologic may also be eligible for a patent term restoration of up to five years under the Hatch-Waxman Act, which is designed to compensate for the patent term lost during the FDA regulatory review process. The length of the patent term restoration is calculated based on the length of time the drug or biologic is under regulatory review. A patent term restoration under the Hatch-Waxman Act cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug or biologic may be restored. Moreover, a patent can only be restored once, and thus, if a single patent is applicable to multiple products, it can only be extended based on one product. Similar provisions are available in Europe and certain other foreign jurisdictions to extend the term of a patent that covers an approved drug or biologic. When possible, depending upon the length of clinical trials and other factors involved in the filing of a BLA we expect to apply for patent term extensions for patents covering our product candidates and their methods of use.

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

## **Our License Agreements**

### ***License Agreement - Agensys***

On December 10, 2015, we and Agensys, Inc., or Agensys, entered into a license agreement, or the Agensys Agreement, pursuant to which (i) Agensys granted us, within the field of cell and gene therapy of diseases in humans, an exclusive, worldwide license and sublicense to its patent rights directed to prostate stem cell antigen 1, or PSCA, and related antibodies, and (ii) we granted Agensys a non-exclusive, fully paid license to our patents directed to inventions that were made by us in the course of developing our licensed products, solely for use with Agensys therapeutic products containing a soluble antibody that binds to PSCA or, to the extent not based upon our other proprietary technology, to non-therapeutic applications of antibodies not used within the field.

As consideration for the rights granted to us under the Agensys Agreement, we agreed to pay to Agensys a non-refundable upfront fee of \$3,000,000. We are also required to make aggregate milestone payments to Agensys of up to (i) \$5,000,000 upon the first achievement of certain specified clinical milestones for its licensed products, (ii) \$50,000,000 upon the achievement of certain



specified clinical milestones for each licensed product, and (iii) \$75,000,000 upon the achievement of certain sales milestones for each licensed product. The Agensys Agreement additionally provides that we will pay to Agensys a royalty percentage that ranges from the mid to high single digits based on the level of annual net sales of licensed products by us, our affiliates or permitted sublicensees. The royalty payments are subject to reduction under specified circumstances.

Under the Agensys Agreement, Agensys also was granted the option to obtain an exclusive license, on a product-by-product basis, from us to commercialize in Japan each licensed product developed under the Agensys Agreement that has completed a phase 2 clinical trial. As to each such licensed product, if Agensys or its affiliate, Astellas Pharma, Inc., exercises the option, the Agensys Agreement provides that we will be paid an option exercise fee of \$5,000,000. In addition, the Agensys Agreement provides that we will be paid a royalty that ranges from the mid to high single digits based on the level of annual net sales in Japan of each such licensed product. If the option is exercised, the aggregate milestone payments payable by us to Agensys, described above with respect to each licensed product, would be reduced by up to an aggregate of \$65,000,000 upon the achievement of certain specified clinical and sales milestones.

The Agensys Agreement will terminate upon the expiration of the last royalty term for the products covered by the Agensys Agreement, which is the earlier of (i) the date of expiration or abandonment of the last valid claim within the licensed patent rights covering any licensed products under the Agensys Agreement, (ii) the expiration of regulatory exclusivity as to a licensed product, and (iii) 10 years after the first commercial sale of a licensed product. Either party may terminate the Agensys Agreement upon a material breach by the other party that remains uncured following 60 days after the date of written notice of such breach (or 30 days if such material breach is related to failure to make payment of amounts due under the Agensys Agreement) or upon certain insolvency events. In addition, Agensys may terminate the Agensys Agreement immediately upon written notice to us if we or any of our affiliates or permitted sublicensees commence an interference proceeding or challenge the validity or enforceability of any of Agensys' patent rights.

### ***License Agreement - BioVec***

On June 10, 2015, we and BioVec Pharma, Inc., or BioVec, entered into a license agreement, or the BioVec Agreement, pursuant to which BioVec agreed to supply us with certain proprietary cell lines and granted us a non-exclusive, worldwide license to certain of its patent rights and related know-how related to such proprietary cell lines.

As consideration for the products supplied and rights granted to us under the BioVec Agreement, we agreed to pay to BioVec an upfront fee of \$100,000 within ten business days of the effective date of the BioVec Agreement and a fee of \$300,000 within ten business days of its receipt of the first release of GMP lot of the products licensed under the BioVec Agreement. In addition, we agreed to pay to BioVec an annual fee of \$150,000, commencing 30 days following the first filing of an IND, or its foreign equivalent, for a product covered by the license; with such annual fees being creditable against any royalties payable by us to BioVec under the BioVec Agreement. We also are required to make a \$250,000 milestone payment to BioVec for each of the first three licensed products to enter into a clinical phase trial and one-time milestone payments of \$2,000,000 upon receipt of a registration granted by the Federal Drug Administration or European Medicines Agency on each of our first three licensed products. The BioVec Agreement additionally provides that we will pay to BioVec a royalty in the low single digits on net sales of products covered by the BioVec Agreement. We may also grant sublicenses under the licensed patent rights and know-how to third parties for limited purposes related to the use, sale and other exploitation of the products licensed under the BioVec Agreement. The BioVec Agreement will continue until terminated. The BioVec Agreement may be terminated by us, in our sole discretion, at any time upon 90 days written notice to BioVec. Either party may terminate the BioVec Agreement in the event of a breach by the other party of any material provision of the BioVec Agreement that remains uncured on the date that is 60 days after written notice of such failure or upon certain insolvency events that remain uncured following the date that is 30 days after the date of written notice to a party regarding such insolvency event.

### ***License Agreement - Leiden***

On April 23, 2015, we and Academisch Ziekenhuis Leiden, also acting under the name of Leiden University Medical Centre, or Leiden, entered into a license agreement, or the Leiden Agreement, pursuant to which Leiden granted to us an exclusive, worldwide license to its patent rights covering high affinity T-cell receptors targeting preferentially-expressed antigen in melanoma, or PRAME, and POU2AF1 epitopes. The license granted under the Leiden Agreement is subject to certain restrictions and to Leiden's retained right to use the licensed patents solely for academic research and teaching purposes, including research collaborations by Leiden with academic, non-profit research third parties; provided that Leiden provides 30 days advance written notice to us of such academic research collaborations.

As consideration for the rights granted to us under the Leiden Agreement, we agreed to pay to Leiden an aggregate of EUR 75,000 in upfront fees within 30 days of the effective date of the Leiden Agreement. In addition, we agreed to pay to Leiden, beginning on the

eighth anniversary of the effective date of the Leiden Agreement, annual minimum royalty payments of EUR 30,000. We are also required to make milestone payments to Leiden of up to an aggregate of EUR 1,025,000 for each of the first licensed product that is specific to PRAME and to POU2AF1. The Leiden Agreement additionally provides that we will pay to Leiden a royalty in the low single digits on net sales of products covered by the Leiden Agreement. If we enter into a sublicensing agreement with a third party related to a product covered by the Leiden Agreement, we have agreed to pay Leiden a percentage ranging in the low double digits on all non-royalty income received from sublicensing revenue directly attributable to the sublicense, dependent on whether we are in phase 1/2, phase 2 or phase 3 at the time that we enter into any such sublicensing agreement.

Under the Leiden Agreement, we and Leiden entered into a sponsored research agreement, pursuant to which we are required to pay Leiden up to EUR 300,000 over a three-year period during the term of the sponsored research agreement. The Leiden Agreement will expire upon the expiration of the last patent included in the licensed patent rights. The Leiden Agreement may be terminated earlier upon mutual written agreement between us and Leiden, and at any time by us upon six months written notice to Leiden. Leiden may terminate the Leiden Agreement in the event of a failure by us to pay any amounts due under the Leiden Agreement that remains uncured on the date that is 30 days after written notice of such failure. Either party may terminate the Leiden Agreement upon a material breach by the other party that remains uncured following 30 days after the date of written notice of such breach or upon certain insolvency events that remain uncured following the date that is 45 days after the date of written notice to a party of such insolvency event.

#### ***License Agreement - ARIAD Pharmaceuticals, Inc.***

##### ***2011 License Agreement***

On March 7, 2011, we entered into an amended and restated exclusive license agreement, or restated ARIAD license, with ARIAD which restated a license agreement entered into in 2006. Under the restated ARIAD license, ARIAD granted to us an exclusive, even as to ARIAD, license, with the right to grant sublicenses, under ARIAD's patent rights relating to dimerizers, genetic constructs coding for dimerizer binding domains, vectors containing said constructs, cells containing said constructs and methods of inducing biological processes in cells containing said constructs. These licensed patent rights were limited in the 2011 restated license to defined products in the fields of cell transplantation and certain types of cancer.

In connection with the original license from ARIAD, in 2006 we issued 121,242 shares of our common stock to ARIAD which were subject to antidilution protection that ultimately resulted in additional issuances to ARIAD by us of 556,221 shares of our common stock, such that ARIAD received a total of 677,463 shares of our common stock under the original license agreement. In addition, we paid ARIAD a license fee of \$250,000 in connection with the restated license in 2011. The restated ARIAD license also provided for certain royalty and milestone payments, which were subsequently terminated pursuant to an omnibus amendment agreement with ARIAD.

Under the restated ARIAD license, we are required to diligently proceed with the development, manufacture and sale of licensed products. The restated ARIAD license is subject at all times to restrictions and obligations under a license agreement by and between ARIAD Gene Therapeutics, Inc., an ARIAD affiliate that merged into ARIAD, and the academic institution from with ARIAD obtained its license to the underlying technology. While we are not required to pay royalties or fees to such academic institution, no sublicensee of ours may enter into a sublicense with respect to any intellectual property owned by the academic institution without its consent, which terms must be consistent with those included in the agreement between ARIAD and such academic institution.

The restated ARIAD license will expire upon expiration of the last license term of a licensed product covered by the agreement, which is the later of (1) 12 years from the date of the first commercial sale of the licensed product, or (2) the expiration of the last to expire valid patent claim on the licensed product. Either party to the license may terminate or modify the restated ARIAD license upon a material breach by the other party that remains uncured following the date that is 30 days after written notice of a payment breach and 90 days for any other breach, and effective immediately upon bankruptcy of the other party. We may terminate the restated ARIAD license in our sole discretion at any time if we determine not to develop or commercialize any licensed product. In addition, upon termination of the restated ARIAD license prior to expiration, we must transfer any ownership and any beneficial ownership in any orphan drug designation or any similar designation in any jurisdiction of orphan drug status of the ARIAD dimerizer to ARIAD.

##### ***2014 Amendment***

In October 2014, we entered into an omnibus amendment agreement with ARIAD, which in part amended the restated ARIAD license to expand the license to cover a broader scope of dimerizers and licensed products for use and exploitation in any human therapeutic field of use other than *in vivo* administration of genetic material directly into a human being using viral vectors for the purpose of producing proteins or other macromolecules that are expressed or secreted for therapeutic or prophylactic purposes.

In connection with the amendment, we made an initial payment of \$15,000,000 and we issued a promissory note to ARIAD for a principal amount of \$35,000,000 in return for the broader scope of the license and the termination of all obligations to make milestone



and royalty payments to ARIAD in the future. On December 23, 2014, the closing of our initial public offering triggered an acceleration of the payment of \$15,000,000 due to ARIAD under the amendment and the promissory note. As a result of such acceleration, on December 29, 2014, we paid to ARIAD an aggregate amount of \$35,000,000, which included an additional payment of \$20,000,000 to extinguish the promissory note. In exchange, ARIAD returned to us all of the 677,463 shares of our common stock then held by ARIAD and all of the agreements related to ARIAD's rights as a stockholder were terminated.

### ***License Agreements - Baylor College of Medicine***

#### ***2008 Baylor License Agreement***

Pursuant to an Exclusive License Agreement with Baylor College of Medicine, dated March 20, 2008, or the 2008 Baylor license agreement, we obtained an exclusive, worldwide and fully paid up license to certain intellectual property, including intellectual property related to methods for activating antigen presenting cells and to genetic constructs coding for membrane bound inducible cytoplasmic CD40.

As consideration for the 2008 Baylor license agreement, we issued to Baylor 23,529 shares of our common stock and assumed responsibility for all legal fees and expenses, filing or maintenance fees, assessments and all other costs and expenses related to prosecuting, obtaining and maintaining patent protection on the patents subject to the 2008 Baylor license agreement.

The 2008 Baylor license agreement is subject to certain restrictions and is nonexclusive with respect to (1) the making or use of the licensed intellectual property for use in non-commercial research, patient care, teaching, and other educational purposes; (2) any non-exclusive license covering the licensed intellectual property that Baylor grants to other academic or research institutions for noncommercial research purposes; (3) any non-exclusive licenses that Baylor is required to grant to the U.S. or foreign state pursuant to an existing or future treaty with the U.S.; and (4) a non-exclusive license granted to ARIAD under the terms of a materials transfer agreement between Baylor and ARIAD.

Baylor may terminate or modify the 2008 Baylor license agreement in the event of a material breach by us that remains uncured following the date that is 90 days after written notice of such breach or upon certain insolvency events that remain uncured following the date that is 30 days following written notice of such insolvency event. We may terminate the 2008 Baylor license agreement, or any portion thereof, at our sole discretion at any time upon 30 days' written notice to Baylor. Upon termination of the 2008 Baylor license agreement, all rights to the intellectual property immediately revert to Baylor.

#### ***2010 Baylor License Agreement***

Pursuant to an Exclusive License Agreement with Baylor, dated June 27, 2010, or the 2010 Baylor license agreement, we obtained an exclusive, worldwide license to certain intellectual property, including intellectual property related to methods for treating prostate cancer, methods of administering T cells to a patient, and methods of activating antigen presenting cells with constructs comprising MyD88 and CD40.

Pursuant to the terms of the 2010 Baylor license agreement, we paid Baylor a license execution fee of \$30,000. In addition, we are required to pay a low annual maintenance fee on each anniversary of the agreement date.

The terms of the 2010 Baylor license agreement also require us to make royalty payments of less than one percent, subject to certain annual minimums, on net sales of products covered by the license. In addition, to the extent we enter into a sublicensing agreement relating to a licensed product, we are required to pay Baylor a percentage in the mid-single digits on all non-royalty income received from sublicensing revenue. Bellicum is required to make milestone payments, of up to \$735,000 in aggregate, upon successful completion of clinical and regulatory milestones regarding the first two products covered by this license.

The 2010 Baylor license agreement will expire upon expiration of the last patent contained in the licensed patent rights, on a country-by-country basis, upon which we will have a perpetual, paid-in-full license in such country. Baylor may terminate or modify the 2010 Baylor license agreement in the event of a material breach by us that remains uncured following the date that is 90 days after written notice of such breach or upon certain insolvency events that remain uncured following the date that is 30 days following written notice of such insolvency event. We may terminate the 2010 Baylor license agreement, or any portion thereof, at our sole discretion at any time upon 60 days' written notice to Baylor. Upon termination of the 2010 Baylor license agreement for any reason prior to expiration, we must assign to Baylor each authorized sublicense agreement that is currently in effect on the date of termination.

## *2014 Baylor License Agreement*

Pursuant to an Exclusive License Agreement with Baylor, effective November 1, 2014, or the 2014 Baylor license agreement, we obtained an exclusive, worldwide license to certain intellectual property, including intellectual property related to methods for inducing selective apoptosis.

Pursuant to the terms of the 2014 Baylor license agreement, we paid Baylor a license execution fee of \$25,000. In addition, we are required to pay Baylor a low annual maintenance fee on each anniversary of the agreement date. The terms of the 2014 Baylor license agreement also require us to make royalty payments in the low single digits, subject to certain annual minimums, on net sales of products covered by the license. To the extent we enter into a sublicensing agreement relating to a licensed product, Bellicum is also required to pay Baylor a percentage in the low double-digits on all non-royalty income received from sublicensing revenue. We are required to make milestone payments, of up to \$275,000 in aggregate, upon successful completion of clinical and regulatory milestones regarding the first product covered by this license. The 2014 Baylor license agreement will expire upon expiration of the last patent contained in the licensed patent rights, on a country-by-country basis, upon which we will have a perpetual, paid-in-full license in each such country.

Baylor may terminate or modify the 2014 Baylor license agreement in the event of a material breach by us that remains uncured following the date that is 90 days after written notice of such breach or upon certain insolvency events that remain uncured following the date that is 30 days following written notice of such insolvency event. We may terminate the 2014 Baylor license agreement, or any portion thereof, at our sole discretion at any time upon 60 days' written notice to Baylor.

## **Grant Agreement**

### ***Grant Agreement with Cancer Prevention and Research Institute of Texas***

On July 27, 2011, we entered into a Cancer Research Grant Contract, or the Grant Contract, with the Cancer Prevention and Research Institute of Texas, or CPRIT, under which CPRIT awarded a grant not to exceed approximately \$5.7 million to be used for the execution of defined clinical development of BPX-501. In addition, CPRIT may award supplemental funding not to exceed ten percent of the total grant amount based upon our progress. To date, we have received approximately \$4.9 million under the grant. The Grant Contract terminated on June 30, 2014, but obligations exist as to licensing, royalty payments, and indemnification provisions.

Pursuant to the Grant Contract, we granted CPRIT a non-exclusive, irrevocable, royalty-free, perpetual, worldwide license to the intellectual property facilitated by the Grant Contract for and on behalf of CPRIT and other governmental entities and agencies of the State of Texas for education, research and other non-commercial purposes only.

The terms of the Grant Contract require that we pay tiered royalties in the low- to mid-single digit percentages on revenues from sales and licenses of intellectual property facilitated by the Grant Contract. If a third party acquires substantially all of our assets, we have the option to buy out from the royalty obligations by paying a buyout amount that is equal to a percentage of the net grant award proceeds received by us under the Grant Contract, less the aggregate amount of all royalties paid at the time of the buyout. The applicable percentage depends on the timing of the buyout and ranges from 125% to 200%.

We are required to use diligent and commercially reasonable efforts to commercialize or otherwise bring to practical application the results of the funded clinical trial. If CPRIT notifies us of our failure to (1) make the required effort to commercialize any product covered by this agreement or (2) perform our obligations with respect to protection of intellectual property, the rights to any intellectual property and proprietary and confidential information may, at CPRIT's option, revert to CPRIT and CPRIT, at its own cost, can take over the prosecution and maintenance of any impacted patents and commercialize such product candidate. CPRIT's option is subject to our ability to cure any failures identified by CPRIT within 30 days.

## **Competition**

The biopharmaceutical industry is characterized by intense and dynamic competition to develop new technologies and proprietary therapies. Any product candidates that we successfully develop and commercialize will have to compete with existing therapies and new therapies that may become available in the future. While we believe that our proprietary CID platform, differentiated product candidates and scientific expertise in the field of cellular immunotherapy provide us with competitive advantages, we face potential competition from various sources, including larger and better-funded pharmaceutical, specialty pharmaceutical and biotechnology companies, as well as from academic institutions, governmental agencies and public and private research institutions.

Our lead product candidate, BPX-501, is an adjunct therapy for HSCT with alternative donors that is designed to provide improved outcomes through enhanced time to reconstitution of the immune system and address the safety risks of GvHD and susceptibility to infections. The current standard-of-care that addresses some of the safety challenges associated with HSCT, primarily GvHD, is high-

dose steroids. We are aware of other companies that are developing product candidates to improve the outcome of HSCT, including Kiadis Pharma Netherlands B.V. and Molecular Medicine S.p.A.

T-cell based treatments for cancer, such as CAR-T and TCR therapies, have recently been an area of significant research and development by academic institutions and biopharmaceutical companies. BPX-601, BPX-701 and BPX-401, based on our CIDECAR and Go-CART technologies may compete with product candidates from a number of companies that are currently focused on this therapeutic modality, including Adaptimmune Limited, bluebird bio, Inc., Celgene Corporation, Cellectis SA, GlaxoSmithKline plc, Intrexon Corporation, Juno Therapeutics, Inc., Kite Pharma, Inc., Novartis AG, Pfizer Inc. and Ziopharm Oncology.

Many of our competitors, either alone or with their strategic partners, have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of product candidates, obtaining FDA and other regulatory approvals of treatments and commercializing those treatments. Accordingly, our competitors may be more successful than us in obtaining approval for treatments and achieving widespread market acceptance. Our competitors' treatments may be more effective, or more effectively marketed and sold, than any treatment we may commercialize and may render our treatments obsolete or non-competitive before we can recover the expenses of developing and commercializing any of our treatments.

Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated among a smaller number of our competitors. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical study sites and subject registration for clinical studies, as well as in acquiring technologies complementary to, or necessary for, our programs. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

We anticipate that we will face intense and increasing competition as new drugs enter the market and advanced technologies become available. We expect any treatments that we develop and commercialize to compete on the basis of, among other things, efficacy, safety, convenience of administration and delivery, price, the level of generic competition and the availability of reimbursement from government and other third-party payers. For example, if a third party is able to obtain a stand-alone new drug application for rimiducid, then potential generic manufacturers may be able to file abbreviated new drug applications for such product.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, we expect that our therapeutic products, if approved, will be priced at a significant premium over competitive generic products and our ability to compete may be affected in many cases by insurers or other third-party payers seeking to encourage the use of generic products.

## **Government Regulation and Product Approval**

As a biopharmaceutical company that operates in the United States, we are subject to extensive regulation. Our cell products will be regulated as biologics. With this classification, commercial production of our products will need to occur in registered and licensed facilities in compliance with cGMP for biologics.

The FDA regulates human cells, tissues, and cellular and tissue-based products, or HCT/Ps, under a two-tiered framework, based on risk categorization. Higher-risk HCT/Ps are regulated as biologics. Manufacturers of biologics are subject to extensive government regulation. For example, such products must complete extensive clinical trials, which must be conducted pursuant to an effective investigational new drug application, or IND. The FDA must review and approve a BLA before a new biologic may be marketed.

The FDA considers our investigational products to be "combination products" because our products involve a biologic, the engineered cells, that is intended to be used with a small molecule chemical drug, rimiducid. In general, biologics such as our engineered cells are regulated through FDA's Center for Biologics Evaluation and Research, or CBER, while synthetic drugs are regulated through FDA's Center for Drug Evaluation and Research, or CDER. When FDA encounters a combination product such as our products, the agency determines which of the two centers will have primary responsibility for regulating the product by determining the primary mode of action for the product. In this case, we believe that the cellular component of the combination contributes the primary mode of action and, as a result, that FDA will regulate our investigational products as biologics, through CBER.

Government authorities in the United States, at the federal, state and local levels, and in other countries extensively regulate, among other things, the research, development, testing, manufacturing, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of biopharmaceutical products such as those we are developing. Our product candidates must be approved by the FDA before they may be legally marketed in the United States and by the appropriate foreign regulatory agency before they may be legally marketed in

foreign countries. Generally, our activities in other countries will be subject to regulation that is similar in nature and scope as that imposed in the United States, although there can be important differences. Additionally, some significant aspects of regulation in Europe are addressed in a centralized way, but country-specific regulation remains essential in many respects. The process for obtaining regulatory marketing approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources.

#### *U.S. Product Development Process*

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

- completion of nonclinical laboratory tests and animal studies according to good laboratory practices, or GLPs, and applicable requirements for the humane use of laboratory animals or other applicable regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- performance of adequate and well-controlled human clinical trials according to the FDA's regulations commonly referred to as good clinical practices, or GCPs, and any additional requirements for the protection of human research patients and their health information, to establish the safety and efficacy of the proposed biological product for its intended use;
- submission to the FDA of a BLA for marketing approval that includes substantial evidence of safety, purity, and potency from results of nonclinical testing and clinical trials;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the biological product is produced to assess compliance with cGMP, to assure that the facilities, methods and controls are adequate to preserve the biological product's identity, strength, quality and purity and, if applicable, the FDA's current good tissue practices, or GTPs, for the use of HCT/Ps;
- potential FDA audit of the nonclinical study and clinical trial sites that generated the data in support of the BLA; and
- FDA review and approval, or licensure, of the BLA.

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

Clinical trials involve the administration of the biological product candidate to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety, including stopping rules that assure a clinical trial will be stopped if certain adverse events should occur. Each protocol and any amendments to the protocol must be submitted to the FDA as part of the IND. Clinical trials must be conducted and monitored in accordance with the FDA's regulations comprising the GCP requirements, including the requirement that all research patients provide informed consent. Further, each clinical trial must be reviewed and approved by an institutional review board, or IRB, at or servicing each institution at which the clinical trial will be conducted. An IRB

is independent from the trial sponsor and is charged with protecting the welfare and rights of clinical trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent that must be signed by each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Clinical trials also must be reviewed by an institutional biosafety committee, or IBC, a local institutional committee that reviews and oversees basic and clinical research conducted at that institution. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment.

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

- *Phase 1.* The biological product is initially introduced into healthy human subjects and tested for safety. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.
- *Phase 2.* The biological product is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule.
- *Phase 3.* Clinical trials are undertaken to further evaluate dosage, clinical efficacy, potency, and safety in an expanded patient population at geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk to benefit ratio of the product and provide an adequate basis for product labeling.

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

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

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

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

Federal law requires that we register all of our clinical trials on a publicly accessible website, and accordingly we disclose information on our clinical trials on [www.clintrials.gov](http://www.clintrials.gov). We must also provide results information for most of our clinical trials, other than Phase 1 clinical trials.

## *U.S. Review and Approval Processes*

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

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

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

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

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

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

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



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

### *Orphan Drug Designation*

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making available in the United States a drug or biologic for this type of disease or condition will be recovered from sales in the United States for that drug or biologic. Orphan drug designation must be requested before submitting a BLA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. The orphan drug designation does not shorten the duration of the regulatory review or approval process, but does provide certain advantages, such as a waiver of PDUFA fees, enhanced access to FDA staff, and potential waiver of PREA requirements discussed above.

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

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

On February 22, 2016, we announced that the FDA granted orphan drug designation for the combination of BPX-501 genetically modified T cells and activator agent rimiducid as "replacement T-cell therapy for the treatment of immunodeficiency and graft versus host disease, or GvHD, after allogeneic hematopoietic stem cell transplant." BPX-501 is an adjunct T-cell therapy incorporating our proprietary CaspaCIDE safety switch.

### *Expedited Development and Review Programs*

The FDA has a Fast Track program that is intended to expedite or facilitate the process for reviewing new products that meet certain criteria. Specifically, new products are eligible for Fast Track designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs, or if the drug has been designated as a qualified infectious disease product. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. Under Fast Track, the FDA may consider for review sections of the BLA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the BLA, the FDA agrees to accept sections of the BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the BLA. Even if Fast Track designation is granted, it may be rescinded if the product no longer meets the qualifying criteria.

Any product, submitted to the FDA for approval, including a product with a Fast Track designation, may also be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. A product is eligible for priority review if it treats a serious condition and, if approved, would provide a significant improvement in safety and effective. The FDA will attempt to direct additional resources to the evaluation of an application for a new product designated for priority review in an effort to facilitate the review. Additionally, a product may be eligible for accelerated approval. Products studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may receive accelerated approval upon a determination that the product treats a serious condition, provides a meaningful advantage over available therapies, and demonstrates an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a drug or biological product receiving accelerated

approval perform appropriate post-marketing clinical studies to verify and describe the predicted effect on irreversible morbidity or mortality or other clinical benefit. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product. The FDCA also provides expedited procedures for FDA withdrawal of approval of a product approved through accelerated approval. Fast Track designation, priority review and accelerated approval do not change the standards for approval but may expedite the development or approval process.

In 2012, the FDA established a Breakthrough Therapy Designation which is intended to expedite the development and review of products that treat serious or life-threatening conditions. The designation requires preliminary clinical evidence that may demonstrate substantial improvement on a clinically significant endpoint over available therapies. The designation includes all of the Fast Track program features, as well as more intensive FDA interaction and guidance, organizational commitment, and other potential actions to expedite review. The Breakthrough Therapy Designation is a distinct status from both accelerated approval and priority review, which can also be granted to the same product if relevant criteria are met. If a product is designated as breakthrough therapy, the FDA will expedite the development and review of such product. Even if a Breakthrough Therapy Designation is granted, it may be rescinded if the product no longer meets the qualifying criteria.

Where applicable, we plan to request Fast Track and Breakthrough Therapy Designation for our product candidates, including BPX-501, BPX-601, BPX-701 and BPX-401. Even if we receive one or both of these designations for our product candidates, the FDA may later decide that our product candidates no longer meets the conditions for qualification. In addition, these designations may not provide us with a material commercial advantage.

#### *Post-Approval Requirements*

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

In addition, quality control and manufacturing procedures must continue to conform to applicable manufacturing requirements after approval to ensure the long-term stability of the product. We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products in accordance with cGMP regulations. cGMP regulations require among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Manufacturers and other entities involved in the manufacture and distribution of approved products are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. Discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved BLA, including, among other things, recall or withdrawal of the product from the market, seizure of product manufactured not in accordance with GMPs, suspension or termination of manufacturing activities at one or more facilities, or other civil or criminal sanctions. In addition, changes to the manufacturing process are strictly regulated, and depending on the significance of the change, may require prior FDA approval before being implemented. Other types of changes to the approved product, such as adding new indications and claims, are also subject to further FDA review and approval.

The FDA also may require post-marketing testing, known as Phase 4 testing, and surveillance to monitor the effects of an approved product. Discovery of previously unknown problems with a product or the failure to comply with applicable FDA requirements can have negative consequences, including adverse publicity, judicial or administrative enforcement, warning letters from the FDA, mandated corrective advertising or communications with doctors, and civil or criminal penalties, among others. Newly discovered or developed safety or effectiveness data may require changes to a product's approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of a REMS or other risk management measures. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

#### *U.S. Patent Term Restoration and Marketing Exclusivity*

The Biologics Price Competition and Innovation Act, or BPCIA, amended the PHSA to authorize the FDA to approve similar versions of innovative biologics, commonly known as biosimilars. Among other requirements, a competitor seeking approval of a biosimilar



must file an application to establish its molecule as highly similar to an approved innovator biologic, without any clinically meaningful differences in terms of safety, purity, and potency. The BPCIA, however, bars the FDA from approving biosimilar applications for 12 years after an innovator biological product receives initial marketing approval. This 12-year period of data exclusivity may be extended by six months, for a total of 12.5 years, if the FDA requests that the innovator company conduct pediatric clinical investigations of the product. Although a statutory provision exists for FDA approval of biosimilars, FDA has yet to provide clarity on many aspects of the regulatory pathway for such products. Furthermore, the first biosimilar applications have only recently been submitted to FDA, and it remains to be seen how FDA will apply the statutory biosimilar provisions to biological products such as ours.

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

#### *Other U.S. Healthcare Laws and Compliance Requirements*

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

The federal Anti-Kickback Statute prohibits, among other things, any person or entity, from knowingly and willfully offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any good, facility, item or service reimbursable, in whole or in part, under Medicare, Medicaid or other federal healthcare programs. The term remuneration has been interpreted broadly to include anything of value. The Anti-Kickback Statute has been interpreted to apply to arrangements between biologic manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution. The exceptions and safe harbors are drawn narrowly and practices that involve remuneration that may be alleged to be intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances.

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

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

The federal false claims laws, including but not limited to the federal civil False Claims Act, prohibit, among other things, any person or entity from knowingly presenting, or causing to be presented, a false claim for payment to, or approval by, the federal government. Pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies' marketing of the product for unapproved, that is, off-label, and thus non-reimbursable, uses.

HIPAA created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud or to obtain, by means of false or fraudulent pretenses, representations or promises, any money or property owned by, or under the control or custody of, any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up by trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services.

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

We may be subject to data privacy and security regulations by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and its implementing regulations, imposes requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's security standards directly applicable to business associates independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Additionally, the federal Physician Payments Sunshine Act within the Affordable Care Act, and its implementing regulations, require that certain manufacturers of drugs, devices, biological and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with certain exceptions, to report annually information related to certain payments or other transfers of value made or distributed to physicians and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals and require that certain manufacturers and group purchasing organizations report annually certain ownership and investment interests held by physicians and their immediate family members.

We will also be required to begin satisfying the product tracing, verification, and reporting requirements set out in the newly enacted Drug Quality and Security Act.

In order to distribute products commercially, we must also comply with state laws that require the registration of manufacturers and wholesale distributors of drug and biological products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state.

Several states have enacted legislation requiring pharmaceutical and biotechnology companies to, among other things, establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical and biotechnology companies for use in sales and marketing, and to prohibit certain other sales and marketing practices. All of our activities are potentially subject to federal and state consumer protection and unfair competition laws.

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

#### *Coverage, Pricing and Reimbursement*

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

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

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

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

### *Healthcare Reform*

In March 2010, President Obama signed the Affordable Care Act, which was intended to broaden access to health insurance, improve quality, and reduce or constrain the growth of healthcare spending among other health policy reforms. The Affordable Care Act has substantially changed healthcare financing and delivery by both governmental and private insurers, and continues to significantly impact the pharmaceutical and biotechnology industry. The Affordable Care Act has changed existing government healthcare programs and resulted in the development of new programs.

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

- an annual, nondeductible fee on any entity that manufactures or imports certain specified branded prescription drugs and biologic agents apportioned among these entities according to their market share in some government healthcare programs;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program, retroactive to January 1, 2010, to 23.1% and 13% of the average manufacturer price for most branded and generic drugs, respectively and capped the total rebate amount for innovator drugs at 100% of the Average Manufacturer Price, or AMP;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals with income at or below 133% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Since its enactment there have been judicial and Congressional challenges to certain aspects of the Affordable Care Act, and we expect there will be additional challenges and amendments to it in the future. We anticipate that the Affordable Care Act will result in additional downward pressure on coverage and the price that we receive for any approved product, and could seriously harm our

business. Any reduction in reimbursement from Medicare and other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products.

There have also been changes to the reimbursement landscape in the U.S. since the passage of the Affordable Care Act. On August 2, 2011, the President signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee did not achieve a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, triggering the legislation's automatic reduction to several government programs. This includes reductions to Medicare payments to providers of 2% per fiscal year, which went into effect on April 1, 2013, and, due to subsequent legislative amendments will stay in effect through 2025 unless additional Congressional action is taken. On January 2, 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. Further, there has been heightened governmental scrutiny recently over the manner in which manufacturers set prices for their marketed products. For example, there have been several recent Congressional inquiries and proposed bills designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our products and/or additional pricing pressure. In addition, it is possible that there will be further legislation or regulation that could harm our business, financial condition, and results of operations.

#### *The Foreign Corrupt Practices Act*

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

#### *Additional Regulation*

In addition to the foregoing, state and federal laws regarding environmental protection and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservancy and Recovery Act and the Toxic Substances Control Act, affect our business. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines. We believe that we are in material compliance with applicable environmental laws and that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations.

#### *Europe / Rest of World Government Regulation*

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

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

For other countries outside of the EU, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical

trials are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

## **Employees**

As of December 31, 2015, we had 72 employees, all of whom were full-time, 59 of whom were engaged in research and development activities and 13 of whom were engaged in business development, finance, information systems, facilities, human resources or administrative support. None of our employees is subject to a collective bargaining agreement. We consider our relationship with our employees to be good.

## **Corporate Information**

We were incorporated in Delaware in July 2004. Our principal executive offices are located at 2130 W. Holcombe Blvd., Ste. 800, Houston, Texas and our telephone number is (832) 384-1100. Our corporate website address is [www.bellicum.com](http://www.bellicum.com). Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, will be made available free of charge on our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission, or the SEC. The contents of our website are not incorporated into this Annual Report and our reference to the URL for our website is intended to be an inactive textual reference only.

We are an “emerging growth company,” as defined in the JOBS Act. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of our initial public offering in December 2014, (b) in which we have total annual gross revenue of at least \$1.0 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeded \$700.0 million as of the prior June 30th, or (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period. References to “emerging growth company” in this Annual Report on Form 10-K have the meaning associated with it in the JOBS Act.

## ITEM 1A. Risk Factors

*You should carefully consider the following risk factors, as well as the other information in this report, and in our other public filings. The occurrence of any of the following risks could harm our business, financial condition, results of operations and/or growth prospects or cause our actual results to differ materially from those contained in forward-looking statements we have made in this report and those we may make from time to time. You should consider all of the risk factors described when evaluating our business.*

### Risks Related to Our Business and Industry

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

We are a clinical stage biopharmaceutical company with a limited operating history. We are not profitable and have incurred losses in each period since our inception in 2004. To date, we have financed our operations primarily through equity and debt financings. For the fiscal years ended December 31, 2015 and 2014, we reported a net loss of \$48.5 million and \$84.0 million, respectively.

As of December 31, 2015, we had an accumulated deficit of \$161.5 million. We expect to continue to incur significant losses for the foreseeable future, and we expect these losses to increase as we continue our research and development of, and seek regulatory approvals for, our product candidates.

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

***Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of uncertainty. We have never generated any revenue from product sales and may never be profitable.***

We have devoted substantially all of our financial resources and efforts to developing our proprietary CID technology platform, identifying potential product candidates and conducting preclinical studies and clinical trials. We are still in the early stages of developing our product candidates, and we have not completed development of any products. Our ability to generate revenue and achieve profitability depends in large part on our ability, alone or with partners, to successfully complete the development of, obtain the necessary regulatory approvals for, and commercialize, product candidates. We do not anticipate generating revenues from sales of products for the foreseeable future. Our ability to generate future revenues from product sales depends heavily on our success in:

- completing clinical trials through all phases of clinical development of our current product candidates, as well as the product candidates that are being developed by our partners and licensees;
- seeking and obtaining marketing approvals for product candidates that successfully complete clinical trials;
- launching and commercializing product candidates for which we obtain marketing approval, with a partner or, if launched independently, successfully establishing a sales force, marketing and distribution infrastructure;
- identifying and developing new product candidates;
- progressing our pre-clinical programs into human clinical trials;
- establishing and maintaining supply and manufacturing relationships with third parties;
- developing new molecular switches based on our proprietary CID technology platform;
- maintaining, protecting, expanding and enforcing our intellectual property; and
- attracting, hiring and retaining qualified personnel.

Because of the numerous risks and uncertainties associated with biologic product development, we are unable to predict the timing or amount of increased expenses and when we will be able to achieve or maintain profitability, if ever. In addition, our expenses could increase beyond expectations if we are required by the FDA, or foreign regulatory agencies, to perform studies and clinical trials in addition to those that we currently anticipate, or if there are any delays in our or our partners completing clinical trials or the development of any of our product candidates. If one or more of the product candidates that we independently develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing such product candidates. Even if we or our partners are able to generate revenues from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations, which may not be available to us on favorable terms, if at all. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our product offerings or even continue our operations. A decline in the value of our company could also cause stockholders to lose all or part of their investment.



***We have concentrated our therapeutic product research and development efforts on our CID platform, and our future success depends on the successful development of this therapeutic approach.***

Our proprietary CID technology platform is novel and there are no approved products or product candidates in late-stage clinical trials based on this technology. Additionally, the safety and efficacy profile of rimiducid has not been subject to large scale clinical testing. If rimiducid is found to have a poor safety profile in clinical trials, or if our technology is not effective, we may be required to redesign all of our product candidates, which would require significant time and expense. In addition, our CID platform technology may not be applicable or effective in the development of additional cellular immunotherapies beyond our current programs which would adversely affect our business and prospects.

***CAR T cell therapies are novel and present significant challenges.***

CAR-T and TCR product candidates represent a relatively new field of cellular immunotherapy and there are no FDA-approved products in this area. Advancing this novel and personalized therapy creates significant challenges for us, including:

- obtaining regulatory approval, as the FDA and other regulatory authorities have limited experience with commercial development of T-cell therapies for cancer;
- sourcing clinical and, if approved, commercial supplies for the materials used to manufacture and process our product candidates;
- developing a consistent and reliable process, while limiting contamination risks, for engineering and manufacturing T cells *ex vivo* and infusing the engineered T cells into the patient;
- educating medical personnel regarding the potential safety benefits, as well as the challenges, of incorporating our product candidates into their treatment regimens; and
- establishing sales and marketing capabilities upon obtaining any regulatory approval to gain market acceptance of a novel therapy.

Our inability to successfully develop CAR-T and TCR cell therapies or develop processes related to the manufacture, sales and marketing of these therapies would adversely affect our business, results of operations and prospects.

***Failure to successfully develop and obtain approval of our lead product candidate BPX-501 or our other clinical product candidates could adversely affect our future success.***

Our business and future success depends, in part, on our ability to obtain regulatory approval of and then successfully commercialize our lead product candidate, BPX-501 and our other clinical product candidates. BPX-501 is in the early stages of development. All of our product candidates, including BPX-501, will require additional clinical and non-clinical development, regulatory review and approval in multiple jurisdictions, substantial investment, and access to sufficient commercial manufacturing capacity and significant marketing efforts before we can generate any revenue from product sales. In addition, because BPX-501 is our most advanced product candidate, and because many of our other product candidates are based on similar technology, if BPX-501 encounters safety or efficacy problems, developmental delays or regulatory issues or other problems, our development plans and business for our other product candidates would be significantly harmed. In addition, our product candidates that incorporate the CID “safety switch” combine genetically modified T cells that are used to enhance the patients’ immune system and a small molecule that leads to the death of these modified T cells if they cause safety issues.

***Our clinical trials may fail to adequately demonstrate the safety and efficacy of any of our product candidates, which would prevent or delay regulatory approval and commercialization.***

Before obtaining regulatory approvals for the commercial sale of our product candidates, we must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that our product candidates are both safe and effective for use in each target indication. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates, including for BPX-501, may not be predictive of the results of later-stage clinical trials. We expect there may be greater variability in results for cellular immunotherapy products processed and administered on a patient-by-patient basis, like all of our CID technology-based development and product candidates, than for “off-the-shelf” products, like many drugs. There is typically an extremely high rate of attrition from the failure of product candidates proceeding through clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety issues, notwithstanding promising results in earlier clinical trials. Most product candidates that commence clinical trials are never approved as products.

***We have not completed any clinical studies of our current product candidates. Success in early clinical studies may not be indicative of results obtained in later studies.***

Many of our current product candidates have not initiated evaluation in human clinical studies, and we may experience unexpected results in the future. Differences in cell processing, time of administration and patient conditioning, among other factors, may result in our experiencing different results in our clinical trials from those reported in trials by our collaborators, and may mean that we experience different results in our clinical trials. In addition, data from preclinical studies and investigator-led Phase 1 or Phase 1/2 clinical trials of BPX-501 therapy should not be relied upon as evidence that later or later-scale clinical trials will succeed. We have designed our planned Phase 1/2 clinical trials of BPX-501 primarily to assess safety and efficacy in a small number of patients with malignant disease or inherited blood disorders. In addition, we are initiating additional Phase 1 and Phase 1/2 clinical trials of BPX-501 and there are a number of investigator-led clinical trials of BPX-501 ongoing and planned.

Similarly, results from preclinical studies, such as *in vitro* and *in vivo* studies, of BPX-401, BPX-601, BPX-701 and our other preclinical programs may not be indicative of the results of clinical trials of these product candidates. Furthermore, we may not be able to commence human clinical trials on any of our preclinical product candidates on the time frames we expect. Our failure to meet these expected targets would likely have an adverse effect on our stock price.

Even if the clinical trials are successfully completed, the FDA or foreign regulatory authorities may not interpret the results as we do, and more clinical trials could be required before we submit our product candidates for approval. To the extent that the results of our clinical trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, approval of our product candidates may be significantly delayed, or we may be required to expend significant additional resources, which may not be available to us, to conduct additional clinical trials in support of potential approval of our product candidates.

***We may not be successful in our efforts to use and expand our CID platform to build a pipeline of product candidates and develop marketable products.***

We believe that our CID platform, which serves as the foundation of our CaspaCIDE, CIDECAR and GoCAR-T technologies, can be further leveraged to discover other novel technologies, therapeutic applications and market opportunities. For example, we are currently conducting research in applying our platform TCR therapies for solid tumors, where immune toxicities associated with treatment are even more severe than CAR-T therapies. We are also developing new molecular switches and two-switch systems to provide greater control over cellular immunotherapy. We are at a very early stage of development and our platform has not yet, and may never lead to, approved or marketable products. Even if we are successful in continuing to build our pipeline, the potential product candidates that we identify may not be suitable for clinical development, including for reasons related to their harmful side effects, limited efficacy or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance. If we do not successfully develop and commercialize product candidates based upon our technological approach, we may not be able to obtain product or partnership revenues in future periods, which would adversely affect our business, prospects, financial condition and results of operations.

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

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



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

Switching or adding third parties to conduct our clinical trials involves substantial cost and requires extensive management time and focus. In addition, there is a natural transition period when a new third party commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines.

Additionally, we are conducting multiple clinical trials in Europe and may plan additional testing of our technology and product candidates in other foreign jurisdictions. We currently have limited staffing and capabilities in foreign countries, and may not be able to effectively resolve potential disputes with our independent investigators and collaborators.

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

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

- the patient eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- the proximity of patients to study sites;
- the design of the clinical trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- our ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will drop out of the clinical trials before completion.

In particular, some of our clinical trials will look to enroll patients with characteristics which are found in a very small population, for example, patients with CD19-expressing cancers, such as ALL, CLL and non-Hodgkin's lymphomas, and patients with orphan inherited blood disorders. Our clinical trials will compete with other companys' clinical trials for product candidates that are in the same therapeutic areas as our product candidates, and this competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in our clinical trials may instead opt to enroll in a trial being conducted by one of our competitors. Since the number of qualified clinical investigators is limited, we expect to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials in these clinical trial sites. Moreover, because our product candidates represent a departure from more commonly used methods for cancer treatment, potential patients and their doctors may be inclined to use conventional therapies, such as chemotherapy and antibody therapy, rather than enroll patients in any of our future clinical trials. Patients may also be unwilling to participate in our clinical trials because of negative publicity from adverse events in the biotechnology or gene therapy industries.

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

***Any adverse developments that occur during any clinical trials conducted by academic investigators, our collaborators or other entities conducting clinical trials under independent INDs may affect our ability to obtain regulatory approval or commercialize our product candidates.***

BPX-501 and certain of our other CaspaCIDE product candidates are being used by third parties in clinical trials for which we are collaborating or in clinical trials which are completely independent of our development program. We have little to no control over the conduct of clinical trials. If serious adverse events occur during these or any other clinical trials using our product candidates, the FDA and other regulatory authorities may delay, limit or deny approval of our product candidate or require us to conduct additional clinical

trials as a condition to marketing approval, which would increase our costs. If we receive FDA approval for BPX-501 or any other CaspaCIDE product candidate and a new and serious safety issue is identified in connection with clinical trials conducted by third parties, the FDA and other regulatory authorities may withdraw their approval of the product or otherwise restrict our ability to market and sell our product. In addition, treating physicians may be less willing to administer our product due to concerns over such adverse events, which would limit our ability to commercialize our product.

***Adverse side effects or other safety risks associated with our product candidates could delay or preclude approval, cause us to suspend or discontinue clinical trials, abandon product candidates, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.***

Undesirable side effects caused by our product candidates could result in the delay, suspension or termination of clinical trials by us, the FDA or other regulatory authorities for a number of reasons. If we elect or are required to delay, suspend or terminate any clinical trial of any product candidates that we develop, the commercial prospects of such product candidates will be harmed and our ability to generate product revenues from any of these product candidates will be delayed or eliminated. Serious adverse events observed in clinical trials could hinder or prevent market acceptance of the product candidate at issue. Any of these occurrences may harm our business, prospects, financial condition and results of operations significantly.

In other clinical trials involving CAR T cells, the most prominent acute toxicities included symptoms thought to be associated with the release of cytokines, such as fever, low blood pressure and kidney dysfunction. Some patients also experienced toxicity of the central nervous system, such as confusion, cranial nerve dysfunction and speech impairment. Adverse events by worst grade and attributed to CAR T cells were severe and life threatening in some patients. The life threatening events were related to kidney dysfunction and toxicities of the central nervous system. Severe and life threatening toxicities occurred mostly in the first two weeks after cell infusion and generally resolved within three weeks. In the past, several patients have also died in clinical trials by others involving CAR T cells.

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

Human clinical trials are expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. Because our product candidates are based on new technology and engineered on a patient-by-patient basis, we expect that they will require extensive research and development and have substantial manufacturing and processing costs. In addition, costs to treat patients with relapsed/refractory cancer and to treat potential side effects that may result from therapies such as our current and future product candidates can be significant. Accordingly, our clinical trial costs are likely to be significantly higher than for more conventional therapeutic technologies or drug products. In addition, our proposed personalized product candidates involve several complex and costly manufacturing and processing steps, the costs of which will be borne by us. The costs of our clinical trials may increase if the FDA does not agree with our clinical development plans or requires us to conduct additional clinical trials to demonstrate the safety and efficacy of our product candidates.

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

The biopharmaceutical industry is characterized by intense competition and rapid innovation. Our competitors may be able to develop other compounds or drugs that are able to achieve similar or better results. Our potential competitors include major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies and universities and other research institutions. Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations and well-established sales forces. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors, either alone or with collaborative partners, may succeed in developing, acquiring or licensing on an exclusive basis drug or biologic products that are more effective, safer, more easily commercialized or less costly than our product candidates or may develop proprietary technologies or secure patent protection that we may need for the development of our technologies and products. We believe the key competitive factors that will affect the development and commercial success of our product candidates are efficacy, safety, tolerability, reliability, convenience of use, price and reimbursement.

Specifically, genetically engineering T cells faces significant competition in both the CAR and TCR technology space from multiple companies, including Adaptimmune Limited, bluebird bio, Inc., Celgene Corporation, Cellectis SA, GlaxoSmithKline plc, Intrexon Corporation, Juno Therapeutics, Inc., Kite Pharma, Inc., Novartis AG, Pfizer Inc. and Ziopharm Oncology. Our lead product candidate, BPX-501, is an adjunct therapy for HSCT with alternative donors that potentially improves stem cell engraftment, accelerates host immune system recovery and treats GvHD. Even if we obtain regulatory approval of our product candidates, the

availability and price of our competitors' products could limit the demand and the price we are able to charge for our product candidates. We may not be able to implement our business plan if the acceptance of our product candidates is inhibited by price competition or the reluctance of physicians to switch from existing methods of treatment to our product candidates, or if physicians switch to other new drug or biologic products or choose to reserve our product candidates for use in limited circumstances. For additional information regarding our competition, see "Item 1. Business—Competition."

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

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

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

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

As of December 31, 2015, we had 72 employees. As our development and commercialization plans and strategies develop, and as we continue our transition into operating as a public company, we expect to need additional managerial, operational, sales, marketing, financial and other personnel. Future growth imposes significant added responsibilities on members of management, including:

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

There are a small number of individuals with experience in cell therapy and the competition for these individuals is high. Our future financial performance and our ability to commercialize our product candidates will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities. We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants to provide certain services, including substantially all aspects of regulatory approval, clinical management, and manufacturing. The services of independent organizations, advisors and consultants may not continue to be available to us on a timely basis when needed, and we may not be able to find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by consultants is compromised for any reason, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval of our product candidates or otherwise advance our business. We may not be able to manage our existing consultants or find other competent outside contractors and consultants on economically reasonable terms, or at all.

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

In addition to expanding our organization, we are increasing the size of our facility and building out our development and manufacturing capabilities, which requires significant capital expenditures. If these capital expenditures are higher than expected, it may adversely affect our financial condition and capital resources. In addition, if the increase in the size of our facility is delayed, it may limit our ability to rapidly expand the size of our organization in order to meet our corporate goals.

***If we fail to obtain additional financing, we may be unable to complete the development and commercialization of our product candidates.***

Our operations have consumed substantial amounts of cash since inception. We expect to continue to spend substantial amounts to continue the clinical development of our product candidates, including our planned clinical development and preclinical studies of our product candidates and other programs. If approved, we will require significant additional amounts in order to launch and commercialize our product candidates.

As of December 31, 2015, we had cash and cash equivalents of approximately \$70.2 and total investments in marketable securities of \$80.1 million. We believe that cash and cash equivalents and investments in marketable securities, or a total of \$150.3 million, will be sufficient to fund our operations through 2017.

We maintain our cash, cash equivalents, and marketable securities with high quality, accredited financial institutions. These amounts at times may exceed federally insured limits. We have not experienced any credit losses in such accounts and do not believe we are exposed to significant risk on these funds. We have no off-balance sheet concentrations of credit risk, such as foreign currency exchange contracts, option contracts or other hedging arrangements.

However, changing circumstances may cause us to consume capital significantly faster than we currently anticipate, and we may need to spend more money than currently expected because of circumstances beyond our control. We expect to require additional capital for the further development and commercialization of our product candidates and may need to raise additional funds sooner if we choose to expand more rapidly than we presently anticipate.

Additional funding may not be available on acceptable terms, or at all. We have no committed source of additional capital and if we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of our product candidates or other research and development initiatives. We could be required to seek collaborators for our product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available or relinquish or license on unfavorable terms our rights to our product candidates in markets where we otherwise would seek to pursue development or commercialization ourselves.

Any of the above events could significantly harm our business, prospects, financial condition and results of operations and cause the price of our common stock to decline.

***Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.***

We may seek additional capital through a combination of public and private equity offerings, debt financings, strategic partnerships and alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, including through the sale of securities from our registration statement on Form S-3 recently filed with the Securities and Exchange Commission, the ownership interests of our existing stockholders will be diluted, and the terms may include liquidation or other preferences that adversely affect the rights of our stockholders. The incurrence of indebtedness would result in increased fixed payment obligations and could involve certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms unfavorable to us.

***We need to oversee manufacturing of a complex supply chain of cellular therapy product candidates, viral vectors and small molecule drugs.***

Because of the complex nature of our products, we need to oversee the manufacture of multiple components that require a diverse knowledge base and appropriate manufacturing personnel. The supply chain for these components is separate and distinct, and no single manufacturer can supply more than one component of each of our products. Additionally, it is likely that the cell therapy products will need to be made within an appropriate geographic location for the area in which the products will be utilized, so one cell therapy manufacturing facility may not be able to supply diverse geographic areas. Any lack of capabilities to store, freeze, thaw and infuse our cell therapies would adversely affect our business and prospects.

***We expect to rely on third parties to manufacture a substantial portion of our clinical cell therapy product candidates, viral vectors and small molecule supplies in the United States and Europe.***

We do not currently own any facility that may be used as our clinical-scale manufacturing and processing facility, and must currently rely on outside vendors to manufacture supplies and process our product candidates, which is and will need to be done on a patient-by-patient basis. We have not yet caused our product candidates to be manufactured or processed on a commercial scale. We may not be able to scale patient-by-patient manufacturing and processing to satisfy clinical or commercial demands for any of our product candidates. In addition, our anticipated reliance on a limited number of third-party manufacturers exposes us to the following risks:

- We may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA or an equivalent foreign regulatory agency must approve any replacement contractor. This approval would require new testing and compliance inspections. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our products after receipt of FDA approval, if any.
- Our third-party manufacturers might be unable to timely formulate and manufacture our product or produce the quantity and quality required to meet our clinical and commercial needs, if any.
- Contract manufacturers may not be able to execute our manufacturing procedures appropriately.
- Our future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products.
- Manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Administration, or corresponding agencies in other geographic locations, to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards.
- We may not own, or may have to share, the intellectual property rights to any improvements made by our third-party manufacturers in the manufacturing process for our products.
- Our third-party manufacturers could breach or terminate their agreement with us.

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

***We expect to create our own manufacturing facility for supply of U.S. clinical and/or commercial cell therapy product candidate requirements, but we may not be able to do so.***

We have leased space and initiated work for the design and build out of manufacturing space at our headquarters building in Houston, Texas. Our intent to create internal manufacturing infrastructure will rely upon finding personnel with an appropriate background and training to staff and operate the facility on a daily basis. Should we be unable to find these individuals, we may need to rely on external contractors longer than anticipated, and train additional personnel to fill the needed roles. There are a small number of individuals with experience in cell therapy and the competition for these individuals is high.

Specifically, the establishment of a cell-therapy manufacturing facility is a complex endeavor requiring knowledgeable individuals who have successful previous experience in cleanroom designs. Cell therapy facilities, like other biological agent manufacturing facilities, require appropriate commissioning and validation activities to demonstrate that they operate as designed. Additionally, each manufacturing process must be validated through the performance of process validation runs to guarantee that the facility, personnel, equipment, and process work as designed. While we have developed our own manufacturing processes using an in-house process development team to maximize our understanding of our process, there is timing risk associated with in-house product manufacture.

***Cell-based therapies rely on the availability of specialty raw materials, which may not be available to us on acceptable terms or at all.***

Gene-modified cell therapy manufacture requires many specialty raw materials, some of which are manufactured by small companies with limited resources and experience to support a commercial product. Some suppliers typically support biomedical researchers or blood-based hospital businesses and may not have the capacity to support commercial products manufactured under cGMP by biopharmaceutical firms. The suppliers may be ill-equipped to support our needs, especially in non-routine circumstances like an FDA inspection or medical crisis, such as widespread contamination. We also do not have commercial supply arrangements with many of

these suppliers, and may not be able to contract with them on acceptable terms or at all. Accordingly, we may experience delays in receiving key raw materials to support clinical or commercial manufacturing.

In addition, some raw materials are currently available from a single supplier, or a small number of suppliers. We cannot be sure that these suppliers will remain in business, or that they will not be purchased by one of our competitors or another company that is not interested in continuing to produce these materials for our intended purpose.

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

We currently have no sales, marketing or distribution capabilities and have no experience in marketing products. We intend to develop an in-house marketing organization and sales force, which will require significant capital expenditures, management resources and time. We will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train and retain marketing and sales personnel.

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

We may not be able to develop in-house sales and distribution capabilities or establish or maintain relationships with third-party collaborators to commercialize any product in the United States or overseas.

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

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

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

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

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

We may form or seek strategic alliances, create joint ventures or collaborations or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our product



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

***Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.***

Because we rely on third parties to manufacture our drug substance and our drug product, and because we collaborate with various organizations and academic institutions on the advancement of our technology platform, we must, at times, share trade secrets with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, collaborative research agreements, consulting agreements or other similar agreements with our collaborators, advisors, employees and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, such as trade secrets. Despite these contractual provisions, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have a material adverse effect on our business.

***We may use our financial and human resources to pursue a particular research program or product candidate and fail to capitalize on programs or product candidates that may be more profitable or for which there is a greater likelihood of success.***

Because we have limited resources, we may forego or delay pursuit of opportunities with certain programs or product candidates or for indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs for product candidates may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through strategic collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate, or we may allocate internal resources to a product candidate in a therapeutic area in which it would have been more advantageous to enter into a partnering arrangement. We are particularly susceptible to this risk because we are pursuing clinical and preclinical development program in each of our CaspaCIDE, CIDE CAR and GoCAR-T technologies. Resources spent on one of these programs could result in fewer resources to further develop the other programs.

***We have limited information available regarding the ultimate cost of our products, and cannot estimate what the cost of our products will be upon commercialization, should that occur.***

We do not yet have sufficient information to reliably estimate the cost of the commercial manufacturing and processing of our product candidates, and the actual cost to manufacture and process our product candidates could materially and adversely affect the commercial viability of our product candidates, including BPX-501. As a result, we may never be able to develop a commercially viable product. Because of the patient-specific nature of our manufacturing process, it is not amenable to traditional "scale up" to manufacture larger lots as is performed for traditional drugs and biological agents.

***We and our contractors utilize hazardous materials in our business operations, and any claims relating to improper handling, storage, or disposal of these materials could harm our business.***

Our activities involve the controlled use of potentially hazardous substances, including chemical and biological materials, by our third-party manufacturers. Our manufacturers are subject to federal, state and local laws and regulations in the United States governing the use, manufacture, storage, handling and disposal of medical and hazardous materials, and similar laws in other geographic regions. Although we believe that our manufacturers' procedures for using, handling, storing and disposing of these materials comply with legally prescribed standards, we cannot completely eliminate the risk of contamination or injury resulting from medical or hazardous

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

***Our internal computer systems, or those used by our clinical investigators, contractors or consultants, may fail or suffer security breaches.***

Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses and unauthorized access. While we have not experienced any such material system failure or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs and our business operations. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development and commercialization of our product candidates could be delayed.

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

Our operations, and those of our clinical investigators, contractors and consultants, could be subject to power shortages, telecommunications failures, water shortages, floods, earthquakes, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or man-made disasters or business interruptions, for which we are predominantly self-insured. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. We rely on third-party manufacturers to produce and process our product candidates on a patient by patient basis. Our ability to obtain clinical supplies of our product candidates could be disrupted if the operations of these suppliers are affected by a man-made or natural disaster or other business interruption.

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

We are exposed to the risk of employee fraud or other illegal activity by our employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and/or negligent conduct that fails to: comply with the laws of the FDA and other similar foreign regulatory bodies; provide true, complete and accurate information to the FDA and other similar foreign regulatory bodies, comply with manufacturing standards we have established, comply with healthcare fraud and abuse laws in the United States and similar foreign fraudulent misconduct laws, or report financial information or data accurately or to disclose unauthorized activities to us. If we obtain FDA approval of any of our product candidates and begin commercializing those products in the United States, our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. These laws may impact, among other things, our current activities with principal investigators and research patients, as well as proposed and future sales, marketing and education programs. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, structuring and commission(s), certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials. The laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs;
- federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other third-party payors that are false or fraudulent or knowingly making a false statement to improperly avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare



benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization;
- the federal Physician Payment Sunshine Act, created under the Affordable Care Act, and its implementing regulations, which requires certain manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the United States Department of Health and Human Services, or HHS, information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as require certain manufacturers and group purchasing organizations to report annually ownership and investment interests held by physicians and their immediate family members; and
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers.

Additionally, we are subject to state and foreign equivalents of each of the healthcare laws described above, among others, some of which may be broader in scope and may apply regardless of the payor.

We have adopted a code of business conduct and ethics, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent inappropriate conduct may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. Efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

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

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

- decreased demand for our product candidates;
- injury to our reputation;
- withdrawal of clinical trial participants;
- initiation of investigations by regulators;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to clinical trial participants or patients;

- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- exhaustion of any available insurance and our capital resources;
- the inability to commercialize any product candidate; and
- a decline in our share price.

Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of any products we develop, alone or with corporate collaborators. We currently carry \$10.0 million of product liability insurance covering our clinical trials, with other coverage limits as appropriate for certain foreign jurisdictions. Although we maintain such insurance, our insurance policies may have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

***Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.***

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change” (generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period), the corporation’s ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income may be limited. As a result of our initial public offering in December 2014, our most recent private placements and other transactions that have occurred over the past three years, we may have experienced an “ownership change.” We may also experience ownership changes in the future as a result of subsequent shifts in our stock ownership.

As of December 31, 2015, we had gross federal income tax net operating loss, or NOL, carry forwards of \$83.0 million and federal research tax credits of \$2.5 million. The NOL carryforwards will expire beginning in 2025, if not utilized.

**Risks Related to Government Regulation**

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

We have not previously submitted a Biologics License Application, or BLA, to the FDA, or similar approval filings to comparable foreign authorities. A BLA must include extensive preclinical and clinical data and supporting information to establish the product candidate’s safety, purity and potency for each desired indication. The BLA must also include significant information regarding the chemistry, manufacturing and controls for the product. We expect the novel nature of our product candidates to create further challenges in obtaining regulatory approval. For example, the FDA has limited experience with commercial development of T cell therapies for cancer. In addition, the cell and gene therapy office of the FDA has limited experience with combination products that include a small molecule component. Approval of our product candidates, including BPX-501, will require this FDA office to consult with another division of the FDA, which may result in further challenges in obtaining regulatory approval, including in developing final product labeling. The regulatory approval pathway for our product candidates may be uncertain, complex, expensive and lengthy, and approval may not be obtained.

We may also experience delays in completing planned clinical trials for a variety of reasons, including delays related to:

- the availability of financial resources to commence and complete our planned clinical trials;
- reaching agreement on acceptable terms with prospective clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different clinical trial sites;
- recruiting suitable patients to participate in a clinical trial;
- having patients complete a clinical trial or return for post-treatment follow-up;
- clinical trial sites deviating from clinical trial protocol, failing to follow GCPs, or dropping out of a clinical trial;
- adding new clinical trial sites; or
- manufacturing sufficient quantities of qualified materials under cGMPs and applying them on a subject by subject basis for use in clinical trials.

Gene therapy clinical trials conducted at institutions that receive funding for recombinant DNA research from the United States National Institutes of Health, or the NIH, are also subject to review by the NIH Office of Biotechnology Activities' Recombinant DNA Advisory Committee, or the RAC. Although the FDA decides whether individual gene therapy protocols may proceed, the RAC review process can delay the initiation of a clinical trial, even if the FDA has reviewed the trial design and details and approved its initiation. Conversely, the FDA can put an IND on clinical hold even if the RAC has provided a favorable review of the drug. Also, before a clinical trial can begin at an NIH-funded institution, that institution's independent institutional review board, or IRB, and its Institutional Biosafety Committee must review the proposed clinical trial to assess the safety of the trial. In addition, adverse developments in clinical trials of gene therapy products conducted by others may cause the FDA or other regulatory bodies to change the requirements for approval of any of our product candidates.

We could also encounter delays if physicians encounter unresolved ethical issues associated with enrolling patients in clinical trials of our product candidates in lieu of prescribing existing treatments that have established safety and efficacy profiles. Further, a clinical trial may be suspended or terminated by us, the IRBs for the institutions in which such clinical trials are being conducted, the Data Monitoring Committee for such clinical trial, or by the FDA or other regulatory authorities due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or clinical trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. If we experience termination of, or delays in the completion of, any clinical trial of our product candidates, the commercial prospects for our product candidates will be harmed, and our ability to generate product revenue will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product development and approval process and jeopardize our ability to commence product sales and generate revenue.

Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may ultimately lead to the denial of regulatory approval of our product candidates.

***The FDA may disagree with our regulatory plans and we may fail to obtain regulatory approval of our product candidates.***

Our ongoing and planned Phase 1 and Phase 1/2 clinical trials of BPX-501 are designed to show enhanced immune system recovery in patients following a mismatched allogeneic (donor cells as opposed to the patient's own cells) HSCT. Following the completion of those clinical trials, and if the results are satisfactory, we plan to meet with regulators in the U.S. and Europe to discuss our clinical trial design that could serve as the registration trial for BPX-501 in that indication. We, or our institutional collaborators, are conducting and planning additional Phase 1 and Phase 1/2 clinical trials of BPX-501 designed to evaluate BPX-501 as a treatment for patients with recurrent disease (relapse) after an allogeneic HSCT. Following the completion of those clinical trials, and if the results are satisfactory, we plan to meet with US and European regulators to discuss whether our planned clinical trial design could serve as the registration trial for our BLA for BPX-501 in that indication. However, the general approach for regulatory marketing approval of a new biologic or drug is dispositive data from two adequate and well-controlled, Phase 3 clinical trials of the relevant biologic or drug in the relevant patient population. Phase 3 clinical trials typically involve hundreds of patients, have significant costs and take years to complete. We believe that a single Phase 3 clinical trial strategy is warranted given the limited alternatives for patients for which BPX-501 therapy is potentially beneficial, but the regulatory authorities may ultimately require more than one Phase 3 clinical trial and may limit clinical trial designs allowed to serve as a registration trial.

Our clinical trials results may not support approval. In addition, BPX-501 and our other product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that our product candidates have the necessary safety, purity, and potency for any of their proposed indications;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that our product candidates' clinical and other benefits outweigh their safety risks;
- we may encounter serious and unexpected adverse events during clinical trials that render our products unsafe for use in humans;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;

- the data collected from clinical trials of our product candidates may not be sufficient to the satisfaction of the FDA or comparable foreign regulatory authorities to support the submission of a BLA or other comparable submission in foreign jurisdictions or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may fail to approve our manufacturing processes and/or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

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

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

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

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

Any regulatory approvals that we receive for our product candidates will require surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a risk evaluation and mitigation strategy, or REMS, in order to approve our product candidates, which could entail requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export and recordkeeping for our product candidates will be subject to extensive and ongoing regulatory requirements. These requirements include, among other things, submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and cGCPs for any clinical trials that we conduct post-approval. Later discovery of previously unknown problems with our product candidates, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

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

The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government

regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

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

The use of engineered T cells as a potential cancer treatment is a recent development and may not become broadly accepted by physicians, patients, hospitals, cancer treatment centers, third-party payors and others in the medical community. We expect physicians in the large bone marrow transplant centers to be particularly influential and we may not be able to convince them to use our product candidates for many reasons. Factors will influence whether our product candidates are accepted in the market, including:

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

In addition, although we are not utilizing embryonic stem cells or replication competent vectors, adverse publicity due to the ethical and social controversies surrounding the therapeutic use of such technologies, and reported side effects from any clinical trials using these technologies or the failure of such clinical trials to demonstrate that these therapies are safe and effective may limit market acceptance our product candidates. If our product candidates are approved but fail to achieve market acceptance among physicians, patients, hospitals, cancer treatment centers or others in the medical community, we will not be able to generate significant revenue.

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

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

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

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

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

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Obtaining coverage and reimbursement approval of a product from a government or other third-party payor is a time-consuming and costly process that could require us to provide to the payor supporting scientific, clinical and cost-effectiveness data for the use of our products. Even if we obtain coverage for a given product, the resulting reimbursement levels might not be adequate for us to achieve or sustain profitability or may require co-payments that patients find unacceptably high. Patients are unlikely to use our product candidates unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our product candidates.

In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our product candidates to each payor separately, with no assurance that coverage and adequate reimbursement will be obtained.

We intend to seek approval to market our product candidates in both the United States and in selected foreign jurisdictions. If we obtain approval in one or more foreign jurisdictions for our product candidates, we will be subject to rules and regulations in those jurisdictions. In some foreign countries, particularly those in the EU, the pricing of biologics is subject to governmental control. In those countries, pricing negotiations with governmental authorities can take considerable time after obtaining marketing approval of a product candidate. In addition, market acceptance and sales of our product candidates will depend significantly on the availability of coverage and adequate reimbursement from third-party payors for our product candidates and may be affected by existing and future health care reform measures.

Third-party payors, whether domestic or foreign, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to the health care system that could impact our ability to sell our products profitably. In particular, in 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively, the Affordable Care Act, was enacted in the United States. The Affordable Care Act and its implementing regulations, among other things, revised the methodology by which rebates owed by manufacturers to the state and federal government for covered outpatient drugs and certain biologics, including our product candidates, under the Medicaid Drug Rebate Program are calculated, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program, extended the Medicaid Drug Rebate program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjected manufacturers to new annual fees and taxes for certain branded prescription drugs, and provided incentives to programs that increase the federal government's comparative effectiveness research. Since its enactment there have been judicial and Congressional challenges to certain aspects of the Affordable Care Act, and we expect there will be additional challenges and amendments to it in the future.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers up to 2% per fiscal year, which went into effect on April 1, 2013, and due to subsequent legislative amendments, will stay in effect through 2025 unless Congressional action is taken. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, or the ATRA, which, among other things, reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. Further, there has been heightened governmental scrutiny recently over the manner in which manufacturers set prices for their marketed products. For example, there have been several recent Congressional inquiries and proposed bills designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products.



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

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

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

Third party payors may also have difficulty in determining the appropriate coverage of our product candidates, if approved, due to the fact that they are combination products that include a small molecule drug (rimiducid). To the extent there are any delays in determining such coverage or inadequate coverage for all aspects of our combination therapies, it would adversely affect the market acceptance of our product candidates.

***Due to the novel nature of our technology and the small size of our target patient populations, we face uncertainty related to pricing and reimbursement for these product candidates.***

Our target patient populations are relatively small, as a result, the pricing and reimbursement of our product candidates, if approved, must be adequate to support commercial infrastructure. If we are unable to obtain adequate levels of reimbursement, our ability to successfully market and sell our product candidates will be adversely affected. The manner and level at which reimbursement is provided for services related to our product candidates (for example, reimbursement for administration of our product candidates to patients) is also important. Inadequate reimbursement for such services may lead to physician resistance and adversely affect our ability to market or sell our products.

**Risks Related to Our Intellectual Property**

***We depend on intellectual property licensed from third parties and termination of any of these licenses could result in the loss of significant rights, which would harm our business.***

We are dependent on patents, know-how and proprietary technology, both our own and licensed from others. Technology that we license from others includes rimiducid, which is the small molecule activating agent that forms a part of our current and future product candidates and that we license from ARIAD. ARIAD may terminate or modify our license upon a material breach by us that remains uncured following the date that is 30 days after written notice of a payment breach and 90 days for any other breach, and effective immediately upon certain insolvency events. In addition, ARIAD in-licenses some of the intellectual property rights it licenses to us. To the extent ARIAD fails to meet its obligations under its license agreements, which we are not in control of, we may lose the benefits of our license agreement with ARIAD. We license from Baylor College of Medicine, or Baylor, certain intellectual property related to methods for activating antigen presenting cells, to certain genetic constructs and to certain methods for inducing apoptosis. Baylor may terminate or modify our licenses in the event of a material breach by us that remains uncured following the date that is 90 days after written notice of such breach or upon certain insolvency events that remain uncured following the date that is 30 days following written notice of such insolvency event. In addition, we have funded certain of our ongoing clinical development and will fund certain of our future clinical development with funds from the State of Texas. The State of Texas may have rights to commercialize the results of those clinical trials if it determines that we have failed, after notice and an opportunity to cure, to use diligent and commercially reasonable efforts to commercialize or otherwise bring to practical application the results of the funded clinical trials. We are also dependent on our license agreements with Agensys with respect to BPX 601, Leiden with respect to BPX 701 and BioVec with respect to making retrovirus for all of our programs. The termination of any of these licenses could have a material adverse affect on our business.

