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[CORVUS PHARMACEUTICALS, INC.](#)

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Filed pursuant to Rule 424(b)(4)
Registration No. 333-208850

PROSPECTUS

4,700,000 Shares



Common Stock

This is an initial public offering of 4,700,000 shares of common stock of Corvus Pharmaceuticals, Inc. Prior to this offering, there has been no public market for our common stock. The initial public offering price of our common stock is \$15.00 per share. Our common stock will trade on The NASDAQ Global Market under the symbol "CRVS."

We are an "emerging growth company," as the term is used in the Jumpstart Our Business Startups Act of 2012, and we have elected to comply with certain reduced public company reporting requirements.

We have granted the underwriters an option for a period of 30 days to purchase an additional 705,000 shares of common stock.

Certain of our existing institutional investors affiliated with certain of our directors have agreed to purchase an aggregate of 1,416,666 shares of our common stock in this offering at the initial public offering price and on the same terms as the other purchasers in this offering.

Investing in our common stock involves risks. Please see "Risk Factors" beginning on page 11.

	Price to Public	Underwriting Discounts and Commissions ⁽¹⁾	Proceeds to Corvus Pharmaceuticals
Per share	\$ 15.00	\$ 1.05	\$ 13.95
Total	\$ 70,500,000	\$ 4,935,000	\$ 65,565,000

(1) See "Underwriting" for a description of the compensation payable to the underwriters.

Delivery of the shares of common stock is expected to be made on or about March 29, 2016.

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

Credit Suisse

Cowen and Company

Guggenheim Securities

Cantor Fitzgerald & Co.

BTIG

The date of this prospectus is March 22, 2016.

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Neither we nor the underwriters have authorized anyone to provide you with information that is different from that contained in this prospectus or in any free writing prospectus we may authorize to be delivered or made available to you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are offering to sell shares of common stock and seeking offers to buy shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front of this prospectus, regardless of the time of delivery of this prospectus or any sale of shares of our common stock.

Through and including April 16, 2016 (the 25th day after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

Unless the context requires otherwise, in this prospectus the terms "Corvus," "Corvus Pharmaceuticals," the "Company," "we," "us" and "our" refer to Corvus Pharmaceuticals, Inc., a Delaware corporation.

Our logo and some of our trademarks and tradenames are used in this prospectus. This prospectus also includes trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, trademarks, tradenames and service marks referred to in this prospectus may appear without the ®, ™ and SM symbols, but those references are not intended to indicate in any way that we will not assert to the fullest extent under applicable law our rights or the rights of the applicable licensor to these trademarks, tradenames and service marks.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before deciding to invest in our common stock, you should read this entire prospectus carefully, including the sections of this prospectus entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes contained elsewhere in this prospectus.

Corvus Pharmaceuticals, Inc.

Overview

We are a clinical stage biopharmaceutical company focused on the development and commercialization of novel immuno-oncology therapies that are designed to harness the immune system to attack cancer cells. Since we began operations in November 2014, we have built a pipeline of four immuno-oncology programs, three of which focus on the adenosine-cancer axis to modulate an immune response. Our lead product candidate, CPI-444, is an oral, small molecule antagonist of the A2A receptor for adenosine, an immune checkpoint. In January 2016, we began enrolling patients in a large expansion cohort trial for CPI-444. This Phase 1/1b clinical trial is designed to examine safety, tolerability, biomarkers and preliminary efficacy of CPI-444 in several solid tumor types, both as a single agent and in combination with Genentech, Inc.'s investigational cancer immunotherapy, atezolizumab, a fully humanized monoclonal antibody targeting PDL-1. We have a lead development candidate for our second program, an anti-CD73 monoclonal antibody that inhibits the production of adenosine, and plan to select development candidates for our other two programs in 2016. We believe the breadth and status of our pipeline demonstrates our management team's expertise in understanding and developing immuno-oncology assets as well as in identifying product candidates that can be in-licensed and further developed internally to treat many types of cancer. We hold worldwide rights to all of our product candidates.

Background in Immuno-oncology

Immuno-oncology therapies that stimulate or enhance immune responses to tumors are a new and emerging approach with several potential benefits over existing therapies. First, the immune system exhibits immunologic diversity and selectivity, which enables it to respond to a large number of potential targets. Second, once triggered, the immune response can be amplified, offering the potential to enhance the efficacy of treatment. Third, once activated, the immune system possesses immunologic memory, potentially providing for a durable and long-lasting response. Some of the most successful types of immuno-oncology therapies are immune checkpoint inhibitors. Immune checkpoints are signaling molecules produced by or expressed on immune cells that act to shut down or block an immune response. In a healthy person, these checkpoints function to limit an immune response to ensure that the immune system does not overreact, which could lead to excessive inflammation and tissue damage, as occurs in patients with autoimmune diseases or allergies. Tumor cells have evolved to activate these checkpoints to shield the tumor from immune response attacks, but studies have shown that immune checkpoint inhibitors can counter these tumor-protective measures and unleash the immune system's cancer-destroying properties.

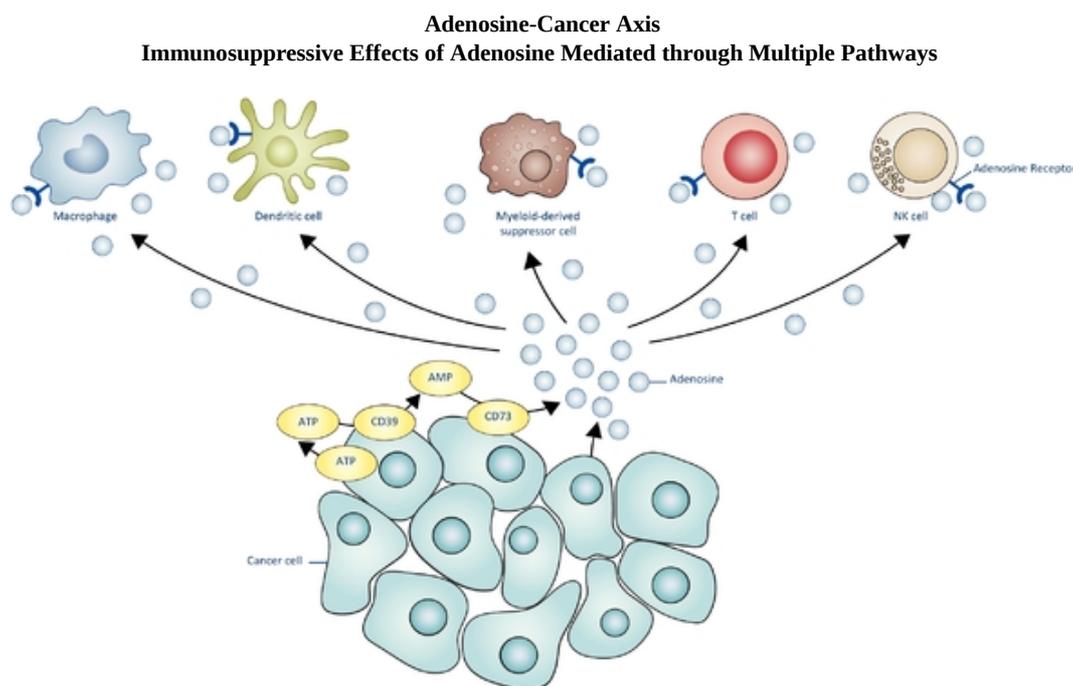
Adenosine-Cancer Axis and Anti-tumor Immune Response

Adenosine activates an immune checkpoint, the adenosine A2A receptor, that is used by the body to limit inflammation and immune responses. The production of adenosine during acute inflammatory processes is mediated by CD73, an enzyme expressed on the surface of several types of immune cells, tumor cells and cells of certain other tissues. As a self-protective maneuver, many tumor types actively sustain increased levels of extracellular adenosine by production through CD73 or by direct secretion of

adenosine. These increased levels of adenosine interact with the A2A and A2B receptors expressed on several cells of the immune system, including T-cells, natural killer (NK) cells, macrophages, dendritic cells and myeloid derived suppressor cells, as well as other cells, which has the effect of dampening the immune response to the tumors, a system known as the adenosine-cancer axis.

Overall, adenosine hinders the immune response to tumors by both blocking the activation and effectiveness of immune cells capable of destroying tumor cells, and by increasing the number of immune cells that act to suppress immune cells from responding to the tumor. As tumor cells evolve and form cancerous growths, they utilize these processes to evade immune attack and promote their survival. However, several preclinical tumor model studies have shown that treatment with A2A receptor inhibitors can counter these survival mechanisms and lead to tumor regression and that this effect can be further enhanced when such treatment is administered in combination with various other checkpoint inhibitors, such as anti-programmed death 1 (PD-1) therapies and anti-cytotoxic T-lymphocyte-associated antigen-4 (CTLA-4) therapies.

The following figure provides an overview of adenosine production by tumors and its effects on the immune system:

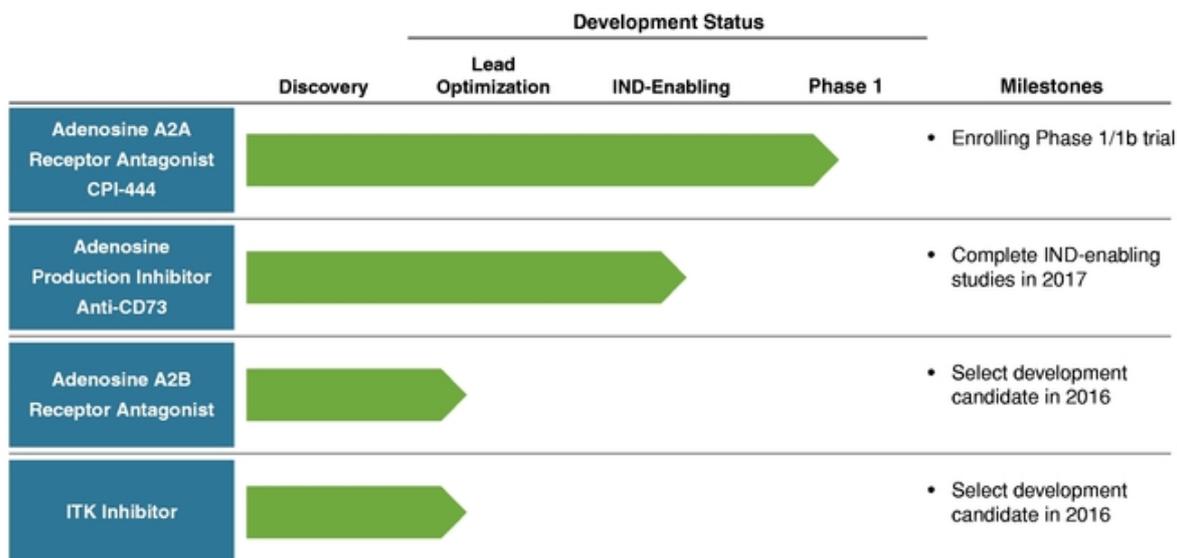


Our Product Pipeline

We are developing novel checkpoint inhibitors and immuno-oncology therapies that we believe may overcome some of the limitations of current immuno-oncology therapies. Three of our programs are aimed at disabling cancer's ability to subvert immune attack by inhibiting adenosine in the tumor microenvironment or by blocking its production by tumors. Our fourth program is aimed at developing product candidates that regulate T-cell activation and differentiation by inhibiting interleukin-2 inducible kinase (ITK). We intend to commercialize any approved product candidates primarily in the United States and Europe for any oncology indications our product candidates are approved for. We expect cancer patients or their healthcare providers to be our primary customers for any approved product candidates and expect that our commercial sales of such product candidates will depend on the

availability of adequate coverage and reimbursement from government health administration authorities, private health insurers and other third-party payors.

The following chart summarizes key information regarding our current product candidate pipeline and expected milestones:



- CPI-444 Adenosine A2A Receptor Antagonist.** In February 2015, we in-licensed patent rights and know-how related to CPI-444 and related molecules from Vernalis (R&D) Limited (Vernalis), where it was under development for treatment of Parkinson's disease and other neurologic diseases. Vernalis and its corporate partner conducted two Phase 1 clinical trials in healthy volunteers and one Phase 1b trial in patients with attention deficit and hyperactivity disorder (ADHD), with an aggregate of approximately 75 healthy volunteers and patients dosed. These trials provided early indications of a favorable safety profile and assessed pharmacokinetics, oral bioavailability and receptor occupancy for CPI-444. We conducted further testing in *in vitro* and *in vivo* models to evaluate CPI-444's immune-enhancing and anti-tumor properties. In these studies, orally administered CPI-444 inhibited tumor growth in multiple mouse models of cancer as a single agent, in combination with anti-PD-1 agents and in combination with anti-PDL-1 agents.

In October 2015, we filed an investigational new drug (IND) application for CPI-444 for treatment of several solid tumor types. In January 2016, we began enrolling patients in a large expansion cohort trial for CPI-444. This Phase 1/1b clinical trial is designed to examine safety, tolerability, biomarkers and preliminary efficacy of CPI-444, both as a single agent and in combination with Genentech's atezolizumab, and will include patients with different types of solid tumors enrolled in disease-specific cohorts.

- Anti-CD73 Adenosine Production Inhibitor.** In December 2014, we in-licensed from The Scripps Research Institute (Scripps) a mouse hybridoma clone expressing an anti-human CD73 antibody, from which we have developed a humanized anti-CD73 monoclonal antibody. We have further modified this antibody to improve binding and inhibition of catalytic activity. CD73 is often

found on lymphocytes, tumors and other tissues, and is believed to play an important role in tumor immune suppression by catalyzing the production of extracellular adenosine. In preclinical *in vitro* studies, our humanized monoclonal anti-CD73 antibody has been shown to inhibit the catalytic activity of CD73, resulting in the blocking of extracellular adenosine production by tumor cells, which we believe could stimulate or enhance immune response to tumors. We are initiating IND-enabling studies for the development of this antibody for potential clinical trials in patients with advanced cancer and plan to complete these studies in 2017.

- **Adenosine A2B Receptor Antagonist.** We have in-licensed several selective and potent adenosine A2B receptor antagonists from Vernalis. In addition, we are synthesizing and have identified other A2B receptor antagonists from our internal research program. Adenosine A2B receptors have recently been found to play an important role in the immune response to tumors. Similar to adenosine A2A receptors, adenosine binds to adenosine A2B receptors, which leads to immunosuppression. We intend to further develop our A2B agents to improve potency, selectivity, pharmacokinetic behavior and immune enhancing properties. We expect to conduct preclinical studies similar to those we have conducted for CPI-444 in order to select a development candidate in 2016. Upon selection, we intend to conduct further IND-enabling studies and potential Phase 1 clinical trials.
- **ITK Inhibitor.** We are currently developing a series of selective, covalent inhibitors of ITK and are evaluating them in preclinical studies for potency, safety and efficacy. ITK, an enzyme that functions in T-cell signaling and differentiation, is expressed predominantly in T-cells, which are lymphocytes that play a vital role in immune response. One of the key survival mechanisms of tumors is believed to be the reprogramming of T-cells to create an inflammatory environment that inhibits anti-tumor immune response and favors tumor growth. We believe highly selective inhibitors of this enzyme will facilitate induction of T-cell anti-tumor immunity and also may be useful in the treatment of T-cell lymphomas. We plan to select a lead development candidate under this program in 2016 and, following selection, advance the candidate into clinical trials in patients with T-cell lymphoma and in patients with solid tumors.

Our founders and management team consist of industry veterans who played significant roles in the discovery and development of successful oncology and immunology antibodies and drugs, including rituximab and ibrutinib. Since our inception, we have expanded our management team and established collaborations with leading biotechnology companies, including Genentech, and collaborative relationships with research institutions, including The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins University. With our management team's expertise in developing both small molecule and antibody-based oncology treatments, we believe we are well positioned to identify and develop novel therapeutic agents that have diverse but complementary mechanisms of action, allowing for their potential integration into immuno-oncology treatment regimens for a broad variety of cancers.

We have attracted initial funding from many leading healthcare investors and funds. Through December 31, 2015, we have raised net cash proceeds of \$108.1 million in convertible preferred stock financings and as of December 31, 2015, we had cash, cash equivalents and marketable securities of \$94.4 million and an accumulated deficit of \$31.5 million.

Our Strategy

Our goal is to become a leader in the field of immuno-oncology treatments for multiple cancer indications. Specific elements of our strategy are:

- leverage our expertise in immunology and oncology to identify, develop and commercialize new product candidates;

- utilize existing pre-clinical and clinical data to advance our lead product candidate, CPI-444, in to clinical trials for oncology;
- advance product candidates for use alone or in combination with other oncology treatments;
- identify biomarkers to select patients and monitor treatment with our product candidates; and
- pursue collaborative relationships, partnerships and in-licensing opportunities to help advance and expand our product candidate portfolio.

Risks Associated with Our Business

Our ability to implement our business strategy is subject to numerous risks of which you should be aware in making an investment decision. These risks are described more fully in the section entitled "Risk Factors" immediately following this prospectus summary. These risks include, among others:

- We have a limited operating history, have incurred significant operating losses since our inception and expect to incur significant losses for the foreseeable future. We may never generate any revenue or become profitable or, if we achieve profitability, we may not be able to sustain it.
- Even if this offering is successful, we will require substantial additional financing to achieve our goals, and a failure to obtain this necessary capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our product development, other operations or commercialization efforts.
- Our business currently depends substantially on the success of CPI-444, which will require significant clinical testing before we can seek regulatory approval and potentially launch commercial sales. If we are unable to obtain regulatory approval for, or successfully commercialize, CPI-444, our business will be materially harmed.
- Any termination or suspension of, or delays in the commencement or completion of, our planned clinical trials could result in increased costs to us, delay or limit our ability to generate revenue and adversely affect our commercial prospects.
- All of our product candidates are still in preclinical or early-stage clinical development. If we are unable to commercialize our product candidates or if we experience significant delays in obtaining regulatory approval for, or commercializing, any or all of our product candidates, our business will be materially and adversely affected.
- We rely on third parties to conduct some or all aspects of our product manufacturing, research and preclinical and clinical testing, and these third parties may not perform satisfactorily.
- Our rights to develop and commercialize our product candidates are subject in part to the terms and conditions of licenses granted to us by other companies.
- Our success depends on our ability to protect our intellectual property and our proprietary technologies.

In addition, there are other risks related to our common stock and this offering that you should consider carefully before deciding whether to invest in our common stock. These risks and others are described more fully in the section entitled "Risk Factors" immediately following this prospectus summary. These risks include, among others:

- An active, liquid and orderly market for our common stock may not develop, and you may not be able to resell your common stock at or above the public offering price.
- Because a small number of our existing stockholders own a majority of our voting stock, your ability to influence corporate matters will be limited.

Corporate Information

We were incorporated in Delaware on January 27, 2014 and began operations in November 2014. Our principal executive offices are located at 863 Mitten Road, Suite 102, Burlingame, California 94010, and our telephone number is (650) 900-4520. Our website address is <http://corvuspharma.com>. The information contained on our website is not part of or incorporated by reference in this prospectus, and you should not consider the contents of our website in making an investment decision with respect to our common stock.

Implications of Being an Emerging Growth Company

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act). We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year following the fifth anniversary of the completion of this offering, (2) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.0 billion, (3) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended (Exchange Act), which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of the second fiscal quarter of such fiscal year or (4) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period. An emerging growth company may take advantage of specified reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. As an emerging growth company,

- we may present only two years of audited financial statements, plus unaudited condensed financial statements for any interim period, and related management's discussion and analysis of financial condition and results of operations;
- we may avail ourselves of the exemption from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley);
- we may provide less extensive disclosure about our executive compensation arrangements; and
- we may not require stockholder non-binding advisory votes on executive compensation or golden parachute arrangements.

We have chosen to opt out of the extended transition periods available to emerging growth companies under the JOBS Act for complying with new or revised accounting standards. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition periods for complying with new or revised accounting standards is irrevocable.

THE OFFERING

Issuer	Corvus Pharmaceuticals, Inc.
Common stock offered by us in this offering	4,700,000 shares.
Common stock to be outstanding after this offering	20,406,356 shares.
Underwriters' option to purchase additional shares	705,000 shares.
Use of Proceeds	We estimate that the net proceeds from this offering will be approximately \$63.5 million, or approximately \$73.3 million if the underwriters exercise in full their option to purchase additional shares of common stock, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We expect to use our net proceeds from this offering to fund research and development of our product candidates under development, including CPI-444, as well as for potential future development programs, potential in-licensing of technology or products, capital expenditures, working capital and other general corporate purposes. See "Use of Proceeds."
Risk Factors	See "Risk Factors" beginning on page 11 and other information included in this prospectus for a discussion of factors that you should consider carefully before deciding whether to invest in our common stock.
Proposed NASDAQ Global Market symbol	"CRVS."

In this prospectus, the number of shares of common stock to be outstanding after this offering is based on 15,706,356 shares of common stock outstanding as of December 31, 2015, and excludes the following:

- 784,136 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2015 under our 2014 Equity Incentive Plan, having a weighted-average exercise price of \$4.09 per share;
- 2,559,499 shares of common stock reserved for issuance pursuant to future awards under our 2014 Equity Incentive Plan as of December 31, 2015. Of such shares, we have granted option awards exercisable for approximately 1,025,250 shares to certain of our employees, executive officers and directors with an exercise price equal to the initial public offering price;
- 3,051,750 shares of common stock reserved for issuance pursuant to future awards under our 2016 Equity Incentive Award Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which will become effective immediately prior to the consummation of this offering; and
- 200,000 shares of common stock reserved for future issuance under our 2016 Employee Stock Purchase Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which became effective immediately prior to the effectiveness of our registration statement filed on Form S-1 in connection with this offering.

Except as otherwise indicated, all information contained in this prospectus assumes the following:

- the filing and effectiveness of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws, each of which will occur immediately prior to the consummation of this offering;
- the conversion of all of our outstanding shares of convertible preferred stock as of December 31, 2015 into an aggregate of 14,274,741 shares of common stock immediately prior to the consummation of this offering;
- no exercise of outstanding stock options described above subsequent to December 31, 2015; and
- no exercise of the underwriters' option to purchase additional shares of common stock.

We refer to our Series A and Series B convertible preferred stock collectively as "convertible preferred stock" in this prospectus, as well as for financial reporting purposes and in the financial tables included in this prospectus, as more fully explained in Note 7 to our financial statements included in this prospectus.

Certain of our existing institutional investors affiliated with certain of our directors have agreed to purchase an aggregate of 1,416,666 shares of our common stock in this offering and certain of our other existing institutional investors have been allocated shares in this offering in the ordinary course, in each case, at the initial public offering price and on the same terms as the other purchasers in this offering.

SUMMARY FINANCIAL DATA

The following summary financial data for the period from January 27, 2014 (inception) to December 31, 2014 and for the year ended December 31, 2015 and the balance sheet data as of December 31, 2014 and 2015 have been derived from our audited financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of our future results. You should read the following selected financial data in conjunction with "Management's Discussion and Analysis of Financial Condition and the Results of Operations" and our audited financial statements and the related notes included elsewhere in this prospectus.

	Period from January 27, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015
(In thousands, except share and per share data)		
Statements of Operations and Comprehensive Loss Data:		
Operating expenses:		
Research and development	\$ 38	\$ 11,352
General and administrative	123	2,418
Total operating expenses	<u>161</u>	<u>13,770</u>
Loss from operations	(161)	(13,770)
Change in fair value of convertible preferred stock liability	—	(17,600)
Interest income	—	35
Net loss	<u>\$ (161)</u>	<u>\$ (31,335)</u>
Net loss per share—basic and diluted ⁽¹⁾	<u>\$ (0.95)</u>	<u>\$ (83.86)</u>
Shares used to compute net loss per share—basic and diluted ⁽¹⁾	<u>170,278</u>	<u>373,643</u>
Pro forma net loss per share—basic and diluted (unaudited) ⁽¹⁾	<u>\$ (0.30)</u>	<u>\$ (1.54)</u>
Shares used to compute pro forma net loss per share—basic and diluted (unaudited) ⁽¹⁾	<u>530,859</u>	<u>8,894,425</u>

- (1) See Note 3 to our audited financial statements included elsewhere in this prospectus for an explanation of the calculations of our net loss per share—basic and diluted, the shares used to compute the net loss per share—basic and diluted, pro forma net loss per share—basic and diluted, and the shares used to compute the pro forma net loss per share—basic and diluted.