Any termination of these agreements, or other agreements to which we are a party could result in the loss of significant rights and could harm our ability to commercialize our product candidates. See “Item 1. Business—Our License Agreements” for additional information regarding our license agreements.

Disputes may also arise between us and our licensors and other partners regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our product candidates, and what activities satisfy those diligence obligations; and
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates.

We are generally also subject to all of the same risks with respect to protection of intellectual property that we license, as we are for intellectual property that we own. If we or our licensors fail to adequately protect this intellectual property, our ability to commercialize products could suffer.

***If our efforts to protect the proprietary nature of our technologies are not adequate, we may not be able to compete effectively in our market.***

Any disclosure to or misappropriation by third parties of our confidential proprietary information could enable competitors to quickly duplicate or surpass our technological achievements, thus eroding our competitive position in our market. Certain intellectual property which is covered by our in-license agreements has been developed at academic institutions which have retained non-commercial rights to such intellectual property.

There are several pending U.S. and foreign patent applications in our portfolio, and we anticipate additional patent applications will be filed both in the United States and in other countries, as appropriate. However, we cannot predict:

- if and when patents will issue;
- the degree and range of protection any issued patents will afford us against competitors including whether third parties will find ways to invalidate or otherwise circumvent our patents;
- whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings which may be costly whether we win or lose.

Composition of matter patents for biological and pharmaceutical products are generally considered to be the strongest form of intellectual property. We cannot be certain that the claims in our pending patent applications directed to compositions of matter for our product candidates will be considered patentable by the United States Patent and Trademark Office, or the USPTO, or by patent offices in foreign countries, or that the claims in any of our issued patents will be considered valid by courts in the United States or foreign countries. Method of use patents have claims directed to the use of a product for the specified method. This type of patent does not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. Moreover, even if competitors do not actively promote their product for our targeted indications, physicians may prescribe these products “off-label.” Although off-label prescriptions may infringe or contribute to the infringement of method of use patents, the practice is common and such infringement is difficult to prevent or prosecute.

The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries. Even if the patents do successfully issue, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, patents in our portfolio may not adequately exclude third parties from practicing relevant technology or prevent others from designing around our claims. If the breadth or strength of our intellectual property position with respect to our product candidates is threatened, it could dissuade companies from collaborating with us to develop, and threaten our ability to commercialize, our product candidates. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates under patent protection would be reduced. Since patent applications in the United States and most other countries are confidential for a period of time after filing, it is possible that patent

applications in our portfolio may not be the first filed patent applications related to our product candidates. Furthermore, for United States applications in which all claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third-party or instituted by the USPTO, to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. For United States applications containing a claim not entitled to priority before March 16, 2013, there is a greater level of uncertainty in the patent law with the passage of the America Invents Act (2012) which brings into effect significant changes to the U.S. patent laws that are yet untried and untested, and which introduces new procedures for challenging pending patent applications and issued patents. A primary change under this reform is creating a “first to file” system in the U.S. This will require us to be cognizant going forward of the time from invention to filing of a patent application.

Patent coverage on the dimerization molecule rimiducid, expired in February 2016. Therefore, any additional barriers to entry for competitors to use rimiducid may not be effective in preventing such use. There remain significant questions regarding how the FDA will interpret the ‘biosimilar’ provisions recently added to the Public Health Service Act as applied to complex biological products such as our investigational products. Depending on how the FDA ultimately interprets these provisions, if our investigational products incorporating rimiducid receive FDA approval through a combination product BLA, then a biosimilar of these combination products could be approved by the FDA 12 years from the date that we receive FDA approval for our application. In addition, if a third party were able to obtain FDA approval of a new drug application for rimiducid on its own, then it is possible that other third parties could later seek approval of an abbreviated new drug application for rimiducid.

We rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of our product discovery and development processes that involve proprietary know-how, information, or technology that is not covered by patents. We require all of our employees to assign their inventions to us, and require all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information, or technology to enter into confidentiality agreements; however, we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, operating results and financial condition.

***Third-party claims of intellectual property infringement may prevent or delay our product discovery and development efforts.***

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation involving patents and other intellectual property rights in the biotechnology and pharmaceutical industries, as well as administrative proceedings for challenging patents, including interference and reexamination proceedings before the USPTO or oppositions and other comparable proceedings in foreign jurisdictions. Recently, under U.S. patent reform, new procedures including *inter parties* review and post grant review have been implemented. As stated above, this reform is untried and untested and will bring uncertainty to the possibility of challenge to our patents in the future. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing our product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may give rise to claims of infringement of the patent rights of others.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents, of which we are currently unaware or have not sufficiently analyzed with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover aspects of our formulations, the manufacturing process of our product candidates, constructs or molecules used in or formed during the manufacturing process, methods of use, including combination therapy or patient selection methods or any final product itself, the holders of any such patents may be able to block our ability to develop and commercialize the product candidate unless we obtained a license under the applicable patents, or until such patents expire or they are finally determined to be held invalid or unenforceable. In either case, such a license may not be available on commercially reasonable terms or at all. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, or at all, our ability to commercialize our product candidates may be impaired or delayed, which could in turn significantly harm our business.

Parties making claims against us may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a

successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our infringing products, which may be impossible or require substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidates. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize our product candidates, which could harm our business significantly.

We are aware of a third party patent having claims directed to chimeric DNA comprising DNA segments encoding (1) a single chain antibody domain and (2) transmembrane and cytoplasmic domains of an endogenous protein. Even though we have reason to believe that our BPX-401 and BPX-601 technologies are not covered by claims of this patent, an owner or licensee of the patent still might bring a patent infringement suit against us. If the patent is asserted against us, we may not prevail in defending against claims of infringement and/or challenging the validity of claims in the patent. We may not successfully develop alternative technologies or enter into an agreement by which we obtain rights to the patent. These rights, if necessary, may not be available on terms acceptable to us.

Also, while we are aware there are third party patents having claims that may be considered relevant to BPX-401 and BPX-601 technologies for which we are seeking, or plan to seek, regulatory approval, we believe those patents have a patent term that may expire prior to the time we expect to obtain regulatory approval for these technologies. The estimated expiration dates for those patents were determined according to information on the face pages of the patents, and certain factors that could influence patent term, such as patent term adjustment and patent term extension, for example, were not factored into these estimates. Accordingly, the estimated expiration dates of those patents may not be accurate and one or more of those patents may not expire before we obtain regulatory approval for an applicable technology. Owners or licensees of one or more of those patents may bring a patent infringement suit against us. If one or more of those patents are asserted against us, we may be able to assert a defense for a safe harbor to patent infringement under 35 U.S.C. 271(e)(1) if certain requirements are met. It is possible that (1) certain of these requirements may not be met, and/or (2) one or more of the third party patents might expire after one or more of our technologies obtain regulatory approval, and consequently we may not successfully assert such a defense to patent infringement. If we are unsuccessful in asserting a defense under 35 U.S.C. 271(e)(1), it is possible we may not prevail in defending against claims of infringement and/or challenging the validity of claims in those patents. We may not successfully develop alternative technologies or enter into agreements by which we obtain rights to applicable patents. These rights, if necessary, may not be available on terms acceptable to us.

***We may not be successful in obtaining or maintaining necessary rights to product components and processes for our development pipeline through acquisitions and in-licenses.***

Because our programs may involve additional product candidates that may require the use of proprietary rights held by third parties, the growth of our business will likely depend in part on our ability to acquire, in-license or use these proprietary rights.

Our product candidates may also require specific formulations to work effectively and efficiently and these rights may be held by others. We may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology.

The licensing and acquisition of third-party intellectual property rights is a competitive area, and companies, which may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates. More established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities.

We may not be able to successfully complete negotiations and ultimately acquire the rights to the intellectual property that we may seek to acquire in the future.

***We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time-consuming and unsuccessful.***

Competitors may infringe our patents or the patents of our licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that one or more of our patents is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put our patent applications at risk of not issuing. Defense of these claims, regardless of their merit, would involve substantial litigation

expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our infringing products, which may be impossible or require substantial time and monetary expenditure.

Interference proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensors. An unfavorable outcome could result in a loss of our current patent rights and could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation or interference proceedings may result in a decision adverse to our interests and, even if we are successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, alone or with our licensors, misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

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

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. Such noncompliance events are outside of our direct control for (1) non-U.S. patents and patent applications owned by us, and (2) patents and patent applications licensed to us by another entity. In such an event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

***Issued patents covering our product candidates could be found invalid or unenforceable if challenged in court or the USPTO.***

If we or one of our licensing partners initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that the patent covering our product candidate, as applicable, 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. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review, and equivalent proceedings in foreign jurisdictions (for example, opposition proceedings). Such proceedings could result in revocation or amendment to our patents in such a way that they no longer 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 and that prior art that was cited during prosecution, but not relied on by the patent examiner, will not be revisited. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patents directed to our product candidates. A loss of patent rights could have a material adverse impact on our business.

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

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve both technological and legal complexity, and is therefore costly, time-consuming and inherently uncertain. In addition, the United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and 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. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. For example, in the recent case, *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*,

the U.S. Supreme Court held that certain claims to DNA molecules are not patentable. While we do not believe that any of the patents owned or licensed by us will be found invalid based on this decision, we cannot predict how future decisions by the courts, the U.S. Congress or the USPTO may impact the value of our patents.

***We have limited foreign intellectual property rights and may not be able to protect our intellectual property rights throughout the world.***

We have limited intellectual property rights outside the United States. Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property to the same extent as federal and state 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, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patents to develop their own products and further, may export otherwise infringing products to territories where we have patents, but enforcement is not as strong as that in the United States. These products may compete with our products 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 in foreign jurisdictions. The legal systems of certain countries, particularly China and certain other developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property, particularly those relating to biopharmaceutical products, 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. To date, we have not sought to enforce any issued patents in these foreign jurisdictions. 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. The requirements for patentability may differ in certain countries, particularly developing countries. Furthermore, generic drug manufacturers or other competitors may challenge the scope, validity or enforceability of our or our licensors' patents, requiring us or our licensors to engage in complex, lengthy and costly litigation or other proceedings. Certain countries in Europe and developing countries, including China and India, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our 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 develop or license.

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

We have received confidential and proprietary information from third parties. In addition, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of these third parties or our employees' former employers. Litigation may be necessary to defend against these claims. 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.

**Risks Related to Ownership of our Common Stock**

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

Prior to our December 2014 initial public offering, there was no public market for our common stock. The trading price of our common stock is likely to continue to be highly volatile and subject to wide fluctuations in response to various factors, some of which are beyond our control, including market conditions in general and a limited trading volume for our shares. In addition to the factors discussed in this "Risk Factors" section and elsewhere in this Annual Report, these factors include:

- the commencement, enrollment or results of the planned clinical trials of our product candidates or any future clinical trials we may conduct, or changes in the development status of our product candidates;
- any delay in our regulatory filings for our product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings, including without limitation the FDA's issuance of a "refusal to file" letter or a request for additional information;
- adverse results or delays in clinical trials;
- our decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;



- adverse regulatory decisions, including failure to receive regulatory approval of our product candidates;
- changes in laws or regulations applicable to our products, including but not limited to clinical trial requirements for approvals;
- adverse developments concerning our CID technology platform and our small molecule drug rimiducid;
- adverse developments concerning our manufacturers;
- our inability to obtain adequate product supply for any approved product or inability to do so at acceptable prices;
- our inability to establish collaborations if needed;
- our failure to commercialize our product candidates;
- additions or departures of key scientific or management personnel;
- unanticipated serious safety concerns related to the use of our product candidates;
- introduction of new products or services offered by us or our competitors;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- our ability to effectively manage our growth;
- the size and growth of our initial target markets;
- our ability to successfully treat additional types of diseases and cancers or at different stages;
- actual or anticipated variations in quarterly operating results;
- our cash position;
- our failure to meet the estimates and projections of the investment community or that we may otherwise provide to the public;
- publication of research reports about us or our industry, or immunotherapy in particular, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- changes in the market valuations of similar companies;
- overall performance of the equity markets;
- sales of our common stock by us or our stockholders in the future;
- trading volume of our common stock;
- changes in accounting practices;
- ineffectiveness of our internal controls;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation;
- general political and economic conditions; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general, and The NASDAQ Global Market and biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company's securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources, which would harm our business, operating results or financial condition.

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

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

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

As of February 16, 2016, our executive officers, directors and 10% stockholders beneficially owned approximately 38.6% of our outstanding voting shares. Therefore, these stockholders may have the ability to significantly influence us through this ownership position. These stockholders may be able to significantly influence all matters requiring stockholder approval. For example, these stockholders may be able to significantly influence elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interest as one of our stockholders.

***We are an emerging growth company and the reduced reporting requirements applicable to emerging growth companies may make our common stock less attractive to investors.***

We are an emerging growth company, as defined in the JOBS Act enacted in April 2012. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in this Annual Report and our periodic reports and proxy statements and exemptions from the requirements of holding nonbinding advisory votes on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years following the year in which we completed our initial public offering, although circumstances could cause us to lose that status earlier. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of our initial public offering, (b) in which we have total annual gross revenue of at least \$1 billion or (c) in which we are deemed to be a large accelerated filer, which requires the market value of our common stock that is held by non-affiliates to exceed \$700 million as of the prior June 30th, or (2) the date on which we have issued more than \$1 billion in non-convertible debt during the prior three-year period.

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

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

We completed our initial public offering on December 23, 2014. As a new public company, we will continue to incur significant legal, accounting and other expenses that we did not incur as a private company. We are now subject to the reporting requirements of the Exchange Act, which requires, among other things, that we file with the SEC annual, quarterly and current reports with respect to our business and financial condition. In addition, the Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC and The NASDAQ Global Market to implement provisions of the Sarbanes-Oxley Act, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Further, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as “say on pay” and proxy access. Recent legislation permits emerging growth companies to implement many of these requirements over a longer period and up to five years from the pricing of an initial public offering. We intend to take advantage of this new legislation but it is possible that we will be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

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

***Changes in accounting rules, assumptions and/or judgments could materially and adversely affect us.***

Accounting rules and interpretations for certain aspects of our operations are highly complex and involve significant assumptions and judgment. These complexities could lead to a delay in the preparation and dissemination of our financial statements. Furthermore, changes in accounting rules and interpretations or in our accounting assumptions and/or judgments, such as asset impairments, could significantly impact our financial statements. In some cases, we could be required to apply a new or revised standard retroactively, resulting in restating prior period financial statements. Any of these circumstances could have a material adverse effect on our business, prospects, liquidity, financial condition and results of operations.

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

Certain holders of our securities, are entitled to rights with respect to the registration of their shares under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

We have registered on Form S-8 all shares of common stock that are issuable under our 2014 Equity Incentive Plan, as amended, or the EIP. As a consequence, these shares can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates.

***Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plan and recently filed shelf registration statement, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.***

We expect that significant additional capital may be needed in the future to continue our planned operations, including conducting clinical trials, commercialization efforts, expanded research and development activities and costs associated with operating a public company. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time, including pursuant to our shelf registration statement on Form S-3 that we recently filed with the Securities and Exchange Commission. If we sell common stock, convertible securities or other equity securities, investors may be materially diluted by subsequent sales. Any such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to the existing holders of our common stock.

***We have broad discretion in the use of the net proceeds from our initial public offering and may not use them effectively.***

Our management has broad discretion in the application of the net proceeds from our December 2014 initial public offering. Because of the number and variability of factors that will determine our use of the net proceeds from our initial public offering, their ultimate use may vary substantially from their currently intended use. Our management might not apply our net proceeds in ways that ultimately increase the value of our common stock. The failure by our management to apply these funds effectively could harm our business. Pending their use, we may invest the net proceeds from our recently completed initial public offering in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders. If we do not invest or apply the net proceeds from our recently completed initial public offering in ways that enhance stockholder value, we may fail to achieve financial results, which could cause our stock price to decline.

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

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent a change of control of our company or changes in our board of directors that our stockholders might consider favorable. Some of these provisions include:

- a board of directors divided into three classes serving staggered three-year terms, such that not all members of the board will be elected at one time;
- a prohibition on stockholder action through written consent, which requires that all stockholder actions be taken at a meeting of our stockholders;
- a requirement that special meetings of stockholders be called only by the chairman of the board of directors, the chief executive officer, or by a majority of the total number of authorized directors;
- advance notice requirements for stockholder proposals and nominations for election to our board of directors;

- a requirement that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of not less than two-thirds of all outstanding shares of our voting stock then entitled to vote in the election of directors;
- a requirement of approval of not less than two-thirds of all outstanding shares of our voting stock to amend any bylaws by stockholder action or to amend specific provisions of our certificate of incorporation; and
- the authority of the board of directors to issue convertible preferred stock on terms determined by the board of directors without stockholder approval and which convertible preferred stock may include rights superior to the rights of the holders of common stock.

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

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

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. In the event securities or industry analysts that cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price may 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 might cause our stock price and trading volume to decline.

#### **ITEM 1B. Unresolved Staff Comments**

None.

#### **ITEM 2. Properties**

We lease an aggregate of approximately 62,067 square feet of space in Houston, Texas, which consists of a 35,250 square foot facility for administrative and research and development activities under a lease that expires in January, 2020, and a 26,817 square foot facility for in-house cell therapy manufacturing activities under a lease that expires in August 2020. We believe that our existing facilities are adequate to meet our current needs, and that suitable additional alternative spaces will be available in the future on commercially reasonable terms.

#### **ITEM 3. Legal Proceedings**

From time to time, we may be involved in various claims and legal proceedings relating to claims arising out of our operations. We are not currently a party to any material legal proceedings.

#### **ITEM 4. Mine Safety Disclosures**

Not applicable.

**PART II****ITEM 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities****Market Information**

Our common stock began trading on The NASDAQ Global Market on December 18, 2014 under the symbol “BLCM.” Prior to such time, there was no public market for our common stock.

The following table sets forth the high and low sales prices per share of our common stock as reported on The NASDAQ Global Market for the periods indicated:

|   | Price Range |          |
|---|-------------|----------|
|   | High        | Low      |
| Year Ended December 31, 2014                  |             |          |
| Fourth Quarter (commencing December 18, 2014) | \$ 27.38    | \$ 18.20 |
| Year Ended December 31, 2015                  |             |          |
| First Quarter                                 | \$ 33.63    | \$ 19.73 |
| Second Quarter                                | \$ 29.33    | \$ 20.20 |
| Third Quarter                                 | \$ 21.71    | \$ 13.66 |
| Fourth Quarter                                | \$ 23.84    | \$ 12.25 |

**Holders of Record**

As of February 29, 2016, there were approximately 49 stockholders of record of our common stock. Certain shares are held in “street” name and thus the actual number of beneficial owners of such shares is not known or included in the foregoing number.

**Dividend Policy**

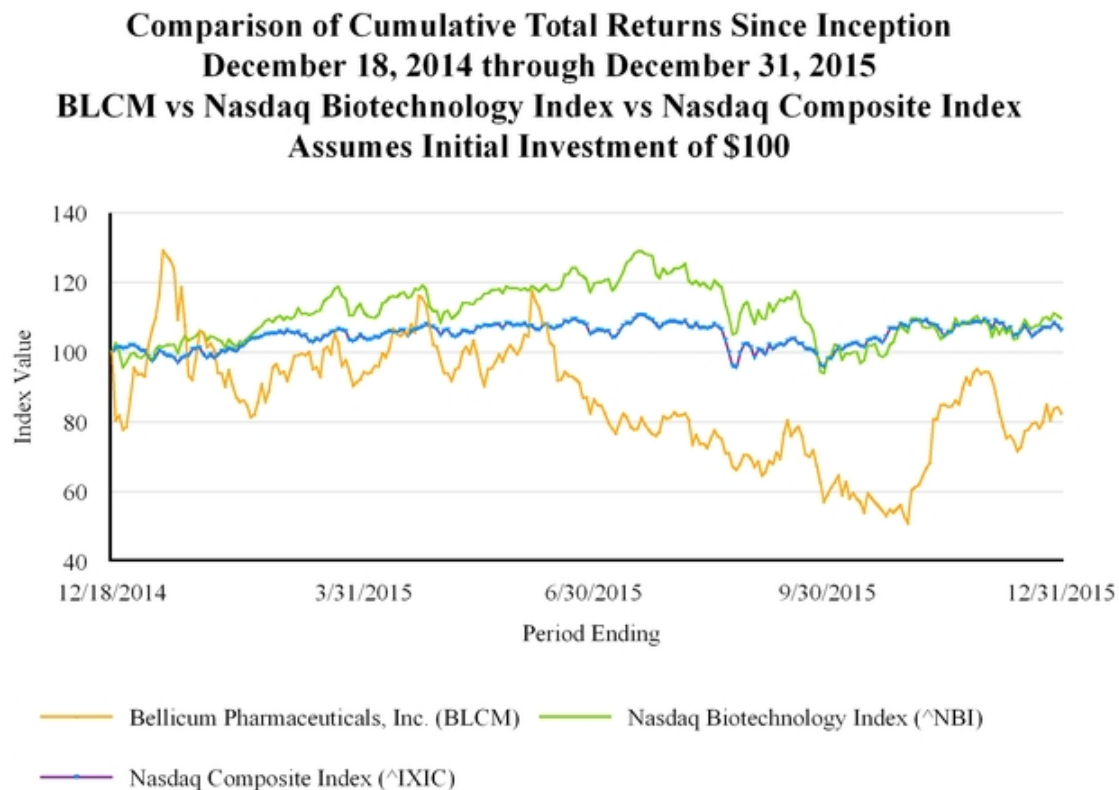
We have never declared or paid any dividends on our common stock. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our board of directors may deem relevant.

**Securities Authorized for Issuance under Equity Compensation Plans**

Information about our equity compensation plans is incorporated herein by reference to Item 12 of Part III of this Annual Report.

## Stock Performance Graph

The following stock performance graph illustrates a comparison of the total cumulative stockholder return on our common stock since December 18, 2014, which is the date our common stock first began trading on the NASDAQ Global Market, to two indices: the NASDAQ Composite Index (^IXIC), and the NASDAQ Biotechnology Index (^NBI). The graph assumes an initial investment of \$100 on December 18, 2014 and assumes reinvestment of the full amount of all dividends, if any. The comparisons in the graph are required by the Securities and Exchange Commission and are not intended to forecast or be indicative of possible future performance of our common stock.



|                      |    | Cumulative Total Return date ended |           |           |           |            |
|----------------------|----|------------------------------------|-----------|-----------|-----------|------------|
|                      |    | 12/18/2014<br>(Inception)          | 3/31/2015 | 6/30/2015 | 9/30/2015 | 12/31/2015 |
| Bellicum             | \$ | 100.00                             | \$ 94.34  | \$ 86.60  | \$ 59.16  | \$ 82.53   |
| Nasdaq Composite     | \$ | 100.00                             | \$ 111.41 | \$ 119.70 | \$ 98.16  | \$ 109.66  |
| Nasdaq Biotechnology | \$ | 100.00                             | \$ 104.00 | \$ 105.82 | \$ 98.04  | \$ 106.26  |

The performance graph shall not be deemed to be incorporated by reference by means of any general statement incorporating by reference this Form 10-K into any filing under the Securities Act or the Exchange Act, except to the extent that we specifically incorporate such information by reference, and shall not otherwise be deemed filed under such acts.

## Recent Sales of Unregistered Securities

In December 2015, we issued 355,361 shares of its common stock to the Texas Treasury Safekeeping Trust Company (a transferee of the Office of the Governor - Economic Development and Tourism), pursuant to the cashless exercise provision of a warrant to



purchase shares of our common stock issued to the State of Texas on September 27, 2007. We did not receive any cash or other consideration.

The issuance of the shares of our common stock was deemed to be exempt from registration under the Securities Act in reliance on Section 3(a)(9) of the Securities Act as a transaction involving the exchange of a security by the issuer with an existing security holder.

### **Use of Proceeds**

On December 17, 2014, we commenced our initial public offering pursuant to a registration statement on Form S-1 (File No. 333- 200328) that was declared effective by the SEC on December 17, 2014 and that registered an aggregate of 7,350,000 shares of our common stock for sale to the public at a price of \$19.00 per share. In addition, at the closing of our initial public offering on December 23, 2014, the underwriters exercised their over-allotment option to purchase 1,102,500 additional shares of our common stock in the initial public offering at the public offering price of \$19.00 per share, for an aggregate offering price of \$160.6 million. The net offering proceeds to us, after deducting underwriting discounts and commissions and offering costs, were approximately \$146.3 million.

The net proceeds from our initial public offering have been invested in highly-liquid money market funds and investment securities. As of December 31, 2015, we estimate that \$41.2 million of the net proceeds from our initial public offering have been utilized to fund our clinical programs and working capital, including general operating expenses, as further described Item 7 entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

## ITEM 6. Selected Financial Data

The following selected financial data should be read in conjunction with our audited financial statements and the notes thereto and “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” located elsewhere in this Annual Report. Amounts are in thousands, except share and per share data.

We derived the statements of operations data for the years ended December 31, 2015, 2014 and 2013 and the balance sheet data as of December 31, 2015 and 2014 from our audited financial statements included in this annual report. We derived the statements of operations data for the years ended December 31, 2012 and the balance sheet data as of December 31, 2013 and 2012 from our audited financial statements not included in this report. Our historical results for any prior period are not necessarily indicative of the results to be expected for any future period. You should read the notes to our financial statements for an explanation of the method used to determine the number of shares used in computing basic and diluted net loss per share.

|   | Year Ended December 31,           |             |            |            |
|---|-----------------------------------|-------------|------------|------------|
|   | 2015                              | 2014        | 2013       | 2012       |
|   | (in thousands, except share data) |             |            |            |
| Statement of Operations:                                      |                                   |             |            |            |
| Grant revenues  | \$ 282                            | \$ 1,780    | \$ 1,941   | \$ 1,470   |
| Operating expenses:   |                                   |             |            |            |
| Research and development                                      | 33,561                            | 12,071      | 7,899      | 6,156      |
| License fees  | 3,184                             | —           | —          | —          |
| ARIAD restructuring costs                                     | —                                 | 43,212      | —          | —          |
| General and administrative                                    | 12,672                            | 4,335       | 1,964      | 1,583      |
| Total operating expenses                                      | 49,417                            | 59,618      | 9,863      | 7,739      |
| Loss from operations  | (49,135)                          | (57,838)    | (7,922)    | (6,269)    |
| Interest income   | 641                               | 35          | 4          | 7          |
| Interest expense  | (12)                              | (1,791)     | (51)       | (1)        |
| Loss on disposal of assets                                    | (42)                              | —           | —          | —          |
| Change in fair value of warrant liability                     | —                                 | (24,371)    | —          | —          |
| Net loss  | \$ (48,548)                       | \$ (83,965) | \$ (7,969) | \$ (6,263) |
| Preferred stock dividends                                     | —                                 | (1,432)     | (1,093)    | (757)      |
| Net loss attributable to common stockholders                  | \$ (48,548)                       | \$ (85,397) | \$ (9,062) | \$ (7,020) |
| Basic and diluted net loss per share                          | \$ (1.84)                         | \$ (34.04)  | \$ (5.05)  | \$ (4.26)  |
| Weighted average common shares outstanding— basic and diluted | 26,346,603                        | 2,508,960   | 1,795,992  | 1,648,198  |

|  | As of December 31, |            |           |          |
|--|--------------------|------------|-----------|----------|
|  | 2015               | 2014       | 2013      | 2012     |
|  | (in thousands)     |            |           |          |
| <b>Balance Sheet Data:</b>                       |                    |            |           |          |
| Cash, cash equivalents and investment securities | \$ 150,365         | \$ 191,602 | \$ 11,168 | \$ 1,632 |
| Working capital                                  | 89,445             | 189,586    | 9,963     | 256      |
| Total assets                                     | 160,406            | 195,794    | 14,942    | 5,186    |
| Convertible preferred stock                      | —                  | —          | 39,926    | 21,658   |
| Accumulated deficit                              | (161,492)          | (112,944)  | (28,979)  | (21,010) |
| Total stockholders' equity (deficit)             | 152,017            | 191,636    | (28,152)  | (19,473) |

## ITEM 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

*You should read the following discussion and analysis together with “Item 6. Selected Financial Data” and our financial statements and related notes included in “Item 8 - Financial Statements and Supplementary Data” in this Annual Report. The following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those expressed or implied in any forward-looking statements as a result of various factors, including those set forth under the caption “Item 1A. Risk Factors.”*

### Overview

We are a clinical stage biopharmaceutical company focused on discovering and developing novel cellular immunotherapies for various forms of cancer, including both hematological cancers and solid tumors, as well as orphan inherited blood disorders. We are using our proprietary Chemical Induction of Dimerization, or CID, technology platform to engineer and then control components of the immune system in real time. By incorporating our CID platform, our product candidates may offer better safety and efficacy outcomes than are seen with current cellular immunotherapies.

We are developing next-generation product candidates in some of the most important areas of cellular immunotherapy, including hematopoietic stem cell transplantation, or HSCT, chimeric antigen receptor T cell therapy, or CAR-Ts, and T cell receptors, or TCRs. HSCT, also known as bone marrow transplantation, has for decades been curative for many patients with hematological cancers or orphan inherited blood disorders. However, adoption of HSCT to date has been limited by the risks of transplant-related morbidity and mortality from graft-versus-host-disease, or GvHD, and the potential for serious infections due to the lack of an effective immune system following a transplant. CAR-T and TCR cell therapies are an innovative approach in which a patient’s T cells are genetically modified to carry chimeric antigen receptors, or CARs, or TCRs which redirect the T cells against cancer cells. While high objective response rates have been reported in some hematological malignancies, serious and sometimes fatal toxicities have arisen in patients treated with CAR-T cell therapies. These toxicities include instances in which the CAR-T cells have caused high levels of cytokines due to over-activation, referred to as “cytokine release syndrome”, frequent transient neurologic toxicities and cases in which they have attacked healthy organs as well as the targeted tumor, sometimes resulting in death. In solid tumors, where the behavior of CAR-T cells is particularly unpredictable and results have been inconsistent, researchers are developing enhanced CAR-T cell approaches called “armored CARs” that raise even greater safety concerns.

Our proprietary CID platform is designed to address these challenges. Events inside a cell are controlled by cascades of specialized signaling proteins. CID consists of molecular switches, modified forms of these signaling proteins, which are triggered inside the patient by infusion of a small molecule, rimiducid, instead of by natural upstream signals. We include these molecular switches in the appropriate immune cells and deliver the cells to the patient in the manner of conventional cellular immunotherapy. We have developed two such switches: a “safety switch,” designed to initiate programmed cell death, or apoptosis, of the immunotherapy cells, and an “activation switch,” designed to stimulate activation and in some cases proliferation of the immunotherapy cells. Each of our technologies incorporates one of these switches, for enhanced, real time control of safety and efficacy:

- CaspaCIDE is our safety switch, incorporated into our HSCT, and in certain of our CAR-T or TCR, product candidates, where it is inactive unless the patient experiences a serious side effect. In that event, rimiducid is administered to fully or partially eliminate the cells, with the goal of terminating or attenuating the therapy and resolving the serious side effect.
- CIDECAR consists of CAR-T cells modified to include the signaling domains of two proteins, MyD88 and CD40. Together, these form our proprietary dual co-stimulatory domain, or MC, which is designed to activate T cells. Incorporation of CaspaCIDE in a CIDECAR product candidate is intended to allow the enhanced potency of MC co-stimulation to be deployed safely in patients.
- GoCAR-T consists of CAR-T cells that are modified to include MC. In contrast to CIDECAR, MC is structured in GoCAR-T as a rimiducid-driven molecular switch, separate from the chimeric antigen receptor. GoCAR-T is designed to allow control of the activation and proliferation of the CAR-T cells through the scheduled administration of a course of rimiducid infusions that may continue until the desired patient outcome is achieved. In the event of emergence of side effects, the level of activation of the GoCAR-T cells is designed to be attenuated by extending the interval between rimiducid doses and/or reducing the dosage per infusion.

By incorporating our novel switch technologies, we are developing product candidates with the potential to elicit positive clinical outcomes and ultimately change the treatment paradigm in various areas of cellular immunotherapy. Our lead clinical product candidate is described below.

- **BPX-501.** We are developing a CaspaCIDE product candidate, BPX-501, as an adjunct T-cell therapy administered after allogeneic HSCT. BPX-501 is designed to improve transplant outcomes by enhancing the recovery of the immune system following an HSCT procedure. BPX-501 addresses the risk of infusing donor T cells by enabling the elimination of donor T cells through the activation of the CaspaCIDE safety switch if there is an emergence of uncontrolled GvHD.

In addition, our preclinical product candidates are designed to overcome the current limitations of CAR-T and TCR therapies and include the following:

- **BPX-701** is a CaspaCIDE-enabled natural high affinity T cell receptor, or TCR, product candidate designed to target malignant cells expressing the preferentially-expressed antigen in melanoma, or PRAME. Initial planned indications for BPX-701 development are Refractory or Relapsed Acute Myeloid Leukemia, or AML, and Myelodysplastic Syndromes, or MDS, with an additional study planned for metastatic uveal melanoma. Each of these is an orphan indication where PRAME is highly expressed and for which current treatment options are limited.
- **BPX-601** is a GoCAR-T product candidate containing our proprietary iMC, inducible MyD88/CD40, activation switch, designed to treat solid tumors expressing prostate stem cell antigen, or PSCA. Preclinical data shows enhanced T-cell proliferation, persistence and *in vivo* anti-tumor activity compared to traditional CAR T therapies. The initial planned indication for BPX-601 development is non-resectable pancreatic cancer.
- **BPX-401** is a CIDECAR product candidate incorporating our proprietary MC co-stimulatory domain and the CaspaCIDE safety switch, designed to target blood cancers expressing CD19.

On January 11, 2016, we submitted required documentation, including clinical trial protocols, for BPX-701 and BPX-601 for review by the National Institutes of Health, or NIH, Recombinant DNA Advisory Committee (RAC). Public review of those programs occurred at the RAC Meeting on March 9, 2016.

We expect to file Investigational New Drug Applications, or INDs, for our three most advanced CAR T and TCR adoptive cell therapy product candidates. INDs for BPX-601 and BPX-701 are expected to be filed during the first half of 2016 and BPX-401 during the second half of the year. Our IND-enabling activities for each of these preclinical product candidates include manufacturing key components and developing a robust process to produce cell products that comply with regulations of the FDA and other regulatory agencies. We have developed an efficient and scalable process to manufacture genetically modified T cells of high quality. This process is currently being implemented by our third-party contract manufacturers to produce BPX-501 for our clinical trials. We expect to leverage this process, as well as our resources, capabilities and expertise for the manufacture of our CAR-T and TCR product candidates. We expect to begin enrolling patients in Phase 1 trials of BPX-701 and BPX-601 in mid-2016, and BPX-401 in the second half of 2016.

## Recent Developments

On March 10, 2016, or the Closing Date, we entered into a Loan and Security Agreement, or the Loan Agreement, with Hercules Capital, Inc., or Hercules, as agent and a lender, Hercules Technology II, L.P., as a lender and Hercules Technology III, L.P., as a lender, under which we borrowed \$15.0 million on the Closing Date and may borrow an additional \$5.0 million on or prior to September 15, 2016. Subject to the terms and conditions of the Loan Agreement, including approval by Hercules' investment committee, and our achievement of specified milestones in the Loan Agreement, we may borrow an additional \$10.0 million through March 15, 2017. We intend to use the proceeds received under the Loan Agreement for funding the build out of our manufacturing facilities and general corporate purposes.

## License Agreement - Agensys, Inc. (Agensys)

On December 10, 2015, we entered into a license agreement with Agensys whereby Agensys granted us an exclusive, worldwide license and sublicense to its patent rights directed to prostate stem cell antigen 1, or PSCA, and related antibodies. We also granted Agensys a non-exclusive, fully paid license to our patents directed to inventions that were made by us in the course of developing our licensed products, solely for use with Agensys therapeutic products containing a soluble antibody that binds to PSCA or, to the extent not based upon our other proprietary technology, to non-therapeutic applications of antibodies not used within the field. For more information, see Note 12 to the financial statements included herein.

### ***License Agreement - BioVec***

On June 10, 2015, we entered into an agreement in which BioVec agreed to supply us with certain proprietary cell lines and granted to us a non-exclusive, worldwide license to certain of its patent rights and related know-how related to such proprietary cell lines. See Note 12 to the financial statements included herein.

### ***License Agreement - Leiden***

On April 23, 2015, we entered into a license agreement with Academisch Ziekenhuis Leiden, or Leiden, whereby Leiden granted to us an exclusive, worldwide license to its patent rights covering high affinity T-cell receptors targeting preferentially-expressed antigen in melanoma, or PRAME, and POU2AF1 epitopes. The license granted under the Leiden Agreement is subject to certain restrictions and to Leiden's retained right to use the licensed patents solely for academic research and teaching purposes, including research collaborations by Leiden with academic, non-profit research third parties; provided that Leiden provides 30 days advance written notice to us of such academic research collaborations. For more information, see Note 12 to the financial statements included herein.

### ***Lease Agreement***

In May 2015, we entered into a lease agreement for approximately 27,000 additional square feet of space at our corporate headquarters for the manufacture of BPX-501 for clinical studies and to support the development of our expanding pipeline of TCR and CAR-T adoptive cell therapy product candidates. For more information, see Note 12 to the financial statements included herein.

## **Financial Operations Overview**

### ***Grant Revenue***

#### ***Cancer Research Institute of Texas (CPRIT)***

To date, we have only recognized revenue from government grants and we have not generated any product revenue. We have received funds from the Cancer Prevention and Research Institute of Texas, or CPRIT, and the National Institute of Health, or NIH, which are awarded based on the progress of the program being funded. In cases when the grant money is not received until expenses for the program are incurred, we accrue the revenue based on the costs incurred for the programs associated with the grant.

During 2011, we entered into a grant agreement with CPRIT for approximately \$5.7 million covering a three year period from July 1, 2011 through June 30, 2014. The grant initially allowed us to receive funds in advance of costs and allowable expenses being incurred. On a quarterly basis, we were required to submit a financial reporting package outlining the nature and extent of reimbursed costs under the grant. At the end of each period, any excess funds received in advance, or paid prior to reimbursement resulted in a deferred liability or grant receivable. The CPRIT grant expired as of June 30, 2014.

#### ***NIH Grant***

During 2013, we entered into a grant agreement with the NIH. The grant is a modular five year grant with funds being awarded each year based on the progress of the program being funded. Grant money is not received until expenses for the program are incurred. We have been awarded approximately \$1.0 million to date, of which \$0.7 million has been received. We accrue the revenue based on the costs incurred for the programs associated with the grant.

In the future, we may generate revenue from a combination of product sales, government or other third-party grants, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements or a combination of these approaches. We expect that any revenue we generate will fluctuate as a result of the timing and amount of license fees, milestone and other payments, and the amount and timing of payments that we receive upon the sale of our products, to the extent any are successfully commercialized. If we fail to complete the development of our product candidates in a timely manner or obtain regulatory approval of them, our ability to generate future revenue, and our results of operations and financial position, would be materially adversely affected.

### ***Research and Development Expenses***

To date, our research and development expenses have related primarily to the development of our CID platform and the identification and development of our product candidates. Research and development expenses consist of expenses incurred in performing research and development activities, including compensation and benefits for research and development employees and consultants, facilities

expenses, overhead expenses, cost of laboratory supplies, manufacturing expenses, fees paid to third parties and other outside expenses.

Research and development costs are expensed as incurred. Clinical trial and other development costs incurred by third parties are expensed as the contracted work is performed. We accrue for costs incurred as the services are being provided by monitoring the status of the clinical trial or project and the invoices received from our external service providers. We adjust our accrual as actual costs become known. Where contingent milestone payments are due to third parties under research and development arrangements, the milestone payment obligations are expensed when the milestone events are achieved.

We utilize our research and development personnel and infrastructure resources across several programs, and many of our costs are not specifically attributable to a single program. Accordingly, we cannot state precisely our total costs incurred on a program-by-program basis.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect our research and development expenses to increase over the next several years as we seek to conduct our ongoing and planned clinical trials for BPX-501, BPX-701, BPX-601 and BPX-401 and as we selectively develop additional product candidates. However, it is difficult to determine with certainty the duration and completion costs of our current or future preclinical programs and clinical trials of our product candidates.

The duration, costs and timing of clinical trials and development of our product candidates will depend on a variety of factors that include, but are not limited to, the following:

- per patient clinical trial costs;
- the number of patients that participate in the clinical trials;
- the number of sites included in the clinical trials;
- the process of collection, differentiation, selection and expansion of immune cells for our cellular immuno-therapies;
- the countries in which the clinical trials are conducted;
- the length of time required to enroll eligible patients;
- the number of doses that patients receive;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring or other studies requested by regulatory agencies;
- the duration of patient follow-up; and
- the efficacy and safety profile of the product candidates.

The following table indicates our research and development expense by project/category for the periods indicated:

|         | 2015             | 2014             | 2013            | 2012            | Total Inception To<br>Date Through<br>December 31, 2015 |
|---------|------------------|------------------|-----------------|-----------------|---|
| Program | (in thousands)   |                  |                 |                 |   |
| BPX-201 | \$ 2,528         | \$ 2,056         | \$ 1,563        | \$ 1,943        | \$ 9,164  |
| BPX-401 | 1,686            | —                | —               | —               | 1,686   |
| BPX-501 | 13,602           | 6,041            | 3,062           | 2,240           | 25,631  |
| BPX-601 | 940              | —                | —               | —               | 940   |
| BPX-701 | 1,093            | —                | —               | —               | 1,093   |
| General | 13,712           | 3,974            | 3,274           | 1,973           | 30,779  |
| Total   | <u>\$ 33,561</u> | <u>\$ 12,071</u> | <u>\$ 7,899</u> | <u>\$ 6,156</u> | <u>\$ 69,293</u>  |

The potential for success of any product candidate depends on numerous factors, including competition, manufacturing capability and commercial viability. We consider which programs to pursue and how much to fund each program based on scientific, clinical and competitive factors, as well as an assessment of each product candidate's commercial potential



### General and Administrative Expenses

General and administrative expenses consist primarily of salaries and other related costs, including share-based compensation, for personnel in executive, finance, accounting, business development, legal and human resources functions. Other significant costs include facility costs not otherwise included in research and development expenses, legal fees relating to patent and corporate matters, insurance costs and professional fees for consultancy, legal, accounting, audit and investor relations.

We anticipate that our general and administrative expenses will increase in the future to support our continued research and development activities, potential commercialization of our product candidates and the increased costs of operating as a public company. These increases are expected to include increased costs related to the hiring of additional personnel and fees to outside consultants, lawyers and accountants, among other expenses. Additionally, we anticipate increased costs associated with being a public company, including expenses related to services associated with maintaining compliance with NASDAQ listing rules and SEC requirements, insurance and investor relations costs.

### Other Income (Expense)

Other income (expense), net consists of interest income, interest expense, loss on the disposition of fixed assets and the change in the fair value of a warrant liability.

## Results of Operations

### Comparison of the Years Ended December 31, 2015 and 2014

The following table sets forth our results of operations for the years ended December 31, 2015 and 2014:

|   | Year ended December 31, |             |            |
|---|-------------------------|-------------|------------|
|   | 2015                    | 2014        | Change     |
|   | (in thousands)          |             |            |
| Grant revenues                            | \$ 282                  | \$ 1,780    | \$ (1,498) |
| Operating expenses:                       |                         |             |            |
| Research and development                  | 33,561                  | 12,071      | 21,490     |
| License fees                              | 3,184                   | —           | 3,184      |
| ARIAD license restructuring               | —                       | 43,212      | (43,212)   |
| General and administrative                | 12,672                  | 4,335       | 8,337      |
| Total operating expenses                  | 49,417                  | 59,618      | (10,201)   |
| Loss from operations                      | (49,135)                | (57,838)    | 8,703      |
| Other income (expense):                   |                         |             |            |
| Interest income                           | 641                     | 35          | 606        |
| Interest expense                          | (12)                    | (1,791)     | 1,779      |
| Change in fair value of warrant liability | —                       | (24,371)    | 24,371     |
| Loss on disposition of fixed assets       | (42)                    | —           | (42)       |
| Total other income (expense)              | 587                     | (26,127)    | 26,714     |
| Net loss                                  | \$ (48,548)             | \$ (83,965) | \$ 35,417  |

### Grant Revenues

Grant revenues were \$0.3 million and \$1.8 million for the years ended December 31, 2015 and 2014, respectively. The decrease in grant revenues was primarily due to the expiration of our grant award from Cancer Prevention and Research Institute of Texas in June 2014.

### *Research and Development Expenses*

Research and development expenses were \$33.6 million and \$12.1 million for the years ended December 31, 2015 and 2014, respectively. The \$21.5 million increase in research and development expenses for the twelve months ended December 31, 2015, was due to an increase in costs related to BPX-501 of \$7.6 million, primarily due to the increase in clinical and manufacturing costs as a result of increased patient enrollment in our clinical trials. The increase in research and development expenses was also due to an increase of \$3.7 million in costs related to our preclinical product candidates, BPX-701, BPX-601 and BPX-401, primarily related to IND enabling activities; and the increase of \$9.7 million in general research and development costs comprised of \$6.3 million in personnel costs, \$2.7 million in allocated overhead costs and \$0.7 million in other costs.

### *Reclassifications*

Certain research and development indirect costs, including facilities and overhead, were previously included in general and administrative costs. These research and development indirect costs are included in research and development expense in the year ended December 31, 2015. The amounts for the year ended December 31, 2014 have been reclassified to conform to the current year presentation. The effect of the reclassification of the results for the twelve months ended December 31, 2014 was to increase research and development expense and reduce general and administrative expense by \$1.1 million with no change in total operating expense or net loss.

### *License fees*

License fees were \$3.2 million for the year ended December 31, 2015, compared to no license fees in 2014. The increase in license fees was primarily due to our new license agreement with Agensys, as consideration for the rights granted to us under the agreement, whereby we paid Agensys a non-refundable upfront fee of \$3.0 million. For more information, see Note 12 to the financial statements included herein.

### *ARIAD License Restructuring*

On October 3, 2014, we entered into an omnibus amendment agreement with ARIAD, under which we agreed to make payments of \$50.0 million in exchange for an expansion of the license field, the termination of all obligations to make milestone and royalty payments to ARIAD in the future and the return of 677,463 shares of our common stock that ARIAD held.

In connection with the amendment, we made an initial payment of \$15.0 million and issued a promissory note to ARIAD for a principal amount of \$35.0 million. Per the promissory note terms, the principal would not accrue interest unless we were in default, in which case it would accrue at a rate of 10% per annum. In December 2014 following our IPO, we paid the remaining \$35.0 million and ARIAD returned all 677,463 shares of our common stock that ARIAD held. The license transaction was valued on the date of the transaction and the note was discounted to fair market value at a 10% rate. This resulted in license expense of \$43.2 million, repurchase of our common stock for \$5.1 million, and interest expense of \$1.7 million. We have recorded the returned shares of common stock as treasury stock. For more information, see Note 11 to the financial statements included herein.

### *General and Administrative Expenses*

General and administrative expenses were \$12.7 million and \$4.3 million for the years ended December 31, 2015 and 2014, respectively. The increase of \$8.4 million in 2015 was due to our overall growth and public company related costs, including an increase in personnel, legal and accounting expenses and costs related to facilities, insurance and travel.

### *Other Income (Expense)*

Other income (expense) was \$0.6 million and \$(26.1) million for the years ended December 31, 2015 and 2014, respectively. The \$26.7 million decrease in other expense in 2015 was primarily due to the change in fair value of a warrant liability of \$24.4 million and imputed interest expense from the ARIAD license restructuring of \$1.7 million. In connection with our August 2014 issuance of Series C convertible preferred stock, Bellicum issued warrants to purchase 6,559,598 shares of Series C convertible preferred stock with an exercise price of \$6.00 per share, which were convertible into 3,858,549 common shares. The fair value of the warrants on the date of issuance of \$9.4 million, as determined using the Black-Scholes option-pricing model, was recorded as a warrant liability. The Series C warrants were revalued at the time of exercise in December 2014 to \$33.8 million. The increase in the calculated fair value from the issuance date to the remeasurement dates resulted in non-cash expense of \$24.4 million in 2014. As all the warrants were either exercised or expired in December 2014, there were no future charges in connection with the warrants in 2015. Interest income in 2015 was a result of substantially higher levels of cash and investments.

### Comparison of the Years Ended December 31, 2014 and 2013

The following table sets forth our results of operations for the years ended December 31, 2014 and 2013:

|   | Year ended December 31, |            |             |
|---|-------------------------|------------|-------------|
|   | 2014                    | 2013       | Change      |
|   | (in thousands)          |            |             |
| Grant revenues                            | \$ 1,780                | \$ 1,941   | \$ (161)    |
| Operating expenses:                       |                         |            |             |
| Research and development                  | 12,071                  | 7,899      | 4,172       |
| ARIAD license restructuring               | 43,212                  | —          | 43,212      |
| General and administrative                | 4,335                   | 1,964      | 2,371       |
| Total operating expenses                  | 59,618                  | 9,863      | 49,755      |
| Loss from operations                      | (57,838)                | (7,922)    | (49,916)    |
| Other income (expense):                   |                         |            |             |
| Interest income                           | 35                      | 4          | 31          |
| Interest expense                          | (1,791)                 | (51)       | (1,740)     |
| Change in fair value of warrant liability | (24,371)                | —          | (24,371)    |
| Total other expense                       | (26,127)                | (47)       | (26,080)    |
| Net loss                                  | \$ (83,965)             | \$ (7,969) | \$ (75,996) |

#### Grant Revenues

Grant revenues were \$1.8 million and \$1.9 million for the years ended December 31, 2014 and 2013, respectively. The decrease in grant revenues in 2014 was primarily due to the expiration of our grant award from Cancer Prevention and Research Institute of Texas in June 2014.

#### Research and Development Expenses

Research and development expenses were \$12.1 million and \$7.9 million for the years ended December 31, 2014 and 2013, respectively. The increase in research and development expenses in 2014 was primarily due to an increase in manufacturing of \$2.0 million and clinical expenses of \$0.8 million as a result of increased patient enrollment in our clinical trials for BPX-501 and BPX-201.

#### Reclassifications

Certain research and development indirect costs, including facilities and overhead, were previously included in general and administrative costs. These research and development indirect costs are included in research and development expense for the year ended December 31, 2015. The results for the year ended December 31, 2014 and 2013, have been reclassified to conform to the current year presentation. The effect of the reclassification of the results for the years ended December 31, 2014 and 2013, was to increase research and development expense and reduce general and administrative expense by \$1.1 million and \$0.8 million, respectively, with no change in total operating expense or net loss.

#### ARIAD License Restructuring

On October 3, 2014, we entered into an omnibus amendment agreement with ARIAD, under which we agreed to make payments of \$50.0 million in exchange for an expansion of the license field, the termination of all obligations to make milestone and royalty payments to ARIAD in the future and the return of 677,463 shares of our common stock that ARIAD held.

In connection with the amendment, we made an initial payment of \$15.0 million and issued a promissory note to ARIAD for a principal amount of \$35.0 million. Per the promissory note terms, the principal would not accrue interest unless we were in default, in which case it would accrue at a rate of 10% per annum. In December 2014 following our IPO, we paid the remaining \$35.0 million

and ARIAD returned all 677,463 shares of our common stock that ARIAD held. The license transaction was valued on the date of the transaction and the note was discounted to fair market value at a 10% rate. This resulted in license expense of \$43.2 million, repurchase of our common stock for \$5.1 million, and interest expense of \$1.7 million. We have recorded the returned shares of common stock as treasury stock. For more information, see Note 11 to the financial statements included herein.

#### *General and Administrative Expenses*

General and administrative expenses were \$4.3 million and \$2.0 million for the years ended December 31, 2014 and 2013, respectively. The increase of \$2.3 million in 2014 in general and administrative expenses was due to our overall growth and public company related costs, including an increase in personnel, legal and accounting expenses and costs related to facilities, insurance and travel.

#### *Other Income (Expense)*

Other expense was \$26.1 million and \$47,000 for the years ended December 31, 2014 and 2013, respectively. The increase in other expense is primarily due to the change in fair value of warrant liability of \$24.4 million and imputed interest expense from the ARIAD license restructuring of \$1.7 million. In connection with the August 2014 issuance of Series C convertible preferred stock, Bellicum issued warrants to purchase 6,559,598 shares of Series C convertible preferred stock with an exercise price of \$6.00 per share which were convertible into 3,858,549 common shares. The fair value of the warrants on the date of issuance of \$9.4 million, as determined using the Black-Scholes option-pricing model, was recorded as a warrant liability. The Series C warrants were revalued both at September 30, 2014 to \$10.6 million, and again revalued at the time of exercise in December 2014 to \$33.8 million. The increase in the calculated fair value from the issuance date to the remeasurement dates resulted in non-cash expense of \$24.4 million in 2014. As all the warrants were either exercised or expired in December 2014, there will be no future charges in connection with the warrants.

#### *Liquidity and Capital Resources*

##### *Sources of Liquidity*

We are a clinical stage biopharmaceutical company with a limited operating history. To date, we have financed our operations primarily through equity and debt financings and grants. We have not generated any revenue from the sale of any products. As of December 31, 2015, we had cash, cash equivalents and investment securities of \$150.4 million. Cash in excess of immediate requirements is invested in accordance with our investment policy, primarily with a view to liquidity and capital preservation.

On February 12, 2013, we received \$3.5 million of cash proceeds through the issuance of promissory notes, bearing interest at 0.21% per annum from February 12, 2013 through July 31, 2013. On July 31, 2013, in connection with the issuance of Series B convertible preferred stock, we repaid the notes with 757,497 shares of Series B convertible preferred stock at a conversion price of \$4.625 per share. The converted balances consisted of \$3.5 million of principal and \$3,426 of outstanding interest payable.

In the first quarter of 2014, we issued 1,582,705 shares of our Series B convertible preferred stock for net proceeds of \$7.3 million, and received \$0.2 million pursuant to the exercise of common warrants.

In August 2014, we completed a private placement of 10,091,743 shares of Series C convertible preferred stock and warrants to purchase up to 6,559,598 shares of Series C convertible preferred stock and received gross proceeds of \$55.0 million, resulting in net proceeds of \$51.5 million. The warrants had an exercise price of \$6.00 per share. The warrants provided for automatic termination upon the date immediately following the date of effectiveness of our registration statement on Form S-1 in connection with our initial public offering. As a result, substantially all of such warrants were exercised in December 2014. We received gross proceeds of approximately \$39.1 million from the exercise of warrants, resulting in net proceeds of \$38.4 million. See Note 8 to the financial statements included herein.

In December 2014, we completed our initial public offering of shares of our common stock which resulted in aggregate gross proceeds to us of approximately \$160.6 million and net offering proceeds to us of approximately \$146.3 million, after deducting underwriting discounts and commissions and offering costs. Also in conjunction with our initial public offering, \$3.4 million of accrued Series B dividends were paid, of which \$0.2 million was paid in cash and the remainder was paid by issuance of 168,199 shares of our common stock. In conjunction with the initial public offering, substantially all of the common warrants were exercised resulting in additional proceeds of \$49,001. Also in conjunction with the initial public offering, \$3.4 million of accrued Series B dividends were paid, of which \$0.2 million was paid in cash and the remainder was paid by issuance of 168,199 shares of common stock.

On January 15, 2016, we filed a shelf Registration Statement on Form S-3 (File No. 333-209012), or the Shelf Registration Statement, to enable us to sell securities from time to time as described in the prospectus in one or more offerings up to a total aggregate offering price of \$150,000,000. The SEC declared the Shelf Registration Statement effective on February 1, 2016.

On March 10, 2016, or the Closing Date, we entered into a Loan and Security Agreement, or the Loan Agreement, with Hercules Capital, Inc., or Hercules, as agent and a lender, Hercules Technology II, L.P., as a lender and Hercules Technology III, L.P., as a lender, under which we borrowed \$15.0 million on the Closing Date and may borrow an additional \$5.0 million on or prior to September 15, 2016. Subject to the terms and conditions of the Loan Agreement, including approval by Hercules' investment committee, and our achievement of specified milestones in the Loan Agreement, or the Milestones, we may borrow an additional \$10.0 million through March 15, 2017. We intend to use the proceeds received under the Loan Agreement for funding the build out of our manufacturing facilities and general corporate purposes.

### ***Funding Requirements***

Our primary uses of capital are, and we expect will continue to be, compensation and related expenses, third-party clinical research and development services, laboratory and related supplies, clinical costs, legal and other regulatory expenses, facility costs and general overhead costs. Specifically, in 2016 we expect to use capital to build our U.S. manufacturing facilities to support our clinical programs and early commercial supply requirements for BPX-501.

The successful development of any product candidate is highly uncertain. As such, at this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the development of BPX-501 or our other current and future product candidates. We are also unable to predict when, if ever, material net cash inflows will commence from the sale of product candidates. This is due to the numerous risks and uncertainties associated with developing medical treatments, including the uncertainty of:

- successful enrollment in, and completion of, clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;
- making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity; and
- launching commercial sales of our products, if and when approved, whether alone or in collaboration with others.

A change in the outcome of any of these variables with respect to the development of any of our product candidates would significantly change the costs and timing associated with the development of that product candidate.

Because all of our product candidates are in the early stages of clinical and preclinical development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of product candidates or whether, or when, we may achieve profitability. Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity or debt financings and collaboration arrangements.

To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our stockholders will be diluted, and the terms may include liquidation or other preferences that adversely affect the rights of our existing stockholders. The incurrence of indebtedness would result in increased fixed payment obligations and could involve certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we raise additional funds through collaboration arrangements, such as strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms unfavorable to us. Any of these actions could harm our business, results of operations and future prospects.

## Outlook

Based on our research and development plans and our timing expectations related to the progress of our programs, we expect that our cash and cash equivalents as of December 31, 2015, which included the net proceeds from our 2014 initial public offering, will enable us to fund our operating expenses and capital expenditure requirements through 2017. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Furthermore, our operating plan may change, and we may need additional funds to meet operational needs and capital requirements for product development and commercialization sooner than planned. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates and the extent to which we may enter into additional collaborations with third parties to participate in their development and commercialization, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials. Our future funding requirements will depend on many factors, as we:

- initiate or continue clinical trials of BPX-501, BPX-701, BPX-601, BPX-401 and any other product candidates;
- continue the research and development of our product candidates;
- seek to discover additional product candidates;
- seek regulatory approvals for our product candidates that successfully complete clinical trials;
- establish a sales, marketing and distribution infrastructure and scale-up manufacturing capabilities and facilities to commercialize products which receive regulatory approval;
- enhance operational, financial and information management systems and hire additional personnel, including personnel to support development of our product candidates and, if a product candidate is approved, our commercialization efforts; and
- incur additional costs associated with being a public company.

## Cash Flows

The following table sets forth a summary of our cash flows for the years ended December 31, 2015, 2014 and 2013:

|   | Year ended December 31, |                   |                 |
|---|-------------------------|-------------------|-----------------|
|   | 2015                    | 2014              | 2013            |
|   | (in thousands)          |                   |                 |
| Net cash used in operating activities     | \$ (35,726)             | \$ (57,308)       | \$ (7,612)      |
| Net cash used in investing activities     | (86,453)                | (804)             | (366)           |
| Net cash provided by financing activities | 818                     | 238,546           | 17,514          |
| Net cash inflow (outflow)                 | <u>\$ (121,361)</u>     | <u>\$ 180,434</u> | <u>\$ 9,536</u> |

### Operating Activities

Net cash used in operating activities of \$35.7 million for the year ended December 31, 2015, was comprised of a net loss of \$48.5 million, which included depreciation expense of \$1.2 million and share-based compensation expense of \$8.4 million. Net cash used in operating activities was also comprised of the following primary components: a decrease in interest and other receivables of \$0.1 million, an increase in prepaid expenses and other current assets of \$1.1 million, a decrease in other assets of \$0.2 million, an increase in accounts payable of \$0.9 million, an increase in accrued liabilities \$2.8 million, and an increase in deferred costs of \$0.4 million.

Net cash used in operating activities of \$57.3 million for the year ended December 31, 2014 was comprised of a net loss of \$84.0 million, which included depreciation expense of \$0.7 million, share-based compensation expense of \$0.9 million and a \$24.4 million non-cash charge for the revaluation of the Series C Warrants. Net cash used in operating activities was also comprised of the following primary components: a decrease in grant receivables of \$0.4 million, an increase in prepaid expenses and other current assets of \$1.1 million, a decrease in other assets of \$0.3 million, an increase in accounts payable of \$0.7 million, an increase in accrued payroll of \$0.3 million, and an increase in deferred manufacturing costs of \$0.2 million.

Net cash used in operating activities was \$7.6 million for the year ended December 31, 2013, which was derived from a net loss of \$8.0 million, in addition to the following primary components: a decrease in prepaid expenses and other assets of \$1.1 million, an increase in accounts payable, accrued payroll, and accrued liabilities of \$0.7 million, a decrease in deferred revenue-grants of \$1.0 million, and share-based compensation of \$0.4 million.

### Investing Activities

Net cash used in investing activities for the year ended December 31, 2015 was \$86.5 million, which was derived from the purchases of property and equipment of \$5.4 million and the purchase of investment securities of \$101.6 million, offset by proceeds from the sale of securities of \$20.6 million in 2015.

Net cash used in investing activities for the year ended December 31, 2014 was \$0.8 million, which was derived solely from the purchase of property and equipment.

Net cash used in investing activities for the year ended December 31, 2013 was \$0.4 million, which was derived solely from the purchase of property and equipment.

### Financing Activities

Net cash provided by financing activities for the year ended December 31, 2015 was \$0.8 million, which was primarily derived from proceeds received from issuance of common stock.

Net cash provided by financing activities for the year ended December 31, 2014 was \$238.5 million, which was derived from approximately \$146.3 million in net proceeds from our December 2014 initial public offering, \$101.5 million from the issuance of convertible preferred stock and the exercise of warrants, offset by \$3.5 million of issuance costs, proceeds from the exercise of common warrants other than in our initial public offering of \$0.3 million, payment of \$5.1 million for repurchase of stock held by ARIAD, payments totaling \$0.2 million for series B dividends, and proceeds from the line of credit of \$0.4 million, which were offset by payments on the line of credit of \$1.2 million. See Note 8 to the audited Financial Statements included herein.

Net cash provided by financing activities for the year ended December 31, 2013 was \$17.5 million, which was derived from proceeds from issuance of preferred stock of \$13.7 million, proceeds from notes payable of \$3.5 million and proceeds from the line of credit of \$0.6 million, offset by payments on the line of credit of \$0.2 million.

### Contractual Obligations

Our contractual obligations as of December 31, 2015 were as follows:

|   | (in thousands) |          |             |             |                   |
|---|----------------|----------|-------------|-------------|-------------------|
|   | Total          | 1 Year   | 2 - 3 Years | 4 - 5 Years | More Than 5 Years |
| License agreements (1)                  | \$ 141,010     | \$ 932   | \$ 5,310    | \$ 22,345   | \$ 112,423        |
| Operating lease agreements (2)          | 8,415          | 1,857    | 3,853       | 2,705       | —                 |
| Contract manufacturing arrangements (3) | 4,006          | 3,808    | 174         | 24          | —                 |
| Facility lease agreement (4)            | 1,368          | 1,368    | —           | —           | —                 |
| Toxicology study agreements (5)         | 518            | 518      | —           | —           | —                 |
| Sponsored research agreements (6)       | 228            | 119      | 109         | —           | —                 |
| Capital lease agreements (7)            | 235            | 42       | 84          | 84          | 25                |
| Total contractual obligations           | \$ 155,780     | \$ 8,644 | \$ 9,530    | \$ 25,158   | \$ 112,448        |

- (1) License agreements - We have entered into several license agreements under which we obtained rights to certain intellectual property. Under the agreements, we could be obligated for payments upon successful completion of clinical and regulatory milestones regarding the products covered by this license. The obligations listed in the table above represent estimates of when the milestones will be achieved. We cannot assure that the timing of the milestones will be completed when estimated or at all. See Note 12 to the financial statements included herein.
- (2) Operating lease agreements - The amounts above are comprised of two five-year lease agreements. The first lease will expire on January 31, 2020 and the second lease expires on August 31, 2020. See Note 12 to the financial statements included herein.
- (3) Contract manufacturing arrangements - We have entered into several manufacturing service arrangements with various terms. The obligations listed in the table above represent estimates of when certain services will be performed.
- (4) Facility lease agreement - In March 2013 we entered into a two-year manufacturing facility agreement for cell processing for a clinical trial. In February 2015, the agreement was extended for an additional two years. Subsequently, in December 2015, the contract was terminated but expected to last an additional three months while BPX-201 clinical trials wind down.
- (5) Toxicology study agreements - In December 2015 we entered into an agreement for various toxicology studies which are estimated to be completed during 2016.



- (6) Sponsored research agreements - During 2015, we entered into two separate sponsored research agreements to undertake research which is of mutual interest to all parties. One agreement includes a commitment over 14 months and the other includes a commitment over a three-year period.
- (7) Capital lease agreements - During 2015, we entered into two office capital lease agreements covering a six year term. The commitment includes equipment, maintenance and supplies.

### **Critical Accounting Policies and Significant Estimates**

Our financial statements are prepared in accordance with U.S. generally accepted accounting principles, or GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. In many instances, we could have reasonably used different accounting estimates, and in other instances changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from management's estimates. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected. While our significant accounting policies are described in the Notes to our financial statements, we believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies related to the more significant areas involving management's judgments and estimates.

### ***Revenue Recognition***

To date, we have only recognized revenue from government grants and we have not generated any product revenue. We have received funds from the Cancer Prevention and Research Institute of Texas, or CPRIT, and the National Institutes of Health, or NIH, which are awarded based on the progress of the program being funded. In cases when the grant money is not received until expenses for the program are incurred, we accrue the revenue based on the costs incurred for the programs associated with the grant.

In the future, we may generate revenue from a combination of product sales, government or other third-party grants, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements or a combination of these approaches. We expect that any revenue we generate will fluctuate from quarter to quarter as a result of the timing and amount of license fees, milestone and other payments, and the amount and timing of payments that we receive upon the sale of our products, to the extent any are successfully commercialized. If we fail to complete the development of our product candidates in a timely manner or obtain regulatory approval of them, our ability to generate future revenue, and our results of operations and financial position, would be materially adversely affected.

### ***Licenses and Patents***

Licenses and patent costs are expensed as incurred. Costs related to the license of patents from third parties and internally developed patents are classified as research and development expenses. Legal costs related to patent applications and maintenance are classified as general and administrative expenses.

### ***Research and Development***

Research and development costs are expensed as incurred. Clinical trial and other development costs incurred by third parties are expensed as the contracted work is performed. We accrue for costs incurred as the services are being provided by monitoring the status of the clinical trial or project and the invoices received from our external service providers. We adjust our accrual as actual costs become known. Where contingent milestone payments are due to third parties under research and development arrangements, the milestone payment obligations are expensed when the milestone events are achieved.

### ***Contract Manufacturing Services***

Contract manufacturing services are expensed as incurred. Prepaid costs are capitalized and amortized as services are performed.

### ***Share-Based Compensation***

We account for share-based compensation by calculating the fair value of equity awards on the date of grant. We calculate the fair value of stock options using the Black-Scholes pricing model, which requires a number of estimates, including the expected lives of awards, interest rates, stock volatility and other assumptions. Restricted stock is measured based on the fair market value of the underlying stock on the date of grant. If the awards are classified as liability awards, the fair value is remeasured at each reporting date and the compensation expense is adjusted accordingly. Additionally, we apply a forfeiture rate to estimate the number of grants that

will ultimately vest, as applicable, and adjust the expense as these awards vest. All of our current equity awards are service based awards and the stock-based compensation cost is being recognized over the requisite service period of the awards on a straight-line basis. Our share based compensation expense has increased due to the growth in the number of our employees and also due to the increase in the valuation of equity awards as a result of becoming a public company in December of 2014.

The following table sets forth the stock-based compensation expense included in our results of operations for the years ended December 31, 2015, 2014 and 2013:

|                            | Year Ended December 31, |               |               |
|----------------------------|-------------------------|---------------|---------------|
|                            | 2015                    | 2014          | 2013          |
|                            | (in thousands)          |               |               |
| General and administrative | \$ 4,832                | \$ 386        | \$ 19         |
| Research and development   | 3,577                   | 525           | 372           |
| Total                      | <u>\$ 8,409</u>         | <u>\$ 911</u> | <u>\$ 391</u> |

### Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. This method also requires the recognition of future tax benefits such as net operating loss and tax credit carry forwards, to the extent that realization of such benefits is more likely than not. A valuation allowance is recorded when the realization of future tax benefits is uncertain. We record a valuation allowance for the full amount of deferred tax assets, which would otherwise be recorded for tax benefits relating to the operating loss and tax credit carryforwards, as realization of such deferred tax assets cannot be determined to be more likely than not.

Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the statement of operations in the period that includes the enactment date.

We account for uncertain tax positions in accordance with the provisions of the Accounting Standards Codification (ASC) 740, *Income Taxes*. When uncertain tax positions exist, we recognize the tax benefit of tax positions to the extent that the benefit will more likely than not be realized. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. As of December 31, 2015, 2014 and 2013, we had no uncertain tax positions and no interest or penalties have been charged to us for the years ended December 31, 2015, 2014 and 2013. If incurred, we will classify any interest and penalties as a component of interest expense and operating expense, respectively. We are subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The tax years 2004 through 2015 remain open to examination by the U.S. Internal Revenue Service.

### Recently Issued Accounting Pronouncements

See Note 2 to the Notes to Consolidated Financial Statements in "Item 8 - Financial Statements and Supplementary Data" in this Annual Report for discussion regarding recent accounting pronouncements.

### Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements (as defined by applicable regulations of the SEC) that are reasonably likely to have a current or future material effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources.

### JOBS Act

In April 2012, the JOBS Act was enacted. Section 107(b) of the JOBS Act provides that an "emerging growth company" may take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We

have irrevocably elected not to avail ourselves of this extended transition period, and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

Subject to certain conditions set forth in the JOBS Act, as an “emerging growth company,” we intend to rely on certain of these exemptions including without limitation with respect to, (1) providing an auditor’s attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act and (2) complying with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements, known as the auditor discussion and analysis. We will remain an “emerging growth company” until the earliest of (a) the last day of the fiscal year in which we have total annual gross revenues of \$1 billion or more, (b) the last day of our fiscal year following the fifth anniversary of the date of the completion of our initial public offering, (c) the date on which we have issued more than \$1 billion in non-convertible debt during the previous three years or (d) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

#### **ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk**

The primary objective of our investment activities is to preserve our capital to fund our operations. We also seek to realize income from our investments without assuming significant risk. To achieve our objectives, we invest our cash allocated to fund our short-term liquidity requirements with prominent financial institutions in bank depository accounts and institutional money market funds. We invest the remainder of our cash in corporate debt securities and municipal bonds rated at least A quality or equivalent, U.S. Treasury notes and bonds and U.S. and state government agency-backed securities. As of December 31, 2015, we had cash, cash equivalents and investment in marketable securities of \$150.4 million.

A portion of our investments may be subject to interest rate risk and could fall in value if market interest rates increase. However, because our investments are primarily short-term in duration, we believe that our exposure to interest rate risk is not significant and a 1% movement in market interest rates would not have a significant impact on the total value of our portfolio. We actively monitor changes in interest rates.

#### **ITEM 8. Financial Statements and Supplementary Data**

##### **Index to Financial Statements**

The financial statements of Bellicum Pharmaceuticals, Inc. listed below are set forth in Item 8 of this Annual Report for the year ended December 31, 2015:

|   | <b>Page</b>        |
|---|--------------------|
| <a href="#">Report of Independent Registered Public Accounting Firm</a>                                     | <a href="#">73</a> |
| <a href="#">Balance Sheets</a>  | <a href="#">74</a> |
| <a href="#">Statements of Operations and Comprehensive Loss</a>   | <a href="#">75</a> |
| <a href="#">Statements of Redeemable and Convertible Preferred Stock and Stockholders’ Equity (Deficit)</a> | <a href="#">76</a> |
| <a href="#">Statements of Cash Flows</a>  | <a href="#">77</a> |
| <a href="#">Notes to the Financial Statements</a>   | <a href="#">78</a> |

## **Report of Independent Registered Public Accounting Firm**

The Board of Directors of Bellicum Pharmaceuticals, Inc.