The table below presents our balance sheet as of December 31, 2015:

- on an actual basis;
- on a pro forma basis to give effect to: (1) the conversion of all of our outstanding shares of convertible preferred stock as of December 31, 2015 into an aggregate of 14,274,741 shares of common stock and (2) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur, in each case, immediately prior to the consummation of this offering; and
- on a pro forma as adjusted basis to give further effect to the sale of 4,700,000 shares of common stock in this offering at the initial public offering price of \$15.00 per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

(In thousands)	As of December 31, 2015		
	Actual	Pro forma	Pro forma as Adjusted
Balance Sheet Data:			
Cash and cash equivalents ⁽¹⁾	\$ 4,105	\$ 4,105	\$ 68,299
Marketable securities	90,281	90,281	90,281
Working capital ⁽²⁾	92,593	92,593	157,009
Total assets ⁽³⁾	98,459	98,459	161,702
Convertible preferred stock	125,780	—	—
Additional paid-in capital	440	126,218	189,683
Accumulated deficit	31,496	31,496	31,496
Total stockholders' (deficit) equity	(31,101)	94,679	158,144

- (1) Pro forma as adjusted cash and cash equivalents reflects an increase of \$64.2 million to give effect to \$63.5 million of net proceeds from the offering (after deducting underwriting discounts and commissions and estimated offering expenses) plus \$729,000 of offering expenses paid in December 2015.
- (2) Pro forma as adjusted working capital reflects gross proceeds of \$70.5 million less underwriting discounts and commissions and the additional \$1.1 million of estimated offering related expenses we expect to incur in 2016.
- (3) Actual and pro forma total assets reflects deferred offering costs of \$1.0 million as of December 31, 2015. Following the consummation of the offering, such deferred offering costs and the additional \$1.1 million of estimated offering related expenses we expect to incur in 2016 will be reclassified as equity, which is reflected in pro forma as adjusted total assets.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this prospectus, including our financial statements and related notes included elsewhere in this prospectus and "Management's Discussion and Analysis of Financial Condition and Results of Operations," before making an investment decision. If any of the following risks are realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the trading price of our common stock could decline and you could lose part or all of your investment.

Risks Related to Our Limited Operating History, Financial Condition and Capital Requirements

We have a limited operating history, have incurred significant operating losses since our inception and expect to incur significant losses for the foreseeable future. We may never generate any revenue or become profitable or, if we achieve profitability, we may not be able to sustain it.

We are a clinical stage pharmaceutical company with a limited operating history. Pharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. To date, we have focused primarily on developing our lead product candidate, CPI-444, which is currently our only product candidate that has undergone clinical development, and researching additional product candidates. We have incurred significant operating losses since we were founded in January 2014 and have not yet generated any revenue from sales. If our products are not approved, we may never generate any revenue. We incurred a net loss of \$0.2 million for the period from January 27, 2014 (inception) to December 31, 2014 and \$31.3 million for the year ended December 31, 2015. We expect to continue to incur losses for the foreseeable future, and we anticipate these losses will increase as we continue our development of, seek regulatory approval for and begin to commercialize CPI-444, and as we develop other product candidates. Even if we achieve profitability in the future, we may not be able to sustain it in subsequent periods. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and results of operations.

Even if this offering is successful, we will require substantial additional financing to achieve our goals, and a failure to obtain this necessary capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our product development, other operations or commercialization efforts.

Since commencing our operations in 2014, substantially all of our efforts have been focused on the research and development of CPI-444. We believe that we will continue to expend substantial resources for the foreseeable future as we continue clinical development of, seek regulatory approval for and prepare for the commercialization of CPI-444, as well as develop other product candidates. These expenditures will include costs associated with research and development, conducting preclinical studies and clinical trials, obtaining regulatory approvals, manufacturing and supply, sales and marketing and general operations. In addition, other unanticipated costs may arise. Because the outcome of any clinical trial and/or regulatory approval process is highly uncertain, we may not be able to accurately estimate the actual amounts necessary to successfully complete the development, regulatory approval process and commercialization of CPI-444 or any other product candidates.

As of December 31, 2015, we had capital resources consisting of cash, cash equivalents and marketable securities of \$94.4 million. We do not expect our existing capital resources together with the net proceeds from this offering to be sufficient to enable us to fund the completion of our clinical trials and remaining development program of CPI-444 through commercialization. In addition, our operating plan may change as a result of many factors, including those described below as well as others currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity, debt financings or other sources, such as strategic collaborations. Such financing would result in dilution to stockholders, imposition of debt covenants and repayment obligations or other restrictions that may affect our business. If we raise additional capital through strategic collaboration agreements, we may have to relinquish valuable rights to our product candidates, including possible

future revenue streams. In addition, additional funding may not be available to us on acceptable terms, or at all, and any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. Furthermore, even if we believe we have sufficient funds for our current or future operating plans, we may seek additional capital due to favorable market conditions or strategic considerations.

The amount and timing of any expenditures needed to implement our development and commercialization programs will depend on numerous factors, including, but not limited to:

- the type, number, scope, progress, expansions, results of and timing of our planned preclinical studies and clinical trials of CPI-444 and any of our other product candidates which we are pursuing or may choose to pursue in the future;
- the need for, and the progress, costs and results of, any additional clinical trials of CPI-444 or any of our other product candidates we may initiate based on the results of our planned clinical trials or discussions with the FDA, including any additional trials the FDA or other regulatory agencies may require;
- the costs of obtaining, maintaining and enforcing our patents and other intellectual property rights;
- the costs and timing of obtaining or maintaining manufacturing for CPI-444 and our other product candidates, including commercial manufacturing if any product candidate is approved;
- the costs and timing of establishing sales and marketing capabilities and enhanced internal controls over financial reporting;
- our ability to achieve sufficient market acceptance, coverage and reimbursement from third-party payors and adequate market share for our product candidates;
- the terms and timing of establishing collaborations, license agreements and other partnerships;
- costs associated with any new product candidates that we may develop, in-license or acquire;
- the effect of competing technological and market developments;
- our ability to attract, hire and retain qualified personnel;
- our ability to establish and maintain partnering arrangements for development; and
- the costs associated with being a public company.

Several of these factors are outside of our control and if we are unable to obtain funding on a timely basis, we will be unable to complete the clinical trials for CPI-444 and our other product candidates, and we may be required to significantly curtail some or all of our activities.

Risks Related to the Discovery and Development of Our Product Candidates

Our business currently depends substantially on the success of CPI-444, which will require significant clinical testing before we can seek regulatory approval and potentially launch commercial sales, and which may not be successful in clinical trials, receive regulatory approval or be successfully commercialized, even if approved. If we are unable to obtain regulatory approval for, or successfully commercialize, CPI-444, our business will be materially harmed.

Our product candidates are in the early stage of development and will require additional preclinical studies, substantial clinical development and testing, manufacturing bridging studies and process validation and regulatory approval prior to commercialization. To date, we have only one product candidate that has been the focus of advanced development efforts: CPI-444. We have invested, and will continue to invest, a significant portion of our time and financial resources in the development of CPI-444. However, we need to raise sufficient funds for, and successfully enroll and complete, our planned clinical trials of CPI-444. We cannot be certain that CPI-444 will be successful in clinical trials, and CPI-444 may not receive regulatory approval even if it is successful in clinical trials.

Even if we do receive regulatory approval necessary for the commercialization of CPI-444, we do not expect that such commercialization will occur for at least the next several years. In particular, the future regulatory and commercial success of CPI-444 is subject to a number of risks, including the following:

- we may not have sufficient financial and other resources to complete the necessary clinical trials for CPI-444;
- we may not be able to demonstrate evidence of efficacy and safety for CPI-444 to the satisfaction of regulatory authorities;
- the results of our clinical trials may not meet the level of statistical or clinical significance required by the FDA or comparable foreign regulatory bodies for marketing approval;
- subjects in our clinical trials may die or suffer other adverse effects for reasons that may or may not be related to CPI-444;
- we do not know the degree to which CPI-444 will be accepted as a therapy, even if approved; and
- we may not be able to obtain, maintain or enforce our patents and other intellectual property rights.

Of the large number of drugs in development in the pharmaceutical industry, only a small percentage result in the submission of a New Drug Application (NDA) or Biologics License Application (BLA) to the FDA or comparable marketing applications to foreign regulatory authorities, and even fewer are approved for commercialization. Furthermore, even if we do receive regulatory approval to market CPI-444, any such approval may be subject to limitations on the indicated uses for which we may market the product. Accordingly, even if we are able to obtain the requisite financing to continue to fund our development programs, we cannot assure you that CPI-444 will be successfully developed or commercialized. If we or any of our potential future collaborators are unable to develop, or obtain regulatory approval for, or, if approved, successfully commercialize CPI-444, we may not be able to generate sufficient revenue to continue our business.

Clinical drug development involves a lengthy and expensive process with an uncertain outcome, and the results of preclinical studies and early clinical trials are not necessarily predictive of future results. Any product candidate we or any of our potential future collaborators advance into clinical trials, including CPI-444, may not have favorable results in later clinical trials, if any, or receive regulatory approval.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials.

Furthermore, our future trials will need to demonstrate sufficient safety and efficacy for approval by regulatory authorities in larger patient populations. Prior to licensing our lead product candidate, CPI-444, it exhibited encouraging safety data in clinical studies performed by third parties. However, CPI-444 has only been studied in healthy volunteers and patients with attention deficit and hyperactivity disorder (ADHD), and has not yet been administered to cancer patients, nor has its immunological effect been studied in humans. It is possible that patients enrolled in our Phase 1/1b clinical trial for CPI-444, which we initiated in January 2016, could respond in unexpected ways. For instance, older patients with cancer may behave differently and experience more toxicity with CPI-444 than the subjects in the prior clinical studies. In addition, we expect that the dosing regimen and duration of treatment in any clinical trial will vary from those utilized in the studies previously

performed by third parties. Furthermore, a portion of our Phase 1/1b clinical trial includes the administration of CPI-444 in combination with Genentech's investigational cancer immunotherapy, atezolizumab (MPDL3280A), which could exacerbate immune system related adverse events, cause increased toxicity or otherwise lead to unexpected adverse events. As a result, there can be no assurance that the results of clinical studies of CPI-444 conducted by third parties will be indicative of results of our Phase 1/1b clinical trial.

For the foregoing reasons, we cannot be certain that our planned clinical trial or any other future clinical trials will be successful. Any safety concerns observed in any one of our clinical trials in our targeted indications could limit the prospects for regulatory approval of our product candidates in those and other indications, which could have a material adverse effect on our business, financial condition and results of operations.

Any termination or suspension of, or delays in the commencement or completion of, our planned clinical trials could result in increased costs to us, delay or limit our ability to generate revenue and adversely affect our commercial prospects.

Before we can initiate clinical trials in the United States for our product candidates, we must submit the results of preclinical testing to the FDA along with other information, including information about product candidate chemistry, manufacturing and controls and our proposed clinical trial protocol, as part of an investigational new drug (IND) application. Our IND for CPI-444 is dependent on preclinical and clinical testing performed by our licensor and its corporate partner and a prior IND filed by our licensor for a non-oncology indication. We were not directly involved in the design or performance of these studies, and, therefore, we may be unable to review or verify all aspects of the information. In addition, we may rely in part on preclinical, clinical and quality data generated by clinical research organizations (CROs) and other third parties for regulatory submissions for our product candidates. If these third parties do not make timely regulatory submissions for our product candidates, it will delay our plans for our clinical trials. If those third parties do not make this data available to us, we will likely have to develop all necessary preclinical and clinical data on our own, which will lead to significant delays and increase development costs of the product candidate. In addition, the FDA may require us to conduct additional preclinical testing for any product candidate before it allows us to initiate clinical testing under any IND, which may lead to additional delays and increase the costs of our preclinical development. Delays in the commencement or completion of our planned clinical trials for CPI-444 or other product candidates could significantly affect our product development costs.

We do not know whether our planned trials will begin on time or be completed on schedule, if at all. The commencement and completion of clinical trials can be delayed for a number of reasons, including delays related to:

- the FDA failing to grant permission to proceed or placing the clinical trial on hold;
- subjects failing to enroll or remain in our trial at the rate we expect;
- subjects choosing an alternative treatment for the indication for which we are developing CPI-444 or other product candidates, or participating in competing clinical trials;
- lack of adequate funding to continue the clinical trial;
- subjects experiencing severe or unexpected drug-related adverse effects;
- a facility manufacturing CPI-444, any of our other product candidates or any of their components being ordered by the FDA or other regulatory authorities to temporarily or permanently shut down due to violations of good manufacturing practice (cGMP) regulations or other applicable requirements, or infections or cross-contaminations of product candidates in the manufacturing process;
- any changes to our manufacturing process that may be necessary or desired;

- any failure or delay in reaching an agreement with CROs and clinical trial sites;
- third-party clinical investigators losing the licenses or permits necessary to perform our clinical trials, not performing our clinical trials on our anticipated schedule or consistent with the clinical trial protocol, good clinical practices (GCP) or regulatory requirements or other third parties not performing data collection or analysis in a timely or accurate manner;
- third-party contractors becoming debarred or suspended or otherwise penalized by the FDA or other government or regulatory authorities for violations of regulatory requirements, in which case we may need to find a substitute contractor, and we may not be able to use some or all of the data produced by such contractors in support of our marketing applications;
- one or more Institutional Review Boards (IRBs) refusing to approve, suspending or terminating the trial at an investigational site, precluding enrollment of additional subjects, or withdrawing its approval of the trial; or
- patients failing to complete a trial or return for post-treatment follow-up.

We could also encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by the Data Safety Monitoring Board for such trial or by the FDA or other regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. In addition, changes in regulatory requirements and policies may occur, and we may need to amend clinical trial protocols to comply with these changes. Amendments may require us to resubmit our clinical trial protocols to IRBs for reexamination, which may impact the costs, timing or successful completion of a clinical trial.

If we experience delays in the completion of, or termination of, any clinical trial of our product candidates, the commercial prospects of our product candidates will be harmed, and our ability to generate product revenues from any of these product candidates will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product candidate development and approval process and jeopardize our ability to commence product sales and generate revenues. See also the risk factor below titled "If we encounter difficulties enrolling subjects in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected."

In addition, many of the factors that cause, or lead to, termination or suspension of, or a delay in the commencement or completion of, clinical trials may also ultimately lead to the denial of regulatory approval of a product candidate. For example, if we make manufacturing or formulation changes to our product candidates, we may need to conduct additional studies to bridge our modified product candidates to earlier versions. Further, if one or more clinical trials are delayed, our competitors may be able to bring products to market before we do, and the commercial viability of CPI-444 or other product candidates could be significantly reduced. Any of these occurrences may harm our business, financial condition and prospects significantly.

CPI-444 and our other product candidates are subject to extensive regulation, compliance with which is costly and time consuming, and such regulation may cause unanticipated delays or prevent the receipt of the required approvals to commercialize our product candidates.

The clinical development, manufacturing, labeling, storage, record-keeping, advertising, promotion, import, export, marketing and distribution of our product candidates are subject to extensive regulation by the FDA in the United States and by comparable authorities in foreign markets. In the United States, we are not permitted to market our product candidates until we receive regulatory approval from the FDA. The process of obtaining regulatory approval is expensive, often takes many years and

can vary substantially based upon the type, complexity and novelty of the product candidates involved, as well as the target indications and patient population. Approval policies or regulations may change, and the FDA has substantial discretion in the drug approval process, including the ability to delay, limit or deny approval of a product candidate for many reasons. Despite the time and expense invested in clinical development of product candidates, regulatory approval is never guaranteed.

The FDA or comparable foreign regulatory authorities can delay, limit or deny approval of a product candidate for many reasons, including:

- such authorities may disagree with the design or implementation of our or any of our potential future collaborators' clinical trials;
- we or any of our potential future collaborators may be unable to demonstrate to the satisfaction of the FDA or other regulatory authorities that a product candidate is safe and effective for any indication;
- such authorities may not accept clinical data from trials which are conducted at clinical facilities or in countries where the standard of care is potentially different from that of the United States;
- we or any of our potential future collaborators may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- such authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- approval may be granted only for indications that are significantly more limited than what we apply for and/or with other significant restrictions on distribution and use;
- such authorities may find deficiencies in the manufacturing processes or facilities of third-party manufacturers with which we or any of our potential future collaborators contract for clinical and commercial supplies; or
- the approval policies or regulations of such authorities may significantly change in a manner rendering our or any of our potential future collaborators' clinical data insufficient for approval.

With respect to foreign markets, approval procedures vary among countries and, in addition to the foregoing risks, may involve additional product testing, administrative review periods and agreements with pricing authorities. In addition, events raising questions about the safety of certain marketed pharmaceuticals may result in increased cautiousness by the FDA and comparable foreign regulatory authorities in reviewing new drugs based on safety, efficacy or other regulatory considerations and may result in significant delays in obtaining regulatory approvals. Any delay in obtaining, or inability to obtain, applicable regulatory approvals would prevent us or any of our potential future collaborators from commercializing our product candidates.

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

Subject enrollment, a significant factor in the timing of clinical trials, is affected by many factors including the size and nature of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, the risk that enrolled patients will not complete a clinical trial, our ability to recruit clinical trial investigators with the appropriate competencies and experience, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating. We will be required to identify and enroll a sufficient number of subjects for each of our clinical trials. Potential subjects for any planned clinical trials may not be adequately diagnosed or identified with the diseases which we are targeting or may not meet the entry criteria for our studies. We also may encounter difficulties in identifying and enrolling subjects with a stage of disease appropriate for our planned clinical trials. We may not be able to initiate or continue clinical trials if we are unable to locate a

sufficient number of eligible subjects to participate in the clinical trials required by the FDA or other foreign regulatory agencies. In addition, the process of finding and diagnosing subjects may prove costly.

In January 2016, we initiated a Phase 1/1b clinical trial for CPI-444 in which we administer CPI-444 as a single agent and in combination with atezolizumab. In this ongoing trial, we plan to enroll patients with many different types of cancer, and it may be difficult to enroll such a diverse group of patients. In addition, we expect there will be ten different treatment cohorts in the clinical trial and it may not be possible to fully enroll all the cohorts or any expansions thereof. Furthermore, if patients are unwilling to participate in our studies for any reason, including the existence of competitive clinical trials for similar patient populations or the availability of approved therapies, the timeline for recruiting subjects, conducting studies and obtaining regulatory approval of our product candidates may be delayed. Our inability to enroll a sufficient number of subjects for any of our future clinical trials would result in significant delays or may require us to abandon one or more clinical trials altogether.

We believe we have appropriately accounted for the above factors in our trials when determining expected clinical trial timelines, but we cannot assure you that our assumptions are correct or that we will not experience delays in enrollment, which would result in the delay of completion of such trials beyond our expected timelines.

The occurrence of serious complications or side effects in connection with use of our product candidates, either in clinical trials or post-approval, could lead to discontinuation of our clinical development programs, refusal of regulatory authorities to approve our product candidates or, post-approval, revocation of marketing authorizations or refusal to approve new indications, which could severely harm our business, prospects, operating results and financial condition.

During the conduct of clinical trials, patients report changes in their health, including illnesses, injuries and discomforts, to their study doctor. Often, it is not possible to determine whether or not the product candidate being studied caused these conditions. For example, in clinical studies of CPI-444 performed by third parties prior to our licensing it from Vernalis, patients exhibited mild transient hypertension as well as minor gastrointestinal disorders due to gastric irritation.

Further, we expect that the dosing regimen and duration of treatment in any clinical trial will vary from those utilized in the studies previously performed by third parties. It is possible that as we test our product candidates in larger, longer and more extensive clinical programs with different dosing regimens, or as use of these product candidates becomes more widespread if they receive regulatory approval, illnesses, injuries, discomforts and other adverse events that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by subjects. For example, although no cardiac adverse events have been observed in the clinical trials for CPI-444 to date, CPI-444 is known to bind to the A1 adenosine receptor. This receptor is expressed in the heart, and although CPI-444 binds to the A1 receptor at a low affinity, it is possible that sufficient binding of the drug to the A1 receptor could occur, leading to adverse effects on the heart such as irregular heart rate or rapid heart rate.

Many times side effects are only detectable after investigational products are tested in large-scale, Phase 3 clinical trials or, in some cases, after they are made available to patients on a commercial scale after approval. To date, CPI-444 has only been studied in healthy volunteers and patients with ADHD, and it is possible that older patients with cancer may behave differently and experience more toxicity with CPI-444. Although not seen to date with CPI-444, other immune-oncology drugs have been found occasionally to induce immune related toxicities such as colitis, hepatitis, pneumonitis and various endocrine diseases. Such side effects could also be exacerbated when CPI-444 is administered in combination with atezolizumab. Results of our trials could reveal a high and unacceptable severity and prevalence of these or other side effects. In such an event, our trials could be suspended or terminated, and the FDA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of our product candidates for any or all targeted indications. Drug-related side

effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

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

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

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

We may not be successful in our efforts to identify or discover additional product candidates.

The success of our business depends primarily upon our ability to develop and commercialize CPI-444. Although CPI-444 is currently in clinical development, our research programs may fail to identify other potential product candidates or advance them into clinical development for a number of reasons. Our research methodology may be unsuccessful in identifying other potential product candidates or our other potential product candidates may be shown to have harmful side effects or may have other characteristics that may make the products unmarketable or unlikely to receive marketing approval. It may also take greater human and financial resources to identify additional therapeutic opportunities for our product candidates or to develop suitable potential product candidates through our research programs than we will possess, thereby limiting our ability to diversify and expand our product candidate portfolio.

In the future, we may conduct clinical trials for CPI-444 and other product candidates in sites outside the United States, and the FDA may not accept data from trials conducted in foreign locations.

We may in the future choose to conduct one or more of our clinical trials outside the United States. Although the FDA may accept data from clinical trials conducted outside the United States, acceptance of this data is subject to certain conditions imposed by the FDA. For example, the clinical trial must be well designed and conducted and performed by qualified investigators in accordance with ethical principles. The study population must also adequately represent the U.S. population, and the data must be applicable to the U.S. population and U.S. medical practice in ways that the FDA deems clinically meaningful. In general, the patient population for any clinical studies conducted outside of the United States must be representative of the population for whom we intend to label the product in the United States. In addition, while these clinical trials are subject to the applicable local laws, FDA acceptance of the data will be dependent upon its determination that the studies also complied with all applicable U.S. laws and regulations. There can be no assurance the FDA will accept data from trials conducted outside of the United States. If the FDA does not accept the data from our clinical trials for CPI-444 or any other product candidates, it would likely result in the need for additional trials, which would be costly and time-consuming and delay or permanently halt our development of CPI-444 or any other product candidates.

Risks Related to Our Reliance on Third Parties

We expect to rely on third parties to conduct our clinical trials. If these third parties do not meet our deadlines or otherwise conduct the trials as required, our clinical development programs could be delayed or unsuccessful and we may not be able to obtain regulatory approval for or commercialize our product candidates when expected, or at all.

We do not have the ability to conduct all aspects of our preclinical testing or clinical trials ourselves. As a result, we expect to be dependent on third parties to conduct our Phase 1/1b clinical trial for CPI-444 and any future clinical studies of CPI-444 and preclinical and clinical trials for our other and future product candidates. The timing of the initiation and completion of these trials will therefore be controlled by such third parties and may occur at times substantially different from our estimates. Specifically, we intend to use and rely on medical institutions, clinical investigators, CROs and consultants to conduct our trials in accordance with our clinical protocols and regulatory requirements. We expect such CROs, investigators and other third parties to play a significant role in the conduct of these trials and subsequent collection and analysis of data, and we will control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on the CROs and other third parties does not relieve us of our regulatory responsibilities. We and our CROs are required to comply with GCP requirements, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area (EEA) and comparable foreign regulatory authorities for all of our product candidates in clinical development. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs or trial sites fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable, and the FDA, EMA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. In addition, our clinical trials must be conducted with product produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

There is no guarantee that any such CROs, investigators or other third parties will devote adequate time and resources to such trials or perform as contractually required. If any of these third parties fail to meet expected deadlines, adhere to our clinical protocols or meet regulatory requirements, or otherwise performs in a substandard manner, our clinical trials may be extended, delayed or terminated.

If any of our clinical trial sites terminates for any reason, we may experience the loss of follow-up information on subjects enrolled in such clinical trials unless we are able to transfer those subjects to another qualified clinical trial site, which may be difficult or impossible.

In addition, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and may receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, or the FDA concludes that the financial relationship may have affected the interpretation of the study, the integrity of the data generated at the applicable clinical trial site may be questioned and the utility of the clinical trial itself may be jeopardized, which could result in the delay or rejection of any NDA or BLA we submit by the FDA. Any such delay or rejection could prevent us from commercializing CPI-444 or our other future product candidates.

We rely on third parties to conduct some or all aspects of our manufacturing, research and preclinical and clinical testing, and these third parties may not perform satisfactorily.

We do not expect to independently conduct all aspects of our manufacturing, research and preclinical and clinical testing. We currently rely, and expect to continue to rely, on third parties with respect to these items. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our studies in accordance with regulatory requirements or our stated study plans and protocols, we may not be able to complete, or may be delayed in completing, the preclinical and clinical studies required to support future IND submissions and approval of our product candidates. Furthermore, any of these third parties may terminate its engagement with us at any time. If we need to enter into alternative arrangements, it could delay our product development activities, and we may not be able to negotiate alternative arrangements on commercially reasonable terms, or at all.