We have audited the accompanying balance sheets of Bellicum Pharmaceuticals, Inc. as of December 31, 2015 and 2014, and the related statements of operations and comprehensive loss, redeemable and convertible preferred stock and stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 2015. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Bellicum Pharmaceuticals, Inc. at December 31, 2015 and 2014, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Houston, Texas  
March 14, 2016

**Bellicum Pharmaceuticals, Inc.**  
**Balance Sheets**  
(in thousands, except for par value and share data)

|   | December 31, 2015 | December 31, 2014 |
|---|-------------------|-------------------|
| <b>ASSETS</b>   |                   |                   |
| Current assets:   |                   |                   |
| Cash and cash equivalents   | \$ 70,241         | \$ 191,602        |
| Investment securities, available for sale - short-term  | 23,820            | —                 |
| Accounts receivable – interest and other receivables  | 440               | 298               |
| Prepaid expenses and other current assets   | 2,389             | 1,322             |
| Total current assets  | 96,890            | 193,222           |
| Investment securities, available for sale - long-term   | 56,304            | —                 |
| Property and equipment, net   | 6,882             | 2,427             |
| Other assets  | 330               | 145               |
| <b>TOTAL ASSETS</b>   | <b>\$ 160,406</b> | <b>\$ 195,794</b> |
| <b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>   |                   |                   |
| Current liabilities:  |                   |                   |
| Accounts payable  | \$ 2,106          | \$ 1,209          |
| Accrued expenses and other current liabilities  | 5,080             | 2,163             |
| Deferred revenue  | —                 | 13                |
| Current portion of capital lease obligation   | 13                | —                 |
| Current portion of deferred rent  | 246               | 97                |
| Current portion of deferred manufacturing costs   | —                 | 154               |
| Total current liabilities   | 7,445             | 3,636             |
| Long-term liabilities:  |                   |                   |
| Capital lease obligation  | 118               | —                 |
| Deferred rent   | 826               | 209               |
| Deferred manufacturing costs  | —                 | 313               |
| <b>TOTAL LIABILITIES</b>  | <b>8,389</b>      | <b>4,158</b>      |
| Commitments and contingencies: (Note 12)  |                   |                   |
| Stockholders' Equity:   |                   |                   |
| Common stock: \$0.01 par value; 200,000,000 shares authorized at December 31, 2015 and 2014; 27,609,344 shares issued and 26,931,881 shares outstanding at December 31, 2015; 27,050,055 shares issued and 26,372,592 shares outstanding at December 31, 2014 | 276               | 271               |
| Treasury stock: 677,463 shares held at December 31, 2015 and 2014   | (5,056)           | (5,056)           |
| Additional paid-in capital  | 318,591           | 309,365           |
| Accumulated other comprehensive loss  | (302)             | —                 |
| Accumulated deficit   | (161,492)         | (112,944)         |
| Total stockholders' equity  | 152,017           | 191,636           |
| <b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>   | <b>\$ 160,406</b> | <b>\$ 195,794</b> |

The accompanying notes are an integral part of these financial statements.

**Bellicum Pharmaceuticals, Inc.**  
**Statements of Operations and Comprehensive Loss**  
(in thousands, except share and per share amounts)

|   | Year Ended December 31, |                    |                   |
|---|-------------------------|--------------------|-------------------|
|   | 2015                    | 2014               | 2013              |
| <b>REVENUES</b>   |                         |                    |                   |
| Grants  | \$ 282                  | \$ 1,780           | \$ 1,941          |
| Total revenues  | 282                     | 1,780              | 1,941             |
| <b>OPERATING EXPENSES</b>   |                         |                    |                   |
| Research and development  | 33,561                  | 12,071             | 7,899             |
| License fees  | 3,184                   | —                  | —                 |
| ARIAD restructuring costs   | —                       | 43,212             | —                 |
| General and administrative  | 12,672                  | 4,335              | 1,964             |
| Total operating expenses  | 49,417                  | 59,618             | 9,863             |
| <b>LOSS FROM OPERATIONS</b>   | <b>(49,135)</b>         | <b>(57,838)</b>    | <b>(7,922)</b>    |
| <b>OTHER INCOME (EXPENSE)</b>   |                         |                    |                   |
| Interest income   | 641                     | 35                 | 4                 |
| Interest expense  | (12)                    | (1,791)            | (51)              |
| Loss on disposal of assets  | (42)                    | —                  | —                 |
| Change in fair value of warrant liability   | —                       | (24,371)           | —                 |
| Total other income (expense)  | 587                     | (26,127)           | (47)              |
| <b>NET LOSS</b>   | <b>\$ (48,548)</b>      | <b>\$ (83,965)</b> | <b>\$ (7,969)</b> |
| Preferred stock dividends   | —                       | (1,432)            | (1,093)           |
| <b>Net loss attributable to common stockholders</b>                                     | <b>\$ (48,548)</b>      | <b>\$ (85,397)</b> | <b>\$ (9,062)</b> |
| <b>Net loss per common share attributable to common shareholders, basic and diluted</b> | <b>\$ (1.84)</b>        | <b>\$ (34.04)</b>  | <b>\$ (5.05)</b>  |
| <b>Weighted-average shares outstanding-basic and diluted</b>                            | <b>26,346,603</b>       | <b>2,508,960</b>   | <b>1,795,992</b>  |
| <b>Net Loss</b>   | <b>\$ (48,548)</b>      | <b>\$ (83,965)</b> | <b>\$ (7,969)</b> |
| <b>Other comprehensive loss:</b>  |                         |                    |                   |
| <b>Unrealized loss on securities, net</b>   | <b>(302)</b>            | <b>—</b>           | <b>—</b>          |
| <b>Comprehensive loss</b>   | <b>\$ (48,850)</b>      | <b>\$ (83,965)</b> | <b>\$ (7,969)</b> |

The accompanying notes are an integral part of these financial statements.

**Bellicum Pharmaceuticals, Inc.**  
**Statements of Redeemable and Convertible Preferred Stock and Stockholders' Equity (Deficit)**  
**Years Ended December 31, 2015, 2014 and 2013**  
**(amounts in thousands, except share data)**

|   | Series A    |          | Series B    |           | Series C     |           | Common Stock |        | Treasury Stock |            | Additional Paid-In Capital | Accumulated Deficit | Other Comprehensive Loss | Total Stockholders' Equity (Deficit) |
|---|-------------|----------|-------------|-----------|--------------|-----------|--------------|--------|----------------|------------|----------------------------|---------------------|--------------------------|--------------------------------------|
|   | Shares      | Amount   | Shares      | Amount    | Shares       | Amount    | Shares       | Amount | Shares         | Amount     |                            |                     |                          |                                      |
| Balance, January 1, 2013                                      | 2,544,539   | \$ 7,634 | 2,849,929   | \$ 14,024 | —            | \$ —      | 1,725,992    | \$ 17  | —              | \$ —       | \$ 1,519                   | \$ (21,010)         | \$ —                     | \$ (19,474)                          |
| Share-based compensation                                      |             |          |             |           |              |           |              |        |                |            | 391                        |                     |                          | 391                                  |
| Conversion of debt and interest into Series B preferred stock |             |          | 757,497     | 3,503     |              |           |              |        |                |            |                            |                     |                          | —                                    |
| Issue Series B preferred stock, net of issuance costs         |             |          | 2,955,857   | 13,671    |              |           |              |        |                |            | (6)                        |                     |                          | (6)                                  |
| Accretion of Series B preferred stock to redemption value     |             |          |             | 1,094     |              |           |              |        |                |            | (1,094)                    |                     |                          | (1,094)                              |
| Net loss  |             |          |             |           |              |           |              |        |                |            |                            | (7,969)             |                          | (7,969)                              |
| Balance, December 31, 2013                                    | 2,544,539   | \$ 7,634 | 6,563,283   | \$ 32,292 | —            | \$ —      | 1,725,992    | \$ 17  | —              | \$ —       | \$ 810                     | \$ (28,979)         | \$ —                     | \$ (28,152)                          |
| Share-based compensation                                      |             |          |             |           |              |           |              |        |                |            | 911                        |                     |                          | 911                                  |
| Issuance of restricted stock grant                            |             |          |             |           |              |           | 117,647      | 1      |                |            | (1)                        |                     |                          | —                                    |
| Exercise of stock options                                     |             |          |             |           |              |           | 12,615       |        |                |            | 11                         |                     |                          | 11                                   |
| Issuance of common stock in an IPO, net of issuance costs     |             |          |             |           |              |           | 8,452,500    | 85     |                |            | 146,218                    |                     |                          | 146,303                              |
| Issue Series B preferred stock, net of issuance costs         |             |          | 1,582,706   | 7,320     |              |           |              |        |                |            |                            |                     |                          | —                                    |
| Issue Series C preferred stock, net of issuance costs         |             |          |             |           | 10,091,743   | 42,074    |              |        |                |            |                            |                     |                          | —                                    |
| Exercise of Series C warrants, net of issuance costs          |             |          |             |           | 6,524,195    | 72,187    |              |        |                |            |                            |                     |                          | —                                    |
| Exercise of common warrants                                   |             |          |             |           |              |           | 510,524      | 5      |                |            | 245                        |                     |                          | 250                                  |
| Accretion of Series B dividend                                |             |          |             | 1,432     |              |           |              |        |                |            | (1,432)                    |                     |                          | (1,432)                              |
| Payment of Series B dividend                                  |             |          |             | (173)     |              |           |              |        |                |            |                            |                     |                          | —                                    |
| Repurchase of common stock held by ARIAD                      |             |          |             |           |              |           |              |        | (677,463)      | (5,056)    |                            |                     |                          | (5,056)                              |
| Conversion of preferred stock                                 | (2,544,539) | (7,634)  | (8,145,989) | (40,871)  | (16,615,938) | (114,261) | 16,230,777   | 163    |                |            | 162,603                    |                     |                          | 162,766                              |
| Net loss  |             |          |             |           |              |           |              |        |                |            |                            | (83,965)            |                          | (83,965)                             |
| Balance, December 31, 2014                                    | —           | \$ —     | —           | \$ —      | —            | \$ —      | 27,050,055   | \$ 271 | (677,463)      | \$ (5,056) | \$ 309,365                 | \$ (112,944)        | \$ —                     | \$ 191,636                           |
| Share-based compensation                                      |             |          |             |           |              |           |              |        |                |            | 8,409                      |                     |                          | 8,409                                |
| Exercise of stock options                                     |             |          |             |           |              |           | 182,238      | 1      |                |            | 481                        |                     |                          | 482                                  |
| Issuance of common stock - Employee Stock Purchase Plan       |             |          |             |           |              |           | 21,690       |        |                |            | 347                        |                     |                          | 347                                  |
| Exercise of common warrants                                   |             |          |             |           |              |           | 355,361      | 4      |                |            | (4)                        |                     |                          | —                                    |
| Other Comprehensive loss                                      |             |          |             |           |              |           | —            |        |                |            | (7)                        |                     |                          | (7)                                  |
| Balance, December 31, 2015                                    | —           | \$ —     | —           | \$ —      | —            | \$ —      | 27,609,344   | \$ 276 | (677,463)      | \$ (5,056) | \$ 318,591                 | \$ (161,492)        | \$ (302)                 | \$ 152,017                           |

The accompanying notes are an integral part of these financial statements.



**Bellicum Pharmaceuticals Inc.**  
**Statements of Cash Flows**  
(in thousands)

|   | Year Ended December 31, |                   |                  |
|---|-------------------------|-------------------|------------------|
|   | 2015                    | 2014              | 2013             |
| <b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>                                |                         |                   |                  |
| Net loss  | \$ (48,548)             | \$ (83,965)       | \$ (7,969)       |
| Adjustments to reconcile net loss to net cash used in operating activities: |                         |                   |                  |
| Depreciation expense  | 1,199                   | 667               | 587              |
| Share-based compensation  | 8,409                   | 911               | 391              |
| Loss on disposal of property and equipment                                  | 42                      | —                 | —                |
| Loss on disposition of investment securities                                | 33                      | —                 | —                |
| Amortization of lease liability   | (94)                    | (89)              | (95)             |
| Amortization of premium on investment securities, net                       | 573                     | —                 | —                |
| Interest expense converted into preferred stock                             | —                       | —                 | 3                |
| Change in fair value of warrant liability                                   | —                       | 24,371            | —                |
| Changes in operating assets and liabilities:                                |                         |                   |                  |
| Accounts receivable   | (142)                   | 448               | (745)            |
| Prepaid expenses and other current assets                                   | (1,067)                 | (1,068)           | 592              |
| Other assets  | (185)                   | 339               | (287)            |
| Accounts payable  | 897                     | 659               | (1)              |
| Accrued liabilities and other   | 2,778                   | 225               | 698              |
| Deferred revenue – grants   | (13)                    | 13                | (1,039)          |
| Deferred rent   | 859                     | 5                 | 14               |
| Deferred manufacturing costs  | (467)                   | 176               | 239              |
| <b>NET CASH USED IN OPERATING ACTIVITIES</b>                                | <b>(35,726)</b>         | <b>(57,308)</b>   | <b>(7,612)</b>   |
| <b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>                                |                         |                   |                  |
| Purchases of investment securities  | (101,649)               | —                 | —                |
| Proceeds from sale of investment securities                                 | 20,617                  | —                 | —                |
| Purchases of property and equipment   | (5,421)                 | (804)             | (366)            |
| <b>CASH USED IN INVESTING ACTIVITIES</b>                                    | <b>(86,453)</b>         | <b>(804)</b>      | <b>(366)</b>     |
| <b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>                                |                         |                   |                  |
| Proceeds from issuance of common stock                                      | 347                     | 160,609           | —                |
| Proceeds from exercise of stock options                                     | 482                     | —                 | —                |
| Payment of issuance costs on common stock                                   | (7)                     | (14,242)          | —                |
| Proceeds from issuance of preferred stock                                   | —                       | 62,320            | 13,671           |
| Payment of issuance costs on preferred stock                                | —                       | (3,524)           | (7)              |
| Proceeds from exercise of preferred warrants                                | —                       | 39,145            | —                |
| Proceeds from exercise of common warrants                                   | —                       | 250               | —                |
| Payment for repurchase of common stock                                      | —                       | (5,056)           | —                |
| Payment of preferred dividends  | —                       | (155)             | —                |
| Payment on capital lease obligation   | (4)                     | —                 | —                |
| Proceeds from notes payable   | —                       | —                 | 3,500            |
| Proceeds from line of credit  | —                       | 386               | 550              |
| Payments on line of credit  | —                       | (1,187)           | (200)            |
| <b>NET CASH PROVIDED BY FINANCING ACTIVITIES</b>                            | <b>818</b>              | <b>238,546</b>    | <b>17,514</b>    |
| <b>NET CHANGE IN CASH AND CASH EQUIVALENTS</b>                              | <b>(121,361)</b>        | <b>180,434</b>    | <b>9,536</b>     |
| <b>CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR</b>                       | <b>191,602</b>          | <b>11,168</b>     | <b>1,632</b>     |
| <b>CASH AND CASH EQUIVALENTS AT END OF YEAR</b>                             | <b>\$ 70,241</b>        | <b>\$ 191,602</b> | <b>\$ 11,168</b> |
| <b>SUPPLEMENTAL CASH FLOW INFORMATION:</b>                                  |                         |                   |                  |
| Cash paid during the period for interest                                    | \$ —                    | \$ 1,767          | \$ 47            |
| <b>NON-CASH INVESTING AND FINANCING ACTIVITIES</b>                          |                         |                   |                  |
| Dividends accreted on preferred stock                                       | \$ —                    | \$ 1,432          | \$ 1,094         |
| Conversion of notes payable into preferred stock                            | \$ —                    | \$ —              | \$ 3,500         |
| Preferred stock dividends paid in common stock                              | \$ —                    | \$ 3,196          | \$ —             |
| Capital lease obligation incurred for property and equipment                | \$ 135                  | \$ —              | \$ —             |
| Accrued liabilities for purchases of property and equipment                 | \$ 139                  | \$ —              | \$ —             |

The accompanying notes are an integral part of these financial statements.



**NOTE 1 - ORGANIZATION AND BUSINESS DESCRIPTION**

Bellicum Pharmaceuticals, Inc. (the Company or Bellicum), was incorporated in Delaware in July 2004 and is based in Houston, Texas. The Company is a clinical stage biopharmaceutical company focused on discovering and developing novel cellular immunotherapies for various forms of cancer, including both hematological cancers and solid tumors, as well as orphan inherited blood disorders. The Company is devoting substantially all of its present efforts to developing next-generation product candidates in some of the most important areas of cellular immunotherapy, including, hematopoietic stem cell transplantation, CAR-T and TCR cell therapy. The Company has not generated any revenue from product sales to date and does not anticipate generating revenues from product sales in the foreseeable future.

The Company is subject to risks common to companies in the biotechnology industry and the future success of the Company is dependent on its ability to successfully complete the development of and obtain regulatory approval for its product candidates, manage the growth of the organization, obtain additional financing necessary in order to develop, launch and commercialize its product candidates, and compete successfully with other companies in its industry.

**NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES*****Basis of Presentation***

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America. Any reference in these footnotes to applicable guidance is meant to refer to the authoritative U.S. generally accepted accounting principles (GAAP) as found in the Accounting Standards Codification (ASC) and Accounting Standards Update (ASU) of the Financial Accounting Standards Board (FASB).

***Use of Estimates***

The preparation of the financial statements in accordance with GAAP requires management to make certain estimates and judgments that affect the reported amounts of assets, liabilities, and expenses. Actual results could differ from those estimates.

Prior to becoming a public company, the Company utilized significant estimates and assumptions in determining the fair value of its common stock for financial reporting purposes. Historically, prior to the Company's initial public offering (IPO) of its common stock, in December 2014, the fair values of the shares of common stock underlying the Company's share-based awards were estimated on each grant date by its board of directors. Given the absence of a public trading market for the Company's common stock, its board of directors exercised reasonable judgment and considered a number of objective and subjective factors to determine the best estimate of the fair value of its common stock, including its stage of development; its operational and financial performance; the nature of its services and its competitive position in the marketplace; the value of companies that it considers peers based on a number of factors, including similarity to the Company with respect to industry and business model; the likelihood of achieving a liquidity event, such as an initial public offering and the nature and history of its business; issuances of preferred stock and the rights, preferences, and privileges of its preferred stock relative to those of its common stock; business conditions and projections; the history of the Company and progress of its research and development efforts and clinical trials; and the lack of marketability of its common stock.

***Revenue Recognition***

The Company has not yet generated any revenue from product sales. The Company's sole source of revenue has been grant revenue related to a \$5.7 million research grant received from the Cancer Prevention and Research Institute of Texas (CPRIT), covering a three-year period from July 1, 2011 through June 30, 2014, and a \$1.0 million research grant from the National Institutes of Health (NIH) covering the period from April 2013 to March 2016. Grant payments received prior to the Company's performance of work required by the terms of the research grant are recorded as deferred revenue and recognized as grant revenue once work is performed and qualifying costs are incurred. (See Note 10).

***Cash and Cash Equivalents***

The Company considers all short-term, highly liquid investments with maturity of three months or less from the date of purchase to be cash equivalents.

***Investment Securities***

Consistent with its investment policy, the Company invests its cash allocated to fund its short-term liquidity requirements with prominent financial institutions in bank depository accounts and institutional money market funds. The Company invests the remainder of its cash in corporate debt securities and municipal bonds rated at least A quality or equivalent, U.S. Treasury notes and bonds and U.S. and state government agency-backed securities.

The Company determines the appropriate classification of investment securities based on their maturity dates at the time of purchase and reevaluates its classification as of each balance sheet date. All investment securities owned were classified as available-for-sale. The cost of securities sold is based on the specific identification method. Investment securities are recorded as of each balance sheet date at fair value, with unrealized gains and, to the extent deemed temporary, unrealized losses included in stockholders' equity. Interest and dividend income on investment securities, accretion of discounts and amortization of premiums and realized gains and losses are included in interest income in the statements of operations and comprehensive income (loss).

An investment security is considered to be impaired when a decline in fair value below its cost basis is determined to be other than temporary. The Company evaluates whether a decline in fair value of an investment security is below its cost basis is other than temporary using available evidence. In the event that the cost basis of the investment security exceeds its fair value, the Company evaluates, among other factors, the amount and duration of the period that the fair value is less than the cost basis, the financial health of and business outlook for the issuer, including industry and sector performance, and operational and financing cash flow factors, overall market conditions and trends, the Company's intent to sell the investment security and whether it is more likely than not the Company would be required to sell the investment security before its anticipated recovery. If a decline in fair value is determined to be other than temporary, the Company records an impairment charge in the statement of comprehensive loss and establishes a new cost basis in the investment.

***Property and Equipment***

Leasehold improvements, furniture, lab equipment or other equipment and software are recorded at cost and are depreciated using the straight-line method over the estimated useful lives of the related assets, which range from three to five years. Leasehold improvements are amortized over the shorter of the estimated useful life or the remaining lease term.

***Impairment of Long-Lived Assets***

The Company reviews long-lived assets for impairment when events or changes in business conditions indicate that their carrying value may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset. There were no impairment charges related to long-lived assets for the years ended December 31, 2015, 2014 and 2013.

***Deferred Rent***

The Company recognizes rent expense for leases with increasing annual rents on a straight-line basis over the term of the lease. The amount of rent expense in excess of cash payments is classified as deferred rent. Any lease incentives received are deferred and amortized over the term of the lease.

***Clinical Trials***

The Company estimates its clinical trial expense accrual for a given period based on the number of patients enrolled at each site, estimated cost per patient, and the length of time each patient has been in the trial, less amounts previously billed. These accruals are recorded in accrued expenses and other current liabilities, and the related expense is recorded in research and development expense.

***Fair Value of Financial Instruments***

Accounting standards include disclosure requirements around fair values used for certain financial instruments and establish a fair value hierarchy. The three-tier hierarchy prioritizes valuation inputs into three levels based on the extent to which inputs used in measuring fair value are observable in the market, as described further in Note 4.

The Company believes the recorded values of its financial instruments, including cash and cash equivalents, accounts payable and accrued liabilities approximate their fair values due to the short-term nature of these instruments.

***Financial Instruments and Credit Risks***

Financial instruments that potentially subject the Company to credit risk include cash and cash equivalents, investment securities, accounts receivable. Cash is deposited in demand accounts in federally insured domestic institutions to minimize risk. Insurance is provided through the Federal Deposit Insurance Corporation (FDIC) and Security Investor Protection Corporation (SIPC). Although the balances in these accounts exceed the federally insured limit from time to time, the Company has not incurred losses related to these deposits.

***Equity Issuance Costs***

Equity issuance costs represent costs paid to third parties in order to obtain equity financing. These costs have been netted against the proceeds of the equity issuances.

***Licenses and Patents***

Licenses and patent costs for technologies that are utilized in research and development and have no alternative future use are expensed as incurred. Costs related to the license of patents from third parties and internally developed patents are classified as research and development expenses. Legal costs related to patent applications and maintenance are classified as general and administrative expenses.

***Research and Development***

Research and development expenses consist of expenses incurred in performing research and development activities, including compensation and benefits for research and development employees and consultants, facilities expenses, overhead expenses, cost of laboratory supplies, manufacturing expenses, fees paid to third parties and other outside expenses.

Research and development costs are expensed as incurred. Clinical trial and other development costs incurred by third parties are expensed as the contracted work is performed. The Company accrues for costs incurred as the services are being provided by monitoring the status of the clinical trial or project and the invoices received from its external service providers. The Company estimates depend on the timeliness and accuracy of the data provided by the vendors regarding the status of each project and total project spending. The Company adjusts its accrual as actual costs become known. Where contingent milestone payments are due to third parties under research and development arrangements, the milestone payment obligations are expensed when the milestone events are achieved.

***Reclassifications***

Certain research and development indirect costs, including facilities and overhead, were previously included in general and administrative costs. These research and development indirect costs are included in research and development expense for the year ended December 31, 2015. The results for the year ended December 31, 2014 and 2013, have been reclassified to conform to the current year presentation. The effect of the reclassification of the results for the years ended December 31, 2014 and 2013, was to increase research and development expense and reduce general and administrative expense by \$1.1 million and \$0.8 million, respectively, with no change in total operating expense or net loss.

***Contract Manufacturing Services***

Contract manufacturing services are expensed as incurred. Prepaid expenses are capitalized and amortized as services are performed.

***Share-Based Compensation***

The Company accounts for its share-based compensation in accordance with ASC 718, *Compensation — Stock Compensation*, which requires the measurement and recognition of compensation expense for all share-based payment awards made to employees and directors to be recognized in the financial statements, based on their fair value. The Company measures share-based compensation to consultants in accordance with ASC 505-50, *Equity-Based Payments to Non-Employees*, and recognizes the fair value of the award over the period the services are rendered or goods are provided.

The Company uses the Black-Scholes option-pricing model to estimate the fair value of stock option awards. The fair value is recognized as expense, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award on a straight-line basis. Prior to the Company's IPO on December 23, 2014, the determination of the grant date fair

value of options using the Black-Scholes option-pricing model was affected by the Company's estimated common stock fair value, as well as assumptions regarding a number of other complex and subjective variables.

### ***Income Taxes***

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. This method also requires the recognition of future tax benefits such as net operating loss and tax credit carry forwards, to the extent that realization of such benefits is more likely than not. A valuation allowance is recorded when the realization of future tax benefits is uncertain. The Company records a valuation allowance for the full amount of deferred tax assets, which would otherwise be recorded for tax benefits relating to the operating loss and tax credit carryforwards, as realization of such deferred tax assets cannot be determined to be more likely than not.

Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the statement of operations in the period that includes the enactment date.

The Company accounts for uncertain tax positions in accordance with the provisions of ASC 740, *Income Taxes*. When uncertain tax positions exist, the Company recognizes the tax benefit of tax positions to the extent that the benefit will more likely than not be realized. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. As of December 31, 2015, 2014 and 2013, the Company had no uncertain tax positions and no interest or penalties have been charged to the Company for the years ended December 31, 2015, 2014 and 2013. If incurred, the Company will classify any interest and penalties as a component of interest expense and operating expense, respectively. The Company is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The tax years 2004 through 2015 remain open to examination by the Internal Revenue Service.

### ***Comprehensive Loss***

Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period, from transactions, and other events and circumstances from non-owner sources. Components of comprehensive income (loss) includes, among other items, unrealized gains and losses on the changes in fair value of investments. These components are added, net of their related tax effect, to the reported net income (loss) to arrive at comprehensive income (loss). The components of accumulated other comprehensive loss at December 31, 2015, on the Company's balance sheet was comprised of the net unrealized holding losses on the Company's investment securities. There was no similar accumulated other comprehensive income or loss components at December 31, 2014 and 2013. See Note 4 for further detail of the unrealized holding gains and losses on the Company's investment securities.

### ***Net Loss and Net Loss per Share of Common Stock Attributable to Common Stockholders***

Basic net loss per share attributable to common stockholders is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of share of common stock outstanding during the period without consideration for common stock equivalents. Diluted net loss per share of common stock is the same as basic net loss per share of common stock, since the effects of potentially dilutive securities are antidilutive. The net loss per share of common stock attributable to common stockholders is computed using the two-class method required for participating securities. All series of the Company's convertible preferred stock are considered to be participating securities as they are entitled to participate in undistributed earnings with shares of common stock. Due to the Company's net loss, there is no impact on the earnings per share calculation in applying the two-class method since the participating securities have no legal requirement to share in any losses.

## Notes to the Financial Statements

The following outstanding shares of common stock equivalents were excluded from the computations of diluted net loss per shares of common stock attributable to common stockholders for the periods presented as the effect of including such securities would be anti-dilutive.

|   | Number of shares  |                   |                   |
|---|-------------------|-------------------|-------------------|
|   | December 31, 2015 | December 31, 2014 | December 31, 2013 |
| Series A Convertible Preferred Stock - as converted to common stock | —                 | —                 | 1,496,782         |
| Series B Convertible Preferred Stock - as converted to common stock | —                 | —                 | 3,860,754         |
| Warrants to purchase common stock                                   | —                 | —                 | 866,570           |
| Options to purchase common stock                                    | 3,628,973         | 2,733,793         | 1,574,398         |
| Stock dividends to be issued as payment for Series B dividends      | —                 | —                 | 101,951           |
| Unvested shares of restricted stock                                 | 88,236            | 117,647           | —                 |
| Total common stock equivalents                                      | 3,717,209         | 2,851,440         | 7,900,455         |

### Recently Issued Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, “*Revenue from Contracts with Customers*”, which amends FASB ASC Topic 606. ASU 2014-09 provides a single, comprehensive revenue recognition model for all contracts with customers. This standard contains principles for the determination of the measurement of revenue and the timing of when such revenue is recognized. Revenue recognition will reflect the transfer of goods or services to customers at an amount that is expected to be earned in exchange for those goods or services. ASU 2014-09 was scheduled to be effective for annual reporting periods beginning after December 15, 2016, and early adoption was not permitted. In August 2015, the FASB issued ASU No. 2015-14, “*Revenue from Contracts with Customers: Deferral of Effective Date*”, which defers the effective date of ASU 2014-09 by one year. ASU 2014-19 is now effective for annual periods after December 15, 2017 including interim periods within that reporting period. Early application is permitted only for annual periods beginning after December 15, 2016, including interim periods within that reporting period. Management is currently evaluating the impact of this pronouncement on the Company’s financial statements.

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 will explicitly require management to assess an entity’s ability to continue as a going concern, and to provide related footnote disclosure in certain circumstances. This pronouncement is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016, and early adoption is permitted. Management does not expect the adoption of this pronouncement to have a material impact on the Company’s financial statements.

In November 2015, the FASB issued ASU No. 2015-17, “*Balance Sheet Classification of Deferred Taxes*.” ASU 2015-17 requires that deferred income tax liabilities and assets be classified as noncurrent in a classified statement of financial position. This pronouncement is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. Earlier application is permitted as of the beginning of an interim or annual reporting period. The Company elected to adopt this standard as of December 31, 2015, prospectively and the Company does not believe the adoption of this standard will have a material impact on the Company’s financial statements.

In January 2016, the FASB issued ASU No. 2016-01, “*Recognition and Measurement of Financial Assets and Financial Liabilities*.” ASU 2016-01 requires that most equity investments be measured at fair value, with subsequent changes in fair value recognized in net income. The pronouncement also impacts financial liabilities under the fair value option and the presentation and disclosure requirements for financial instruments. This pronouncement is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, and early adoption is not permitted. Management does not expect the adoption of this pronouncement to have a material impact on the Company’s financial statements.

In February 2016, the FASB issued ASU No. 2016-02, “*Leases*.” ASU 2016-01 requires companies that lease assets to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in its balance sheet. The pronouncement will also require additional disclosures about the amount, timing and uncertainty of cash flows arising from leases. This pronouncement is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018, and early adoption is permitted. Management is currently evaluating the impact of this pronouncement on the Company’s statements.

The Company has evaluated other recent accounting pronouncements and believes that none of them will have a material effect on the Company’s financial statements.



### NOTE 3 - CASH AND CASH EQUIVALENTS

As of December 31, 2015 and 2014, the Company invested approximately \$62.2 million and \$43.6 million, respectively, in cash equivalent instruments.

### NOTE 4 - FAIR VALUE OF MEASUREMENTS AND INVESTMENT SECURITIES

The Company follows ASC, Topic 820, *Fair Value Measurements and Disclosures*, or ASC 820, for application to financial assets. ASC 820 defines fair value, provides a consistent framework for measuring fair value under GAAP and requires fair value financial statement disclosures. ASC 820 applies only to the measurement and disclosure of financial assets that are required or permitted to be measured and reported at fair value under other ASC topics (except for standards that relate to share-based payments such as ASC Topic 718, *Compensation – Stock Compensation*).

The valuation techniques required by ASC 820 may be based on either observable or unobservable inputs. Observable inputs reflect readily obtainable data from independent sources, and unobservable inputs reflect the Company's market assumptions.

These inputs are classified into the following hierarchy:

*Level 1 Inputs – quoted prices (unadjusted) in active markets for identical assets that the reporting entity has the ability to access at the measurement date;*

*Level 2 Inputs – inputs other than quoted prices included within Level 1 that are observable for the asset, either directly or indirectly; and*

*Level 3 Inputs – unobservable inputs for the assets.*

The following tables present the Company's investment securities (including, if applicable, those classified on the Company's balance sheet as cash equivalents) that are measured at fair value on a recurring basis as of December 31, 2015 and 2014:

|  | Balance at<br>December 31, 2015 | Fair Value Measurements at Reporting Date Using                      |   |  |  |
|--|---------------------------------|--|---|--|--|
|  |                                 | Quoted prices in active<br>markets for identical<br>assets (Level 1) | Significant other<br>observable inputs<br>(Level 2) | Significant unobservable<br>inputs (Level 3) |  |
|  |                                 | (in thousands)   |   |  |  |
| Cash Equivalents:                        |                                 |  |   |  |  |
| Money market funds                       | \$ 52,714                       | \$ 52,714  | \$ —  | \$ —   |  |
| U.S. government agency-backed securities | 9,500                           | —  | 9,500   | —  |  |
| Total Cash Equivalents                   | \$ 62,214                       | \$ 52,714  | \$ 9,500  | \$ —   |  |
| Investment Securities:                   |                                 |  |   |  |  |
| U.S. government agency-backed securities | \$ 22,388                       | \$ —   | \$ 22,388   | \$ —   |  |
| Corporate debt securities                | 51,547                          | —  | 51,547  | —  |  |
| Municipal bonds                          | 6,189                           | —  | 6,189   | —  |  |
| Total Investment Securities              | \$ 80,124                       | \$ —   | \$ 80,124   | \$ —   |  |

|                        | Balance at<br>December 31, 2014 | Fair Value Measurements at Reporting Date Using                      |   |  |  |
|------------------------|---------------------------------|--|---|--|--|
|                        |                                 | Quoted prices in active<br>markets for identical<br>assets (Level 1) | Significant other<br>observable inputs<br>(Level 2) | Significant unobservable<br>inputs (Level 3) |  |
|                        |                                 | (in thousands)   |   |  |  |
| Cash Equivalents:      |                                 |  |   |  |  |
| Money market funds     | \$ 43,587                       | \$ 43,587  | \$ —  | \$ —   |  |
| Total Cash Equivalents | \$ 43,587                       | \$ 43,587  | \$ —  | \$ —   |  |

## Notes to the Financial Statements

U.S. Treasury, U.S. or state government agency-backed securities, corporate debt securities and municipal bonds are valued based on various observable inputs such as benchmark yields, reported trades, broker/dealer quotes, benchmark securities and bids.

Investment securities, all classified as available-for-sale, consisted of the following as of December 31, 2015:

| Investment Securities:                   | Amortized Cost   | Gross Unrealized Gains | Gross Unrealized Losses | Aggregate Estimated Fair Value |
|--|------------------|------------------------|-------------------------|--------------------------------|
|  | (in thousands)   |                        |                         |                                |
| U.S. government agency-backed securities | \$ 22,417        | \$ 1                   | \$ (30)                 | \$ 22,388                      |
| Corporate debt securities                | 51,807           | 1                      | (261)                   | 51,547                         |
| Municipal bonds                          | 6,200            | —                      | (11)                    | 6,189                          |
| Total Investment Securities              | <u>\$ 80,424</u> | <u>\$ 2</u>            | <u>\$ (302)</u>         | <u>\$ 80,124</u>               |

The Company's investment securities as of December 31, 2015, will reach maturity between January 2016 and July 2026, with a weighted-average maturity date in February 2017. There were no investment securities held at December 31, 2014.

### NOTE 5 - PROPERTY AND EQUIPMENT

Property and equipment consists of the following:

|                                     |                        | December 31,    |                 |
|-------------------------------------|------------------------|-----------------|-----------------|
|                                     |                        | 2015            | 2014            |
|                                     | Estimated Useful Lives | (in thousands)  |                 |
| Leasehold improvements              | 5 years                | \$ 4,092        | \$ 1,506        |
| Lab equipment                       | 5 years                | 3,741           | 1,717           |
| Office furniture                    | 5 years                | 931             | 335             |
| Software                            | 3 years                | 109             | 75              |
| Computer equipment                  | 3 to 5 years           | 401             | 205             |
| Equipment held under capital leases | 5 years                | 135             | —               |
| Total                               |                        | <u>9,409</u>    | <u>3,838</u>    |
| Less: accumulated depreciation      |                        | <u>(2,527)</u>  | <u>(1,411)</u>  |
| Property and equipment, net         |                        | <u>\$ 6,882</u> | <u>\$ 2,427</u> |

During the years ended December 31, 2015, 2014, and 2013, the Company recorded \$1.2 million, \$0.7 million and \$0.6 million of depreciation expense, respectively.

**NOTE 6 - ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES**

Accrued expenses and other liabilities consist of the following:

|  | December 31,    |                 |
|--|-----------------|-----------------|
|  | 2015            | 2014            |
|  | (in thousands)  |                 |
| Accrued payroll                                      | \$ 1,332        | \$ 731          |
| Manufacturing costs                                  | 2,412           | —               |
| Patient treatment costs                              | 333             | 128             |
| Medical facility fees                                | 282             | 201             |
| Commission on exercise of warrants                   | —               | 731             |
| Other  | 721             | 372             |
| Total accrued expenses and other current liabilities | <u>\$ 5,080</u> | <u>\$ 2,163</u> |

**NOTE 7 - DEFERRED MANUFACTURING COSTS**

At December 31, 2014, the Company had deferred manufacturing costs of \$0.3 million and a credit against future manufacturing costs of \$0.2 million, pursuant to a service agreement with a third party manufacturer. The deferred manufacturing cost was amortized as manufacturing batches of cell therapy products were produced and the credit was recognized monthly over the term of the agreement. In September 2015, the Company and the third party manufacturer agreed to amend the service agreement, pursuant to which both parties were released from all prior obligations except for a 30-day transition period during which the third party would continue to manufacture batches in process, not to exceed three batches. As a result of the amendment to the agreement, and the release of its obligations, the Company reversed the remaining deferred manufacturing costs and credit against future manufacturing costs, resulting in a decrease of \$0.3 million in research and development expenses for the year ended December 31, 2015.

**NOTE 8 - COMMON STOCK, PREFERRED STOCK AND WARRANTS**
*Common Stock*

As of December 31, 2015 and 2014, the Company had 200,000,000 authorized shares of common stock with a par value of \$0.01 per share.

**Exercise of Common Warrants**

In March 2014, the Company issued 393,523 shares of its common stock for \$200,700, or \$0.51 per share in connection with the exercise of warrants expiring in March 2014.

In December 2014, the Company issued 117,001 shares of common stock for \$49,001, or \$0.42 per share in connection with the exercise of warrants expiring in 2015.

In December 2015, the Company issued 355,361 shares of its common stock to the Texas Treasury Safekeeping Trust Company (a transferee of the Office of the Governor - Economic Development and Tourism), pursuant to the cashless exercise provision of a warrant to purchase shares of the Company's common stock issued to the State of Texas on September 27, 2007. The Company did not receive any cash or other consideration.

**Initial Public Offering**

On December 17, 2014, the Company commenced its initial public offering (IPO) pursuant to a registration statement on Form S-1 (File No. 333- 200328) that was declared effective by the SEC on December 17, 2014 and that registered an aggregate of 7,350,000 shares of the Company's common stock for sale to the public at a price of \$19.00 per share. In addition, at the closing of the IPO on December 23, 2014, the underwriters exercised their over-allotment option to purchase 1,102,500 additional shares of the Company's common stock at a price to the public of \$19.00 per share, for an aggregate offering price of \$160.6 million. The net offering proceeds to the Company, after deducting underwriting discounts, commissions and offering costs, were approximately \$146.3 million.

**Treasury Stock**

In December 2014, in connection with the restructuring of the license agreement with ARIAD Pharmaceuticals, Inc. (ARIAD), the Company repurchased from ARIAD 677,463 shares of its common stock valued at approximately \$5.1 million. See Note 11.

**Preferred Stock**

As of December 2015 and 2014, the Company had 10,000,000 authorized shares of preferred stock. There were no shares of preferred stock issued or outstanding at December 31, 2015 and 2014.

The Company had two series of convertible redeemable preferred stock issued and outstanding as of December 31, 2013: Series A convertible redeemable preferred stock (Series A) and Series B convertible redeemable preferred stock (Series B), each with a par value of \$0.01. The shares of Series A were issued between March 2009 and November 2011 at a price of \$3.00 per share. The shares of Series B were issued between November 2011 and January 2014 at a price of \$4.625 per share. On August 22, 2014, the Company filed an amended restated Certificate of Incorporation pursuant to which the Company was authorized to issue Series C convertible preferred stock (Series C, and collectively with the Series A and Series B, the preferred stock), and certain changes were made to the rights, preferences and privileges of Series A and Series B.

On August 22, 2014, the Company issued 10,091,743 shares of Series C at a purchase price of \$5.45 per share and warrants to purchase up to 6,559,598 shares of Series C with an exercise price of \$6.00 per share. The warrants had a five year term, but were subject to earlier termination in the event of a Qualified IPO (as defined in the warrants) on or prior to March 31, 2015, or upon a merger or sale of the Company. The Company received net proceeds from the issuance of Series C preferred stock of \$51.5 million, net of offering costs of \$3.5 million. All of the preferred stock was converted to common stock upon the closing of the IPO, and no shares of preferred stock remained outstanding at December 31, 2015 and 2014.

The following table summarizes the Company's preferred shares for the three years ended December 31, 2015:

|   | (in thousands, except shares) |               |                  |             |               |                  |              |               |                  |
|---|-------------------------------|---------------|------------------|-------------|---------------|------------------|--------------|---------------|------------------|
|   | Series A                      |               |                  | Series B    |               |                  | Series C     |               |                  |
|   | Shares                        | Initial Value | Redemption Value | Shares      | Initial Value | Redemption Value | Shares       | Initial Value | Redemption Value |
| Outstanding January 1, 2013                                   | 2,544,539                     | \$ 7,634      | \$ 7,634         | 2,849,929   | \$ 13,181     | \$ 14,024        | —            | \$ —          | \$ —             |
| Issuance of Series B preferred stock for cash, net            | —                             | —             | —                | 2,955,857   | 13,671        | 13,671           | —            | —             | —                |
| Conversion of debt and interest into Series B preferred stock |                               |               |                  | 757,497     | 3,503         | 3,503            |              |               |                  |
| Accretion of Series B dividends                               |                               |               |                  |             | -             | 1,094            |              |               |                  |
| Outstanding December 31, 2013                                 | 2,544,539                     | \$ 7,634      | \$ 7,634         | 6,563,283   | \$ 30,355     | \$ 32,292        | —            | \$ —          | \$ —             |
| Issuance of Series B preferred stock for cash, net            | —                             | —             | —                | 1,582,706   | 7,320         | 7,320            |              |               |                  |
| Issuance of Series C preferred stock for cash, net            |                               |               |                  |             |               |                  | 10,091,743   | 42,074        | 42,074           |
| Issuance of Series C preferred stock on exercise of warrants  |                               |               |                  |             |               |                  | 6,524,195    | 72,187        | 72,187           |
| Accretion of Series B dividends                               |                               |               |                  |             | -             | 1,432            |              |               |                  |
| Payment of Series B dividends                                 |                               |               |                  |             |               | (173)            |              |               |                  |
| Conversion to common stock                                    | (2,544,539)                   | (7,634)       | (7,634)          | (8,145,989) | (37,675)      | (40,871)         | (16,615,938) | (114,261)     | (114,261)        |
| Outstanding December 31, 2014                                 | —                             | \$ —          | \$ —             | —           | \$ —          | \$ —             | —            | \$ —          | \$ —             |
| Outstanding December 31, 2015                                 | —                             | \$ —          | \$ —             | —           | \$ —          | \$ —             | —            | \$ —          | \$ —             |

The rights, preferences and privileges of the preferred stock, as of December 31, 2014, were as follows:

#### *Optional Conversion*

Each share of Series A, Series B and Series C was convertible, at the option of the holder at any time and without additional consideration, into one share of common stock. The conversion prices of the Series A, Series B and Series C were \$3.00 per share, \$4.625 per share and \$5.45 per share, respectively. The rate at which shares of preferred stock were convertible into shares of common stock, was subject to anti-dilution protection in the event of certain dilutive issuances of capital stock.

#### *Mandatory Conversion*

Upon the closing of the IPO, all of the outstanding shares of preferred stock automatically converted into shares of the Company's common stock, at a conversion ratio adjusted for the prior 1-for-1.7 reverse split of our common stock.

#### *Dividends*

Through August 22, 2014, the holders of Series B were entitled to receive an annual dividend, payable quarterly, if, as and when declared, and if not paid, accrued, equal to 6% of the Series B original issue price, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to Series B. This dividend was cumulative, but not compounded. No dividends or other distributions could be declared or paid with respect to the Series A or common stock, other than dividends payable solely in common stock, unless and until all dividends due on Series B have been paid or declared and set apart for payment. On August 22, 2014, the Series B dividend was made non-cumulative and cumulative Series B dividends of \$3.4 million were declared and paid in December 2014 in conjunction with the IPO.

#### **Warrants**

##### *Series C Warrants*

In connection with the August 2014 issuance of Series C convertible preferred stock, Bellicum issued warrants to purchase 6,559,598 shares of Series C convertible preferred stock with an exercise price of \$6.00 per share which were convertible into 3,858,549 common shares. The fair value of the warrants on the date of issuance of \$9.4 million, as determined using the Black-Scholes option-pricing model, was recorded as a warrant liability. The Series C warrants were revalued both at September 30, 2014 to \$10.6 million, and again at the time of exercise in December 2014 to \$33.8 million. The increase in the calculated fair value from the issuance date to the remeasurement dates required the recording of a non-cash charge of \$24.4 million in 2014, of which \$23.2 million was a fourth quarter expense. Subsequent to the IPO in December 2014, 6,524,195 of the Series C warrants were exercised and converted into 3,837,727 shares of common stock. The Company received cash proceeds of approximately \$39.2 million as a result of the Series C warrant exercise. Holders of 35,403 Series C warrants chose not to exercise their warrants, and those warrants have expired.

#### **NOTE 9 - SHARE-BASED COMPENSATION PLANS**

The Company has four share-based compensation plans, which authorize the granting of shares of common stock and options to purchase common stock to employees and directors of the Company, as well as non-employee consultants, and allows the holder of the option to purchase common stock at a stated exercise price. Options vest according to the terms of the grant, which may be immediately or based on the passage of time, generally over four years, and have a term of up to 10 years. Unexercised stock options terminate on the expiration date of the grant. The Company recognizes the share-based compensation expense over the requisite service period of the individual grantees, which generally equals the vesting period.

##### 2006 Stock Option Plan

The 2006 Stock Option Plan (the 2006 Plan) provided for the issuance of non-qualified stock options to employees, including officers, non-employee directors and consultants to the Company. A total of 151,410 and 167,056 options were outstanding under this plan as of December 31, 2015 and 2014. As of December 31, 2015, there were no additional shares available for grant under the 2006 Plan. Options under the 2006 Plan were exercised for cash proceeds to the Company of \$6,980.

### 2011 Stock Option Plan

The 2011 Stock Option Plan (the 2011 Plan) provided for the issuance of incentive and non-qualified stock options to employees, including officers, non-employee directors and consultants to the Company. The 2011 Plan replaced the 2006 Plan. There were 2,256,120 and 2,425,561 outstanding options under this plan at December 31, 2015 and 2014, respectively. As of December 31, 2015, there were no additional shares available for grant under this plan. During 2015 and 2014, a total of 166,592 and 12,615 options outstanding under the 2011 Plan, respectively, were exercised for cash proceeds to the company of \$0.5 million and \$11,250, respectively.

### 2014 Equity Incentive Plan

The 2014 Equity Incentive Plan (the 2014 Plan) became effective in December 2014, upon the closing of the IPO. The 2014 Plan provides for the issuance of equity awards, including incentive and non-qualified stock options and restricted stock awards to employees, including officers, non-employee directors and consultants to the Company or its affiliates. The 2014 Plan also provides for the grant of performance cash awards and performance-based stock awards. The aggregate number of shares of common stock that are authorized for issuance under the 2014 Plan is 2,990,354 shares, plus any shares subject to outstanding options that were granted under the 2011 Plan or 2006 Plan that are forfeited, terminated, expired or are otherwise not issued. There were 1,221,443 and 141,176 outstanding options under this plan at December 31, 2015 and 2014, respectively. There were 88,236 and 117,647 shares of restricted stock outstanding under the Plan at December 31, 2015 and 2014, respectively.

### 2014 Employee Stock Purchase Plan

The 2014 Employee Stock Purchase Plan (the ESPP) was adopted in December 2014 upon the closing of the IPO and provides for eligible Company employees, as defined by the ESPP, to be given an opportunity to purchase the Company's common stock at a discount, through payroll deductions, with stock purchases being made upon defined purchase dates. The ESPP authorizes the issuance of up to 550,000 shares of the Company's common stock, pursuant to purchase rights granted to its employees. The ESPP was approved by the Company's board of directors and stockholders in December 2014 and employee payroll deductions of approximately \$0.4 million were withheld during year ended December 31, 2015. During the year ended December 31, 2015, 21,690 shares were purchased pursuant to the ESPP and the Company received \$0.3 million in proceeds. There were no ESPP stock purchases during the year ended December 31, 2014. The Company recorded share-based compensation expense for shares purchased for less than fair market value under the ESPP of \$0.2 million, for the year ended December 31, 2015. There was \$0.2 million and \$0.4 million of unrecognized compensation expense related to the ESPP as of December 31, 2015 and 2014, respectively, which will be recognized over the remaining 12 months of the plan.

### Share-Based Compensation Expense

The valuation of the share-based compensation awards is a significant accounting estimate that requires the use of judgment and assumptions that are likely to have a material impact on the financial statements. The fair value of option grants is determined using the Black-Scholes option-pricing model. Expected volatilities utilized in the model are based on implied volatilities from traded stocks of peer companies. Similarly, the dividend yield is based on historical experience and the estimate of future dividend yields. The risk-free interest rate is derived from the U.S. Treasury yield curve in effect at the time of grant. The expected term of the options is based on the average period the stock options are expected to remain outstanding. As the Company does not have sufficient historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior, the expected term is calculated as the midpoint between the weighted-average vesting term and the contractual expiration period also known as the simplified method. The Company assumed no awards would be forfeited during the vesting period, as actual forfeitures have been minimal through December 31, 2015.

The fair value of the option grants have been estimated, with the following weighted-average assumptions:

|                         | Year Ended December 31, |       |       |
|-------------------------|-------------------------|-------|-------|
|                         | 2015                    | 2014  | 2013  |
| Risk-free interest rate | 1.71%                   | 1.86% | 1.58% |
| Volatility              | 74%                     | 95%   | 90%   |
| Expected life (years)   | 6.08                    | 6.09  | 6.25  |
| Expected dividend yield | 0%                      | 0%    | 0%    |

## Notes to the Financial Statements

Share-based compensation for the years ended December 31, 2015, 2014 and 2013, are as follows:

|                            | Year Ended December 31, |               |               |
|----------------------------|-------------------------|---------------|---------------|
|                            | 2015                    | 2014          | 2013          |
|                            | (in thousands)          |               |               |
| General and administrative | \$ 4,832                | \$ 386        | \$ 19         |
| Research and development   | 3,577                   | 525           | 372           |
| Total                      | <u>\$ 8,409</u>         | <u>\$ 911</u> | <u>\$ 391</u> |

Stock option activity for the years ended December 31, 2015 and 2014 is as follows:

| Options                             | Outstanding Stock Options | Weighted-Average Exercise Price | Weighted-Average Remaining Contractual Term (in years) | (in thousands) Aggregate Intrinsic Value |
|-------------------------------------|---------------------------|---------------------------------|--|--|
| Balance at December 31, 2013        | 1,574,398                 | \$ 2.33                         | 8.26   | <u>\$ 275</u>                            |
| Granted                             | 1,188,806                 | \$ 8.67                         |  |  |
| Exercised                           | (12,615)                  | \$ 2.55                         |  |  |
| Forfeited                           | (16,796)                  | \$ 2.55                         |  |  |
| Balance at December 31, 2014        | 2,733,793                 | \$ 5.09                         | 8.39   | <u>\$ 49,076</u>                         |
| Granted                             | 1,089,767                 | \$ 22.23                        |  |  |
| Exercised                           | (182,238)                 | \$ 2.64                         |  | <u>\$ 3,236</u>                          |
| Forfeited                           | (12,349)                  | \$ 14.99                        |  |  |
| Balance at December 31, 2015        | <u>3,628,973</u>          | <u>\$ 10.32</u>                 | <u>8.03</u>  | <u>\$ 39,021</u>                         |
| Exercisable as of December 31, 2015 | <u>1,677,355</u>          | <u>\$ 3.84</u>                  | <u>6.82</u>  | <u>\$ 27,612</u>                         |

Restricted stock share activity for the year ended December 31, 2015 and 2014 is as follows:

| Restricted Stock Shares      | Outstanding Restricted Shares | Weighted-Average Fair Value at Date of Grant Per Share |
|------------------------------|-------------------------------|--|
| Balance at December 31, 2013 | —                             |  |
| Granted                      | 117,647                       | \$ 19.00   |
| Vested                       | —                             |  |
| Forfeited                    | —                             |  |
| Balance at December 31, 2014 | 117,647                       | \$ 19.00   |
| Granted                      | —                             | —  |
| Vested                       | (29,411)                      | \$ 19.00   |
| Forfeited                    | —                             | —  |
| Balance at December 31, 2015 | <u>88,236</u>                 | <u>\$ 19.00</u>  |



## Notes to the Financial Statements

The following table includes share-based payment activity for the years ended December 31, 2015, 2014 and 2013:

|   | Year Ended December 31,          |          |         |
|---|----------------------------------|----------|---------|
|   | 2015                             | 2014     | 2013    |
|   | (in thousands, except per share) |          |         |
| Weighted-average grant date fair value of options granted           | \$ 16.09                         | \$ 13.30 | \$ 1.38 |
| Weighted-average grant date fair value of restricted shares granted | \$ —                             | \$ 19.00 | \$ —    |
| Aggregate intrinsic value of options exercised                      | \$ 3,236                         | \$ 59    | \$ —    |
| Total fair value of restricted shares vested                        | \$ 656                           | \$ —     | \$ —    |
| Cash received by Company upon option exercises                      | \$ 482                           | \$ 11    | \$ —    |

The following table summarizes the options outstanding and exercisable at December 31, 2015:

| Options Outstanding |              |  |                                 | Options Exercisable |  |                                 |
|---------------------|--------------|--|---------------------------------|---------------------|--|---------------------------------|
| Exercise Price      | Total Shares | Weighted-Average Remaining Contractual Term (in years) | Weighted-Average Exercise Price | Total Shares        | Weighted-Average Remaining Contractual Term (in years) | Weighted-Average Exercise Price |
| \$ .51 to \$2.55    | 1,412,543    | 6.37   | \$ 2.33                         | 1,346,174           | 6.31   | \$ 2.32                         |
| \$ 7.47 to \$19.00  | 1,282,663    | 8.97   | \$ 9.60                         | 303,380             | 8.87   | \$ 8.90                         |
| \$ 20.09 to \$24.48 | 933,767      | 9.24   | \$ 23.40                        | 27,801              | 9.43   | \$ 22.40                        |
| Total               | 3,628,973    | 8.03   | Total                           | 1,677,355           | 6.82   |                                 |

At December 31, 2015, total compensation cost not yet recognized was \$27.1 million and the weighted average period over which this amount is expected to be recognized is 3.02 years. The aggregate fair value of options vesting in the years ended December 31, 2015, 2014 and 2013 was \$5.5 million, \$0.3 million and \$0.1 million, respectively.

### NOTE 10 - GRANT REVENUE

#### *CPRIT Grant*

On July 27, 2011, the Company entered into a Cancer Research Grant Contract (Grant Contract) with the Cancer Prevention and Research Institute of Texas (CPRIT) under which CPRIT awarded a grant not to exceed approximately \$5.7 million to be used by the Company for the execution of defined clinical development of BPX-501. The Grant Contract terminated on June 30, 2014. The terms of the Grant Contract require the Company to pay tiered royalties on revenues from sales and licenses of intellectual property facilitated by the Grant Contract.

During 2015, 2014, and 2013, the Company incurred \$-, \$1.4 million and \$1.8 million of expenses under the Grant Contract, respectively. As of December 31, 2015 and 2014, the Company had an outstanding grant receivable of \$- million and \$0.3 million, respectively, for grant expenditures that were paid but had not yet been reimbursed.

#### *NIH Grant*

During 2015, 2014 and 2013, the Company was awarded \$0.3 million, \$0.3 million and \$0.4 million, respectively, under a grant from the National Institutes of Health (NIH). The awards cover the period from April 2013 through March 2016. The awards were made pursuant to the authority of 42 USC 241 42 CFR 52, and are subject to the requirements of the statute. Funds spent on the grant are reimbursed through monthly reimbursement requests.

As of December 31, 2015, 2014 and 2013, funds spent under the grant were \$0.3 million, \$0.3 million and \$0.2 million, respectively. As of December 31, 2015, the Company had an outstanding grant receivable of \$57,000. As of December 31, 2014, the Company had deferred revenue of \$13,000 related to the grant.

#### NOTE 11 - ARIAD RESTRUCTURING COSTS

On March 7, 2011, the Company entered into an amended and restated exclusive license agreement with ARIAD (Amended ARIAD License) which amended a license agreement entered into by the parties in 2006. Under the Amended ARIAD License, ARIAD granted to the Company an exclusive (even as to the ARIAD) license, with the right to grant sublicenses, under ARIAD's patent rights relating to dimerizers, genetic constructs coding for dimerizer binding domains, vectors containing said constructs, cells containing said constructs and methods of inducing biological processes in cells containing said constructs. These licensed patent rights were initially limited to the fields of cell transplantation and certain types of cancer.

In connection with the initial license, in 2006, the Company issued 121,241 shares of its common stock to ARIAD which were subject to antidilution protection that ultimately resulted in additional issuances to ARIAD by the Company of 556,222 shares of the Company's common stock, such that ARIAD received a total of 677,463 shares of common stock under the license agreement. In addition, the Company paid ARIAD a license fee of \$250,000 in connection with the amendment in 2011. The Amended ARIAD license also provided for certain royalty and milestone payments, which were subsequently terminated pursuant to an omnibus amendment agreement with ARIAD.

Under the Amended ARIAD License, the Company is required to diligently proceed with the development, manufacture and sale of licensed products. The Amended ARIAD License is subject at all times to restrictions and obligations under a license agreement by and between ARIAD Gene Therapeutics, Inc. (one of ARIAD's affiliates which merged into ARIAD) and the academic institution from which ARIAD obtained its license to the underlying technology. While the Company is not required to pay royalties or fees to such academic institution, no sublicensee of the Company's may enter into a sublicense with respect to any intellectual property owned by the academic institution without its consent, which terms must be consistent with those included in the agreement between ARIAD and such academic institution.

The Amended ARIAD License will expire upon expiration of the last license term of a licensed product covered by the agreement, which is either the later of (i) 12 years from the date of the first commercial sale of the licensed product, or (ii) expiration of a valid claim on the licensed product. Either party to the license may terminate or modify the Amended ARIAD License upon a material breach by the other party that remains uncured following the date that is 30 days after written notice of a payment breach and 90 days for any other breach, and effective immediately upon bankruptcy of the other party. The Company may terminate the amended ARIAD license in its sole discretion at any time if the Company determines not to develop or commercialize any licensed product. In addition, upon termination of the amended ARIAD license prior to expiration, the Company must transfer any ownership and any beneficial ownership in any orphan drug designation or any similar designation in any jurisdiction of orphan drug status of the ARIAD dimerizer to ARIAD.

On October 3, 2014, the Company entered into an omnibus amendment agreement with ARIAD, under which the Company agreed to make payments of \$50.0 million in exchange for an expansion of the license field, the termination of all obligations to make milestone and royalty payments to ARIAD in the future and the return of 677,463 shares of common stock held by ARIAD.

In connection with the amendment, the Company made an initial payment of \$15.0 million and issued a promissory note to ARIAD for a principal amount of \$35.0 million. Per the promissory note terms, the principal would not accrue interest unless the Company was in default, in which case it would accrue at a rate of 10% per annum. In December 2014, following the Company's IPO, the Company paid the remaining \$35.0 million and ARIAD returned all 677,463 shares of common stock of the Company that ARIAD held. The license transaction was valued on the date of the transaction and the note was discounted to fair market value at a 10% rate. This resulted in the ARIAD license expense of \$43.2 million, repurchase of common stock for \$5.1 million and interest expense of \$1.7 million. The Company has recorded the returned shares of common stock as treasury stock.

**NOTE 12 - COMMITMENTS AND CONTINGENCIES**
***Operating Lease Agreements***

In December 2012, the Company entered into a five years lease agreement for its administrative and research and development activities. In 2013, the lease was amended to include additional space and in 2014, the lease was amended again to include additional space and extend the term of the lease. After the 2013 and 2014 amendments, the leased premises totals 35,250 square feet. The lease includes escalating base rent payments, which initially increased on November 1, 2013, and then increased again on December 31, 2013. An additional base rent increase became effective February 1, 2015 as a result of the 2014 lease modification. Subsequently, an increase in the base rent payment will occur during the last month of each year. This escalating base rent payment structure will continue through the expiration of the lease on January 31, 2020.

On May 6, 2015, the Company entered into an additional operating lease agreement for the lease of approximately 26,817 square feet which the Company will use to enable in-house cell therapy manufacturing. The term of the lease began on September 1, 2015 and will continue for an initial term of five years, which may be renewed for five additional one year periods. The Company is required to remit base monthly rent of approximately \$66,531 which will increase at various approximate rates between of 3.5% to 5% each year through the expiration of the lease in August 2020. The Company is also required to pay additional rent in the form of its pro rata share of certain specified operating expenses of the landlord. An early termination right is available to the Company upon certain events, including the landlord's default on its obligations under the lease.

***Capital Lease Agreements***

The Company entered into two office equipment leases during 2015, which expire in 2021. The office equipment leases are being accounted for as capital leases under FASB Topic ASC 840 - Leases. The present value of the minimum lease payments are greater than 90% or more than the fair market value of the leased equipment and the lease terms are 6 years.

Aggregate future minimum annual payments under operating and capital leases at December 31, 2015, are as follows:

| Year                  | Operating Leases |       | Capital Leases |
|-----------------------|------------------|-------|----------------|
|                       | (in thousands)   |       |                |
| 2016                  | \$               | 1,857 | \$ 42          |
| 2017                  |                  | 1,903 | 42             |
| 2018                  |                  | 1,950 | 42             |
| 2019                  |                  | 2,001 | 42             |
| 2020                  |                  | 704   | 42             |
| Thereafter            |                  | —     | 25             |
| Total minimum rentals | \$               | 8,415 | \$ 235         |

***License Agreement - Agensys, Inc.***

On December 10, 2015, the Company and Agensys, Inc. (Agensys), entered into a license agreement (the Agreement), pursuant to which (i) Agensys granted the Company, within the field of cell and gene therapy of diseases in humans, an exclusive, worldwide license and sublicense to its patent rights directed to prostate stem cell antigen 1 ("PSCA") and related antibodies, and (ii) the Company granted Agensys a non-exclusive, fully paid license to the Company's patents directed to inventions that were made by the Company in the course of developing the Company's licensed products, solely for use with Agensys therapeutic products containing a soluble antibody that binds to PSCA or, to the extent not based upon Bellicum's other proprietary technology, to non-therapeutic applications of antibodies not used within the field.

As consideration for the rights granted to the Company under the Agreement, the Company agreed to pay to Agensys a non-refundable upfront fee of \$3,000,000, which is included in license fee expense. The Company is also required to make aggregate milestone payments to Agensys of up to (i) \$5,000,000 upon the first achievement of certain specified clinical milestones for its licensed products, (ii) \$50,000,000 upon the achievement of certain specified clinical milestones for each licensed product, and (iii) \$75,000,000 upon the achievement of certain sales milestones for each licensed product. The Agreement additionally provides that the Company will pay to Agensys a royalty that ranges from the mid to high single digits based on the level of annual net sales of licensed products by the Company, its affiliates or permitted sublicensees. The royalty payments are subject to reduction under

specified circumstances. These milestone and royalty payments will be expensed as incurred.

Under the Agreement, Agensys also was granted the option to obtain an exclusive license, on a product-by-product basis, from the Company to commercialize in Japan each licensed product developed under the Agreement that has completed a phase 2 clinical trial. As to each such licensed product, if Agensys or its affiliate, Astellas Pharma, Inc., exercises the option, the Agreement provides that the Company will be paid an option exercise fee of \$5,000,000. In addition, the Agreement provides that the Company will be paid a royalty that ranges from the mid to high single digits based on the level of annual net sales in Japan of each such licensed product. If the option is exercised, the aggregate milestone payments payable by the Company to Agensys, described above with respect to each licensed product, would be reduced by up to an aggregate of \$65,000,000 upon the achievement of certain specified clinical and sales milestones.

The Agreement will terminate upon the expiration of the last royalty term for the products covered by the Agreement, which is the earlier of (i) the date of expiration or abandonment of the last valid claim within the licensed patent rights covering any licensed products under the Agreement, (ii) the expiration of regulatory exclusivity as to a licensed product, and (iii) 10 years after the first commercial sale of a licensed product. Either party may terminate the Agreement upon a material breach by the other party that remains uncured following 60 days after the date of written notice of such breach (or 30 days if such material breach is related to failure to make payment of amounts due under the Agreement) or upon certain insolvency events. In addition, Agensys may terminate the Agreement immediately upon written notice to the Company if the Company or any of its affiliates or permitted sublicensees commences an interference proceeding or challenges the validity or enforceability of any of Agensys' patent rights.

#### ***License Agreement - BioVec***

On June 10, 2015, the Company and BioVec Pharma, Inc. (BioVec) entered into a license agreement (the BioVec Agreement) pursuant to which BioVec agreed to supply the Company with certain proprietary cell lines and granted to the Company a non-exclusive, worldwide license to certain of its patent rights and related know-how related to such proprietary cell lines.

As consideration for the products supplied and rights granted to the Company under the BioVec Agreement, the Company agreed to pay to BioVec an upfront fee of \$100,000 within ten business days of the effective date of the BioVec Agreement and a fee of \$300,000 within ten business days of its receipt of the first release of GMP lot of the products licensed under the BioVec Agreement. In addition, the Company agreed to pay to BioVec an annual fee of \$150,000, commencing 30 days following the first filing of an Investigational New Drug Application (an IND filing), or its foreign equivalent, for a product covered by the license; with such annual fees being creditable against any royalties payable by the Company to BioVec under the BioVec Agreement. The Company also is required to make a \$250,000 milestone payment to BioVec for each of the first three licensed products to enter into a clinical phase trial and one-time milestone payments of \$2,000,000 upon receipt of a registration granted by the Federal Drug Administration or European Medicines Agency on each of the Company's first three licensed products. The BioVec Agreement additionally provides that the Company will pay to BioVec a royalty in the low single digits on net sales of products covered by the BioVec Agreement. The Company may also grant sublicenses under the licensed patent rights and know-how to third parties for limited purposes related to the use, sale and other exploitation of the products licensed under the BioVec Agreement. The BioVec Agreement will continue until terminated. The BioVec Agreement may be terminated by the Company, in its sole discretion, at any time upon 90 days written notice to BioVec. Either party may terminate the BioVec Agreement in the event of a breach by the other party of any material provision of the BioVec Agreement that remains uncured on the date that is 60 days after written notice of such failure or upon certain insolvency events that remain uncured following the date that is 30 days after the date of written notice to a party regarding such insolvency event. The Company recognized expenses of \$100,000 in connection with the BioVec License Agreement for the year ended December 31, 2015. The Company was not required to make any milestone payments for the year ended December 31, 2015.

#### ***License Agreement - Leiden***

On April 23, 2015, the Company and Academisch Ziekenhuis Leiden, also acting under the name Leiden University Medical Centre (Leiden), entered into a license agreement (the Leiden Agreement), pursuant to which Leiden granted to the Company an exclusive, worldwide license to its patent rights covering high affinity T-cell receptors targeting preferentially-expressed antigen in melanoma, (PRAME) and POU2AF1 epitopes. The license granted under the Leiden Agreement is subject to certain restrictions and to Leiden's retained right to use the licensed patents solely for academic research and teaching purposes, including research collaborations by Leiden with academic, non-profit research third parties; provided that Leiden provides 30 days advance written notice to the Company of such academic research collaborations.

As consideration for the rights granted to the Company under the Leiden Agreement, the Company agreed to pay to Leiden an aggregate of EUR 75,000 in upfront fees within 30 days of the effective date of the Leiden Agreement. In addition, the Company

agreed to pay to Leiden, beginning on the eighth anniversary of the effective date of the Leiden Agreement, annual minimum royalty payments of EUR 30,000. The Company also is required to make milestone payments to Leiden of up to an aggregate of EUR 1,025,000 for each of the first licensed product that is specific to PRAME and to POU2AF1. The Leiden Agreement additionally provides that the Company will pay to Leiden a royalty in the low single digits on net sales of products covered by the Leiden Agreement. If the Company enters into a sublicensing agreement with a third party related to a product covered by the Leiden Agreement, the Company agreed to pay Leiden a percentage ranging in the low double digits on all non-royalty income received from sublicensing revenue directly attributable to the sublicense, dependent on whether the Company is in phase 1/2, phase 2 or phase 3 at the time that the Company enters into any such sublicensing agreement.

Under the Leiden Agreement, the Company and Leiden entered into a sponsored research agreement, pursuant to which the Company is required to pay Leiden up to EUR 300,000 over a three years period during the term of the sponsored research agreement. The Leiden Agreement will expire upon the expiration of the last patent included in the licensed patent rights. The Leiden Agreement may be terminated earlier upon mutual written agreement between the Company and Leiden, and at any time by the Company upon six months written notice to Leiden. Leiden may terminate the Leiden Agreement in the event of a failure by the Company to pay any amounts due under the Leiden Agreement that remains uncured on the date that is 30 days after written notice of such failure. Either party may terminate the Leiden Agreement upon a material breach by the other party that remains uncured following 30 days after the date of written notice of such breach or upon certain insolvency events that remain uncured following the date that is 45 days after the date of written notice to a party of such insolvency event. The Company recognized \$84,000 of expenses in connection with the Leiden License Agreement for the year ended December 31, 2015. The Company was not required to make any milestone payments for the year ended December 31, 2015.

#### ***Employment agreements***

The Company has signed agreements with thirteen of its officers and key employees to provide certain benefits in the event of a “change of control” as defined in these agreements and the occurrence of certain other events. The agreements provide for a lump-sum payment in cash equal to 12 to 18 months of annual base salary and annual cash bonus, if any. The annual base salary and annual cash bonus portion of the agreements would aggregate approximately \$4.6 million at the rate of compensation in effect at December 31, 2015. In addition, the agreements provide for continuation of certain insurance and other benefits for periods of 12 to 18 months.

#### ***Litigation***

The Company, from time to time, may be involved in litigation relating to claims arising out of its ordinary course of business. Management believes that there are no material claims or actions pending or threatened against the Company.

**NOTE 13 - INCOME TAXES**

The Company did not recognize tax expense during 2015, 2014 or 2013.

The reconciliation between federal income taxes at the statutory rate and the Company's income tax expense for the year is as follows:

|                                    | December 31,   |             |            |
|------------------------------------|----------------|-------------|------------|
|                                    | 2015           | 2014        | 2013       |
|                                    | (in thousands) |             |            |
| U.S. tax benefit at statutory rate | \$ (16,506)    | \$ (28,548) | \$ (2,709) |
| Meals and entertainment            | 24             | 10          | 4          |
| Incentive stock options            | 12             | 98          | 115        |
| Warrant expense                    | —              | 8,286       | —          |
| Federal deferred tax true-up       | (187)          | —           | —          |
| Return to provision                | (2)            | —           | —          |
| Deferred tax valuation allowances  | 17,920         | 20,586      | 3,027      |
| Research and development credit    | (1,261)        | (432)       | (437)      |
| Income tax expense                 | \$ —           | \$ —        | \$ —       |

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes, and the amounts used for income tax purposes. Significant components of the Company's deferred taxes as of December 31, 2015 and 2014 are as follows:

|  | December 31,   |          |
|--|----------------|----------|
|  | 2015           | 2014     |
|  | (in thousands) |          |
| Deferred tax liabilities:                |                |          |
| Depreciation                             | \$ (933)       | \$ (127) |
| Prepaid expenses                         | —              | (189)    |
| Tenant improvement allowance             | —              | (83)     |
| Total deferred tax liabilities           | (933)          | (399)    |
| Deferred tax assets:                     |                |          |
| Net operating loss carry-forward         | 28,229         | 14,044   |
| Nonqualified stock options               | 2,248          | 268      |
| Restricted stock expense                 | 20             | 16       |
| Employee stock purchase plan             | 82             | —        |
| Tenant improvement liability             | 341            | 96       |
| Deferred contract manufacturing costs    | —              | 161      |
| Intangible assets                        | 15,716         | —        |
| Unrealized loss on investment securities | 103            | —        |
| Research and development credit          | 2,519          | 1,258    |
| ARIAD license restructuring              | —              | 14,977   |
| Other                                    | 23             | 7        |
| Total deferred tax assets                | 49,281         | 30,827   |
| Valuation allowance                      | (48,348)       | (30,428) |
| Total deferred tax                       | \$ —           | \$ —     |
| Net current deferred tax liability       | \$ —           | \$ (175) |
| Net non-current deferred tax asset       | —              | 175      |
| Total deferred tax                       | \$ —           | \$ —     |

As of December 31, 2015 and 2014, the Company had gross federal income tax net operating loss (NOL) carry forwards of \$83.0 million and \$41.3 million, respectively, and federal research tax credits of \$2.5 million and \$1.3 million, respectively. The net operating loss carry-forwards will expire beginning in 2025, if not utilized. In assessing the realization of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax asset will be realized. The ultimate realization of deferred tax assets is dependent upon the Company attaining future taxable income during periods in which those temporary differences become deductible.

## Notes to the Financial Statements

Due to the uncertainty surrounding the realization of the benefits of its deferred assets, including net operating loss carry forwards, the Company has provided a 100% valuation allowance on its deferred tax assets at December 31, 2015 and 2014. The increases in the valuation allowance were \$18.0 million and \$20.6 million for the years ended December 31, 2015 and 2014, respectively.