We and our contract manufacturers are subject to significant regulation with respect to manufacturing our products and the contract manufacturers on which we rely may not continue to meet regulatory requirements.

We do not currently have nor do we plan to acquire the infrastructure or internal capability to manufacture our clinical drug supplies for use in the conduct of our trials, and we lack the resources and the capability to manufacture any of our product candidates on a clinical or commercial scale. We currently rely on several different manufacturers who supply different parts of the CPI-444 molecule and are in discussions with third-party manufacturers for our anti-CD73 antibody. These suppliers currently do not have the capacity for commercial scale manufacturing.

All entities involved in the preparation of therapeutics for clinical studies or commercial sale, including our existing contract manufacturers for our product candidates, are subject to extensive regulation. Components of a finished therapeutic product approved for commercial sale or used in late-stage clinical studies must be manufactured in accordance with cGMP requirements. These regulations govern manufacturing processes and procedures, including record keeping, and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Poor control of production processes can lead to the introduction of adventitious agents or other contaminants, or to inadvertent changes in the properties or stability of our product candidates that may not be detectable in final product testing. We or our contract manufacturers must supply all necessary documentation in support of an NDA or BLA on a timely basis and must adhere to the FDA's Good Laboratory Practice regulations and cGMP regulations enforced by the FDA through its facilities inspection program. Our facilities and quality systems and the facilities and quality systems of some or all of our third-party contractors must pass a pre-approval inspection for compliance with the applicable regulations as a condition of regulatory approval of our product candidates or any of our other potential products. In addition, the regulatory authorities may, at any time, audit or inspect our manufacturing facilities or those of our third-party contractors involved with the preparation of our product candidates or the associated quality systems for compliance with the regulations applicable to the activities being conducted. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with cGMPs.

The regulatory authorities also may, at any time following approval of a product for sale, audit the manufacturing facilities of our third-party contractors. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulations occurs independent of such an inspection or audit, we or the relevant regulatory authority may require remedial measures that may be costly and/or time-consuming for us or a third party to implement and that may include the temporary or permanent suspension of a clinical study or commercial sales or the temporary or permanent closure of a facility. Such violations could also result in civil and/or criminal penalties, and the FDA may impose regulatory sanctions including, among other

things, refusal to approve a pending application for a new drug product or biologic product, revocation of a pre-existing approval or closing one or more manufacturing facilities.

In addition, if supply from an approved manufacturer is interrupted, there could be a significant disruption in commercial supply. An alternative manufacturer would need to be qualified through an NDA supplement which could result in further delay. The regulatory agencies may also require additional studies if a new manufacturer is relied upon for commercial production. Changing manufacturers may involve substantial costs and is likely to result in a delay in our desired clinical and commercial timelines.

We, or our third-party manufacturers, may be unable to successfully scale-up manufacturing of our product candidates in sufficient quality and quantity, which would delay or prevent us from developing our product candidates and commercializing approved products, if any.

In order to conduct clinical trials of our product candidates, we will need to manufacture them in large quantities. We, or any manufacturing partners, may be unable to successfully increase the manufacturing capacity for any of our product candidates in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities. If we or any manufacturing partners are unable to successfully scale up the manufacture of our product candidates in sufficient quality and quantity, the development, testing and clinical trials of that product candidate may be delayed or become infeasible, and regulatory approval or commercial launch of any resulting product may be delayed or not obtained, which could significantly harm our business.

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 research and develop and to manufacture our product candidates, we must 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, consulting agreements or other similar agreements with our advisors, employees, third-party contractors 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, including our trade secrets. Despite the contractual provisions employed when working with third parties, 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 independent 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.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets, although our agreements may contain certain limited publication rights. For example, any academic institution that we may collaborate with in the future will likely expect to be granted rights to publish data arising out of such collaboration. In the future we may also conduct joint research and development programs that may require us to share trade secrets under the terms of our research and development or similar agreements. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets would impair our competitive position and have an adverse impact on our business.

Risks Related to Commercialization of Our Product Candidates

All of our product candidates are still in preclinical or early-stage clinical development. If we are unable to commercialize our product candidates or if we experience significant delays in obtaining regulatory approval for, or commercializing, any or all of our product candidates, our business will be materially and adversely affected.

All of our product candidates are still in preclinical and early-stage clinical development. In particular, none of our product candidates, other than CPI-444, has ever been tested in a human subject. Our ability to generate product revenue will depend heavily on our ability to successfully develop and commercialize these product candidates. We do not expect that such commercialization of any of our product candidates will occur for at least the next several years, if ever. Our ability to commercialize our product candidates effectively will depend on several factors, including the following:

- successful completion of preclinical studies and clinical trials, including the ability to demonstrate safety and efficacy of our product candidates;
- managing the complexity of our clinical trial designs;
- receipt of marketing approvals from the FDA and similar foreign regulatory authorities;
- establishing commercial manufacturing capabilities by making arrangements with third-party manufacturers;
- successfully launching commercial sales of any approved products, whether alone or in collaboration with others;
- acceptance of any approved products by patients, the medical community and third-party payors;
- establishing market share while competing with other therapies;
- a continued acceptable safety profile of any approved products;
- maintaining compliance with post-approval regulation and other requirements; and
- qualifying for, identifying, registering, maintaining, enforcing and defending intellectual property rights and claims covering our product candidates.

If we experience significant delays or an inability to commercialize our product candidates, our business, financial condition and results of operations will be materially adversely affected.

If we do not achieve our projected development goals in the time frames we announce and expect, the commercialization of our products may be delayed and, as a result, our stock price may decline.

We estimate the timing of the accomplishment of various scientific, clinical, regulatory and other product development goals, which we sometimes refer to as milestones. These milestones may include the commencement or completion of scientific studies and clinical trials and the submission of regulatory filings. From time to time, we may publicly announce the expected timing of some of these milestones. For example, throughout this prospectus, we state that we plan to complete IND-enabling studies for the development of our humanized monoclonal anti-CD73 antibody in 2017. All of these milestones will be based on a variety of assumptions, and the actual timing of these milestones can vary dramatically compared to our estimates, in some cases for reasons beyond our control. If we do not meet these milestones as publicly announced, the commercialization of our products may be delayed and, as a result, our stock price may decline.

Any approved products could be subject to restrictions or withdrawal from the market, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our product candidates, when and if any of them are approved.

Following potential approval of any our product candidates, the FDA may impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly and time consuming post-approval studies, post-market surveillance or clinical trials. Following approval, if any, of CPI-444 or any other product candidate, such candidate will also be subject to ongoing FDA requirements governing the labeling, packaging, storage, distribution, safety surveillance, advertising, promotion, recordkeeping and reporting of safety and other post-market information. If we or a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturing facility or us, including requesting recall or withdrawal of the product from the market or suspension of manufacturing.

If we or the manufacturing facilities for CPI-444 or any other product candidate that may receive regulatory approval, if any, fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue warning letters or untitled letters;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve pending applications or supplements or applications filed by us;
- suspend or impose restrictions on operations, including costly new manufacturing requirements; or
- seize or detain products, refuse to permit the import or export of product or request that we initiate a product recall.

The occurrence of any event or penalty described above may inhibit our ability to commercialize our product candidates and generate revenue.

The FDA has the authority to require a risk evaluation and mitigation strategy (REMS) as part of an NDA or after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug, such as limiting prescribing to certain physicians or medical centers that have undergone specialized training, limiting treatment to patients who meet certain safe-use criteria and requiring treated patients to enroll in a registry.

In addition, if CPI-444 or any of our other product candidates is approved, our product labeling, advertising and promotion will be subject to regulatory requirements and continuing regulatory review. The FDA strictly regulates the promotional claims that may be made about prescription products. In particular, a product may not be promoted for uses that are not approved by the FDA as reflected in the product's approved labeling. If we receive marketing approval for a product candidate, physicians may nevertheless prescribe it to their patients in a manner that is inconsistent with the approved label. If we are found to have promoted such off-label uses, we may become subject to significant liability. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant sanctions. The federal government has levied large civil and criminal fines against companies for alleged improper promotion and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed.

Even if we receive regulatory approval we still may not be able to successfully commercialize CPI-444 or any other product candidate, and the revenue that we generate from sales, if any, could be limited.

Even if CPI-444 or any of our other product candidates receive regulatory approval, they may not gain market acceptance among physicians, patients, healthcare payors or the medical community. The degree of market acceptance of our product candidates will depend on a number of factors, including:

- demonstration of clinical efficacy and safety compared to other more-established products;
- the indications for which our product candidates are approved;
- the limitation of our targeted patient population and other limitations or warnings contained in any FDA-approved labeling;
- acceptance of a new formulation by healthcare providers and their patients;
- our ability to obtain and maintain sufficient third-party coverage and reimbursement from government healthcare programs, including Medicare and Medicaid, private health insurers and other third-party payors;
- the willingness of patients to pay out-of-pocket in the absence of third-party coverage and reimbursement;
- the prevalence and severity of any adverse effects;
- pricing and cost-effectiveness;
- the timing of market introduction of our product candidates as well as competitive drugs;
- the effectiveness of our or any of our potential future collaborators' sales and marketing strategies; and
- unfavorable publicity relating to the product candidate.

If any product candidate is approved but does not achieve an adequate level of acceptance by physicians, hospitals, healthcare payors or patients, we may not generate sufficient revenue from that product candidate and may not become or remain profitable. Our efforts to educate the medical community and third-party payors regarding the benefits of CPI-444 or any of our other product candidates may require significant resources and may never be successful.

Failure to obtain or maintain adequate coverage and reimbursement for our product candidates, if approved, could limit our ability to market those products and decrease our ability to generate revenue.

Successful commercial sales of any approved products will depend on the availability of adequate coverage and reimbursement from government health administration authorities, private health insurers and other third-party payors. Each third-party payor separately decides which products it will cover and establishes the reimbursement level, and there is no guarantee that any of our product candidates that may be approved for marketing by regulatory authorities will receive adequate coverage or reimbursement levels. Obtaining and maintaining coverage approval for a product candidate is time-consuming, costly and may be difficult. We may be required to conduct expensive pharmacoeconomic studies to justify coverage and reimbursement or the level of coverage and reimbursement relative to other therapies. If coverage and adequate reimbursement are not available or limited, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for drugs and biologics. Even if we obtain coverage for a given product, the resulting reimbursement rates may be inadequate and may affect the demand for, or the price of, any product candidate for which we obtain marketing approval.

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

In the United States and some foreign jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes regarding the healthcare system, including cost-containment measures that may reduce or limit coverage and reimbursement for newly approved drugs and biologics and affect our ability to profitably sell any product candidates for which we obtain marketing approval.

For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively referred to as the Affordable Care Act, was enacted with a goal of reducing the cost of healthcare and substantially changing the way healthcare is financed by both governmental and private insurers. The Affordable Care Act, among other things, subjected biological products to potential competition by lower-cost biosimilars; addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected; increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program; extended the rebate program to individuals enrolled in Medicaid managed care organizations; established annual fees and taxes on manufacturers of certain prescription drugs; created a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; and established a new Patient-Centered Outcomes Research Institute to oversee, identify priorities and conduct comparative clinical effectiveness research, along with funding for such research.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. These new laws, among other things, included aggregate reductions of Medicare payments to providers of up to 2% per fiscal year that will remain in effect through 2025 unless additional Congressional action is taken and additional specific reductions in Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers.

We expect that the Affordable Care Act, these new laws and other healthcare reform measures that may be adopted in the future may result in additional reductions in Medicare and other healthcare funding, more rigorous coverage criteria, new payment methodologies and additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or 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 product candidates, if approved.

Any product candidates for which we intend to seek approval as biologic products may face competition sooner than anticipated.

The Affordable Care Act includes a subtitle called the Biologics Price Competition and Innovation Act of 2009 (BPCIA), which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until twelve years from the date on which the reference product was first licensed. During this twelve-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of its product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact,

implementation and meaning are subject to uncertainty. While the processes to implement the BPCIA have not yet been fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for our biological products.

Though CPI-444 is a small molecule and will not be regulated as a biological product, we intend to develop biological products in the future. We believe that any of our future product candidates approved as a biological product under a BLA should qualify for the twelve-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to Congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. Moreover, the extent to which a biosimilar, once approved, could be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products will depend on a number of marketplace and regulatory factors that are still developing.

We may fail to obtain orphan drug designations from the FDA for our product candidates, and even if we obtain such designations, we may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.

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

While we have not obtained nor have we sought to obtain orphan designation for any product candidate, we believe many of the potential indications of our product candidates, if approved, could qualify for orphan drug designation. For instance, if CPI-444 is approved for the treatment of certain solid tumors with small patient populations, such as melanoma, renal or triple-negative breast cancer, it is possible that it could qualify for orphan drug designation with respect to such indications. As a result, we may seek to obtain orphan drug designation for our product candidates for any qualifying indications they may be approved for in the future. Even if we obtain such designations, we may not be the first to obtain marketing approval of our product candidate for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products. In addition, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan-designated indication or may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties can be approved for the same condition. Even after an orphan product is approved, the FDA can subsequently approve the same drug with the same active moiety for the same condition if the FDA concludes that the later drug is safer, more effective or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug, nor gives the drug any advantage in the regulatory review or approval process. In addition, while we may seek orphan drug designation for our product candidates, we may never receive such designations.

We may expend our limited resources to pursue a particular product candidate and fail to capitalize on product candidates that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we focus on specific product candidates, including CPI-444. As a result, we may forgo or delay pursuit of opportunities with other product candidates 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 and product candidates for specific indications may not yield any commercially viable product candidates. 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 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.

We may not be successful in establishing and maintaining development or other strategic collaborations, which could adversely affect our ability to develop and commercialize product candidates.

In connection with our Phase 1/1b clinical trial for CPI-444, we entered into a clinical trial collaboration agreement with Genentech in October 2015. Pursuant to the agreement, Genentech will provide us with access to, and supplies of, its investigational cancer immunotherapy, atezolizumab (MPDL3280A), to be used in combination with CPI-444 in the clinical trial. The collaboration operates under a joint development committee with equal representation from both companies. However, we and Genentech each have the right to terminate the agreement due to material breach by either party for safety considerations, if directed by a regulatory authority or if development of CPI-444 or atezolizumab is discontinued. If we fail to maintain our strategic collaboration with Genentech (1) the development of CPI-444 in combination with atezolizumab may be terminated or delayed; (2) our cash expenditures related to development of CPI-444 could increase significantly, and we may need to seek additional financing; (3) we may be required to hire additional employees or otherwise develop expertise for which we have not budgeted; (4) we will bear all of the risk related to the development of CPI-444 as a combination therapy; and (5) we will need to seek collaborations with other companies that have anti-PD-1 or anti-PDL-1 antibodies, which will significantly delay our development program.

We may form strategic alliances and collaborative partnerships in the future, and we may not realize the benefits of such alliances.

In addition to our collaboration agreement with Genentech, we may form additional strategic alliances, create joint ventures or collaborations or enter into licensing arrangements with third parties that we believe will complement or augment our existing business, including for the continued development or commercialization of our product candidates. These relationships may result in or include non-recurring and other charges, increased near- and long-term expenditures, the issuance of securities that dilute our existing stockholders or disruptions to 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 third parties may view the risk of failure in future clinical trials as too significant or the commercial opportunity for our product candidates as too limited. We cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction.

Even if we are successful in our efforts to establish strategic alliances or collaborative partnerships, the terms that we agree upon may not be favorable to us, and we may not be able to maintain such strategic alliances or collaborative partnerships if, for example, development or approval of a product candidate is delayed, the safety of a product candidate is questioned or sales of an approved product candidate are unsatisfactory. In addition, any potential future strategic alliances or collaborative

partnerships may be terminable by our strategic partners, and we may not be able to adequately protect our rights under these agreements. Furthermore, strategic partners may negotiate for certain rights to control decisions regarding the development and commercialization of our product candidates, if approved, and may not conduct those activities in the same manner as we do. Any termination of strategic alliances or collaborative partnerships we enter into in the future, or any delay in entering into collaborative partnership agreements related to our product candidates, could delay the development and commercialization of our product candidates and reduce their competitiveness if they reach the market, which could have a material adverse effect on our business, financial condition and results of operations.

We face competition from entities that have developed or may develop product candidates for cancer, including companies developing novel treatments and technology platforms. If these companies develop technologies or product candidates more rapidly than we do or their technologies are more effective, our ability to develop and successfully commercialize product candidates may be adversely affected.

Our competitors have developed, are developing or will develop product candidates and processes competitive with our product candidates. Competitive therapeutic treatments include those that have already been approved and accepted by the medical community and any new treatments that enter the market. We believe that a significant number of products are currently under development, and may become commercially available in the future, for the treatment of conditions for which we may attempt to develop product candidates. In particular, there is intense and rapidly evolving competition in the immunoregulatory therapeutics field. Our competitors include larger and better funded pharmaceutical, biopharmaceutical, biotechnological and therapeutics companies. Moreover, we also compete with universities and other research institutions who may be active in oncology research and could be in direct competition with us. We also compete with these organizations to recruit management, scientists and clinical development personnel, which could negatively affect our level of expertise and our ability to execute our business plan. We will also face competition in establishing clinical trial sites, registering subjects for clinical trials and in identifying and in-licensing new product candidates. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

All of our product candidates, if approved, will compete with a range of therapeutic treatments that are either in development or currently marketed. We are aware of companies that have advanced adenosine A2A receptor antagonists into early- or late-stage clinical development for non-oncology indications, primarily Parkinson's disease. These companies include Merck & Co., Inc. and Biotie Therapies Corp. In addition, Kyowa Hakko Kirin Pharma, Inc. has approval in Japan for an adenosine A2A receptor antagonist for use in Parkinson's disease and is currently conducting a Phase 3 study in the United States for Parkinson's disease. Within oncology, Palobiofarma SL has submitted an IND to begin a Phase 1 dose finding clinical trial with an adenosine A2A antagonist in lung cancer patients. Novartis has announced an exclusive licensing agreement with Palobiofarma. AstraZeneca plc has recently licensed a preclinical A2A antagonist for use in cancer therapy. In addition, Redoxtherapies, Inc. is developing an A2A receptor antagonist for cancer. More generally, in the field of immuno-oncology, there are large pharmaceutical companies with approved products or products in late-stage development that target other immune checkpoints, including PD-1, PDL-1 or CTLA-4. These companies include Bristol-Myers Squibb (nivolumab, ipilimumab), Merck (pembrolizumab), Genentech (atezolizumab) and AstraZeneca (tremelimumab). Also, AstraZeneca and MedImmune LLC have recently announced the initiation of a Phase 1 study with an anti-CD73 antibody. Finally, Janssen Pharmaceuticals, Inc. and AbbVie Inc. are co-marketing Imbruvica (ibrutinib), which is a small molecule inhibitor of the kinase BTK that has also been reported to inhibit ITK.

Many of our competitors have significantly greater financial, technical, manufacturing, marketing, sales and supply resources or experience than we do. If we successfully obtain approval for any product candidate, we will face competition based on many different factors, including the safety and effectiveness of our products, the ease with which our products can be administered and the extent to which patients accept relatively new routes of administration, the timing and scope of regulatory approvals for these products, the availability and cost of manufacturing, marketing and sales capabilities, price, reimbursement coverage and patent position. Competing products could present superior treatment alternatives, including by being more effective, safer, less expensive or marketed and sold more effectively than any products we may develop. Competitive products may make any products we develop obsolete or noncompetitive before we recover the expense of developing and commercializing our product candidates.

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

Cancer therapies are sometimes characterized as first line, second line or third line, and the FDA often approves new therapies initially only for third line use. When cancer is detected early enough, first line therapy is sometimes adequate to cure the cancer or prolong life without a cure. Whenever first line therapy, usually chemotherapy, hormone therapy, surgery or a combination of these, proves unsuccessful, second line therapy may be administered. Second line therapies often consist of more chemotherapy, radiation, antibody drugs, tumor targeted small molecules or a combination of these. Third line therapies can include bone marrow transplantation, antibody and small molecule targeted therapies, more invasive forms of surgery and new technologies. In markets with approved therapies, we expect to initially seek approval of our product candidates as a later stage therapy for patients who have failed other approved treatments. Subsequently, for those drugs that prove to be sufficiently beneficial, if any, we would expect to seek approval as a second line therapy and potentially as a first line therapy, but there is no guarantee that our product candidates, even if approved, would be approved for second line or first line therapy. In addition, we may have to conduct additional clinical trials prior to gaining approval for second line or first line therapy.

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

We have no sales, marketing or distribution capabilities, and we may have to invest significant resources to develop these capabilities.

We have no internal sales, marketing or distribution capabilities. If CPI-444 or any of our other product candidates ultimately receives regulatory approval, we may not be able to effectively market and distribute the product candidate. We may have to seek collaborators or invest significant amounts of financial and management resources to develop internal sales, distribution and marketing capabilities, some of which will be committed prior to any confirmation that CPI-444 or any of our other product candidates will be approved, if at all. We may not be able to enter into collaborations or hire consultants or external service providers to assist us in sales, marketing and distribution functions

on acceptable financial terms or at all. Even if we determine to perform sales, marketing and distribution functions ourselves, we could face a number of additional related risks, including:

- we may not be able to attract and build an effective marketing department or sales force;
- the cost of establishing a marketing department or sales force may exceed our available financial resources and the revenue generated by CPI-444 or any other product candidates that we may develop, in-license or acquire; and
- our direct sales and marketing efforts may not be successful.

Our future growth may depend, in part, on our ability to operate in foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties.

Our future growth may depend, in part, on our ability to develop and commercialize our product candidates in foreign markets. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from applicable regulatory authorities in foreign markets, and we may never receive such regulatory approvals for any of our product candidates. To obtain separate regulatory approval in many other countries we must comply with numerous and varying regulatory requirements regarding safety and efficacy and governing, among other things, clinical trials, commercial sales, pricing and distribution of our product candidates. If we obtain regulatory approval of our product candidates and ultimately commercialize our product candidates in foreign markets, we would be subject to additional risks and uncertainties, including the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements and the reduced protection of intellectual property rights in some foreign countries.

Governments may impose price controls, which may adversely affect our future profitability.

We intend to seek approval to market our product candidates in both the United States and in foreign jurisdictions. In some foreign countries, particularly in the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product candidate. To obtain reimbursement or pricing approval in some countries, we may be required to conduct clinical trials to compare the cost-effectiveness of our product candidates to other available therapies, which is time-consuming and costly. If reimbursement of our future products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, we may be unable to achieve or sustain profitability.

Risks Related to Our Business Operations

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

Our quarterly and annual operating results may fluctuate significantly, which makes it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including, but not limited to:

- the timing and cost of, and level of investment in, research, development and commercialization activities relating to our product candidates, which may change from time to time;
- coverage and reimbursement policies with respect to our product candidates, if approved, and potential future drugs that compete with our product candidates;
- the cost of manufacturing our product candidates, which may vary depending on the quantity of production and the terms of our agreements with manufacturers;

- expenditures that we may incur to acquire, develop or commercialize additional product candidates and technologies;
- the level of demand for any approved products, which may vary significantly;
- future accounting pronouncements or changes in our accounting policies; and
- the timing and success or failure of clinical trials for our product candidates or competing product candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated revenue or earnings guidance we may provide.

We are dependent on the services of our President and Chief Executive Officer, Richard A. Miller, M.D., and other key executives, and if we are not able to retain these members of our management or recruit additional management, clinical and scientific personnel, our business will suffer.

We are dependent on the principal members of our management and scientific staff. The loss of service of any of our management could harm our business. In addition, we are dependent on our continued ability to attract, retain and motivate highly qualified management, clinical and scientific personnel. If we are not able to retain our management, particularly our President and Chief Executive Officer, Dr. Miller, and to attract, on acceptable terms, additional qualified personnel necessary for the continued development of our business, we may not be able to sustain our operations or grow. Although we have executed employment agreements with each member of our current executive management team, including Dr. Miller, these agreements are terminable at will with or without notice and, therefore, we may not be able to retain their services as expected.

We will need to expand and effectively manage our managerial, operational, financial and other resources in order to successfully pursue our clinical development and commercialization efforts. We may not be able to attract or retain qualified management and scientific and clinical personnel in the future due to the intense competition for qualified personnel among pharmaceutical, biotechnology and other businesses, particularly in the San Francisco Bay Area. Our industry has experienced a high rate of turnover of management personnel in recent years. If we are not able to attract, integrate, retain and motivate necessary personnel to accomplish our business objectives, we may experience constraints that will significantly impede the achievement of our development objectives, our ability to raise additional capital and our ability to implement our business strategy.

In addition, we do not currently maintain "key person" life insurance on the lives of our executives or any of our employees. This lack of insurance means that we may not have adequate compensation for the loss of the services of these individuals.

We may encounter difficulties in managing our growth and expanding our operations successfully.