The Internal Revenue Code Section 382 limits net operating loss and tax credit carry forwards when an ownership change of more than 50% of the value of the stock in a loss corporation occurs. Accordingly, the ability to utilize remaining net operating loss and tax credit carry forwards may be significantly restricted.

### NOTE 14 - SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

Selected quarterly financial data (unaudited) for the year ended December 31, 2015 and 2014 is presented below:

|  | (in thousands except per share data) (1) |                |               |                       |
|--|--|----------------|---------------|-----------------------|
| 2015   | First Quarter                            | Second Quarter | Third Quarter | Fourth Quarter<br>(2) |
| Total revenues   | \$ 107                                   | \$ 84          | \$ 57         | \$ 34                 |
| Loss from operations   | \$ (7,808)                               | \$ (10,705)    | \$ (13,617)   | \$ (17,005)           |
| Net loss   | \$ (7,758)                               | \$ (10,534)    | \$ (13,408)   | \$ (16,848)           |
| Net loss per share attributable to common shareholders - basic and diluted | \$ (0.30)                                | \$ (0.40)      | \$ (0.51)     | \$ (0.63)             |
| 2014   | First Quarter                            | Second Quarter | Third Quarter | Fourth Quarter<br>(3) |
| Total revenues   | \$ 552                                   | \$ 553         | \$ 660        | \$ 15                 |
| Loss from operations   | \$ (2,277)                               | \$ (3,273)     | \$ (2,898)    | \$ (49,390)           |
| Net loss   | \$ (2,290)                               | \$ (3,281)     | \$ (4,097)    | \$ (74,298)           |
| Preferred dividends  | \$ (540)                                 | \$ (564)       | \$ (328)      | \$ —                  |
| Net loss attributable to common shareholders                               | \$ (2,830)                               | \$ (3,845)     | \$ (4,425)    | \$ (74,298)           |
| Net loss per share attributable to common shareholders - basic and diluted | \$ (1.52)                                | \$ (1.81)      | \$ (2.08)     | \$ (18.99)            |

(1) The amounts were computed independently for each quarter, and the sum of the quarters may not total the annual amounts due to rounding.

(2) The 2015 fourth quarter results include a non-refundable upfront fee to Agensys of \$3.0 million under the license agreement. See Note 12.

(3) The 2014 fourth quarter results include ARIAD license restructuring of \$43.2 million and the change in fair value of the warrant liability of \$23.2 million. See Note 11.

### NOTE 15 - SUBSEQUENT EVENTS

On March 10, 2016 (the Closing Date), the Company, entered into a Loan and Security Agreement (the Loan Agreement) with Hercules Capital, Inc. (Hercules), as agent and a lender, Hercules Technology II, L.P., as a lender and Hercules Technology III, L.P., as a lender, under which the Company borrowed \$15.0 million on the Closing Date and may borrow an additional \$5.0 million on or prior to September 15, 2016. Subject to the terms and conditions of the Loan Agreement, including approval by Hercules' investment committee, and the Company's achievement of specified milestones in the Loan Agreement (the Milestones), the Company may borrow an additional \$10.0 million through March 15, 2017. The Company intends to use the proceeds received under the Loan Agreement for funding the build-out of our manufacturing facilities and general corporate purposes.

The interest rate will be calculated at a rate equal to the greater of either (i) 9.35% plus the prime rate as reported in The Wall Street Journal minus 3.50%, and (ii) 9.35%. Payments under the Loan Agreement are interest only for 18 months from the Closing Date, extendable to 24 months upon the Company achieving the Milestones. The interest only period will be followed by equal monthly payments of principal and interest amortized over a 30 months schedule through the maturity date of March 1, 2020 (the "Loan



Maturity Date”); provided that if the Milestones are achieved, the Company will make equal monthly payments of principal and interest amortized over a 24 months schedule through the Loan Maturity Date. The remaining principal balance will be due and payable on the Loan Maturity Date. In addition, upon the Loan Maturity date or such earlier date specified in the Loan Agreement, a final payment equal to \$1,216,250, plus, subject to and contingent on the funding of the additional \$5.0 million loan advance, \$173,750; plus, subject to and contingent on the funding of the additional \$10.0 million loan advance, \$695,000. The Company’s obligations under the Loan Agreement are secured by a security interest in substantially all of its assets, other than its intellectual property.

If the Company prepays the loan, including interest, prior to December 31, 2016, there will be no prepayment penalty. If the Company prepays the loan, including interest, after January 1, 2017 but prior to the date that is 24 months following the Closing Date, it will pay Hercules a prepayment charge based on a prepayment fee equal to 2.00% of the amount prepaid; if the prepayment occurs thereafter, it will pay Hercules a prepayment charge based on a prepayment fee equal to 1.00% of the amount prepaid. The prepayment charge is also applicable upon the occurrence of a change of control of the Company.

The Loan Agreement includes customary affirmative and restrictive covenants, but does not include any financial maintenance covenants, and also includes standard events of default, including payment defaults. Upon the occurrence of an event of default, a default interest rate of an additional 5% may be applied to the outstanding loan balance and Hercules may declare all outstanding obligations immediately due and payable and take such other actions as set forth in the Loan Agreement.

The description of the Loan Agreement contained herein does not purport to be complete and is qualified in its entirety by reference to the complete text of the Loan Agreement, including the exhibits thereto, a copy of which will be filed as an exhibit to the Company’s Quarterly Report on Form 10-Q for the period ending March 31, 2016.

## **ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

None.

## **ITEM 9A. Controls and Procedures**

### **Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of our Chief Executive Officer and Chief Financial and Accounting Officer (our principal executive officer and principal financial officer, respectively), evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of December 31, 2015. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure.

Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of December 31, 2015, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective.

### **Management’s Annual Report on Internal Controls over Financial Reporting**

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). Our internal control over financial reporting is designed under the supervision of our Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with United States generally accepted accounting principles.

Management, including our Chief Executive Officer and Chief Financial and Accounting Officer, has assessed the effectiveness of our internal control over financial reporting based on the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework. Based on our evaluation, management has concluded that our internal control over financial reporting was effective as of December 31, 2015.

This Annual Report does not include an attestation report of our registered public accounting firm due to a transition period established by the JOBS Act applicable to emerging growth companies.

### **Inherent Limitations of Internal Controls**

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 risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### **Changes in Internal Control over Financial Reporting**

There were no changes in our internal control over financial reporting during our latest fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## **ITEM 9B. Other Information**

None.

## PART III

### **ITEM 10. Directors, Executive Officers and Corporate Governance**

The information required by this item and not set forth below will be set forth in the sections headed “Election of Directors,” “Executive Officers” and “Section 16(a) Beneficial Ownership Reporting Compliance” in our definitive proxy statement for our 2016 Annual Meeting of Stockholders, or our Proxy Statement, to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2015, and is incorporated herein by reference.

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial and accounting officer or controller, or persons performing similar functions, known as the Code of Business Conduct and Ethics. The Code of Business Conduct and Ethics is available on our website at [www.bellicum.com](http://www.bellicum.com) under the Corporate Governance section of our Investors & Media page. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for any officer or director, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K.

### **ITEM 11. Executive Compensation**

The information required by this item will be set forth in the section headed “Executive and Director Compensation” in our Proxy Statement and is incorporated herein by reference.

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

The information required by this item will be set forth in the section headed “Equity Benefit Plans” and “Security Ownership of Certain Beneficial Owners and Management” in our Proxy Statement and is incorporated herein by reference.

The information required by Item 201(d) of Regulation S-K will be set forth in the section headed “Executive and Director Compensation” in our Proxy Statement and is incorporated herein by reference.

### **ITEM 13. Certain Relationships and Related Party Transactions, and Director Independence**

The information required by this item will be set forth in the sections headed “Certain Relationships and Related Party Transactions” and “Election of Directors” in our Proxy Statement and is incorporated herein by reference.

### **ITEM 14. Principal Accounting Fees and Services**

The information required by this item will be set forth in the section headed “Principal Accounting Fees and Services” in our Proxy Statement and is incorporated herein by reference.

**PART IV**

**ITEM 15. Exhibits, Financial Statements and Schedules**

(a)(1) Financial Statements.

The response to this portion of Item 15 is set forth under Part II, Item 8 above.

(a)(2) Financial Statement Schedules.

None.

(a)(3) Exhibits.

See the Exhibit Index immediately following the signature page of this Annual Report. The exhibits listed in the Exhibit Index below are filed or incorporated by reference as part of this Annual Report.

## 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.

### Bellicum Pharmaceuticals, Inc.

Date: March 14, 2016

By: /s/ Thomas J. Farrell

Thomas J. Farrell

*President and Chief Executive Officer*

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Thomas J. Farrell as his true and lawful attorney-in-fact, with the power of substitution, for him in any and all capacities, to sign any amendments to this report, and to file the same, with exhibits thereto and other documents in connection therewith with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorney-in-fact, or his substitute or substitutes may do or cause to be done by virtue hereof.

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 in the capacities and on the dates indicated:

| Signature   | Title   | Date           |
|---|---|----------------|
| <u>/s/ Thomas J. Farrell</u><br>Thomas J. Farrell         | President, Chief Executive Officer and Member of the Board of Directors<br><i>(Principal Executive Officer)</i> | March 14, 2016 |
| <u>/s/ Alan A. Musso</u><br>Alan A. Musso                 | Chief Financial Officer and Treasurer<br><i>(Principal Financial and Accounting Officer)</i>                    | March 14, 2016 |
| <u>/s/ Kevin M. Slawin, M.D.</u><br>Kevin M. Slawin, M.D. | Chief Technology Officer and Member of the Board of Directors   | March 14, 2016 |
| <u>/s/ James Brown</u><br>James Brown                     | Chairman of the Board of Directors  | March 14, 2016 |
| <u>/s/ Reid M. Huber, Ph.D.</u><br>Reid M. Huber, Ph.D.   | Member of the Board of Directors  | March 14, 2016 |
| <u>/s/ Frank B. McGuyer</u><br>Frank B. McGuyer           | Member of the Board of Directors  | March 14, 2016 |
| <u>/s/ Jon P. Stonehouse</u><br>Jon P. Stonehouse         | Member of the Board of Directors  | March 14, 2016 |
| <u>/s/ Stephen R. Davis</u><br>Stephen R. Davis           | Member of the Board of Directors  | March 14, 2016 |

## INDEX TO EXHIBITS

| Exhibit<br>Number | Description   |
|-------------------|---|
| 3.1               | Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant’s Current Report on Form 8-K, filed with the SEC on December 23, 2014).   |
| 3.2               | Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant’s Current Report on Form 8-K, filed with the SEC on December 23, 2014).   |
| 4.1               | Reference is made to Exhibits 3.1 and 3.2.  |
| 4.2               | Form of Common Stock Certificate of the Registrant (incorporated by reference to Exhibit 4.1 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).   |
| 4.3               | Second Amended and Restated Investor Rights Agreement by and among the Registrant and certain of its stockholders, dated August 22, 2014 (incorporated by reference to Exhibit 4.2 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                   |
| 4.4               | Registration Rights Agreement by and among the Registrant and Baker Brothers Life Sciences, LP, and two of its affiliated funds, dated January 15, 2016.  |
| 10.1+             | Form of Indemnification Agreement by and between the Registrant and its directors and officers (incorporated by reference to Exhibit 10.1 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).  |
| 10.2+             | Bellicum Pharmaceuticals, Inc. 2006 Stock Option Plan and Form of Nonqualified Stock Option Agreement (incorporated by reference to Exhibit 10.2 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).   |
| 10.3+             | Bellicum Pharmaceuticals, Inc. 2011 Stock Option Plan and Forms of Incentive Stock Option Grant Agreement and Nonqualified Stock Option Agreement (incorporated by reference to Exhibit 10.3 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).         |
| 10.4+             | Bellicum Pharmaceuticals, Inc. 2014 Equity Incentive Plan and Form of Stock Option Grant Notice, Stock Option Agreement and Notice of Exercise thereunder (incorporated by reference to Exhibit 10.4 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014). |
| 10.5+             | Bellicum Pharmaceuticals, Inc. Non-Employee Director Compensation Policy.   |
| 10.6+             | Third Amended and Restated Employment Agreement by and between the Registrant and Thomas J. Farrell, dated November 17, 2014 (incorporated by reference to Exhibit 10.6 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                              |
| 10.7+             | Amended and Restated Employment Agreement by and between the Registrant and David M. Spencer, Ph.D., dated November 17, 2014 (incorporated by reference to Exhibit 10.7 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                              |
| 10.8+             | Employment Agreement by and between the Registrant and Joseph H. Senesac, dated November 16, 2014 (incorporated by reference to Exhibit 10.12 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).  |
| 10.9+             | Employment Agreement by and between the Registrant and Peter L. Hoang, dated November 17, 2014 (incorporated by reference to Exhibit 10.13 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).   |
| 10.10             | Notice of Expansion of Licensed Field to Obtain Additional Exclusive Rights (incorporated by reference to Exhibit 10.14 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).  |
| 10.11*            | Amended and Restated License Agreement by and between the Registrant and ARIAD Pharmaceuticals, Inc., dated March 7, 2011 (incorporated by reference to Exhibit 10.15 to the Registrant’s Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                                |

| Exhibit Number | Description  |
|----------------|--|
| 10.12*         | Omnibus Amendment Agreement by and between Registrant and ARIAD Pharmaceuticals, Inc., dated October 3, 2014 (incorporated by reference to Exhibit 10.16 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                                |
| 10.13*         | Exclusive License Agreement by and between the Registrant and Baylor College of Medicine, dated March 20, 2008 (incorporated by reference to Exhibit 10.17 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                              |
| 10.14*         | Exclusive License Agreement by and between the Registrant and Baylor College of Medicine, dated June 27, 2010 (incorporated by reference to Exhibit 10.18 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                               |
| 10.15*         | Cancer Research Grant Contract by and between the Registrant and the Cancer Prevention and Research Institute of Texas, dated July 27, 2011 (incorporated by reference to Exhibit 10.19 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014). |
| 10.16*         | Exclusive License Agreement by and between the Registrant and Baylor College of Medicine, effective November 1, 2014 (incorporated by reference to Exhibit 10.20 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                        |
| 10.17          | Lease Agreement by and between Registrant and Sheridan Hills Developments L.P., dated June 1, 2012 (incorporated by reference to Exhibit 10.21 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).  |
| 10.18          | First Amendment to Lease Agreement by and between Registrant and Sheridan Hills Developments L.P., dated September 13, 2013 (incorporated by reference to Exhibit 10.22 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                 |
| 10.19          | Second Amendment to Lease Agreement by and between Registrant and Sheridan Hills Developments L.P., dated June 20, 2014 (incorporated by reference to Exhibit 10.23 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                     |
| 10.20          | Third Amendment to Lease Agreement by and between Registrant and Sheridan Hills Developments L.P., dated July 21, 2014 (incorporated by reference to Exhibit 10.24 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                      |
| 10.21          | Fourth Amendment to Lease Agreement by and between Registrant and Sheridan Hills Developments L.P., dated November 12, 2014 (incorporated by reference to Exhibit 10.25 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                 |
| 10.22          | Loan and Security Agreement by and between the Registrant and Comerica Bank, dated December 13, 2012 (incorporated by reference to Exhibit 10.27 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).  |
| 10.23          | First Amendment to Loan and Security Agreement by and between the Registrant and Comerica Bank, dated March 1, 2014 (incorporated by reference to Exhibit 10.28 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                         |
| 10.24          | Second Amendment to Loan and Security Agreement by and between the Registrant and Comerica Bank, dated July 3, 2014 (incorporated by reference to Exhibit 10.29 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).                         |
| 10.25+         | Employment Agreement by and between the Registrant and Alan A. Musso, dated December 4, 2014 (incorporated by reference to Exhibit 10.30 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-200328), originally filed with the SEC on November 18, 2014).  |
| 10.26+         | Incentive Award Program (incorporated by reference to Exhibit 10.1 to the Registrant's report on Form 8-K filed with the SEC on February 27, 2015).  |
| 10.27+         | Amended and Restated Employment Agreement between the Registrant and Annemarie Moseley, Ph.D., dated April 1, 2015 (incorporated by reference to Exhibit 10.1 to the Registrant's report on Form 8-K filed with the SEC on April 7, 2015).   |
| 10.28+         | Employment Agreement between the Registrant and Kevin M. Slawin, M.D., dated April 6, 2015 (incorporated by reference to Exhibit 10.2 to the Registrant's Registration report on Form 8-K filed with the SEC on April 7, 2015)   |
| 10.29+         | Employment Agreement between the Registrant and Ken Mosley, dated April 1, 2015 (incorporated by reference to Exhibit 10.3 to the Registrant's report on Form 10-Q filed with the SEC on May 12, 2015)   |



| Exhibit Number | Description   |
|----------------|---|
| 10.30*         | License Agreement by and between the Registrant and Academish Ziekenhuis Leiden, also acting under the name Leiden University Medical Centre, effective as of April 20, 2015 (incorporated by reference to Exhibit 10.1 to the Registrant's report on Form 10-Q filed with the SEC on August 13, 2015). |
| 10.31*         | License Agreement by and between the Registrant and BioVec Pharma, Inc., dated as of June 4, 2015 (incorporated by reference to Exhibit 10.2 to the Registrant's report on Form 10-Q filed with the SEC on August 13, 2015).  |
| 10.32          | Lease Agreement by and between the Registrant and Sheridan Hills Developments L.P., dated as of May 6, 2015.  |
| 10.33#         | Exclusive License Agreement by and between the Registrant and Agensys, Inc., effective as of December 10, 2015.   |
| 23.1           | Consent of Ernst & Young LLP, an Independent Registered Public Accounting Firm.   |
| 24.1           | Power of Attorney. Reference is made to the signature page hereto.  |
| 31.1           | Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.  |
| 31.2           | Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.  |
| 32.1           | Certification of the Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.  |
| 32.2           | Certification of the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.  |

---

+ Indicates management contract or compensatory plan.

\* Confidential treatment has been granted with respect to certain portions of this exhibit. Omitted portions have been filed separately with the SEC.

# Certain provisions of this exhibit have been omitted pursuant to a request for confidential treatment.

## REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this “Agreement”) is made as of January 15, 2016, by and between Bellicum Pharmaceuticals, Inc., a Delaware corporation (the “Company”), and the persons listed on the attached Schedule A who are signatories to this Agreement (collectively, the “Investors”). Unless otherwise defined herein, capitalized terms used in this Agreement have the respective meanings ascribed to them in Section 1.

### RECITALS

**WHEREAS**, the Company and the Investors wish to provide for certain arrangements with respect to the registration of the Registrable Securities (as defined below) by the Company under the Securities Act (as defined below).

**NOW, THEREFORE**, in consideration of the mutual promises and covenants set forth herein, and other consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

### Section 1

#### Definitions

1.1. Certain Definitions. In addition to the terms defined elsewhere in this Agreement, as used in this Agreement, the following terms have the respective meanings set forth below:

(a) “Board” shall mean the Board of Directors of the Company.

(b) “Commission” shall mean the Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

(c) “Common Stock” shall mean the common stock of the Company, par value \$0.01 per share.

(d) “Exchange Act” shall mean the Securities Exchange Act of 1934, as amended, or any similar successor federal statute and the rules and regulations thereunder, all as the same shall be in effect from time to time.

(e) [Reserved]

(f) “Other Securities” shall mean securities of the Company, other than Registrable Securities (as defined below), with respect to which registration rights have been granted by the Company from time to time.

(g) “Person” shall mean any individual, partnership, corporation, company, association, trust, joint venture, limited liability company, unincorporated organization, entity or division, or any government, governmental department or agency or political subdivision thereof.

(h) “Registrable Securities” shall mean the shares of Common Stock and any Common Stock issued or issuable upon the exercise or conversion of any other securities (whether equity, debt or otherwise) of the Company now owned or hereafter acquired by any of the Investors.

(i) The terms “register,” “registered” and “registration” shall refer to a registration effected by preparing and filing a Registration Statement in compliance with the Securities Act, and such Registration Statement becoming effective under the Securities Act.

(j) “Registration Expenses” shall mean all expenses incurred by the Company in effecting any registration pursuant to this Agreement, including, without limitation, all registration, qualification, and filing fees, printing expenses, escrow fees, fees and disbursements of counsel for the Company and up to \$50,000 of reasonable legal expenses of one special counsel for Investors (if different from the Company’s counsel and if such counsel is reasonably approved by the Company) per underwritten public offering, blue sky fees and expenses, and expenses of any regular or special audits incident to or required by any such registration, but shall not include Selling Expenses.

(k) “Registration Statement” means any registration statement of the Company filed with, or to be filed with, the SEC under the Securities Act, including the related prospectus, amendments and supplements to such registration statement, including pre- and post-effective amendments, and all exhibits and all material incorporated by reference in such registration statement as may be necessary to comply with applicable securities laws other than a registration statement (and related prospectus) filed on Form S-4 or Form S-8 or any successor forms thereto.

(l) “Rule 144” shall mean Rule 144 as promulgated by the Commission under the Securities Act, as such rule may be amended from time to time, or any similar successor rule that may be promulgated by the Commission.

(m) “Securities Act” shall mean the Securities Act of 1933, as amended, or any similar successor federal statute and the rules and regulations thereunder, all as the same shall be in effect from time to time.

(n) “Selling Expenses” shall mean all underwriting discounts and selling commissions applicable to the sale of Registrable Securities, the fees and expenses of any legal counsel and any other advisors any of the Investors engage and all similar fees and commissions relating to the Investors’ disposition of the Registrable Securities.

**Section 2**  
**Resale Registration Rights**

**2.1. Resale Registration Rights.**

(a) Following demand by any Investor the Company shall file with the Commission a Registration Statement on Form S-3 (except if the Company is not then eligible to register for resale the Registrable Securities on Form S-3, in which case such registration shall be on another appropriate form in accordance with the Securities Act) covering the resale of the Registrable Securities by the Investors (the “Resale Registration Shelf”), and the Company shall file such Resale Registration Shelf as promptly as reasonably practicable following such demand, and in any event within sixty (60) days of such demand. Such Resale Registration Shelf shall include a “final” prospectus, including the information required by Item 507 of Regulation S-K of the Securities Act, as provided by the Investors in accordance with Section 2.7. Notwithstanding the foregoing, before filing the Resale Registration Shelf, the Company shall furnish to the Investors a copy of the Resale Registration Shelf and afford the Investors an opportunity to review and comment on the Resale Registration Shelf. The Company’s obligation pursuant to this Section 2.1(a) is conditioned upon the Investors providing the information contemplated in Section 2.7.

(b) The Company shall use its reasonable best efforts to cause the Resale Registration Shelf and related prospectuses to become effective as promptly as practicable after filing. The Company shall use its reasonable best efforts to cause such Registration Statement to remain effective under the Securities Act until the earlier of (i) all Registrable Securities covered by the Resale Registration Shelf have been sold or may be sold freely without limitations or restrictions as to volume or manner of sale pursuant to Rule 144 or (ii) all Registrable Securities covered by the Resale Registration Shelf otherwise cease to be Registrable Securities pursuant to Section 2.9 hereof. The Company shall promptly, and within two (2) business days after the Company confirms effectiveness of the Resale Registration Shelf with the Commission, notify the Investors of the effectiveness of the Resale Registration Shelf.

(c) Notwithstanding anything contained herein to the contrary, the Company shall not be obligated to effect, or to take any action to effect, a registration pursuant to Section 2.1(a):

(i) if the Company has and maintains an effective Registration Statement on Form S-3ASR that provides for the resale of an unlimited number of securities by selling stockholders (a “Company Registration Shelf”); or

(ii) during the period forty-five (45) days prior to the Company’s good faith estimate of the date of filing of a Company Registration Shelf; or

(iii) if the Company has caused a Registration Statement to become effective pursuant to this Section 2.1 during the prior twelve (12) month period.

(d) If the Company has a Company Registration Shelf in place at any time in which the Investors make a demand pursuant to Section 2.1(a), the Company shall file with the Commission, as promptly as practicable, and in any event within fifteen (15) business days after such demand, a “final” prospectus supplement to its Company Registration Shelf covering the resale of the Registrable Securities by the Investors (the “Prospectus”); provided, however, that the Company shall not be obligated to file more than one Prospectus pursuant to this Section 2.1(d) in any six month period to add additional Registrable Securities to the Company Registration Shelf that were acquired by the Investors other than directly from the Company or in an underwritten public offering by the Company. The Prospectus shall include the information required under Item 507 of Regulation S-K of the Securities Act, which information shall be provided by the Investors in accordance with Section 2.7. Notwithstanding the foregoing, before filing the Prospectus, the Company shall furnish to the Investors a copy of the Prospectus and afford the Investors an opportunity to review and comment on the Prospectus.

(e) Deferral and Suspension. At any time after being obligated to file a Resale Registration Shelf or Prospectus, or after any Resale Registration Shelf has become effective or a Prospectus filed with the Commission, the Company may defer the filing of or suspend the use of any such Resale Registration Shelf or Prospectus, upon giving written notice of such action to the Investors with a certificate signed by the Principal Executive Officer of the Company stating that in the good faith judgment of the Board, the filing or use of any such Resale Registration Shelf or Prospectus covering the Registrable Securities would be seriously detrimental to the Company or its stockholders at such time and that the Board concludes, as a result, that it is in the best interests of the Company and its stockholders to defer the filing or suspend the use of such Resale Registration Shelf or Prospectus at such time. The Company shall have the right to defer the filing of or suspend the use of such Resale Registration Shelf or Prospectus for a period of not more than one hundred twenty (120) days from the date the Company notifies the Investors of such deferral or suspension; provided that the Company shall not exercise the right contained in this Section 2.1(e) more than once in any twelve month period. In the case of the suspension of use of any effective Resale Registration Shelf or Prospectus, the Investors, immediately upon receipt of notice thereof from the Company, shall discontinue any offers or sales of Registrable Securities pursuant to such Resale Registration Shelf or Prospectus until advised in writing by the Company that the use of such Resale Registration Shelf or Prospectus may be resumed. In the case of a deferred Prospectus or Resale Registration Shelf filing, the Company shall provide prompt written notice to the Investors of (i) the Company’s decision to file or seek effectiveness of the Prospectus or Resale Registration Shelf, as the case may be, following such deferral and (ii) in the case of a Resale Registration Shelf, the effectiveness of

such Resale Registration Shelf. In the case of either a suspension of use of, or deferred filing of, any Resale Registration Shelf or Prospectus, the Company shall not, during the pendency of such suspension or deferral, be required to take any action hereunder (including any action pursuant to Section 2.2 hereof) with respect to the registration or sale of any Registrable Securities pursuant to any such Resale Registration Shelf, Company Registration Shelf or Prospectus.

(f) Other Securities. Subject to Section 2.2(e) below, any Resale Registration Shelf or Prospectus may include Other Securities, and may include securities of the Company being sold for the account of the Company; provided such Other Securities are excluded first from such Registration Statement in order to comply with any applicable laws or request from any Government Entity, Nasdaq or any applicable listing agency. For the avoidance of doubt, no Other Securities may be included in an underwritten offering pursuant to Section 2.2 without the consent of the Investors.

## 2.2. Sales and Underwritten Offerings of the Registrable Securities.

(a) Notwithstanding any provision contained herein to the contrary, the Investors, collectively, shall, subject to the limitations set forth in this Section 2.2, be permitted one underwritten public offering per calendar year, but no more than three underwritten public offerings in total, to effect the sale or distribution of Registrable Securities.

(b) If the Investors intend to effect an underwritten public offering pursuant to a Resale Registration Shelf or Company Registration Shelf to sell or otherwise distribute Registrable Securities, they shall so advise the Company and provide as much notice to the Company as reasonably practicable (and in any event not less than fifteen (15) business days prior to the Investors' request that the Company file a prospectus supplement to a Resale Registration Shelf or Company Registration Shelf).

(c) In connection with any offering initiated by the Investors pursuant to this Section 2.2 involving an underwriting of shares of Registrable Securities, the Investors shall be entitled to select the underwriter or underwriters for such offering, subject to the consent of the Company, such consent not to be unreasonably withheld, conditioned or delayed.

(d) In connection with any offering initiated by the Investors pursuant to this Section 2.2 involving an underwriting of shares of Registrable Securities, the Company shall not be required to include any of the Registrable Securities in such underwriting unless the Investors (i) enter into an underwriting agreement in customary form with the underwriter or underwriters, (ii) accept customary terms in such underwriting agreement with regard to representations and warranties relating to ownership of the Registrable Securities and authority and power to enter into such underwriting agreement and (iii) complete and execute all questionnaires, powers of attorney, custody agreements, indemnities and other documents as may be requested by such

underwriter or underwriters. Further, the Company shall not be required to include any of the Registrable Securities in such underwriting if (Y) the underwriting agreement proposed by the underwriter or underwriters contains representations, warranties or conditions that are not reasonable in light of the Company's then-current business or (Z) the underwriter, underwriters or the Investors require the Company to participate in any marketing, road show or comparable activity that may be required to complete the orderly sale of shares by the underwriter or underwriters.

(e) If the total amount of securities to be sold in any offering initiated by the Investors pursuant to this Section 2.2 involving an underwriting of shares of Registrable Securities exceeds the amount that the underwriters determine in their sole discretion is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities (subject in each case to the cutback provisions set forth in this Section 2.2(e)), that the underwriters and the Company determine in their sole discretion shall not jeopardize the success of the offering. If the underwritten public offering has been requested pursuant to Section 2.2(a) hereof, the number of shares that are entitled to be included in the registration and underwriting shall be allocated in the following manner: (a) first, shares of Company equity securities that the Company desires to include in such registration shall be excluded and (b) second, Registrable Securities requested to be included in such registration by the Investors shall be excluded. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round down the number of shares allocated to any of the Investors to the nearest 100 shares.

2.3. Fees and Expenses. All Registration Expenses incurred in connection with registrations pursuant to this Agreement shall be borne by the Company. All Selling Expenses relating to securities registered on behalf of the Investors shall be borne by the Investors.

2.4. Registration Procedures. In the case of each registration of Registrable Securities effected by the Company pursuant to Section 2.1 hereof, the Company shall keep the Investors advised as to the initiation of each such registration and as to the status thereof. The Company shall use its reasonable best efforts, within the limits set forth in this Section 2.4, to:

(a) prepare and file with the Commission such amendments and supplements to such Registration Statement and the prospectuses used in connection with such Registration Statement as may be necessary to keep such Registration Statement effective and current and comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such Registration Statement;

(b) furnish to the Investors such numbers of copies of a prospectus, including preliminary prospectuses, in conformity with the requirements of the Securities Act, and such



other documents as the Investors may reasonably request in order to facilitate the disposition of Registrable Securities;

(c) use its reasonable best efforts to register and qualify the Registrable Securities covered by such Registration Statement under such other securities or blue sky laws of such jurisdictions in the United States as shall be reasonably requested by the Investors, provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions;

(d) in the event of any underwritten public offering, and subject to Section 2.2(d), enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering and take such other usual and customary action as the Investors may reasonably request in order to facilitate the disposition of such Registrable Securities;

(e) notify the Investors at any time when a prospectus relating to a Registration Statement covering any Registrable Securities is required to be delivered under the Securities Act of the happening of any event as a result of which the prospectus included in such Registration Statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing. The Company shall use its reasonable best efforts to amend or supplement such prospectus in order to cause such prospectus not to include any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing;

(f) provide a transfer agent and registrar for all Registrable Securities registered pursuant to such Registration Statement and, if required, a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(g) if requested by an Investor, use reasonable best efforts to cause the Company's transfer agent to remove any restrictive legend from any Registrable Securities being transferred by an Investor pursuant to a Resale Registration Shelf or Company Registration Shelf, within two business days following such request;

(h) cause to be furnished, at the request of the Investors, on the date that Registrable Securities are delivered to underwriters for sale in connection with an underwritten offering pursuant to this Agreement, (i) an opinion, dated such date, of the counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters, and (ii) a letter or letters from the independent certified public accountants of the Company, in form and

substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering, addressed to the underwriters; and

(i) cause all such Registrable Securities included in a Registration Statement pursuant to this Agreement to be listed on each securities exchange or other securities trading markets on which Common Stock is then listed.

## 2.5. The Investors Obligations.

(a) Discontinuance of Distribution. The Investors agree that, upon receipt of any notice from the Company of the occurrence of any event of the kind described in Section 2.4(e) hereof, the Investors shall immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement covering such Registrable Securities until the Investors' receipt of the copies of the supplemented or amended prospectus contemplated by Section 2.4(e) hereof or receipt of notice that no supplement or amendment is required and that the Investors' disposition of the Registrable Securities may be resumed. The Company may provide appropriate stop orders to enforce the provisions of this Section 2.5(a).

(b) Compliance with Prospectus Delivery Requirements. The Investors covenant and agree that they shall comply with the prospectus delivery requirements of the Securities Act as applicable to them or an exemption therefrom in connection with sales of Registrable Securities pursuant to any Registration Statement filed by the Company pursuant to this Agreement.

(c) Notification of Sale of Registrable Securities. The Investors covenant and agree that they shall notify the Company following the sale of Registrable Securities to a third party as promptly as reasonably practicable, and in any event within thirty (30) days, following the sale of such Registrable Securities.

## 2.6. Indemnification.

(a) To the extent permitted by law, the Company shall indemnify the Investors, and, as applicable, their officers, directors, and constituent partners, legal counsel for each Investor and each Person controlling the Investors, with respect to which registration, related qualification, or related compliance of Registrable Securities has been effected pursuant to this Agreement, and each underwriter, if any, and each Person who controls any underwriter within the meaning of the Securities Act against all claims, losses, damages, or liabilities (or actions in respect thereof) to the extent such claims, losses, damages, or liabilities arise out of or are based upon (i) any untrue statement (or alleged untrue statement) of a material fact contained in any prospectus or other document (including any related Registration Statement) incident to any such registration, qualification, or compliance, or (ii) any omission (or alleged omission) to state

therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law applicable to the Company and relating to action or inaction required of the Company in connection with any such registration, qualification, or compliance; and the Company shall pay as incurred to the Investors, each such underwriter, and each Person who controls the Investors or underwriter, any legal and any other expenses reasonably incurred in connection with investigating or defending any such claim, loss, damage, liability, or action; provided, however, that the indemnity contained in this Section 2.6(a) shall not apply to amounts paid in settlement of any such claim, loss, damage, liability, or action if settlement is effected without the consent of the Company (which consent shall not unreasonably be withheld); and provided, further, that the Company shall not be liable in any such case to the extent that any such claim, loss, damage, liability, or expense arises out of or is based upon any violation by such Investor of the obligations set forth in Section 2.5 hereof or any untrue statement or omission contained in such prospectus or other document based upon written information furnished to the Company by the Investors, such underwriter, or such controlling Person and stated to be for use therein.

(b) To the extent permitted by law, each Investor (severally and not jointly) shall, if Registrable Securities held by such Investor are included for sale in the registration and related qualification and compliance effected pursuant to this Agreement, indemnify the Company, each of its directors, each officer of the Company who signs the applicable Registration Statement, each legal counsel and each underwriter of the Company's securities covered by such a Registration Statement, each Person who controls the Company or such underwriter within the meaning of the Securities Act against all claims, losses, damages, and liabilities (or actions in respect thereof) arising out of or based upon (i) any untrue statement (or alleged untrue statement) of a material fact contained in any such Registration Statement, or related document, or (ii) any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by such Investor of Section 2.5 hereof, the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law applicable to such Investor and relating to action or inaction required of such Investor in connection with any such registration and related qualification and compliance, and shall pay as incurred to such persons, any legal and any other expenses reasonably incurred in connection with investigating or defending any such claim, loss, damage, liability, or action, in each case only to the extent that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in (and such violation pertains to) such Registration Statement or related document in reliance upon and in conformity with written information furnished to the Company by such Investor and stated to be specifically for use

therein; provided, however, that the indemnity contained in this Section 2.6(b) shall not apply to amounts paid in settlement of any such claim, loss, damage, liability, or action if settlement is effected without the consent of such Investor (which consent shall not unreasonably be withheld); provided, further, that such Investor's liability under this Section 2.6(b) (when combined with any amounts such Investor is liable for under Section 2.6(d)) shall not exceed such Investor's net proceeds from the offering of securities made in connection with such registration.

(c) Promptly after receipt by an indemnified party under this Section 2.6 of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against an indemnifying party under this Section 2.6, notify the indemnifying party in writing of the commencement thereof and generally summarize such action. The indemnifying party shall have the right to participate in and to assume the defense of such claim; provided, however, that the indemnifying party shall be entitled to select counsel for the defense of such claim with the approval of any parties entitled to indemnification, which approval shall not be unreasonably withheld; provided further, however, that if either party reasonably determines that there may be a conflict between the position of the Company and the Investors in conducting the defense of such action, suit, or proceeding by reason of recognized claims for indemnity under this Section 2.6, then counsel for such party shall be entitled to conduct the defense to the extent reasonably determined by such counsel to be necessary to protect the interest of such party. The failure to notify an indemnifying party promptly of the commencement of any such action, if prejudicial to the ability of the indemnifying party to defend such action, shall relieve such indemnifying party, to the extent so prejudiced, of any liability to the indemnified party under this Section 2.6, but the omission so to notify the indemnifying party shall not relieve such party of any liability that such party may have to any indemnified party otherwise than under this Section 2.6.

(d) If the indemnification provided for in this Section 2.6 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage, or expense referred to therein, then the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and of the indemnified party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage, or expense as well as any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission. In no event,

however, shall (i) any amount due for contribution hereunder be in excess of the amount that would otherwise be due under Section 2.6(a) or Section 2.6(b), as applicable, based on the limitations of such provisions and (ii) a Person guilty of fraudulent misrepresentation (within the meaning of the Securities Act) be entitled to contribution from a Person who was not guilty of such fraudulent misrepresentation.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with an underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control; provided, however, that the failure of the underwriting agreement to provide for or address a matter provided for or addressed by the foregoing provisions shall not be a conflict between the underwriting agreement and the foregoing provisions.

(f) The obligations of the Company and the Investors under this Section 2.6 shall survive the completion of any offering of Registrable Securities in a Registration Statement under this Agreement or otherwise.

2.7. Information. The Investors shall furnish to the Company such information regarding the Investors and the distribution proposed by the Investors as the Company may reasonably request and as shall be reasonably required in connection with any registration referred to in this Agreement. The Investors agree to, as promptly as practicable (and in any event prior to any sales made pursuant to a prospectus), furnish to the Company all information required to be disclosed in order to make the information previously furnished to the Company by the Investors not misleading. The Investors agree to keep confidential the receipt of any notice received pursuant to Section 2.4(e) and the contents thereof, except as required pursuant to applicable law. Notwithstanding anything to the contrary herein, the Company shall be under no obligation to name the Investors in any Registration Statement if the Investors have not provided the information required by this Section 2.7 with respect to the Investors as a selling securityholder in such Registration Statement or any related prospectus.

2.8. Rule 144 Requirements. With a view to making available to the Investors the benefits of Rule 144 promulgated under the Securities Act and any other rule or regulation of the Commission that may at any time permit the Investors to sell Registrable Securities to the public without registration, the Company agrees to use its reasonable best efforts to:

(a) make and keep public information available, as those terms are understood and defined in Rule 144 under the Securities Act at all times after the date hereof;

(b) file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act;

(c) prior to the filing of the Registration Statement or any amendment thereto (whether pre-effective or post-effective), and prior to the filing of any prospectus or prospectus supplement related thereto, to provide the Investors with copies of all of the pages thereof (if any) that reference the Investors; and

(d) furnish to any Investor, so long as the Investor owns any Registrable Securities, forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested by an Investor in availing itself of any rule or regulation of the Commission which permits an Investor to sell any such securities without registration.

2.9. Termination of Status as Registrable Securities. The Registrable Securities shall cease to be Registrable Securities upon the earliest to occur of the following events: (i) such Registrable Securities have been sold pursuant to an effective Registration Statement; (ii) such Registrable Securities have been sold by the Investors pursuant to Rule 144 (or other similar rule), (iii) such Registrable Securities may be resold by the Investor holding such Registrable Securities without limitations as to volume or manner of sale pursuant to Rule 144; or (iv) ten (10) years after the date of this Agreement.

#### **Section 4**

##### **Miscellaneous**

3.1. Amendment. No amendment, alteration or modification of any of the provisions of this Agreement shall be binding unless made in writing and signed by each of the Company and the Investors.

3.2. Injunctive Relief. It is hereby agreed and acknowledged that it shall be impossible to measure in money the damages that would be suffered if the parties fail to comply with any of the obligations herein imposed on them and that in the event of any such failure, an aggrieved Person shall be irreparably damaged and shall not have an adequate remedy at law. Any such Person shall, therefore, be entitled (in addition to any other remedy to which it may be entitled in law or in equity) to injunctive relief, including, without limitation, specific performance, to enforce such obligations, and if any action should be brought in equity to enforce any of the provisions of this Agreement, none of the parties hereto shall raise the defense that there is an adequate remedy at law.

3.3. Notices. All notices required or permitted under this Agreement must be in writing and sent to the address or facsimile number identified below. Notices must be given: (a) by personal delivery, with receipt acknowledged; (b) by facsimile followed by hard copy delivered

by the methods under clause (c) or (d); (c) by prepaid certified or registered mail, return receipt requested; or (d) by prepaid reputable overnight delivery service. Notices shall be effective upon receipt. Either party may change its notice address by providing the other party written notice of such change. Notices shall be delivered as follows:

If to the Investors: At such Investor's address as set forth on Schedule A hereto

If to the Company: Bellicum Pharmaceuticals, Inc.,  
Life Science Plaza  
2130 W. Holcombe Boulevard, Suite 800  
Houston, Texas 77030  
(fax: (713) 335-1446)  
Attention: General Counsel

with a copy to: Cooley LLP  
4401 Eastgate Mall  
San Diego, CA 92121-1909  
Attention: Julie Robinson  
(fax: (858) 550-6420)



3.4. Governing Law; Jurisdiction; Venue; Jury Trial.

(a) This Agreement shall be governed by, and construed in accordance with, the law of the State of New York without giving effect to any choice or conflict of law provision or rule (whether of the State of New York or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of New York.

(b) Each of the Company and the Investors irrevocably and unconditionally submits, for itself and its property, to the nonexclusive jurisdiction of the courts of the State of New York sitting in the Borough of Manhattan, New York and of the United States District Court of the Southern District of New York, and any appellate court from any thereof, in any action or proceeding arising out of or relating to this Agreement and the transactions contemplated herein, or for recognition or enforcement of any judgment, and each of the Company and the Investors irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such New York state court or, to the fullest extent permitted by applicable law, in such federal court. Each of the Company and the Investors hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

(c) Each of the Company and the Investors irrevocably and unconditionally waives, to the fullest extent permitted by applicable law, any objection that it may now or hereafter have to the laying of venue of any action or proceeding arising out of or relating to this Agreement and the transactions contemplated herein in any court referred to in Section 3.4(b) hereof. Each of the Company and the Investors hereby irrevocably waives, to the fullest extent permitted by applicable law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

(d) EACH OF THE COMPANY AND THE INVESTORS HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH OF THE COMPANY AND THE INVESTORS (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT EACH OF THE COMPANY AND THE INVESTORS HAS BEEN INDUCED TO ENTER INTO THIS

AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

3.5. Successors, Assigns and Transferees. Any and all rights, duties and obligations hereunder shall not be assigned, transferred, delegated or sublicensed by any party hereto without the prior written consent of the other party; provided, however, that the Investors shall be entitled to transfer Registrable Securities to one or more of their affiliates and, solely in connection therewith, may assign their rights hereunder in respect of such transferred Registrable Securities, in each case, so long as such Investor is not relieved of any liability or obligations hereunder, without the prior consent of the Company. Any transfer or assignment made other than as provided in the first sentence of this Section 3.5 shall be null and void. Subject to the foregoing and except as otherwise provided herein, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors and administrators of the parties hereto.

3.6. Entire Agreement. This Agreement, together with any exhibits hereto, constitute the entire agreement between the parties relating to the subject matter hereof and all previous agreements or arrangements between the parties, written or oral, relating to the subject matter hereof are superseded.

3.7. Waiver. No failure on the part of either party hereto to exercise any power, right, privilege or remedy under this Agreement, and no delay on the part of either party hereto in exercising any power, right, privilege or remedy under this Agreement, shall operate as a waiver thereof; and no single or partial exercise of any such power, right, privilege or remedy shall preclude any other or further exercise thereof or of any other power, right, privilege or remedy.

3.8. Severability. If any part of this Agreement is declared invalid or unenforceable by any court of competent jurisdiction, such declaration shall not affect the remainder of the Agreement and the invalidated provision shall be revised in a manner that shall render such provision valid while preserving the parties' original intent to the maximum extent possible.

3.9. Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement. All references in this Agreement to sections, paragraphs and exhibits shall, unless otherwise provided, refer to sections and paragraphs hereof and exhibits attached hereto.

3.10. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be enforceable against the parties that execute such counterparts (including by facsimile or other electronic means), and all of which together shall constitute one instrument.

3.11. Term and Termination. The Investors' rights to demand the registration of the Registrable Securities under this Agreement, as well as the Company's obligations under Section 2.2 hereof, shall terminate automatically once all Registrable Securities cease to be Registrable Securities pursuant to the terms of Section 2.9 of this Agreement.

*[Remainder of Page Intentionally Left Blank; Signature Pages Follow]*

IN WITNESS WHEREOF, the parties hereto have executed this Registration Rights Agreement effective as of the day, month and year first above written.

Bellicum Pharmaceuticals, Inc.  
a Delaware Corporation

By: /s/ Ken Moseley  
Name: Ken Moseley  
Title: SVP & GC

[Signature Page to Registration Rights Agreement]

[Signature Page to Registration Rights Agreement]

**667, L.P.**

By: BAKER BROS. ADVISORS LP, management company and investment adviser to 667, L.P., pursuant to authority granted to it by Baker Biotech Capital, L.P., general partner to 667, L.P., and not as the general partner

By: /s/ Scott L. Lessing

Scott L. Lessing

President

**BAKER BROTHERS LIFE SCIENCES, L.P.**

By: BAKER BROS. ADVISORS LP, management company and investment adviser to BAKER BROTHERS LIFE SCIENCES, L.P., pursuant to authority granted to it by Baker Brothers Life Sciences Capital, L.P., general partner to BAKER BROTHERS LIFE SCIENCES, L.P., and not as the general partner

By: /s/ Scott L. Lessing

Scott L. Lessing

President

**14159, L.P.**

By: BAKER BROS. ADVISORS LP, management company and investment adviser to 14159, L.P., pursuant to authority granted to it by 14159 Capital, L.P., general partner to 14159, L.P., and not as the general partner.

By: /s/ Scott L. Lessing

Scott L. Lessing

President

[Signature Page to Registration Rights Agreement]

**Schedule A**

**The Investors**

667, L.P.  
BAKER BROTHERS LIFE SCIENCES, L.P.  
14159, L.P.

To the above Investors:

Baker Brothers Investments  
667 Madison Avenue 21<sup>st</sup> Floor  
New York, NY 10065

With a copy to:

Akin Gump Strauss Hauer & Feld LLP  
Attn: Jeffrey Kochian  
One Bryant Park  
New York, NY 10036-6745



**BELLICUM PHARMACEUTICALS, INC.**  
**NON-EMPLOYEE DIRECTOR COMPENSATION POLICY**

Each member of the Board of Directors (the “**Board**”) who is not also serving as an employee of or consultant to Bellicum Pharmaceuticals, Inc. (“**Bellicum**”) or any of its subsidiaries (each such member, an “**Eligible Director**”) will receive the compensation described in this Non-Employee Director Compensation Policy for his or her Board service on and following the date of the underwriting agreement between Bellicum and the underwriters managing the initial public offering of the common stock of Bellicum (the “**Common Stock**”), pursuant to which the Common Stock is priced in such initial public offering (the “**Effective Date**”). This policy is effective as of the Effective Date and may be amended at any time in the sole discretion of the Board or the Compensation Committee of the Board.

### **Annual Cash Compensation**

The annual cash compensation amount set forth below is payable in equal quarterly installments, payable in arrears on the last day of each fiscal quarter in which the service occurred. If an Eligible Director joins the Board or a committee of the Board at a time other than effective as of the first day of a fiscal quarter, each annual retainer set forth below will be pro-rated based on days served in the applicable fiscal year, with the pro-rated amount paid for the first fiscal quarter in which the Eligible Director provides the service, and regular full quarterly payments thereafter. All annual cash fees are vested upon payment.

1. Annual Board Service Retainer:
  - a. All Eligible Directors: \$35,000
  - b. Chairman of the Board Service Retainer (in addition to Eligible Director Service Retainer): \$25,000
  - c. Lead Independent Director Service Retainer (in addition to Eligible Director Service Retainer): \$15,000
2. Annual Committee Member Service Retainer:
  - a. Member of the Audit Committee: \$7,500
  - b. Member of the Compensation Committee: \$5,000
  - c. Member of the Nominating & Governance Committee: \$3,500
3. Annual Committee Chair Service Retainer (in addition to Committee Member Service Retainer):
  - a. Chairman of the Audit Committee: \$7,500
  - b. Chairman of the Compensation Committee: \$5,000
  - c. Chairman of the Nominating & Governance Committee: \$4,000

### **Equity Compensation**

The equity compensation set forth below will be granted under the Bellicum, Inc. 2014 Equity Incentive Plan (the “**Plan**”), subject to the Bellicum stockholders’ approval of the Plan. All stock options granted under this policy will be nonstatutory stock options, with an exercise price per share equal to 100% of the Fair Market Value (as defined in the Plan) of the underlying Common Stock on the date of grant, and a term of ten years from the date of grant (subject to earlier termination in connection with a termination of service as provided in the Plan, provided that upon a termination of service other than for death, disability or cause, the post-termination exercise period will be 12 months from the date of termination).

1. Initial Grant: On the date of the Eligible Director’s initial election to the Board, for each Eligible Director who is first elected to the Board following the Effective Date (or, if such date is not a market trading day, the first market trading day thereafter), the Eligible Director will be automatically, and without further action by the Board or Compensation Committee of the Board, granted a stock option for 20,000 shares (the “**Initial Grant**”). The shares subject to each Initial Grant will vest in equal monthly installments over a three year period such that the option is fully vested on the third anniversary of the date of grant, subject to the Eligible Director’s Continuous Service (as defined in the Plan) through each such vesting date and will vest in full upon a Change in Control (as defined in the Plan).
2. Annual Grant: On the date of each Bellicum annual stockholder meeting held after the Effective Date, for each Eligible Director who continues to serve as a non-employee member of the Board (or who is first elected to the Board at such annual stockholder meeting), the Eligible Director will be automatically, and without further action by the Board or Compensation Committee of the Board, granted a stock option for 10,000 shares (the “**Annual Grant**”). In addition, each Eligible Director who is first elected to the Board following the Effective Date and other than at an annual stockholder meeting will be automatically, and without further action by the Board or Compensation Committee of the Board, granted an Annual Grant, pro rated for the number of months remaining until the next annual stockholder meeting. The shares subject to the Annual Grant will vest in equal monthly installments until Bellicum’s next annual stockholder meeting, so that each Annual Grant is fully vested on the date of Bellicum’s next annual stockholder meeting, subject to the Eligible Director’s Continuous Service (as defined in the Plan) through such vesting date and will vest in full upon a Change in Control (as defined in the Plan).



**LEASE AGREEMENT**  
**LIFE SCIENCE PLAZA**

**2130 WEST HOLCOMBE BOULEVARD**  
**HOUSTON, TEXAS**

**BY AND BETWEEN**

**SHERIDAN HILLS DEVELOPMENTS L.P.**

**(“LANDLORD”)**

**AND**

**BELLICUM PHARMACEUTICALS, INC.**

**(“TENANT”)**

**May 6, 2015**

## TABLE OF CONTENTS

Page

|                |  |           |
|----------------|--|-----------|
| <b>SEC. 1</b>  | <b>LEASED PREMISES</b>   | <b>1</b>  |
| <b>SEC. 2</b>  | <b>TERM:</b>   | <b>2</b>  |
| <b>SEC. 3</b>  | <b>USE:</b>  | <b>2</b>  |
| <b>SEC. 4</b>  | <b>SECURITY DEPOSIT:</b>   | <b>2</b>  |
| <b>SEC. 5</b>  | <b>BASE RENT:</b>  | <b>3</b>  |
| <b>SEC. 6</b>  | <b>ADDITIONAL RENT:</b>  | <b>4</b>  |
| <b>SEC. 7</b>  | <b>SERVICES AND UTILITIES:</b>                                     | <b>10</b> |
| <b>SEC. 8</b>  | <b>MAINTENANCE, REPAIRS AND USE:</b>                               | <b>13</b> |
| <b>SEC. 9</b>  | <b>QUIET ENJOYMENT; RIGHTS RESERVED:</b>                           | <b>13</b> |
| <b>SEC. 10</b> | <b>ALTERATIONS:</b>  | <b>14</b> |
| <b>SEC. 11</b> | <b>FURNITURE, FIXTURES AND PERSONAL PROPERTY:</b>                  | <b>15</b> |
| <b>SEC. 12</b> | <b>SUBLETTING AND ASSIGNMENT:</b>                                  | <b>16</b> |
| <b>SEC. 13</b> | <b>FIRE AND OTHER CASUALTY:</b>                                    | <b>18</b> |
| <b>SEC. 14</b> | <b>CONDEMNATION:</b>   | <b>19</b> |
| <b>SEC. 15</b> | <b>DEFAULT BY TENANT:</b>  | <b>19</b> |
| <b>SEC. 16</b> | <b>REMEDIES OF LANDLORD:</b>                                       | <b>20</b> |
| <b>SEC. 17</b> | <b>LIEN FOR RENT:</b>  | <b>22</b> |
| <b>SEC. 18</b> | <b>NON-WAIVER:</b>   | <b>22</b> |
| <b>SEC. 19</b> | <b>LAWS AND REGULATIONS; RULES AND REGULATIONS:</b>                | <b>22</b> |
| <b>SEC. 20</b> | <b>ASSIGNMENT BY LANDLORD; LIMITATION OF LANDLORD'S LIABILITY:</b> | <b>22</b> |
| <b>SEC. 21</b> | <b>SEVERABILITY:</b>   | <b>22</b> |
| <b>SEC. 22</b> | <b>SIGNS:</b>  | <b>23</b> |
| <b>SEC. 23</b> | <b>SUCCESSORS AND ASSIGNS:</b>                                     | <b>23</b> |
| <b>SEC. 24</b> | <b>SUBORDINATION:</b>  | <b>23</b> |
| <b>SEC. 25</b> | <b>TAX PROTEST:</b>  | <b>24</b> |
| <b>SEC. 26</b> | <b>HOLDING OVER:</b>   | <b>24</b> |
| <b>SEC. 27</b> | <b>INDEPENDENT OBLIGATION TO PAY RENT:</b>                         | <b>24</b> |
| <b>SEC. 28</b> | <b>INDEMNITY; RELEASE AND WAIVER:</b>                              | <b>25</b> |
| <b>SEC. 29</b> | <b>INSURANCE:</b>  | <b>26</b> |
| <b>SEC. 30</b> | <b>ENTIRE AGREEMENT:</b>   | <b>26</b> |
| <b>SEC. 31</b> | <b>NOTICES:</b>  | <b>26</b> |
| <b>SEC. 32</b> | <b>COMMENCEMENT DATE:</b>  | <b>27</b> |
| <b>SEC. 33</b> | <b>INTENTIONALLY DELETED:</b>                                      | <b>27</b> |
| <b>SEC. 34</b> | <b>BROKERS:</b>  | <b>27</b> |
| <b>SEC. 35</b> | <b>ESTOPPEL CERTIFICATES:</b>                                      | <b>27</b> |
| <b>SEC. 36</b> | <b>NAME CHANGE:</b>  | <b>27</b> |
| <b>SEC. 37</b> | <b>BANKRUPTCY:</b>   | <b>27</b> |
| <b>SEC. 38</b> | <b>TELECOMMUNICATIONS PROVIDERS:</b>                               | <b>28</b> |
| <b>SEC. 39</b> | <b>HAZARDOUS SUBSTANCES:</b>                                       | <b>28</b> |

|                |  |           |
|----------------|--|-----------|
| <b>SEC. 40</b> | <b>NO MONEY DAMAGES FOR FAILURE TO CONSENT; WAIVER OF CERTAIN DAMAGES:</b> | <b>29</b> |
| <b>SEC. 41</b> | <b>ACKNOWLEDGMENT OF NON-APPLICABILITY OF DTPA:</b>                        | <b>29</b> |
| <b>SEC. 42</b> | <b>ATTORNEYS' FEES:</b>  | <b>30</b> |
| <b>SEC. 43</b> | <b>AUTHORITY OF TENANT:</b>  | <b>30</b> |
| <b>SEC. 44</b> | <b>INABILITY TO PERFORM:</b>   | <b>30</b> |
| <b>SEC. 45</b> | <b>JOINT AND SEVERAL TENANCY:</b>  | <b>30</b> |
| <b>SEC. 46</b> | <b>EXECUTION OF THIS LEASE AGREEMENT:</b>                                  | <b>30</b> |
| <b>SEC. 47</b> | <b>WAIVER OF TRIAL BY JURY; COUNTERCLAIM:</b>                              | <b>30</b> |
| <b>SEC. 48</b> | <b>CALCULATION OF TIME PERIODS:</b>  | <b>30</b> |
| <b>SEC. 49</b> | <b>ANTI-TERRORISM LAWS:</b>  | <b>30</b> |
| <b>SEC. 50</b> | <b>RENEWAL OPTIONS:</b>  | <b>31</b> |
| <b>SEC. 51</b> | <b>CHASE SPACE:</b>  | <b>32</b> |
| <b>SEC. 52</b> | <b>BACK-UP GENERATOR:</b>  | <b>32</b> |
| <b>SEC. 53</b> | <b>FINANCIAL STATEMENTS:</b>   | <b>33</b> |
| <b>SEC. 54</b> | <b>LANDLORD DEFAULT:</b>   | <b>33</b> |
| <b>SEC. 55</b> | <b>EXHIBITS:</b>   | <b>33</b> |

**EXHIBITS:**

EXHIBIT A – FLOOR PLAN OF THE MANUFACTURING SPACE  
EXHIBIT A-1 – FLOOR PLAN OF THE INTERIOR MECHANICAL SPACE  
EXHIBIT A-2 – FLOOR PLAN OF THE EXTERIOR MECHANICAL SPACE  
EXHIBIT B – LEGAL DESCRIPTION OF THE LAND  
EXHIBIT C – PARKING AGREEMENT  
EXHIBIT D – RULES AND REGULATIONS  
EXHIBIT E – ACCEPTANCE OF PREMISES MEMORANDUM  
EXHIBIT F – TENANT'S ESTOPPEL CERTIFICATE  
EXHIBIT G – LEASEHOLD IMPROVEMENTS  
EXHIBIT H – AIR CONDITIONING AND HEATING SERVICES  
EXHIBIT I – INSURANCE REQUIREMENTS  
EXHIBIT J – PREVIOUSLY GRANTED EXCLUSIVE USES  
EXHIBIT K – MODIFIED BOMA STANDARD  
EXHIBIT L – FORM OF SUBORDINATION, NON-DISTURBANCE AND ATTORNMENMENT AGREEMENT

## LEASE AGREEMENT

### Office Building

This Lease Agreement (this “**Lease Agreement**”) is made and entered into as of the date set forth on the signature page between SHERIDAN HILLS DEVELOPMENTS L.P., a Texas limited partnership, hereinafter referred to as “**Landlord**”, and BELLICUM PHARMACEUTICALS, INC., a Delaware corporation, hereinafter referred to as “**Tenant**”:

WITNESSETH:

**SEC. 1 LEASED PREMISES** In consideration of the mutual covenants as set forth herein, Landlord and Tenant hereby agree as follows:

A. Landlord hereby leases to Tenant and Tenant hereby leases from Landlord for the rental and on the terms and conditions hereinafter set forth (i) approximately twenty-five thousand three hundred four (25,304) square feet of Net Rentable Area on the fifth (5th) floor of the Building, as reflected on the floor plan attached hereto as **Exhibit A** and made a part hereof for all purposes and known as Suite 500 (the “**Manufacturing Space**”), (ii) an additional seven hundred five (705) square feet of Net Rentable Area located on the fourth (4th) floor of the Building, as reflected on the floor plan thereof attached hereto and made a part hereof for all purposes as **Exhibit A-1** (the “**Interior Mechanical Space**”) and (iii) an additional eight hundred eight (808) square feet of Net Rentable Area located on the fifth (5th) floor of the Building, as reflected on the floor plan thereof attached hereto and made a part hereof for all purposes as **Exhibit A-2** (collectively, the “**Exterior Mechanical Space**” and together with the Manufacturing Space and Interior Mechanical Space, the “**Leased Premises**”) in the medical office building located at 2130 West Holcombe Boulevard, Houston, Harris County, Texas 77030 (the “**Building**”) and situated on that certain tract or parcel of land more particularly described by metes and bounds on **Exhibit B** attached hereto and made a part hereof for all purposes (the “**Land**”). Subject to Section 9.B below, Landlord hereby grants Tenant, its employees, invitees and other visitors, a nonexclusive license for the Term of this Lease Agreement and all extensions and renewals thereof to use, for the purpose of ingress and egress to the Building and the Leased Premises, and in accordance with Section 19 below, the Common Areas (as hereinafter defined) twenty-four hours a day, seven days a week (subject to temporary closures as necessary for repairs, maintenance or emergencies). Facilities and areas of the Building that are intended and designated by Landlord from time to time for the common, general and non-exclusive use of all tenants of the Building, which include, without limitation, the Garage (as defined on **Exhibit C**), are called “**Common Areas**,” subject to the provisions of this Lease Agreement. Landlord has the exclusive control over and right to manage the Common Areas. In addition, Landlord shall have the exclusive use and control over all other areas of the Building not designated as Common Areas nor leased exclusively to tenants of the Building, which include, but are not limited to, all risers, horizontal and vertical shafts and telephone closets in the Building.

B. The term “**Net Rentable Area**” shall mean the net rentable area measured according to standards based on but modified from those published by the Building Owners and Managers Association (BOMA) International, Publication ANSI/BOMA Z 65.1-2010, both as may be amended or replaced from time to time (the “**Modified BOMA Standard**”). A copy of the current Modified BOMA Standard is attached hereto as **Exhibit K** and made a part hereof for all purposes. Within thirty (30) days following the Commencement Date (the “**NRA Notice Period**”), if Landlord determines that the Net Rentable Area of the Leased Premises differs from that referenced in Section 1.A above, Landlord may deliver a written notice to Tenant (the “**NRA Notice**”) specifying Landlord’s determination of the Net Rentable Area of the Leased Premises. If the Landlord does not deliver the NRA Notice during the NRA Notice Period, the Net Rentable Area of the Leased Premises in Section 1.A above shall be deemed to be correct for all purposes under this Lease Agreement. If Landlord delivers the NRA Notice to Tenant within the NRA Notice Period, Tenant shall have the next thirty (30) days (the “**Response Period**”) in which to have its architect verify the Net Rentable Area of the Leased Premises specified in the NRA Notice and notify Landlord in writing if Tenant disagrees with such determination (the “**NRA Response**”). Tenant’s NRA Response must specify in detail the basis for Tenant’s disagreement with Landlord’s determination of the Net Rentable Area of the Leased Premises. Should Tenant fail to deliver the NRA Response during the Response Period, the Net Rentable Area of the Leased Premises specified in the NRA Notice shall be deemed to be correct for all purposes under this Lease Agreement. If Tenant timely sends the NRA Response to Landlord during the Response Period and Landlord’s architect and Tenant’s architect are unable to agree on the Net Rentable Area of

the Leased Premises within the next thirty (30) days [such thirty (30) day period commencing on the date of the NRA Response (the “**Negotiation Period**”)], the Net Rentable Area of the Leased Premises shall be determined by an independent third-party architect mutually selected by Landlord and Tenant in good faith within five (5) business days of the expiration of the Negotiation Period (the fees of such architect being shared equally by Landlord and Tenant). Such independent third-party architect shall make the final and conclusive determination of the Net Rentable Area of the Leased Premises within thirty (30) days of his/her appointment. All measurements of the Leased Premises and the Building shall be made in accordance with the Modified BOMA Standard. If the Building is ever demolished, altered, remodeled, renovated, expanded or otherwise changed in such a manner as to alter the amount of space contained therein, then the Net Rentable Area of the Building shall be adjusted and recalculated by using the Modified BOMA Standard.

C. Landlord also leases to Tenant certain parking spaces on the terms and conditions set forth in **Exhibit C** attached hereto and made a part hereof for all purposes.

D. The Leased Premises shall be delivered to Tenant and Tenant shall accept same, in its current “**AS IS, WHERE IS**” condition subject to the construction of leasehold improvements set forth and described on **Exhibit G** attached hereto and made a part hereof for all purposes and the completion of any incomplete or corrective items specified in a “punch list” approved by Landlord and Tenant pursuant to **Exhibit G** and latent defects, to the extent Tenant notifies Landlord thereof in writing within the first six (6) months following the Commencement Date. Tenant acknowledges that no representations as to the repair of the Leased Premises or the Building, nor promises to alter, remodel or improve the Leased Premises or the Building, have been made by Landlord, except as are expressly set forth in this Lease Agreement.

## **SEC. 2 TERM:**

A. The term of this Lease Agreement (the “**Term**”) shall commence on September 1, 2015 (the “**Commencement Date**”) and, unless sooner terminated or renewed and extended in accordance with the terms and conditions set forth herein, shall expire at 11:59 p.m. on August 31, 2020 (the “**Expiration Date**”).

B. This Lease Agreement shall be effective as of the Effective Date (as hereinafter defined). Landlord hereby consents to Tenant and its agents, employees or contractors entering the Leased Premises prior to the Commencement Date for purposes of undertaking alterations, additions and improvements therein, including, but not limited to, telephone, and data cabling and installation of furniture systems, which entry shall be subject to the terms and conditions of this Lease Agreement, except that the Rent (as hereinafter defined) shall not commence to accrue as a result of such entry until the date specified in Section 5 below. Landlord hereby consents to Tenant’s accessing the Leased Premises at any time after May 15, 2015 for the sole purpose of installing Tenant’s furniture, equipment and cabling, provided such access does not unreasonably interfere with the contractors’ completion of the Leasehold Improvements (as defined on **Exhibit G**) or any other work being performed by Landlord in the Leased Premises, Tenant has coordinated such installation through reasonable advanced written notice with property management and the contractors, and Tenant has complied with the terms and provisions of this Lease Agreement.

**SEC. 3 USE:** The Leased Premises shall be used and occupied by Tenant solely for the purpose of (i) manufacturing Tenant’s pharmaceuticals, (ii) general office use and (iii) a research laboratory up to and including Biosafety Level 2. The Leased Premises shall not be used for any purpose which would tend to lower the first-class character of the Building, violate any other tenants’ exclusive use, if any, previously granted by Landlord, which exclusive use is identified in **Exhibit J** attached hereto and made a part hereof for all purposes, create unreasonable elevator loads or otherwise interfere with standard Building operations. Tenant agrees specifically that no food, soft drink or other vending machine will be installed within the Leased Premises without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed. Under no circumstances shall any abortions be performed in the Leased Premises (but the foregoing does not prohibit routine gynecological procedures).

**SEC. 4 SECURITY DEPOSIT:** \$76,460.98 payable on the Effective Date. Upon the occurrence of any Event of Default, Landlord may, from time to time, without prejudice to any other remedy, use the security deposit paid to Landlord by Tenant as herein provided to the extent necessary to make good any arrears of Rent (as hereinafter defined)

and any other damage, injury, expense or liability caused to Landlord by such Event of Default. Following any such application of the security deposit, Tenant shall pay to Landlord within ten (10) days of demand the amount so applied in order to restore the security deposit to the amount thereof existing prior to such application. Any remaining balance of the security deposit shall be returned by Landlord to Tenant within sixty (60) days after the termination of this Lease Agreement and after Tenant provides written notice to Landlord of Tenant's forwarding address; provided, however, Landlord shall have the right to retain and expend such remaining balance (a) to reimburse Landlord for any and all rentals or other sums due hereunder that have not been paid in full by Tenant and/or (b) for cleaning and repairing the Leased Premises if Tenant shall fail to deliver same at the termination of this Lease Agreement in a neat and clean condition and in as good a condition as existed at the date of possession of same by Tenant, ordinary wear and tear and casualty loss only excepted. Tenant shall not be entitled to any interest on the security deposit. Such security deposit shall not be considered an advance payment of rental or a measure of Landlord's damages in case of an Event of Default by Tenant.

## SEC. 5 BASE RENT:

A. As part of the consideration for the execution of this Lease Agreement, Tenant covenants and agrees and promises to pay Landlord base rent for the Manufacturing Space only according to the following schedule (the "**Manufacturing Space Base Rent**"):

| <u>Months Following the<br/>Commencement Date</u> | <u>Annual Base Rent Rate Per<br/>Square Foot of Net Rentable Area</u> | <u>Annual Base Rent</u> | <u>Monthly Payment</u> |
|---|---|-------------------------|------------------------|
| 1-12  | \$30.75   | \$778,098.00            | \$64,841.50            |
| 13-24   | \$31.80   | \$804,667.20            | \$67,055.60            |
| 25-36   | \$32.95   | \$833,766.80            | \$69,480.57            |
| 37-48   | \$34.10   | \$862,866.40            | \$71,905.53            |
| 49-60   | \$35.30   | \$893,231.20            | \$74,435.93            |
| 61-72   | \$36.50   | \$923,596.00            | \$76,966.33            |
| 73-84   | \$37.80   | \$956,491.20            | \$79,707.60            |
| 85-96   | \$39.10   | \$989,386.40            | \$82,448.87            |
| 97-108  | \$40.50   | \$1,024,812.00          | \$85,401.00            |
| 109-120   | \$41.90   | \$1,060,237.60          | \$88,353.13            |



As part of the consideration for the execution of this Lease Agreement, Tenant covenants and agrees and promises to pay Landlord base rent for the Interior Mechanical Space only according to the following schedule (the “**Interior Mechanical Space Base Rent**”):

| <u>Months Following the Commencement Date</u> | <u>Annual Base Rent Rate Per Square Foot of Net Rentable Area</u> | <u>Annual Base Rent</u> | <u>Monthly Payment</u> |
|---|---|-------------------------|------------------------|
| 1-12  | \$20.75   | \$14,628.75             | \$1,219.06             |
| 13-24   | \$21.80   | \$15,369.00             | \$1,280.75             |
| 25-36   | \$22.95   | \$16,179.75             | \$1,348.31             |
| 37-48   | \$24.10   | \$16,990.50             | \$1,415.88             |
| 49-60   | \$25.30   | \$17,836.50             | \$1,486.38             |
| 61-72   | \$26.50   | \$18,682.50             | \$1,556.88             |
| 73-84   | \$27.80   | \$19,599.00             | \$1,633.25             |
| 85-96   | \$29.10   | \$20,515.50             | \$1,709.63             |
| 97-108  | \$30.50   | \$21,502.50             | \$1,791.88             |
| 109-120                                       | \$31.90   | \$22,489.50             | \$1,874.13             |

As part of the consideration for the execution of this Lease Agreement, Tenant covenants and agrees and promises to pay Landlord base rent for the Exterior Mechanical Space only according to the following schedule (the “**Exterior Mechanical Space Base Rent**” and together with the Manufacturing Space Base Rent and Interior Mechanical Space Base Rent, the “**Base Rent**”):

| <u>Months Following the Commencement Date</u> | <u>Annual Base Rent Rate Per Square Foot of Net Rentable Area</u> | <u>Annual Base Rent</u> | <u>Monthly Payment</u> |
|---|---|-------------------------|------------------------|
| 1-60  | \$7.00  | \$5,656.00              | \$471.33               |
| 61-120  | \$8.00  | \$6,464.00              | \$538.67               |

The Base Rent shall be payable to Landlord at the address of the Landlord’s property manager set forth in Section 31 below (or such other address as may be designated by Landlord in writing from time to time) in monthly installments in legal tender of the United States of America, in advance, without demand, set-off or counterclaim except as herein expressly provided, on or before the first day of each calendar month during the Term hereof; provided, however, the first monthly payment of Base Rent shall be made on the Effective Date. If the Term of this Lease Agreement as described above commences on other than the first day of a calendar month or terminates on other than the last day of a calendar month, then the installments of Base Rent for such month or months shall be prorated and the installment or installments so prorated shall be paid in advance. The payment for such prorated month shall be calculated by multiplying the monthly installment by a fraction, the numerator of which shall be the number of days of the Term occurring during said commencement or termination month, as the case may be, and the denominator of which shall be the total number of days occurring in said commencement or termination month.