We will need to grow our organization substantially to continue development and pursue the potential commercialization of CPI-444 and our other product candidates, as well as function as a

public company. As of December 31, 2015, we had 33 full-time employees. As we seek to advance CPI-444 and other product candidates, we will need to expand our financial, development, regulatory, manufacturing, marketing and sales capabilities or contract with third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with various strategic partners, suppliers and other third parties. Our future financial performance and our ability to commercialize our product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively.

We are subject to various federal and state healthcare laws and regulations, and our failure to comply with these laws and regulations could harm our results of operations and financial conditions.

Although we do not currently have any products on the market, if we obtain FDA approval for any of our product candidates and begin commercializing those products in the United States, our operations may be directly, or indirectly through our customers and third-party payors, subject to various U.S. federal and state healthcare laws and regulations. These laws will affect our operations, sales and marketing practices, and our relationships with physicians and other customers and third-party payors. Such laws include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the federal Anti-Kickback Statute or specific intent to violate it to have committed a violation; in addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act);
- the federal False Claims Act, which imposes criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), which imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, which also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the federal Physician Payment Sunshine Act, which requires manufacturers of drugs, devices, biologics 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 government information related to payments or other "transfers of value" made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and requires applicable manufacturers and group purchasing organizations to report annually to the government ownership and investment interests held by the physicians described above and their immediate family members and payments or other "transfers of value" to such

physician owners (manufacturers are required to submit reports to the government by the 90th day of each calendar year); and

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

Ensuring that our internal operations and business arrangements with third-parties comply with applicable healthcare laws and regulations could involve substantial costs. If our operations are found to be in violation of such laws or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, exclusion from U.S. government funded healthcare programs, such as Medicare and Medicaid, disgorgement, individual imprisonment, contractual damages, reputational harm, diminished profits and the curtailment or restructuring of our operations.

We and any of our potential future collaborators, third-party manufacturers and suppliers will use biological materials and may use hazardous materials, and any claims relating to improper handling, storage or disposal of these materials could be time consuming or costly.

We and any of our potential future collaborators, third-party manufacturers or suppliers will use biological materials and may use hazardous materials, including chemicals and biological agents and compounds that could be dangerous to human health and safety of the environment. Our operations and the operations of our third-party manufacturers and suppliers also produce hazardous waste products. Federal, state and local laws and regulations govern the use, generation, manufacture, storage, handling and disposal of these materials and wastes. Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental laws and regulations may impair our product development efforts. In addition, we cannot eliminate the risk of accidental injury or contamination from these materials or wastes. We do not carry specific biological or hazardous waste insurance coverage, and our property, casualty and general liability insurance policies specifically exclude coverage for damages and fines arising from biological or hazardous waste exposure or contamination. In the event of contamination or injury, we could be held liable for damages or be penalized with fines in an amount exceeding our resources, and our clinical trials or regulatory approvals could be suspended.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of CPI-444 or our other product candidates.

We face an inherent risk of product liability as a result of the clinical testing of CPI-444 and our other product candidates and will face an even greater risk if we commercialize our product candidates. For example, we may be sued if CPI-444 or our other product candidates allegedly cause injury or are found to be otherwise unsuitable during product 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 candidate, negligence, strict liability and 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 or cease the commercialization of our product candidates. Even a successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for CPI-444 or our other product candidates;
- injury to our reputation;
- withdrawal of clinical trial participants;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- the inability to commercialize CPI-444 or our other product candidates; and
- a decline in our stock price.

We do not currently maintain product liability insurance. In the future, we plan to obtain product liability insurance coverage in an amount and on terms and conditions that are customary for similarly situated companies and that are satisfactory to our board of directors. Our inability to obtain and retain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of CPI-444 or our other product candidates. Although we plan to maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies will also 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.

We and any of our potential future collaborators will be required to report to regulatory authorities if any of our approved products cause or contribute to adverse medical events, and any failure to do so would result in sanctions that would materially harm our business.

If we and any of our potential future collaborators are successful in commercializing our products, the FDA and foreign regulatory authorities would require that we and any of our potential future collaborators report certain information about adverse medical events if those products may have caused or contributed to those adverse events. The timing of our obligation to report would be triggered by the date we become aware of the adverse event as well as the nature of the event. We and any of our potential future collaborators or CROs may fail to report adverse events within the prescribed timeframe. If we or any of our potential future collaborators or CROs fail to comply with such reporting obligations, the FDA or a foreign regulatory authority could take action, including criminal prosecution, the imposition of civil monetary penalties, seizure of our products or delay in approval or clearance of future products.

Our internal computer systems, or those of any of our potential future collaborators, CROs or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

Despite the implementation of security measures, our internal computer systems and those of our current and any future CROs and other contractors, consultants and collaborators are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. 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, whether due to a loss of our trade secrets or other similar disruptions. 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. We also rely on third parties to manufacture our product candidates, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development and commercialization of our product candidates could be delayed.

Our information technology systems could face serious disruptions that could adversely affect our business.

Our information technology and other internal infrastructure systems, including corporate firewalls, servers, leased lines and connection to the Internet, face the risk of systemic failure that could disrupt our operations. A significant disruption in the availability of our information technology and other internal infrastructure systems could cause interruptions and delays in our research and development work.

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

Our operations could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or manmade disasters or business interruptions, for which we are predominantly self-insured. We rely on third-party manufacturers to produce CPI-444 and our other product candidates. Our ability to obtain clinical supplies of CPI-444 or our other product candidates could be disrupted if the operations of these suppliers were affected by a man-made or natural disaster or other business interruption. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses.

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

We are exposed to the risk that our employees, independent contractors, principal investigators, CROs, consultants and vendors may engage in misconduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct involving the improper use or misrepresentation of information obtained in the course of clinical trials, the creation of fraudulent data in our preclinical studies or clinical trials or illegal misappropriation of drug product, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity 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. In addition, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. 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 fines and other sanctions.

Risks Related to Our Intellectual Property

Our rights to develop and commercialize our product candidates are subject in part to the terms and conditions of licenses granted to us by other companies. The patent protection, prosecution and enforcement for some of our product candidates may be dependent on third parties.

We currently are heavily reliant upon licenses of certain patent rights and proprietary technology from third parties that is important or necessary to the development of our technology and products, including technology related to our product candidates. For example, we rely on our license agreement with Vernalis for all of our rights with respect to the intellectual property covering our CPI-444 product candidate and certain development candidates under our A2B receptor antagonist program. Further, we rely on our license agreement with The Scripps Research Institute for certain materials and rights related to our humanized monoclonal anti-CD73 antibody program. These and other licenses we may enter into in the future may not provide adequate rights to use such intellectual property and technology in all relevant fields of use or in all territories in which we may wish to develop or commercialize our technology and products in the future. As a result, we may not be able to develop and commercialize our technology and products in fields of use and territories for which we are not granted rights pursuant to such licenses.

Licenses to additional third-party technology that may be required for our development programs may not be available in the future or may not be available on commercially reasonable terms, which could have a material adverse effect on our business and financial condition.

In some circumstances, we may not have the right to control the preparation, filing, prosecution and enforcement of patent applications, or to maintain the patents, covering technology that we license from third parties. In addition, some of our agreements with our licensors require us to obtain consent from the licensor before we can enforce patent rights, and our licensor may withhold such consent or may not provide it on a timely basis. Therefore, we cannot be certain that our licensors or collaborators will prosecute, maintain, enforce and defend such intellectual property rights in a manner consistent with the best interests of our business, including by taking reasonable measures to protect the confidentiality of know-how and trade secrets, or by paying all applicable prosecution and maintenance fees related to intellectual property registrations for any of our product candidates. We also cannot be certain that our licensors have drafted or prosecuted the patents and patent applications licensed to us in compliance with applicable laws and regulations, which may affect the validity and enforceability of such patents or any patents that may issue from such applications. If they fail to do so, this could cause us to lose rights in any applicable intellectual property that we in-license, and as a result our ability to develop and commercialize products or product candidates may be adversely affected and we may be unable to prevent competitors from making, using and selling competing products.

Our success depends on our ability to protect our intellectual property and our proprietary technologies.

Our commercial success depends in part on our ability to obtain and maintain patent protection and trade secret protection for our product candidates, proprietary technologies and their uses as well as our ability to operate without infringing upon the proprietary rights of others. We generally seek to protect our proprietary position by filing patent applications in the United States and abroad related to our product candidates, proprietary technologies and their uses that are important to our business. There can be no assurance that our patent applications or those of our licensors will result in additional patents being issued or that issued patents will afford sufficient protection against competitors with similar technology, nor can there be any assurance that the patents issued will not be infringed, designed around or invalidated by third parties. Even issued patents may later be found invalid or unenforceable or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. The degree of future protection for our proprietary rights is

uncertain. Only limited protection may be available and may not adequately protect our rights or permit us to gain or keep any competitive advantage. This failure to properly protect the intellectual property rights relating to our product candidates could have a material adverse effect on our financial condition and results of operations.

While we have rights to an issued composition-of-matter patent in the United States and corresponding issued patents in certain foreign territories covering CPI-444, we cannot be certain that the claims in any of our patent applications covering composition-of-matter of our other product candidates will be considered patentable by the United States Patent and Trademark Office (USPTO), courts in the United States or by the patent offices and courts in foreign countries, nor can we be certain that the claims in our issued composition-of-matter patents will not be found invalid or unenforceable if challenged.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we or any of our potential future collaborators will be successful in protecting our product candidates by obtaining and defending patents. These risks and uncertainties include the following:

- the USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process, the noncompliance with which can result in abandonment or lapse of a patent or patent application, and partial or complete loss of patent rights in the relevant jurisdiction;
- patent applications may not result in any patents being issued;
- patents that may be issued or in-licensed may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage;
- our competitors, many of whom have substantially greater resources than we do and many of whom have made significant investments in competing technologies, may seek or may have already obtained patents that will limit, interfere with or eliminate our ability to make, use and sell our potential product candidates;
- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the United States for disease treatments that prove successful, as a matter of public policy regarding worldwide health concerns; and
- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing product candidates.

The patent prosecution process is also expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Although we enter into non-disclosure and confidentiality agreements with parties who have access to patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators, CROs, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach such agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents, if issued, or the patent rights that we license from others, may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, which could limit our

ability to stop others from using or commercializing similar or identical products, or limit the duration of the patent protection of our products and product candidates. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our intellectual property may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition, we rely on the protection of our trade secrets, including unpatented know-how, technology and other proprietary information to maintain our competitive position. Although we have taken steps to protect our trade secrets and unpatented know-how, including entering into confidentiality agreements with third parties, and confidential information and inventions agreements with employees, consultants and advisors. Despite these efforts, we cannot provide any assurances that all such agreements have been duly executed, and any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. Moreover, third parties may still obtain this information or may come upon this or similar information independently, and we would have no right to prevent them from using that technology or information to compete with us. If any of these events occurs or if we otherwise lose protection for our trade secrets, the value of this information may be greatly reduced and our competitive position would be harmed. If we do not apply for patent protection prior to such publication or if we cannot otherwise maintain the confidentiality of our proprietary technology and other confidential information, then our ability to obtain patent protection or to protect our trade secret information may be jeopardized.

Our commercial success depends significantly on our ability to operate without infringing the patents and other proprietary rights of third parties. Claims by third parties that we infringe their proprietary rights may result in liability for damages or prevent or delay our developmental and commercialization efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. Other entities may have or obtain patents or proprietary rights that could limit our ability to make, use, sell, offer for sale or import our product candidates and future approved products or impair our competitive position. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions, reexaminations, inter partes review (IPR) proceedings and post-grant review (PGR) proceedings before the USPTO and/or corresponding foreign patent offices. Numerous third-party U.S. and foreign issued patents and pending patent applications exist in the fields in which we are developing product candidates. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. For example, we are aware of an issued patent in Australia that may be relevant to commercialization of CPI-444 in that country. That Australian patent is expected to expire in 2022. Our ability to commercialize CPI-444 in Australia prior to 2022 could be adversely affected if we do not obtain a license under such patent. We are also aware of a corresponding patent application pending in the United States which is subject to a non-final rejection from the USPTO. Claims similar to those currently pending in the U.S. application were not accepted and did not issue in corresponding applications in Europe and other major jurisdictions. If a patent issues from such U.S. patent application with claims similar to those that are currently pending, our ability to commercialize CPI-444 in the United States may be adversely affected if we do not obtain a license under such

patent. As the biotechnology industry expands and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties. Because patent applications are maintained as confidential for a certain period of time, until the relevant application is published we may be unaware of third-party patents that may be infringed by commercialization of CPI-444 or our other product candidates, and cannot be certain that we were the first to file a patent application related to a product candidate or technology. Moreover, because patent applications can take many years to issue, there may be currently-pending patent applications that may later result in issued patents that our product candidates may infringe. In addition, identification of third-party patent rights that may be relevant to our technology is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. Any claims of patent infringement asserted by third parties would be time consuming and could:

- result in costly litigation;
- divert the time and attention of our technical personnel and management;
- cause development delays;
- prevent us from commercializing CPI-444 or our other product candidates until the asserted patent expires or is held finally invalid or not infringed in a court of law;
- require us to develop non-infringing technology, which may not be possible on a cost-effective basis; or
- require us to enter into royalty or licensing agreements, which may not be available on commercially reasonable terms, or at all.

Although no third party has asserted a claim of patent infringement against us as of the date of this prospectus, others may hold proprietary rights that could prevent CPI-444 or our other product candidates from being marketed. Any patent-related legal action against us claiming damages and seeking to enjoin commercial activities relating to our product candidates or processes could subject us to potential liability for damages, including treble damages if we were determined to willfully infringe, and require us to obtain a license to manufacture or market CPI-444 or our other 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. We cannot predict whether we would prevail in any such actions or that any license required under any of these patents would be made available on commercially acceptable terms, if at all. Moreover, even if we or our future strategic partners were able to obtain a license, the rights may be nonexclusive, which could result in our competitors gaining access to the same intellectual property. In addition, we cannot be certain that we could redesign our product candidates or processes to avoid infringement, if necessary. Accordingly, an adverse determination in a judicial or administrative proceeding, or the failure to obtain necessary licenses, could prevent us from developing and commercializing CPI-444 or our other product candidates, which could harm our business, financial condition and operating results. In addition, intellectual property litigation, regardless of its outcome, may cause negative publicity and could prohibit us from marketing or otherwise commercializing our product candidates and technology.

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. Further, our issued patents could be found invalid or unenforceable if challenged in court.

Competitors may infringe our intellectual property rights or those of our licensors. To prevent infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in a patent infringement proceeding, a court may decide that a patent we own or in-license is not valid, is unenforceable and/or is not infringed. If we or any of our potential future collaborators were to initiate legal proceedings against a third party to enforce a

patent directed at one of our product candidates, the defendant could counterclaim that our patent is invalid and/or unenforceable in whole or in part. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge include an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could include an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution. Third parties may also raise similar claims before the USPTO, even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable, and prior art could render our patents or those of our licensors invalid. 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 patent protection on such product candidate. Such a loss of patent protection would have a material adverse impact on our business.

Interference proceedings provoked by third parties or brought by us or declared 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 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. Our defense of litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties or enter into development or manufacturing partnerships that would help us bring our product candidates to market.

Even if resolved in our favor, litigation or other legal proceedings relating to our intellectual property rights may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and 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. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace.

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

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

On September 16, 2011, the Leahy-Smith America Invents Act (Leahy-Smith Act), was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. In particular, under the Leahy-Smith Act, the United States transitioned in March 2013 to a "first to file" system in which the first inventor to file a patent application will be entitled to the patent. Third parties are allowed to submit prior art before the issuance of a patent by the USPTO,

and may become involved in post-grant proceedings including opposition, derivation, reexamination, inter-partes review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope or enforceability of, or invalidate, our patent rights, which could adversely affect our competitive position.

We may not be successful in obtaining or maintaining necessary rights to our product candidates through acquisitions and in-licenses.

We currently have rights to the intellectual property, through licenses from third parties and under patents that we own, to develop our product candidates. Because our programs may require the use of proprietary rights held by third parties, the growth of our business will depend in part on our ability to acquire, in-license or use these proprietary rights. For example, our product candidates may require specific formulations to work effectively and efficiently and the rights to these formulations 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 as necessary for our product candidates. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment.

We have collaborated with U.S. academic institutions and may in the future collaborate with U.S. and foreign academic institutions to accelerate our preclinical research or development under written agreements with these institutions. These institutions may provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program.

If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of that program and our business and financial condition could suffer.

We may fail to comply with any of our obligations under existing agreements pursuant to which we license or have otherwise acquired intellectual property rights or technology, which could result in the loss of rights or technology that are material to our business.

Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues. We are party to various agreements that we depend on for rights to use various technologies that are material to our business, including intellectual property rights covering CPI-444 and methods relating to its use and manufacture. In each of these cases, our rights to use the licensed intellectual property are subject to the continuation of and our compliance with the terms of these agreements. Disputes may arise regarding our rights to intellectual property licensed to us from a third party, including but not limited to:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights;

- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the ownership of inventions and know-how resulting from the creation or use of intellectual property by us, alone or with our licensors and collaborators;
- the scope and duration of our payment obligations;
- our rights upon termination of such agreement; and
- the scope and duration of exclusivity obligations of each party to the agreement.

If disputes over intellectual property and other rights that we have licensed or acquired from third parties 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. If we fail to comply with our obligations under current or future licensing agreements, these agreements may be terminated or the scope of our rights under them may be reduced and we might be unable to develop, manufacture or market any product that is licensed under these agreements.

We may be subject to claims that we have wrongfully hired an employee from a competitor or that we or our employees have wrongfully used or disclosed alleged confidential information or trade secrets of their former employers.

As is common in the pharmaceutical industry, in addition to our employees, we engage the services of consultants to assist us in the development of our product candidates. Many of these consultants, and many of our employees, were previously employed at, or may have previously provided or may be currently providing consulting services to, other pharmaceutical companies including our competitors or potential competitors. We may become subject to claims that we, our employees or a consultant inadvertently or otherwise used or disclosed trade secrets or other information proprietary to their former employers or their former or current clients. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, which could adversely affect our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to our management team.

We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

We may also be subject to claims that former employees, collaborators or other third parties have an ownership interest in our patents or other intellectual property. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and distraction to management and other employees.

If we do not obtain patent term extension for our product candidates, our business may be materially harmed.

Depending upon the timing, duration and specifics of FDA marketing approval of CPI-444 or other product candidates, one or more of our U.S. patents may be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984 (Hatch-Waxman Amendments). The Hatch-Waxman Amendments permit 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, we may not be granted an extension because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent

protection afforded could be less than we request. If we are unable to obtain patent term extension or restoration or the term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced, possibly materially.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our financial condition or results of operations.

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

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 a high degree of technological and legal complexity. Therefore, obtaining and enforcing biopharmaceutical patents is costly, time consuming and inherently uncertain. In addition, Congress may pass patent reform legislation that is unfavorable to us. The Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents we might obtain in the future.

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

While we have issued patents directed at CPI-444 in the United States and pending patent applications directed at CPI-444 and other product candidates in the United States and other countries, filing, prosecuting and defending patents on CPI-444 and our other 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 rights 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 patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection but enforcement is not as strong as that in the United States. These products may compete with our product candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

The legal systems of many foreign countries do not favor the enforcement of patents and other intellectual property protection, 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. 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. 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.

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

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

- others may be able to make adenosine antagonists that are similar to our product candidates but that are not covered by the claims of the patents that we own or have exclusively licensed;
- we or our licensors or future collaborators might not have been the first to make the inventions covered by the issued patent or pending patent application that we own or have exclusively licensed;
- we or our licensors or future collaborators might not have been the first to file patent applications covering certain of our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own or have exclusively licensed may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.

Should any of these events occur, they could significantly harm our business, results of operations and prospects.

Risks Related to Our Common Stock and this Offering

An active, liquid and orderly market for our common stock may not develop, and you may not be able to resell your common stock at or above the public offering price.

Prior to this offering, there has been no public market for our common stock and an active trading market for our common stock may never develop or be sustained following this offering. We and the representatives of the underwriters determined the initial public offering price of our common stock through negotiation. This price does not necessarily reflect the price at which investors in the market will be willing to buy and sell our shares following this offering. In addition, an active trading market may not develop following the consummation of this offering or, if it is developed, may not be

sustained. Further, certain of our existing institutional investors affiliated with certain of our directors have agreed to purchase an aggregate of 1,416,666 shares of our common stock in this offering and certain of our other existing institutional investors have been allocated shares in this offering in the ordinary course, in each case, at the initial public offering price and on the same terms as the other purchasers in this offering. As a result, fewer shares may be actively traded in the public market because these stockholders may be restricted from selling the shares by restrictions under applicable securities laws, which would reduce the liquidity of the market for our common stock. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. An inactive market may also impair our ability to raise capital by selling shares and may impair our ability to acquire other businesses, applications or technologies using our shares as consideration, which, in turn, could materially adversely affect our business.

The trading price of the shares of our common stock could be highly volatile, and purchasers of our common stock could incur substantial losses.

Our stock price is likely to be volatile. The stock market in general and the market for stock of pharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the initial public offering price. The market price for our common stock may be influenced by those factors discussed in this "Risk Factors" section and many others, including:

- our ability to enroll subjects in our planned clinical trials;
- results of the clinical trials, and the results of trials of our competitors or those of other companies in our market sector;
- regulatory approval of CPI-444 and our other product candidates, or limitations to specific label indications or patient populations for its use, or changes or delays in the regulatory review process;
- regulatory developments in the United States and foreign countries;
- changes in the structure of healthcare payment systems, especially in light of current reforms to the U.S. healthcare system;
- the success or failure of our efforts to acquire, license or develop additional product candidates;
- innovations or new products developed by us or our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- manufacturing, supply or distribution delays or shortages;
- any changes to our relationship with any manufacturers, suppliers, collaborators or other strategic partners;
- achievement of expected product sales and profitability;
- variations in our financial results or those of companies that are perceived to be similar to us;
- market conditions in the pharmaceutical sector and issuance of securities analysts' reports or recommendations;
- trading volume of our common stock;
- an inability to obtain additional funding;

- sales of our stock by insiders and stockholders;
- general economic, industry and market conditions other events or factors, many of which are beyond our control;
- additions or departures of key personnel; and
- intellectual property, product liability or other litigation against us.

In addition, in the past, stockholders have initiated class action lawsuits against pharmaceutical companies following periods of volatility in the market prices of these companies' stock. Such litigation, if instituted against us, could cause us to incur substantial costs and divert management's attention and resources, which could have a material adverse effect on our business, financial condition and results of operations.

Our failure to meet the continued listing requirements of The NASDAQ Global Market could result in a delisting of our common stock.

If, after listing, we fail to satisfy the continued listing requirements of The NASDAQ Global Market, such as the corporate governance requirements or the minimum closing bid price requirement, NASDAQ may take steps to delist our common stock. Such a delisting would likely have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. In the event of a delisting, we can provide no assurance that any action taken by us to restore compliance with listing requirements would allow our common stock to become listed again, stabilize the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the NASDAQ minimum bid price requirement or prevent future non-compliance with NASDAQ's listing requirements.

We may allocate the net proceeds from this offering in ways that you and other stockholders may not approve.

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section titled "Use of Proceeds." Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our management might not apply our net proceeds in ways that ultimately increase the value of your investment, and the failure by our management to apply these funds effectively could harm our business. Pending their use, we may invest the net proceeds from this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government. These investments may not yield a favorable return to our stockholders. If we do not invest or apply the net proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

You will suffer immediate and substantial dilution in the net tangible book value of the common stock you purchase.

The initial public offering price of our common stock is substantially higher than the pro forma as adjusted net tangible book value per share of our outstanding common stock immediately after the completion of this offering. Purchasers of common stock in this offering will experience immediate dilution of approximately \$7.26 per share. In the past, we issued options to acquire common stock at prices significantly below the initial public offering price. To the extent these outstanding options are ultimately exercised, investors purchasing common stock in this offering will sustain further dilution. For a further description of the dilution that you will experience immediately after this offering, see "Dilution."

Because a small number of our existing stockholders own a majority of our voting stock, your ability to influence corporate matters will be limited.

As of February 29, 2016, our executive officers, directors and greater than 5% stockholders, in the aggregate, owned approximately 78.9% of our outstanding common stock. Certain of our existing institutional investors affiliated with certain of our directors have agreed to purchase an aggregate of 1,416,666 shares of our common stock in this offering and certain of our other existing institutional investors have been allocated shares in this offering in the ordinary course, in each case, at the initial public offering price and on the same terms as the other purchasers in this offering. If our existing institutional investors purchase all the shares they have been allocated, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates will beneficially own approximately 71.8% of our outstanding common stock upon the completion of this offering (based on the initial public offering price of \$15.00 per share and assuming no exercise of the underwriters' option to purchase additional shares and no exercise of outstanding options). Therefore, even after this offering, such persons, acting together, will have the ability to control our management and affairs and substantially all matters submitted to our stockholders for approval, including the election and removal of directors and approval of any significant transaction. These persons will also have the ability to control our management and business affairs. This concentration of ownership may have the effect of delaying, deferring or preventing a change in control, impeding a merger, consolidation, takeover or other business combination involving us, or discouraging a potential acquiror from making a tender offer or otherwise attempting to obtain control of our business, even if such a transaction would benefit other stockholders.