B. In addition to the foregoing Base Rent and the Additional Rent to be paid by Tenant pursuant to Section 6 below, Tenant agrees to pay to Landlord as additional rent all charges for any services, goods or materials furnished by Landlord at Tenant’s request which are not required to be furnished by Landlord under this Lease Agreement, as well as other sums payable by Tenant hereunder, within ten (10) days after Landlord renders a statement therefor to Tenant. All Rent (as hereinafter defined) shall bear interest from the date due until paid at the greater of (i) two percent (2%) above the “prime rate” per annum of the JPMorgan Chase Bank, a New York banking corporation or its successor or such other “money center” bank as Landlord and Tenant may agree from time to time (“**Chase**”) in effect on said due date (or if the “prime rate” be discontinued, the base reference rate then being used by Chase to define the rate of interest charged to commercial borrowers) or (ii) ten percent (10%) per annum; provided, however, in no event shall the rate of interest hereunder exceed the maximum non-usurious rate of interest (hereinafter called the “**Maximum**”

**Rate**”) permitted by the applicable laws of the State of Texas or the United States of America, and to the extent that the Maximum Rate is determined by reference to the laws of the State of Texas, the Maximum Rate shall be the weekly ceiling (as defined and described in Chapter 303 of the Texas Finance Code, as amended) at the applicable time in effect.

C. If the Net Rentable Area of the Leased Premises is modified for any reason, the provisions of this Lease Agreement which are contingent upon the size of the Leased Premises (including without limitation, Base Rental, Additional Rent, Tenant’s pro rata share, the Improvement Allowance and number of reserved Parking Spaces and number of unreserved Parking Spaces) shall be automatically adjusted to reflect the modification of the Net Rentable Area of the Leased Premises, effective as of the date of the determination made in accordance with Section 1.B above. If the Net Rentable Area of the Building is modified for any reason, the provisions of this Lease Agreement which are contingent upon the size of the Building (including, without limitation, Tenant’s pro rata share) shall automatically be adjusted to reflect the modification of the Net Rentable Area of the Building, effective as of the date of the determination made in accordance with Section 1.B above. The parties shall memorialize all such adjustments in an amendment to this Lease Agreement as soon as reasonably possible thereafter.

## **SEC. 6 ADDITIONAL RENT:**

A. As part of the consideration for the execution of this Lease Agreement, and in addition to the Base Rent specified above, Tenant covenants and agrees to pay, for each calendar year during the Term, as additional rent (the “**Additional Rent**”), Tenant’s pro rata share of the Operating Expenses (as hereinafter defined) for that year. Tenant’s pro rata share shall be a fraction, the numerator of which is the Net Rentable Area in the Manufacturing Space plus the Net Rentable Area of the Interior Mechanical Space and the denominator of which is the Net Rentable Area in the Building, excluding the Net Rentable Area of the Exterior Mechanical Space and any other exterior mechanical space in, on or about the Building, which shall not be included in the calculation of Tenant’s pro rata share of Operating Expenses. Notwithstanding the foregoing sentence, in regards to the Interior Mechanical Space, Tenant’s pro-rata share of Operating Expenses (i) shall not include a component for janitorial services for such space, as janitorial services will not be furnished by Landlord to such space; and (ii) Tenant’s share of heating, ventilation and air conditioning (“**HVAC**”) costs for such space will be billed back in accordance with **Exhibit H** and **H-1** of this Lease Agreement and will be equal to the HVAC costs attributable to the Interior Mechanical Space.

B. All Operating Expenses shall be determined in accordance with generally accepted accounting principles, consistently applied and shall be computed on the accrual basis. The term “**Operating Expenses**” as used herein shall mean all expenses, costs and disbursements in connection with the ownership, operation, management, maintenance and repair of the Building, the Land, related pedestrian walkways, landscaping, fountains, roadways and parking facilities (including the Garage [as defined on **Exhibit C**]), and such additional facilities to service any of the foregoing in subsequent years as may be necessary or desirable in Landlord’s reasonable discretion (the Building, the Land and said additional facilities being hereinafter sometimes referred to as the “**Complex**”), including but not limited to the following:

- (1) Wages and salaries of all employees engaged in the operation, security, cleaning and maintenance of the Complex, including customary taxes, insurance and benefits relating thereto, allocated based upon the time such employees are engaged directly in providing such services, but not above the level of property manager.
- (2) All supplies, tools, equipment and materials used in operation and maintenance of the Complex.
- (3) Cost of all utilities for the Complex, including but not limited to the costs of water, electricity, gas, heating, lighting, air conditioning and ventilation; provided, however, in the event that Landlord elects to meter or sub-meter any or all of the aforementioned utilities in accordance with Section 7.E hereof, Operating Expenses shall not include the cost of such metered or sub-metered utilities provided to the Leased Premises or the leased premises of the other tenants in the Complex.
- (4) Cost of all janitorial service, maintenance and service agreements for the Complex and the equipment therein, including alarm service, security service, window cleaning, janitorial service, trash removal and elevator maintenance.
- (5) Cost of all insurance relating to the Complex which Landlord may elect to obtain, including but not limited to casualty and liability insurance applicable to the Complex and Landlord's personal property used in connection therewith; the amount of the commercially reasonable deductible paid by Landlord or deducted from any insurance proceeds paid to Landlord shall also constitute an Operating Expense.
- (6) Accounting costs and audit fees attributable to Landlord's ownership of the Complex, including without limitation in connection with tax returns. All taxes and assessments and other governmental charges (whether federal, state, county or municipal and whether they be by taxing districts or authorities presently taxing the Leased Premises or by others subsequently created or otherwise) and any other taxes and improvement assessments attributable to the Complex, or its operation or the revenues or rents received therefrom (whether directly or indirectly through the use of a franchise, margin or other similar tax and whether or not such taxes allow for the deduction of expenses in calculating the base amount on which the tax is levied) but excluding, however, federal and state taxes on income (collectively, "**Taxes**"); provided, however, that if at any time during the Term, new taxes, assessments, levies, impositions or charges are imposed on the rents received from the Complex or the rents reserved herein or any part thereof (whether directly or indirectly through the use of a franchise, margin or other similar tax), or the present method of taxation or assessment shall be so changed that the whole or any part of the taxes, assessments, levies, impositions or charges now levied, assessed or imposed on real estate and the improvements thereof shall be discontinued and as a substitute therefor, or in lieu of an increase to the tax rate thereof, taxes, assessments, levies, impositions or charges shall be levied, assessed and/or imposed wholly or partially as a capital levy or otherwise on the rents received from the Complex or the rents reserved herein or any part thereof (whether directly or indirectly through the use of a franchise, margin or similar tax and whether or not such taxes allow for the deduction of expenses in calculating the base amount on which the tax is levied), then such substitute or additional taxes, assessments, levies, impositions or charges, to the extent so levied, assessed or imposed, shall be deemed to be included within Taxes to the extent that such substitute or additional tax would be payable if the Complex were the only property of the Landlord subject to such tax. It is agreed that Tenant will also be responsible for ad valorem taxes on its personal property and on the value of leasehold improvements to the extent that the same exceed standard building allowance, provided, however, that such amount(s) is(are) expressly set out in the tax statements from the taxing authorities, or are reasonably determinable from tax statements that pertain specifically to the Leased Premises,

even if no reference is made in such statements to "standard building allowance" or similar concepts.

- (7) Amortization of the cost of installation of capital investment items that have been (whether before or during the Term) or are hereafter installed for the purpose of reducing Operating Expenses or which may be required by any laws, ordinances, orders, rules, regulations and requirements which are amended, become effective or are interpreted differently after the Commencement Date which impose any duty with respect to or otherwise relate to the use, condition, occupancy, maintenance or alteration of the Complex. All such costs which relate to the installation of such capital investment items shall be amortized over the reasonable life of the capital investment item, with the reasonable life and amortization schedule being determined in accordance with generally accepted accounting principles as reasonably determined by Landlord.
- (8) The property management fees incurred by Landlord, in no event to exceed four percent (4%) of the gross revenues (but expressly excluding parking revenues) received by Landlord on the Complex.
- (9) Cost of repairs and general maintenance (excluding repairs and general maintenance paid by proceeds of insurance or by Tenant or other third parties) for the Complex.
- (10) The reasonable rental value of the Building management office (which shall not exceed 3,000 square feet of Net Rentable Area).
- (11) All costs incurred by Landlord for the purpose of reducing Operating Expenses, including, without limitation, the cost of all tax protests (subject to the provisions set forth in Section 6.B(7) above).

C. Notwithstanding anything contained in this Lease Agreement to the contrary, the following shall not be included in or considered as Operating Expenses:

- (1) Except as set forth in Section 6.B(7) above, expenditures classified as capital expenditures, including without limitation, capital improvements, capital repairs, capital equipment and capital tools, under generally accepted accounting principles consistently applied, including rental payments with respect to capital items, or any non-cash charges such as depreciation or amortization. All costs incurred for the acquisition and renovation, construction and improving of the Complex and Garage, and readying same for occupancy and use, including without limitation tap fees or other one-time utility charges and initial installation of landscaping improvements, light fixtures and other items, even if the replacement thereof is permitted to be included in Operating Expenses shall be excluded from Operating Expenses.
- (2) Advertising, promotional expenses, leasing commissions, attorneys fees, costs and disbursements and other expenses incurred in connection with the leasing of the Complex or negotiations or disputes relating to leasing and lease interpretations with tenants or prospective tenants or other occupants of the Complex. Personnel costs of persons on-site and off-site to the extent same are engaged in leasing activities shall be excluded from Operating Expenses. Gifts, meals and entertainment expenses incurred with tenants, tenant prospects and brokers shall be excluded from Operating Expenses.
- (3) The cost of repairs or other work occasioned by any casualty which is covered by insurance or coverable by standard all risk property insurance available in Texas, or by the exercise of the right of eminent domain or otherwise reimbursed to Landlord from another source, net of deductibles carried by Landlord, and reasonable out-of-pocket cost of adjustment.
- (4) Landlord's cost of HVAC, electricity, water, janitorial and other services or benefits sold or provided to tenants in the Complex and for which Landlord is entitled to be reimbursed by such tenants as a separate additional charge or rental over and above the base rent or additional rent payments payable under the lease agreement with such tenant. The cost of providing HVAC services to other tenants at times or in quantities in excess of that made available to Tenant without special charge under this Lease Agreement, and the cost of providing electricity, water, janitorial or other services to other tenants in quantities or at specifications in excess of that made available to Tenant without special charge under this Lease Agreement, shall be excluded from Operating Expenses regardless of whether Landlord offers such services to other tenants without special charge under the terms of such other tenants' leases.
- (5) All costs (including permit, license and inspection fees), however paid, in demolishing, removing, completing, fixturing, furnishing, renovating, decorating or otherwise altering or improving space for tenants or other occupants of the Complex or for vacant space, or for any management office, including space planning, interior design and engineering work.
- (6) Except as set forth in Section 6.B(7) above, all costs incurred by Landlord in connection with the design or construction of the Complex or any equipment therein and related facilities, the correction of defects in design, construction or in the discharge of Landlord's obligations under **Exhibit G** attached to this Lease Agreement.
- (7) Except as set forth in Section 6.B(7) above, all costs of removing, remediating, encapsulating and/or monitoring any hazardous waste, substance or material, including, without limitation, asbestos containing materials, but excluding automotive fuels discharged in driving and parking areas of the Complex. Notwithstanding Section 6.B(7) above, all operating and capital costs required by or incurred in connection with (i) the installation of any capital improvement required by any law, ordinance or regulation enacted before the Effective Date, including, without limitation, the Americans with Disabilities Act, the Texas Architectural Barriers Act, the Houston Life Safety Ordinance, but excluding any changes in interpretations, enforcement or ruling thereon after the Effective Date, (ii) the existence of

chlorofluorocarbons (freon) in the Complex heating ventilation and air conditioning system or variable air volume system, or (iii) any future asbestos abatement of the Complex shall be excluded from Operating Expenses.

- (8) All costs, including without limitation fines, penalties and legal fees, incurred or imposed in connection with any legal violation by Landlord or the property manager or any breach or default by Landlord under any loan or mortgage instrument or any lease or license agreement. All costs, including without limitation interest, late charges, penalties and legal fees, incurred in connection with any late payment by Landlord.
- (9) Except as otherwise provided in Section 6.B(6) above, federal and state taxes on income and inheritance, estate and gift taxes of Landlord, the property manager and their respective affiliates, and all taxes imposed on or calculated on the basis of any mortgage encumbering the Complex or Garage or in connection with any transfer of ownership of the Complex or Garage or beneficial interests therein.
- (10) Ad valorem taxes attributable to the leasehold improvements of Tenant and the other tenants of the Complex in excess of Complex standard but only to the extent (a) Landlord is reimbursed directly by such other tenants for any ad valorem taxes attributable to the above Building standard leasehold improvements of such other tenants or (b) a separate allocation is made by the applicable taxing authority.
- (11) All payments to any affiliate of Landlord for services in excess of the costs of arms-length, third-party providers for services of comparable quality and scope.
- (12) Compensation paid to clerks, attendants or other persons in commercial concessions operated by Landlord or the property manager.
- (13) All costs incurred in connection with the operation, maintenance or repair of any antennae or satellite facilities, unless such services are being provided to all tenants of the Complex, including Tenant.
- (14) Except as otherwise provided in Section 6.B(6) above, other costs (including consulting fees and related disbursements) incurred in connection with Landlord's ownership of the Complex to the extent not directly related to the operation, maintenance and repair thereof, including without limitation, costs of any disputes between Landlord and its employees or the property manager and costs of selling, syndicating, financing, mortgaging or hypothecating any of the Landlord's interest in the Complex and/or common areas, costs of defending Landlord's title or interest in and to said property.
- (15) All contributions to charitable organizations.
- (16) All contributions to reserves for Operating Expenses.
- (17) Except as otherwise provided in Section 6.B(6) above, any special assessments of taxes from any city, county, state or federal governmental agency, including, but not limited to, such items as parking income taxes.
- (18) Costs of repair or replacement for any item to the extent that Landlord is reimbursed for same pursuant to a warranty.
- (19) Costs which Landlord is reimbursed by its insurance carrier or by any tenant's insurance carrier or by any other entity.

- (20) Any fines, costs, penalties or interest resulting from the negligence or willful misconduct of the Landlord or its agents, contractors or employees.
- (21) Any bad debt loss, rent loss or reserves for bad debt or rent loss.
- (22) All payments of principal, interest or other charges of any kind incurred in connection with any indebtedness secured by the Complex, and any payments under any ground lease or other underlying lease; provided that if Landlord makes payment of ad valorem taxes to its lender, rather than to taxing authorities, then payment to the lender shall not be included in Operating Expenses, but payments by the lender to taxing authorities shall be considered payments by Landlord, to be included in Operating Expenses to the extent otherwise provided for herein.
- (23) The cost of any additional casualty insurance premium for the Complex in excess of the standard rate payable by Landlord, which additional cost is attributable to: (a) the tenancy of a particular tenant or tenants in the Complex other than Tenant or (b) the use of any part of the Complex by Landlord other than for purposes of providing general services to the Complex.
- (24) Accounting costs and audit fees attributable to Landlord's ownership (as opposed to the operation) of the Complex, including in connection with Landlord's income tax returns.

D. If the Term of this Lease Agreement commences or terminates on other than the first day of a calendar year, Tenant's Additional Rent shall be prorated for such commencement or termination year, as the case may be, by multiplying each by a fraction, the numerator of which shall be the number of days of the Term during the commencement or termination year, as the case may be, and the denominator of which shall be 365, and the calculation described in Section 6.F below shall be made as soon as reasonably possible after the termination of this Lease Agreement, Landlord and Tenant hereby agreeing that the provisions relating to said calculation shall survive the termination of this Lease Agreement.

E. On or about January 1 of each calendar year during the Term, Landlord shall endeavor to deliver to Tenant Landlord's good faith estimate of Tenant's Additional Rent (the "**Estimated Additional Rent**") for such year. The Estimated Additional Rent shall be paid in equal installments in advance on the first day of each month. If Landlord does not deliver an estimate to Tenant for any year by January 1 of that year, Tenant shall continue to pay Estimated Additional Rent based on the prior year's estimate until Landlord's estimate is delivered to Tenant. From time to time during any calendar year, but in no event more than twice in any calendar year, Landlord may revise its estimate of the Additional Rent for that year based on either actual or reasonably anticipated increases in Operating Expenses, and the monthly installments of Estimated Additional Rent shall be appropriately adjusted for the remainder of that year in accordance with the revised estimate so that by the end of the year, the total payments of Estimated Additional Rent paid by Tenant shall equal the amount of the revised estimate.

F. Within one hundred fifty (150) days after the end of each calendar year during the Term, or as soon as reasonably practicable thereafter, Landlord shall provide Tenant a statement showing the Operating Expenses for said calendar year, prepared in accordance with generally accepted accounting practices, and a statement prepared by Landlord comparing Estimated Additional Rent paid by Tenant with actual Additional Rent. If the Estimated Additional Rent paid by Tenant, if any, exceeds the actual Additional Rent for said calendar year, Landlord shall pay Tenant an amount equal to such excess at Landlord's option, by either giving a credit against rentals next due, if any, or by direct payment to Tenant within thirty (30) days of the date of such statement. If the actual Additional Rent exceeds Estimated Additional Rent for said calendar year, Tenant shall pay the difference to Landlord within thirty (30) days of receipt of the statement. The provisions of this paragraph shall survive the expiration or termination of this Lease Agreement. Any amount due to the Landlord as shown on Landlord's statement described above, whether or not disputed by Tenant as provided herein shall be paid by Tenant when due as provided above, without prejudice to any subsequent written exception made pursuant to Section 6.I. The Base Rent, Additional Rent and all other sums of money that become due and payable under this Lease Agreement shall collectively be referred to herein as "**Rent**".

G. Notwithstanding any other provision herein to the contrary, it is agreed that if less than one hundred percent (100%) of the Net Rentable Area of the Building is occupied during any calendar year or if less than one hundred percent (100%) of the Net Rentable Area of the Building is being provided with Building standard services during any calendar year, an adjustment shall be made in computing each component of the Operating Expenses for that year which varies with the rate of occupancy of the Building (such as, but not limited to, utilities, management fees and janitorial services) so that the total Operating Expenses shall be computed for such year as though the Building had been one hundred percent (100%) occupied during such year and as though one hundred percent (100%) of the Building had been provided with Building standard services during that year.

H. All Additional Rent shall be paid by Tenant to Landlord contemporaneously with the required payment of Base Rent on the first day of each calendar month, monthly in advance, for each month of the Term, in lawful money of the United States at the address of the Landlord's property manager specified in Section 31 below (or such other address as may be designated by Landlord in writing from time to time). No payment by Tenant or receipt by Landlord of an amount less than the amount of Rent herein stipulated to be paid shall be deemed to be other than on account of the stipulated Rent, nor shall any endorsement on any check or any letter accompanying such payment of Rent be deemed an accord and satisfaction, but Landlord may accept such payment without prejudice to his rights to collect the balance of such Rent.

I. Landlord shall maintain full and complete records of Operating Expenses and exclusions therefrom in accordance with generally accepted accounting principles and good commercial practice and sufficient to enable Tenant to audit Operating Expenses to confirm that Operating Expenses are being charged in accordance with this Lease Agreement. Not more than once per calendar year, and only on or before the sixtieth (60<sup>th</sup>) day following the date Landlord delivered the statement described in Section 6.F above to Tenant setting out the adjustment, if any, to the Estimated Additional Rent (the Estimated Additional Rent, as adjusted by such statement, is hereinafter referred to as the "**Adjusted Additional Rent**"), Tenant shall have the right, directly or through agents or contractors, to commence an inspection and audit of Landlord's books and records pertaining to Operating Expenses and exclusions therefrom for the period covered by the statement only, upon reasonable advance notice to and coordination with Landlord; provided, however, in no event will Landlord be obligated to permit any such inspection or audit to be performed by a consultant or firm that is compensated by Tenant on a contingent fee or percentage of recovery basis. If Tenant fails to commence such audit on or before the sixtieth (60<sup>th</sup>) day following the date Landlord delivered the statement described in Section 6.F above to Tenant or to complete such audit and deliver the auditor's report to Landlord before the ninetieth (90<sup>th</sup>) day following the delivery of such statement, then Tenant shall conclusively be deemed to have accepted the Adjusted Additional Rent specified in such statement and to have waived any right to contest such amount in the future. The cost of any such review or audit by Tenant shall be borne solely by Tenant. Notwithstanding the foregoing, if following such audit it is conclusively determined that the Adjusted Additional Rent exceeds the actual Additional Rent by more than five percent (5%) for the calendar year in question, Landlord shall reimburse Tenant for all of Tenant's reasonable out of pocket costs and expenses incurred by Tenant in connection with such audit. If following such audit, it is conclusively determined that the Adjusted Additional Rent paid by Tenant exceeds the actual Additional Rent for said calendar year, Landlord shall pay Tenant an amount equal to such excess at Landlord's option, by either giving a credit against rentals next due, if any, or by direct payment to Tenant within thirty (30) days of the date of such determination. If as a result of such audit, it is conclusively determined that the actual Additional Rent exceeds the Adjusted Additional Rent for said calendar year, Tenant shall pay to Landlord within thirty (30) days of the date of such determination, the positive difference between the amount that the actual Additional Rent exceeds the Adjusted Additional Rent for said calendar year.

J. Landlord and Tenant hereby each acknowledge and agree that they are knowledgeable and experienced in commercial transactions and further hereby acknowledge and agree that the provisions of this Lease Agreement for determining Operating Expenses and other charges are commercially reasonable and valid even though such methods may not state precise mathematical formulae for determining such Operating Expenses. **ACCORDINGLY, TENANT HEREBY VOLUNTARILY AND KNOWINGLY WAIVES ALL RIGHTS AND BENEFITS TO WHICH TENANT MAY BE ENTITLED UNDER SECTION 93.012 OF THE TEXAS PROPERTY CODE, AS ENACTED BY HOUSE BILL 2186, 77<sup>TH</sup> LEGISLATURE, AS SUCH SECTION NOW EXISTS OR AS SAME MAY BE HEREAFTER AMENDED OR SUCCEEDED.**



**SEC. 1 SERVICES AND UTILITIES:**

E. Provided no Event of Default has occurred and is continuing hereunder, and subject to the provisions of Sections 7.B and 7.C below, Landlord shall furnish the following services and amenities (collectively, the **“Required Services”**) to Tenant (and its assignees and sublessees permitted hereunder) while occupying the Manufacturing Space:

- (1) Domestic water at those points of supply provided for general use of the tenants of the Building;
- (2) Chilled water piping to the main Building back bone located in the center of the Building mechanical rooms on the fifth (5<sup>th</sup>) floor of the Building for central heat, ventilation and air conditioning in season, twenty-four (24) hours per day, seven (7) days per week, all as more particularly described on **Exhibit H** attached hereto and made a part hereof for all purposes;
- (3) Electric lighting service for all public areas and special service areas of the Building in the manner and to the extent deemed by Landlord to be in keeping with the standards of other comparable medical office buildings in and in the vicinity of the Texas Medical Center area of Houston, Texas;
- (4) Janitor service on a five (5) day week basis, in the manner and to the extent deemed standard by Landlord during the periods and hours as such services are normally furnished to tenants in the Building and such window-washing as may from time to time in Landlord's judgment reasonably be required, all in keeping with the standards of other comparable medical office buildings in and in the vicinity of the Texas Medical Center area of Houston, Texas;
- (5) On-site security personnel and equipment for the Building; provided, however, that Tenant agrees that Landlord shall not be responsible for the adequacy or effectiveness of such security provided that (i) Landlord has exercised reasonable care in the selection of the security contractor and equipment, and (ii) the scope and extent of the security services contracted for by Landlord are in keeping with the standards of other comparable medical office buildings in and in the vicinity of the Texas Medical Center area of Houston, Texas;
- (6) Electrical facilities to furnish 24 hours a day, seven days a week (i) power to operate typewriters, personal computers, calculating machines, photocopying machines and other equipment that operates on 120/208 volts (collectively, the "**Low Power Equipment**"); provided, however, total rated connected load by the Low Power Equipment shall not exceed an annual average of four (4) watts per square foot of Net Rentable Area of the Manufacturing Space and Interior Mechanical Space and (ii) power to operate Tenant's lighting and Tenant's equipment that operates on 277/480 volts (collectively, the "**High Power Equipment**"); provided, however, total rated connected load by the High Power Equipment shall not exceed an annual average of two (2) watts per square foot of Net Rentable Area of the Manufacturing Space and Interior Mechanical Space. In the event that the Tenant's connected loads for low electrical consumption (120/208 volts) and high electrical consumption (277/480 volts) are in excess of those loads stated above, as determined by an independent utility consultant, and Landlord agrees to provide such additional load capacities to Tenant (such determination to be made by Landlord in its sole discretion), then Landlord may install and maintain, at Tenant's expense, electrical submeters, wiring, risers, transformers, and electrical panels, and other items required by Landlord, in Landlord's discretion, to accommodate Tenant's design loads and capacities that exceed those loads stated above, including, without limitation, the installation and maintenance thereof.
- (7) All Building standard fluorescent bulb replacement and all incandescent bulb replacement in the Common Areas of the Complex; and
- (8) Non-exclusive passenger elevator service to the Manufacturing Space twenty-four (24) hours per day and non-exclusive freight elevator service during normal business hours of the Building.

F. The obligation of Landlord to provide the Required Services shall be subject to governmental regulation thereof (i.e., rationing, temperature control, etc.) and any such regulation that impairs Landlord's ability to provide the

Required Services as herein stipulated shall not constitute an Event of Default hereunder but rather providing the applicable Required Services to the extent allowed pursuant to such regulations shall be deemed to be full compliance with the obligations and agreements of Landlord hereunder.

G. To the extent any of the Required Services require electricity, gas and water supplied by public utilities or others, Landlord's covenants hereunder shall only impose on Landlord the obligation to use its good faith efforts to cause the applicable public utilities or other providers to furnish the same. Failure by Landlord to furnish any of the Required Services to any extent, or any cessation thereof, due to failure of any public utility or other provider to furnish service to the Building, or any other cause beyond the reasonable control of Landlord, shall not render Landlord liable in any respect for damages to either person or property, nor be construed as an eviction of Tenant, nor work an abatement of Rent, nor relieve Tenant from fulfillment of any covenant or agreement hereof. As used herein, the phrase "cause beyond the reasonable control of Landlord" shall include, without limitation, acts of the public enemy, restraining of government, unavailability of materials, strikes, civil riots, floods, hurricanes, tornadoes, earthquakes and other severe weather conditions or acts of God. In the event of any failure by Landlord to furnish any of the Required Services to any extent, or any cessation thereof, due to malfunction of any equipment or machinery, or any other cause within the reasonable control of Landlord, Tenant shall have no claim for rebate of Rent or damages on account thereof, except as provided herein, provided that Landlord utilizes its reasonable efforts to promptly repair said equipment or machinery and to restore said Required Services as soon thereafter as is reasonably practicable. If the interruption of Essential Required Services (as defined herein) is caused by the negligence or willful misconduct of Landlord, its employees, contractors, subcontractors or agents or lies within Landlord's reasonable control and such interruption renders any portion of the Leased Premises, as applicable, unusable by Tenant for its intended purpose, then if such Essential Required Services are not restored within five (5) consecutive days following the initial interruption of Essential Required Services, Tenant shall receive an abatement of all Base Rent and Additional Rent as to the portion of the Leased Premises, as applicable, rendered unusable for its intended purpose beginning on the sixth (6th) consecutive day following the initial interruption of Essential Required Services until such Essential Required Services are restored. Furthermore, if such interruption of Essential Required Services renders the Manufacturing Space unusable for its intended purpose for more than sixty (60) consecutive days and Landlord fails to commence to cure and thereafter diligently pursue the cure of such interruption within such sixty (60) consecutive day period, then Tenant may terminate this Lease Agreement by delivering written notice to Landlord at any time after the expiration of such 60-day period unless Landlord has commenced to cure such interruption. The foregoing Rent abatement and termination rights shall be Tenant's sole recourse in the event of an interruption of an Essential Required Service. Landlord in no event shall be liable for damages by reason of loss of profits, business interruption or other consequential damages. The provisions of this Section 7.C do not apply in the case of a casualty or condemnation under Sections 13 and 14 hereof, which provisions shall govern in such circumstances. As used herein, the term "**Essential Required Services**" means any one or more of the following services to the extent Landlord is required to provide such service to Tenant under this Lease Agreement: HVAC, electricity, water, and/or elevator service.

H. Tenant hereby acknowledges and agrees that Landlord is obligated to provide only the Required Services under this Lease Agreement, and that Landlord, its agents and representatives, have made no representations whatsoever of any additional services or amenities to be provided by Landlord now or in the future under this Lease Agreement. Notwithstanding the foregoing, Tenant recognizes that Landlord may, at Landlord's sole option, elect to provide additional services or amenities for the tenants of the Building from time to time, and hereby agrees that Landlord's discontinuance of any provision of any such additional services or amenities shall not constitute a default of Landlord under this Lease Agreement nor entitle Tenant to any abatement of or reduction in Rent.

I. Notwithstanding anything contained in this Section 7 to the contrary, Landlord shall have the right to install, at Tenant's sole cost and expense, meters or sub-meters within the Leased Premises for the purpose of metering or sub-metering water, electricity or any other utility provided to the Leased Premises, and may install, at its sole discretion and at Tenant's sole cost and expense, meters or sub-meters for the purpose of metering or sub-metering heating, air conditioning and ventilation. In the event that Landlord installs one or more of the aforementioned meters or sub-meters, Landlord shall provide an invoice to Tenant for the utilities provided to the Leased Premises on a monthly basis in arrears based on the actual costs charged to Landlord for providing such utilities to the Leased Premises, which shall be paid by Tenant as Additional Rent on or before the first day of the following calendar month, along with the remainder of the Additional Rent then due and owing by Tenant. In the alternative, Landlord shall have the continuing

right to require Tenant to procure water, electricity and/or any other utility directly from a reputable third party service provider (“**Provider**”) for Tenant’s own account in which case Tenant shall be responsible for the payment of such utilities directly to such Provider. In such event, Tenant shall require each Provider to comply with the Building’s rules and regulations, all applicable laws, and Landlord’s reasonable policies and practices for the Building. Tenant acknowledges Landlord’s current policy that requires all Providers utilizing any area of the Complex outside the Premises to be approved by Landlord and to enter into a written agreement reasonably acceptable to Landlord prior to gaining access to, or making any installations in or through, such area. Accordingly, Tenant shall give Landlord written notice sufficient for such purposes.

## **SEC. 2 MAINTENANCE, REPAIRS AND USE:**

C. Landlord shall provide for the cleaning and maintenance of the public portions of the Building including painting and landscaping surrounding the Building. Unless otherwise expressly stipulated herein, Landlord shall not be required to make any improvements or repairs of any kind or character on the Leased Premises during the Term, except such repairs as may be required by normal maintenance operations to the exterior walls, corridors, windows, roof and other structural elements and equipment of the Building.

D. Landlord, its officers, agents, designees and representatives shall have the right to enter all parts of the Leased Premises at all reasonable hours upon at least 24 hours’ advance notice (except in the event of an emergency or to provide janitorial service, in which case no notice is required) for the purposes of: (i) inspecting same for compliance with Tenant’s obligations hereunder, (ii) cleaning, making repairs, alterations or additions to the Building or Leased Premises which it may deem necessary or desirable, (iii) to provide any service which it is obligated to furnish to Tenant, or (iv) showing the Leased Premises to prospective purchasers, mortgagees, or prospective tenants (but with prospective tenants only, during the last 6 months of the Term), and Tenant shall not be entitled to any abatement or reduction of Rent by reason thereof; provided, however, Landlord shall use commercially reasonable efforts not to disturb Tenant’s use of the Leased Premises and accommodate Tenant’s preferred time of entry to the extent reasonable under the circumstances. Further, Tenant may elect to have a Tenant representative escort Landlord, its officers, agents, designees and representatives through the Leased Premises provided such election shall not delay Landlord’s entry into the Leased Premises. Landlord shall use commercially reasonable efforts to cause all parties entering the Leased Premises on Landlord’s behalf or invitation to keep all information learned about Tenant’s business operations during any such visit to the Leased Premises confidential and shall not disclose any such information to a third party.

E. Landlord may, at its option and at the cost and expense of Tenant, repair or replace any damage or injury done to the Complex or any part thereof, caused by Tenant, Tenant’s agents, employees, licensees, invitees or visitors; Tenant shall pay the reasonable cost thereof to Landlord within 30 days of demand. Tenant further agrees to maintain and keep the interior of the Leased Premises in good repair and condition at Tenant’s expense. Tenant agrees not to commit or allow any waste or damage to be committed on any portion of the Leased Premises, and at the termination of this Lease Agreement, by lapse of time or otherwise, to deliver up the Leased Premises to Landlord in as good condition as on the Commencement Date, ordinary wear and tear and casualty and condemnation damage alone excepted, and upon such termination of this Lease Agreement, Landlord shall have the right to re-enter and resume possession of the Leased Premises.

F. Tenant will not use, occupy or permit the use or occupancy of the Leased Premises for any purpose which is directly or indirectly forbidden by law, ordinance or governmental or municipal regulation or order, or which may be dangerous to life, limb or property; or permit the maintenance of any public or private nuisance; or do or permit any other thing which may unreasonably interfere with, annoy or disturb the quiet enjoyment of any other tenant of the Building; or keep any substance or carry on or permit any operation which might emit offensive odors or conditions into other portions of the Complex; or use any apparatus which might make undue noise or set up vibrations in the Complex; or permit anything to be done which would increase the fire and extended coverage insurance rate on the Building or contents and if there is any increase in such rates by reason of acts of Tenant, then Tenant agrees to pay such increase promptly upon demand therefor by Landlord. In the event Tenant fails to correct, cure or discontinue such prohibited or dangerous use within five (5) days following notice from the Landlord, such failure shall constitute an Event of Default by Tenant hereunder and Landlord shall have all of its remedies as set forth in this Lease Agreement.

### SEC. 3 QUIET ENJOYMENT; RIGHTS RESERVED:

A. Tenant, on paying the said Rent and performing the covenants herein agreed to be by it performed, shall and may peaceably and quietly have, hold and enjoy the Leased Premises for the said Term.

B. Notwithstanding anything herein to the contrary, provided no such actions materially adversely affect Tenant's access to or use of the Leased Premises or the Garage, Landlord hereby expressly reserves the right in its sole discretion to (i) temporarily or permanently change the location of, close, block or otherwise alter any streets, driveways, entrances, corridors, doorways or walkways leading to or providing access to the Complex or any part thereof or otherwise restrict the use of same provided such activities do not unreasonably impair Tenant's access to the Leased Premises, or reduce the size or configuration of the Leased Premises, (ii) improve, remodel, add additional floors to or otherwise alter the Building, (iii) construct, alter, remodel or repair one or more parking facilities (including garages) on the Land, and (iv) convey, transfer or dedicate portions of the Land. In addition, Landlord shall have the right, in its sole discretion, at any time during the Term to attach to any or all of the Building windows a glazing, coating or film or to install storm windows for the purpose of improving the Building's energy efficiency. Tenant shall not remove, alter or disturb any such glazing, coating or film. The addition of such glazing, coating or film, or the installation of storm windows or the exercise of any of Landlord's rights pursuant to this Section 9, shall in no way reduce Tenant's obligations under this Lease Agreement or impose any liability on Landlord and it is agreed that Landlord shall not incur any liability whatsoever to Tenant as a consequence thereof and such activities shall not be deemed to be a breach of any of Landlord's obligations hereunder. Landlord agrees to exercise good faith in notifying Tenant within a reasonable time in advance of any alterations, modifications or other actions of Landlord under this Section 9. Any diminution or shutting off of light, air or view by any structure which is now or may hereafter be effected on lands adjacent to the Building shall in no way affect this Lease Agreement or impose any liability on Landlord. Noise, dust or vibration or other incidents caused by or arising out of any work performed pursuant to the exercise of Landlord's rights reserved in this Section 9 or new construction of improvements on lands adjacent to the Building, whether or not owned by Landlord, or on the Land shall in no way affect this Lease Agreement or impose any liability on Landlord. Tenant agrees to cooperate with Landlord in furtherance of Landlord's exercise of any of the rights specified in this Section 9.

### SEC. 4 ALTERATIONS:

A. Tenant shall not make or allow to be made (except as otherwise provided in this Lease Agreement) any alterations or physical additions (including fixtures) in or to the Leased Premises (which for the purposes hereof includes the placement of safes, vaults and other heavy furniture or equipment), without first obtaining the written consent of Landlord; provided, however, Landlord's consent to (i) any alterations or physical additions (including fixtures) to the Leased Premises which do not affect the HVAC, plumbing, electrical or mechanical systems or structural elements of the Leased Premises or the Building or (ii) the placement of safes, vaults or other heavy furniture or equipment within the Leased Premises, shall not be unreasonably withheld, conditioned or delayed. In addition, Tenant shall not be permitted to take x-rays or core drill or penetrate the floor of the Leased Premises or any other floor of the Building without first obtaining the Landlord's consent, which consent shall not be unreasonably withheld, conditioned or delayed. However, notwithstanding the foregoing, Landlord acknowledges and agrees that Tenant may drill into the floor slab for plumbing associated with drainage, the location and scheduling thereof to be consented to by Landlord, which consent shall not be unreasonably withheld, conditioned or delayed. The cost of any consultant or engineer hired by Landlord in connection with such work undertaken by Tenant shall be paid for by Tenant as additional rent hereunder. Tenant shall submit requests for consent to make alterations or physical additions together with copies of the plans and specifications for such alterations. Subsequent to obtaining Landlord's consent and prior to commencement of construction of the alterations or physical additions, Tenant shall deliver to Landlord the building permit, a copy of the executed construction contract covering the alterations and physical additions and evidence of contractor's and subcontractor's insurance, such insurance being with such companies, for such periods and in such amounts as Landlord may reasonably require, naming the Landlord Parties (as defined on Exhibit I) as additional insureds. Tenant shall pay to Landlord upon demand a review fee in the amount of Landlord's actual costs incurred to compensate Landlord for the cost of review and approval of the plans and specifications and for additional administrative costs incurred in monitoring the construction of the alterations, all such charges to Tenant to be reasonable. Tenant shall deliver to

Landlord a copy of the “as-built” plans and specifications for all alterations or physical additions so made in or to the Leased Premises, and shall reimburse Landlord for the cost incurred by Landlord to update its current architectural plans for the Building.

B. Tenant shall indemnify, defend (with counsel reasonably acceptable to Landlord) and hold harmless the Landlord Parties from and against all costs (including reasonable attorneys’ fees and costs of suit), losses, liabilities, or causes of action arising out of or relating to any alterations, additions or improvements made by Tenant to the Leased Premises, including but not limited to any mechanics’ or materialmen’s liens asserted in connection therewith.

C. Tenant shall not be deemed to be the agent or representative of Landlord in making any such alterations, physical additions or improvements to the Leased Premises, and shall have no right, power or authority to encumber any interest in the Complex in connection therewith other than Tenant’s leasehold estate under this Lease Agreement. However, should any mechanics’ or other liens be filed against any portion of the Complex or any interest therein (other than Tenant’s leasehold estate hereunder) by reason of Tenant’s acts or omissions or because of a claim against Tenant or its contractors, Tenant shall cause the same to be canceled or discharged of record by bond or otherwise within twenty (20) days after notice by Landlord. If Tenant shall fail to cancel or discharge said lien or liens, within said twenty (20) day period, which failure shall be deemed to be an Event of Default hereunder without the necessity of any further notice, Landlord may, at its sole option and in addition to any other remedy of Landlord hereunder, cancel or discharge the same and upon Landlord’s demand, Tenant shall promptly reimburse Landlord for all costs incurred in canceling or discharging such lien or liens.

D. Tenant shall cause all alterations, physical additions, and improvements (including fixtures), constructed or installed in the Leased Premises by or on behalf of Tenant to comply with all applicable governmental codes, ordinances, rules, regulations and laws. Tenant acknowledges and agrees that neither Landlord’s review and approval of Tenant’s plans and specifications nor its observation or supervision of the construction or installation thereof shall constitute any warranty or agreement by Landlord that same comply with such codes, ordinances, rules, regulations and laws or release Tenant from its obligations under this Section 10.D.

E. Tenant shall be wholly responsible for any accommodations or alterations that are required by applicable governmental codes, ordinances, rules, regulations and laws to be made to the Leased Premises to accommodate disabled employees and customers of Tenant, including, without limitation, compliance with the Americans with Disabilities Act (42 U.S.C. §§ 12101 et seq.) and the Texas Architectural Barriers Act (Texas Government Code, Chapter 469) (collectively, the “**Accommodation Laws**”) to the extent interpreted and enforced from time to time, as well as all applicable regulatory requirements promulgated by the Centers for Medicare and Medicaid Services (“**CMS**”), the State of Texas, Occupational Safety and Health Administration and the administrative regulations promulgated thereunder and all other federal, state and local statutory and regulatory requirements and building codes, including, without limitation, state hospital licensing standards and CMS certification regulations (collectively, the “**Healthcare Laws**”). Except to the extent provided below, Landlord shall be responsible for making all accommodations and alterations to the Common Areas of the Building necessary to comply with the Accommodation Laws and any other federal, state and local statutory and regulatory requirements and building codes. Notwithstanding the foregoing, Landlord may perform, at Tenant’s sole cost and expense, any accommodations or alterations that are required by the Accommodation Laws and/or Healthcare Laws or that are required by any governmental official acting pursuant to the Accommodation Laws and/or Healthcare Laws to any area outside of the Leased Premises which are triggered by any alterations or additions to the Leased Premises or by the proposed use of the Premises as described in Section 3 and Tenant shall reimburse Landlord for such cost and expense within thirty (30) days of demand.

**SEC. 5 FURNITURE, FIXTURES AND PERSONAL PROPERTY:** Tenant may remove its trade fixtures, office supplies and movable office furniture and equipment not attached to the Building provided: (a) such removal is made prior to the termination of this Lease Agreement; (b) Tenant is not in default of any obligation or covenant under this Lease Agreement at the time of such removal; and (c) Tenant promptly repairs all damage caused by such removal. All other property at the Leased Premises and any alterations or additions to the Leased Premises (including wall-to-wall carpeting, paneling or other wall covering) and any other article attached or affixed to the floor, wall or ceiling of the Leased Premises (excluding lab benches which will be considered movable equipment not attached to the Building and which may be removed by Tenant in accordance with the first sentence of this Section 11) shall become the property

of Landlord and shall remain upon and be surrendered with the Leased Premises as a part thereof at the termination of the Lease Agreement by lapse of time or otherwise, Tenant hereby waiving all rights to any payment or compensation therefor. Tenant will, prior to termination of this Lease Agreement, remove any and all alterations, additions, fixtures, equipment and property placed or installed by Tenant in the Leased Premises and will repair any damage caused by such removal; provided, however, Tenant shall not be obligated to remove any alterations or physical additions that affect the Leased Premises or the Building if at such time as Landlord approves any such alterations or physical additions pursuant to Section 10 above, Landlord notifies Tenant in writing that Landlord requires such items not be removed upon the expiration or termination of this Lease Agreement. In addition, Tenant shall be required prior to the termination of this Lease Agreement to remove all of its telecommunications equipment, including, but not limited to, all switches, cabling, wiring, conduit, racks and boards, whether located in the Leased Premises or in the Common Areas. If Tenant does not complete all removals prior to the termination of this Lease Agreement, Landlord may remove such items (or contract for the removal of such items), Tenant shall reimburse Landlord upon demand for the reasonable costs incurred by Landlord in connection therewith and Tenant shall be deemed to be holding over pursuant to Section 26 below until such time as such items have been removed from the Leased Premises. This Section 11 shall survive the expiration or termination of this Lease Agreement.

## **SEC. 6 SUBLETTING AND ASSIGNMENT:**

K. In the event Tenant should desire to assign this Lease Agreement or sublet the Leased Premises or any part thereof or allow same to be used or occupied by others, Tenant shall give Landlord written notice (which shall specify the duration of said desired sublease or assignment, the date same is to occur, the exact location of the space affected thereby, the proposed rentals on a square foot basis chargeable thereunder and sufficient information of the proposed sublessee or assignee regarding its intended use, financial condition and business operations) of such desire at least fifteen (15) days in advance of the date on which Tenant desires to make such assignment or sublease or allow such a use or occupancy. Landlord shall then have a period of ten (10) days following receipt of such notice within which to notify Tenant in writing that Landlord elects:

- (1) in the event such assignee or sublessee fails to meet the conditions set forth in subparagraph (3) below, to refuse to permit Tenant to assign this Lease Agreement or sublet such space, and in such case this Lease Agreement shall continue in full force and effect in accordance with the terms and conditions hereof; or
- (2) to terminate this Lease Agreement as to the space so affected as of the date so specified by Tenant in which event Tenant shall be relieved of all obligations hereunder as to such space arising from and after such date; provided, however, that if Landlord elects to terminate this Lease Agreement pursuant to this Section 12.A(2), Tenant shall have ten (10) days after receipt of written notice of Landlord's election during which Tenant may, if it so desires, withdraw its request for Landlord's consent to such assignment or sublease, in which event this Lease Agreement shall remain in full force and effect as if such request for Landlord's consent had not been made; or
- (3) to permit Tenant to assign this Lease Agreement or sublet such space for the duration specified in such notice, such approval not to be unreasonably withheld, conditioned or delayed, if (a) the nature and character of the proposed assignee or sublessee and the principals thereof, their business and activities and intended use of the Leased Premises are in Landlord's reasonable judgment consistent with the current standards of the Building and the floor or floors on which the Leased Premises are located, (b) neither the proposed assignee or sublessee (nor any party which, directly or indirectly, controls or is controlled by or is under common control with the proposed assignee or sublessee) is a department, representative or agency of any governmental body or then an occupant of any part of the Building or a party with whom Landlord is then negotiating to lease space in the Building or in any adjacent Building owned by Landlord or an affiliate of Landlord in and in the vicinity of the Texas Medical Center area of Houston, Texas, (c) the form and substance of the proposed sublease or instrument of assignment are acceptable to Landlord (which

acceptance by Landlord shall not be unreasonably withheld, conditioned or delayed) and is expressly subject to all of the terms and provisions of this Lease Agreement and to any matters to which this Lease Agreement is subject, (d) the proposed occupancy would not (1) increase Landlord's cleaning requirements, (2) impose an extra burden upon the services to be supplied by Landlord to Tenant hereunder, (3) violate the current rules and regulations of the Building, (4) violate the provisions of any other leases of tenants in the Building or (5) cause alterations or additions to be made to the Building (excluding the Leased Premises), (e) Tenant enters into a written agreement with Landlord whereby it is agreed that fifty percent (50%) of any rent realized by Tenant as a result of said sublease or assignment in excess of the Base Rent and Additional Rent payable to Landlord by Tenant under this Lease Agreement and any and all sums and other considerations of whatsoever nature paid to Tenant by the assignee or sublessee for or by reason of such assignment or sublease, including, but not limited to, sums paid for the sale of Tenant's fixtures, leasehold improvements, equipment, furniture, furnishings or other personal property in excess of the fair market value thereof (that is, after deducting and giving Tenant credit for Tenant's reasonable costs directly associated therewith, including reasonable brokerage fees, reasonable marketing costs, reasonable attorney's fees and the reasonable cost of remodeling or otherwise improving the Leased Premises for said assignee or sublessee but excluding any free rentals or the like offered to any such sublessee or assignee) shall be payable to Landlord such payments are actually received by Tenant, (f) the granting of such consent will not constitute a default under any other agreement to which Landlord is a party or by which Landlord is bound and (g) the creditworthiness of the proposed assignee or sublessee and the principals thereof is acceptable to Landlord, in Landlord's reasonable discretion.

L. No assignment or subletting by Tenant shall be effective unless Tenant shall execute, have acknowledged and deliver to Landlord, and cause each sublessee or assignee to execute, have acknowledged and deliver to Landlord, an instrument in form and substance reasonably acceptable to Landlord in which (i) such sublessee or assignee adopts this Lease Agreement and assumes and agrees to perform jointly and severally with Tenant, all of the obligations of Tenant under this Lease Agreement, as to the space transferred to it, (ii) Tenant and such sublessee or assignee agree to provide to Landlord, at their expense, direct access from a public corridor in the Building to the transferred space, (iii) such sublessee or assignee agrees to use and occupy the transferred space solely for the purpose specified in Section 3 and otherwise in strict accordance with this Lease Agreement and (iv) Tenant acknowledges and agrees that, notwithstanding such subletting or assignment, Tenant remains directly and primarily liable for the performance of all the obligations of Tenant hereunder (including, without limitation, the obligation to pay Rent), and Landlord shall be permitted to enforce this Lease Agreement against Tenant or such sublessee or assignee, or both, without prior demand upon or proceeding in any way against any other persons. Tenant shall, upon demand, reimburse Landlord for all reasonable out-of-pocket expenses incurred by Landlord in connection with a request made by Tenant pursuant to this Section 12, including, without limitation, any investigations as to the acceptability of the proposed assignee or sublessee, and all legal costs reasonably incurred in connection with the granting of any requested consent.

M. Any consent by Landlord to a particular assignment or sublease shall not constitute Landlord's consent to any other or subsequent assignment or sublease, and any proposed sublease or assignment by any assignee or sublessee shall be subject to the provisions of this Section 12 as if it were a proposed sublease or assignment by Tenant. The prohibition against an assignment or sublease described in this Section 12 shall be deemed to include a prohibition against (i) Tenant's mortgaging or otherwise encumbering its leasehold estate, (ii) an assignment or sublease which may occur by merger or operation of law and (iii) permitting the use or occupancy of the Leased Premises, or any part thereof, by anyone other than Tenant, each of which shall be ineffective and void and shall constitute an Event of Default under this Lease Agreement unless consented to by Landlord in writing in advance, which consent shall not be unreasonably withheld, conditioned or delayed. For purposes hereof, the transfer of the ownership or voting rights in a controlling interest of the voting stock of Tenant (if Tenant is a corporation) or the transfer of a general partnership interest or a majority of the limited partnership interest in Tenant (if Tenant is a partnership) or the transfer of a majority of the membership interests in Tenant (if Tenant is a limited liability company), at any time throughout the Term, shall be deemed to be an assignment of this Lease Agreement.



N. Notwithstanding anything to the contrary contained herein, Tenant may assign this Lease Agreement or sublet the Leased Premises or any part thereof, without the prior consent of Landlord, to (i) an Affiliate (as defined below) of Tenant, (ii) an entity into which Tenant is merged, consolidated or converted (or the resulting entity in any merger of any other entity into or with Tenant), or (iii) an entity to which fifty percent (50%) or more of Tenant's assets are transferred (each a "**Permitted Transferee**"); provided, however, (a) Tenant shall give Landlord written notice (which shall specify the assignee or sublessee, the duration of said assignment or sublease, the effective date of such assignment or subletting, the financial information necessary for Landlord to confirm the net worth test set forth below has been satisfied and the exact location of the space affected thereby and the rentals on a square foot basis to be charged thereunder) of such assignment or sublease at least ten (10) business days prior to such assignment or sublease, and (b) the assignee or successor entity must carry on the same use from the Leased Premises as Tenant and have a net worth as determined by generally accepted accounting principles ("**GAAP**") on the date following such sale of assets or merger at least equal to the GAAP net worth of Tenant as of the day preceding such assignment, sublease, sale or merger. In the event of any subletting or assignment to a Permitted Transferee, one hundred percent (100%) of the rent received from such Permitted Transferee shall be retained by Tenant. Further, any Permitted Transferee under an assignment of the Lease Agreement or the subletting of all of the Leased Premises shall have the right to exercise Tenant's Right of First Refusal, Tenant's Preferential Right, the Renewal Option and any rights to the Hold Space. As used herein, (1) the term "**Affiliate**" means any person or entity controlled by, under common control with, or which controls, the Tenant, and (2) the term "**control**" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of the entity referred to, whether through ownership of voting securities, by contract or otherwise, and the terms "**controlling**" and "**controls**" have meanings correlative to the foregoing.

## **SEC. 7 FIRE AND OTHER CASUALTY:**

A. In the event of a fire or other casualty in the Leased Premises, Tenant shall immediately give notice thereof to Landlord. If the Leased Premises shall be partially destroyed by fire or other casualty so as to render the Leased Premises untenantable in whole or in part, Rent shall abate thereafter as to the portion of the Leased Premises rendered untenantable until such time as the Leased Premises are made tenantable as reasonably determined by Landlord and Landlord agrees to commence and prosecute such repair work promptly and with all due diligence; provided, however, in the event such destruction (i) results in total or substantial damages to or destruction of the Building and Landlord shall decide not to rebuild or (ii) results in the Leased Premises being untenantable in whole or in substantial part and the reasonable estimation of a responsible contractor selected by Landlord as to the amount of time necessary to rebuild or restore such destruction to the Leased Premises and all other portions of the Building exceeds six (6) months from the time such work is commenced, then in either event, Landlord shall have a right to terminate this Lease Agreement effective as of the date of casualty or destruction, and upon such termination, all Rent owed up to the time of such destruction or termination shall be paid by Tenant. Subject to reasonable delays for insurance adjustments, Landlord shall give Tenant written notice of its decisions, estimates or elections under this Section 13 within sixty (60) days after any such damage or destruction. If any portion of Rent is abated under this Section 13, Landlord may elect to extend the expiration date of the Term of this Lease Agreement for the period of the abatement. Notwithstanding any provision herein to the contrary, if such casualty to the Leased Premises occurs during the last 12 months of the Term, or the repairs required will, in the reasonable estimation of the contractor selected by Landlord, take twelve (12) months or longer to repair, Tenant may terminate this Lease Agreement by delivering written notice to Landlord within thirty (30) days of Landlord's delivery to Tenant of the estimation of the time period necessary to make the repairs, such termination to be effective as of the date of casualty or destruction, and upon such termination, all Rent owed up to the time of such destruction or termination shall be paid by Tenant.

B. Notwithstanding anything in this Lease Agreement to the contrary, if the Leased Premises are damaged by fire or other casualty resulting from the gross negligence or willful misconduct of Tenant, or the agents, employees, licensees, customers or invitees of Tenant, such damage shall be repaired by and at the expense of Tenant under the direction and supervision of Landlord, and this Lease Agreement shall not be terminated and Rent shall continue without abatement.

C. Notwithstanding anything contained in this Section 13, in no event shall Landlord be required to expend more to reconstruct, restore and repair the Building than the amount actually received by Landlord from the proceeds

of the property insurance carried by Landlord and Landlord (or which would have been received had Landlord carried the insurance required to be carried hereunder) shall have no duty to repair or restore any portion of any alterations, additions, installation or improvements in the Leased Premises or the decorations thereto except to the extent that the proceeds of the insurance carried by Tenant are timely received by Landlord. If Tenant desires any other additional repairs or restoration, and if Landlord consents thereto, it shall be done at Tenant's sole cost and expense subject to all of the applicable provisions of this Lease Agreement. Tenant acknowledges that Landlord shall be entitled to the full proceeds of any insurance coverage whether carried by Landlord or Tenant, for damage to any alterations, addition, installation, improvements or decorations which would become the Landlord's property upon the termination of this Lease Agreement.

**SEC. 8 CONDEMNATION:** If all of the Complex is taken or condemned, or acquired under threat of condemnation, by or at the direction of any governmental authority (a **"Taking"** or **"Taken"**, as the context requires), or if so much of the Complex is Taken that, in Landlord's opinion, the remainder cannot be restored to an economically viable, quality office building, or if the awards payable to Landlord as a result of any Taking are, in Landlord's opinion, inadequate to restore the remainder to an economically viable, quality office building, Landlord may, at its election, exercisable by the giving of written notice to Tenant within sixty (60) days after the date of the Taking, terminate this Lease Agreement as of the date of the Taking or the date Tenant is deprived of possession of the Leased Premises (whichever is later). If this Lease Agreement is not terminated as a result of a Taking, Landlord shall restore the Leased Premises remaining after the Taking to a Building standard condition. During the period of restoration, Base Rent shall be abated to the extent the Leased Premises are rendered untenable and, after the period of restoration, Base Rent and Tenant's pro rata share shall be reduced in the proportion that the area of the Leased Premises Taken or otherwise rendered untenable bears to the area of the Leased Premises just prior to the Taking. If any portion of Base Rent is abated under this Section 14, Landlord may elect to extend the expiration date of the Term for the period of the abatement. All awards, proceeds, compensation or other payments from or with respect to any Taking of the Complex or any portion thereof shall belong to Landlord, Tenant hereby assigning to Landlord all of its right, title, interest and claim to same. Tenant shall have the right to assert a claim for and recover from the condemning authority, but not from Landlord, such compensation as may be awarded on account of Tenant's moving and relocation expenses, and depreciation to and loss of Tenant's movable personal property.

**SEC. 9 DEFAULT BY TENANT:** The occurrence of any one or more of the following shall constitute an **"Event of Default"** under this Lease Agreement:

A. The failure of Tenant to pay any Rent as and when due under this Lease Agreement and such failure continues for five (5) business days after Landlord gives Tenant written notice of such failure; provided, however, that once Landlord has given Tenant two (2) such notices during any calendar year of this Lease Agreement for any payments that are not made when due hereunder, Landlord shall not be required to give further notice or any notice at all with respect to subsequent defaults in such payments in such calendar year, and the failure or refusal by Tenant to timely make any payment thereafter due hereunder during such calendar year shall immediately constitute an Event of Default entitling Landlord to pursue its remedies without notice or demand;

B. The failure of Tenant to perform, comply with or observe any of the other covenants or conditions contained in this Lease Agreement and the continuance of such failure for the period of time as may be specified elsewhere in this Lease Agreement for such specific covenant or condition, or should no period of time be specified elsewhere in this Lease Agreement with respect to such specific covenant or condition, a period of thirty (30) days after written notice to Tenant; or, if such failure cannot reasonably be cured within said thirty (30) day period despite Tenant's diligent good faith efforts, the failure of Tenant to promptly commence its diligent good faith efforts to cure such failure within said thirty (30) day period and/or the continuance of such failure for a period of ninety (90) days notwithstanding Tenant's efforts to cure;

C. Tenant shall fail to execute and acknowledge or otherwise respond in good faith and in writing within ten (10) days after submission to Tenant of a request for confirmation of the subordination of this Lease Agreement pursuant to Section 24 or an estoppel certificate pursuant to Section 35;

D. Intentionally Deleted;

E. The filing of a petition by or against Tenant or any guarantor of Tenant's obligations under this Lease Agreement (i) naming Tenant or any guarantor as debtor in any bankruptcy or other insolvency proceeding, (ii) for the appointment of a liquidator or receiver for all or substantially all of Tenant's or any guarantor's property or for Tenant's interest in this Lease Agreement, or (iii) to reorganize or modify Tenant's or any guarantor's capital structure;

F. The admission by Tenant or any guarantor in writing of its inability to meet its obligations as they become due or the making by Tenant or any guarantor of an assignment for the benefit of its creditors;

G. The attempt by Tenant to assign this Lease Agreement or to sublet all or any part of the Leased Premises to other than a Permitted Transferee (or to a Permitted Transferee in a manner that does not comply with Section 12.D.) without the prior written consent of Landlord in accordance with Section 12;

H. Any holding over by Tenant in accordance with Section 26 with respect to all or any portion of the Leased Premises after the expiration or termination of the Lease Agreement; or

I. The failure by Tenant to comply with the insurance requirements set forth in **Exhibit I**.

**SEC. 10 REMEDIES OF LANDLORD:** Upon any Event of Default, Landlord may exercise any one or more of the following described remedies, in addition to all other rights and remedies provided at law or in equity:

A. Terminate this Lease Agreement by written notice to Tenant and forthwith repossess the Leased Premises and be entitled to recover forthwith as damages a sum of money equal to the total of (i) the cost of recovering the Leased Premises (including reasonable attorneys' fees and costs of suit), (ii) the reasonable cost of removing and storing any personal property, (iii) the unpaid Rent earned at the time of termination, plus interest thereon at the rate described in Section 5, (iv) the present value (discounted at the rate of eight percent (8%) per annum) of the balance of the Rent for the remainder of the Term less the present value (discounted at the same rate) of the fair market rental value of the Leased Premises for said period, taking into account the period of time the Leased Premises will remain vacant until a new tenant is obtained, and the reasonable cost to prepare the Leased Premises for occupancy and the other reasonable costs (such as leasing commissions, tenant improvement allowances and attorneys' fees) to be incurred by Landlord in connection therewith, and (v) any other sum of money and damages owed by Tenant to Landlord under this Lease Agreement.

B. Terminate Tenant's right of possession (but not this Lease Agreement) and may repossess the Leased Premises by forcible detainer suit or otherwise, without thereby releasing Tenant from any liability hereunder and without demand or notice of any kind to Tenant and without terminating this Lease Agreement. Landlord shall use reasonable efforts under the circumstances to relet the Leased Premises on such terms and conditions as Landlord in its sole discretion may determine (including a term different than the Term, rental concessions, alterations and repair of the Leased Premises); provided, however, Landlord hereby reserves the right (i) to lease any other comparable space available in the Building or in any adjacent building owned by Landlord prior to offering the Leased Premises for lease, and (ii) to refuse to lease the Leased Premises to any potential tenant which does not meet Landlord's standards and criteria for leasing other comparable space in the Building. Landlord shall not be liable for, nor shall Tenant's obligations hereunder be diminished because of, Landlord's failure or refusal to relet the Leased Premises or collect rent due in respect of such reletting. For the purpose of such reletting Landlord shall have the right to decorate or to make any repairs, changes, alterations or additions in or to the Leased Premises as may be reasonably necessary or desirable. In the event that (i) Landlord shall fail or refuse to relet the Leased Premises, or (ii) the Leased Premises are relet and a sufficient sum shall not be realized from such reletting (after first deducting therefrom, for retention by Landlord, the unpaid Rent due hereunder earned but unpaid at the time of reletting plus interest thereon at the rate specified in Section 5, the reasonable cost of recovering possession (including reasonable attorneys' fees and costs of suit), all of the reasonable costs and expenses of such decorations, repairs, changes, alterations and additions, the reasonable expense of such reletting and the reasonable cost of collection of the rent accruing therefrom) to satisfy the Rent, then Tenant shall pay to Landlord as damages a sum equal to the amount of such deficiency. Any such payments due Landlord shall be made upon demand therefor from time to time and Tenant agrees that Landlord may file suit to recover any

sums falling due under the terms of this Section 16 from time to time. No delivery to or recovery by Landlord of any portion due Landlord hereunder shall be any defense in any action to recover any amount not theretofore reduced to judgment in favor of Landlord, nor shall such reletting be construed as an election on the part of Landlord to terminate this Lease Agreement unless a written notice of such intention be given to Tenant by Landlord. Notwithstanding any such termination of Tenant's right of possession of the Leased Premises, Landlord may at any time thereafter elect to terminate this Lease Agreement. In any proceedings to enforce this Lease Agreement under this Section 16, Landlord shall be presumed to have used its reasonable efforts to relet the Leased Premises, and Tenant shall bear the burden of proof to establish that such reasonable efforts were not used.

C. Alter any and all locks and other security devices at the Leased Premises, and if it does so Landlord shall not be required to provide a new key or other access right to Tenant unless Tenant has cured all Events of Default; provided, however, that in any such instance, during Landlord's normal business hours and at the convenience of Landlord, and upon the written request of Tenant accompanied by such written waivers and releases as Landlord may require, Landlord will escort Tenant or its authorized personnel to the Leased Premises to retrieve any personal belongings or other property of Tenant not subject to the Landlord's lien or security interest described in Section 17. The provisions of this Section 16.C are intended to override and control any conflicting provisions of the Texas Property Code.

D. All agreements and provisions to be performed by Tenant under any of the terms of this Lease Agreement shall be at Tenant's sole cost and expense and without any abatement of Rent, except as otherwise provided in this Lease Agreement. If Tenant shall fail to pay any sum of money, other than Base Rent, required to be paid by it hereunder or shall fail to cure any default and such failure shall continue for ten (10) days after notice thereof by Landlord, then Landlord may, but shall not be obligated so to do, and without waiving or releasing Tenant from any obligations, make any such payment or perform any such act on Tenant's part. All sums so paid by Landlord and all reasonable costs incurred by Landlord in taking such action shall be deemed Additional Rent hereunder and shall be paid to Landlord on demand, and Landlord shall have (in addition to all other rights and remedies of Landlord) the same rights and remedies in the event of the non-payment thereof by Tenant as in the case of default by Tenant in the payment of Rent.

E. In connection with the exercise by Landlord of its rights and remedies in respect of any Event of Default on the part of Tenant, to the extent (but no further) that Landlord is required by applicable Texas law to mitigate damages, or to use efforts to do so, and such requirement cannot be lawfully and effectively waived (it being the intention of Landlord and Tenant that such requirements be and are hereby WAIVED to the maximum extent permitted by applicable law), Tenant agrees in favor of Landlord that Landlord shall not be deemed to have failed to mitigate damages, or to have used the efforts required by law to do so, because:

- (1) Landlord leases other space in the Building prior to re-letting the Leased Premises;
- (2) Landlord refuses to relet the Leased Premises to any Affiliate of Tenant, or any principal of Tenant, or any Affiliate of such principal;
- (3) Landlord refuses to relet the Leased Premises to any person or entity whose creditworthiness Landlord in good faith deems unacceptable;
- (4) Landlord refuses to relet the Leased Premises to any person or entity because the use proposed to be made of the Leased Premises by such prospective tenant is not of a type and nature consistent with that of the other tenants in the Building or the floor where the Leased Premises are situated as of the date Tenant defaults under this Lease Agreement, or because such use would, in the good faith opinion of Landlord, impose unreasonable or excessive demands upon the Building;
- (5) Landlord refuses to relet the Leased Premises to any person or entity, or any affiliate of such person or entity, who has been engaged in litigation with, or who has threatened litigation against, Landlord or any of its affiliates, or whom Landlord in good faith deems to be unreasonably or excessively litigious;
- (6) Landlord refuses to relet the Leased Premises because the tenant or the terms and provisions of the proposed lease are not approved by the holders of any liens or security interests in the Building or any part thereof, or would cause Landlord to breach or be in default of, or to be unable to perform any of its covenants under, any agreements between Landlord and any third party;
- (7) Landlord refuses to relet the Leased Premises because the proposed tenant is unwilling to execute and deliver Landlord's standard lease form without substantial tenant-oriented modifications or such tenant requires improvements to the Leased Premises to be paid at Landlord's cost and expense; or
- (8) Landlord refuses to relet the Leased Premises to a person or entity whose character or reputation, or the nature of whose business, Landlord in good faith deems unacceptable;

and it is further agreed that each and all of the grounds for refusal set forth in clauses (1) through (8) above, both inclusive, of this sentence are reasonable grounds for Landlord's refusal to relet the Leased Premises, or (as to all other provisions of this Lease Agreement) for Landlord's refusal to issue any approval, or take any other action, of any nature whatsoever under this Lease Agreement. In the event the waiver set forth in this Section 16.E shall be ineffective, Tenant further agrees in favor of Landlord, to the maximum extent to which it may lawfully and effectively do so, that the following efforts to mitigate damages if made by Landlord (and without obligating Landlord to render such efforts) shall be conclusively deemed reasonable, and that Landlord shall be conclusively deemed to have used the efforts to mitigate damages required by applicable law if: Landlord places the Leased Premises on its inventory of available space in the Building; Landlord makes such inventory available to brokers who request same; and Landlord shows the Leased Premises to prospective tenants (or their brokers) who request to see it.

**SEC. 11 LIEN FOR RENT:** LANDLORD HEREBY WAIVES ANY STATUTORY LANDLORD'S LIEN TO WHICH LANDLORD MAY OTHERWISE BE ENTITLED.

**SEC. 12 NON-WAIVER:** Neither acceptance of Rent by Landlord nor failure by Landlord to exercise available rights and remedies, whether singular or repetitive, shall constitute a waiver of any of Landlord's rights hereunder. Waiver by Landlord of any right for any Event of Default of Tenant shall not constitute a waiver of any right for either a subsequent Event of Default of the same obligation or any other Event of Default. No act or thing done by Landlord or its agent shall be deemed to be an acceptance or surrender of the Leased Premises and no agreement

to accept a surrender of the Leased Premises shall be valid unless it is in writing and signed by a duly authorized officer or agent of Landlord.

**SEC. 13 LAWS AND REGULATIONS; RULES AND REGULATIONS:** Tenant shall comply with, and Tenant shall use commercially reasonable efforts to cause its visitors, employees, contractors, agents, invitees and licensees to comply with, all laws, ordinances, orders, rules and regulations of any state, federal, municipal and other agencies or bodies having any jurisdiction thereof relating to the use, condition or occupancy of the Leased Premises, including, without limitation, all Healthcare Laws. Such reasonable written rules and regulations applying to all tenants in the Building as may be hereafter adopted by Landlord for the safety, care and cleanliness of the premises and the preservation of good order thereon, are hereby made a part hereof for all purposes and Tenant agrees to comply with all such rules and regulations. Landlord shall have the right at all times to change such rules and regulations or to amend them in any reasonable manner as may be deemed advisable by Landlord (provided such changes do not materially adversely affect Tenant's use of the Leased Premises for the uses set forth in Section 3), all of which changes and amendments will be sent by Landlord to Tenant in writing and shall be thereafter carried out and observed by Tenant. The current rules and regulations of the Building are set forth in **Exhibit D** attached hereto and made a part hereof for all purposes. Landlord shall use commercially reasonable efforts to enforce the rules and regulations in a non-discriminatory manner.

**SEC. 14 ASSIGNMENT BY LANDLORD; LIMITATION OF LANDLORD'S LIABILITY:** Landlord shall have the right to transfer and assign, in whole or in part, all its rights and obligations hereunder and in the Complex, and in such event and upon such transferee's assumption of all obligations of Landlord accruing after the date of such transfer, no further liability or obligation shall thereafter accrue against Landlord hereunder. Furthermore, Tenant specifically agrees to look solely to Landlord's interest in the Complex for the recovery of any judgment from Landlord, it being agreed that the Landlord Parties shall never be personally liable for any such judgment.

**SEC. 15 SEVERABILITY:** This Lease Agreement shall be construed in accordance with the laws of the State of Texas. If any clause or provision of this Lease Agreement is illegal, invalid or unenforceable, under present or future laws effective during the Term hereof, then it is the intention of the parties hereto that the remainder of this Lease Agreement shall not be affected thereby, and it is also the intention of both parties that in lieu of each clause or provision that is illegal, invalid or unenforceable, there be added as part of this Lease Agreement a clause or provision as similar in terms to such illegal, invalid or unenforceable clause or provision as may be possible and be legal, valid and enforceable.

**SEC. 16 SIGNS:** No signs of any kind or nature, symbol or identifying mark shall be put on the Building, in the halls, elevators, staircases, entrances, parking areas or upon the doors or walls, whether plate glass or otherwise, of the Leased Premises or within the Leased Premises so as to be visible from the public areas or exterior of the Building without the prior written approval of Landlord, which approval shall not be unreasonably withheld, conditioned or delayed. All signs or lettering shall conform in all respects to the sign and/or lettering criteria established by Landlord in writing. Landlord, at its sole cost and expense, shall provide Building standard signage on the north public corridor wall immediately adjacent to Tenant's entrance opposite the elevator lobby on the north side of the eighth (8<sup>th</sup>) floor.

**SEC. 17 SUCCESSORS AND ASSIGNS:** Landlord and Tenant agree that all provisions hereof are to be construed as covenants and agreements as though the words imparting such covenants were used in each separate paragraph hereof, and that, except as restricted by the provisions of Section 12, this Lease Agreement and all the covenants herein contained shall be binding upon the parties hereto, their respective heirs, legal representatives, successors and assigns.

**SEC. 18 SUBORDINATION:**

A. Tenant covenants and agrees with Landlord that this Lease Agreement is subject and subordinate to any mortgage, deed of trust, ground lease and/or security agreement which may now or hereafter encumber the Complex or any interest of Landlord therein and/or the contents of the Building, and to any advances made on the security thereof and to any and all increases, renewals, modifications, consolidations, replacements and extensions thereof; provided

any such subordination to a mortgage, deed of trust, ground lease and/or security agreement executed after the Effective Date shall be upon the express condition that this Lease Agreement shall be recognized by the mortgagee or ground lessor and that the rights of Tenant shall remain in full force and effect during the Term so long as Tenant shall continue to perform all the covenants and conditions of this Lease Agreement. In confirmation of such subordination, however, at Landlord's request Tenant shall execute promptly any appropriate certificate or instrument that Landlord may request, provided such subordination includes a commercially reasonable non-disturbance provision. In the event of the enforcement by the ground lessor, the trustee, the beneficiary or the secured party under any such ground lease, mortgage, deed of trust or security agreement of the remedies provided for by law or by such ground lease, mortgage, deed of trust or security agreement, Tenant will automatically become the Tenant of such ground lessor or successor in interest without any change in the terms or other provisions of this Lease Agreement; provided, however, that such ground lessor or successor in interest shall not be (a) bound by any payment of Rent for more than one month in advance except prepayments in the nature of security for the performance by Tenant of its obligations under this Lease Agreement to the extent such prepayments have been delivered to such successor in interest, (b) bound by any amendment or modification of this Lease Agreement made without the written consent of such ground lessor or such successor in interest (c) liable for any previous act or omission of the Landlord, (d) subject to any credit, demand, claim, counterclaim, offset or defense which theretofore accrued to Tenant against the Landlord, (e) required to account for any security deposit of Tenant other than any security deposit actually delivered to lender by Landlord and (f) responsible for any monies owing by Landlord to Tenant. Upon request by such ground lessor or successor in interest, whether before or after the enforcement of its remedies, Tenant shall execute and deliver an instrument or instruments confirming and evidencing the attornment herein set forth. Notwithstanding anything contained in this Lease Agreement to the contrary, in the event of any default by Landlord in performing its covenants or obligations hereunder which would give Tenant the right to terminate this Lease Agreement, Tenant shall not exercise such right unless and until (a) Tenant gives written notice of such default (which notice shall specify the exact nature of said default and how the same may be cured) to the lessor under any such land or ground lease and the holder(s) of any such mortgage or deed of trust or security agreement who has theretofore notified Tenant in writing of its interest and the address to which notices are to be sent, and (b) said lessor and holder(s) fail to cure or cause to be cured said default within thirty (30) days from the receipt of such notice from Tenant. This Lease Agreement is further subject to and subordinate to all matters of record in Harris County, Texas.

B. Additionally, within thirty (30) days of the Effective Date of this Lease Agreement, Landlord will use commercially reasonable efforts to cause all mortgagees, lenders, ground lessors and other parties currently holding a security interest affecting the Leased Premises or the Complex to execute a subordination, nondisturbance and attornment agreement substantially in the form attached hereto as **Exhibit L** (the "SNDA"). Consequently, if Landlord fails for any reason whatsoever, other than the failure of Tenant to provide Landlord for forwarding to the lender with such information regarding Tenant, its operations, finances, and principals, as the lender may request, or to act reasonably in respect of the proposed wording of the SNDA, or to act expeditiously to execute the SNDA, to obtain and deliver to Tenant the SNDA signed by such lender within thirty (30) days after the Effective Date of this Lease Agreement, Tenant shall have the right, in its sole discretion by written notice to Landlord, to terminate this Lease Agreement at any time prior to Tenant's receipt of the SNDA executed by such lender.

C. Notwithstanding anything to the contrary set forth above, any beneficiary under any deed of trust may at any time subordinate its deed of trust to this Lease Agreement in whole or in part, without any need to obtain Tenant's consent, by execution of a written document subordinating such deed of trust to the Lease Agreement to the extent set forth in such document and thereupon the Lease Agreement shall be deemed prior to such deed of trust to the extent set forth in such document without regard to their respective dates of execution, delivery and/or recording. In that event, to the extent set forth in such document, such deed of trust shall have the same rights with respect to this Lease Agreement as would have existed if this Lease Agreement had been executed, and a memorandum thereof, recorded prior to the execution, delivery and recording of the deed of trust.

**SEC. 19 TAX PROTEST:** Tenant waives all rights under the Texas Property Tax Code, now or hereafter in effect, including all rights under Sections 41.413 and 42.015 thereof, granting to tenants of real property or lessees of tangible personal property the right to protest the appraised value, or receive notice of reappraisal, of all or any part of the Complex, irrespective of whether Landlord has elected to protest such appraised value. To the extent such waiver

is prohibited, Tenant appoints Landlord as its attorney-in-fact, coupled with an interest, to appear and take all actions on behalf of Tenant which Tenant may take under the Texas Property Tax Code.

**SEC. 20 HOLDING OVER:** In the event of holding over by Tenant with respect to all or any portion of the Leased Premises after the expiration or termination of the Lease Agreement, such holding over shall constitute a tenancy at sufferance relationship between Landlord and Tenant and all of the terms and provisions of this Lease Agreement shall be applicable during such period, except that as monthly rental, Tenant shall pay to Landlord for each month (or any portion thereof) during the period of such hold over an amount equal to one hundred fifty percent (150%) of the Rent payable by Tenant for the month immediately preceding the holdover period. The rental payable during such hold over period shall be payable to Landlord on demand. No holding over by Tenant, whether with or without consent of Landlord, shall operate to extend this Lease Agreement except as herein provided. In the event of any unauthorized holding over, Tenant shall also indemnify, defend (with counsel reasonably acceptable to Landlord) and hold harmless the Landlord Parties (as defined on Exhibit I) against all claims for damages against the Landlord Parties as a result of Tenant's possession of the Leased Premises, including, without limitation, claims for damages by any other party to which Landlord may have leased, or entered into an agreement to lease, all or any part of the Leased Premises effective upon the termination of this Lease Agreement. **Notwithstanding anything herein to the contrary, Landlord and Tenant specifically agree that no notice to terminate Tenant's tenancy hereunder will be required from and after the expiration of the Term of this Lease Agreement under Section 91.001 or Section 24.005 of the Texas Property Code before Landlord files a forcible detainer suit on grounds that Tenant is holding over beyond the end of the Term or renewal period (if any) hereof; and any sublease hereunder shall not be approved unless it also contains a specific comparable waiver by the subtenant thereunder.**

**SEC. 21 INDEPENDENT OBLIGATION TO PAY RENT:**

A. It is the intention of the parties hereto that the obligations of Landlord and Tenant hereunder shall be separate and independent covenants and agreements, that the Rent and all other sums payable by Tenant hereunder shall continue to be payable in all events and that the obligations of Tenant hereunder shall continue unaffected, unless the requirement to pay or perform the same shall have been terminated pursuant to an express provision of this Lease Agreement.

B. Except as otherwise expressly provided herein, Tenant waives the right (a) to quit, terminate or surrender this Lease Agreement or the Leased Premises or any part thereof, or (b) to any abatement, suspension, deferment or reduction of the rent or any other sums payable under this Lease Agreement.

**SEC. 22 INDEMNITY; RELEASE AND WAIVER:**

A. Tenant hereby agrees to indemnify, protect, defend and hold the Landlord Parties harmless from and against any and all liabilities, claims, causes of action, fines, damages, suits and expenses, including reasonable attorneys' fees and necessary litigation expenses (collectively, the "**Claims**"), arising from Tenant's use, occupancy or enjoyment of the Leased Premises and its facilities for the conduct of its business or from any activity, work or thing done, permitted, omitted or suffered by Tenant and its partners, officers, directors, employees, agents, servants, contractors, customers, licensees and invitees in or about the Complex, **INCLUDING ANY CLAIMS RESULTING FROM THE NEGLIGENCE OF THE LANDLORD PARTIES, BUT NOT TO THE EXTENT CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE LANDLORD PARTIES** and Tenant further agrees to indemnify, protect, defend and hold the Landlord Parties harmless from and against any and all Claims arising from any breach or default in the performance of any obligation on Tenant's part to be performed under the terms of this Lease Agreement or arising from any negligence or willful misconduct of Tenant or any of its partners, officers, directors, employees, agents, servants, contractors, customers, licensees and invitees, **INCLUDING ANY CLAIMS RESULTING FROM THE NEGLIGENCE OF THE LANDLORD PARTIES, BUT NOT TO THE EXTENT CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE LANDLORD PARTIES**. In case any action or proceeding shall be brought against the Landlord Parties by reason of any such Claim, Tenant, upon notice from Landlord, shall provide a separate defense to same at Tenant's sole cost and expense by counsel



reasonably satisfactory to Landlord. The indemnity obligations of Tenant under this Section 28.A shall survive the expiration or earlier termination of this Lease Agreement.

B. Tenant hereby releases the Landlord Parties from any and all claims or causes of action whatsoever which Tenant might otherwise now or hereafter possess resulting in or from or in any way associated with any loss covered or which would have been covered by insurance required to be carried by Tenant under this Lease Agreement, **REGARDLESS OF CAUSE OR ORIGIN OF SUCH LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SOLE, JOINT, OR CONCURRENT NEGLIGENCE OF THE LANDLORD PARTIES**, including the deductible and/or uninsured portion thereof, maintained and/or required to be maintained by Tenant pursuant to this Lease Agreement.

C. Landlord shall not be liable or responsible to Tenant for (a) any loss or damage to any property or person occasioned by theft, criminal act, fire, act of God, public enemy, injunction, riot, strike, insurrection, war, court order, requisition or order of governmental body or authority, or any cause beyond Landlord's control, or (b) any damage or inconvenience which may arise through repair or alteration of any part of the Building made necessary by virtue of any such cause; provided, however, Landlord shall use commercially reasonable efforts to minimize such damage or inconvenience to Tenant.

D. Subject to Tenant's indemnification obligations set forth in Section 28.A above, which shall not be limited, negated or lessened in any way by the indemnity obligations set forth in this Section 28.D, Landlord hereby agrees to indemnify, protect, defend and hold the (a) Tenant, (b) its shareholders, members, partners, affiliates and subsidiaries, successors and assigns, and (c) any directors, officers, employees, agents, or contractors of such persons or entities (collectively, the "**Tenant Parties**") harmless from and against any and all Claims, arising from Landlord's ownership or operation of the Complex (excluding Claims arising from Tenant's use, occupancy or enjoyment of the Leased Premises and Tenant's use of the Parking Spaces) or from any activity, work or thing done, permitted or suffered by the Landlord Parties in or about the Complex (excluding the Leased Premises and Tenant's Parking Spaces), **EXCLUDING ANY PORTION OF ANY CLAIM TO THE EXTENT IT RESULTS FROM THE NEGLIGENCE, GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE TENANT PARTIES** and Landlord further agrees to indemnify, protect, defend and hold the Tenant Parties harmless from and against any and all Claims arising from any breach or default in the performance of any obligation on Landlord's part to be performed under the terms of this Lease Agreement or arising from any negligence or willful misconduct of the Landlord Parties, **EXCLUDING ANY CLAIMS RESULTING FROM THE NEGLIGENCE, GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE TENANT PARTIES**. In case any action or proceeding shall be brought against the Tenant Parties by reason of any such Claim, Landlord, upon notice from Tenant, shall provide a separate defense to same at Landlord's sole cost and expense by counsel reasonably satisfactory to Tenant. The indemnity obligations of Landlord under this Section 28.D shall survive the expiration or earlier termination of this Lease Agreement.

**SEC. 23 INSURANCE:** Landlord and Tenant shall satisfy the insurance requirements as more particularly described on **Exhibit I** attached hereto and made a part hereof for all purposes. In no event shall Tenant's liability under this Lease Agreement be limited by the amount of insurance required to be carried under **Exhibit I**.

**SEC. 24 ENTIRE AGREEMENT:** This instrument and any attached addenda or exhibits signed by the parties constitute the entire agreement between Landlord and Tenant with respect to the subject matter hereof; no prior written or prior or contemporaneous oral promises or representations shall be binding. This Lease Agreement shall not be amended, changed or extended except by written instrument signed by both parties hereto. Section captions herein are for Landlord's and Tenant's convenience only, and neither limit nor amplify the provisions of this instrument. Tenant agrees, at Landlord's request, to execute a recordable memorandum of this Lease Agreement.

**SEC. 25 NOTICES:** Whenever in this Lease Agreement it shall be required or permitted that notice, notification or demand be given or served by either party to this Lease Agreement to or on the other, such notice or demand shall be given or served and shall not be deemed to have been given or served unless in writing and (i) delivered personally, (ii) forwarded by facsimile, (iii) sent by Certified or Registered Mail, postage prepaid, with a copy also sent by facsimile or (iv) sent by a reputable common carrier guaranteeing next-day delivery, addressed as follows:

To the Landlord:      Sheridan Hills Developments L.P.  
                                 c/o The Metrontario Group  
                                 601-1 Yorkdale Road  
                                 Toronto, Ontario  
                                 Canada M6A 3A1  
                                 Attention: Mr. Matt Fisher  
                                 Telephone: (416) 785-6000x228  
                                 Facsimile: (416) 785-7000

With a copy to:      Andrews Kurth LLP  
                                 600 Travis, Suite 4200  
                                 Houston, TX 77002  
                                 Attn: Darren S. Inoff, Esq.  
                                 Telephone: (713) 220-3841  
                                 Facsimile: (713) 238-7134

With a copy to:      Jones Lang LaSalle  
                                 Americas, Inc.  
                                 1400 Post Oak Boulevard, Suite 1100  
                                 Houston, Texas 77056  
                                 Attention: Mary Stanton  
                                 Telephone: (713) 888-4009  
                                 Facsimile: (713) 888-4040

With a copy to:      Property Management Office  
                                 2301 West Holcombe Blvd., Suite 1300  
                                 Houston, Texas 77030  
                                 Attention: Property Manager  
                                 Telephone: (713) 592-5433  
                                 Facsimile: (713) 660-0295

To the Tenant:      At the address noted for Tenant on the signature page hereof until the Commencement Date, at which time it shall become the Address of the Leased Premises.

With a copy to: DuBois, Bryant & Campbell, LLP  
303 Colorado Street, Suite 2300  
Austin, Texas 78701  
Attention: Kim Shraibati  
Telephone: (512) 457-8000  
Facsimile: (512) 457-8008

Such addresses may be changed from time to time by either party by serving written notice as above provided. Any such notice or demand shall be deemed to have been given on the date of receipted delivery, refusal to accept delivery or when delivery is first attempted but cannot be made due to a change of address for which no notice is given, five (5) business days after it shall have been mailed as provided in this Section 31 or if sent by facsimile, upon electronic or telephonic confirmation of receipt from the receiving facsimile machine, whichever is earlier.

**SEC. 26 COMMENCEMENT DATE:** Tenant shall, if requested by Landlord, execute and deliver to Landlord within ten (10) days of Landlord's request an Acceptance of Premises Memorandum of the Leased Premises, the form of which is attached as **Exhibit E** attached hereto and made a part hereof for all purposes.

**SEC. 27 INTENTIONALLY DELETED:**

**SEC. 28 BROKERS:** Each of Landlord and Tenant warrants that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Lease Agreement, excepting only PinPoint Commercial, L.P. ("**Broker**") and that it knows of no other real estate broker(s) or agent(s) who is(are) or might be entitled to a commission in connection with this Lease Agreement. Landlord shall agree to pay all real estate commissions due in connection with this Lease Agreement only to the Broker, provided Landlord and such broker have entered into a separate commission agreement. Tenant agrees to indemnify, defend (with counsel reasonably acceptable to Landlord) and hold harmless the Landlord Parties from and against any liability from all other claims for commissions, finder's fee or other compensation arising from the negotiation of this Lease Agreement on Tenant's behalf. Landlord agrees to indemnify, defend (with counsel reasonably acceptable to Tenant) and hold Tenant harmless from and against any liability from all other claims for commissions, finder's fee or other compensation arising from the negotiation of this Lease Agreement on Landlord's behalf.

**SEC. 29 ESTOPPEL CERTIFICATES:** From time to time after the Effective Date, within ten (10) days after request in writing therefor from Landlord, Tenant agrees to execute and deliver to Landlord, or to such other addressee or addresses as Landlord may designate (and Landlord and any such addressee may rely thereon), a statement in writing in the form of **Exhibit F** attached hereto and made a part hereof for all purposes or in such other form and substance satisfactory to Landlord (herein called "**Tenant's Estoppel Certificate**"), certifying to all or any part of the information provided for in **Exhibit F** as is requested by Landlord and any other information reasonably requested by Landlord.

**SEC. 30 NAME CHANGE:** Landlord and Tenant mutually covenant and agree that Landlord hereby reserves and shall have the right at any time and from time to time to change the name of the Building or the address of the Building as Landlord may deem advisable, and Landlord shall not incur any liability whatsoever to Tenant as a consequence thereof.

**SEC. 31 BANKRUPTCY:** If a petition is filed by or against Tenant for relief under Title 11 of the United States Code, as amended (the "**Bankruptcy Code**"), and Tenant (including for purposes of this Section Tenant's successor in bankruptcy, whether a trustee or Tenant as debtor in possession) assumes and proposes to assign, or proposes to assume and assign, this Lease Agreement pursuant to the provisions of the Bankruptcy Code to any person or entity who has made or accepted a bona fide offer to accept an assignment of this Lease Agreement on terms acceptable to Tenant, then notice of the proposed assignment setting forth (a) the name and address of the proposed assignee, (b) all of the terms and conditions of the offer and proposed assignment, and (c) the adequate assurance to be furnished by the proposed assignee of its future performance under the Lease Agreement, shall be given to Landlord by Tenant no later than twenty (20) days after Tenant has made or received such offer, but in no event later than ten (10) days prior

to the date on which Tenant applies to a court of competent jurisdiction for authority and approval to enter into the proposed assignment. Landlord shall have the prior right and option, to be exercised by notice to Tenant given at any time prior to the date on which the court order authorizing such assignment becomes final and non-appealable, to receive an assignment of this Lease Agreement upon the same terms and conditions, and for the same consideration, if any, as the proposed assignee, less any brokerage commissions which may otherwise be payable out of the consideration to be paid by the proposed assignee for the assignment of this Lease Agreement. If this Lease Agreement is assigned pursuant to the provisions of the Bankruptcy Code, Landlord: (i) may require from the assignee a deposit or other security for the performance of its obligations under the Lease Agreement in an amount substantially the same as would have been required by Landlord upon the initial leasing to a tenant similar to the assignee; and (ii) shall receive, as additional rent, the sums and economic consideration described in Section 12.A(3)(e). Any person or entity to which this Lease Agreement is assigned pursuant to the provisions of the Bankruptcy Code shall be deemed, without further act or documentation, to have assumed all of the Tenant's obligations arising under this Lease Agreement on and after the date of such assignment. Any such assignee shall, upon demand, execute and deliver to Landlord an instrument confirming such assumption. No provision of this Lease Agreement shall be deemed a waiver of Landlord's rights or remedies under the Bankruptcy Code to oppose any assumption and/or assignment of this Lease Agreement, to require a timely performance of Tenant's obligations under this Lease Agreement, or to regain possession of the Leased Premises if this Lease Agreement has neither been assumed or rejected within sixty (60) days after the date of the order for relief or within such additional time as a court of competent jurisdiction may have fixed. Notwithstanding anything in this Lease Agreement to the contrary, all amounts payable by Tenant to or on behalf of Landlord under this Lease Agreement, whether or not expressly denominated as rent, shall constitute rent for the purposes of Section 502(b)(6) of the Bankruptcy Code.

**SEC. 32 TELECOMMUNICATIONS PROVIDERS:** In the event Tenant wishes to use, at any time during the Term of this Lease Agreement, the services of a telecommunications provider whose equipment or service is not then in the Building, no such provider shall be entitled to enter the Building or commence providing such service without first obtaining the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed. Landlord may condition its consent on such matters as Landlord reasonably deems appropriate including, without limitation, (i) such provider agreeing to an easement or license agreement in form and substance reasonably satisfactory to Landlord, (ii) Landlord having been provided and approved the plans and specifications for the equipment to be installed in the Building, (iii) Landlord having received, prior to the commencement of such work, such indemnities, bonds or other financial assurances as Landlord may require, (iv) the provider agreeing to abide by all Building rules and regulations, and agreeing to provide Landlord an "as built" set of plans and specifications, (v) the provider agreeing to pay Landlord such compensation as Landlord determines to be reasonable, and (vi) Landlord having determined that there is adequate space in the Building for the placement of all of such provider's lines and equipment.

**SEC. 33 HAZARDOUS SUBSTANCES:**

A. Tenant shall not cause or permit any Hazardous Substance (as hereinafter defined) to be used, stored, generated, contained or disposed of on or in the Complex by Tenant, Tenant's agents, employees, contractors or invitees in violation of Environmental Laws (as hereinafter defined). Landlord acknowledges and agrees that as part of Tenant's use of the Leased Premises as a research laboratory, Tenant shall be permitted to use lab alcohols, acids, radioactive agents, liquid nitrogen (including installation of liquid nitrogen freezers) and other related medical research items as are necessary to the operation of a research laboratory up to and including Biosafety Level 2, provided Tenant must use and store such materials in compliance with all applicable laws, rules and regulations, including, without limitation, all Environmental Laws. All bio-hazardous waste shall be removed, at Tenant's sole cost and expense, and at Tenant's risk, by a third party company following any and all Environmental Laws, insurance requirements and industry disposal regulations regarding said waste. If Hazardous Substances are used, stored, generated, contained or disposed of on or in the Complex in violation of Environmental Laws, or if the Complex becomes contaminated with Hazardous Substances in any manner due to the actions or omissions of Tenant or its agents, employees, contractors or invitees, Tenant shall indemnify, defend (with counsel reasonably acceptable to Landlord) and hold the Landlord Parties harmless from any and all claims, damages, fines, judgments, penalties, costs, liabilities and losses (including, without limitation, a decrease in value of the Complex, damages caused by loss or restriction of rentable or usable space or any damages

caused by adverse impact on marketing of the space and any and all sums paid for settlement of claims, attorneys' fees, consultant and expert fees) arising during or after the Term and as a result of such use, storage, generation, disposal or contamination in violation of Environmental Laws. This indemnification includes, without limitation, any and all costs incurred because of any investigation of the site or any cleanup, removal or restoration mandated by a federal, state or local agency or political subdivision. Without limitation of the foregoing, if Tenant causes or permits the presence of any Hazardous Substance on the Complex in violation of Environmental Laws that results in contamination, Tenant shall promptly, at its sole expense, take any and all necessary actions to return the Complex to the condition existing prior to the presence of any such Hazardous Substance on the Complex; provided, however, Tenant must obtain Landlord's prior written approval for any such remedial action. Tenant shall be responsible for the application for and maintenance of all required permits, the submittal of all notices and reports, proper labeling, training and record keeping, and timely and appropriate response to any release or other discharge by Tenant of a Hazardous Substance under Environmental Laws. The indemnity obligations of Tenant under this Section 39 shall survive the expiration or earlier termination of this Lease Agreement. Notwithstanding the foregoing to the contrary, Tenant acknowledges that the Building will be used by various tenants for medical-related purposes and as such, certain Hazardous Substances will be present in the Complex from time to time. To Landlord's current actual knowledge, without the duty of investigation or injury, as of the Effective Date, no Hazardous Substances are in, on, under or about the Leased Premises in violation of any Environmental Law, or requiring any notice, investigation, clean-up, or other response and Landlord shall indemnify, defend (with counsel reasonably acceptable to Tenant) and hold the Tenant and its officers, directors, agents and employees harmless from any and all claims, damages, fines, judgments, penalties, costs, liabilities and losses arising during or after the Term as a result of Landlord's breach of such representation and warranty. Landlord's obligations set forth in this Section 39 shall survive the expiration or termination of this Lease Agreement.

B. As used herein, "**Hazardous Substance**" means (i) any substance that is toxic, ignitable, reactive or corrosive or that is regulated by any local, state or federal law, and includes any and all material or substances that are defined as "hazardous waste", "extremely hazardous waste", "hazardous substance" or a "hazardous material" pursuant to any such laws and includes, but is not limited to, asbestos, polychlorobiphenyls and petroleum and any fractions thereof, (ii) any substance which is now or hereafter considered a biological contaminant or which could adversely impact air quality, including mold, fungi and other bacterial agents and (iii) all biohazardous, infectious and medical waste. Notwithstanding anything in this Section 39 to the contrary, "Hazardous Substances" shall not include materials commonly used in the ordinary operations of a general office building, provided that (1) such materials are used and properly stored in the Leased Premises in quantities ordinarily used and stored in comparable medical space, (2) such materials are not introduced into the Building's plumbing systems or are not otherwise released or discharged in the Leased Premises or the Building and (3) such materials are in strict compliance with local, state or federal law. As used herein, "**Environmental Laws**" means all applicable federal, state or local laws, regulations, orders, judgments and decrees regarding health, safety or the environment.

**SEC. 34 NO MONEY DAMAGES FOR FAILURE TO CONSENT; WAIVER OF CERTAIN DAMAGES:** Wherever in this Lease Agreement Landlord's consent or approval is required, if Landlord refuses to grant such consent or approval, whether or not Landlord expressly agreed that such consent or approval would not be unreasonably withheld, conditioned or delayed, Tenant shall not make, and Tenant hereby waives, any claim for money damages (including any claim by way of set-off, counterclaim or defense) based upon Tenant's claim or assertion that Landlord unreasonably withheld, conditioned or delayed its consent or approval. Tenant's sole remedy shall be an action or proceeding to enforce such provision, by specific performance, injunction or declaratory judgment. **EXCEPT AS OTHERWISE PERMITTED BY SECTION 26 OF THIS LEASE AGREEMENT, IN NO EVENT SHALL THE EITHER PARTY HERETO BE LIABLE FOR, AND EACH PARTY HEREBY WAIVES ANY CLAIM FOR, ANY INDIRECT, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE DAMAGES, INCLUDING LOSS OF PROFITS OR BUSINESS OPPORTUNITY, ARISING UNDER OR IN CONNECTION WITH THIS LEASE AGREEMENT.**

**SEC. 35 ACKNOWLEDGMENT OF NON-APPLICABILITY OF DTPA:** It is the understanding and intention of the parties that Tenant's rights and remedies with respect to the transactions provided for and contemplated in this Lease Agreement (collectively, this "**Transaction**") and with respect to all acts or practices of Landlord, past, present or future, in connection with this Transaction, are and shall be governed by legal principles other than the Texas Deceptive Trade Practices - Consumer Protection Act (the "**DTPA**"). Accordingly, Tenant hereby (a) agrees that under Section 17.49(f) of the DTPA this Transaction is not governed by the DTPA and (b) certifies, represents and warrants to Landlord that (i) Tenant has been represented by legal counsel in connection with this Transaction who has not been directly or indirectly identified, suggested or selected by the Landlord and Tenant has conferred with Tenant's counsel concerning all elements of this Lease Agreement (including, without limitation, this Section 41) and this Transaction and (ii) the Leased Premises will not be occupied by Tenant as Tenant's family residence. Tenant expressly recognizes that the total consideration as agreed to by Landlord has been predicated upon the inapplicability of the DTPA to this Transaction and that Landlord, in determining to proceed with the entering into of this Lease Agreement, has expressly relied on the inapplicability of the DTPA to this Transaction.

**SEC. 36 ATTORNEYS' FEES:** In the event either party defaults in the performance of any of the terms, agreements or conditions contained in this Lease Agreement and the other party places the enforcement of this Lease Agreement, or any part thereof, or the collection of any rent due or to become due hereunder, or recovery of the possession of the Leased Premises, in the hands of an attorney who files suit upon the same, and should such non-defaulting party prevail in such suit, the defaulting party agrees to pay the other party's reasonable attorneys' fees and other disbursements or costs thereby incurred.

**SEC. 37 AUTHORITY OF TENANT:** If Tenant is a corporation, partnership or other entity, Tenant warrants and represents unto Landlord that (a) Tenant is a duly organized and existing legal entity, in good standing in the State of Texas, (b) Tenant has full right and authority to execute, deliver and perform this Lease Agreement, (c) the person executing this Lease Agreement was authorized to do so and (d) upon written request of Landlord, such person will deliver to Landlord satisfactory evidence of his or her authority to execute this Lease Agreement on behalf of Tenant.

**SEC. 38 INABILITY TO PERFORM:** Whenever a period of time is prescribed for the taking of an action by Landlord or Tenant, the period of time for the performance of such action shall be extended by the number of days or months that the performance is actually delayed due to strikes, acts of God, shortages of labor or materials, war, terrorist attacks (including bio-chemical attacks), civil disturbances and other causes beyond the reasonable control of the Landlord or Tenant, as the case may be ("**Force Majeure**"); provided, however, Force Majeure shall not excuse Tenant's obligation to pay any sums of money due hereunder, including without limitation, the obligation to pay Rent.

**SEC. 39 JOINT AND SEVERAL TENANCY:** If more than one person executes this Lease Agreement as Tenant, their obligations hereunder are joint and several, and any act or notice of or to, or refund to, or the signature of, any one or more of them, in relation to the renewal or termination of this Lease Agreement, or under or with respect to any of the terms hereof shall be fully binding on each and all of the persons executing this Lease Agreement as a Tenant.

**SEC. 40 EXECUTION OF THIS LEASE AGREEMENT:** The submission of an unsigned copy of this Lease Agreement to Tenant for Tenant's consideration does not constitute an offer to lease the Leased Premises or an option to or for the Leased Premises. This Lease Agreement shall become effective and binding only upon the execution and delivery of this Lease Agreement by both Landlord and Tenant.

**SEC. 41 WAIVER OF TRIAL BY JURY; COUNTERCLAIM:** LANDLORD AND TENANT HEREBY WAIVE TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER PARTY AGAINST THE OTHER ON ANY MATTERS IN ANY WAY ARISING OUT OF OR CONNECTED WITH THIS LEASE AGREEMENT, THE RELATIONSHIP OF LANDLORD AND TENANT, TENANT'S USE OR OCCUPANCY OF THE LEASED PREMISES, OR THE ENFORCEMENT OF ANY REMEDY UNDER ANY APPLICABLE LAW, RULE, STATUTE, ORDER, CODE OR ORDINANCE. If Landlord commences any legal proceeding against Tenant, Tenant shall not interpose any counterclaim of any nature or description in any such proceeding (unless failure to impose such counterclaim would preclude Tenant from asserting in a separate action the claim which is the subject of the counterclaim), and will not seek to consolidate any such proceeding with any other action which may have been or will be brought in any other court by Tenant.

**SEC. 42 CALCULATION OF TIME PERIODS:** Should the calculation of any of the various time periods provided for herein result in an obligation becoming due on a Saturday, Sunday or legal holiday (such day which is neither Saturday, Sunday or legal holiday, a "business day"), then the due date of such obligation or scheduled time of occurrence of such event shall be delayed until the next business day.

**SEC. 43 ANTI-TERRORISM LAWS:** Tenant represents and warrants to and covenants with Landlord that (i) neither Tenant nor any of its owners or affiliates currently are, or shall be at any time during the Term, in violation of any laws relating to terrorism or money laundering (collectively, the "**Anti-Terrorism Laws**"), including without limitation Executive Order No. 13224 on Terrorist Financing, effective September 24, 2001, and regulations of the U.S. Treasury Department's Office of Foreign Assets Control (OFAC) related to Specially Designated Nationals and Blocked Persons (SDN's OFAC Regulations), and/or the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (Public Law 107-56) (the "**USA Patriot Act**"); (ii) neither Tenant nor any of its owners, affiliates, investors, officers, directors, employees, vendors, subcontractors or agents is or shall be during the term hereof a "**Prohibited Person**" which is defined as follows: (1) a person or entity owned or controlled by, affiliated with, or acting for or on behalf of, any person or entity that is identified as a Specially Designated National and Blocked Person on the then-most current list published by OFAC at its official website, <http://www.treas.gov/offices/eotffc/ofac/sdn/t11sdn.pdf>, or at any replacement website or other replacement official publication of such list, and (2) a person or entity who is identified as or affiliated with a person or entity designated as a terrorist, or associated with terrorism or money laundering pursuant to regulations promulgated in connection with the USA Patriot Act; and (iii) Tenant has taken appropriate steps to understand its legal obligations under the Anti-Terrorism Laws and has implemented appropriate procedures to assure its continued compliance with such laws. Tenant hereby agrees to defend, indemnify, and hold harmless Landlord, its officers, directors, agents and employees, from and against any and all claims, damages, losses, risks, liabilities and expenses (including attorney's fees and costs) arising from or related to any breach of the foregoing representations, warranties and covenants. At any time and from time-to-time during the Term, Tenant shall deliver to Landlord within ten (10) days after receipt of a written request therefor, a written certification or such other evidence reasonably acceptable to Landlord evidencing and confirming Tenant's compliance with this Section 49.

**SEC. 44 RENEWAL OPTIONS:** Tenant shall have, and is hereby granted, the options (the "**Renewal Options**") to extend the Term of this Lease Agreement for five (5) additional periods of one (1) year each (as applicable, the "**Extended Term**") upon and subject to the following terms, conditions and provisions:

A. The Renewal Options may only be exercised by Tenant giving irrevocable written notice thereof to Landlord no later than six (6) months and one (1) day prior to the commencement of the Extended Term arising from the Renewal Option being exercised. If Tenant fails to give Landlord such written notice of exercise of such Renewal Option within such specified time period, Tenant shall be deemed to have elected not to exercise, and to have waived, such Renewal Option and the unexercised Renewal Options shall automatically terminate and expire and be of no

further force and effect. It is expressly agreed that Tenant shall not have the option to extend the Term of this Lease Agreement beyond the Extended Term. If Tenant exercises any of the Renewal Options, such Extended Term shall commence immediately upon the expiration of the then current Term of this Lease Agreement (as applicable, the “**Extended Term Commencement Date**”).

B. If Tenant exercises any of the Renewal Options (in accordance with and subject to the provisions of this Section 50), the Extended Term shall be upon, and subject to, all of the terms, covenants and conditions provided in this Lease Agreement except for any terms, covenants and conditions that are expressly or by their nature inapplicable to the Extended Term (including, without limitation, the right to renew the Term of this Lease Agreement beyond the final Extended Term) and except that (i) the annual Base Rent during the applicable Extended Term shall be as set forth in Section 5.A above and (ii) the Leased Premises and all leasehold improvements relating thereto will be provided in the condition they exist (i.e., “AS IS” and “WITH ALL FAULTS”) on the Extended Term Commencement Date, and this Lease Agreement shall be deemed to have been automatically amended as of the Extended Term Commencement Date in accordance with this Section 50. Tenant and Landlord shall promptly (but in no event longer than fifteen (15) days after Landlord’s submission of the amendment to Tenant) execute and deliver an appropriate amendment of this Lease Agreement to evidence such terms as will apply following commencement of the Extended Term.

C. Notwithstanding any provision herein to the contrary, Tenant shall not have the right to extend the Term of this Lease Agreement pursuant to this Section 50 and such right shall automatically terminate and be of no further force and effect if, at the time Tenant exercises such Renewal Option or on the Extended Term Commencement Date, an Event of Default then exists under this Lease Agreement. Tenant shall not have the right to assign the Renewal Options to any sublessee or assignee of the Leased Premises other than a Permitted Transferee, nor may any such sublessee or assignee (other than a Permitted Transferee) exercise the Renewal Options unless in connection with an assignment of Tenant’s entire interest in this Lease Agreement or a sublease of the entire Leased Premises.

D. For all purposes under this Lease Agreement, the Extended Term (if exercised) shall be deemed to be included in and part of the Term.

**SEC. 45 CHASE SPACE:** At no cost to Tenant for such right during the Term, Tenant shall have the right to use (on a non-exclusive basis), its pro rata share (based on the percentage of the total Net Rentable Area of the Building comprising the Manufacturing Space) of the chase space located either (i) [on the south side of the Building towards the southwest corner of the 5th floor, or (ii) the chase space located in the core of the Building,] such chase space to be used solely by Tenant for uses associated with the use permitted under Section 3 of this Lease Agreement, which uses shall be subject to the prior written approval of the Landlord. In the event Tenant needs to penetrate surfaces within the Building for such installations, immediately after the completion of such work, Tenant will conceal such work and/or the surface finish will be returned to its condition at the time Tenant commenced such work. All such work will be at Tenant’s sole cost and expense and be subject to Landlord’s prior approval as to location, time, manner and nature of such work and such work must comply with the terms and provisions of this Lease Agreement.

**SEC. 46 BACK-UP GENERATOR:**

A. Tenant shall be permitted, at its sole cost and expense, to install, connect to the Building, operate and maintain a natural gas back-up electrical generator and all related equipment switching gear, conduit and equipment mounts (collectively, “**Generator**”) screened from public view to be located in a location in the Complex mutually agreed upon by Landlord and Tenant. The installation of the Generator shall be subject to all conditions and requirements as provided for in Section 10 hereof. Landlord reserves the right to relocate the Generator from time to time at Landlord’s cost and expense, and to install its own generator providing back-up power to the Common Areas and emergency lighting in the Complex in the same area as Tenant’s Generator.

B. The installation, maintenance, repair, replacement, removal and repair of any damage relating to the Generator, and all related costs, shall be the sole responsibility of Tenant, subject to Landlord’s reasonable direction and control. Landlord shall supply diesel fuel for the Generator from the central tank at the Building which the Landlord shall maintain at its sole cost and expense, but with the diesel fuel drawn from same by Tenant to be at Tenant’s sole



cost and expense based on a meter (also to be installed and maintained at Tenant's sole cost and expense). Notwithstanding anything to the contrary contained herein, in no event shall Tenant be permitted to install or maintain on or about the Leased Premises or the Building any underground fuel storage tanks or any diesel fuel tanks of its own.

C. Upon the expiration or termination of this Lease Agreement, or at such time as Tenant decides that it no longer wishes to maintain the Generator, Tenant shall be obligated to remove the Generator and all related or ancillary equipment, wiring, and the like, and Tenant shall repair any damage caused by the installation and use of the Generator and by such removal in a manner and method reasonably satisfactory to Landlord.

D. The Generator shall be used solely for the generation of emergency power in the event of and only for the duration of a power outage or "brownout", or interruption of electrical service to the Building. Tenant shall be permitted to periodically test the Generator to confirm that it is in good working order. The Generator shall be used solely for purposes of Tenant's business in the Leased Premises. The use and operation of the Generator shall comply with all applicable provisions of this Lease Agreement. In no event shall the maintenance, use and operation of the Generator interfere with any of the systems of the Building. Tenant shall comply with all laws applicable to the use and operation of the Generator. Tenant shall be responsible for obtaining all licenses, permits and approvals for the use and operation of the Generator.

E. Parking Spaces occupied by the Generator shall be considered unreserved Parking Spaces (as defined on **Exhibit C**) utilized by Tenant and shall be paid for by Tenant in accordance with the terms and provisions of **Exhibit C**.

F. Tenant shall defend, indemnify and hold the Landlord Parties harmless from and against all Claims and liabilities of every kind or nature related to the existence and operation of the Generator, except to the extent that such claims and liabilities are the result of the gross negligence or willful misconduct of any of the Landlord Parties.

G. Throughout the Term, Landlord shall maintain a separate back-up power generator serving the Common Areas and emergency lighting in the Complex.

**SEC. 47 FINANCIAL STATEMENTS:** Tenant shall from time to time during the Term, but not more than twice in any 12 month period, provide to Landlord an up to date true and accurate unaudited financial statement, balance sheet, and income and expense statement covering Tenant and any guarantor of Tenant's obligations under this Lease Agreement, within twenty (20) days after written request therefor is made by Landlord to Tenant. Except as may be required by law, Landlord agrees to keep any financial information provided pursuant to this Section 53 (the "**Confidential Information**") confidential; provided, however that (a) Landlord may make any disclosure of the Confidential Information to which Tenant has consented in writing in advance, and (b) any of the Confidential Information may be disclosed to employees, partners, agents, successors, affiliates, assigns and representatives of Landlord, including, but not limited to, its auditors, attorneys, and lenders and potential purchasers and lenders of the Building in connection with any financing or sale of the Building who (i) need to know the Confidential Information in connection therewith, (ii) shall have been informed by Landlord of the confidential nature of the Confidential Information, and (iii) shall have agreed to treat the Confidential Information confidentially and to use it only for the purpose described above.

**SEC. 48 LANDLORD DEFAULT:** The failure of Landlord to promptly and faithfully keep and perform each and every covenant, agreement, and stipulation herein on the part of Landlord to be kept and performed and the continuance of such failure for a period of thirty (30) days after written notice to Landlord; or, if such failure cannot reasonably be cured within said thirty (30) day period despite Landlord's diligent good faith efforts, the failure of Landlord to promptly commence its diligent good faith efforts to cure such failure within said thirty (30) day period shall, at the option of Tenant, constitute a default by Landlord under this Lease Agreement. In the case of any breach or default of this Lease Agreement by Landlord, Tenant shall have all of the remedies, rights, and authority against and with respect to Landlord provided by law, or in equity specifically including the right to injunctive relief. In the event of such failure by Landlord which continues for a period of ninety (90) days notwithstanding Landlord's efforts to cure, Tenant shall have the right at the end of such ninety (90) day period to deliver to Landlord written notice to terminate

this Lease Agreement, which shall take effect thirty (30) days after the date of such notice, except that Tenant's right to terminate shall be null and void if the failure is cured during such thirty (30) day period.

**SEC. 49 EXHIBITS:** Exhibits A through L are attached hereto and made a part of this Lease Agreement for all purposes.

[END OF TEXT]

IN WITNESS WHEREOF, Landlord and Tenant, acting herein by duly authorized individuals, have caused these presents to be executed in multiple counterparts (by facsimile, pdf or otherwise), each of which shall have the force and effect of an original on this 6th day of May, 2015 (the “**Effective Date**”).

**LANDLORD:**

Sheridan Hills Developments L.P.,  
a Texas limited partnership

By: Pouncet Sheridan Inc., an Ontario,  
Canada corporation, its general partner

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**TENANT:**

Bellicum Pharmaceuticals, Inc., a Delaware corporation

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

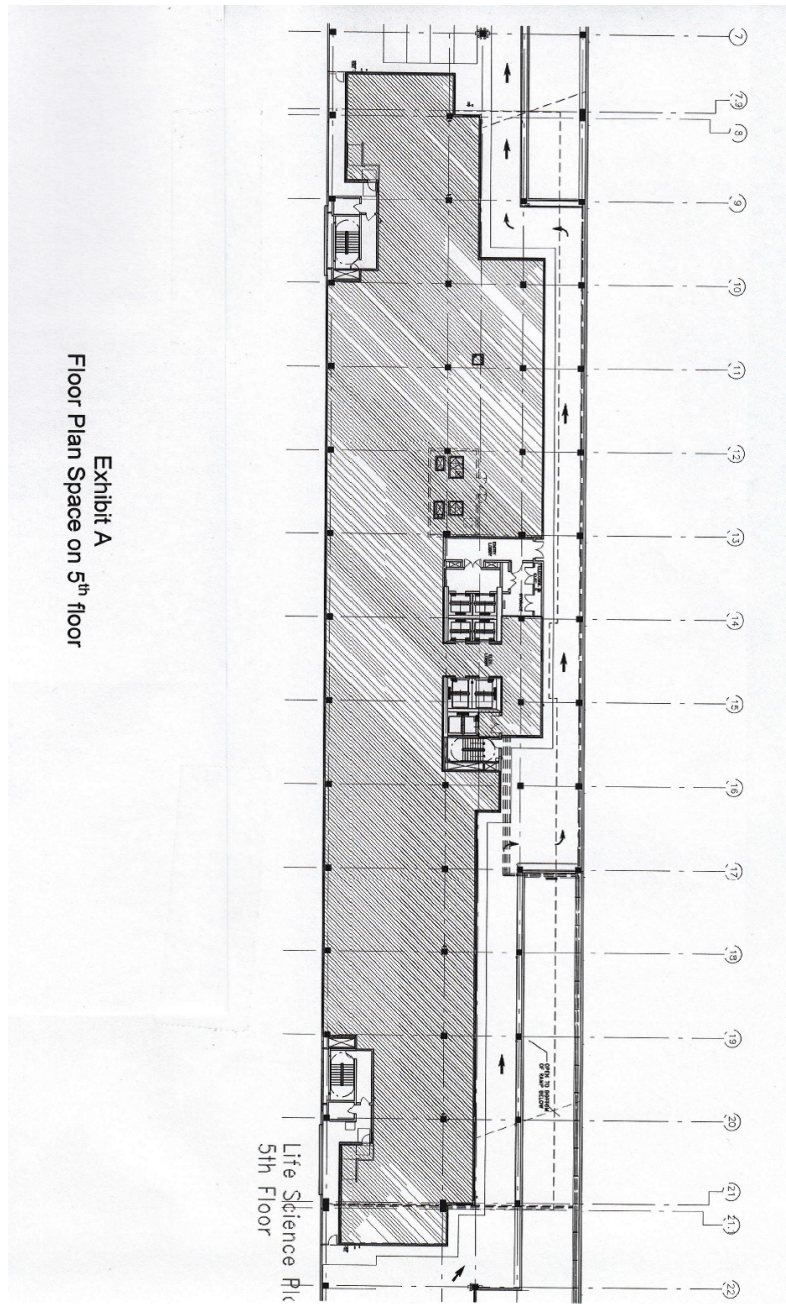
**ADDRESS:**

Prior to Commencement Date:  
2301 West Holcombe Blvd., Suite 800  
Houston, Texas 77030

Following the Commencement Date:  
At the Leased Premises

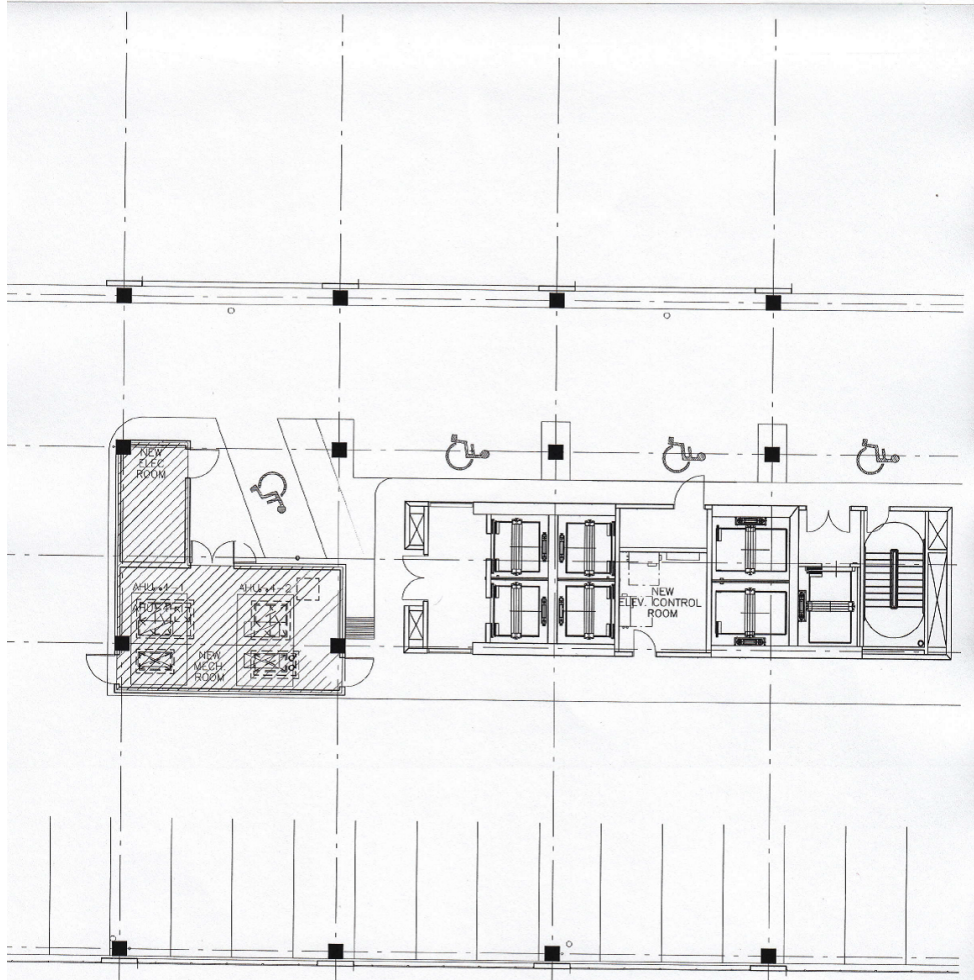
EXHIBIT A

FLOOR PLAN OF THE MANUFACTURING SPACE



**EXHIBIT A-1**  
**FLOOR PLAN OF THE MANUFACTURING SPACE**

Exhibit A-1  
Interior Mech. Space on 4<sup>th</sup> floor

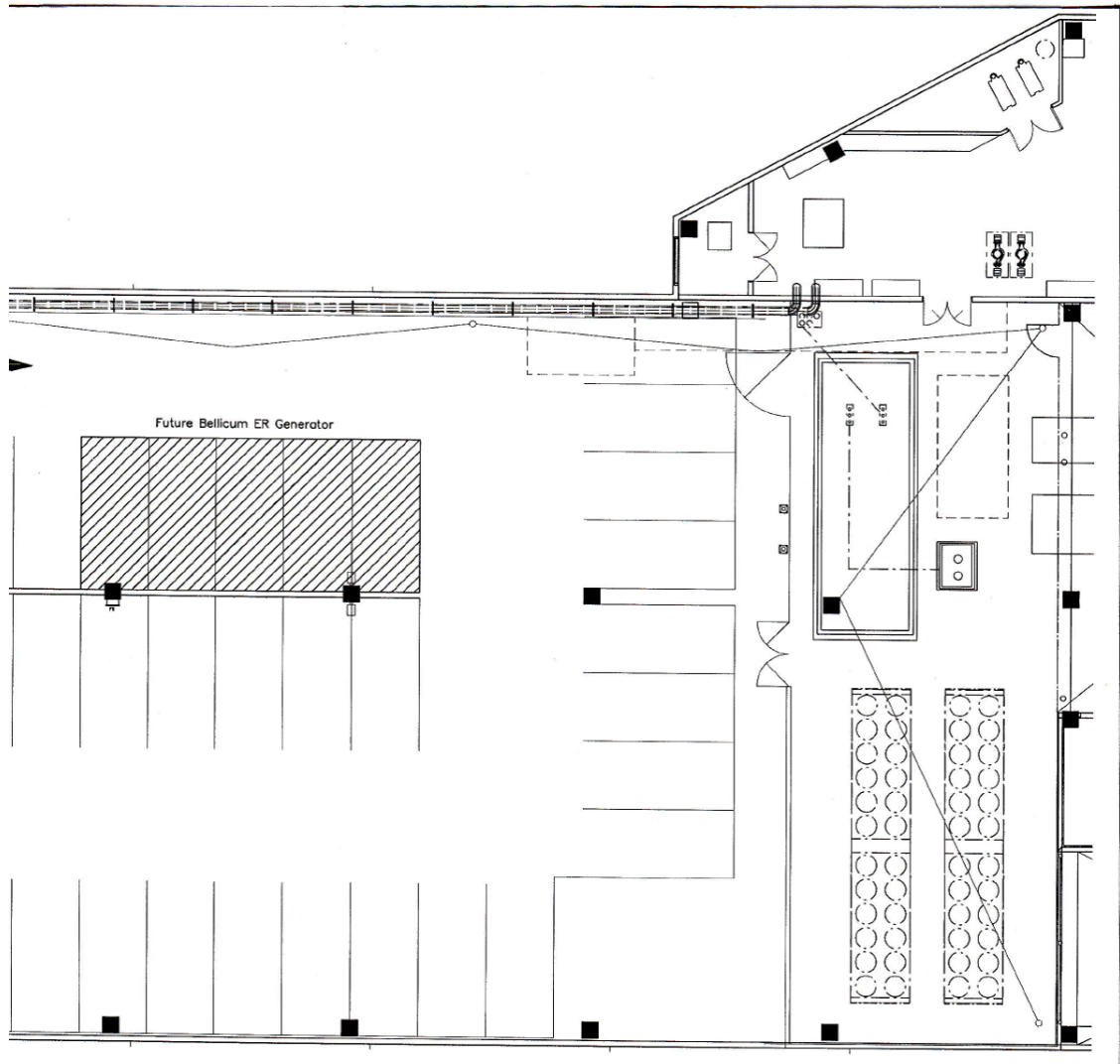


A-1-1

EXHIBIT A-2

FLOOR PLAN OF THE EXTERIOR MECHANICAL SPACE

Exhibit A-2  
Exterior Mech. Space on 5<sup>th</sup> floor



A-2-1

## **EXHIBIT B**

### **LEGAL DESCRIPTION OF THE LAND**

All that certain 2.3391 acres being all of Restricted Reserve "A", Block 1, Twenty-One Thirty West Holcombe Boulevard Replat No. 1 according to the plat thereof as filed in Film Code Number 595196, Harris County Map Records, in the P. W. Rose Survey, Abstract - 645, Houston, Harris County, Texas, and being more particularly described by metes and bounds as follows (bearings based on Texas Coordinate System of 1983, South Central Zone);

Commencing at Harris County Floodplain Reference Mark Number 040110 being a brass disc stamped "040110" having published coordinates of (X: 3,110,377.78) and (Y: 13,820,307.50) from which Harris County Floodplain Reference Mark Number 040115 being a brass disc stamped "D100 BM16" bears S 70° 42' 24" W - 1,730.12' for reference; Thence N 36° 12' 56" W - 1,995.95' to a found 3/4" iron pipe with cap (stamped C.L. DAVIS RPLS 4464) marking the southeast corner of said Restricted Reserve "A" from which a found 3/4" iron pipe bears N 79° 32' 53" E - 0.69' for reference and marking the POINT OF BEGINNING of herein described tract;

1. Thence S 87° 49' 11" W - 932.20' with the north right-of-way line of West Holcombe Boulevard (120' wide) to a found 1" iron pipe marking the southwest corner of said Restricted Reserve "A";
2. Thence N 02° 10' 49" W - 104.62' with the east right-of-way line of Mont Clair Drive (60' wide) to a 1" pinch top pipe marking the southwest corner of Lot 22, Block 7, Replat of Southgate Addition Section No. 3 according to the plat thereof as filed in Volume 26, Page 16, Harris County Map Records;
3. Thence N 87° 52' 11" E - 798.90' north line of said Reserve "A" to a found 5/8" iron rod for corner;
4. Thence N 59° 45' 09" E - 151.07' with the south line of Lots 9 - 11, Block 7 of said Replat of Southgate Addition, Section No. 3 to a found 5/8" iron rod for corner;
5. Thence S 02° 10' 49" E - 175.00' with the west line of that certain tract described in a deed dated 06-30-1986 from Miller Hotel Development, Incorporated to Burger King Corporation as filed in Official Records of Real Property of Harris County at Clerk's File Number K-700805, Film Code 056-71-1646 to the POINT OF BEGINNING and containing 2.3391 (101,892 square feet) of land more or less.

## EXHIBIT C

### PARKING AGREEMENT

Landlord hereby agrees to make available to Tenant during the Term, as Tenant elects, up to thirty-five (35) unreserved parking passes from time to time. Tenant shall be entitled from time to time to take and pay for all or any of such unreserved parking passes (and the parking spaces it is thereby entitled to use shall be hereinafter collectively referred to as the “**Parking Spaces**”) for use in the Building parking garage (hereinafter referred to as the “**Garage**”), upon the following terms and conditions:

1. Tenant shall pay as rental for the Parking Spaces the rates charged from time to time by the operator of the Garage, plus all taxes applicable thereto. During the first twelve (12) months following the Commencement Date, the initial monthly rate for each of the Parking Spaces for reserved parking shall be \$240.00 plus taxes and for unreserved parking shall be \$165.00 plus taxes. Said rentals shall be due and payable to Landlord or its parking manager, as designated in writing by Landlord at the address of the Landlord’s property manager specified in Section 31 of this Lease Agreement (or such other address as may be designated by Landlord in writing from time to time), as additional rent on the first day of each calendar month during the Term.
2. In the event Tenant so desires, and upon ten (10) days’ prior written notice to Landlord, Tenant may convert up to ten percent (10%) of its Parking Spaces for unreserved parking to Parking Spaces for reserved parking. In the event Tenant elects to convert such unreserved Parking Spaces to reserved Parking Spaces in accordance with this Paragraph 2, Landlord shall provide said Parking Spaces for reserved parking to Tenant during the balance of the Term at the rates charged from time to time for reserved Parking Spaces in the Garage plus all taxes applicable thereto. From and after the date Tenant commences leasing such parking spaces for reserved parking, the term “Parking Spaces” shall be deemed to include such reserved Parking Spaces.
3. Notwithstanding anything contained in this Exhibit C to the contrary, Landlord shall have the right to recapture any Parking Space not utilized by Tenant for six (6) consecutive months beginning after the first twelve (12) calendar months of the Term, and in the event Landlord exercises such right, Landlord shall have no further obligations to Tenant with respect to such Parking Spaces and the number of reserved or unreserved Parking Spaces, as the case may be, referred to above in this Exhibit C shall be correspondingly reduced.
4. Landlord will issue to Tenant parking tags, stickers or access cards for the Parking Spaces, or will provide a reasonable alternative means of identifying and controlling vehicles authorized to park in the contract Garage. Tenant shall surrender each such tag, sticker or other identifying device to Landlord upon termination of the Parking Space related thereto.
5. Landlord, at its discretion, shall have the right from time to time, upon written notice to Tenant, to designate the area(s) within which vehicles may be parked. Tenant agrees that although Landlord shall mark with signage Tenant’s reserved Parking Spaces, Landlord shall have no obligation to enforce such reservation by ticketing, towing or affixing a notice to cars parked in Tenant’s reserved Parking Spaces by those who are not Tenant’s customers, guests, invitees and employees; provided, however, Landlord will use commercially reasonable efforts to direct tenants at the Complex to abide by the parking rules.
6. If for any reason beyond Landlord’s reasonable control Landlord fails or is unable to provide any of the Parking Spaces to Tenant at any time during the Term or any renewals or extensions hereof, and such failure continues for two (2) business days after Tenant gives Landlord written notice thereof, Tenant’s obligation to pay rental for any Parking Space which is not provided by Landlord shall be abated for so long as Tenant does not have the use thereof and Landlord shall use its diligent good faith efforts to provide alternative parking arrangements in the Garage or within a one-half (1/2) mile radius of the Building for the number of vehicles equal to the number of Parking Spaces not provided by Landlord. Tenant shall pay for any alternative parking provided by Landlord so long as Tenant is not paying rent for the Parking Spaces. This abatement and good faith effort



to provide alternative parking arrangements shall be in full settlement of all claims that Tenant might otherwise have against Landlord by reason of Landlord's failure or inability to provide Tenant with the Parking Spaces.

7. If the Term commences on other than the first day of a calendar month or terminates on other than the last day of a calendar month, then rentals for the Parking Spaces shall be prorated on a daily basis.
8. Tenant shall indemnify, defend (with counsel reasonably acceptable to Landlord) and hold harmless the Landlord Parties from and against all liabilities, obligations, losses, damages, penalties, claims, actions, suits, costs, expenses and disbursements (including court costs and reasonable attorneys' fees) resulting directly or indirectly from the use of the Parking Spaces, unless caused by the gross negligence or willful misconduct of Landlord or the Landlord Parties.
9. Landlord may provide parking in the Garage or in surface lots for visitors to the Building in an area designated by Landlord and in a capacity determined by Landlord to be appropriate for the Building. Landlord reserves the right to charge and collect a fee for parking in the visitor Garage or in the surface lots in an amount determined by Landlord or the operator of the Garage to be appropriate. Provided that no Event of Default has occurred, Landlord agrees to allow Tenant to validate the parking ticket of Tenant's visitors with a stamp or other means approved in advance by Landlord, and to bill Tenant for the parking charges so validated by Tenant on a monthly basis. Said visitor parking charges shall be due and payable to Landlord as additional rent within ten (10) days after Tenant's receipt of such statement. Alternatively, Landlord may establish a parking validation program whereby tenants may, at their option, purchase prepaid parking validation stickers or other means of identification for specific increments of visitor parking charges, which the tenants may then distribute to their visitors and invitees to be submitted to the Garage attendant as payment for the applicable increment of visitor parking charge.
10. Upon the occurrence of an Event of Default, Landlord shall have the right (in addition to all other rights, remedies and recourse hereunder and at law) to terminate Tenant's use of the Parking Spaces without prior notice or warning to Tenant.
11. Landlord shall have the right to relocate the Garage to any future parking facilities Landlord may construct on the Land, provided Tenant has use of 35 parking spaces.

A condition of any parking shall be compliance by the parker with Garage rules and regulations, including any sticker or other identification system established by Landlord. The following rules and regulations are in effect until notice is given to Tenant of any change. Landlord reserves the right to modify and/or adopt such other reasonable rules and regulations for the Garage as it deems necessary for the operation of the Garage. Landlord may refuse to permit any person who violates the rules to park in the Garage, and any violation of the rules shall subject the car to removal.

## **PARKING RULES AND REGULATIONS**

1. Cars must be parked entirely within the stall lines painted on the floor.
2. All directional signs and arrows and signs designating wheelchair accessible parking spaces must be observed.
3. The speed limit shall be five (5) miles per hour.
4. Parking prohibited:
  - (a) in areas not striped for parking
  - (b) in aisles
  - (c) where "no parking" signs are posted
  - (d) on ramps where indicated
  - (e) in cross-hatched areas
  - (f) in spaces reserved for exclusive use by designated lessees
  - (g) in such other areas as may be designated by Landlord or Landlord's agent(s).
5. Parking stickers or any other device or form of identification supplied by Landlord shall remain the property of Landlord and shall not be transferable. There will be a replacement charge payable by Tenant equal to the amount posted from time to time by Landlord for loss of any parking card or parking sticker.
6. Garage managers and attendants are not authorized to make or allow any exceptions to these Rules and Regulations.
7. Every parker is required to park and lock his own car. All responsibility for loss or damage to cars and contents, property or persons is assumed by the parker.
8. Tenant is required to give Landlord, on a quarterly basis, a list of employees parking in the Garage which shall include year, make and model of car and license number.
9. In order to protect Landlord's property, Landlord shall have the right, but not the obligation, to install cameras in the Garage.
10. Landlord is entitled to limit the size of the parked vehicles by weight, height or width without constituting a breach of its obligation to provide parking hereunder.

Failure to promptly pay the rent required hereunder or persistent failure on the part of Tenant or Tenant's designated parkers to observe the Rules and Regulations above shall give Landlord the right to terminate Tenant's right to use the parking structure. No such termination shall create any liability on Landlord or be deemed to interfere with Tenant's right to quiet possession of its Leased Premises.

## EXHIBIT D

### RULES AND REGULATIONS

The following standards shall be observed by Tenant for the common safety, cleanliness and convenience of all occupants of the Building. These rules are subject to change from time to time, as specified in the Lease Agreement.

1. All tenants will refer all contractors' representatives and installation technicians who are to perform any work within the Building to Landlord for Landlord's supervision, approval (which approval shall not be unreasonably withheld, conditioned or delayed) and control before the performance of any such work. This provision shall apply to all work performed in the Building including, but not limited to, installations of telephones, computer equipment, electrical devices and attachments, and any and all installations of every nature affecting floors, walls, woodwork, trim, windows, ceilings, equipment and any other physical portion of the Building. Tenant shall not mark, paint, drill into, or in any way deface any part of the Building or the Leased Premises, except with the prior written consent of the Landlord, and as the Landlord may direct; provided, however, Tenant may hang pictures, bulletin boards, white boards and the like within the Leased Premises without prior consent of or notice to Landlord.
2. The work of the janitorial or cleaning personnel shall not be hindered by Tenant after 5:30 p.m., and such work may be done at any time when the offices are vacant. The windows, doors and fixtures may be cleaned at any time. Tenant shall provide adequate waste and rubbish receptacles, cabinets, book cases, map cases, etc., necessary to prevent unreasonable hardship to Landlord in discharging its obligations regarding cleaning service.
3. Prior to the commencement of any construction in the Leased Premises, Tenant shall deliver evidence of its contractor's and subcontractor's insurance, such insurance being with such companies, for such periods and in such amounts as Landlord may reasonably require, naming the Landlord Parties as additional insureds.
4. No sign, advertisement or notice shall be displayed, painted or affixed by Tenant, its agents, servants or employees, in or on any part of the outside or inside of the Building or Leased Premises without prior written consent of Landlord, and then only of such color, size, character, style and material and in such places as shall be approved and designated by Landlord. Signs on doors and entrances to the Leased Premises shall be placed thereon by Landlord.
5. Except as otherwise provided in this Lease Agreement and for such items as are installed as part of the Leasehold Improvements, Tenant shall not place, install or operate on the Leased Premises or in any part of the Building any engine, refrigerating, heating or air conditioning apparatus, stove or machinery, or conduct mechanical operations, or place or use in or about the Leased Premises any inflammable, explosive, hazardous or odorous solvents or materials without the prior written consent of Landlord. No portion of the Leased Premises shall at any time be used for cooking, sleeping or lodging quarters. Tenant may use coffee pots, refrigerators and microwaves in Leased Premises.
6. Tenant shall not make or permit any loud or improper noises in the Building or otherwise interfere in any way with other tenants.
7. Landlord will not be responsible for any lost or stolen personal property or equipment from the Leased Premises or public areas, regardless of whether such loss occurs when the area is locked against entry or not.
8. Tenant, or the employees, agents, servants, visitors or licensees of Tenant, shall not, at any time or place, leave or discard rubbish, paper, articles, plants or objects of any kind whatsoever outside the doors of the Leased Premises or in the corridors or passageways of the Building or attached Parking Areas. No animals (other

than mice in any vivarium), bicycles or vehicles of any description shall be brought into or kept in or about the Building, except for Landlord designated bicycle parking areas.

9. No additional lock or locks shall be placed by Tenant on any door in the Building unless written consent of Landlord shall have first been obtained. Two (2) keys will be furnished by Landlord for the Leased Premises, and any additional key required must be obtained from Landlord. A charge will be made for each additional key furnished. All keys shall be surrendered to Landlord upon termination of tenancy.
10. None of the entries, passages, doors, hallways or stairways in the Building shall be blocked or obstructed.
11. Landlord shall have the right to determine and prescribe the weight and proper position of any unusually heavy equipment, including computers, safes, large files, etc., that are to be placed in the Building, and only those which in the exclusive judgment of the Landlord will not do damage to the floors, structure and/or elevators may be moved into the Building. Any damage caused by installing, moving or removing such aforementioned articles in the Building shall be paid for by Tenant.
12. All holiday and other decorations must be constructed of flame retardant materials. Live Christmas trees are not permitted in the Leased Premises.
13. Tenant shall provide Landlord with a list of all personnel authorized to enter the Building after hours (6:00 p.m. to 7:00 a.m. Monday through Friday, and 24 hours a day on Saturdays, Sundays and Holidays).
14. The following dates shall constitute "**Holidays**" as said term is used in this Lease Agreement: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, the Friday following Thanksgiving Day and Christmas and any other holiday recognized and taken by tenants cumulatively occupying at least one-half (1/2) of the Net Rentable Area of office space of the Building. The Holidays set forth herein may not be changed by Landlord during the Term.
15. The following hours shall constitute the normal business hours of the Building: between 7:00 a.m. and 6:00 p.m. from Monday through Friday and between 8:00 a.m. and 12:00 noon on Saturdays, all exclusive of Holidays. The aforementioned hours of operation may not be changed by Landlord during the Term.
16. Movement of furniture or office equipment in or out of the Building, or dispatch or receipt by Tenant of any heavy equipment, bulky material or merchandise which requires use of elevators or stairways, or movement through the Building's service dock or lobby entrance shall be restricted to such hours as Landlord shall designate. All such movement shall be in a manner to be agreed upon between Tenant and Landlord in advance. Such prior arrangements shall be initiated by Tenant. The time, method and routing of movement and limitations for safety or other concern which may prohibit any article, equipment or other item from being brought into the Building shall be subject to Landlord's reasonable discretion and control. Any hand trucks, carryalls or similar appliances used for the delivery or receipt of merchandise or equipment shall be equipped with rubber tires, side guards and such other safeguards as the Building shall require. Although Landlord or its personnel may participate in or assist in the supervision of such movement, Tenant assumes full responsibility for all risks as to damage to articles moved and injury to persons or property engaged in such movement, including equipment, property and personnel of Landlord if damaged or injured as a result of acts in connection with carrying out this service for Tenant, from the time of entering the property to completion of work. Landlord shall not be liable for the acts of any person engaged in, or any damage or loss to any of said property or persons resulting from any act in connection with such service performed for Tenant.
17. Landlord shall designate one elevator to be the freight elevator to be used to handle packages and shipments of all kinds. The freight elevator shall be available to handle such deliveries from 9:00 a.m. to 11:00 a.m. and 2:00 p.m. to 3:30 p.m. weekdays. Parcel Post, express, freight or merchants' deliveries can be made anytime

within these hours. No furniture or freight shall be handled outside the above hours, except by previous arrangement.

18. Any additional services as are routinely provided to tenants, not required by the Lease Agreement to be performed by Landlord, which Tenant requests Landlord to perform, and which are performed by Landlord, shall be billed to Tenant at Landlord's cost plus five percent (5%).
19. All doors leading from public corridors to the Leased Premises are to be kept closed when not in use.
20. Canvassing, soliciting or peddling in the Building is prohibited and Tenant shall cooperate to prevent same.
21. Tenant shall give immediate notice to the Building Manager in case of accidents in the Leased Premises or in the Building or of defects therein or in any fixtures or equipment, or of any known emergency in the Building.
22. Tenant shall not use the Leased Premises or permit the Leased Premises to be used for photographic, multilith or multigraph reproductions, except in connection with its own business.
23. The requirements of Tenant will be attended to only upon application to the Building Manager. Employees of Landlord shall not perform any work or do anything outside of their regular duties, unless under special instructions from the Building Manager.
24. Tenant shall place or have placed solid pads under all rolling chairs such as may be used at desks or tables. Any damages caused to carpet by not having same shall be repaired or replaced at the expense of Tenant.
25. Tenant, or the employees, agents, servants, visitors or licensees of Tenant shall abide by the rules and regulations for the Parking Areas included in the Parking Agreement attached hereto as **Exhibit C**.
26. Except as otherwise noted, Landlord reserves the right to rescind any of these Rules and Regulations of the Building, and to make such other and further rules and regulations as in its reasonable judgment shall from time to time be needful for the safety, protection, care and cleanliness of the Building, the Leased Premises and the Parking Areas, the operation thereof, the preservation of good order therein and the protection and comfort of the other tenants in the Building and their agents, employees and invitees, which rules and regulations, when made and written notice thereof is given to Tenant, shall be binding upon Tenant in like manner as if originally herein prescribed, provided such changes do not unreasonably interfere with Tenant's use or occupancy of or access to the Leased Premises.
27. Landlord will provide 35 cardkeys or other access devices during the Term to Tenant and Tenant agrees to return all of these cardkeys and other access devices to Landlord upon expiration or termination of this Lease Agreement. All others will be furnished to Tenant at a cost of Fifty and 00/100 Dollars (\$50.00) per card or a mutually agreed upon price for each other access device. Any future increase in the cost of cardkeys and other access devices will be passed on to Tenant for any additional cardkeys and other access devices required.
28. Tenant, or its employees, agents, servants, visitors, invitees or licensees of Tenant, shall not smoke or permit to be smoked cigarettes, cigars or pipes within the Leased Premises or Building. Smoking shall be confined to area(s) designated by Landlord but shall in no event be closer than twenty-five feet (25') to any entrance to the Building. Landlord shall have no obligation to Tenant for failure of another tenant, its employees, agents, servants, visitors, invitees or licensees to comply with this paragraph.
29. Tenant shall not attempt to adjust wall-mounted thermostats in the Building. If there is any damage to wall-mounted thermostats due to attempts by Tenant to adjust thermostats, Landlord may repair such damage at the sole cost and expense of the Tenant.



**EXHIBIT E**

**ACCEPTANCE OF PREMISES MEMORANDUM**

This Memorandum is an amendment to the Lease Agreement for space in 2130 West Holcombe Boulevard, Suite 800 Houston, Harris County, Texas 77030, executed on the 6th day of May, 2015 between Sheridan Hills Developments L.P., a Texas limited partnership, as Landlord and Bellicum Pharmaceuticals, Inc., a Delaware corporation, as Tenant.

Landlord and Tenant hereby agree that:

1. The Manufacturing Space consists of \_\_\_\_\_square feet of Net Rentable Area. The Interior Mechanical Space consists of \_\_\_\_\_square feet of Net Rentable Area and the Exterior Mechanical Space consists of \_\_\_\_\_ square feet of Net Rentable Area.
2. Except for those items shown on the attached "punch list", if any, which Landlord will remedy within 30 days hereof, Landlord has fully completed the construction work required under the terms of the Lease Agreement.
3. The Leased Premises are tenantable, the Landlord has no further obligation for construction (except as specified above), and Tenant acknowledges that both the Building and the Leased Premises are satisfactory in all respects.
4. The Commencement Date of the Lease Agreement is hereby agreed to be the \_\_\_\_\_ day of \_\_\_\_\_, 2015.
5. The Expiration Date of the Lease Agreement is hereby agreed to be the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

All other terms and conditions of the Lease Agreement are hereby ratified and acknowledged to be unchanged.

Agreed and Executed this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

**Landlord:**

Sheridan Hills Developments L.P.,  
a Texas limited partnership

By: Pouncet Sheridan Inc., an Ontario,  
Canada corporation, its general partner

By:\_\_\_\_\_  
Name:\_\_\_\_\_  
Title:\_\_\_\_\_

**Tenant:**

Bellicum Pharmaceuticals, Inc.

By:\_\_\_\_\_  
Name:\_\_\_\_\_  
Title:\_\_\_\_\_

**EXHIBIT F**

**TENANT'S ESTOPPEL CERTIFICATE**

(Addressee)

RE: Houston, Texas

Gentlemen:

The undersigned ("Tenant") has executed and entered into that certain lease agreement ("Lease Agreement") attached hereto as **Exhibit A** and made a part hereof for all purposes with respect to those certain premises ("Leased Premises") which are located in the above-referenced project ("Project") and are more fully described in the Lease Agreement. Tenant understands that the entity to whom this letter is addressed ("Addressee") has committed to loan or invest a substantial sum of money in reliance upon this certification by the undersigned, which certification is a condition precedent to making such loan or investment, or that Addressee intends to take some other action in reliance upon this certification.