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

We have never declared or paid any cash dividend on our common 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. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which stockholders have purchased their shares.

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.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur could significantly reduce the market price of our common stock and impair our ability to raise adequate capital through the sale of additional equity securities.

Based on shares of common stock outstanding as of December 31, 2015, upon the closing of this offering, we will have outstanding a total of 20,406,356 shares of common stock after this offering, assuming no exercise of the underwriters' option to purchase additional shares and no exercise of outstanding options. Of these shares, only the 4,700,000 shares of common stock sold in this offering by us, plus any shares sold upon exercise of the underwriters' option to purchase additional shares, will be freely tradable, without restriction, in the public market immediately following this offering, unless they are purchased by one of our affiliates.

Our directors and executive officers and holders of substantially all of our outstanding securities have entered into lock-up agreements with the underwriters pursuant to which they may not, with limited exceptions, for a period of 180 days from the date of this prospectus, offer, sell or otherwise transfer or dispose of any of our securities, without the prior written consent of Credit Suisse Securities (USA) LLC and Cowen and Company, LLC. The underwriters may permit our officers, directors and

other stockholders and the holders of our outstanding options who are subject to the lock-up agreements to sell shares prior to the expiration of the lock-up agreements, subject to limitations. See "Underwriting." Sales of these shares, or perceptions that they will be sold, could cause the trading price of our common stock to decline. After the lock-up agreements expire, up to an additional 15,706,356 shares of common stock will be eligible for sale in the public market of which 12,391,800 shares are held by directors, executive officers and greater than 5% stockholders and will be subject to volume limitations under Rule 144 under the Securities Act.

In addition, as of December 31, 2015, up to 784,136 shares of common stock that were subject to outstanding options under our employee benefit plans as of such date will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements and Rule 144 and Rule 701 under the Securities Act. If these additional shares of common stock are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

After this offering, the holders of approximately 14.3 million shares of our outstanding common stock, or approximately 90.9% of our total outstanding common stock as of December 31, 2015, will be entitled to rights with respect to the registration of their shares under the Securities Act, subject to vesting and the 180-day lock-up agreements described above. See "Description of Capital Stock—Registration Rights." Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares held by affiliates, as defined in Rule 144 under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

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. 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, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of Sarbanes-Oxley, reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements and exemptions from the requirements of holding nonbinding advisory votes on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company until the earlier of (1) the last day of the fiscal year following the fifth anniversary of the completion of this offering, (2) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.0 billion, (3) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of the second fiscal quarter of such fiscal year, or (4) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period. If investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

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

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. We will be subject to the reporting requirements of the Exchange Act, which will require, among other things, that we file with the SEC annual, quarterly and current reports with respect to our business and financial condition. In addition, Sarbanes-Oxley, as well as rules subsequently adopted by the SEC, and The NASDAQ Global Market to implement provisions of

Sarbanes-Oxley, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Further, pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the SEC has adopted additional rules and regulations in these areas, such as mandatory "say on pay" voting requirements that will apply to us when we cease to be an emerging growth company. 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.

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

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us, our business, our market or our competitors. We do not currently have and may never obtain research coverage by securities and industry analysts. If no securities or industry analysts commence coverage of the Company, the trading price for our stock would be negatively impacted. In the event we obtain securities or industry analyst coverage, if one or more of the analysts who covers us downgrades our stock, our stock price would likely decline. If one or more of these analysts ceases to cover us or fails to regularly publish reports on us, interest in our stock could decrease, which could cause our stock price or trading volume to decline.

If we fail to maintain proper and effective internal control over financial reporting, our ability to produce accurate and timely financial statements could be impaired, investors may lose confidence in our financial reporting and the trading price of our common stock may decline.

Pursuant to Section 404 of Sarbanes-Oxley, our management will be required to report upon the effectiveness of our internal control over financial reporting beginning with the annual report for our fiscal year ending December 31, 2017. When we lose our status as an "emerging growth company" and reach an accelerated filer threshold, our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for management to assess our internal control over financial reporting are complex and require significant documentation, testing and possible remediation. To comply with the requirements of being a reporting company under the Exchange Act, we will need to upgrade our systems including information technology; implement additional financial and management controls, reporting systems and procedures; and hire additional accounting and finance staff. If we or, if required, our auditors are unable to conclude that our internal control over financial reporting is effective, investors may lose confidence in our financial reporting and the trading price of our common stock may decline.

We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting once that firm begins its Section 404 reviews, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by The NASDAQ Stock Market, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management.

Our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect immediately prior to the consummation of this offering will contain provisions that could significantly reduce the value of our shares to a potential acquiror or delay or prevent changes in control or changes in our management without the consent of our board of directors. The provisions in our charter documents will include the following:

- a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors, unless the board of directors grants such right to the stockholders, to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- the required approval of at least 66²/3% of the shares entitled to vote to remove a director for cause, and the prohibition on removal of directors without cause;
- the ability of our board of directors to authorize the issuance of shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquiror;
- the ability of our board of directors to alter our amended and restated bylaws without obtaining stockholder approval;
- the required approval of at least 66²/3% of the shares entitled to vote to adopt, amend or repeal our amended and restated bylaws or repeal the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- an exclusive forum provision providing that the Court of Chancery of the State of Delaware will be the exclusive forum for certain actions and proceedings;
- the requirement that a special meeting of stockholders may be called only by the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and

- advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of us.

We are also subject to the anti-takeover provisions contained in Section 203 of the Delaware General Corporation Law. Under Section 203, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other exceptions, the board of directors has approved the transaction. For a description of our capital stock, see the section titled "Description of Capital Stock."

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

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

Our ability to use net operating loss carryforwards and other tax attributes may be limited in connection with this offering or other ownership changes.

We have incurred substantial losses during our history and do not expect to become profitable in the near future, and we may never achieve profitability. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset future taxable income, if any, until such unused losses expire. As of December 31, 2015, we had federal net operating loss (NOL) carryforwards of approximately \$11.7 million and state NOL carryforwards of approximately \$11.7 million available to offset future taxable income. If not utilized, the federal and state NOL carryforwards will begin to expire in various years beginning in 2034. As of December 31, 2015, we also had \$0.3 million of federal and \$0.3 million of state research and development tax credit carryforwards available to reduce future income taxes. The federal research and development tax credits will begin to expire in 2035, if not utilized. The state research and development tax credits have no expiration date. Utilization of NOL carryforwards and credits may be subject to an annual limitation due to the "ownership change" provisions under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, and similar state provisions. An "ownership change" is generally defined as a cumulative change in the ownership interest of significant stockholders over a three-year period in excess of 50 percentage points. We may have experienced an ownership change in 2015 and could experience ownership changes in the future, including in connection with this offering. Such ownership changes could result in the expiration of our NOL carryforwards and other tax attributes before they can be utilized and, if we are profitable, our future cash flows could be adversely affected due to our increased tax liability.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve risks and uncertainties. All statements other than statements of historical facts contained in this prospectus are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may," "could," "will," "would," "should," "expect," "plan," "anticipate," "believe," "estimate," "intend," "predict," "seek," "contemplate," "potential" or "continue" or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- the anticipated timing, costs and conduct of our planned preclinical studies and clinical trials for CPI-444 and other product candidates in our development programs;
- our ability to develop, acquire and advance product candidates into, and successfully complete, clinical trials;
- the timing or likelihood of regulatory filings and approvals for CPI-444 and our other product candidates;
- our ability to commercialize CPI-444, if approved, and our other product candidates;
- our expectations regarding the clinical effectiveness of our product candidates;
- our commercialization, marketing and manufacturing capabilities and strategy;
- the pricing and reimbursement of our product candidates, if approved;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates, including projected terms of patent protection;
- the potential benefits of strategic collaborations and our ability to enter into strategic arrangements;
- our expectations related to the use of proceeds from this offering;
- developments and projections relating to our competitors and our industry, including competing therapies;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing; and
- our financial performance.

These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those described under the heading "Risk Factors" and elsewhere in this prospectus.

Any forward-looking statement in this prospectus reflects our current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, industry and future growth. Given these uncertainties, you should not place undue reliance on these forward-looking statements. These forward-looking statements speak only as of the date of this prospectus. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

MARKET, INDUSTRY AND OTHER DATA

This prospectus contains estimates, projections and other information concerning our industry, our business and the markets for certain drugs, including data regarding the estimated size of those markets, their projected growth rates and the incidence of certain medical conditions. Information that is based on estimates, forecasts, projections or similar methodologies is inherently subject to uncertainties, and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by third parties, industry, medical and general publications, government data and similar sources. In some cases, we do not expressly refer to the sources from which this data is derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires.

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately \$63.5 million at the initial public offering price of \$15.00 per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise in full their option to purchase additional shares of common stock, we estimate that the net proceeds will be approximately \$73.3 million after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

We expect to use our existing capital resources and the net proceeds from this offering as follows:

- approximately \$40 million to fund the ongoing clinical development of CPI-444, including our Phase 1/1b clinical trial; and
- the remainder to fund the preclinical development of our anti-CD73 adenosine production inhibitor, our adenosine A2B receptor antagonist, our ITK inhibitor and early-stage research and development of other programs and potential future development programs, potential in-licensing of technology or products, capital expenditures, working capital and other general corporate purposes. While we expect the majority of this amount will be allocated to our anti-CD73 adenosine production inhibitor, the allocation of funds among these product candidates will largely depend on their performance in preclinical trials, which we are unable to predict.

However, due to the uncertainties inherent in the clinical development and regulatory approval process, it is difficult to estimate with certainty the exact amounts of the net proceeds from this offering that may be used for the above purposes. We may also find it necessary or advisable to use the net proceeds from this offering for other purposes. Accordingly, our management will retain broad discretion over the use of the net proceeds from this offering. The amounts and timing of our expenditures will depend upon numerous factors. For instance, the amounts and timing of our expenditures will in part depend on the time and cost necessary to conduct our Phase 1/1b clinical trial, which will largely depend on the number of patient cohorts that we expand as a result of patient responses. Because we cannot predict which cohorts, if any, we will expand, there can be no assurance that our existing capital resources and the net proceeds from this offering will be sufficient to fund our clinical trial for any specific cohort to completion, and we do not expect such amounts to be sufficient to fund the full clinical trial to completion. Furthermore, the amounts and timing of our expenditures will depend on (1) the time and cost associated with clinical trials and preclinical development of other product programs; (2) the results of any clinical trials and other studies; and (3) other factors described under the heading "Risk Factors" included elsewhere in this prospectus.

Following this offering, we will require substantial capital in order to complete clinical development and commercialize CPI-444 and complete the clinical development of any additional product candidates. For additional information regarding our potential capital requirements, see "Even if this offering is successful, we will require substantial additional financing to achieve our goals, and a failure to obtain this necessary capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our product development, other operations or commercialization efforts" under the heading "Risk Factors."

Pending the use of the proceeds as described above, we intend to invest the net proceeds in interest-bearing investment-grade securities or government securities.

DIVIDEND POLICY

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

CAPITALIZATION

The following table sets forth our cash, cash equivalents and marketable securities and our capitalization as of December 31, 2015:

- on an actual basis;
- on a pro forma basis to give effect to: (1) the conversion of all of our outstanding shares of convertible preferred stock as of December 31, 2015 into an aggregate of 14,274,741 shares of common stock and (2) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur, in each case, immediately prior to the consummation of this offering; and
- on a pro forma as adjusted basis to give further effect to the sale of 4,700,000 shares of common stock in this offering at the initial public offering price of \$15.00 per share, after deducting the underwriting discount and commissions and estimated offering expenses payable by us.

You should read this information together with our financial statements and related notes appearing elsewhere in this prospectus and the information set forth under the headings "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

(In thousands, except share and per share data)	As of December 31, 2015		
	Actual	Pro forma	Pro forma as Adjusted
Cash, cash equivalents and marketable securities ⁽¹⁾	\$ 94,386	\$ 94,386	\$ 158,580
Convertible preferred stock, par value \$0.0001 per share: 14,274,741 shares authorized, 14,274,741 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	\$ 125,780	—	—
Stockholders' (deficit) equity:			
Preferred stock, par value \$0.0001 per share: no shares authorized, issued and outstanding, actual; 10,000,000 shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted	—	—	—
Common stock, \$0.0001 par value per share: 20,000,000 shares authorized, 1,431,615 shares issued and outstanding, actual; 290,000,000 shares authorized, 15,706,356 shares issued and outstanding, pro forma; and 290,000,000 shares authorized, 20,406,356 shares issued and outstanding, pro forma as adjusted	—	2	2
Additional paid-in capital	440	126,218	189,683
Accumulated other comprehensive loss	(45)	(45)	(45)
Accumulated deficit	(31,496)	(31,496)	(31,496)
Total stockholders' (deficit) equity	(31,101)	94,679	158,144
Total capitalization	\$ 94,679	\$ 94,679	\$ 158,144

- (1) Pro forma as adjusted cash, cash equivalents and marketable securities reflects an increase of \$64.2 million to give effect to \$63.5 million of net proceeds from the offering (after deducting underwriting discounts and commissions and estimated offering expenses) plus \$729,000 of offering expenses paid in December 2015.

The number of shares of common stock issued and outstanding actual, pro forma and pro forma as adjusted in the table above excludes the following shares as of December 31, 2015:

- 784,136 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2015 under our 2014 Equity Incentive Plan, having a weighted-average exercise price of \$4.09 per share;
- 2,559,499 shares of common stock reserved for issuance pursuant to future awards under our 2014 Equity Incentive Plan as of December 31, 2015. Of such shares, we have granted option awards exercisable for approximately 1,025,250 shares to certain of our employees, executive officers and directors with an exercise price equal to the initial public offering price;
- 3,051,750 shares of common stock reserved for issuance pursuant to future awards under our 2016 Equity Incentive Award Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which will become effective immediately prior to the consummation of this offering; and
- 200,000 shares of common stock reserved for future issuance under our 2016 Employee Stock Purchase Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which became effective immediately prior to the effectiveness of our registration statement filed on Form S-1 in connection with this offering.

DILUTION

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

Net tangible book value per share is determined by dividing our total tangible assets less our total liabilities and convertible preferred stock that is not included in equity by the number of shares of common stock outstanding. Our historical net tangible book value (which excludes deferred offering expenses of \$1.0 million) as of December 31, 2015 was \$(32.1) million, or \$(22.39) per share. Our pro forma net tangible book value (which excludes deferred offering expenses of \$1.0 million) as of December 31, 2015 was \$93.7 million, or \$5.97 per share, based on the total number of shares of our common stock outstanding as of December 31, 2015, after giving effect to the conversion of all of our outstanding shares of convertible preferred stock as of December 31, 2015 into an aggregate of 14,274,741 shares of common stock immediately prior to the consummation of this offering.

Net tangible book value dilution per share to new investors represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the pro forma as adjusted net tangible book value per share of common stock immediately after completion of this offering. After giving effect to our sale of 4,700,000 shares of common stock in this offering at the initial public offering price of \$15.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us (which excludes \$0.7 million of offering related expenses paid in the year ended December 31, 2015), our pro forma as adjusted net tangible book value as of December 31, 2015 would have been \$157.9 million, or \$7.74 per share. This represents an immediate increase in net tangible book value of \$1.77 per share to existing stockholders and an immediate dilution in net tangible book value of \$7.26 per share to purchasers of common stock in this offering, as illustrated in the following table:

Initial public offering price per share	\$ 15.00
Historical net tangible book value per share as of December 31, 2015	\$ (22.39)
Pro forma net tangible book value per share as of December 31, 2015	\$ 5.97
Increase in pro forma net tangible book value per share attributable to new investors in this offering	\$ 1.77
Pro forma as adjusted net tangible book value per share after this offering	7.74
Dilution per share to investors participating in this offering	<u>7.26</u>

If the underwriters' option to purchase additional shares from us is exercised in full, the pro forma as adjusted net tangible book value per share after this offering would be \$7.95 per share, the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be \$1.98 per share and the dilution per share to investors participating in this offering would be \$7.05 per share.

The following table presents, on a pro forma as adjusted basis as of December 31, 2015, the differences between the existing stockholders and the investors purchasing shares in this offering with respect to the number of shares purchased from us, the total consideration paid, which includes proceeds received from the issuance of common and preferred stock, cash received from the exercise of stock options and the value of any stock issued for services, and the average price paid or to be paid per share by existing stockholders and by new investors purchasing shares in this offering at the initial public offering price of \$15.00 per share, before deducting the underwriting discounts and commissions

and estimated offering expenses payable by us (in thousands, except per share amounts and percentages):

	<u>Shares Purchased</u>		<u>Total Consideration</u>		<u>Average Price Per Share</u>
	<u>Number</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	
Existing stockholders ⁽¹⁾	15,706,356	77.0%	\$ 108,612,862	60.6%	\$ 6.92
Investors purchasing shares in this offering ⁽¹⁾	4,700,000	23.0	70,500,000	39.4	15.00
Totals	20,406,356	100%	\$ 179,112,862	100%	

- (1) Certain of our existing institutional investors affiliated with certain of our directors have agreed to purchase an aggregate of 1,416,666 shares in this offering at the initial public offering price. These exclude shares allocated in the ordinary course to existing institutional investors not affiliated with our directors. The presentation in this table regarding ownership by existing stockholders does not give effect to any purchases in this offering by such investors. See the footnotes to the beneficial ownership table in "Principal Stockholders" for more details.

The foregoing calculations exclude the following shares as of December 31, 2015:

- 784,136 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2015 under our 2014 Equity Incentive Plan, having a weighted-average exercise price of \$4.09 per share;
- 2,559,499 shares of common stock reserved for issuance pursuant to future awards under our 2014 Equity Incentive Plan as of December 31, 2015. Of such shares, we have granted option awards exercisable for approximately 1,025,250 shares to certain of our employees, executive officers and directors with an exercise price equal to the initial public offering price;
- 3,051,750 shares of common stock reserved for issuance pursuant to future awards under our 2016 Equity Incentive Award Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which will become effective immediately prior to the consummation of this offering; and
- 200,000 shares of common stock reserved for future issuance under our 2016 Employee Stock Purchase Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which became effective immediately prior to the effectiveness of our registration statement filed on Form S-1 in connection with this offering.

Without giving effect to any purchases in this offering by our existing institutional investors, if the underwriters exercise in full their option to purchase additional shares of our common stock, our existing stockholders would own 74.4% and our new investors would own 25.6% of the total number of shares of our common stock outstanding upon completion of this offering. The total consideration paid by our existing stockholders would be approximately \$108.6 million, or 57.3%, and the total consideration paid by investors purchasing shares in this offering would be \$81.1 million, or 42.7%.

SELECTED FINANCIAL DATA

The following selected data for the period from January 27, 2014 (inception) to December 31, 2014 and for the year ended December 31, 2015 and the balance sheet data as of December 31, 2014 and 2015 have been derived from our audited financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of our future results. You should read the following selected financial data in conjunction with "Management's Discussion and Analysis of Financial Condition and the Results of Operations" and our financial statements and the related notes included elsewhere in this prospectus.

(In thousands, except share and per share data)	Period from January 27, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015
Statements of Operations and Comprehensive Loss Data:		
Operating expenses:		
Research and development	\$ 38	\$ 11,352
General and administrative	123	2,418
Total operating expenses	161	13,770
Loss from operations	(161)	(13,770)
Change in fair value of convertible preferred stock liability	—	(17,600)
Interest income	—	35
Net loss	\$ (161)	\$ (31,335)
Net loss per share—basic and diluted ⁽¹⁾	\$ (0.95)	\$ (83.86)
Shares used to compute net loss per share—basic and diluted ⁽¹⁾	170,278	373,643
Pro forma net loss per share—basic and diluted (unaudited) ⁽¹⁾	\$ (0.30)	\$ (1.54)
Shares used to compute pro forma net loss per share—basic and diluted (unaudited) ⁽¹⁾	530,859	8,894,425
Other comprehensive loss:		
Unrealized loss on marketable securities	—	(45)
Total other comprehensive loss	—	(45)
Comprehensive loss	\$ (161)	\$ (31,380)

- (1) See Note 3 to our audited financial statements included elsewhere in this prospectus for an explanation of the calculations of our net loss per share—basic and diluted, the shares used to compute the net loss per share—basic and diluted, pro forma net loss per share—basic and diluted, and the shares used to compute the pro forma net loss per share—basic and diluted.

The table below presents our balance sheet data as of December 31, 2014 and 2015:

(In thousands)	As of December 31	
	2014	2015
Balance Sheet Data:		
Cash and cash equivalents	\$ 12,517	\$ 4,105
Marketable securities	—	90,281
Working capital	9,855	92,593
Total assets	12,529	98,459
Convertible preferred stock liability	2,600	—
Convertible preferred stock	10,011	125,780
Additional paid-in capital	2	440
Accumulated deficit	(161)	(31,496)
Total stockholders' deficit	(159)	(31,101)

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

You should read the following discussion and analysis of our financial condition and results of operations together with "Selected Financial Data" and the financial statements and related notes included elsewhere in this prospectus. This discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed in "Risk Factors" and in other parts of this prospectus.

Overview

We are a clinical stage biopharmaceutical company focused on the development and commercialization of novel immuno-oncology therapies that are designed to harness the immune system to attack cancer cells. Since we began operations in November 2014, we have built a pipeline of four immuno-oncology programs, three of which focus on the adenosine-cancer axis to modulate an immune response. Our lead product candidate, CPI-444, is an oral, small molecule antagonist of the A2A receptor for adenosine, an immune checkpoint. In January 2016, we began enrolling patients in a large expansion cohort trial for CPI-444. This Phase 1/1b clinical trial is designed to examine safety, tolerability, biomarkers and preliminary efficacy of CPI-444 in several solid tumor types, both as a single agent and in combination with Genentech, Inc.'s investigational cancer immunotherapy, atezolizumab, a fully humanized monoclonal antibody targeting PDL-1. We have also chosen a lead development candidate for our second program, an anti-CD73 monoclonal antibody that inhibits the production of adenosine, and plan to select development candidates for our other two programs in 2016. We believe the breadth and status of our pipeline demonstrates our management team's expertise in understanding and developing immuno-oncology assets as well as in identifying product candidates that can be in-licensed and further developed internally to treat many types of cancer. We hold worldwide rights to all of our product candidates.

To date, substantially all of our efforts have been focused on the research, development and advancement of CPI-444, and we have not generated any revenue from product sales and, as a result, we have incurred significant losses. We expect to continue to incur significant research and development and general and administrative expenses related to our operations. Our net loss for the period from January 27, 2014 (inception) to December 31, 2014 and for the year ended December 31, 2015 was \$0.2 million and \$31.3 million, respectively. Net loss for the year ended December 31, 2015 includes a \$17.6 million non-cash charge associated with the change in fair value of a convertible preferred stock liability. In June 2015, the convertible preferred stock liability terminated and the balance of \$20.2 million was reclassified to convertible preferred stock. As of December 31, 2015, we had an accumulated deficit of \$31.5 million. We expect to continue to incur losses for the foreseeable future, and we anticipate these losses will increase as we continue our development of, seek regulatory approval for and begin to commercialize CPI-444, and as we develop other product candidates. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods.

Since our inception and through December 31, 2015, we have funded our operations primarily through the sale and issuance of convertible preferred stock. In November 2014, January 2015 and June 2015, we received aggregate net proceeds of \$33.3 million from the sale of our Series A convertible preferred stock. In September 2015, we received net proceeds of \$74.8 million from the sale of our Series B convertible preferred stock. As of December 31, 2015, we had capital resources consisting of cash, cash equivalents and marketable securities of \$94.4 million. We do not expect our existing capital resources, together with the net proceeds from this offering, to be sufficient to enable us to fund the completion of our clinical trials and remaining development program of CPI-444 through commercialization. In addition, our operating plan may change as a result of many factors, including those described elsewhere in this prospectus and others currently unknown to us, and we may need to

seek additional funds sooner than planned, through public or private equity, debt financings or other sources, such as strategic collaborations. Such financing would result in dilution to stockholders, imposition of debt covenants and repayment obligations or other restrictions that may affect our business. If we raise additional capital through strategic collaboration agreements, we may have to relinquish valuable rights to our product candidates, including possible future revenue streams. In addition, additional funding may not be available to us on acceptable terms or at all and any additional fundraising efforts may divert our management from its day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. Furthermore, even if we believe we have sufficient funds for our current or future operating plans, we may seek additional capital due to favorable market conditions or strategic considerations.

Financial Overview

Revenue

To date, we have not generated any revenues. We do not expect to receive any revenues from any product candidates that we develop unless and until we obtain regulatory approval and commercialize our products or enter into revenue-generating collaboration agreements with third parties.

Research and Development Expenses

Our research and development expenses consist primarily of costs incurred to conduct research, such as the discovery and development of our product candidates, as well as the in-licensing of CPI-444. We record research and development expenses as incurred. Research and development expenses consist of costs incurred for the discovery and development of our product candidates and include:

- employee-related expenses, including salaries, benefits, travel and non-cash stock-based compensation expense;
- external research and development expenses incurred under arrangements with third parties, such as contract research organizations, preclinical testing organizations, contract manufacturing organizations, academic and non-profit institutions and consultants;
- costs to acquire technologies to be used in research and development that have not reached technological feasibility and have no alternative future use;
- license fees; and
- other expenses, which include direct and allocated expenses for laboratory, facilities and other costs.

We plan to increase our research and development expenses substantially as we continue the development of our product candidates. Our current planned research and development activities include the following:

- enrollment and completion of our Phase 1/1b clinical trial of CPI-444;
- process development and manufacturing of drug supply for CPI-444;
- process development and manufacturing of drug supply for our anti-CD73 antibody to support IND-enabling studies; and
- preclinical studies under our other programs in order to select development product candidates in 2016.

In addition to our product candidates that are in clinical development, we believe it is important to continue substantial investment in potential new product candidates to build the value of our product candidate pipeline and our business.

Our expenditures on current and future preclinical and clinical development programs are subject to numerous uncertainties related to timing and cost to completion. The duration, costs and timing of clinical trials and development of product candidates will depend on a variety of factors, including many of which are beyond our control. The process of conducting the necessary clinical research to obtain regulatory approval is costly and time consuming, and the successful development of our product candidates is uncertain. The risks and uncertainties associated with our research and development projects are discussed more fully in the section of this prospectus titled "Risk Factors—Risks Related to the Discovery and Development of Our Product Candidates." As a result of these risks and uncertainties, we are unable to determine with any degree of certainty the duration and completion costs of our research and development projects or if, when or to what extent we will generate revenues from the commercialization and sale of any of our product candidates that obtain regulatory approval. We may never succeed in achieving regulatory approval for any of our product candidates.

General and Administrative Expenses

General and administrative expenses include personnel costs, expenses for outside professional services and allocated expenses. Personnel costs consist of salaries, benefits and stock-based compensation. Outside professional services consist of legal, accounting and audit services and other consulting fees. Allocated expenses consist of rent expense related to our office and research and development facility.

We expect to incur additional expenses as a result of operating as a public company, including expenses related to compliance with the rules and regulations of the Securities and Exchange Commission and those of any national securities exchange on which our securities are traded, additional insurance expenses, investor relations activities and other administrative and professional services. We also expect to increase our administrative headcount significantly to operate as a public company and as we advance our product candidates through clinical development, which will also increase our general and administrative expenses.

Change in Fair Value of Convertible Preferred Stock Liability

Our Series A convertible preferred stock financing included two tranches of investment. The first tranche included two separate closings in November 2014 and January 2015, and the second tranche occurred in June 2015 following the occurrence of a defined triggering event under the financing transaction documents.

The change in the fair value of the convertible preferred stock liability is associated with the investors' right to purchase the second tranche of Series A convertible preferred stock at the same price per share as the first tranche. Changes in the fair value were recorded each period based on the estimated fair value of the convertible preferred stock liability until the option is exercised or expires. The option was deemed exercised upon the closing of the second tranche in June 2015, at which time the \$20.2 million fair value of the convertible preferred stock liability was reclassified from a liability to convertible preferred stock.

Critical Accounting Policies and Significant Judgments and Use of Estimates

This discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States (U.S. GAAP). The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the

disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Convertible Preferred Stock Liability

We have determined that our obligation to issue additional shares of our Series A convertible preferred stock under our Series A convertible preferred stock financing documents represented a freestanding financial instrument, which we accounted for as a liability, until the exercise of the option, which occurred on June 15, 2015. The freestanding convertible preferred stock liability was initially recorded at fair value, with fair value changes recognized in the statements of operations and comprehensive loss. We estimated the fair value of this liability using an option-pricing model that include assumptions for future financings, expected volatility, expected life, yield and risk-free interest rate. At the time of the exercise of the option, any remaining value of the convertible preferred stock liability was reclassified to convertible preferred stock with no further remeasurement required.

Stock-Based Compensation

Because our common stock is not currently publicly traded, our board of directors, with the assistance of management, uses significant judgment to estimate the fair value of our common stock. Following the closing of this offering, the fair value of our common stock will be the closing price of our common stock as reported on the date of the grant.

We recognize compensation costs related to stock-based awards granted to employees based on the estimated fair value of the awards on the date of grant, net of estimated forfeitures. We estimate the grant date fair value, and the resulting stock-based compensation expense, using the Black-Scholes valuation model. The grant date fair value of the stock-based awards is generally recognized on a straight-line basis over the requisite service period, which is generally the vesting period of the respective awards. Stock-based compensation expense related to awards to non-employees is recognized based on the then-current fair value at each measurement date over the associated service period of the award, which is generally the vesting term, on a straight line basis. We have used the Black-Scholes valuation model to assist us in determining the fair value of stock-based awards. The Black-Scholes valuation model requires the use of subjective and complex assumptions which determine the fair value of stock-based awards.

Based upon our Black-Scholes option fair value calculations, we recognized stock-based compensation expense for employees and non-employees of \$— and \$428,000 for the periods from January 27, 2014 (inception) to December 31, 2014 and for the year ended December 31, 2015, respectively. As of December 31, 2015, total compensation cost related to unvested employee stock options not yet recognized in our financial statements was approximately \$4.7 million, and the weighted average period over which this cost was expected to be recognized was 3.64 years. We expect to continue to grant stock options in the future, and to the extent that we do, our stock-based compensation expense recognized in future periods will likely increase.

The Black-Scholes option pricing model requires the use of subjective and complex assumptions which help us to determine the estimated fair value of stock-based awards, including the expected term and price volatility of the underlying stock. These assumptions include:

- **Volatility:** We used an average historical stock price volatility of comparable public companies within the biotechnology and pharmaceutical industry that were deemed to be representative of future stock price trends as we are not a public company and do not have any trading history for our common stock.
- **Expected Term:** We used the simplified method prescribed in Financial Account Standards Board (FASB) ASC 718, *Compensation—Stock Compensation*, to calculate the expected term of options granted to employees and directors.
- **Risk-free Interest Rate:** We estimated the risk-free interest rate over the expected term of the options based on the constant maturity rate of U.S. Treasury securities with similar maturities as of the date of the grant.
- **Expected Dividends:** We have not paid and do not anticipate paying any dividends in the near future.

The following table presents the weighted-average assumptions used to estimate the fair value options granted:

	Period from January 27, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015
Expected volatility	97.0%	83.3%
Expected term (in years)	6.1	6.1
Risk-free interest rate	1.7%	1.7%
Expected dividend yield	0%	0%

In addition to the assumptions used in the Black-Scholes option-pricing model, we also estimate a forfeiture rate to calculate the stock-based compensation for our equity awards. We estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. Thus, we record stock-based compensation expense only for those awards that are expected to vest. To the extent actual forfeitures differ from the estimates, the difference will be recorded as a cumulative adjustment in the period that the estimates are revised.

We expect to continue to use judgment in evaluating the expected volatility, expected terms and forfeiture rates utilized for our stock-based compensation calculations on a prospective basis.

Fair Value

Historically, for all periods prior to this offering, the fair values of the shares of common stock underlying our stock-based awards were estimated on each grant date by our board of directors. In order to determine the fair value of our common stock underlying option grants and restricted common stock, our board of directors considered, among other things, valuations of our common stock as of December 1, 2014, June 10, 2015, September 16, 2015, November 9, 2015 and December 31, 2015 in accordance with the guidance provided by the American Institute of Certified Public Accountants Practice Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*.

The Practice Guide identifies various available methods for allocating enterprise value across classes and series of capital stock to determine the estimated fair value of common stock at each

valuation date. In determining a fair value for our common stock, at various times we primarily used the following methods and combinations of methods:

- **Probability-Weighted Expected Return Method.** The probability-weighted expected return method (PWERM) is a scenario-based analysis that estimates value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.
- **Option Pricing Method.** Under the option pricing method (OPM), shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The estimated fair values of the convertible preferred stock and common stock are inferred by analyzing these options.

Given the absence of a public trading market for our common stock, we believe our board of directors exercised reasonable judgment as it considered a number of objective and subjective factors to determine the best estimate of the fair value of our common stock, including our current financial condition, anticipated expenses, the market value of stock or equity interests in similar corporations and other entities engaged in businesses substantially similar to those engaged in by us, the present value of our anticipated future cash flows, valuations of comparable companies, financing prospects, current and potential strategic relationships, competitive developments and related matters, the aggregate liquidation preference of our convertible preferred stock, the price at which our shares of outstanding capital stock have previously been issued, the current market and venture capital financing environment and the lack of marketability of our common stock.

There are significant judgments and estimates inherent in the determination of the estimated fair value of our common stock. If we had made different assumptions, our stock-based compensation expense, net loss and net loss per share could have been significantly different.

The intrinsic value of all outstanding options as of December 31, 2015 was \$8.6 million based on the initial public offering price of \$15.00 per share, of which approximately \$8.4 million was related to unvested options.

Income Tax

We recognize deferred income taxes for temporary differences between the basis of assets and liabilities for financial statement and income tax purposes. We periodically evaluate the evidence bearing upon whether our deferred tax assets are realizable. Based upon the weight of available evidence, which includes our historical operating performance, reported cumulative net losses since inception and difficulty in accurately forecasting our future results, we maintained a full valuation allowance on the net deferred tax assets as of December 31, 2015 of approximately \$5.9 million. We intend to maintain a full valuation allowance on the federal and state deferred tax assets until sufficient positive evidence exists to support reversal of the valuation allowance.

As of December 31, 2015, we had federal net operating loss (NOL) carryforwards of approximately \$11.7 million and state NOL carryforwards of approximately \$11.7 million available to offset future taxable income. If not utilized, the federal and state NOL carryforwards will begin to expire in various years beginning in 2034.

As of December 31, 2015, we also had \$0.3 million of federal and \$0.3 million of state research and development tax credit carryforwards available to reduce future income taxes. The federal research and development tax credits will begin to expire in 2035, if not utilized. The state research and development tax credits have no expiration date.

Utilization of NOL carryforwards and credits may be subject to an annual limitation due to the ownership change provisions in the Internal Revenue Code of 1986, as amended (Code), and similar

state provisions. An annual limitation may result in the expiration of NOLs and credits before utilization. During the third quarter of 2015, the Company issued a new series of convertible preferred stock that in conjunction with other preferred stock issuances may have caused an ownership change under these provisions of the Code and similar state provisions. As of December 31, 2015, NOLs and credits are not expected to expire unused in the carryforward period as a result of these recent issuances of convertible preferred shares. The Company could experience additional ownership changes in the future, including in connection with this offering, that could impose additional annual limitations.

Our policy is to recognize interest and penalties related to income taxes as a component of income tax expense. No interest and penalties related to income taxes have been recognized in the statements of operations and comprehensive loss.

Results of Operations

Comparison of the periods below as indicated (in thousands):

	Period from January 27, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015	Change
Operating expenses:			
Research and development	\$ 38	\$ 11,352	\$ 11,314
General and administrative	123	2,418	2,295
Total operating expenses	161	13,770	13,609
Loss from operations	(161)	(13,770)	(13,609)
Change in fair value of convertible preferred stock liability	—	(17,600)	(17,600)
Interest income	—	35	35
Net loss	\$ (161)	\$ (31,335)	\$ (31,174)

Research and Development Expense

Research and development expenses for the year ended December 31, 2015 consisted of the following costs by program (specific program costs consist solely of external costs):

<u>(In thousands)</u>	<u>Year ended December 31, 2015</u>
CPI-444	\$ 4,092
ITK	539
Anti-CD73	315
Unallocated employee and overhead costs	6,406
Total	\$ 11,352

CPI-444 costs of \$4.1 million primarily consisted of a \$1.0 million license payment to Vernalis, \$1.7 million in drug purchases and \$0.7 million in clinical trial expenses. ITK costs of \$0.5 million primarily consisted of the outside synthesis and testing of chemical compounds. Anti-CD73 costs of \$0.3 million primarily consisted of outside development costs.

Unallocated costs of \$6.4 million primarily consisted of personnel related costs of \$3.3 million, lab materials and expensed equipment costs of \$1.5 million and facility and related overhead costs of \$0.8 million.

General and Administrative Expense

General and administrative expense increased \$2.3 million during the year ended December 31, 2015 compared to the period from January 27, 2014 (inception) through December 31, 2014. The increase was primarily attributable to an increase of \$0.9 million in personnel-related expenses due to an increase in headcount and an increase of \$0.9 million in professional services expenses and an increase of \$0.2 million in facility related expenses.

Change in Fair Value of Convertible Preferred Stock Liability

In connection with the issuance of shares of our Series A convertible preferred stock in November 2014, we granted a second tranche option to the Series A investors to purchase 4,460,715 shares of our Series A convertible preferred stock upon the achievement of certain milestones. At initial recognition, we recorded the option as a liability on our balance sheet at its estimated fair value of \$2.6 million. The fair value of the convertible preferred stock liability at December 31, 2014 was \$2.6 million, resulting in no gain or loss on remeasurement for the period from January 27, 2014 (inception) to December 31, 2014. In June 2015, we achieved the relevant milestones, and the investors exercised their right to purchase 4,460,715 shares of Series A convertible preferred stock for net proceeds of \$16.7 million. Immediately prior to the closing of this tranche, we remeasured the convertible preferred stock liability to its then fair value and recorded a loss from remeasurement of \$17.6 million in our statement of operations to bring the convertible preferred stock liability to its then fair value of \$20.2 million, which was reclassified to convertible preferred stock upon the closing of the second tranche.

Result of Operations for the period from January 27, 2014 (inception) to December 31, 2014:

We were incorporated on January 27, 2014 and began operations in November 2014 with the closing of our Series A convertible preferred stock financing. We incurred a loss of \$0.2 million for the period from January 27, 2014 to December 31, 2014. This loss is primarily comprised of general and administrative expenses related to personnel-related costs and professional services.

Liquidity and Capital Expenditures; Plan of Operation

As of December 31, 2015, we had cash, cash equivalents and marketable securities of \$94.4 million. Since our inception and through December 31, 2015, we have financed our operations primarily through private placements of convertible preferred stock.

We use our cash primarily to fund operating expenses, mostly research and development expenditures. We plan to increase our research and development expenses for the foreseeable future as we continue the preclinical and clinical development of our product candidates. At this time, due to the inherently unpredictable nature of preclinical and clinical development and given the early stage of our product candidates, we cannot predict with certainty the costs we will incur and the timelines that will be required to complete development, obtain marketing approval and commercialize our current product candidates or any future product candidates. For the same reasons, we are also unable to predict when, if ever, we will generate revenue from product sales or whether, or when, if ever, we may achieve profitability. Clinical and preclinical development timelines, the probability of success and development costs may differ materially from expectations. In addition, we cannot forecast which product candidates may be subject to future collaborations, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

Since our inception we have incurred significant losses and negative cash flows from operations. We have an accumulated deficit of \$31.5 million, which includes a \$17.6 million non-cash charge associated with the change in fair value of a preferred stock call option liability, through December 31,

2015. We expect to incur substantial additional losses in the future as we expand our research and development activities. Based on our research and development plans, we expect that our existing cash, cash equivalent and marketable securities, excluding the proceeds of this offering, will be sufficient to enable us to fund research and development of our product candidates under development, including CPI-444, through at least the next twelve months. However, we have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect.

The timing and amount of our operating expenditures will depend largely on:

- the initiation, progress, timing, costs and results of clinical trials for CPI-444;
- the timing, progress, costs and results of preclinical and clinical development activities for our other product candidates;
- the number and scope of preclinical and clinical programs we decide to pursue;
- the costs involved in prosecuting, maintaining and enforcing patent and other intellectual property rights;
- the cost and timing of regulatory approvals; and
- our efforts to enhance operational systems and hire additional personnel, including personnel to support development of our product candidates and satisfy our obligations as a public company.

Until such time, if ever, as we can generate substantial revenue from product sales, we expect to fund our operations and capital funding needs through equity and/or debt financings. We may also enter into additional collaboration arrangements or selectively partner for clinical development and commercialization. The sale of additional equity would result in additional dilution to our stockholders. The incurrence of debt financing would result in debt service obligations and the governing documents would likely include operating and financing covenants that would restrict our operations. If we are not able to secure adequate additional funding, we may be forced to make reductions in spending, extend payment terms with suppliers, liquidate assets where possible and/or suspend or curtail planned programs. Any of these actions could have a material effect on our business, financial condition and results of operations.

Cash Flows

The following table summarizes our cash flows for the periods indicated (in thousands):

	Period from January 27, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015
Net cash provided by (used in):		
Operating activities	\$ (96)	\$ (11,328)
Investing activities	—	(92,032)
Financing activities	12,613	94,948
Net increase (decrease) in cash and cash equivalents	<u>\$ 12,517</u>	<u>\$ (8,412)</u>

Cash Flows from Operating Activities

During the year ended December 31, 2015, cash used in operating activities was \$11.3 million, which consisted of a net loss of \$31.3 million, adjusted by non-cash charges of \$18.2 million and a net change of \$1.8 million in our net operating assets. The non-cash charges are primarily associated with remeasurement of our convertible preferred stock liability to fair value of \$17.6 million. The change in

our net operating assets and liabilities was primarily due to an increase of \$1.3 million of prepaid and other current assets, including prepaid drug purchases of \$0.7 million and receivables from our landlord of \$0.3 million in connection with improvements to our facility, offset by increases in short-term liabilities of \$2.5 million and increased long-term liabilities of \$0.6 million, primarily in connection with deferred rent.

During the period from January 27, 2014 (inception) to December 31, 2014, cash used in operating activities was \$0.1 million, which consisted of a net loss of \$0.2 million, offset by an increase in accounts payable and accrued liabilities of \$0.1 million.

Cash Flows from Investing Activities

Cash used in investing activities during the year ended December 31, 2015 was \$92.0 million, which consisted of \$1.7 million of capital expenditures to purchase property and equipment and \$104.4 million of purchases of short-term marketable securities, offset by \$14.1 million in proceeds from the maturity of marketable securities.

Cash Flows from Financing Activities

During the year ended December 31, 2015, cash provided by financing activities was \$94.9 million, primarily consisting of net proceeds from the issuances of convertible preferred stock.

During the period from January 27, 2014 (inception) to December 31, 2014, cash provided by financing activities was \$12.6 million, primarily consisting of net proceeds from the issuance of convertible preferred stock.

Off-Balance Sheet Arrangements

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

Contractual Obligations

We lease our facilities under a non-cancelable operating lease that expires in 2021.

As of December 31, 2015, future minimum lease payments under the facility lease were as follows (in thousands):

2016	\$	726
2017		821
2018		848
2019		873
2020		900
Thereafter		113
Total	\$	<u>4,281</u>

Pursuant to our license agreements with each of Vernalis and Scripps, we have obligations to make future milestone and royalty payments to these parties. However, because these amounts are contingent and not fixed or determinable, they have not been included on our balance sheet or in the table above.

JOBS Act Accounting Election

We are an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the

enactment of the JOBS Act until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. We also intend to rely on other exemptions provided by the JOBS Act, including, without limitation, 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. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least \$1.0 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700.0 million as of the prior June 30th, and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risk related to changes in interest rates. We had cash and cash equivalents of \$12.5 million as of December 31, 2014 and cash, cash equivalents and marketable securities of \$94.4 million as of December 31, 2015, which consisted of bank deposits and U.S. Treasury securities. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations of interest income have not been significant. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 10% increase in interest rates would not have a material effect on the fair market value of our portfolio.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued ASU 2014-09, *Revenue from Contracts with Customers*, which required an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. ASU 2014-09 will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. The new standard is effective January 1, 2018 for public companies. Early application is permitted as of January 1, 2017. The standard permits the use of either the retrospective or cumulative effect transition method. We do not believe adopting ASU 2014-09 will have a material impact on our financial statements as we are not yet generating revenues.

In August 2014, the FASB issued Accounting Standards Update No. 2014-15, *Disclosure of Uncertainties About an Entity's Ability to Continue as a Going Concern*. This standard update provides guidance around management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. The new guidance is effective for all annual and interim periods ending after December 15, 2016. We do not believe that adopting ASU 2014-15 will have a material impact on our financial statements.

In November 2015, the FASB issued Accounting Standards Update No 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*. This standard amends the accounting for income taxes and requires all deferred tax assets and liabilities to be classified as non-current on the balance sheet. The new standard is effective for reporting periods beginning after December 15, 2016, with early adoption permitted. The standard may be adopted either prospectively or retrospectively. We are currently evaluating the impact of ASU 2015-17.

BUSINESS

Overview

We are a clinical stage biopharmaceutical company focused on the development and commercialization of novel immuno-oncology therapies that are designed to harness the immune system to attack cancer cells. Since we began operations in November 2014, we have built a pipeline of four immuno-oncology programs, three of which focus on the adenosine-cancer axis to modulate an immune response. Our lead product candidate, CPI-444, is an oral, small molecule antagonist of the A2A receptor for adenosine, an immune checkpoint. In January 2016, we began enrolling patients in a large expansion cohort trial for CPI-444. This Phase 1/1b clinical trial is designed to examine safety, tolerability, biomarkers and preliminary efficacy of CPI-444 in several solid tumor types, both as a single agent and in combination with Genentech, Inc.'s investigational cancer immunotherapy, atezolizumab, a fully humanized investigational monoclonal antibody targeting PDL-1. We have also chosen a lead development candidate for our second program, an anti-CD73 monoclonal antibody that inhibits the production of adenosine, and plan to select development candidates for our other two programs in 2016. We believe the breadth and status of our pipeline demonstrates our management team's expertise in understanding and developing immuno-oncology assets as well as in identifying product candidates that can be in-licensed and further developed internally to treat many types of cancer. We hold worldwide rights to all of our product candidates.

Immuno-oncology therapies that stimulate or enhance immune responses to tumors are a new and emerging approach with several potential benefits over existing therapies. First, the immune system exhibits immunologic diversity and selectivity, which enables it to respond to a large number of potential targets. Second, once triggered, the immune response can be amplified, offering the potential to enhance the efficacy of treatment. Third, once activated, the immune system possesses immunologic memory, potentially providing for a durable and long-lasting response. Some of the most successful types of immuno-oncology therapies are immune checkpoint inhibitors. Immune checkpoints are signaling molecules produced by or expressed on immune cells that act to shut down or block an immune response. In a healthy person, these checkpoints function to limit an immune response to ensure that the immune system does not overreact, which could lead to excessive inflammation and tissue damage, as occurs in patients with autoimmune diseases or allergies. Tumor cells have evolved to activate these checkpoints to shield the tumor from immune response attacks, but studies have shown that immune checkpoint inhibitors can counter these tumor-protective measures and unleash the immune system's cancer-destroying properties.

The FDA recently approved agents that target specific immune checkpoints, including antibodies against the cytotoxic T-lymphocyte-associated antigen-4 (CTLA-4) and programmed death 1 (PD-1) receptors, and there are ongoing studies of agents that target programmed death receptor-ligand 1 (PDL-1). These antibodies represent the first immune checkpoint inhibitors to demonstrate effectiveness in the clinic, and preclinical data suggest that there are many other immune checkpoints or targets that may be modulated to promote the activation of a patient's anti-tumor immune system.

Since we began operations in November 2014, we have built a pipeline of four immuno-oncology programs. Three of our programs are aimed at disabling cancer's ability to subvert immune attack by inhibiting adenosine in the tumor microenvironment or by blocking its production by tumors. Adenosine activates an immune checkpoint, the adenosine A2A receptor, that is used by the body to limit inflammation and immune responses. Adenosine accomplishes this by interacting with the A2A and A2B receptors expressed on several cells of the immune system; including T-cells, natural killer (NK) cells, macrophages, dendritic cells and myeloid derived suppressor cells, as well as other cells. We are developing small molecules that selectively inhibit the binding of adenosine to either A2A receptors or to A2B receptors. We also are developing injectable monoclonal antibodies that block the production of adenosine by tumors by inhibiting the cell surface enzyme CD73. Our fourth program is

aimed at developing product candidates that regulate T-cell activation and differentiation by inhibiting interleukin-2 inducible kinase (ITK). Several of our product candidates are orally administered small molecules which may provide for easier administration and facilitate their use in combination with other anti-cancer agents. Our oral product candidates are designed to be rapidly eliminated from the body, which, in turn, could reduce the potential for excessive toxicity when used in combination with other antibody-based checkpoint inhibitors.