With respect to the Lease Agreement, Tenant certifies to you the following, with the intention that you may rely fully thereon:

1. A true and correct copy of the Lease Agreement, including any and all amendments and modifications thereto, is attached hereto as **Exhibit A**;
2. The original Lease Agreement is dated \_\_\_\_\_, 201\_\_, and has been assigned, modified, supplemented or amended only in the following respects:  
  
(Please write "None" above or, on a separate sheet of paper, state the effective date of and describe any oral or written modifications, supplements or amendments to the Lease Agreement and attach a copy of such modifications, supplements or amendments, with the Lease Agreement as Exhibit A);
3. Tenant is in actual occupancy of the Leased Premises under the Lease Agreement; the Leased Premises are known as Suite \_\_\_\_\_, of the Project; and the Leased Premises contain approximately \_\_\_\_\_square feet;
4. The initial term of the Lease Agreement commenced on \_\_\_\_\_, 201\_\_, and ends at 11:59 p.m. on \_\_\_\_\_, 201\_\_, at a monthly base rent of \$ \_\_\_\_\_, and no rentals or other payments in advance of the current calendar month have been paid by Tenant, except as follows:  
  
(Please write "None" above or describe such payments on a separate sheet of paper);
5. Base Rent with respect to the Lease Agreement has been paid by Tenant through \_\_\_\_\_, 201\_\_; all additional rents and other charges have been paid for the current periods;
6. There are no unpaid concessions, bonuses, free months' rent, rebates or other matters affecting the rent for Tenant, except as follows:  
  
(Please write "None" above or describe such matters on a separate sheet of paper);



7. No security or other deposit has been paid by Tenant with respect to the Lease Agreement, except as follows:
- (Please write “None” above or describe such deposits on a separate sheet of paper);
8. The Lease Agreement is in full force and effect and, to Tenant’s current actual knowledge, there are no events or conditions existing which, with notice or the lapse of time or both, could constitute a monetary or other default of the Landlord under the Lease Agreement, or entitle Tenant to any offset or defense against the prompt current payment of rent or constitute a default by Tenant under the Lease Agreement, except as follows:
- (Please write “None” above or describe such default on a separate sheet of paper);
9. All improvements required to be made by Landlord under the terms of the Lease Agreement have been satisfactorily completed and accepted by Tenant as being in conformity with the Lease Agreement, except as follows:
- (Please write “None” above or describe such improvements on a separate sheet of paper);
10. Tenant has no option to expand or rent additional space within the Project or any right of first refusal with regard to any additional space within the Project, other than the Leased Premises, except as follows:
- (Please write “None” above or describe such right or option on a separate sheet of paper);
11. Tenant has no right or option to renew the Lease Agreement for any period of time after the expiration of the initial term of the Lease Agreement, except as follows:
- (Please write “None” above or describe such right on a separate sheet of paper);
12. To Tenant’s current actual knowledge, any and all broker’s leasing and other commissions relating to and/or resulting from Tenant’s execution of the Lease Agreement and occupancy of the Leased Premises have been paid in full and no broker’s leasing or other commissions will be or become due or payable in connection with or as a result of either Tenant’s execution of a new Lease Agreement covering all or any portion of the Leased Premises or any other space within the Project or Tenant’s renewal of the Lease Agreement, except as follows:
- (Please write “None” above or describe such right on a separate sheet of paper);
13. To Tenant’s current actual knowledge, the use, maintenance or operation of the Leased Premises complies with, and will at all times comply with, all applicable federal, state, county or local statutes, laws, rules and regulations of any governmental authorities relating to environmental, health or safety matters (being hereinafter collectively referred to as the “Environmental Laws”);
14. [intentionally deleted];
15. Tenant has not received any notices, written or oral, of violation of any Environmental Law or of any allegation which, if true, would contradict anything contained herein and there are not writs, injunctions, decrees, orders or judgments outstanding, no lawsuits, claims, proceedings or investigations pending or threatened, relating to the use, maintenance or operation of the Leased Premises, nor is Tenant aware of a basis for any such proceeding;
16. There are no actions, whether voluntary or otherwise, pending against Tenant under the bankruptcy or insolvency laws of the United States or of any state.
17. Tenant has no right of refusal or option to purchase the Leased Premises or the Project.

18. Tenant understands that the Lease Agreement may be assigned to Addressee and Tenant agrees to attorn to Addressee in all respects in accordance with the Lease Agreement.

Dated: \_\_\_\_\_, 201\_\_.

Very truly yours,

Bellicum Pharmaceuticals, Inc.

By:\_\_\_\_\_

Name:\_\_\_\_\_

Title:\_\_\_\_\_

## EXHIBIT G

### LEASEHOLD IMPROVEMENTS

1. Work by Landlord. Landlord shall cause to be constructed and/or installed in the Leased Premises the permanent leasehold improvements and tenant finish desired by Tenant and approved by Landlord, which approval shall not be unreasonably withheld, conditioned or delayed (the “**Leasehold Improvements**”). The leasehold construction will be performed pursuant to a cost plus contract entered into by Landlord with a general contractor agreed on by Landlord and Tenant. Further, prior to commencement of the Leasehold Improvements and as a condition precedent to the Commencement Date, Landlord will, at Landlord sole cost and expense (i) level all floors within the Manufacturing Space such that the floors are level within commercially reasonable construction tolerances, namely one-half (0.5”) inch deviation per ten (10’) feet (the “**Landlord Work**”). Landlord agrees to remedy any floor level defects prior to the Commencement Date, provided that Tenant provides Landlord with written notice of such defects (in sufficient detail for Landlord to accurately identify them), at least thirty (30) days prior to the Commencement Date.

2. Planning and Construction.

(a) Landlord and Tenant shall cooperate in good faith in the planning and construction of the Leasehold Improvements, it being agreed and understood that it is the intent and desire of the parties that the Leased Premises be ready for Tenant’s occupancy on or before the Estimated Leased Premises Delivery Date. Tenant shall respond within five (5) business days to any request from Landlord or Landlord’s architect or contractor for Tenant’s approval of any particular aspect thereof. To the extent Tenant engages Landlord’s consultants as Tenant’s mechanical/electrical/plumbing and/or structural engineering consultants, Landlord shall not require reimbursement of third-party fee charges to Landlord for review of Tenant’s plans and documents by the consultants so engaged.

(b) Tenant will cause its architect and engineers (the “**Design Professionals**”) to prepare a set of space plans (the “**Proposed Space Plans**”) for the Leasehold Improvements and submit same to Landlord for its review and approval within fourteen (14) days following the Effective Date. Within ten (10) business days after delivery of the Proposed Space Plans to Landlord, Landlord shall either approve (which approval shall not be unreasonably withheld, conditioned or delayed) the Proposed Space Plans or notify Tenant of the item(s) of the Proposed Space Plans that Landlord disapproves and the reason(s) therefor. If Landlord disapproves the Proposed Space Plans, Tenant shall cause the Design Professionals to revise and resubmit same to Landlord for approval within five (5) business days (the “**Revised Space Plans**”). Within five (5) business days after delivery of the Revised Space Plans to Landlord, Landlord shall either approve the Revised Space Plans or notify Tenant of the item(s) of the Revised Space Plans which Landlord disapproves and the reason(s) therefor. If Landlord disapproves the Revised Space Plans, Tenant shall cause the Design Professionals to further revise and resubmit same to Landlord for approval within five (5) business days, which process shall continue until the plans are approved. Landlord shall have five (5) business days after delivery of each set of Revised Space Plans to either approve the Revised Space Plans or notify Tenant of the item(s) of the Revised Space Plans which Landlord disapproves and the reason(s) therefor. The Proposed Space Plans or Revised Space Plans, as approved by Landlord, are hereinafter referred to as the “**Space Plans**”.

(c) Upon Landlord’s approval of the Space Plans, Tenant shall cause the Design Professionals to prepare construction drawings (in accordance with the Space Plans) and specifications including complete sets of detailed architectural, structural, mechanical, electrical and plumbing working drawings (the “**Proposed Construction Drawings**”) for the Leasehold Improvements and shall deliver the Proposed Construction Drawings to Landlord for approval (which approval shall not be unreasonably withheld, conditioned or delayed). Within ten (10) business days after delivery of the Proposed Construction Drawings to Landlord, Landlord shall either approve the Proposed Construction Drawings or notify Tenant of the item(s) of the Proposed Construction Drawings that Landlord disapproves and the reason(s) therefor. If Landlord disapproves the Proposed Construction Drawings, Tenant shall cause the Design Professionals to revise and resubmit same to Landlord for approval within five (5) business days (the “**Revised Construction Drawings**”). Within five (5) business days after delivery of the Revised Construction Drawings to Landlord, Landlord shall either approve the Revised Construction Drawings or notify Tenant of the item(s) of the Revised Construction Drawings which Landlord disapproves and the reason(s) therefor. If Landlord disapproves the Revised Construction Drawings, Tenant shall cause the Design Professionals to further revise and resubmit same to

Landlord for approval within five (5) business days, which process shall continue until the plans are approved. Landlord shall have five (5) business days after delivery of each set of Revised Construction Drawings to either approve the Revised Construction Drawings or notify Tenant of the item(s) of the Revised Construction Drawings which Landlord disapproves and the reason(s) therefor. The Proposed Construction Drawings or Revised Construction Drawings, as approved by Landlord, are hereinafter referred to as the “**Construction Drawings**”.

3. Quality of Work. Landlord shall supervise the construction of the Leasehold Improvements in conformance with the Construction Drawings and shall use its diligent good faith efforts to cause same to be constructed and installed in a good and workmanlike manner in accordance with good industry practice.

4. Completion of Construction. The “**Leasehold Improvements Completion Date**” shall mean the date upon which the Leasehold Improvements are substantially complete in accordance with the Construction Drawings. The phrase “**substantially complete**” shall mean that all construction debris has been removed from the Leased Premises and the Leased Premises are reasonably clean, the Leasehold Improvements have been completed in substantial accordance with the Construction Drawings therefor, except for the completion of Punch List Items (hereinafter defined), and Landlord shall have obtained and delivered to Tenant a temporary certificate of occupancy for the Leased Premises. Landlord will give Tenant ten (10) days’ advance written notice of the date on which Landlord expects the Leased Premises to be substantially complete and ready for occupancy. If the Leased Premises are not ready for occupancy by the Estimated Leased Premises Delivery Date for any reason, Landlord shall not be liable or responsible for any claims, damages or liabilities in connection therewith or by reason thereof. The term “**Punch List Items**” shall mean details of construction, decoration and mechanical adjustment which, in the aggregate, are relatively minor in character and do not materially interfere with the use or enjoyment of the Leased Premises for the uses permitted in Section 3 of this Lease Agreement. The Punch List Items shall be set forth in a list prepared during a walkthrough inspection of the Leased Premises, such inspection to be performed by Tenant’s and Landlord’s representatives within ten (10) days after Landlord shall advise Tenant that substantial completion of the Leasehold Improvements in the Leased Premises has occurred or is imminent. Landlord shall use its commercially reasonable efforts to cause the Punch List Items to be substantially completed within thirty (30) days after said walkthrough inspection and Landlord and Tenant’s agreement on the Punch List Items. Additionally, Landlord shall use its commercially reasonable efforts to obtain and deliver to Tenant a final (permanent) certificate of occupancy for the Leased Premises within ninety (90) after substantial completion.

5. Tenant Delay. As used herein, “**Tenant Delay**” shall mean the sum of (i) the number of days of delay beyond the 5-business day response period in responding to Landlord’s request for approval of any documentation in connection with the Leasehold Improvements, (ii) the number of days of delay in preparing any of such documentation caused by changes requested by Tenant to any aspect of the Leasehold Improvements which were reflected in the documentation theretofore approved by Tenant, (iii) the number of days of delay in completing the Leasehold Improvements caused by the Tenant’s early entry into the Leased Premises pursuant to Section 2.B of the Lease Agreement and (iv) the positive difference, if any, between the increase and decrease in the number of days required to complete the Leasehold Improvements caused by changes requested by Tenant to the working drawings after Tenant’s approval thereof, in all instances net of any delay on the part of Landlord, its employees, agents or contractors.

6. Disclaimer of Warranty. **TENANT ACKNOWLEDGES THAT THE CONSTRUCTION AND INSTALLATION OF THE LEASEHOLD IMPROVEMENTS WILL BE PERFORMED BY AN UNAFFILIATED CONTRACTOR OR CONTRACTORS AND THAT ACCORDINGLY LANDLORD HAS MADE AND WILL MAKE NO WARRANTIES TO TENANT WITH RESPECT TO THE QUALITY OF CONSTRUCTION THEREOF OR AS TO THE CONDITION OF THE LEASED PREMISES, EITHER EXPRESS OR IMPLIED, AND THAT LANDLORD EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTY THAT THE LEASED PREMISES ARE OR WILL BE SUITABLE FOR TENANT’S INTENDED COMMERCIAL PURPOSE. AS SET FORTH IN SECTION 27 OF THE LEASE, TENANT’S OBLIGATION TO PAY BASE AND ADDITIONAL RENTAL HEREUNDER IS NOT DEPENDENT UPON THE CONDITION OF THE LEASED PREMISES OR THE BUILDING OR THE PERFORMANCE BY LANDLORD OF ITS OBLIGATIONS HEREUNDER, AND TENANT SHALL CONTINUE TO PAY THE BASE AND ADDITIONAL RENT WITHOUT ABATEMENT, SETOFF OR DEDUCTION, NOTWITHSTANDING ANY BREACH BY LANDLORD OF ITS DUTIES OR OBLIGATIONS HEREUNDER, WHETHER EXPRESS OR IMPLIED,**

**EXCEPT AS OTHERWISE PROVIDED IN THIS LEASE AGREEMENT.** However, Landlord agrees that in the event that any defect in the construction of the Leasehold Improvements are discovered, Landlord will diligently pursue and seek to enforce any warranties of the contractor(s) and/or the manufacturer of any defective materials incorporated therein.

7. **Cost of Leasehold Improvements.** Landlord shall pay all costs and expenses of the Leasehold Improvements (including labor, materials, construction management, architectural and engineering costs) up to the aggregate amount of \$45.00 per square foot of Net Rentable Area of the Manufacturing Space only (the **"Improvement Allowance"**). Landlord shall pay any invoices for consultants engaged directly by Tenant out of the Improvement Allowance within thirty (30) days after delivery. In the event that the cost and expense of constructing and installing any portion of the Leasehold Improvements exceeds the Improvement Allowance (the **"Excess Cost"**), then prior to Landlord's awarding of the construction contract with respect to the Leasehold Improvements or, as applicable, Landlord performing any change order work, Tenant shall deposit with Landlord, one hundred ten percent (110%) of the amount of Landlord's good faith, reasonable estimate of any Excess Cost, or security therefor in a form reasonably acceptable to Landlord. No more frequently than monthly, Landlord shall invoice Tenant for the portion of the Excess Cost expended by Landlord and unpaid by Tenant. Tenant shall pay the invoiced amount within ten (10) business days thereafter. Tenant shall be entitled to authorize Landlord to draw on its security for the invoice amount (plus any costs incurred by Landlord as a result of the draw), provided that the remaining security shall at all times be at least one hundred ten percent (110%) of the then-projected Excess Cost not yet expended. If Tenant pays the invoice amount, Landlord shall approve a reduction in the amount of the security, to an amount equal to one hundred ten percent (110%) of the then-projected Excess Cost not yet expended. In the event that any portion of the Improvement Allowance remains unused on the Leasehold Improvements Completion Date, Tenant shall have the option to have such unused amounts applied to Base Rent first due under this Lease Agreement.

8. **Construction Management Fee.** Tenant acknowledges and agrees to pay Landlord a construction management fee equal to five percent (5%) of the total costs and expenses of the Leasehold Improvements, excluding "soft" costs incurred by Tenant, such as Tenant's interior architect and third-party consultants retained directly by Tenant. Such construction management fee may be paid for by Tenant out of the Improvement Allowance.

9. **Builder's Risk Insurance.** Landlord shall cause the general contractor to obtain and maintain Builder's Risk insurance on an "all risk" basis and on a completed value form including a Permission to Complete and Occupy endorsement, for full replacement value of the Leasehold Improvements, such policy naming Landlord and Tenant as additional insureds. The cost of such insurance shall be paid for out of the Improvement Allowance.

## EXHIBIT H

### AIR CONDITIONING AND HEATING SERVICES

Landlord will furnish Building standard chilled water for air conditioning and heating at such temperatures and in such amounts as are considered to be standard for other comparable medical office buildings in and in the vicinity of the Texas Medical Center area of Houston, Texas, twenty-four (24) hours per day, seven (7) days per week, to be paid for by Tenant as described below. Landlord shall install, as part of the Leasehold Improvements, to be paid for out of the Improvement Allowance, separate metering for all of Tenant's HVAC air handling units, heat exchangers and fan coil units (such HVAC air handling units, heat exchangers and fan coil units are hereinafter collectively referred to as the "**HVAC Equipment**" and such meters are hereinafter referred to as the "**BTU Meters**"). Tenant shall maintain and repair the HVAC Equipment and BTU Meters at Tenant's expense. The BTU Meters measure the energy consumed by the HVAC Equipment in British Thermal Units ("**BTUs**"). Tenant will pay Landlord the cost of the energy consumed by the HVAC Equipment (the "**Submetered BTU Charges**"), which cost shall be the product of (x) the BTUs (in millions) consumed during such month by the HVAC Equipment (as evidenced by the BTU Meters), multiplied by (y) the then-current per million BTU amount charged by Landlord in the Building generally to tenants leasing space in the tower portion of the Building, which amount shall be determined using the formula shown on **Exhibit H-1** attached hereto and made a part hereof for all purposes. Tenant acknowledges that **Exhibit H-1** applies the formula to the information available to Landlord as of the Effective Date, and that the amounts will be adjusted as of the Commencement Date based on updated information and thereafter from time to time based on the Kilowatt Hour Rate (as defined below). The "**Kilowatt Hour Rate**" shall mean the actual average cost per kilowatt hour charged by the utility company providing electricity to Landlord in the Building or, if said utility company shall cease charging for electricity on the basis of a kilowatt hour, then the Kilowatt Hour Rate shall mean the actual average cost per unit of measurement substituted therefor by said utility company. Tenant acknowledges that, during the Term, the Kilowatt Hour Rate is subject to fluctuation as prescribed by the applicable utility company. Landlord shall provide an invoice to Tenant for the Submetered BTU Charges on a monthly basis in arrears, which shall be paid by Tenant as Additional Rent on or before the first day of the calendar month following the month the invoice is provided, along with the remainder of the Additional Rent then due and owing by Tenant.

# EXHIBIT H - 1

## HVAC CALCULATIONS

### HVAC Calculation

Bellicum

Summary Calculations  
Electrical Rate \$/KWHr

\$ 0.07753

Last updated: 3/24/2015  
Last printed: 3/24/2015

| Power Consumption at Full Load      | kw/ton               | horsepower/<br>ton     | watts/ton                 | kw/ton   | kwh cost                    | Cost/ton per<br>hour |
|-------------------------------------|----------------------|------------------------|---------------------------|----------|-----------------------------|----------------------|
| Chillers                            | 0.6505               |                        |                           | 0.6505   | \$ 0.07753                  | \$ 0.0504            |
| Condenser water pumps               |                      | 0.0833                 | 62.25                     | 0.0623   | \$ 0.07753                  | \$ 0.0048            |
| Cooling towers                      |                      | 0.0694                 | 51.875                    | 0.0519   | \$ 0.07753                  | \$ 0.0040            |
| Chilled water pumps                 |                      | 0.1111                 | 83                        | 0.0830   | \$ 0.07753                  | \$ 0.0064            |
| Accessories and misc. items         |                      | 0                      | 4                         | 0.0040   | \$ 0.07753                  | \$ 0.0003            |
|                                     |                      |                        |                           | 0.8516   |                             | \$ 0.0660            |
| Depreciation of Equipment           | Years of<br>Service  | Standard<br>Hours/year | Total hours of<br>service | Cost/ton |                             | Cost/ton per<br>hour |
| Chillers                            | 20.00                | 8,760                  | 175,200                   | \$ 1,000 |                             | \$ 0.0057            |
| Cooling towers                      | 20.00                | 8,760                  | 175,200                   | \$ 500   |                             | \$ 0.0029            |
| Air handling units                  | 20.00                | 8,760                  | 175,200                   | \$ 1,250 |                             | \$ 0.0071            |
| Piping & ductwork                   | 30.00                | 8,760                  | 262,800                   | \$ 600   |                             | \$ 0.0023            |
| Controls                            | 10.00                | 8,760                  | 87,600                    | \$ 900   |                             | \$ 0.0103            |
|                                     |                      |                        |                           | \$ 4,250 |                             | \$ 0.0283            |
| Return on Investment                | ROI goal             | Standard<br>Hours/year |                           | Cost/ton | Aver. Cost/<br>ton per year | Cost/ton per<br>hour |
| Chillers                            | 6.75%                | 8,760                  |                           | \$ 1,000 | \$ 67.50                    | \$ 0.0077            |
| Cooling towers                      | 6.75%                | 8,760                  |                           | \$ 500   | \$ 33.75                    | \$ 0.0039            |
| Air handling units                  | 6.75%                | 8,760                  |                           | \$ 1,250 | \$ 84.38                    | \$ 0.0096            |
| Piping & ductwork                   | 6.75%                | 8,760                  |                           | \$ 600   | \$ 40.50                    | \$ 0.0046            |
| Controls                            | 6.75%                | 8,760                  |                           | \$ 900   | \$ 60.75                    | \$ 0.0069            |
|                                     |                      |                        |                           | \$ 4,250 | \$ 286.88                   | \$ 0.0327            |
| Make up and Blow down Water         | Cost /year           | Standard<br>Hours/year | Plant tons                |          |                             | Cost/ton per<br>hour |
| Water and Chem per 1000 tons YR2014 | \$ 140,616.83        | 8,760                  | 720                       |          |                             | \$ 0.0223            |
| Total Costs                         | Cost/ton<br>per hour | BTU/ton/hr             | Cost of MBTU              |          |                             |                      |
| Power consumption                   | \$ 0.0660            | 12,000                 | \$ 5.50                   |          |                             |                      |
| Depreciation                        | \$ 0.0283            | 12,000                 | \$ 2.35                   |          |                             |                      |
| Return on Investment                | \$ 0.0327            | 12,000                 | \$ 2.73                   |          |                             |                      |
| Water and Chemicals                 | \$ 0.0223            | 12,000                 | \$ 1.86                   |          |                             |                      |
|                                     | \$ 0.1493            |                        | \$ 12.44                  |          |                             |                      |

## EXHIBIT I

### INSURANCE REQUIREMENTS

#### 1. Tenant's Insurance.

a. Tenant, at its expense, shall obtain and keep in full force and effect during the Term:

i. a policy of commercial general liability insurance on an occurrence basis against claims for personal injury, bodily injury, death and/or property damage occurring in or about the Complex, under which Tenant is named as the insured and (a) Landlord, (b) Landlord's property manager, (c) any lender whose loan is secured by a lien against the Complex, (d) their respective shareholders, members, partners, affiliates and subsidiaries, successors and assigns, and (e) any directors, officers, employees, agents, or contractors of such persons or entities are named as additional insureds (collectively, the "**Landlord Parties**"). Such insurance shall provide primary coverage without contribution from any other insurance carried by or for the benefit of the Landlord Parties, and Tenant shall obtain blanket broad-form contractual liability coverage to insure its indemnity obligations set forth in Section 28 of the Lease Agreement. The minimum limits of liability applying exclusively to the Leased Premises shall be a combined single limit with respect to each occurrence in an amount of not less than \$5,000,000; provided, however, that Landlord shall retain the right to require Tenant to increase such coverage from time to time to that amount of insurance which in Landlord's reasonable judgment is then being customarily required by landlords for similar office space in buildings comparable to the Building. The deductible or self insured retention amount for such policy shall not exceed \$10,000;

ii. insurance against loss or damage by fire, and such other risks and hazards as are insurable under then available standard forms of "Special Form Causes of Loss" or "All Risk" property insurance policies with extended coverage, insuring Tenant's movable fixtures and movable partitions, telephone and other equipment, computer systems, trade fixtures, furniture, furnishings, and other items of personal property which are removable without material damage to the Building ("**Tenant's Property**") and all alterations and improvements to the Leased Premises (including the Leasehold Improvements constructed pursuant to Exhibit G to the Lease Agreement) to the extent such alterations and improvements exceed the cost of the improvements typically performed in connection with the initial occupancy of tenants in the Building ("**Building Standard Installations**"), for the full insurable value thereof or replacement cost thereof, having a deductible amount (or self-insured retention amount), not in excess of \$25,000;

iii. during the performance of any alteration made after the Commencement Date, until completion thereof, Builder's Risk insurance on an "all risk" basis and on a completed value form including a Permission to Complete and Occupy endorsement, for full replacement value covering the interest of Landlord and Tenant (and their respective contractors and subcontractors) in all work incorporated in the Building and all materials and equipment in or about the Leased Premises;

iv. Workers' Compensation Insurance, as required by law;

v. Business Interruption Insurance in an amount equal to at least one year's Rent; and

vi. such other insurance in such amounts as the Landlord Parties may reasonably require from time to time.

b. All insurance required to be carried by Tenant (i) shall contain a provision that (x) no act or omission of Tenant shall affect or limit the obligation of the insurance company to pay the amount of any loss sustained, and (y) it shall be noncancellable and/or no material change in coverage shall be made thereto unless the Landlord Parties receive thirty (30) days' prior notice of the same via US mail, and (ii) shall be effected under valid and enforceable policies issued by reputable insurers permitted to do business in the State of Texas and rated in Best's Insurance Guide,



or any successor thereto as having a “Best’s Rating” of at least “A-“ and a “Financial Size Category” of at least “X” or, if such ratings are not then in effect, the equivalent thereof or such other financial rating as Landlord may at any time consider appropriate.

c. On or prior to the Commencement Date, Tenant shall deliver to Landlord appropriate policies of insurance, including evidence of waivers of subrogation required to be carried pursuant to this **Exhibit I** and that the Landlord Parties are named as additional insureds (the “**Policies**”). Evidence of each renewal or replacement of the Policies shall be delivered by Tenant to Landlord at least ten (10) days prior to the expiration of the Policies. In lieu of the Policies, Tenant may deliver to Landlord a certification from Tenant’s insurance company (on the form currently designated “Acord 27” (Evidence of Property Insurance) and “Acord 25-S” (Certificate of Liability Insurance), or the equivalent, provided that attached thereto is an endorsement to Tenant’s commercial general liability policy naming the Landlord Parties as additional insureds) which shall be binding on Tenant’s insurance company, and which shall expressly provide that such certification conveys to the Landlord Parties all the rights and privileges afforded under the Policies as primary insurance. Tenant will notify Landlord immediately upon receipt of any notice from its insurance carrier of cancellation or non-renewal of the coverages required under this Lease Agreement.

2. Landlord’s Insurance.

a. Landlord shall keep the Building insured against damage and destruction by fire, vandalism, and other perils in the amount of the full replacement value of the Building (as determined for insurance purposes) as the value may exist from time to time, exclusive of foundations and footings, or such lesser amount as will avoid co-insurance.

b. Landlord shall maintain contractual and commercial general liability insurance, including bodily injury and property damage, with a minimum combined single limit of liability of \$1,000,000 for bodily injury or death of any person occurring in or about the Building and \$3,000,000 for injury, death, or damages resulting to more than one person in any one occurrence.

c. Notwithstanding the foregoing, in the event Landlord is an institutional owner, then Landlord may elect to self-insure with respect to the insurance coverages required by the terms of the Lease Agreement.

3. Waiver of Subrogation.

Landlord and Tenant shall each procure an appropriate clause in or endorsement to any property insurance covering the Complex and personal property, fixtures and equipment located therein, wherein the insurer waives subrogation or consents to a waiver of right of recovery, and Landlord and Tenant agree not to make any claim against, or seek to recover from, the other for any loss or damage to its property or the property of others resulting from fire or other hazards to the extent covered by the property insurance that was required to be carried by that party under the terms of the Lease Agreement. Tenant acknowledges that Landlord shall not carry insurance on, and shall not be responsible for, (i) damage to any alterations or improvements exceeding Building Standard Installations, (ii) Tenant’s Property, and (iii) any loss suffered by Tenant due to interruption of Tenant’s business.

## **EXHIBIT J**

### **PREVIOUSLY GRANTED EXCLUSIVE USES**

1. A full service health club and fitness facility offering such fitness programs, recreational facilities, personal training and other related services as Tenant may determine which may include, without limitation, the following primary permitted uses: a jogging track, weight and aerobic training, racquetball and other racquet sports, gymnasiums, basketball, swimming pool, jacuzzi, sauna and whirlpool facilities, steam rooms, aerobics and/or floor exercise, strength training, cardio fitness training, free weights, exercise machinery and equipment, martial arts, spinning, boxing, yoga, circuit training and personal training.
2. A long term acute care hospital.
3. A first class delicatessen style sandwich shop.
4. A medical facility having in the Building a linear accelerator, CT scan imaging equipment, PET scan imaging equipment and/or MRI equipment, all for oncological diagnosis and treatment purposes.

## EXHIBIT K

### MODIFIED BOMA STANDARD

#### Life Science Plaza Modified BOMA Standards

The following items constitute the **“Modified BOMA Standard”** as noted in the Lease Agreement. For the items not addressed in this modification, the BOMA standard **BOMA Z65.1-2010** or its successor shall prevail. A copy of the BOMA standards will be available for review in the management office located on the Penthouse floor, suite 1300 at Life Science Plaza.

The following are the modifications to the BOMA standard. Page numbers refer to the original BOMA document.

1. Definition: Major Vertical Penetrations, pg.2 shall read:

‘Major vertical penetrations shall mean stairs, elevator shafts, flues, pipe shafts, vertical ducts and the like, and their enclosing walls. Atria, light-wells and similar penetrations above the finished floor are included in this definition. Not included, however, are vertical penetrations built for the private use of a tenant occupying office areas. These major vertical penetrations shall be considered private. Exclusive use of these spaces shall be directed by the Owner. If the tenant uses part of any or all of the vertical penetrations, the area used shall be viewed as leasable/rentable space. Notwithstanding the above, structural columns, openings for vertical electrical cable or telephone distribution are not considered to be major vertical penetrations.’

2. Definition: Office Area, pg.2 shall read:

‘Office area shall mean the area where a tenant normally houses personnel, furniture, equipment and/or other items for the exclusive use of the tenant.’

3. Definition: Measuring Usable Area, pg 16 shall read:

‘Usable area of an interior office area or interior building common area shall be computed by measuring the area enclosed by: the center line of the corridor and other permanent walls, including exterior walls; tenant spaces abutting building common areas are measured to the centerline of walls that separate them; the dominant portion of a major vertical penetration; and the center of partitions that separate the area being measured from adjoining office areas, store areas and/or building common areas. Usable Area of Exterior Mechanical Space shall be computed by measuring the area enclosed by a three (3’) foot buffer area on all sides of the space occupied by equipment, equipment pads and operational functions, unless an exterior wall, demising wall or screen wall falls within the three (3’) foot buffer area on any side, in which case the outside of the exterior wall or mid-point of any other wall shall mark the extent of the measurement on that side. Usable Area of Interior Mechanical Space shall be computed by measuring: (i) the area enclosed by a three (3’) foot buffer area on all sides of the space occupied by equipment, equipment pads and operational functions, unless an exterior wall, demising wall or screen wall falls within the three (3’) foot buffer area on any side, in which case the outside of the exterior wall or mid-point of any other wall shall mark the extent of the measurement on that side; and (ii) where Tenant’s pipes, conduits or equipment cause clear headroom to be less than eight (8’) feet, the floor area immediately below such pipes, conduits or equipment, together with a three (3’) foot access area on each side.’

4. Definition: Calculating Store Area, pg 20 shall read:

‘Store area shall be computed by measuring the area enclosed by: the building line in the case of all exterior outside face/ façade wall surfaces; the center-line surface of the store area side of the corridor and other permanent walls; and the center of interior partitions that separate the store area from adjoining interior store areas, interior office areas and/or interior building common areas’.



EXHIBIT L

FORM OF SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT

SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT

MassMutual Loan No. 0642101

Massachusetts Mutual Life Insurance Company  
c/o Cornerstone Real Estate Advisers  
One Financial Plaza  
Hartford, Connecticut 06103  
Attention: Finance Group Loan Servicing

Re: Life Science Plaza located at 2130 West Holcombe Boulevard, Houston, Texas 77030

The undersigned, Bellicum Pharmaceuticals, Inc., ("**Tenant**") understands that Massachusetts Mutual Life Insurance Company ("**Lender**") has made or will be making a loan (the "**Loan**") to Sheridan Hills Developments L.P. ("**Landlord**") secured by a mortgage or deed of trust (the "**Mortgage**") encumbering the real property (the "**Property**") described on Exhibit A, attached hereto and made a part hereof. Tenant and Landlord entered into a lease agreement (the "**Lease**") dated May 6, 2015 by which Tenant leased from Landlord certain premises commonly known as Suite 500 located on the fifth (5<sup>th</sup>) floor of that certain medical office building located at 2130 West Holcombe Boulevard, Houston, Harris County, Texas 77030 (the "**Leased Premises**"), and constituting a portion of the Property. Tenant desires to be able to obtain the advantages of the Lease and occupancy thereunder in the event of foreclosure of the Mortgage and Lender wishes to have Tenant confirm the priority of the Mortgage over the Lease.

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth herein, the parties hereto agree as follows:

1. Tenant hereby subordinates all of its right, title and interest under the Lease to the lien, operation and effect of the Mortgage s (as the same may be modified and/or extended from time to time) now or hereafter in force against the Property, and to any and all existing and future advances made under such Mortgage.
2. In the event that Lender becomes the owner of the Property by foreclosure, deed in lieu of foreclosure, or otherwise, Tenant agrees to unconditionally attorn to Lender and to recognize it as the owner of the Property and the Landlord under the Lease. The Lender agrees not to terminate the Lease or disturb or interfere with Tenant's possession of the Leased Premises during the term of the Lease, or any extension or renewal thereof, so long as Tenant is not in default under the Lease beyond applicable notice, grace and cure periods, if any.
3. Tenant agrees to commence paying all rents, revenues and other payments due under the Lease directly to Lender after Lender notifies Tenant that Lender is the owner and holder of the Loan and is invoking Lender's rights under the Loan documents to directly receive from Tenant all rents, revenues and other payments due under the Lease. By making such payments to Lender, Tenant shall be deemed to have satisfied all such payment obligations to Landlord under the Lease.
4. This Agreement shall inure to the benefit of and be binding upon Lender's affiliates, agents, co-lenders and participants, and each of their respective successors and assigns (each a "**Lender Party**" and collectively, the "**Lender Parties**").
5. For the convenience of the parties any number of counterparts hereof may be executed, and each such executed counterpart shall be deemed an original, and all such counterparts together shall constitute one and the same instrument. Facsimile or .PDF transmission of an executed counterpart of this Agreement shall be deemed to constitute due and sufficient delivery of such counterpart, and such facsimile or .PDF signatures shall be deemed original signatures for purposes of enforcement and construction of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Subordination, Non-Disturbance and Attornment Agreement to be duly executed as of the 6th day of May, 2015.

TENANT:

Bellicum Pharmaceuticals, Inc.

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

LANDLORD:

Sheridan Hills Developments L.P.,  
a Texas limited partnership

By: Pouncet Sheridan Inc., an Ontario,  
Canada corporation, its general partner

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

LENDER:

MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY

By: Cornerstone Real Estate Advisers LLC,  
its authorized agent

By: \_\_\_\_\_

Name:

Title:

**NOTARY ACKNOWLEDGEMENTS**

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this, the \_\_\_\_\_ day of \_\_\_\_\_, 2015, before me, the undersigned party, personally appeared \_\_\_\_\_ who acknowledged himself/herself to be the \_\_\_\_\_ of Bellicum Pharmaceuticals, Inc., a Delaware corporation, and that he/she as such \_\_\_\_\_, being authorized to do so, executed the foregoing Subordination, Non-disturbance and Attornment Agreement for the purposes therein contained by signing the name of the \_\_\_\_\_ by himself/herself as \_\_\_\_\_.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

\_\_\_\_\_  
Notary Public  
My Commissions Expires:

PROVINCE OF ONTARIO §  
§  
CITY OF TORONTO §

This instrument was acknowledged before me on May \_\_\_\_, 2015, by Lawrence Lubin, Vice President of Pouncet Sheridan Inc., an Ontario, Canada corporation, the general partner of Sheridan Hills Developments L.P., on behalf of said entities.

\_\_\_\_\_  
MATTHEW KIRK FISHER  
NOTARY PUBLIC IN AND FOR THE PROVINCE \_\_\_\_\_ OF ONTARIO

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this, the \_\_\_\_ day of \_\_\_\_\_ 2015, before me, the undersigned party, personally appeared \_\_\_\_\_ who acknowledged himself/herself to be a \_\_\_\_\_ of Cornerstone Real Estate Advisers LLC, a Delaware limited liability company, and that he/she as such \_\_\_\_\_ being authorized to do so, executed the foregoing Subordination, Non-disturbance and Attornment Agreement for the purposes therein contained by signing the name of the corporation by himself/herself as a \_\_\_\_\_.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

\_\_\_\_\_  
Notary Public  
My Commission Expires:

## **EXHIBIT A**

### **LEGAL DESCRIPTION**

All that certain 2.3391 acres being all of Restricted Reserve "A", Block 1, Twenty-One Thirty West Holcombe Boulevard Replat No. 1 according to the plat thereof as filed in Film Code Number 595196, Harris County Map Records, in the P. W. Rose Survey, Abstract - 645, Houston, Harris County, Texas, and being more particularly described by metes and bounds as follows (bearings based on Texas Coordinate System of 1983, South Central Zone);

Commencing at Harris County Floodplain Reference Mark Number 040110 being a brass disc stamped "040110" having published coordinates of (X: 3,110,377.78) and (Y: 13,820,307.50) from which Harris County Floodplain Reference Mark Number 040115 being a brass disc stamped "D100 BM16" bears S 70° 42' 24" W - 1,730.12' for reference; Thence N 36° 12' 56" W - 1,995.95' to a found 3/4" iron pipe with cap (stamped C.L. DAVIS RPLS 4464) marking the southeast corner of said Restricted Reserve "A" from which a found 3/4" iron pipe bears N 79° 32' 53" E - 0.69' for reference and marking the POINT OF BEGINNING of herein described tract;

1. Thence S 87° 49' 11" W - 932.20' with the north right-of-way line of West Holcombe Boulevard (120' wide) to a found 1" iron pipe marking the southwest corner of said Restricted Reserve "A";
2. Thence N 02° 10' 49" W - 104.62' with the east right-of-way line of Mont Clair Drive (60' wide) to a 1" pinch top pipe marking the southwest corner of Lot 22, Block 7, Replat of Southgate Addition Section No. 3 according to the plat thereof as filed in Volume 26, Page 16, Harris County Map Records;
3. Thence N 87° 52' 11" E - 798.90' north line of said Reserve "A" to a found 5/8" iron rod for corner;
4. Thence N 59° 45' 09" E - 151.07' with the south line of Lots 9 - 11, Block 7 of said Replat of Southgate Addition, Section No. 3 to a found 5/8' iron rod for corner;
5. Thence S 02° 10' 49" E - 175.00' with the west line of that certain tract described in a deed dated 06-30-1986 from Miller Hotel Development, Incorporated to Burger King Corporation as filed in Official Records of Real Property of Harris County at Clerk's File Number K-700805, Film Code 056-71-1646 to the POINT OF BEGINNING and containing 2.3391 (101,892 square feet) of land more or less.



## EXCLUSIVE LICENSE AGREEMENT

**THIS EXCLUSIVE LICENSE AGREEMENT** (the “**Agreement**”) is made effective as of December 10, 2015 (the “**Effective Date**”) by and between Agensys, Inc., a California corporation, having an address at 1800 Stewart St., Santa Monica, CA 90404 (“**AGENSYS**”), and Bellicum Pharmaceuticals, Inc., a Delaware corporation, having an address at 2130 W. Holcombe Blvd #800, Houston, TX 77030 (“**BELLICUM**”). AGENSYS and BELLICUM are sometimes referred to herein individually as a “**Party**” and collectively as the “**Parties**.”

### RECITALS

**WHEREAS**, AGENSYS has proprietary technology relating to prostate stem cell antigen 1 and antibodies thereto; and

**WHEREAS**, the BELLICUM wishes to leverage AGENSYS’s proprietary technology to develop products utilizing AGENSYS’s proprietary technology for cell therapies and gene therapies for treatment of human diseases;

**NOW THEREFORE**, based on the foregoing premises and the mutual covenants and obligations set forth below, the Parties agree as follows:

### 1. DEFINITIONS

The following terms have the following meanings as used in this Agreement:

1.1 “**Affiliate**” means, an entity that, directly or indirectly, through one or more intermediaries, controls, is controlled by or is under common control with an entity as of or after the Effective Date and only for the period of such control. For purposes of this definition only, the term “control” (including, with correlative meaning, the terms “controlled by” or “under the common control with”) means the possession of the power, either directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of an entity, whether by ownership of voting stock or partnership interest, by contract or otherwise, including direct or indirect ownership of more than fifty percent (50%) of the voting interest in the entity in question; provided, however, that if local law requires a minimum percentage of local ownership, control will be established by direct or indirect beneficial ownership of one hundred percent (100%) of the maximum ownership percentage that may, under such local law, be owned by foreign interests.

1.2 “**AGENSYS Licensed Patent Rights**” means the rights licensed to AGENSYS under the [...\*\*\*...] License Agreement in and to: (a) the patent applications and patents listed in Exhibit B; (b) any other patent or patent application that claims priority to, or common priority with, or is a divisional, continuation, reissue, renewal, reexamination, substitution or extension of any patent or patent application identified in (a); (c) any patents subsequently issuing on any patent application identified in (a) or (b), including any reissues, renewals, reexaminations, substitutions or extensions thereof; (d) any claim of a continuation-in-part application or patent (including any reissues, renewals, reexaminations, substitutions or extensions thereof), if such claim is entitled to the priority date of at least one of the patents or patent applications identified

\*\*\* Confidential Treatment Request

in (a), (b) or (c); (e) any foreign counterpart (including PCTs) of any patent or patent application identified in (a), (b), (c) or (d); and (f) any supplementary protection certificates, pediatric exclusivity periods, any other patent term extensions and exclusivity periods and the like of any patents and patent applications identified in (a) through (e).

1.3 **“AGENSYS Technology”** means information, data, know-how and technology owned by AGENSYS, of any type whatsoever, in any tangible or intangible form, including trade secrets and techniques, inventions, practices, methods, techniques, processes, test data (including pharmacological, biological, chemical, biochemical, toxicological, preclinical and clinical test data), manufacturing know-how and data, analytical and quality control data, stability data, other study data and procedures, results, inventions, developments, specifications, formulations, compositions of matter of any type or kind (patentable or otherwise), assays and tangible materials delivered to BELLICUM by or on behalf of AGENSYS. The [...\*\*\*...] are included within AGENSYS Technology.

1.4 **“AGENSYS Patent Rights”** means: (a) the patent applications and patents listed in Exhibit A; (b) any other patent or patent application that claims priority to, or common priority with, or is a divisional, continuation, reissue, renewal, reexamination, substitution or extension of any patent or patent application identified in (a); (c) any patents subsequently issuing on any patent application identified in (a) or (b), including any reissues, renewals, reexaminations, substitutions or extensions thereof; (d) any claim of a continuation-in-part application or patent (including any reissues, renewals, reexaminations, substitutions or extensions thereof), if such claim is entitled to the priority date of at least one of the patents or patent applications identified in (a), (b) or (c); (e) any foreign counterpart (including PCTs) of any patent or patent application identified in (a), (b), (c) or (d); and (f) any supplementary protection certificates, pediatric exclusivity periods, any other patent term extensions and exclusivity periods and the like of any patents and patent applications identified in (a) through (e).

1.5 **“BLA”** means a Biologics License Application under United States 21 C.F.R. 601.2, or foreign equivalent thereof, for Regulatory Approval filed in any country or group of countries in the Territory.

1.6 **“Commercial Launch”** means, with respect to a Licensed Product and a given country, the first sale of such Licensed Product to a Third Party in such country once all Regulatory Approvals required therefor and have been obtained in such country.

1.7 **“Commercialize”** means to promote, market, distribute, sell and provide product support for a product, and "Commercializing" and "Commercialization" will be interpreted accordingly.

1.8 **“Commercially Reasonable Efforts”** means that level of efforts and resources consistent with commercially reasonable practices of a similarly situated company in the pharmaceutical industry with respect to the research, development or commercialization of a pharmaceutical product at a similar stage of research, development or commercialization, taking

\*\*\*Confidential Treatment Requested

into account relevant factors including, without limitation, measures of patent coverage, relative safety and efficacy, product profile, the competitiveness of the marketplace, the proprietary position of such product, the regulatory structure involved, the market potential of such product and other relevant factors, including comparative technical, legal, scientific and/or medical factors, all as measured by the facts and circumstances in effect at the time when the carrying out of such obligations is due.

1.9 **“Confidential Information”** means all information and materials received by either Party from the other Party pursuant to this Agreement, other than that portion of such information or materials that:

- (i) is publicly disclosed by the disclosing Party, either before or after it becomes known to the receiving Party;
- (ii) was known to the receiving Party as demonstrated by contemporaneous, competent written records, without obligation to keep it confidential, prior to when it was received from the disclosing Party;
- (iii) is subsequently disclosed to the receiving Party by a Third Party lawfully in possession thereof without obligation to keep it confidential;
- (iv) has been publicly disclosed other than by the disclosing Party and without breach of the receiving Party’s obligation of confidentiality with respect thereto; or
- (v) has been independently developed by the receiving Party without the aid, application or use of, or reference to, Confidential Information of the disclosing Party, as demonstrated by contemporaneous, competent written records.

1.10 **“Control”** means possession of the ability to grant a license or sublicense under, or to provide access to or copies of, certain property of a Party as provided for herein without violating the terms of any agreement or other arrangement with any Third Party.

1.11 **“Field”** means cell and gene therapy of diseases in humans.

1.12 **“IND”** means an Investigational New Drug Application as defined in the United States Food, Drug and Cosmetic Act or foreign equivalent thereof in any country or group of countries in the Territory, the filing of which is necessary to commence clinical testing of a pharmaceutical product in humans in a particular jurisdiction.

1.13 **“Licensed Product”** means any product or process where the manufacture, use, practice, sale, offer for sale, importation or performance of such product in the country in question would, in the absence of this Agreement, constitute an infringement (or, in the case of a pending claim, would constitute an infringement if such pending claim was then issued) of at least one Valid Claim within the AGENSYS Patent Rights, or any Patents directed to AGENSYS Sole Inventions, or any Joint Patents (without giving effect to BELLICUM’s ownership interest therein), or would, in the absence of this Agreement, constitute an infringement of any Valid [...\*\*\*...] Claim within the AGENSYS Licensed Patent Rights.

\*\*\*Confidential Treatment Requested

1.14 **“Net Sales”** means, with respect to any Licensed Product, the total amount actually received from the commercial sale of such Licensed Product by BELLICUM, its Affiliates or Permitted Sublicensees to Third Parties after deduction (if not already deducted in the amount invoiced) of the following items, but only to the extent that such items are actually paid or allowed in connection with such sale of Licensed Product and are consistent with GAAP, typical and customary for BELLICUM:

[...\*\*\*...]

For the avoidance of doubt, [...\*\*\*...] will not result in any Net Sales.

Notwithstanding the foregoing in this Section 1.14, amounts received by BELLICUM, its Affiliates or Permitted Sublicensees for [...\*\*\*...] will not be included in the computation of Net Sales hereunder.

1.15 **“Patent”** means (i) unexpired letters patent (including inventor's certificates) which have not been held invalid or unenforceable by a court of competent jurisdiction from which no appeal can be taken or has been taken within the required time period, including without limitation any substitution, extension, registration, confirmation, reissue, re-examination, renewal or any like filing thereof and (ii) pending applications for letters patent, including without limitation any provisional, converted provisional, continued prosecution application, continuation, divisional or continuation-in-part thereof.

1.16 **“Phase II Clinical Trial”** means a clinical trial, or foreign equivalent thereof, as defined in 21 C.F.R. 312.21(b), as may be amended from time to time, in any country or group of countries in the Territory.

\*\*\*Confidential Treatment Requested

1.17 **“Phase III Clinical Trial”** means a clinical trial, or foreign equivalent thereof, as defined in 21 C.F.R. 312.21(c), as may be amended from time to time, in any country or group of countries in the Territory.

1.18 **“Regulatory Approval”** means all approvals (including supplements, amendments, pre- and post-approvals and Price Approvals), licenses, registrations or authorizations of any national, supra-national, regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity, necessary for the manufacture, distribution, use or sale of a pharmaceutical product in a given regulatory jurisdiction.

1.19 **“Regulatory Authority”** means the United States Food and Drug Administration or foreign equivalent thereof in the applicable territory or country within the Territory.

1.20 **“Territory”** means worldwide.

1.21 **“Third Party”** means any entity other than AGENSYS or BELLICUM or their respective Affiliates (and in the case of AGENSYS, such AGENSYS Affiliates shall be set forth in Exhibit C, attached hereto, as it may be amended from time-to-time).

1.22 **“[...\*\*\*...] License Agreement”** means the License Agreement [...\*\*\*...].

1.23 **“Valid Claim”** means a claim in an issued patent or a pending patent application within the AGENSYS Patent Rights, or any Patents directed to AGENSYS Sole Inventions, or the Joint Patents, which claim has not expired, lapsed, been cancelled or become abandoned irrevocably and has not been held invalid or unenforceable by an un-reversed and un-appealable decision or judgment of a court or other appropriate body of competent jurisdiction, and which has not been admitted to be invalid or unenforceable through reissue, disclaimer or otherwise.

1.24 **“Valid [...\*\*\*...] Claim”** means a claim in an issued, unexpired patent or a pending patent application within the AGENSYS Licensed Patent Rights that has not lapsed, been canceled, or become abandoned and which claim has not been held invalid or unenforceable in an unappealed and unappealable final judgment of a court of competent jurisdiction.

1.25 **Additional Definitions:**

| <b><u>Defined Term</u></b>    | <b><u>Section in which Defined</u></b> |
|-------------------------------|--|
| <b>AGENSYS</b>                | Preamble                               |
| <b>AGENSYS Indemnitees</b>    | 7.1                                    |
| <b>AGENSYS Sole Invention</b> | 5.1                                    |

\*\*\*Confidential Treatment Requested

| <b><u>Defined Term</u></b>      | <b><u>Section in which Defined</u></b> |
|---------------------------------|--|
| <b>Agreement</b>                | Preamble                               |
| <b>API</b>                      | 2.6(a)                                 |
| <b>ASMAI</b>                    | 12.1                                   |
| <b>Assignment In Part</b>       | 12.7                                   |
| <b>BELLICUM</b>                 | Preamble                               |
| <b>BELLICUM Indemnitees</b>     | 7.2                                    |
| <b>BELLICUM Sole Invention</b>  | 5.1                                    |
| <b>CDA</b>                      | 12.1                                   |
| <b>Commercialization Option</b> | 2.6(a)                                 |
| <b>Competitive Infringement</b> | 5.3(b)(i)                              |
| <b>Development Plan</b>         | 3.1                                    |
| <b>Effective Date</b>           | Preamble                               |
| <b>Excluded Claim</b>           | 11.3(f)                                |
| <b>Executives</b>               | 2.6(a)                                 |
| <b>Indemnify</b>                | 7.1                                    |
| <b>ICC</b>                      | 11.3(a)                                |
| <b>ICC Rules</b>                | 11.3(a)                                |
| <b>Japan License Agreement</b>  | 2.6(a)                                 |
| <b>Joint Inventions</b>         | 5.1                                    |
| <b>Joint Patents</b>            | 5.2(c)                                 |
| <b>JP Licensed Product</b>      | 2.6(a)                                 |
| <b>Licensed BELLICUM Patent</b> | 2.2                                    |
| <b>Licensee</b>                 | 2.6(a)                                 |
| <b>Losses</b>                   | 7.1                                    |
| <b>MCA</b>                      | 12.1                                   |
| <b>Party/Parties</b>            | Preamble                               |
| <b>Patent Term Extension</b>    | 5.5                                    |
| <b>Permitted Sublicensee</b>    | 2.3                                    |
| <b>Proposed Terms</b>           | 2.6(a)                                 |
| <b>Referral Date</b>            | 2.6(a)                                 |
| <b>Royalty Term</b>             | 4.3(b)                                 |
| <b>Section 11.2 Executives</b>  | 11.2                                   |
| <b>Support Memorandum</b>       | 2.6(a)                                 |
| <b>Sublicense Agreement</b>     | 2.3                                    |

| <u>Defined Term</u>             | <u>Section in which Defined</u> |
|---------------------------------|---------------------------------|
| <b>Term</b>                     | 10.1                            |
| <b>Third Party Claim</b>        | 7.1                             |
| <b>Third Party Claim of INF</b> | 5.4(a)                          |
| <b>Third Party IP License</b>   | 4.3(d)                          |

## 2. LICENSES

### 2.1 Licenses to BELLICUM.

(a) **AGENSYS Owned.** Subject to the terms and conditions of this Agreement (including, without limitation, the Commercialization Option provided in Section 2.6 and the financial obligations in Article 4), AGENSYS hereby grants to BELLICUM an exclusive, royalty-bearing (in accordance with Article 4) license under the AGENSYS Patents Rights, the AGENSYS Technology and AGENSYS's interest in the Joint Patents, to develop, make, have made, use, sell, offer to sell, lease, import and have imported, and to perform and have performed, Licensed Products in the Field in the Territory. Such license will be sublicensable as provided in Section 2.3.

(b) **AGENSYS Licensed.** Subject to the terms and conditions of this Agreement (including, without limitation, the Commercialization Option provided in Section 2.6 and the financial obligations in Article 4) and the [...\*\*\*...] License Agreement (including, without limitation, the rights of [...\*\*\*...] as described in Section 2.2 of the [...\*\*\*...] License Agreement), AGENSYS hereby grants to BELLICUM an exclusive (subject to the limitations set forth in Section 2.2 of the [...\*\*\*...] License Agreement), royalty-bearing (in accordance with Article 4) sublicense under the AGENSYS Licensed Patents Rights to make, have made, use, sell, offer for sale and import Licensed Products in the Field in the Territory, to the extent permitted under law. Such sublicense will be further sublicensable as provided in Section 2.3 to the extent not limited by the [...\*\*\*...] License Agreement. Without limiting the generality of the foregoing, Section 3.1 and Section 3.3 of the [...\*\*\*...] License Agreement is applicable to BELLICUM as a sublicensee of AGENSYS. The sublicense granted under this Section 2.1(b) is subject to the terms and conditions of the [...\*\*\*...] License Agreement governing the license to AGENSYS under which the sublicense is granted. AGENSYS will faithfully and timely perform and discharge its obligations under the [...\*\*\*...] License Agreement, and BELLICUM will faithfully and timely perform and discharge its obligations under this Agreement that arise as a result of the sublicense granted in this Section 2.1(b), and each Party will not permit any action to be taken or event to occur, in each case, to the extent within such Party's reasonable control, that would give [...\*\*\*...] the right to terminate the [...\*\*\*...] License Agreement. For the avoidance of doubt, any act or omission by BELLICUM that would cause AGENSYS to be in breach of the [...\*\*\*...] License Agreement is a breach of this Agreement.

2.2 **Licenses to AGENSYS.** As consideration for the rights granted under Section 2.1 and subject to the terms and conditions of this Agreement, BELLICUM hereby grants to

\*\*\*Confidential Treatment Requested

AGENSYS a non-exclusive, fully paid license under Patents Controlled by BELLICUM that are directed to BELLICUM Sole Inventions, to the extent each such Patent includes at least one claim that would read upon the making, using, or selling of antibodies that bind to prostate stem cell antigen 1 (each, a **“Licensed BELLICUM Patent”**), wherein AGENSYS is granted such license to develop, make, have made, use, sell, offer to sell, lease, import and have imported, and to perform and have performed any therapeutic product containing a soluble antibody or soluble derivative thereof that binds to prostate stem cell antigen 1 or, to the extent not based upon BELLICUM’s other proprietary technology, to exploit non-therapeutic product uses and applications (for example only, in vitro analysis and/or characterization) of any antibody not used within the Field. AGENSYS may sublicense its rights under a Licensed BELLICUM Patent only in conjunction with a license of AGENSYS’s rights in an AGENSYS therapeutic product containing a soluble antibody that binds to prostate stem cell antigen 1. Each such permitted sublicense must (a) be in writing and (b) be consistent with, and subject to the terms and conditions of, this Agreement, including but not limited to the limitations set forth in this Section 2.2.

**2.3 Sublicensing by BELLICUM.** To the extent permitted under this Agreement and the [...\*\*\*...] License Agreement, BELLICUM has the right to grant sublicenses under the licenses granted in Section 2.1 to one or more Third Parties or Affiliates subject to the provisions of this Section 2.3 and, if applicable, the [...\*\*\*...] License Agreement. Each agreement under which BELLICUM grants a sublicense under the licenses granted in Section 2.1 (each, a **“Sublicense Agreement”**) must (a) be in writing and (b) be consistent with, and subject to the terms and conditions of, this Agreement and, if applicable, the [...\*\*\*...] License Agreement. Any sublicensee of the rights granted to BELLICUM pursuant to this Section 2.3 will be referred to herein as a **“Permitted Sublicensee.”** BELLICUM will be responsible for compliance of any Permitted Sublicensee with this Agreement and, if applicable, the [...\*\*\*...] License Agreement. Any breach of this Agreement and, if applicable, the [...\*\*\*...] License Agreement by the acts or omissions of a Permitted Sublicensee will be a breach of this Agreement by BELLICUM. BELLICUM will provide AGENSYS with a full and complete copy of such Sublicense Agreement within [...\*\*\*...] after execution thereof; provided that BELLICUM may redact any confidential information contained therein that is not necessary to disclose to ensure compliance with this Agreement including, without limitation, provisions or portions of the Sublicense Agreement that are not relevant to the sublicense described in this Section 2.3. Notwithstanding the foregoing, if applicable, if a given Sublicense Agreement includes a sublicense grant by BELLICUM under the [...\*\*\*...] License Agreement, BELLICUM will provide AGENSYS with a full and complete copy of such Sublicense Agreement within [...\*\*\*...] after execution thereof; provided that BELLICUM may redact any confidential information contained therein that is not necessary to disclose to ensure compliance with this Agreement including, without limitation, provisions or portions of the Sublicense Agreement that are not relevant to the sublicense described in this Section 2.3.

**2.4 [Reserved]**

**2.5 [Reserved]**

\*\*\*Confidential Treatment Requested



## 2.6 Option for Commercialization of Licensed Products in Japan.

(a) **Grant.** For each Licensed Product that has completed a first Phase II Clinical Trial, and on such a Licensed Product-by-Licensed Product basis, BELLICUM agrees to grant and hereby grants AGENSYS the exclusive commercialization option (the “**Commercialization Option**”) to obtain an exclusive license -- under all Patents and technology owned or Controlled by BELLICUM (y) that are necessarily used, practiced or exploited to develop and Commercialize the particular Licensed Product in Japan, or (z) to ensure that the same Licensed Product is developed and Commercialized worldwide, that would be commercially reasonably used, practiced or exploited in developing and Commercializing such particular Licensed Product in Japan -- to develop and Commercialize each such particular Licensed Product in Japan (each, a “**JP Licensed Product**”) under the licensing terms set out in Section 2.6(b) below; provided that if the Licensee (as defined below) submits an IND in Japan for the same Licensed Product which has completed a first Phase II Clinical Trial, and if a Regulatory Authority in Japan requires the Licensee to modify such JP Licensed Product granted to the Licensee, then the Licensee shall have the right to change such JP Licensed Product to the extent required by such Regulatory Authority or otherwise required by applicable laws and regulations, and such modified JP Licensed Product shall be deemed the same as the JP Licensed Product for which the Commercial Option was exercised. For the avoidance of doubt, for Patents and technology that are Controlled, but not owned, by BELLICUM, BELLICUM will only grant a sublicense under such Patents and technology to the extent BELLICUM can do so without violating the terms of any agreement or other arrangement with any Third Party for such Patents and technology, and the Licensee shall be obligated to reimburse BELLICUM under the Japan License Agreement (as defined below) for payments BELLICUM is obligated to pay (and actually pays) to each such Third Party due to the grant of the sublicense or due to the exercise by the Licensee of its rights under such sublicense. AGENSYS or Astellas Pharma Inc. (“**API**”), a parent company of AGENSYS, may exercise the option with respect to a particular JP Licensed Product at any time during the period beginning upon [...\*\*\*...] and ending upon the earlier of: [...\*\*\*...]. If AGENSYS or API chooses to exercise the Commercialization Option, which choice is in the sole discretion of AGENSYS and API, AGENSYS or API will provide written notice thereof to BELLICUM (the entity providing such notice, the “**Licensee**”). Upon the giving of such notice, BELLICUM and the Licensee will negotiate in good faith a written license agreement (the “**Japan License Agreement**”) containing the terms and conditions set forth in Section 2.6(b) below, the terms and conditions under which BELLICUM (or BELLICUM’s contract manufacturing organization) would agree to manufacture and supply the JP Licensed Product if requested by the Licensee, and such other terms and conditions as are reasonable and customary in the industry but otherwise consistent with the terms in Section 2.6(b) below and this Agreement. BELLICUM and the Licensee will complete and execute the Japan License Agreement within [...\*\*\*...] of the Licensee’s exercise of the Commercialization Option. Upon execution of a given Japan License Agreement, the license grants to BELLICUM under Section 2.1 of this Agreement will exclude such JP Licensed Product in Japan, and the rights to such JP Licensed Product in Japan will vest exclusively with the Licensee. If AGENSYS or API executes a Japan License Agreement for a given Licensed Product, then AGENSYS or API, as Licensee, will be solely responsible for all preclinical, clinical and post-approval development, regulatory and

\*\*\*Confidential Treatment Requested

commercialization activities in connection with such JP Licensed Product in Japan, including all costs related thereto; provided that BELLICUM may retain certain responsibilities related to such JP Licensed Product activities in Japan (as one non-limiting example, BELLICUM's supply of rimiducid and associated regulatory support in relation to such rimiducid supply). In the event BELLICUM and the Licensee fail to reach agreement on the terms of the Japan License Agreement within such [...] period of negotiation, either BELLICUM or the Licensee may refer the Japan License Agreement at issue to BELLICUM's CEO and to Licensee's senior executive (the **"Executives"**); provided that if Licensee is AGENSYS, the Executive shall be the chief executive officer of AGENSYS, and if the Licensee is API, the Executive shall be a senior executive of API that is authorized and empowered to bind API to the negotiated terms of the Japan License Agreement. The Executives will meet (or confer by telephone or video conference) within [...] after such referral occurs (**"Referral Date"**), at a time and place mutually acceptable to both Executives. If the Executives do not resolve the terms of the Japan License Agreement at issue within [...] after the Referral Date (or such longer time period as the Executives may mutually agree in writing), the Licensee or BELLICUM may submit the matter to binding "baseball arbitration" as follows: Within [...] after the Executives fail to resolve the terms of the Japan License Agreement at issue, Licensee may refer such Japan License Agreement at issue to arbitration by submitting a written notice of such request to BELLICUM. Promptly following receipt of such notice, the Parties shall meet and discuss in good faith and agree on an arbitrator to resolve the issue, which arbitrator shall be neutral and independent of both Parties and all of their respective Affiliates, shall have significant experience and expertise in licensing and partnering agreements in the pharmaceutical and biotechnology industries, and shall have some experience in mediating or arbitrating issues relating to such agreements. If the Parties cannot agree on such arbitrator within thirty (30) days of request by Licensee for arbitration, then such arbitrator shall be appointed by the American Arbitration Association, which arbitrator must meet the foregoing criteria. Within fifteen (15) days after an arbitrator is selected (or appointed, as the case may be), each Party will deliver to both the arbitrator and the other Party a detailed written proposal setting forth its proposed terms for the Japan License Agreement at issue (the **"Proposed Terms"** of the Party) and a memorandum (the **"Support Memorandum"**) in support thereof, not exceeding ten (10) pages in length. The Parties also will provide the arbitrator a copy of this Agreement, as it may be amended at such time. Within fifteen (15) days after receipt of the other Party's Proposed Terms and Support Memorandum, each Party may submit to the arbitrator (with a copy to the other Party) a response to the other Party's Support Memorandum, such response not exceeding five (5) pages in length. Neither Party may have any other communications (either written or oral) with the arbitrator other than for the sole purpose of engaging the arbitrator or as expressly permitted in this Section 2.6(a); provided that, the arbitrator may convene a hearing if the arbitrator so chooses to ask questions of the Parties and hear oral argument and discussion regarding each Party's Proposed Terms. Within sixty (60) days after the arbitrator's appointment, the arbitrator will select one of the two Proposed Terms (without modification) provided by the Parties that (1) is most consistent with the intention underlying and agreed principles set forth in this Agreement including, without limitation, the terms and conditions expressly required to be in the Japan License Agreement as set forth in this Section 2.6, and (2) is most consistent with customary and standard terms and conditions for exclusive license agreements of this nature within the pharmaceutical industry, giving weight to the terms and conditions contained in this Agreement as being customary and standard within the pharmaceutical industry, though in no event shall customary and standard terms and conditions

\*\*\*Confidential Treatment Requested

be found to override the terms and conditions expressly required to be in the Japan License Agreement as set forth in this Section 2.6. The decision of the arbitrator shall be final, binding, and unappealable. For clarity, the arbitrator must select as the only method to resolve the Japan License Agreement at issue one of the two sets of Proposed Terms, and may not combine elements of both Proposed Terms or award any other relief or take any other action. For the avoidance of doubt, AGENSYS and API have no obligation hereunder to exercise the Commercialization Option.

(b) **Terms of the Japan License Agreement.** Each Japan License Agreement will provide that the Licensee will pay to BELLICUM an option exercise fee of five million dollars (US\$5,000,000) within [...\*\*\*...] after exercise of the applicable Commercialization Option. In addition, each Japan License Agreement will provide that the Licensee will pay to BELLICUM a royalty on Net Sales of the JP Licensed Product in Japan during the applicable Royalty Term on an annual basis at the following rates:

(i) For the portion of aggregate annual Net Sales of all JP Licensed Products in Japan equal to or less than [...\*\*\*...] dollars (US\$[...\*\*\*...]) in any calendar year, [...\*\*\*...] percent ([...\*\*\*...])% of such portion of such Net Sales;

(ii) For the portion of aggregate annual Net Sales of all JP Licensed Products in Japan greater than [...\*\*\*...] dollars (US\$[...\*\*\*...]) and equal to or less than [...\*\*\*...] dollars (US\$[...\*\*\*...]) in any calendar year, [...\*\*\*...] percent ([...\*\*\*...])% of such portion of such annual Net Sales;

(iii) For the portion of aggregate annual Net Sales of all JP Licensed Products in Japan greater than [...\*\*\*...] dollars (US\$[...\*\*\*...]) in any calendar year, [...\*\*\*...] percent ([...\*\*\*...])% of such portion of such annual Net Sales.

(c) **Restriction on Certain Activities.** BELLICUM agrees not to grant any licenses or sublicenses, enter into any agreements with Third Parties or Affiliates or make any commitments that would prevent, limit or restrict BELLICUM from entering into the Japan License Agreement and fully granting the licenses thereunder upon the Licensee's exercise of the Commercialization Option. For the avoidance of doubt, BELLICUM cannot grant any licenses under the Joint Patents, any sublicenses under the AGENSYS Patent Rights, the AGENSYS Technology, and, if applicable, any sublicenses under the AGENSYS Licensed Patent Rights, to make, use, sell, offer for sale, import, or export JP Licensed Products in Japan unless and until the Commercialization Option for such JP Licensed Product has expired without exercise by AGENSYS or API. Furthermore, BELLICUM agrees not to itself or with or through any Affiliate or Third Party, directly or indirectly, market, sell or otherwise Commercialize any Licensed Products within Japan unless and until the Commercialization Option for such JP Licensed Product has expired without exercise by AGENSYS or API.

## 2.7 Information, Data and Material.

(a) Within [...\*\*\*...] days of the Effective Date, AGENSYS will provide BELLICUM with all information and data Controlled by AGENSYS that is reasonably necessary for BELLICUM to research, develop or manufacture Licensed Products or to perform regulatory activities in the Territory (for example, regulatory supporting documentation would include a

\*\*\*Confidential Treatment Requested

right of reference to the CMC sections of relevant AGENSYS regulatory filings, if needed); provided that all AGENSYS Technology provided by AGENSYS pursuant to this Section 2.7(a) is provided to BELLICUM “AS IS”, subject to AGENSYS’s representations and warranties in Article 6.

(b) Upon BELLICUM’s reasonable request within [...\*\*\*...] of the Effective Date, AGENSYS will make available to BELLICUM all information and data in AGENSYS’s Control relating to antibodies to prostate stem cell antigen 1 in AGENSYS’s possession that has not previously been provided to BELLICUM, including any raw data and/or original data relating to Licensed Products; provided that any AGENSYS Technology provided under this Section 2.7(b) will be provided “AS IS”, subject to AGENSYS’s representations and warranties in Article 6. For [...\*\*\*...] from the Effective Date, AGENSYS will not destroy, discard or otherwise dispose of or will not have destroyed, discarded or otherwise disposed of any information and data relating to antibodies to prostate stem cell antigen 1 without prior written approval of BELLICUM, which approval will not be unreasonably withheld; provided that, if requested by BELLICUM, AGENSYS will transfer to BELLICUM such information and data that AGENSYS proposes to destroy, discard or dispose of (or true and complete copies thereof).

## 2.8 AGENSYS’s Support.

(a) Subject to the terms and conditions of this Agreement, if reasonably requested by BELLICUM within [...\*\*\*...] of the Effective Date, AGENSYS will, to the extent available mutually agreed upon by the Parties in writing, provide BELLICUM with support for the following activities with respect to Licensed Products:

(i) pre-clinical and clinical data, information, and results in AGENSYS’s Control that are relevant to AGENSYS Technology and related to the Field; provided that if any such item of data, information or results also is covered by Section 2.7, the terms and conditions of Section 2.7 shall control with respect to such item;

(ii) information pertaining to agreements with third parties that are granted rights and/or licenses under the AGENSYS Technology, or to materials that AGENSYS has shared with third parties involving AGENSYS Technology that are related to the Field;

(iii) information pertaining to the [...\*\*\*...] License Agreement, including any matters related to the [...\*\*\*...] License Agreement that may influence or affect BELLICUM’s practice and exploitation of the license granted under Section 2.1(b).

(b) Upon BELLICUM’s reasonable request, and to the extent available and as mutually agreed upon by the Parties in writing, AGENSYS shall provide support and/or information, data, know-how and technology if it pertains to an anti-prostate stem cell antigen 1 antibody or a related hybridoma that was in existence as of the Effective Date and to the extent that it is relevant to the Field. The Parties agree that the [...\*\*\*...] and the [...\*\*\*...] are non-limiting examples of such antibodies or hybridomas that were in existence as of the Effective Date. Notwithstanding anything herein to the contrary, AGENSYS shall have no obligation to provide support and/or information, data, know-how and technology

\*\*\*Confidential Treatment Requested

(i) that pertains solely to any anti-prostate stem cell antigen 1 antibodies that did not exist as of the Effective Date; (ii) that pertains to improvements, derivatives or enhancements of an anti-prostate stem cell antigen 1 antibody that are not relevant to the Field; or (iii) that is directed to antibody drug conjugates that use an anti-prostate stem cell antigen 1 antibody that was in existence as of the Effective Date; provided that this clause (iii) will not affect AGENSYS's obligation to provide support and/or information, data, know-how and technology pertaining to the anti-prostate stem cell antigen 1 antibody portion, whether such information, data, know-how and/or technology was obtained in relation to such antibody in antibody drug conjugate form or in any other form.

(c) BELLICUM will reimburse all reasonable direct costs and expenses incurred by AGENSYS for any and all activities conducted under Section 2.8; provided that each of such costs and expenses were previously agreed upon in writing by the Parties pursuant to a budget.

**2.9 Retained Rights; No Implied Licenses.** Except as explicitly set forth in this Agreement, neither Party grants under its intellectual property (including without limitation Patents) any license, express or implied, to the other Party. Except for the rights and licenses expressly granted in this Agreement, AGENSYS retains all rights under the AGENSYS Patent Rights, the AGENSYS Licensed Patent Rights, and the AGENSYS Technology. No rights will be deemed granted by AGENSYS to BELLICUM, or by BELLICUM to AGENSYS, by implication, estoppel or otherwise.

### **3. DEVELOPMENT AND COMMERCIALIZATION OF LICENSED PRODUCTS**

**3.1 Development of Products in the Field in the Territory.** Subject to the terms and conditions of this Agreement, during the Term, BELLICUM is solely responsible for the development of, and for obtaining, and maintaining Regulatory Approvals for, Licensed Products in the Field in the Territory (excluding Japan if a Japan License Agreement is executed for a given Licensed Product), including all costs and expenses associated with such activities. Without limiting the foregoing, BELLICUM has sole responsibility, at BELLICUM's cost and expense, for conducting clinical and non-clinical studies and CMC-related studies and activities with respect to Licensed Products in the Field in the Territory and preparing, filing, obtaining and maintaining the appropriate applications with Regulatory Authorities, and for all contacts with Regulatory Authorities, regarding Licensed Products in the Field in the Territory. BELLICUM is also responsible for ensuring that its employees, agents, clinical institutions and clinical investigators comply with all applicable statutory and regulatory requirements with respect to Licensed Products, including but not limited to: regulatory provisions regarding protection of human subjects, financial disclosure by clinical investigators, Institutional Review Boards (IRB), Good Clinical Practices, Good Laboratory Practices, IND regulations, and any conditions imposed by a reviewing IRB or imposed by the applicable Regulatory Authority. BELLICUM will use Commercially Reasonable Efforts to develop, and to file for, obtain and maintain Regulatory Approvals for, at least one Licensed Product in the Field in the Territory. BELLICUM will perform all development and regulatory activities with respect to Licensed Products in the Field in the Territory in compliance with all applicable laws, rules and regulations. Furthermore, BELLICUM is solely responsible for the timely reporting of all relevant adverse drug reactions/experiences, Licensed Product quality, License Product

complaints and safety data relating to Licensed Products in the Field, to the appropriate Regulatory Authorities in accordance with the applicable laws, rules and regulations of the Regulatory Authorities in the Territory. As required for [...\*\*\*...], BELLICUM will prepare an initial product development plan describing in reasonable scope and detail its proposed plans and its estimated timetable for its research, development, manufacture, obtaining all necessary governmental approvals for, and sale of Licensed Products in the Field in the Territory (the “**Development Plan**”), and will [...\*\*\*...]. As required for [...\*\*\*...]. For avoidance of doubt, and with respect to all provisions within this Article 3, if a Japan License Agreement is executed for a given Licensed Product, Licensee will have sole responsibility for all activities and costs in relation to the corresponding JP Licensed Product.