Our immuno-oncology product candidate pipeline includes the following:

CPI-444 Adenosine A2A Receptor Antagonist. In February 2015, we in-licensed patent rights and know-how related to CPI-444 and related molecules from Vernalis (R&D) Limited (Vernalis), where it was under development for treatment of Parkinson's disease and other neurologic diseases. Vernalis and its corporate partner conducted two Phase 1 clinical trials in healthy volunteers and one Phase 1b trial in patients with attention deficit and hyperactivity disorder (ADHD), with an aggregate of approximately 75 healthy volunteers and patients dosed. These trials provided early indications of a favorable safety profile and assessed pharmacokinetics, oral bioavailability and receptor occupancy for CPI-444. We conducted further testing in *in vitro* and *in vivo* models to evaluate CPI-444's immune-enhancing and anti-tumor properties. In these studies, orally administered CPI-444 inhibited tumor growth in multiple mouse models of cancer as a single agent, in combination with anti-PD-1 agents and in combination with anti-PDL-1 agents.

In October 2015, we filed an investigational new drug (IND) application for CPI-444 for treatment of several solid tumor types. In January 2016, we began enrolling patients in a large expansion cohort for CPI-444. This Phase 1/1b clinical trial is designed to examine safety, tolerability, biomarkers and preliminary efficacy of CPI-444, both as a single agent and in combination with Genentech's atezolizumab (MPDL3280A), and will include patients with different types of solid tumors enrolled in disease-specific cohorts.

The issued U.S. patents that we in-licensed from Vernalis are directed to the composition of matter of CPI-444 and its method of use for treating disorders treatable by purine receptor blocking. These patents are expected to expire in the United States between January 2022 and July 2029, excluding any patent term extension that may be available. We hold an exclusive, worldwide license under these patent rights and related know-how, including a limited right to grant sublicenses, for all fields of use, to develop, manufacture and commercialize products containing certain adenosine receptor antagonists, including CPI-444.

Anti-CD73 Adenosine Production Inhibitor. In December 2014, we in-licensed from The Scripps Research Institute (Scripps) a mouse hybridoma clone expressing an anti-human CD73 antibody, from which we have developed a humanized anti-CD73 monoclonal antibody. We have further modified this antibody to improve binding and inhibition of catalytic activity. CD73 is often found on lymphocytes, tumors and other tissues and is believed to play an important role in tumor immune suppression by catalyzing the production of extracellular adenosine. In preclinical *in vitro* studies, our humanized monoclonal anti-CD73 antibody has been shown to inhibit the catalytic activity of CD73, resulting in the blocking of extracellular adenosine production by tumor cells, which we believe could stimulate or enhance immune response to tumors. We are initiating IND-enabling studies for the development of this antibody for potential clinical trials in patients with advanced cancer and plan to complete these studies in 2017. We hold a non-exclusive, world-wide license for all fields of use under Scripps' rights in a hybridoma clone expressing an anti-CD73 antibody, and to progeny, mutants or unmodified derivatives of such hybridoma and any antibodies expressed by such hybridoma.

Adenosine A2B Receptor Antagonist. We have in-licensed several selective and potent adenosine A2B receptor antagonists from Vernalis. In addition, we are synthesizing and have identified other A2B receptor antagonists from our internal research program. Adenosine A2B receptors have recently

been found to play an important role in the immune response to tumors. Similar to adenosine A2A receptors, adenosine binds to adenosine A2B receptors, which leads to immunosuppression. We intend to further develop our A2B agents to improve potency, selectivity, pharmacokinetic behavior and immune enhancing properties. We expect to conduct preclinical studies similar to those we have conducted for CPI-444 in order to select a development candidate in 2016. Upon selection, we intend to conduct further IND-enabling studies and potential Phase 1 clinical trials. We hold an exclusive, worldwide license under certain Vernalis patent rights and know-how, including a limited right to grant sublicenses, for all fields of use to develop, manufacture and commercialize products containing such compounds that have been developed using the intellectual property rights that we in-license from Vernalis.

ITK Inhibitor. We are currently developing a series of selective, covalent inhibitors of ITK and are evaluating them in preclinical studies for potency, safety and efficacy. ITK, an enzyme that functions in T-cell signaling and differentiation, is expressed predominantly in T-cells, which are lymphocytes that play a vital role in immune response. One of the key survival mechanisms of tumors is believed to be the reprogramming of T-cells to create an inflammatory environment that inhibits anti-tumor immune response and favors tumor growth. We believe highly selective inhibitors of this enzyme will facilitate induction of T-cell anti-tumor immunity and also may be useful in the treatment of T-cell lymphomas. We plan to select a lead development candidate under this program in 2016 and, following selection, advance the candidate into clinical trials in patients with T-cell lymphoma and in patients with solid tumors. We hold exclusive worldwide rights for all indications.

Our Company Origins, Team and Investors

Since we began operations in November 2014, our focus has been on improving and expanding upon the recent success with immune checkpoint inhibitors and developing agents to new targets in the evolving immuno-oncology field. Our founders and management team consist of industry veterans who played significant roles in the discovery and development of successful oncology and immunology antibodies and drugs, including rituximab and ibrutinib. Our co-founders include our Chief Executive Officer, Richard A. Miller, M.D., our Chief Financial Officer, Leiv Lea, and our Executive Vice President, Discovery Research, Joseph Buggy, Ph.D. Dr. Miller previously co-founded IDEC (which merged to form Biogen IDEC, now Biogen), where he led research efforts on lymphoma, culminating in the development of rituximab. Dr. Miller, an oncologist, also co-founded and was the initial CEO of Pharmacyclics, Inc. where he and colleagues in-licensed ibrutinib and, together with Dr. Buggy, led its development. Our Chief Financial Officer, Leiv Lea, has previously led finance teams for emerging biotechnology companies, including Pharmacyclics. Mr. Lea has extensive commercial and operating experience in addition to having completed a number of financial and strategic transactions. In addition, we have recruited industry veterans and experts to join our management team, and established collaborations with leading biotechnology companies, including Genentech, and collaborative relationships with research institutions, including The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins. With our management team's expertise in developing both small molecule and antibody-based oncology treatments, we believe we are well positioned to identify and develop novel therapeutic agents that have diverse but complementary mechanisms of action, allowing for their potential integration into immuno-oncology treatment regimens for a broad variety of cancers.

We have attracted initial funding from many leading healthcare investors and funds, including Adams Street Partners; BlackRock; Cormorant Asset Management; Cowen Private Investments; funds affiliated with Fidelity Management and Research Company; Jennison Associates (on behalf of certain clients); Novo A/S; OrbiMed Advisors; Roche Venture Fund; Rock Springs Capital Management; Sphera Funds Management; funds and accounts managed by T. Rowe Price; and venBio Select Advisor.

Our Strategy

Our goal is to become a leader in the field of immuno-oncology treatments for multiple cancer indications. Specific elements of our strategy are:

- **Leverage our expertise in immunology and oncology to identify, develop and commercialize new product candidates.** We have established development expertise and capabilities in synthetic chemistry, molecular biology, immunology and clinical oncology, which we believe will help us advance product candidates in the immuno-oncology field. We plan to become a leader in the development and commercialization of product candidates targeting adenosine in what is known as the adenosine-cancer axis, a key mechanism used by tumors to evade immune attack. Three of our product programs, each of which was in-licensed, are focused on the development of product candidates targeting this axis, including an A2A receptor antagonist, an anti-CD73 antibody and an A2B receptor antagonist. We intend to seek opportunities to in-license additional product candidates with a focus on the potential to address unmet needs within our areas of expertise.
- **Utilize existing preclinical and clinical data to advance our lead product candidate into clinical trials for oncology.** Our lead candidate, CPI-444, was previously studied in Phase 1 and 1b clinical trials in healthy volunteers and patients with ADHD, providing information on safety, pharmacokinetics and dosing in patients. In our preclinical studies, CPI-444 has demonstrated potent and selective inhibition of the adenosine A2A receptor. We believe the existing clinical and preclinical data for CPI-444 will significantly reduce the development time for this compound. Our IND in oncology was filed in October 2015 and we began enrolling patients in a Phase 1/1b clinical trial in January 2016. This trial utilizes a successive expansion cohort design to enroll patients with different types of cancer into disease-specific cohorts.
- **Advance product candidates for use alone or in combination with other oncology treatments.** We intend to focus on product candidates with single agent activity, which are also designed to be combined synergistically with other cancer therapies. We believe that many immuno-oncology therapeutic regimens will likely be built on a backbone of anti-PD-1/PDL-1 blockade, and our initial Phase 1/1b clinical trial includes the administration of CPI-444 in combination with an investigational anti-PDL-1 agent. Our product candidates are designed to target the patient's immune system rather than a specific type of malignant cell, and, if approved, could be suitable for combination with current and future immunotherapy agents as well as traditional cancer treatments, including chemotherapy, biologic therapy, targeted therapy and radiation therapy.
- **Identify biomarkers to select patients and monitor treatment with our product candidates.** Predicting optimal drug responses in patients requires the identification and validation of predictive biomarkers. We believe that developing the ability to identify patient subsets most likely to respond to our product candidates will increase the clinical benefit to patients and improve the probability of success of our clinical trials. Our Phase 1/1b clinical trial of CPI-444 will examine numerous biomarkers to identify those that may correlate with clinical efficacy and increase our likelihood of success.
- **Pursue collaborative relationships, partnerships and in-licensing opportunities to help advance and expand our product candidate portfolio.** In addition to developing product candidates through preclinical and clinical stages of development, we plan to identify and pursue strategic collaborative relationships, partnerships and in-licensing opportunities, which could enhance the development of our programs and product candidates. As evidenced by our collaboration with Genentech for CPI-444, we intend to build upon our relationships with leading biotechnology companies and research institutions to identify new opportunities to position us at the forefront of immuno-oncology.

Cancer Treatment and Immuno-oncology

Cancer is the second leading cause of mortality in the United States, accounting for nearly one in every four deaths. Approximately 40% of Americans will develop some form of cancer, and, according to the American Cancer Society, there will be 1.7 million new cases of cancer and 589,000 deaths due to cancer in the United States in 2015. Cancer treatment has traditionally included chemotherapy, biologic therapy, radiation, surgery or a combination of these approaches. Treatment with targeted agents is becoming more widely used. These agents often react with specifically mutated proteins in cancer. Many different mutations are now known to occur frequently in cancer and, in many cases, are responsible for driving tumor progression.

Immuno-oncology is a new and emerging approach to treating cancer that is based on stimulating or enhancing an immune response to the tumor. This approach is based on the findings that the mutations occurring in cancer cells may be immunogenic and capable of eliciting an immune response against the tumor. Immuno-oncology therapies offer several potential advantages over existing cancer therapies due to the intrinsic features of the immune system. For instance, the immune system exhibits immunologic diversity and selectivity, which enables it to respond to a large number of potential targets. In addition, once triggered, the immune response can be amplified, offering the potential to enhance the efficacy of treatment. Furthermore, once activated, the immune system possesses immunologic memory, potentially providing for a durable and long-lasting response. Finally, because immunotherapy mechanisms are indifferent to tissue origin and are instead focused on immunogenic mutations, which are often expressed across tumor types, immunotherapy may be widely applicable to many types of cancer and not limited to a particular tumor type. This allows for these agents to be potentially active in a multitude of cancer histologies. However, while the modulation of the immune system to eradicate cancer has been a long-standing goal in cancer therapy, historically it has not been possible to consistently produce clinically meaningful anti-tumor immune responses despite the immunogenicity of tumors.

Recently, the reasons for the previous failures of immunologic approaches to cancer treatment have become better understood. Tumors evolve sophisticated survival mechanisms, allowing them to avoid immune-mediated destruction as occurs with pathogens, such as bacteria or viruses. These mechanisms include the activation of immune checkpoints on cells of the immune system, which act to block immune responses, and the reprogramming of T-cells to create an inflammatory environment that inhibits immune response and favors tumor growth. Immune checkpoints are signaling molecules produced by or expressed on immune cells that shut down or block an immune response. In a healthy person, these checkpoints function to limit an immune response to ensure that the immune system does not overreact, which could lead to excessive inflammation and tissue damage, as occurs in patients with autoimmune diseases or allergies. Tumors have evolved to activate these checkpoints to shield them from immune response attacks. However, studies have shown that these mechanisms can be countered using immune checkpoint inhibitors, which can unleash the immune system's cancer-destroying properties. The newfound understanding of immune checkpoints has led to a revolution in cancer treatment and the growing field of immuno-oncology. Specific immune checkpoint inhibitors, including antibodies against CTLA-4, PD-1 receptor or its ligand PDL-1 have produced impressive results in the clinic in a range of cancers, leading to FDA approvals for ipilimumab (anti-CTLA-4), nivolumab (anti-PD-1) and pembrolizumab (anti-PD-1).

Despite their recent success, current checkpoint inhibitors suffer from several limitations. Only a minority of patients treated with checkpoint inhibitors exhibit robust anti-tumor responses, and most responses are partial and temporary. Many patients initially respond, but then relapse due to the emergence of resistant pathways, which may occur due to tumor cell expression of other checkpoints. Some patients experience unusual toxicities related to an excessive immune response leading to pneumonitis, hepatitis, colitis and other immune related disorders. These limitations have motivated a

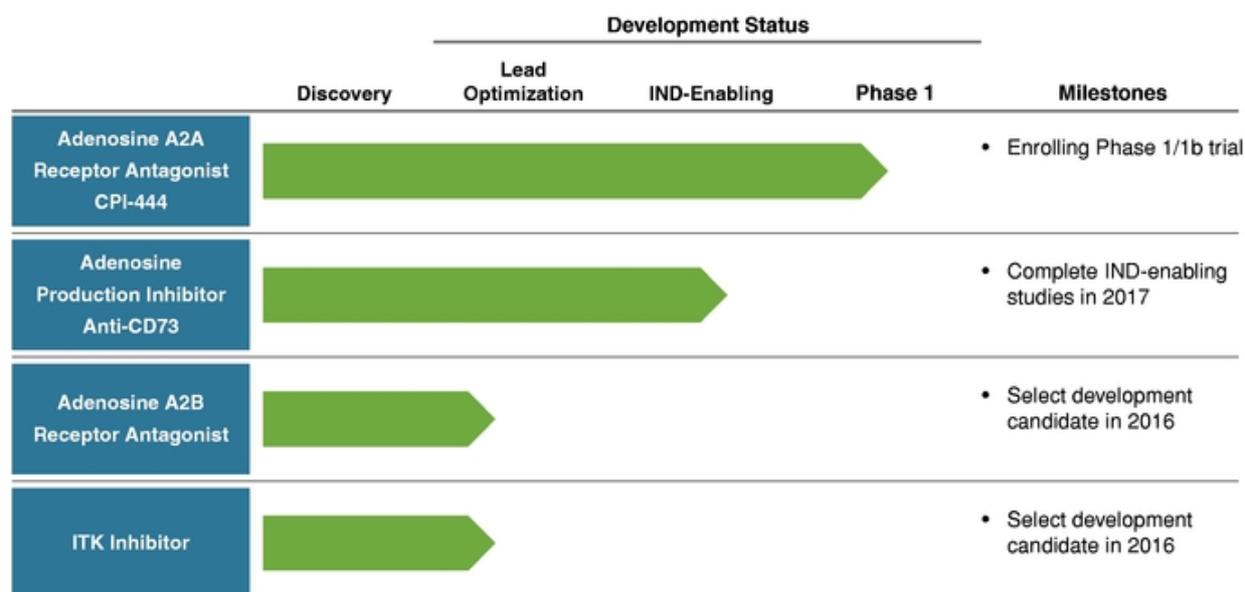
search for other immune checkpoint targets and the use of combinations of various checkpoint inhibitors in an attempt to improve efficacy, reduce resistance and limit or reduce toxicity.

The recent success of checkpoint inhibitors has stimulated increased interest in utilizing various immunotherapy approaches to treating cancer, including vaccines, cellular therapies and other immunomodulatory agents. These approaches include modulating the function of various immune cells. For example, ibrutinib, an FDA approved BTK inhibitor, is currently being evaluated as an immunomodulatory agent in solid tumors because it is believed to also affect the differentiation of T-cells.

Product Pipeline

We are developing novel checkpoint inhibitors and immuno-oncology therapies that we believe may overcome some of the limitations of current immuno-oncology therapies. Three of our programs are aimed at disabling cancer’s ability to subvert immune attack by inhibiting adenosine in the tumor microenvironment or by blocking its production by tumors. Our fourth program is aimed at developing product candidates that regulate T-cell activation and differentiation by inhibiting ITK. We intend to commercialize any approved product candidates primarily in the United States and Europe for any oncology indications our product candidates are approved for. We expect cancer patients or their healthcare providers to be our primary customers for any approved product candidates and expect that our commercial sales of such product candidates will depend on the availability of adequate coverage and reimbursement from government health administration authorities, private health insurers and other third-party payors.

The following chart summarizes key information regarding our current product candidate pipeline and expected milestones:

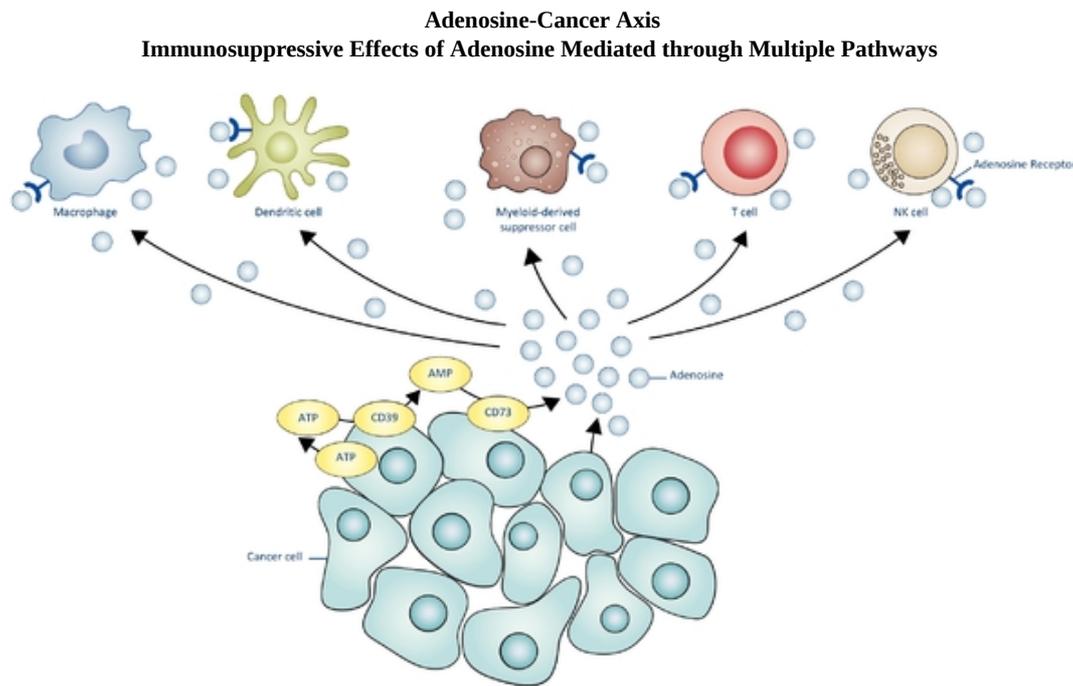


Adenosine Inhibitors

Adenosine-Cancer Axis and Anti-tumor Immune Response

Adenosine activates an immune checkpoint, the adenosine A2A receptor, that is used by the body to limit inflammation and immune responses. It is produced during acute, inflammatory processes in two steps. The first step is the catalytic conversion of adenosine triphosphate (ATP) to adenosine monophosphate (AMP) by the enzyme CD39. The second and rate-limiting step is the conversion of AMP to adenosine by CD73, an enzyme expressed on the surface of several types of immune cells, tumor cells and cells of certain other tissues. Under normal circumstances, the level of adenosine is increased to protect a person from over-injury in response to such stimuli as inflammation, infection or ischemia. However, as a self-protective maneuver, many tumor types actively sustain increased levels of extracellular adenosine by production through CD73 or by direct secretion of adenosine. These increased levels of adenosine interact with the A2A and A2B receptors expressed on several cells of the immune system, including T-cells, NK cells, macrophages, dendritic cells and myeloid derived suppressor cells, as well as other cells, which has the effect of dampening the immune response to the tumors, a system known as the adenosine-cancer axis.

The following figure provides an overview of adenosine production by tumors and its effects on the immune system:



The immune system is composed of several cellular components that mediate a variety of functions in response to tumor cells and foreign pathogens. For instance, macrophages and dendritic cells function primarily to process foreign antigens and tumor antigens. These cells then present such antigens to other cells, such as T-cells. The presentation of these antigens to T-cells stimulates cytotoxic T-cells (also known as killer T-cells) to destroy the tumor cells or foreign pathogens. Other cells, such as NK cells, are capable of destroying tumor cells without the need for antigen presentation from macrophages or dendritic cells. In addition, certain immune cells, such as myeloid derived suppressor cells and T regulatory cells, function to suppress or dampen immune responses. The various cellular components of the immune system work in a coordinated manner to recognize and destroy pathogens and tumor cells.

Adenosine hinders the immune response to tumors by both blocking the activation and effectiveness of immune cells capable of destroying tumor cells, and by increasing the number of immune cells that act to suppress immune cells from responding to the tumor. For instance, adenosine reduces T-cell and NK cell production of cytokines, such as interleukin-2 (IL-2) and gamma interferon (IFN γ), which results in the blockade or reduction in the ability of such cells to destroy tumor cells. Adenosine also leads to activation and proliferation of T regulatory cells, which function to suppress or dampen immune responses. In addition, adenosine causes dendritic cells to both decrease the rate at which they present antigens to T-cells, thereby inhibiting the ability of T-cells to destroy tumor cells, and decrease their production of co-stimulatory cytokines, which also has the effect of suppressing or dampening the immune response. Macrophages exposed to adenosine will similarly decrease their function, which results in the suppression of immune activity. Finally, adenosine stimulates and increases the number of myeloid derived suppressor cells in the tumor microenvironment, which suppresses immune responses to the tumor. As tumor cells evolve and form cancerous growths, they utilize these processes to evade immune attack and promote their survival. Many of the effects of adenosine on the immune system are mediated through binding to A2A receptors present on several immune cells. Much less is known about A2B receptors, but they have recently been found on certain immune cells, such as macrophages and myeloid derived suppressor cells, and adenosine binding to A2B receptors also appears to play a role in tumor induced immune suppression.

Cancer cells also appear to directly utilize adenosine to promote their own growth. Many solid tumors upregulate CD73 for increased adenosine production. In some cases, it appears adenosine can stimulate growth in tumors by increasing a tumor's blood supply.

A significant body of data indicates that targeting the adenosine-cancer axis through the A2A receptor can promote anti-tumor immune responses leading to tumor regression. Consistent with studies of the inhibition of the A2A receptor, A2A receptor gene knockout mice, which completely lack expression of the A2A receptor, exhibit improved anti-tumor immunity. In addition, several preclinical tumor model studies have shown that treatment with A2A receptor inhibitors leads to tumor regression that is enhanced when administered in combination with various other checkpoint inhibitors, such as anti-PD-1 therapies and anti-CTLA-4 therapies.

Lead Product Candidate: CPI-444, an A2A selective, orally administered antagonist of the adenosine A2A receptor

Overview

Our lead product candidate, CPI-444, is a selective oral adenosine A2A receptor antagonist that we licensed from Vernalis in February 2015. This molecule was under development for treatment of Parkinson's and other neurologic diseases because expression of A2A receptors was shown in a region of the brain known as the substantia nigra, an area of the brain that produces dopamine. Vernalis and its corporate partner, Biogen IDEC, discontinued development of the drug after others had failed to show efficacy in clinical trials in Parkinson's disease with other A2A antagonists. Although those studies failed to demonstrate efficacy in Parkinson's disease, they did show that A2A receptor antagonists were relatively safe and well-tolerated. Three human clinical trials involving approximately 75 healthy volunteers and patients with ADHD were conducted previously with CPI-444 by Vernalis and their corporate partner, of whom 43 received single doses and 54 received once-daily or twice-daily doses for up to 14 days. One of these, a randomized, Phase 1b, double-blind, cross-over, placebo controlled trial in 28 patients with ADHD, was conducted in the United States from 2013 to 2014 under an IND. At the time, little was known about the A2A receptor and the potential effects of adenosine on the immune system, and these studies did not attempt to measure effects of treatment on immune cells or on immune function.

Since licensing CPI-444, we have conducted extensive laboratory studies *in vitro* and *in vivo* in animal models to evaluate CPI-444's immune-enhancing and anti-tumor properties. In these studies, orally administered CPI-444 inhibited tumor growth in multiple mouse models of cancer as a single agent, in combination with anti-PD-1 and in combination with anti-PDL-1. We have also shown *in vitro* that CPI-444 binds potently and selectively to human activated T-cells and blocks adenosine mediated immunosuppression by restoring T-cell function. In addition, we have shown that there is anti-tumor activity in mice for a significant time following oral administration, which appears to be mediated through a long-lasting memory immune response. Furthermore, we have shown in animal models that the treatment is well tolerated. Our IND in oncology was filed in October 2015, and we began enrolling patients in a Phase 1/1b clinical trial in January 2016.