**3.2 Commercialization of Products in the Field in the Territory.** Subject to the terms and conditions of this Agreement, during the Term, BELLICUM is solely responsible for the Commercialization of Licensed Products in the Field in the Territory (excluding Japan if a Japan License Agreement is executed for a given Licensed Product), including any post-marketing studies of Licensed Products in the Field in the Territory, including all costs associated with such activities. BELLICUM will use Commercially Reasonable Efforts to Commercialize Licensed Products in the Field in the Territory (excluding Japan if a Japan License Agreement is executed for a given Licensed Product). Subject to any executed Japan License Agreement, BELLICUM will perform all Commercialization activities with respect to Licensed Products in the Field in the Territory in compliance with all applicable laws, rules and regulations. Without limiting the foregoing, and subject to any executed Japan License Agreement, BELLICUM has the sole right and responsibility for all commercial and medical affairs matters with respect to Licensed Products in the Field in the Territory.

**3.3 Manufacture and Supply of Products.** Subject to the terms and conditions of this Agreement, and subject to any executed Japan License Agreement, during the Term, BELLICUM is solely responsible for the manufacture and supply of Licensed Products in the Field in the Territory, including CMC-related work necessary for obtaining Regulatory Approval for Licensed Products in the Field in the Territory, including all costs associated with such activities. BELLICUM will perform all manufacturing activities with respect to Licensed Products in the Field in the Territory in compliance with all applicable laws, rules and regulations.

**3.4 Disclosure Regarding BELLICUM’s Efforts.** BELLICUM will deliver to AGENSYS an [...\*\*\*...] summarizing development, regulatory, manufacturing and commercialization activities of BELLICUM, its Affiliates and Permitted Sublicensees with respect to Licensed Products in the Field in the Territory. BELLICUM will also provide any

\*\*\*Confidential Treatment Requested

information and data reasonably necessary for [...\*\*\*...].

3.5 **Subcontractors.** BELLICUM or its Affiliates may perform some or all of BELLICUM's obligations under this Article 3 through one or more subcontractors. BELLICUM will remain responsible for the performance by any Third Party subcontractors and the compliance of such Third Party subcontractors with the provisions of this Agreement in connection with such performance.

#### 4. FEES AND PAYMENTS

4.1 **Upfront Fee.** BELLICUM will make a non-refundable (except to the extent refundable amounts are provided in Section 5.5), non-creditable payment to AGENSYS of three million dollars (US\$3,000,000) payable to AGENSYS within [...\*\*\*...] after the Effective Date.

##### 4.2 Milestone Payments.

(a) BELLICUM will make milestone payments to AGENSYS based on achievement of regulatory and Commercialization milestone events for Licensed Products as set forth in this Section 4.2. BELLICUM will pay to AGENSYS the amounts set forth below within [...\*\*\*...] after achievement by BELLICUM or its Affiliate or Permitted Sublicensee of the relevant milestone event. BELLICUM will notify AGENSYS promptly in writing after first achievement of each such milestone event. Each such payment is non-creditable against any other payments due hereunder and nonrefundable.

| Milestone          | Payment         |
|--------------------|-----------------|
| i-1) [...***...]   | US\$[...***...] |
| i-2) [...***...]   | US\$[...***...] |
| ii) [...***...]    | US\$[...***...] |
| iii-1) [...***...] | US\$[...***...] |
| iii-2) [...***...] | US\$[...***...] |

\*\*\*Confidential Treatment Requested

|                   |                 |
|-------------------|-----------------|
| iv-1) [...***...] | US\$[...***...] |
| iv-2) [...***...] | US\$[...***...] |
| v-1) [...***...]  | US\$[...***...] |
| v-2) [...***...]  | US\$[...***...] |

(b) Each of the milestone payments described in this Section 4.2 is payable when a particular Licensed Product first achieves such milestone event, except for milestones (i-1) and (i-2) as described in the above table, each of which is only payable one time upon the first Licensed Product achieving such milestone event. For clarification, in the event two or more milestone events are achieved at the same time, the milestone payments for both milestone events will be due.

(c) Two Licensed Products shall be deemed to be “different Licensed Products” from one another if they incorporate or use different constructs for cell or gene therapy. An existing BLA plus supplements thereto (for example, supplements for different indications) would relate to the same Licensed Product. If a new BLA is filed, the presumption is that it would relate to a different Licensed Product.

\*\*\*Confidential Treatment Requested



### 4.3 Royalty on Net Sales.

(a) **Rates.** BELLICUM will pay AGENSYS a royalty on Net Sales of Licensed Products sold in each country of the Territory, during the Royalty Term for such Licensed Product in such country, according to the following rates:

(i) For the portion of aggregate annual Net Sales of all Licensed Products throughout the Territory equal to or less than [...] dollars (US\$[...]) in any calendar year, [...] percent ([...]) of such portion of such Net Sales anywhere in the Territory;

(ii) For the portion of aggregate annual Net Sales of all Licensed Products throughout the Territory greater than [...] dollars (US\$[...]) and equal to or less than [...] dollars (US\$[...]) in any calendar year, [...] percent ([...]) of such portion of such annual Net Sales anywhere in the Territory;

(iii) For the portion of aggregate annual Net Sales of all Licensed Products throughout the Territory greater than [...] dollars (US\$[...]) in any calendar year, [...] percent ([...]) of such portion of such annual Net Sales anywhere in the Territory.

For clarity, upon execution of each Japan License Agreement, sales of the corresponding JP Licensed Product in Japan are excluded from the phrase “Net Sales anywhere in the Territory.”

(b) **Royalty Term.** Royalties under this Section 4.3 are payable on aggregate annual Net Sales of all Licensed Products in the Territory for a period determined on a Licensed Product-by-Licensed Product and country-by-country basis from the Commercial Launch of a Licensed Product in a country in the Territory and ending on the latest to occur of the following: (i) the date of expiration or abandonment of the last Valid Claim and last Valid [...] Claim that would be infringed, absent a license, by the manufacture, use or sale of such Licensed Product, (ii) the date of expiration of regulatory exclusivity with respect to such Licensed Product, and (iii) the date that is ten (10) years after the first commercial sale date for such Licensed Product (the “**Royalty Term**”). Section 6.1(b) of the [...] License Agreement will apply in determining whether a royalty is owed for a Licensed Product with respect a Valid [...] Claim.

(c) **Royalty Step Down.** The royalty percentages in Sections 4.3(a)(i), (ii) and (iii) that BELLICUM pays AGENSYS for sales of Licensed Product in countries where the manufacture, use, or sale of such Licensed Product would not infringe a Valid Claim will be reduced by [...] percent ([...]) in such country where such reduction will be applied on a pro rata basis across Sections 4.3(a)(i), (ii) and (iii), to the extent each may be applicable in a given calendar year.

(d) **Third Party Royalties.** If, during the Term, BELLICUM determines that any Licensed Product or the use thereof in the Field, or that the practice of any AGENSYS Technology reasonably necessary to use, research, develop, manufacture, or commercialize a

\*\*\*Confidential Treatment Requested

Licensed Product, infringes, or may reasonably be considered to infringe or likely to infringe (at that time or in the future), claims of an unexpired patent or patent application other than those in the AGENSYS Patent Rights or the AGENSYS Licensed Patent Rights, BELLICUM may, if it has not already done so, negotiate with the owner of such patents or patent applications for a license (“**Third Party IP License**”) on commercially reasonable terms. If the Third Party IP License requires the payment of royalties or other consideration to such owner that is a Third Party (other than a Permitted Sublicensee), the royalties otherwise payable under this Section 4.3 will be reduced by [...] percent ([...]%) of the dollar amount of the royalties or other monetary consideration actually paid by BELLICUM to the owners of such patents or patent applications with respect to Net Sales in such calendar quarter on a Licensed Product-by-Licensed Product and country-by-country basis; provided that in no event will the royalty amount payable under this Section 4.3 be less than [...] percent ([...]%) of what the royalty amount would have been in such calendar quarter in the absence of the Third Party IP License(s) for such Licensed Product in the applicable country, but for this Section 4.3(d).

(e) **No Multiple Royalties.** If a Licensed Product is covered by more than one Valid Claim and/or Valid [...] Claim, multiple royalties are not due on such Licensed Product under this Section 4.3.

**4.4 Payments and Reports.** All amounts payable to AGENSYS pursuant to Section 4.3 must be paid in U.S. dollars within [...] after the end of the calendar quarter in which the Net Sales giving rise to the royalty payment obligation were achieved, except as otherwise specifically provided herein. BELLICUM will include with each payment of royalties due to AGENSYS a statement setting forth on a Licensed Product-by-Licensed Product basis in reasonable detail the calculation of Net Sales (including the number of Licensed Products sold, the total amount actually received from commercial sales of Licensed Products, the deductions therefrom to arrive at Net Sales, and any exchange rate used), and the royalties payable to AGENSYS for such calendar quarter. BELLICUM will also provide any and all information and data reasonably necessary for AGENSYS to [...].

**4.5 Taxes.** BELLICUM will deduct from any payments hereunder any withholding of taxes required under applicable law to be withheld on such payments from the sums otherwise payable by BELLICUM hereunder for payment to the proper tax authorities on behalf of AGENSYS. BELLICUM will timely pay any such amounts to the proper tax authorities. BELLICUM will send evidence of the obligation together with proof of payment to AGENSYS following such payment. The Parties agree to cooperate with each other in the event AGENSYS claims exemption from such withholding or seeks deductions under any double taxation or other similar treaty or agreement from time to time in force.

#### **4.6 Payment and Currency.**

(a) **Currency.** Each Party will make all payments due under this Agreement to the other Party by bank wire transfer in immediately available funds to an account designated by the receiving Party, unless otherwise specified in writing by the receiving Party. All payments hereunder must be made in U.S. dollars.

\*\*\*Confidential Treatment Requested

(b) **Blocked Currency.** In each country where the local currency is blocked and cannot be removed from the country, royalties arising from Net Sales made in that country will be paid to the receiving Party in such country in local currency by deposit in a local bank designated by the receiving Party, unless the Parties otherwise agree in writing.

(c) **Foreign Exchange.** When conversion of payments from any foreign currency is required, such conversion will be at an exchange rate equal to the weighted average of the rates of exchange for the currency of the country from which the royalties are payable as published by [...\*\*\*...] (or such other source agreed in writing by the Parties), during the calendar quarter for which a payment is due.

**4.7 Late Payments.** In the event that any payment amount due under this Agreement is not made when due, the payment will accrue interest from the date due at the annual rate of [...\*\*\*...] percent ([...\*\*\*...]%) above the [...\*\*\*...] (as set forth by [...\*\*\*...]); provided, however, that in no event will such rate exceed the maximum legal annual interest rate. The payment of such interest will not limit the payee Party from exercising any other rights it may have as a consequence of the lateness of any payment. If BELLICUM paid any interest that should not have been assessed by AGENSYS, such amount will be reimbursed to BELLICUM within [...\*\*\*...] after a determination is made that such interest was improperly assessed.

**4.8 Records; Audits.** BELLICUM will keep, and will require its Affiliates and Permitted Sublicensees to keep, complete, true and accurate books of accounts and records for the purpose of determining the existence and accuracy of the payments to be made under this Agreement. Such books and records must be kept for at least [...\*\*\*...] following the end of the calendar quarter to which they pertain. Such records will be open for inspection during such [...\*\*\*...] period by independent accountants selected by AGENSYS and reasonably acceptable to BELLICUM, solely for the purpose of verifying the accuracy of payments and payment-related reports to be made by BELLICUM hereunder. All such accountants will be required to enter into a confidentiality agreement with BELLICUM. The records for any calendar year may be inspected only once by AGENSYS. Except for for-cause audits, such inspections may be made no more than once each calendar year, during normal business hours that are mutually agreed by the Parties, and upon at least [...\*\*\*...] prior written notice. The accountants will disclose to AGENSYS, and AGENSYS will disclose to [...\*\*\*...], only information directly pertaining to the accuracy of payments and payment-related reports to be made by BELLICUM to AGENSYS, and by AGENSYS to [...\*\*\*...], respectively. The inspection report will be copied to BELLICUM. If any errors, that if corrected would favor AGENSYS, are discovered in the course of such inspection, then within [...\*\*\*...] after its receipt of the inspection report, BELLICUM will pay AGENSYS those amounts (plus interest as provided under Section 4.7, in the case of AGENSYS, and interest as provided under Section 22.1 of the [...\*\*\*...] License Agreement, in the case of amounts AGENSYS is obligated to pay to [...\*\*\*...] as a result of such errors) that AGENSYS would have received in the absence of such errors. Inspections conducted under this Section 4.8 will be at the expense of AGENSYS, unless a variation or error, that if corrected would favor AGENSYS exceeding [...\*\*\*...] percent ([...\*\*\*...]%) of the amount stated for any calendar year covered by the inspection is established in the course of such inspection, whereupon all reasonably incurred fees and expenses for the inspection for such period will be paid promptly by BELLICUM.

\*\*\*Confidential Treatment Requested

## 5. INTELLECTUAL PROPERTY

**5.1 Ownership.** AGENSYS has, and will retain, all right, title and interest in and to, the AGENSYS Patent Rights and AGENSYS Technology. [...] have, and will retain, all right, title and interest in and to, the AGENSYS Licensed Patent Rights. Each Party will solely own all inventions, discoveries and improvements conceived, discovered, developed or otherwise made solely by or on behalf of such Party (or its Affiliates, contractors or Sublicensees) in the course of conducting or performing research, development, manufacture and/or Commercialization of Licensed Products under this Agreement (an “**AGENSYS Sole Invention**” or a “**BELLICUM Sole Invention**,” as applicable). Inventions, discoveries and improvements conceived, discovered, developed or otherwise made jointly by or on behalf of both Parties (or their respective Affiliates, contractors or Sublicensees) in the course of performing research, development, manufacture and/or Commercialization of Licensed Products under this Agreement will be owned jointly by the Parties in accordance with joint ownership interests of co-inventors under U.S. patent law (“**Joint Inventions**”). Inventorship for the purposes of ownership will be determined in accordance with U.S. patent laws. Each such AGENSYS Sole Invention will be treated as AGENSYS Patent Rights in accordance with Section 5.2(a) for the purposes of preparation, filing, prosecution, maintenance and bearing of associated costs and expenses, and will be included in the license granted by AGENSYS under Section 2.1(a). BELLICUM will be responsible for the preparation, filing, prosecution and maintenance (including any interferences, extensions, reissue proceedings and reexaminations) of patent applications claiming a BELLICUM Sole Invention, at BELLICUM’s sole expense.

### 5.2 Prosecution of Patents.

(a) **AGENSYS Patent Rights.** AGENSYS is responsible for, and will conduct, the preparation, filing, prosecution and maintenance (including any interferences, extensions, reissue proceedings and reexaminations) of the AGENSYS Patent Rights on a worldwide basis. On a pro-rata basis (based on the number of exclusive licensees of the AGENSYS Patent Rights), BELLICUM will reimburse AGENSYS for reasonable out-of-pocket costs and expenses incurred by AGENSYS after the Effective Date with respect to such preparation, filing, prosecution and maintenance of AGENSYS Patent Rights in the Territory. BELLICUM will have a meaningful opportunity to review and comment upon such preparation, filing, prosecution and maintenance by AGENSYS of the AGENSYS Patent Rights in the Territory. AGENSYS will provide BELLICUM with a copy of each proposed submission to a patent authority in the Territory regarding an AGENSYS Patent Right at least [...] prior to making such filing. If AGENSYS determines in its sole discretion to abandon or not to file, prosecute or maintain any patent or patent application within the AGENSYS Patents anywhere in the Territory, then AGENSYS will provide BELLICUM with [...] prior written notice of such determination (or such other period of time reasonably necessary to allow BELLICUM to assume such responsibilities) and will provide BELLICUM with the opportunity to file, prosecute and maintain such patent and/or patent application in the Territory on behalf of AGENSYS. In the event that BELLICUM desires to cease bearing the costs and expenses with respect to any patent or patent application within the AGENSYS Patent Rights, BELLICUM may provide reasonable prior written notice to AGENSYS of such intention. Upon receipt of such notice, AGENSYS will have the right, but not the obligation, to elect to continue

\*\*\*Confidential Treatment Requested

prosecuting and maintaining any such patent or patent application at its own expense, and such patent or patent application will no longer be included within the AGENSYS Patent Rights.

(b) **AGENSYS Licensed Patent Rights.** The preparation, filing, prosecution and maintenance (including any interferences, extensions, reissue proceedings and reexaminations) of the AGENSYS Licensed Patent Rights are governed by the [...\*\*\*...] License Agreement. On a pro-rata basis (based on the number of exclusive sublicensees of the AGENSYS Licensed Patent Rights), BELLICUM will reimburse AGENSYS for reasonable out-of-pocket costs and expenses incurred by AGENSYS after the Effective Date with respect to such preparation, filing, prosecution and maintenance of AGENSYS Licensed Patent Rights in the Territory. To the extent AGENSYS has an opportunity to request a discussion with [...\*\*\*...], or AGENSYS receives drafts of relevant documents, pursuant to Section 8 of the [...\*\*\*...] License Agreement, BELLICUM will have a meaningful opportunity to review and comment to AGENSYS upon such preparation, filing, prosecution and maintenance by [...\*\*\*...] of the AGENSYS Licensed Patent Rights in the Territory. AGENSYS will provide BELLICUM with a copy of each submission that AGENSYS makes to a patent authority in the Territory regarding an AGENSYS Patent Right promptly after making such filing. AGENSYS also will provide BELLICUM with a copy of each submission made to a patent authority regarding an AGENSYS Licensed Patent Right for which AGENSYS has received a copy. In the event that BELLICUM desires to cease bearing the costs and expenses with respect to any patent or patent application within the AGENSYS Licensed Patent Rights, BELLICUM may provide [...\*\*\*...] prior written notice to AGENSYS of such intention. Upon receipt of such notice, AGENSYS will have the right, but not the obligation, to elect to continue prosecuting and maintaining any such patent or patent application at its own expense, and such patent or patent application will no longer be included within the AGENSYS Licensed Patent Rights.

(c) **Joint Patents.** With respect to Joint Inventions, BELLICUM will be responsible for the preparation, filing, prosecution and maintenance (including any interferences, extensions, reissue proceedings and reexaminations) of patent applications claiming such Joint Invention (such patent application together with all Patents derived therefrom, collectively, “**Joint Patents**”). BELLICUM will provide AGENSYS with: (i) drafts of any new patent application that covers such Joint Invention before filing that application, allowing reasonable time for review and comment by AGENSYS; and (ii) copies of all correspondence to and from any and all Patent offices concerning any Joint Patents and an opportunity to comment by AGENSYS on any proposed responses, voluntary amendments and submissions pertaining to Joint Patents to be made to any such Patent offices. For each Joint Patent, and unless the Parties otherwise agree in writing, BELLICUM will file direct patent applications or will enter the national stage in the following jurisdictions: US, JP, EPO, and such other jurisdictions as AGENSYS reasonably requests in writing and for which AGENSYS reasonably agrees to file. AGENSY and BELLICUM will bear all costs and expenses equally with respect to such preparation, filing, prosecution and maintenance of Joint Patents in the Territory. If BELLICUM determines in its sole discretion to abandon or not maintain any patent application within the Joint Patents anywhere in the Territory, then BELLICUM will provide AGENSYS with thirty (30) days prior written notice of such determination (or such other period of time reasonably necessary to allow AGENSYS to assume such responsibilities) and will provide AGENSYS with the opportunity to prosecute and maintain such patent application in the Territory.

\*\*\*Confidential Treatment Requested

### 5.3 Infringement of Patents by Third Parties.

(a) **Notification.** Each Party will promptly notify the other Party in writing of any alleged or threatened infringement of the AGENSYS Patent Rights, the AGENSYS Licensed Patent Rights, or Joint Patents within the Territory of which it becomes aware. Neither Party will [...\*\*\*...].

(b) **Competitive Infringement of AGENSYS Patent Rights and Joint Patents.**

(i) **First Right.** AGENSYS has the first right, but not the obligation, to prosecute infringement of the AGENSYS Patent Rights, and BELLICUM has the first right, but not the obligation, to prosecute infringement of the Joint Patents, in the Territory, at its own expense and by counsel of its own choice, by Third Party activities with products and commercial methods in the Field that are or would be competitive with Licensed Products (“**Competitive Infringement**”).

(ii) **Back-up Right for Competitive Infringement in the Territory.** If AGENSYS or BELLICUM (as applicable) does not bring action to prosecute Competitive Infringement within [...\*\*\*...] after notification thereof to or by AGENSYS or BELLICUM (as applicable) pursuant to Section 5.3(a), then the other Party will have the right, but not the obligation, to bring an appropriate action against any person or entity engaged in such Competitive Infringement directly or contributorily, at its own expense and by counsel of its own choice; *provided, however*, BELLICUM shall only have the right to assert the AGENSYS Patent Rights in accordance with this Section 5.3(b)(ii) to prosecute Competitive Infringement within the Field. For the avoidance of doubt, if an alleged infringer has products that are outside the Field or products in the Field that are not or would not be competitive with Licensed Products, in addition to engaging in Competitive Infringement, then BELLICUM’s back-up right under this Section 5.3(b)(ii) includes the right to bring an action for Competitive Infringement (i.e., asserting that the infringer’s competitive product within the Field infringes the AGENSYS Patent Rights), but BELLICUM does not have a right to assert infringement of the AGENSYS Patent Rights with regard to the infringer’s products that are outside the Field or products in the Field that are not or would not be competitive with any Licensed Products.

(iii) **Participation with Respect to Competitive Infringement.** The Party not bringing an action with respect to Competitive Infringement under this Section 5.3(b) is entitled to separate representation in such matter by counsel of its own choice and at its own expense, and the other Party and its counsel will reasonably cooperate with, and take into account the view of, the Party not bringing the action and its counsel in strategizing, preparing and presenting any such action or proceeding. The Party bringing the action will reasonably consider the other Party’s comments on any such prosecution. The Party not bringing the action will reasonably cooperate with the Party bringing such action. The Party bringing the action will reimburse the other Party for the other Party’s reasonable out-of-pocket expenses incurred in providing such reasonable cooperation requested by the Party bringing the action.

\*\*\*Confidential Treatment Requested

(c) **Other Infringement of AGENSYS Patents.** For all infringement of AGENSYS Patent Rights anywhere in the world other than a Competitive Infringement described in Section 5.3(b), AGENSYS has the sole right to prosecute (or refrain from prosecuting) such infringement in its sole discretion.

(d) **Joint Patents.** With respect to Third Party Infringement of Joint Patents other than a Competitive Infringement described in Section 5.3(b), the Parties will confer and take such action in such manner as they mutually agree in writing. If the Parties are unable after a reasonable period of time to agree on how to proceed, then each Party may exercise its rights as joint owner of the affected Joint Patent in accordance with Section 5.1.

(e) **AGENSYS Licensed Patent Rights.** [...\*\*\*...] have the first right to prosecute infringement of the AGENSYS Licensed Patent Rights as provided in Section 9.2 of the [...\*\*\*...] License Agreement. If [...\*\*\*...] do not exercise their rights, AGENSYS will exercise its rights to prosecute infringement of the AGENSYS Licensed Patent Rights under the [...\*\*\*...] License Agreement consistent with the prosecution of infringement of the AGENSYS Patent Rights as provided in Sections 5.3(b) and 5.3(c), as applicable. BELLICUM will reasonably cooperate with AGENSYS as reasonably requested by AGENSYS, at AGENSYS's expense, to enable AGENSYS to [...\*\*\*...].

(f) **Settlement.** Neither Party will settle a claim brought under this Section 5.3 involving Joint Patents or AGENSYS Patent Rights in a manner that would materially impair the rights or commercial interests of the other Party without the prior written consent of the other Party (which consent will not be unreasonably withheld or delayed). Without limiting the generality of the foregoing, neither Party will settle a claim brought under this Section 5.3 involving Joint Patents that includes an admission of invalidity or unenforceability of a Joint Patent without the prior written consent of the other Party (which consent will not be unreasonably withheld, conditioned or delayed).

(g) **Allocation of Proceeds.** Subject to the [...\*\*\*...] License Agreement with regard to the AGENSYS Licensed Patent Rights, if either Party recovers monetary damages from any Third Party in an action brought under Section 5.3 in which the other Party participated, such recovery will be allocated first to reimburse the Parties for costs and expenses borne in such action, and any remaining amounts will be retained by the Party that brought and controlled the action and, if BELLICUM brought and controlled such action, (i) to the extent that such awarded damages represented lost sales of Licensed Products, such recovered monetary damages will be deemed Net Sales subject to the royalty provisions of Section 4.3, and (ii) to the extent that such awarded damages represented lost profits or reasonable royalties attributable to infringement of the AGENSYS Patent Rights or the AGENSYS Licensed Patent Rights, then subject to the applicable royalty rate set forth in Section 4.3, BELLICUM shall pay to AGENSYS as royalties under this Agreement [...\*\*\*...] percent ([...\*\*\*...]%) of such recovered monetary damages (assuming that the lost profits or reasonable royalties were calculated on the underlying sales of the infringer; provided that such assumed underlying sales by the infringer are not included in aggregate annual Net Sales under Section 4.3(a)), but such [...\*\*\*...] share of such recovered monetary damages will in no event exceed the tier of royalty that is then-currently payable to

\*\*\*Confidential Treatment Requested

AGENSYS under Section 4.3. For example, (A) if BELLICUM is awarded monetary damages representing a [...\*\*\*...]% reasonable royalty, and the applicable royalty tier under Section 4.3(a) at the time of receipt of such awarded damages is [...\*\*\*...]%, then BELLICUM will pay AGENSYS the amount equal to [...\*\*\*...]% of the awarded monetary damages, and shall retain the remaining [...\*\*\*...]% for BELLICUM; and (B) if BELLICUM is awarded monetary damages representing a [...\*\*\*...]% reasonable royalty, and the applicable royalty tier under Section 4.3(a) at the time of receipt of such awarded damages is [...\*\*\*...]%, then BELLICUM will pay AGENSYS the amount equal to [...\*\*\*...]% of the awarded monetary damages, and shall retain the remaining [...\*\*\*...]% for BELLICUM.

#### 5.4 Infringement of Third Party Rights.

(a) **Notice.** If any Licensed Product manufactured, used, sold, offered for sale or imported by either Party, its Affiliates, or Permitted Sublicensees becomes the subject of a Third Party's claim or assertion of infringement of a Patent granted by a jurisdiction within the Territory as a direct result of the manufacture, use, sale, offer for sale or importation of Licensed Product ("**Third Party Claim of INF**"), the Party first having notice of the Third Party Claim of INF will promptly notify the other Party in writing, and the Parties will promptly meet to consider the Third Party Claim of INF and the appropriate course of action.

(b) **Defense.** BELLICUM has the first right, but not the obligation, to defend any such Third Party Claim of INF. If BELLICUM does not commence actions to defend such Third Party Claim of INF within [...\*\*\*...] after it receives or delivers notice thereof, then AGENSYS will have the right, but not the obligation, to control the defense of such Third Party Claim of INF by counsel of its choice. The non-defending Party will reasonably cooperate with the Party conducting the defense of the Third Party Claim of INF, including if required to conduct such defense, furnishing a power of attorney. The Party conducting the defense will reimburse the other Party for the other Party's reasonable out-of-pocket expenses incurred in providing such reasonable cooperation requested by the Party conducting the defense.

(c) **Settlement.** Neither Party has the right to enter into any settlement of any Third Party Claim of INF described in this Section 5.4 in a manner that would materially impair the other Party's rights or commercial interests without such other Party's written consent, which consent will not be unreasonably withheld or delayed.

**5.5 Additional Patent Term Extension Obligations.** BELLICUM will keep AGENSYS fully informed of the progress of BELLICUM (and, as applicable, its Affiliate(s) and Permitted Sublicensee(s)) toward Regulatory Approval of each different Licensed Product in the Territory. BELLICUM will consult with AGENSYS in determining, with respect to such Licensed Product, if any Patent within the AGENSYS Patents Rights or the AGENSYS Licensed Patents Rights would be eligible for patent term extension pursuant to 35 U.S.C. §§156, supplementary protection certificates provided under Council Regulation (EEC) No 1768/92 of 18 June 1992, or any foreign equivalent of either ("**Patent Term Extension**"), AGENSYS will determine in its sole discretion whether such Patent Term Extension should be sought with respect to any of the AGENSYS Patents Rights or the AGENSYS Licensed Patents Rights, provided, that AGENSYS shall reasonably consider BELLICUM's comments on any Patent Term Extensions for Licensed Products and BELLICUM's requests that a Patent Term Extension for a Licensed Product should be sought with respect to any of the AGENSYS Patent Rights

\*\*\*Confidential Treatment Requested



listed in Exhibit A sections entitled “[...\*\*\*...]” or “[...\*\*\*...]” or any of the AGENSYS Licensed Patents Rights listed in Exhibit B. AGENSYS and BELLICUM acknowledge that there is a specific and limited time period for taking action with respect to submission of any application for Patent Term Extension. If AGENSYS agrees to grant BELLICUM’s request to seek a Patent Term Extension for a Licensed Product, then at AGENSYS’s request, BELLICUM will, in a timely manner, reasonably assist AGENSYS in preparing an application for Patent Term Extension for such Licensed Product -- as requested and instructed by AGENSYS. If BELLICUM does not elect to file for Patent Term Extension on one of its own US Patents with substantially similar or longer patent term and has requested that a Patent Term Extension be sought for a Licensed Product with respect to a US Patent in the AGENSYS Patent Rights or in the AGENSYS Licensed Patents Rights, and if AGENSYS exercises its discretion to not seek the requested Patent Term Extension for such US Patent without offering an alternative US patent within the AGENSYS Patent Rights that covers the Licensed Product with a similar scope of claims extended and substantially similar patent term, then, within [...\*\*\*...] of the end of the period available to apply for such Patent Term Extension, AGENSYS will refund, on a one time basis, [...\*\*\*...] dollars (US\$[...\*\*\*...]) of the upfront fee paid to AGENSYS under Section 4.1, and if any remaining Valid Claim covers such Licensed Product, the royalty rates for the three tiers applicable to such Licensed Product under Section 4.3(a) shall be reduced to [...\*\*\*...] percent ([...\*\*\*...]% ), [...\*\*\*...] percent ([...\*\*\*...]% ), and [...\*\*\*...] percent ([...\*\*\*...]% ), respectively. For the avoidance of doubt, the refund of the upfront fee shall only be due one time regardless of the number of Licensed Products for which BELLICUM requests Patent Term Extension, but the reduction in the royalty rates for the three tiers applicable to such Licensed Product may be applied to each Licensed Product for which the Patent Term Extension is requested by BELLICUM but not sought by AGENSYS on the requested US Patent or an alternative US Patent as described above; provided that BELLICUM may not request Patent Term Extension be sought on the same US Patent for which BELLICUM previously requested a Patent Term Extension.

**5.6 Patent Marking.** BELLICUM (or its Affiliate or Permitted Sublicensee) will mark Licensed Products marketed and sold by BELLICUM (or its Affiliate or Permitted Sublicensee) hereunder with appropriate patent numbers or indicia at AGENSYS’s request to the extent permitted by law, in those countries in which such markings impact recoveries of damages or equitable remedies available with respect to infringements of patents.

**5.7 Trademarks.** BELLICUM is responsible for selection, registration and maintenance of the trademark(s) for Licensed Products in the Field in the Territory, at its own cost, and all such trademark(s) will be filed and exclusively owned by BELLICUM.

**5.8 [...\*\*\*...] Name and Trademarks.** Except as required by law, BELLICUM is not permitted to use any name, trade name, trademark or other designation of [...\*\*\*...] or its employees (including contraction, abbreviation or simulation of any of the foregoing) in advertising, publicity or other promotional activity. Unless required by law, BELLICUM is expressly prohibited from using the name “[...\*\*\*...]” or the name of any campus of the [...\*\*\*...].

\*\*\* Confidential Treatment Requested

## 6. REPRESENTATIONS AND WARRANTIES

**6.1 Mutual Representations and Warranties.** Each Party hereby represents, warrants and covenants (as applicable) to the other Party as follows:

(a) **Corporate Existence and Power.** It is a company or corporation duly organized, validly existing and in good standing under the laws of the jurisdiction in which it is incorporated, and has full corporate power and authority and the legal right to own and operate its property and assets and to carry on its business as it is now being conducted and as contemplated in this Agreement, including, without limitation, the right to grant the licenses granted hereunder.

(b) **Authority and Binding Agreement.** As of the Effective Date, (a) it has the corporate power and authority and the legal right to enter into this Agreement and perform its obligations hereunder; (b) it has taken all necessary corporate action on its part required to authorize the execution and delivery of the Agreement and the performance of its obligations hereunder; and (c) the Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid and binding obligation of such Party that is enforceable against it in accordance with its terms.

(c) **No Conflict.** It has not entered, and will not enter, into any agreement with any Third Party that is in conflict with the rights granted to the other Party under this Agreement, and has not taken and will not take any action that would in any way prevent it from granting the rights granted to the other Party under this Agreement, or that would otherwise materially conflict with or adversely affect the rights granted to the other Party under this Agreement. Its performance and execution of this Agreement does not and will not result in a breach of any other contract to which it is a Party.

**6.2 BELLICUM.** BELLICUM represents, warrants and covenants to AGENSYS as follows: BELLICUM and its Affiliates and Permitted Sublicensees are not debarred under the U.S. Federal Food, Drug and Cosmetic Act or comparable laws in any other country or jurisdiction, and it does not, and will not during the Term, employ or use the services of any person or entity who is debarred, in connection with the development, manufacture or commercialization of the Licensed Products.

**6.3 AGENSYS.** AGENSYS represents and warrants to BELLICUM as follows:

(a) AGENSYS has the right and ability to grant the licenses and/or sublicenses granted herein to BELLICUM under the AGENSYS Patent Rights, the AGENSYS Licensed Patent Rights, and the AGENSYS Technology as provided herein.

(b) To AGENSYS's knowledge after due inquiry, inventors of the AGENSYS Patent Rights have been properly named, and AGENSYS is not aware of any claims by any Third Parties (including without limitation [...\*\*\*...]) to an ownership interest in the AGENSYS Patent Rights or the AGENSYS Technology existing as of the Effective Date that are licensed to BELLICUM under this Agreement.

\*\*\*Confidential Treatment Requested

(c) To the best of AGENSYS's knowledge as of the Effective Date, Exhibit A sets forth a true and complete list of all patents and patent applications filed on or before the Effective Date in the Territory and Controlled by AGENSYS that include dominant claims that would necessarily be infringed (if not included in the AGENSYS Patent Rights) by making, using, selling, offering for sale or importing any anti-prostate stem cell antigen 1 antibody or related hybridoma that, as of the Effective Date, was in existence and was Controlled by AGENSYS; provided that, if any Patent or Patent application with dominant claims (as described in this subsection (c)) is inadvertently omitted from Exhibit A, Exhibit A will be amended to add such Patent(s) and Patent application(s) and the addition of such Patent(s) or Patent application(s) to Exhibit A shall be deemed a complete remedy of breach of this Section 6.3(c) due to such inadvertent omission.

(d) To AGENSYS's knowledge as of the Effective Date, there are no actual suits or claims, or suits or claims threatened in writing, by any Third Party alleging that the use by AGENSYS or its licensees or sublicensees of a Licensed Product or the AGENSYS Technology will constitute an infringement or other violation of a patent or other intellectual property right of such Third Party.

(e) No patent or patent application within the AGENSYS Patent Rights is or has been involved in any reissue, reexamination, interference, opposition or equivalent or similar proceeding to which AGENSYS is a party; and the AGENSYS Patent Rights are not subject to any judgments, settlements or liens against or owed by AGENSYS.

(f) AGENSYS has received no notice of default under the [...\*\*\*...] License Agreement from [...\*\*\*...].

**6.4 Disclaimer.** BELLICUM understands that Licensed Products are the subjects of ongoing clinical research and development and that AGENSYS cannot assure the safety or usefulness of Licensed Products. AGENSYS makes no warranty except as set forth in this Article 6 concerning the AGENSYS Patent Rights, the AGENSYS Licensed Patent Rights, or the AGENSYS Technology.

**6.5 No Patent Validity Warranty.** Notwithstanding anything to the contrary herein, nothing in this Agreement will be deemed or construed as a representation or warranty by AGENSYS that any patent or inventor's certificate within the AGENSYS Patent Rights or the AGENSYS Licensed Patents Rights is valid or enforceable.

**6.6 No Other Representations.** THE EXPRESS REPRESENTATIONS AND WARRANTIES STATED IN THIS ARTICLE 6 ARE IN LIEU OF, AND THE PARTIES EXPRESSLY DISCLAIM, ALL OTHER REPRESENTATIONS AND WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OR NON-MISAPPROPRIATION OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICES.

\*\*\*Confidential Treatment Requested

6.7 [...\*\*\*...] **Limited Warranty.** BELLICUM acknowledges that [...\*\*\*...].

## 7. INDEMNIFICATION

**7.1 Indemnification by BELLICUM.** BELLICUM hereby agrees to defend, hold harmless and indemnify (collectively “**Indemnify**”) AGENSYS, its Affiliates, and its and their agents, directors, officers and employees (the “**AGENSYS Indemnitees**”) from and against any and all liabilities, expenses and/or losses, including without limitation reasonable legal expenses and attorneys’ fees (collectively “**Losses**”) resulting from Third Party suits, claims, actions and demands (each, a “**Third Party Claim**”) to the extent arising directly or indirectly out of (i) the gross negligence or willful misconduct of any BELLICUM Indemnatee with respect to any of BELLICUM’s obligations or activities contemplated by this Agreement, (ii) a breach of any of BELLICUM’s representations, warranties or covenants pursuant to Article 6; or (iii) the development, manufacture, storage, handling, marketing, promotion, use, sale, offer for sale or importation of Licensed Products by BELLICUM, its Affiliates, or Permitted Sublicensees in the Territory. BELLICUM’s obligation to Indemnify the AGENSYS Indemnitees pursuant to the foregoing sentence does not apply to the extent that any such Losses (A) arise from the negligence or intentional misconduct of any AGENSYS Indemnatee; (B) arise from any breach by AGENSYS of this Agreement; or (C) are Losses for which AGENSYS is obligated to Indemnify the BELLICUM Indemnitees pursuant to Section 7.2.

**7.2 Indemnification by AGENSYS.** AGENSYS hereby agrees to Indemnify BELLICUM, its Affiliates, and its and their agents, directors, officers and employees (the “**BELLICUM Indemnitees**”) from and against any and all Losses resulting from Third Party Claims to the extent arising directly or indirectly out of (i) the gross negligence or willful misconduct of any AGENSYS Indemnatee with respect to any of AGENSYS’s obligations or activities contemplated by this Agreement, or (ii) a breach of any of AGENSYS’s representations, warranties or covenants pursuant to Article 6. AGENSYS’s obligation to Indemnify the BELLICUM Indemnitees pursuant to this Section 7.2 does not apply to the extent that any such Losses (A) arise from the negligence or intentional misconduct of any BELLICUM Indemnatee; (B) arise from any breach by BELLICUM of this Agreement; or (C) are Losses for which BELLICUM is obligated to Indemnify the AGENSYS Indemnitees pursuant to Section 7.1.

**7.3 Procedure.** Any AGENSYS Indemnatee or BELLICUM Indemnatee entitled to be Indemnified hereunder will provide the indemnifying Party with prompt written notice of the claim giving rise to the indemnification obligation pursuant to this Article 7 and the exclusive ability to defend (with the reasonable cooperation of the indemnified Party) or settle any such claim; *provided, however*, that the indemnifying Party may not enter into any settlement for damages other than monetary damages without the indemnified Party’s written consent, such consent not to be unreasonably withheld or delayed. The indemnified Party will have the right to participate, at its own expense and with counsel of its choice, in the defense of any claim or suit that has been assumed by the indemnifying Party; provided that the indemnifying Party will have

\*\*\*Confidential Treatment Requested

the right to control such defense. If the Parties cannot agree as to the application of Sections 7.2 and 7.1 to any particular Third Party Claim, the Parties may conduct separate defenses of such Third Party Claim. Each Party reserves the right to claim indemnity from the other in accordance with Sections 7.2 and 7.1 above upon resolution of the application of Sections 7.2 and 7.1 to the underlying Third Party Claim, notwithstanding the provisions of this Section 7.3 requiring the indemnified Party to tender to the indemnifying Party the exclusive ability to defend such claim or suit.

**7.4 Insurance.** BELLICUM will procure and maintain during the Term and for a period of [...\*\*\*...] thereafter, insurance, including product liability insurance, of a type and in amounts which are consistent with normal business practices of prudent companies similarly situated at all times during which any Licensed Product is being clinically tested with human subjects or commercially distributed or sold. It is understood that such insurance will not be construed to create a limit of BELLICUM's liability with respect to its indemnification obligations under this Article 7. BELLICUM will provide AGENSYS with written evidence of such insurance upon request. BELLICUM will provide AGENSYS with written notice at least [...\*\*\*...] prior to the cancellation, non-renewal or material change in such insurance which materially adversely affects the rights of AGENSYS hereunder.

## **8. LIMITATION OF LIABILITY**

EXCEPT WITH RESPECT TO LIABILITY ARISING FROM A BREACH OF ARTICLE 9 AND TO THE EXTENT SUCH PARTY MAY BE REQUIRED TO INDEMNIFY THE OTHER PARTY UNDER ARTICLE 7, NEITHER PARTY NOR ITS RESPECTIVE AFFILIATES AND PERMITTED SUBLICENSEES WILL BE LIABLE FOR SPECIAL, EXEMPLARY, CONSEQUENTIAL OR PUNITIVE DAMAGES, WHETHER IN CONTRACT, WARRANTY, TORT, STRICT LIABILITY OR OTHERWISE, IN CONNECTION WITH THIS AGREEMENT OR ANY LICENSE GRANTED HEREUNDER.

## **9. CONFIDENTIALITY**

**9.1 Treatment of Confidential Information.** The Parties agree that a Party receiving Confidential Information of the other Party will (i) maintain in confidence such Confidential Information to the same extent such receiving Party maintains its own proprietary industrial information of similar kind and value (but at a minimum each receiving Party will use Commercially Reasonable Efforts to maintain the other Party's Confidential Information in confidence); (ii) not disclose such Confidential Information to any Third Party without prior written consent of the other Party, except for disclosures made in confidence to any Third Party or to its Permitted Sublicensees who agree to be bound by obligations of non-disclosure and non-use at least as stringent as those contained in this Article 9; and (iii) not use such Confidential Information for any purposes except (a) in the performance of its obligations or exercise of its rights under this Agreement, or (b) in connection with an M&A transaction involving the receiving Party. For the avoidance of doubt, Confidential Information of [...\*\*\*...] under the [...\*\*\*...] License Agreement provided to BELLICUM by AGENSYS will be treated as Confidential Information of AGENSYS hereunder.

\*\*\*Confidential Treatment Requested

**9.2 Authorized Disclosure.** Notwithstanding any other provision of this Agreement to the contrary, each receiving Party may disclose Confidential Information of the other Party:

(a) to the extent and to the persons and entities required by an applicable governmental law, rule, regulation or order or judicial order or requirement; *provided, however*, that the receiving Party required to disclose Confidential Information will first have given prompt written notice to the other Party hereto to enable it to seek any available exemptions from or limitations on such disclosure requirement and will reasonably cooperate in such efforts by the other Party;

(b) to the extent and to the persons and entities required by rules of the National Association of Securities Dealers; and

(c) as necessary to file or prosecute patent applications, prosecute or defend litigation or otherwise establish rights or enforce obligations under and in accordance with this Agreement, but only to the extent that any such disclosure is necessary.

### **9.3 Publicity; Terms of Agreement.**

(a) The Parties agree that the material terms of this Agreement are included within the Confidential Information of both Parties, subject to the special authorized disclosure provisions set forth below in this Section 9.3.

(b) The Parties agree that the public announcement of the execution of this Agreement will be in the form of a press release to be mutually agreed upon by the Parties in writing on or before the Effective Date and thereafter each Party will be entitled to make or publish any public statement regarding the Parties' relationship and the general nature of this Agreement consistent with the scope and contents of such release. Thereafter, AGENSYS and BELLICUM will jointly discuss and agree in writing, based on the principles of this Section 9.3(b), on any statement to the public regarding this Agreement or any aspect of this Agreement subject in each case to disclosure otherwise required by law or regulation as determined in good faith by counsel for each Party. The terms of this Agreement may also be disclosed to (i) government agencies where required by law, including filings required to be made by law with the Securities and Exchange Commission, the NASDAQ Stock Market, or any national securities exchange, or (ii) Third Parties who have legitimate bona fide reasons to know, with the prior written consent of the other Party, which consent will not be unreasonably withheld, in each case (both (i) and (ii)) so long as such disclosure is made under a binder of confidentiality (in the case of Third Parties), so long as highly sensitive terms and conditions such as financial terms are extracted from the Agreement or not disclosed upon the request of the other Party, and so long as the disclosing Party (x) gives reasonable advance notice of the disclosure under the circumstances requiring the disclosure, (y) provides the non-disclosing Party a meaningful opportunity to review and comment upon such terms that are to be disclosed and terms that are to be redacted or for which confidential treatment will be sought, within a reasonable time, and (z) reasonably considers the non-disclosing Party's comments on any such terms, redactions or confidential treatment. BELLICUM will [...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...].

9.4 **Publications.** BELLICUM will [...\*\*\*...].

## 10. TERM AND TERMINATION

10.1 **Term.** The term of this Agreement commences on the Effective Date and continues until the expiration of the last Royalty Term, unless terminated earlier as provided in this Agreement (the “**Term**”). Upon expiration, but not termination, of this Agreement, BELLICUM will have a worldwide, fully-paid up, non-exclusive right under the Agreement to the AGENSYS Patent Rights and the AGENSYS Technology for Licensed Products within the Field.

### 10.2 Early Termination.

#### (a) Termination for Cause.

(i) A Party has the right to terminate this Agreement upon written notice to the other Party if such other Party is in material breach of this Agreement and has not cured such breach within sixty (60) days (thirty (30) days with respect to any payment breach) after written notice from the terminating Party describing such breach and demanding its cure. Any such termination will become effective at the end of such sixty (60) day period (thirty (30) day period with respect to any payment breach) unless the breaching Party has cured any such breach prior to the end of such period.

(ii) Either Party may terminate this Agreement (i) if, at any time, the other Party files in any court or agency pursuant to any statute or regulation of any state or country, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of Party or of its assets, or (ii) if the other Party proposes a written agreement of composition or extension of its debts, or (iii) if the other Party is served with an involuntary petition against it, filed in any insolvency proceeding, and such petition is not dismissed within sixty (60) days after the filing thereof, or (iv) if the other Party proposes or is a party to any dissolution or liquidation, or (v) if the other Party makes an assignment for the benefit of creditors.

(b) **Other AGENSYS Termination Rights.** AGENSYS has the right to terminate this Agreement immediately upon written notice to BELLICUM if BELLICUM or any of its Affiliates or Permitted Sublicensees, directly or through any Third Party, commences any interference or opposition proceeding with respect to, challenges the validity or enforceability of, or opposes any extension of or the grant of a supplementary protection certificate with respect to, any AGENSYS Patent Right or AGENSYS Licensed Patent Right.

### 10.3 [Reserved.]

\*\*\*Confidential Treatment Requested

**10.4 Survival.** The following provisions will survive any expiration or termination of this Agreement for the period of time specified: Articles 1, 7, 8, 11, and 12, Article 9 (with respect to Confidential Information exchanged prior to the effective date of termination) and Sections 4.8; 5.1; 5.2(c) (with respect to Joint Inventions conceived or reduced to practice during the term); 5.3 (but solely with respect to infringement alleged to have occurred during the Term); 6.4; 6.5; 6.6, 10.1, 10.4, and 10.5. Termination of this Agreement does not relieve the Parties of any liability which accrued hereunder prior to the effective date of such termination, nor preclude either Party from pursuing all rights and remedies it may have hereunder or at law or in equity with respect to any breach of this Agreement. The remedies provided in this Article 10 are not exclusive of any other remedies a Party may have in law or equity.

**10.5 Expiration of the [...\*\*\*...] License Agreement.** Upon expiration, but not termination, of the [...\*\*\*...] License Agreement, then to the extent that AGENSYS is not precluded from extending its royalty-free license under Section 12.2 of the [...\*\*\*...] License Agreement to BELLICUM, BELLICUM will have a worldwide, fully-paid up, non-exclusive right under the Agreement to use, practice and exploit the AGENSYS Licensed Patent Rights for Licensed Products within the Field. Other than the license right described in the preceding sentence, as of and after such expiration of the [...\*\*\*...] License Agreement, the rights and obligations of the Parties under this Agreement relating solely to the [...\*\*\*...] License Agreement will be terminated without further effect; provided that such expiration shall not affect the rights and obligations AGENSYS has under the [...\*\*\*...] License Agreement that survive such expiration, as set forth in Section 12.3 of the [...\*\*\*...] License Agreement, or that have accrued as of the expiration date.

## 11. DISPUTE RESOLUTION

**11.1 Objective.** The Parties recognize that disputes as to matters arising under or relating to this Agreement or either Party's rights and/or obligations hereunder may arise from time to time. It is the objective of the Parties to establish procedures to facilitate the resolution of such disputes in an expedient manner by mutual cooperation and without resort to litigation. To accomplish this objective, the Parties agree to follow the procedures set forth in this Article 11 to resolve any such dispute if and when it arises.

**11.2 Resolution by Section 11.2 Executives.** If an unresolved dispute as to matters arising under or relating to this Agreement or either Party's rights and/or obligations hereunder arises, either Party may refer such dispute to the Chief Executive Officer of BELLICUM and a senior executive of AGENSYS who reports directly to the Chief Executive Officer of AGENSYS (the Chief Executive Officer of BELLICUM and such senior executive of AGENSYS, collectively, the "**Section 11.2 Executives**"), who will meet in person or by telephone within [...\*\*\*...] after such referral to attempt in good faith to resolve such dispute. If such matter cannot be resolved by discussion of the Section 11.2 Executives within [...\*\*\*...] following such meeting (as may be extended by mutual written agreement), such dispute may only be resolved in accordance with Section 11.3.

\*\*\*Confidential Treatment Requested



### 11.3 Arbitration.

(a) If the Parties do not resolve a dispute as provided in Section 11.2, and a Party wishes to pursue the matter, each such dispute that is not an “Excluded Claim” (as defined below) will be resolved by binding arbitration in accordance with the Rules of Arbitration of the International Chamber of Commerce (“**ICC**”) as then in effect (the “**ICC Rules**”), and judgment on the arbitration award may be entered in any court having jurisdiction thereof. The decision rendered in any such arbitration will be final and not appealable. If either Party intends to commence binding arbitration of such dispute, such Party will provide written notice to the other Party informing the other Party of such intention and the issues to be resolved. Within [...\*\*\*...] after the receipt of such notice, the other Party may by written notice to the Party initiating binding arbitration, add additional issues to be resolved.

(b) The arbitration will be conducted by a panel of three (3) arbitrators experienced in the pharmaceutical business, none of whom will be a current or former employee or director or professional advisor, or a then-current stockholder, of either Party, their respective Affiliates or any Sublicensee. Within thirty (30) days after receipt of the original notice of binding arbitration, each Party will select one person to act as arbitrator and the two Party-selected arbitrators will select a third arbitrator within ten (10) days of their appointment. If the arbitrators selected by the Parties are unable or fail to agree upon the third arbitrator, the third arbitrator will be appointed by the ICC in accordance with the ICC Rules. The place of arbitration will be San Francisco, California and all proceedings and communications will be in English.

(c) It is the intention of the Parties that discovery, although permitted as described herein, will be limited except in exceptional circumstances. The arbitrators will permit such limited discovery necessary for an understanding of any legitimate issue raised in the arbitration, including the production of documents. No later than thirty (30) days after selection of the arbitrators, the Parties and their representatives will hold a preliminary meeting with the arbitrators, to mutually agree upon and thereafter follow procedures seeking to assure that the arbitration will be concluded within six (6) months from such meeting. Failing any such mutual agreement, the arbitrators will design and the Parties will follow procedures to such effect. The decision of the panel of arbitrators will be reduced to writing and delivered to the Parties.

(d) Either Party may apply to the arbitrators for interim injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved. Either Party also may, without waiving any remedy under this Agreement, seek from any court having jurisdiction any injunctive or provisional relief necessary to protect the rights or property of that Party pending the arbitration award. The arbitrators have no authority to award punitive or any other non-compensatory damages. The arbitrators have the power to order that all or part of the legal or other costs incurred by a Party in connection with the arbitration be paid by the other Party. Subject to the preceding sentence, each Party will bear an equal share of the arbitrators’ and any administrative fees of arbitration.

(e) Except to the extent necessary to confirm or enforce an award or as may be required by applicable law, neither a Party nor an arbitrator may disclose the existence, content or results of an arbitration without the prior written consent of both Parties. In no event

\*\*\*Confidential Treatment Requested

will arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the dispute, controversy or claim would be barred by the applicable California statute of limitations.

(f) As used in this Section, the term “**Excluded Claim**” means a dispute, controversy or claim that concerns (A) the validity, enforceability or infringement of a patent, trademark, copyright or regulatory data exclusivity; or (B) any antitrust, anti-monopoly or competition law or regulation, whether or not statutory.

## 12. MISCELLANEOUS

**12.1 Entire Agreement; Amendment.** This Agreement, including the Exhibits hereto, sets forth the complete, final and exclusive agreement and all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto with respect to the subject matter hereof and supersedes and terminates all prior agreements and understandings between the Parties with respect to the subject matter hereof. There are no covenants, promises, agreements, warranties, representations, conditions or understandings, either oral or written, between the Parties other than as are set forth herein and therein. Without limiting the generality of the foregoing, the Parties agree that, as of the Effective Date, this Agreement supersedes the Confidentiality Agreement by and between BELLICUM and API, dated April 2, 2015 (the “**CDA**”). Further, the Parties agree that, as of the Effective Date and going forward, BELLICUM’s Proprietary Information as defined under the CDA will be treated as BELLICUM’s Confidential Information under this Agreement by AGENSYS and its Affiliate API, and API’s Proprietary Information as defined under the CDA will be treated as AGENSYS’s Confidential Information under this Agreement by BELLICUM. Without limiting the generality of the foregoing, the Parties also agree that, as of the Effective Date, this Agreement supersedes the Mutual Confidentiality Agreement by and between BELLICUM and Astellas Scientific and Medical Affairs, Inc. (“**ASMAI**”), dated May 18, 2012 (the “**MCA**”). Further, the Parties agree that, as of the Effective Date and going forward, BELLICUM’s Confidential Information as defined under the MCA will be treated as BELLICUM’s Confidential Information under this Agreement by AGENSYS and its Affiliate ASMAI, and ASMAI’s Confidential Information as defined under the MCA will be treated as AGENSYS’s Confidential Information under this Agreement by BELLICUM. No subsequent alteration, amendment, change or addition to this Agreement will be binding upon the Parties unless reduced to writing and signed by an authorized officer of each Party.

**12.2 Governing Law.** This Agreement is governed by, and construed and enforced in accordance with, the laws of the State of California, excluding its conflicts of laws principles.

**12.3 Force Majeure.** Each Party will be excused from liability for failure to perform its obligations under this Agreement to the extent that such performance is prevented by a *force majeure* event, and so long as the nonperforming Party promptly provides written notice of the occurrence of such *force majeure* event to the other Party, and the nonperforming Party diligently performs such obligations upon cessation of the *force majeure* event. Such excuse will continue so long as the condition constituting *force majeure* continues and the nonperforming Party uses [...\*\*\*...] to remove the condition. For purposes of this Agreement, a *force majeure* event includes conditions beyond the reasonable

\*\*\*Confidential Treatment Requested

control of the Parties, including without limitation, an act of God or terrorism, voluntary or involuntary compliance with any regulation, law or order of any government, war, civil commotion, labor strike or lock-out, epidemic, failure or default of public utilities or common carriers, destruction of production facilities or materials by fire, earthquake, storm or like catastrophe; *provided, however*, the payment of invoices due and owing hereunder may not be delayed by the payor because of a *force majeure* event affecting the payor.

**12.4 Notices.** All notices hereunder must be in writing in the English language and will be deemed given if delivered personally or by facsimile transmission (receipt verified), mailed by registered or certified mail (return receipt requested), postage prepaid, or sent by reputable express courier service, to the following respective addresses (or at such other address for a Party as may be specified by like notice; provided, that notices of a change of address will be effective only upon receipt thereof).

|                                  |   |
|----------------------------------|---|
| If to BELLICUM,<br>addressed to: | BELLICUM PHARMACEUTICALS, INC.<br>2130 W. Holcombe Boulevard, Suite 800<br>Houston, Texas 77030<br>Attention: President and Chief Executive Officer<br>Telephone: +1 (832) 384-1111<br>Facsimile: +1 (832) 384-1150 |
|----------------------------------|---|

|  |   |
|--|---|
| With a copy to (which<br>does not constitute<br>notice): | BELLICUM PHARMACEUTICALS, INC.<br>2130 W. Holcombe Boulevard, Suite 800<br>Houston, Texas 77030<br>Attention: Chief Financial Officer<br>Telephone: +1 (832) 384-1116<br>Facsimile: +1 (832) 384-1150 |
|--|---|

|  |   |
|--|---|
| With a copy to (which<br>does not constitute<br>notice): | BELLICUM PHARMACEUTICALS, INC.<br>2130 W. Holcombe Boulevard, Suite 800<br>Houston, Texas 77030<br>Attention: General Counsel<br>Telephone: +1 (832) 384-1107<br>Facsimile: +1 (281) 768-7695 |
|--|---|

|                                 |  |
|---------------------------------|--|
| If to AGENSYS,<br>addressed to: | AGENSYS, INC.<br>1800 Stewart Street<br>Santa Monica, CA 90404<br>Attention: Shane M. Popp<br>Telephone: +1-424-280-5205<br>Facsimile: +1-424-280-5052 |
|---------------------------------|--|

|  |   |
|--|---|
| With a copy to (which<br>does not constitute<br>notice): | AGENSYS, INC.<br>1800 Stewart Street<br>Santa Monica, CA 90404<br>Attention: Head of Research |
|--|---|

With a copy to (which does not constitute notice):

ASTELLAS PHARMA INC.  
 2-5-1, Nihonbashi-Honcho, Chuo-ku, Tokyo, Japan  
 Attention: Vice President, Legal & Compliance  
 Telephone: +81-3-3244-3231  
 Facsimile: +81-3-3244-5811

**12.5 No Strict Construction.** This Agreement has been prepared jointly and will not be strictly construed against either Party.

**12.6 Relationship Between the Parties.** The Parties' relationship, as established by this Agreement, is solely that of independent contractors. This Agreement does not create any partnership, joint venture or similar business relationship between the Parties. Neither Party is a legal representative of the other Party, and neither Party can assume or create any obligation, representation, warranty or guarantee, express or implied, on behalf of the other Party for any purpose whatsoever.

**12.7 Assignment.** Neither Party may assign or transfer this Agreement or any rights or obligations hereunder without the prior written consent of the other Party; provided, however that each Party may assign this Agreement, without the other Party's prior written consent: (a) in connection with the merger, acquisition or sale of such Party or substantially all of the assets of such Party to which this Agreement relates, or (b) to an Affiliate for so long as such entity remains an Affiliate and provided that the assigning Party remains liable and responsible to the non-assigning Party hereto for the performance and observance of all such duties and obligations by such Affiliate assignee. Notwithstanding the foregoing, if the [...\*\*\*...] License Agreement is terminated for any reason, AGENSYS will have the right without the prior written consent of BELLICUM to assign AGENSYS's rights relating to the AGENSYS Licensed Patent Rights under this Agreement to [...\*\*\*...] as specified under Section 3.3 of the [...\*\*\*...] License Agreement, provided that (1) the duties of [...\*\*\*...] under such assignment in part relating to the AGENSYS Licensed Patent Rights under this Agreement ("**Assignment In Part**") will not be greater than the duties of [...\*\*\*...] to AGENSYS under the [...\*\*\*...] License Agreement, and (2) the rights of [...\*\*\*...] with respect to BELLICUM under such Assignment In Part will not be less than the rights of [...\*\*\*...] with respect to AGENSYS under the [...\*\*\*...] License Agreement. As of and after the effective date of such Assignment In Part by AGENSYS to [...\*\*\*...], BELLICUM will be responsible for paying directly to [...\*\*\*...] (i) royalties on Licensed Products at the rates and subject to the reductions set forth in Section 6.1 of the [...\*\*\*...] License Agreement, wherein BELLICUM shall be deemed the "Licensee" (and BELLICUM will have the right to deduct such amounts actually paid to [...\*\*\*...] from amounts owed to AGENSYS under Section 4.3), (ii) as applicable, milestone payments for Licensed Products in accordance with Section 5.2 of the [...\*\*\*...] License Agreement (and BELLICUM will have the right to deduct such milestone payment amounts actually paid to [...\*\*\*...] from amounts owed to AGENSYS under Section 4.2), and (iii) the reimbursement of patent preparation, filing, prosecution, and maintenance expenses under Section 8 for Patents that were within the AGENSYS Licensed Patent Rights, which reimbursement obligation will be adjusted pro-rata if other AGENSYS sublicenses under the [...\*\*\*...] License Agreement have been assigned to [...\*\*\*...] upon termination. Any permitted assignment described in this Section 12.7 will be binding on the successors of the assigning Party. Any assignment or

\*\*\*Confidential Treatment Requested

attempted assignment by either Party in violation of the terms of this Section 12.7 will be null, void and of no legal effect.

**12.2 Performance by Affiliates.** Each of AGENSYS and BELLICUM acknowledges that its obligations under this Agreement may be performed by Affiliates of AGENSYS and BELLICUM, respectively. Obligations of the Party for which one of its Affiliates is performing hereunder will be deemed to extend to such performing Affiliate. Each of AGENSYS and BELLICUM guarantees performance of this Agreement by its Affiliates. Wherever in this Agreement the Parties delegate responsibility to Affiliates, the Parties agree that such Affiliates may not make decisions inconsistent with this Agreement, amend the terms of this Agreement or act contrary to its terms in any way.

**12.3 Severability.** If any one or more of the provisions of this Agreement is held to be invalid or unenforceable by any court of competent jurisdiction from which no appeal can be or is taken, the provision will be considered severed from this Agreement and will not serve to invalidate any remaining provisions hereof. The Parties will make a good faith effort to replace any invalid or unenforceable provision with a valid and enforceable one such that the objectives contemplated by the Parties when entering this Agreement may be realized.

**12.4 Headings.** The headings for each Article and Section in this Agreement have been inserted for convenience of reference only and are not intended to limit or expand on the meaning of the language contained in the particular Article or Section.

**12.5 No Waiver.** The failure of, or delay by, a Party to insist upon strict performance of or to otherwise enforce any provision of this Agreement or to exercise any right arising out of this Agreement (including, without limitation, exercise of a right to terminate) will neither impair that provision or right nor constitute a waiver of that provision or right, in whole or in part, in that instance or in any other instance. To be effective, any waiver by a Party of a particular provision or right must be in writing, must be as to a particular matter and, if applicable, for a particular period of time and must be signed by such Party.

**12.6 No Third Party Beneficiaries.** This Agreement is neither expressly nor impliedly made for the benefit of any party other than those executing it, except as otherwise provided in this Agreement with respect to API under Section 2.6, AGENSYS Indemnitees under Section 7.1, and BELLICUM Indemnitees under Section 7.2.

**12.7 Counterparts.** This Agreement may be executed in two (2) or more counterparts, including facsimile and electronically transmitted counterparts, each of which will be deemed an original, but all of which together constitute one and the same instrument. Signatures provided by facsimile transmission or in Adobe™ Portable Document Format (PDF) sent by electronic mail will be deemed to be original signatures.

**IN WITNESS WHEREOF**, the Parties have executed this Agreement by their duly authorized officers as of the Effective Date.

**AGENSYS, INC.**

**BELLICUM PHARMACEUTICALS, INC.**

By: /s/ Wataru Uchida By: /s/ Tom Farrell

Name: Wataru Uchida Name: Tom Farrell

Title: President Title: President and Chief Executive Officer

**LIST OF EXHIBITS**

Exhibit A: AGENSYS Patent Rights  
Exhibit B: AGENSYS Licensed Patent Rights  
Exhibit C: AGENSYS'S Affiliates  
Exhibit D: [...\*\*\*...]

\*\*\*Confidential Treatment Requested

**EXHIBIT A**

**AGENSYS PATENT RIGHTS**

[...\*\*\*...]

\*\*\*Confidential Treatment Requested



[...\*\*\*...]

\*\*\*Confidential Treatment Requested

**EXHIBIT B**

**AGENSYS LICENSED PATENT RIGHTS**

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested



[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested

[...\*\*\*...]

\*\*\*Confidential Treatment Requested



**EXHIBIT C**  
**AGENSYS'S AFFILIATES**

## List of Affiliates as of Mar, 2015

| Company name   | Country     |
|--|-------------|
| <b>Japan</b>   |             |
| Astellas Pharma, Inc.  | Japan       |
| Astellas Business Service Co., Ltd.                                  | Japan       |
| Astellas Marketing and Sales Support Co., Ltd.                       | Japan       |
| Astellas Learning Institute, Co., Ltd.                               | Japan       |
| Astellas Research Technologies Co., Ltd.                             | Japan       |
| Astellas Analytical Science Laboratories Inc.                        | Japan       |
| Astellas Pharma Tech Co., Ltd.                                       | Japan       |
| <b>North America</b>   |             |
| Astellas US Holding, Inc.  | USA         |
| Astellas US LLC  | USA         |
| Astellas Pharma US, Inc.   | USA         |
| OSI Pharmaceuticals, LLC   | USA         |
| (OSI) Pinelawn LLC   | USA         |
| OSI Ardsley LLC  | USA         |
| Ocogene Science Inc.   | USA         |
| Astellas Pharma Canada Inc.  | Canada      |
| Astellas Farma Brasil Importacao e Distribucao de Medicamentos Ltda. | Brazil      |
| Astellas Pharma Global Development, Inc.                             | USA         |
| Astellas Scientific and Medical Affairs, Inc.                        | USA         |
| Astellas Research Institute of America LLC                           | USA         |
| Agensys, Inc.  | USA         |
| Astellas US Technologies, Inc.                                       | USA         |
| Astellas Pharma Technologies, Inc.                                   | USA         |
| Astellas Venture Capital LLC   | USA         |
| Astellas Venture Management LLC                                      | USA         |
| Astellas Bio Inc.  | USA         |
| Perseid Therapeutics LLC   | USA         |
| Fujisawa Investments for Entrepreneurship, L.P.                      | USA         |
| Astellas Venture Fund I LP   | USA         |
| Fujisawa Investments for Entrepreneurship II, L.P.                   | USA         |
| <b>Europe</b>  |             |
| Astellas B.V.  | Netherlands |
| Astellas Pharma Ges.mbH  | Austria     |
| Astellas Pharma EOOD   | Bulgaria    |
| Astellas d.o.o. za promet lijekovima                                 | Croatia     |
| Astellas Pharma s.r.o.   | Czech       |
| Astellas Pharma A/S  | Denmark     |
| Astellas Pharma JLT  | Dubai       |
| Astellas Pharma S.A.S  | France      |
| Astellas Pharma GmbH   | Germany     |
| Astellas Deutschland GmbH  | Germany     |
| Klinge Pharma GmbH   | Germany     |

|  |              |
|--|--------------|
| Astellas Pharmaceuticals AEBE  | Greece       |
| Astellas Pharma Kft  | Hungary      |
| Astellas Pharma Co. Ltd.   | Ireland      |
| Astellas Pharma S.p.A.   | Italy        |
| Astellas Pharma Europe BV  | Netherlands  |
| Astellas Pharma International BV                                       | Netherlands  |
| Astellas Pharma BV   | Netherlands  |
| Astellas Pharma Sp.z.O.O.  | Poland       |
| Astellas Farma Limitada  | Portugal     |
| Yabrofarma, LDA  | Portugal     |
| Astellas Pharma S.R.L.   | Rumania      |
| ZAO Astellas Pharma  | Russia       |
| Astellas Pharma Production LLC   | Russia       |
| Astellas Pharma Pty.   | South Africa |
| Astellas Pharma S.A.   | Spain        |
| Yamanouchi Spain, S.L.   | Spain        |
| Astellas Pharma AB   | Sweden       |
| Astellas Pharma A.G.   | Switzerland  |
| Astellas Pharma İlaç Ticaret ve Sanayi A.Ş.                            | Turkey       |
| Astellas Pharma, trženje in distribucija farmacevtskih izdelkov d.o.o. | Slovenia     |
| Limited Liability Company “Astellas Pharma”                            | Ukraine      |
| Astellas Pharma Europe Limited   | UK           |
| Astellas Pharma Limited  | UK           |
| Bripharm Ltd.  | UK           |
| Paines & Byrne, Limited  | UK           |
| Astellas Ireland Co., Ltd.   | Ireland      |
| Prosidion Limited  | UK           |
| Oxford Real Estate Owner Ltd.  | UK           |
| Oxford Real Estate Owner 2 Ltd.  | UK           |

## Asia

|                                      |            |
|--------------------------------------|------------|
| Astellas Pharma Korea, Inc.          | Korea      |
| Astellas Pharma Taiwan, Inc.         | Taiwan     |
| Astellas Pharma China, Inc.          | China      |
| Astellas Pharma Hong Kong Co., Ltd.  | Hong Kong  |
| Astellas Pharma (Thailand) Co., Ltd. | Thailand   |
| Astellas Pharma Philippines, Inc.    | Philippine |
| P. T. Astellas Pharma Indonesia      | Indonesia  |
| Astellas Pharma India PVT, Ltd.      | India      |
| Astellas Pharma Singapore Pte. Ltd   | Singapore  |

## Oceania

|                                    |            |
|------------------------------------|------------|
| Astellas Pharma Australia Pty Ltd. | Australia  |
| Rainbowseeker Insurance, Inc.      | Micronesia |

EXHIBIT D

[...\*\*\*...]

\*\*\* Confidential Treatment Requested

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-8 No. 333-201036) pertaining to the 2006 Stock Option Plan, 2011 Stock Option Plan, 2014 Equity Incentive Plan and to the 2014 Employee Stock Purchase Plan of Bellicum Pharmaceuticals, Inc., and
- (2) Registration Statement (Form S-3 No. 333-209012) of Bellicum Pharmaceuticals, Inc.

of our report dated March 14, 2016, with respect to the financial statements of Bellicum Pharmaceuticals, Inc. included in this Annual Report (Form 10-K) of Bellicum Pharmaceuticals, Inc. for the year ended December 31, 2015.

/s/ Ernst & Young LLP

Houston, Texas  
March 14, 2016

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER  
PURSUANT TO RULE 13a-14(a) AND 15d-14(a) OF THE SECURITIES EXCHANGE ACT, AS ADOPTED PURSUANT TO SECTION 302 OF THE  
SARBANES-OXLEY ACT OF 2002

I, Thomas J. Farrell, certify that:

1. I have reviewed this Annual Report on Form 10-K of Bellicum Pharmaceuticals, 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 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 functions):

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 14, 2016

/s/Thomas J. Farrell

Thomas J. Farrell

President and Chief Executive Officer

(Principal Executive Officer)

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER  
PURSUANT TO RULE 13a-14(a) AND 15d-14(a) OF THE SECURITIES EXCHANGE ACT, AS ADOPTED PURSUANT TO SECTION 302 OF THE  
SARBANES-OXLEY ACT OF 2002

I, Alan A. Musso, certify that:

1. I have reviewed this Annual Report on Form 10-K of Bellicum Pharmaceuticals, 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 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 functions):

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 14, 2016

/s/ Alan A. Musso

Alan A. Musso

Chief Financial Officer and Treasurer

(Principal Financial Officer)

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Thomas J. Farrell, Chief Executive Officer of Bellicum Pharmaceuticals, Inc. (the “Registrant”), do hereby certify in accordance with 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, based upon my knowledge:

- (1) this Annual Report on Form 10-K of the Registrant, to which this certification is attached as an exhibit (the “Report”), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: March 14, 2016

/s/ Thomas J. Farrell

---

Thomas J. Farrell

President and Chief Executive Officer

This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.



## CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Alan A. Musso, Chief Financial Officer and Treasurer of Bellicum Pharmaceuticals, Inc. (the “Registrant”), do hereby certify in accordance with 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, based upon my knowledge:

- (1) this Annual Report on Form 10-K of the Registrant, to which this certification is attached as an exhibit (the “Report”), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: March 14, 2016

/s/ Alan A. Musso

---

Alan A. Musso

Chief Financial Officer and Treasurer

This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.