Human Safety and Pharmacokinetic Data for CPI-444

Prior to licensing CPI-444 from Vernalis, Vernalis and its corporate partner conducted two Phase 1 clinical trials in healthy volunteers and one Phase 1b trial in patients with ADHD, with oral doses ranging from 30 mg/day to 300 mg/day. Two studies were completed in healthy human male volunteers, the first of which was a single ascending dose or multiple dose study with 41 healthy volunteers. Of these 41 subjects, 21 were dosed in both the single ascending dose and multiple dose portions of the study. The second study was a receptor occupancy study performed in six human subjects using PET imaging to determine receptor occupancy. The third study was a randomized, double blind, placebo controlled, cross-over Phase 1b trial in 28 patients with ADHD, which evaluated doses up to 200 mg/day. The results of these studies were as follows:

- *Safety and tolerability:* In studies involving healthy volunteers, there was no pattern in the incidence, severity, or relationship of adverse events to CPI-444 dose level. The main toxicity exhibited was gastro-intestinal disorders (abdominal pain, nausea) due to gastric irritation; however, these findings were also observed in the placebo group. No differences in gastric endoscopy were seen between treatment and placebo groups. No dose limiting toxicities were observed and no subject experienced a serious adverse event considered by the investigator to be related to CPI-444. There were no treatment-associated changes seen for any routine laboratory safety tests. A minimal and transient increase in blood pressure that may have been dose-related was observed on day one, but was not detected by day 14 of continuous daily dosing. No clinically significant cardiac abnormalities on telemetry or electrocardiogram recordings were observed. There were no clinically significant changes from baseline in physical examination findings and there were no treatment-emergent clinically significant findings. Based on these studies, we believe that administration of CPI-444 was not associated with any clear evidence of toxicity.
- *Human pharmacokinetics:* CPI-444 was absorbed promptly following oral administration (lag time of less than 0.5 hours) with maximum plasma concentrations (C_{max}) observed within four hours of dosing (t_{max}). The plasma half-life ($t_{1/2}$) of CPI-444 was determined to be approximately 10 hours after 14 days of dosing. Preliminary data indicate that the effect of food on bioavailability of CPI-444 is negligible, indicating that the drug can be given to fasting or fed patients.
- *Receptor occupancy in human brain:* In a receptor occupancy study conducted by Vernalis during its development of CPI-444 for Parkinson's disease, CPI-444 was shown to bind to brain A2A receptor in a dose-dependent manner following oral administration. CPI-444 appeared to display a direct relationship between plasma concentration and brain A2A receptor occupancy, with 50% of the receptor occupied at a concentration of 320 ng/mL. Approximately 15% of drug crosses the blood brain barrier in studies conducted in non-human primates. Trough level plasma concentrations greater than 960 ng/mL of CPI-444 are, therefore, calculated to lead to greater than 90% A2A receptor occupancy in peripheral tissues. These studies indicate that at the

lowest plasma levels of CPI-444 achieved following 100 mg given twice per day, there would be an expected 90% or higher occupancy of the peripheral A2A receptors.

Human Pharmacokinetics of CPI-444

	200 mg Once Daily Oral		100 mg Twice Daily Oral	
	Day 1	Day 14	Day 1	Day 14
C _{max} (µg/mL)	4.29	5.59	3.54	4.06
T _{max} (h)	1.78	3.0	3.00	2.00
C _{min} (µg/mL)	Not applicable	0.22	Not applicable	1.12
t _{1/2} (h)	Not calculated	10.2	3.00	10.6

Our Preclinical Studies of CPI-444

Following our licensing of CPI-444 from Vernalis in February 2015, we conducted preclinical studies of CPI-444 to evaluate its potency and selectivity in *in vitro* studies and its efficacy in both *in vitro* and *in vivo* studies. The results of these studies are described below.

Potency and Selectivity in *In Vitro* Studies

In order for an A2A receptor antagonist to be a suitable product candidate, it would need to bind to the A2A receptor very strongly, while not binding strongly to other adenosine receptors. Such strong and selective binding would be expected to enable lower dosing of the product candidate and minimize unwanted binding to other adenosine receptors, which could reduce the potential for unwanted side effects. Binding is measured by determining a drug's binding affinity (K_i) for the target. K_i values in the low nanomolar (nM) range are indicative of strong binding occurring at low concentrations of the drug.

CPI-444 was shown *in vitro* to selectively bind to A2A receptors more strongly than any other adenosine receptors. As shown in the table below, CPI-444 was shown to bind to A2A receptors with an affinity (K_i) of 3.5 nM and was over 50 times more selective to the A2A receptors than to other adenosine receptor subtypes. Based on these results, we believe that at our current expected dose levels, CPI-444 is likely to bind to A2A receptors without exhibiting significant binding to A1, A2B or A3 receptors, which could lead to CPI-444 exhibiting an adequate safety profile and potential efficacy at reasonable doses.

Selective Binding of CPI-444 to A2A Receptor

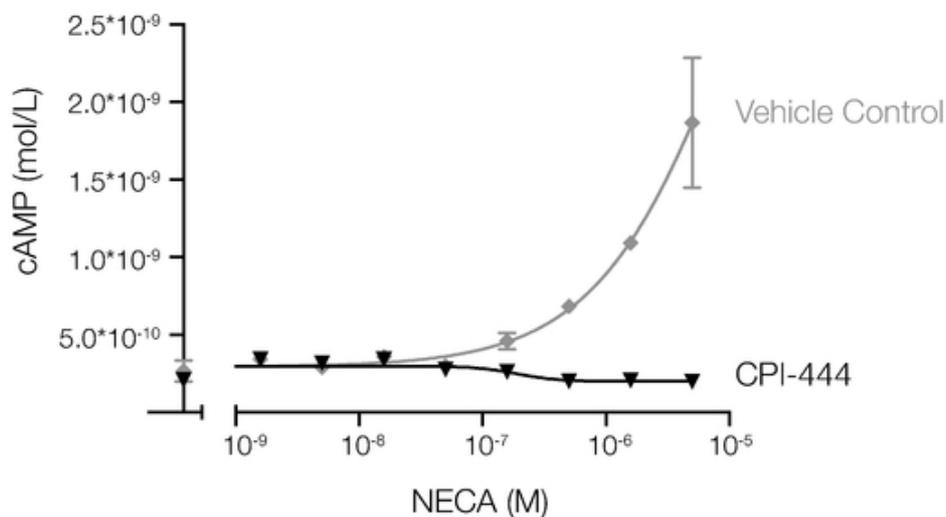
Receptor	K _i nM	Receptor Selectivity Ratio
Adenosine A2A	3.5	1
Adenosine A1	192	54
Adenosine A2B	1,528	431
Adenosine A3	2,455	693

Efficacy in Preclinical *In Vitro* Immune Studies

We have evaluated CPI-444 in a series of *in vitro* studies directed toward its use as an immunotherapy for cancer. Adenosine receptors are G-protein coupled receptors (GPCRs) and signal intracellularly by stimulating production of cyclic adenosine monophosphate (cAMP). As shown in the figure below, in human T-cells studied *in vitro*, 1 µM of CPI-444 fully inhibited the production of intracellular cAMP following stimulation with 5'-N-ethylcarboxamidoadenosine (NECA), a stable analog

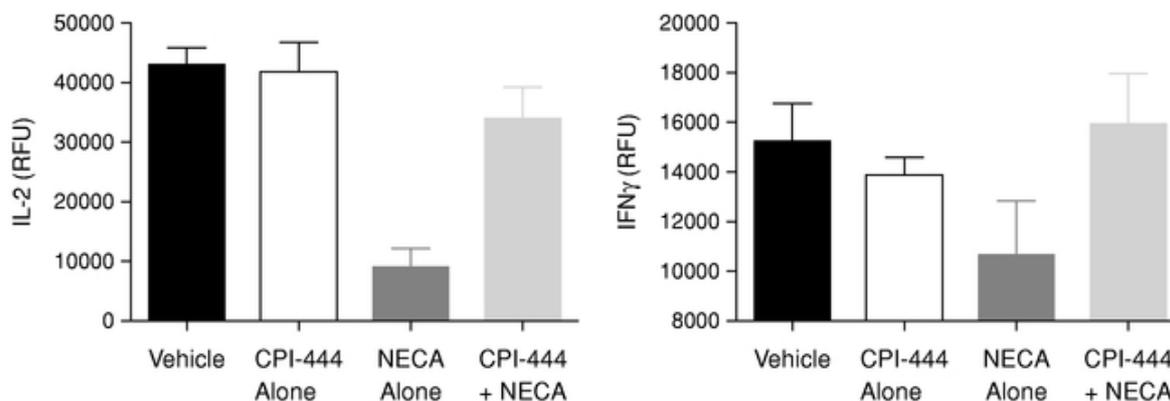
of adenosine. NECA is often used in laboratory experiments in place of adenosine because it is not degraded by naturally occurring enzymes. We believe this result demonstrates that CPI-444 can significantly block the immunosuppressive adenosine signaling in human T-cells, thereby limiting the immunosuppressive effects of adenosine. In addition, a concentration of 70 nM of CPI-444 was able to block 50% of the maximum cAMP production induced by adenosine in activated T-cells, representing relatively potent activity of the drug. CPI-444 also exhibited activity comparable to SCH58261, a commercially available laboratory grade A2A antagonist often used as a control in *in vitro* studies.

Production of Intracellular cAMP in Human T-cells Treated with CPI-444



We have also shown that CPI-444 restores the *in vitro* function of human activated T-cells, as assayed by IL-2 and IFN γ secretion by activated T-cells, in the presence of immunosuppressive levels of NECA. IL-2 and IFN γ are released by activated T-cells and are mediators of T-cell proliferation and killing of tumor cells. Adenosine reduces the levels of these mediators. Our experiments indicate that CPI-444 can overcome the immunosuppression caused by adenosine. The following figures show that 1 μ M of adenosine decreased the stimulation of human T-cells following their activation as assayed by measuring levels of secreted IFN γ or IL-2. Treatment of these cells with 1 μ M CPI-444 restored IFN γ and IL-2 secretion, suggesting that CPI-444 can restore immune function of cytotoxic T-cells following adenosine-induced T-cell suppression.

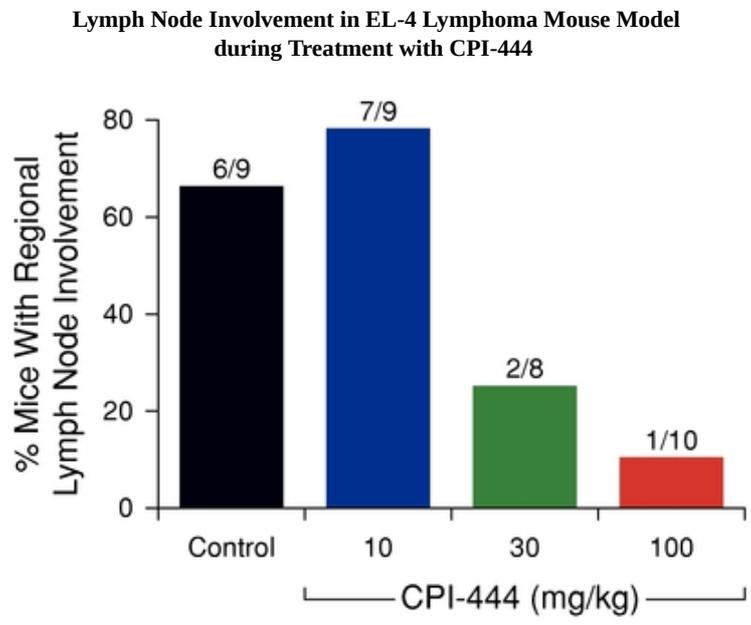
Secretion of IL-2 and IFN γ in Human T-cells Treated with CPI-444



Efficacy in Preclinical *In Vivo* Mouse Models of Cancer

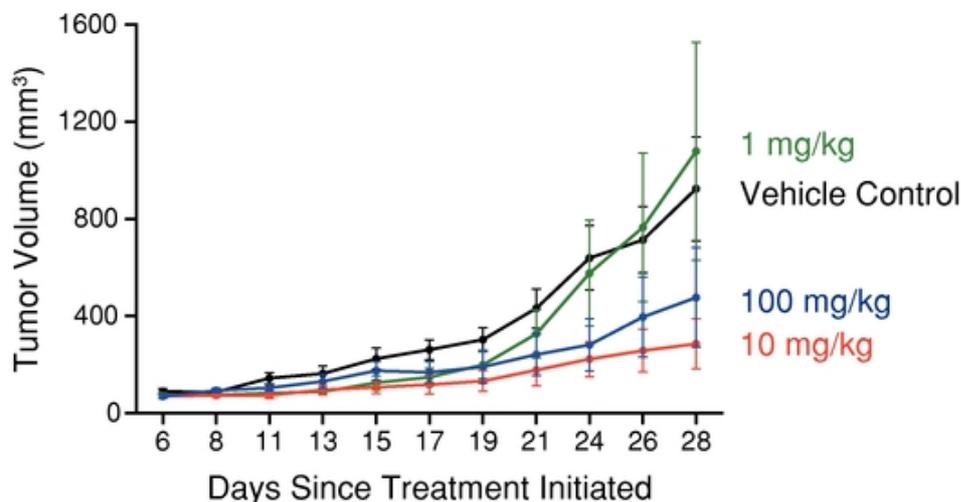
We have also tested CPI-444 in three different mouse models of tumor growth: an EL-4 lymphoma model, an MC38 colon tumor model and a CT26 colon tumor model.

In the rapidly proliferating EL-4 lymphoma model, daily oral treatment with CPI-444 resulted in a small decrease in growth of the primary tumor at the injection site at a dose of 100 mg/kg. EL-4 is a lymphoma that rapidly spreads throughout the lymphatic system. As shown in the figure below, a significant reduction in the number of lymph nodes with cancer cells present, also known as lymph node involvement, was seen. At a dose of 100 mg/kg, only one of ten mice had measureable tumor lymph node involvement, as compared to the control study, where six of nine mice had widespread measureable lymph node involvement.



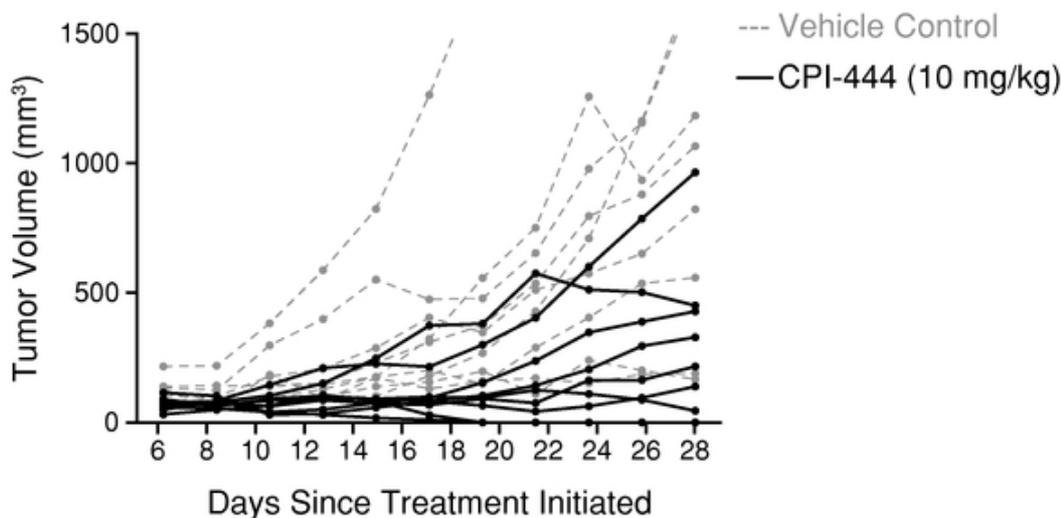
In the MC38 mouse colon cancer model shown in the figure below, the daily treatment of mice with CPI-444 led to a dose-dependent reduction in tumor growth at the primary tumor site that is significant in the 10 mg/kg ($p=0.01$) treatment group. The p-value is a measure that states the probability that a comparable or better result would be produced purely by chance. A p-value equal to 0.01 means that if the CPI-444 were only as effective as the placebo administered in the control, there would be a 1% chance that a comparable or better result would be produced purely by chance. A p-value ≤ 0.05 is commonly used as a criterion for statistical significance meaning that the effect is unlikely due to random chance.

Tumor Volume in MC38 Colon Cancer Mouse Model during Treatment with CPI-444



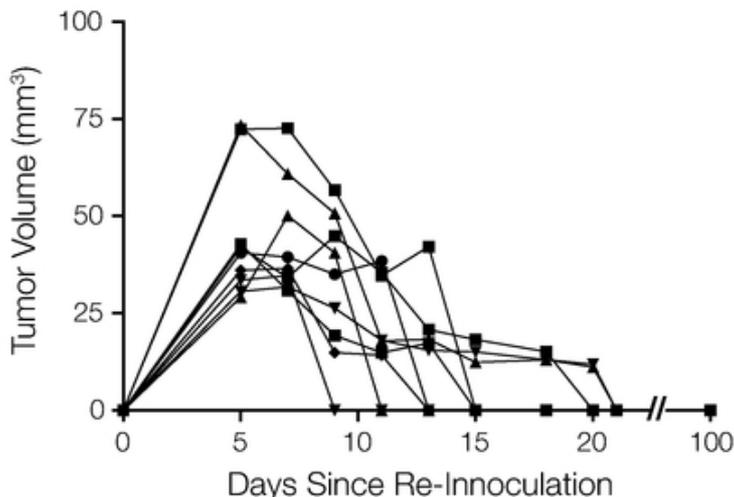
The figure below shows the tumor volume of each mouse treated with 10 mg/kg CPI-444. Such mice can be seen to have tumors that initially enlarged, but then regressed, or that achieved a measure of disease stability. Notably, complete regression of the tumor was observed in several of the mice treated with CPI-444, while none of the tumors in the mice in the control group completely regressed. Mice treated with 100 mg/kg exhibited similar results.

Tumor Volume in MC38 Colon Cancer Mouse Model during Treatment with 10 mg/kg of CPI-444



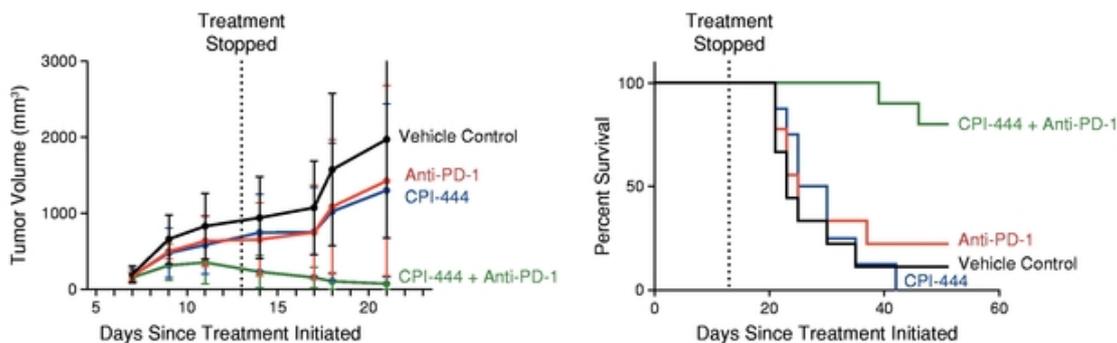
Following the initial 24-day treatment period, ten of the mice that had complete elimination of their tumors at doses of 10 mg/kg and 100 mg/kg were subsequently taken off of drug and evaluated for six weeks without treatment. During this time, no tumor re-growth was observed, suggesting these mice were cured of their tumors. In order to determine if the cured mice had developed immunity to the MC38 colon tumors, the mice were then re-inoculated with MC38 colon tumor cells, the same inoculum of tumor cells that were initially injected. As shown in the figure below, following an initial period of minimal tumor enlargement, all ten of the mice went on to reject the tumors even though no treatment was given. These results are consistent with the hypothesis that, once activated, the immune system can exhibit immunologic memory, potentially providing for a durable and long-lasting response.

Tumor Volume in MC38 Colon Cancer Mouse Model following Re-Inoculation with Tumor Cells in Previously Treated Mice



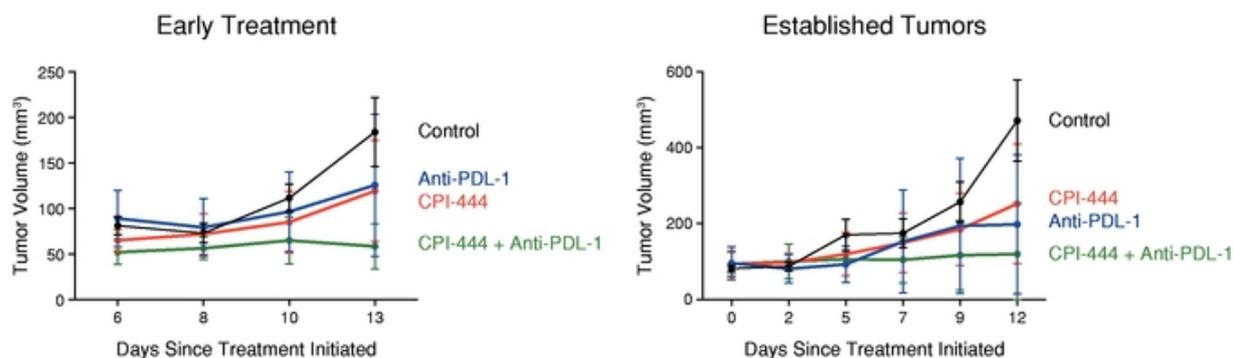
In the CT26 colon cancer mouse model, a relatively immunotherapy resistant tumor model, the administration of CPI-444 alone (100 mg/kg, oral) and an anti-PD-1 antibody alone led to a slight reduction in tumor growth. However, as shown in the figure below, the combination of CPI-444 (100 mg/kg, oral) and the anti-PD-1 agent led to a synergistic and significant ($p < 0.05$) reduction in tumor growth as well as an improvement in overall survival compared to either CPI-444 alone or the anti-PD-1 agent alone. All of the mice who were administered the combination exhibited stable tumor volume or significant regression of their tumors. Seven of nine mice who were administered the combination treatment showed long-term survival.

Tumor Volume and Survival Rates in CT26 Colon Cancer Mouse Model following Treatment with CPI-444 and Anti-PD-1



We have also evaluated CPI-444 in combination with an anti-PDL-1 agent in the MC38 colon cancer model. Mice were treated with oral CPI-444 at a dose of 10 mg/kg per day with or without the anti-PDL-1 antibody, both immediately and after seven days of tumor growth. As shown in the figure below, the combination produced better tumor control than either agent alone, both when given early in the course of tumor growth and when given after the tumor was more established. Mice similarly treated with oral CPI-444 at a dose of 100 mg/kg experienced similar results.

**Tumor Volume in MC38 Colon Cancer Mouse Model
following Treatment with 10 mg/kg CPI-444 and Anti-PDL-1**



CPI-444 Clinical Development Plan

In January 2016, we began enrolling patients in a Phase 1/1b, open-label, multicenter, multidose, dose-selection clinical trial for patients with selected advanced, incurable cancers. The trial is intended to examine oral CPI-444 administered as a single agent and in combination with Genentech's investigational cancer immunotherapy, atezolizumab (MPDL3280A), an anti-PDL-1 monoclonal antibody. Under our clinical trial collaboration agreement with Genentech, we will be responsible for the conduct and cost of the relevant studies, under the supervision of a joint development committee made up of our representatives and representatives of Genentech. Genentech will also supply atezolizumab. Pre-treatment and on-treatment tissue, blood and serum samples will be collected and tested for a wide range of biomarkers. We also plan to study the expression of numerous genes in tumor samples.

We plan to initially conduct the trial in multiple sites in the United States, Australia and Canada, with the potential for additional European sites at a later date. We intend to enroll patients with tumors that have been found by others to be responsive to immunotherapeutic agents. These tumors include non-small cell lung cancer, malignant melanoma, renal cell cancer, triple-negative breast cancer, colorectal cancer, head and neck cancer, bladder cancer and metastatic castration-resistant prostate cancer. Studies utilizing anti-CTLA-4 therapies, anti-PD-1 therapies and anti-PDL-1 therapies have shown that these tumors are more likely to possess immunogenic proteins that are capable of eliciting anti-tumor immune responses. As a result, we believe that selecting patients with these types of tumors will enhance our chances of identifying patients responsive to CPI-444 therapy.

The primary objectives of our clinical trial for CPI-444, as a single agent and in combination with atezolizumab, are to:

- evaluate the safety and tolerability of CPI-444 in cancer patients;
- determine appropriate dosage based on safety, pharmacokinetic and pharmacodynamic data;
- assess anti-tumor activity; and
- assess the potential role of various biomarkers to predict or monitor response to therapy.

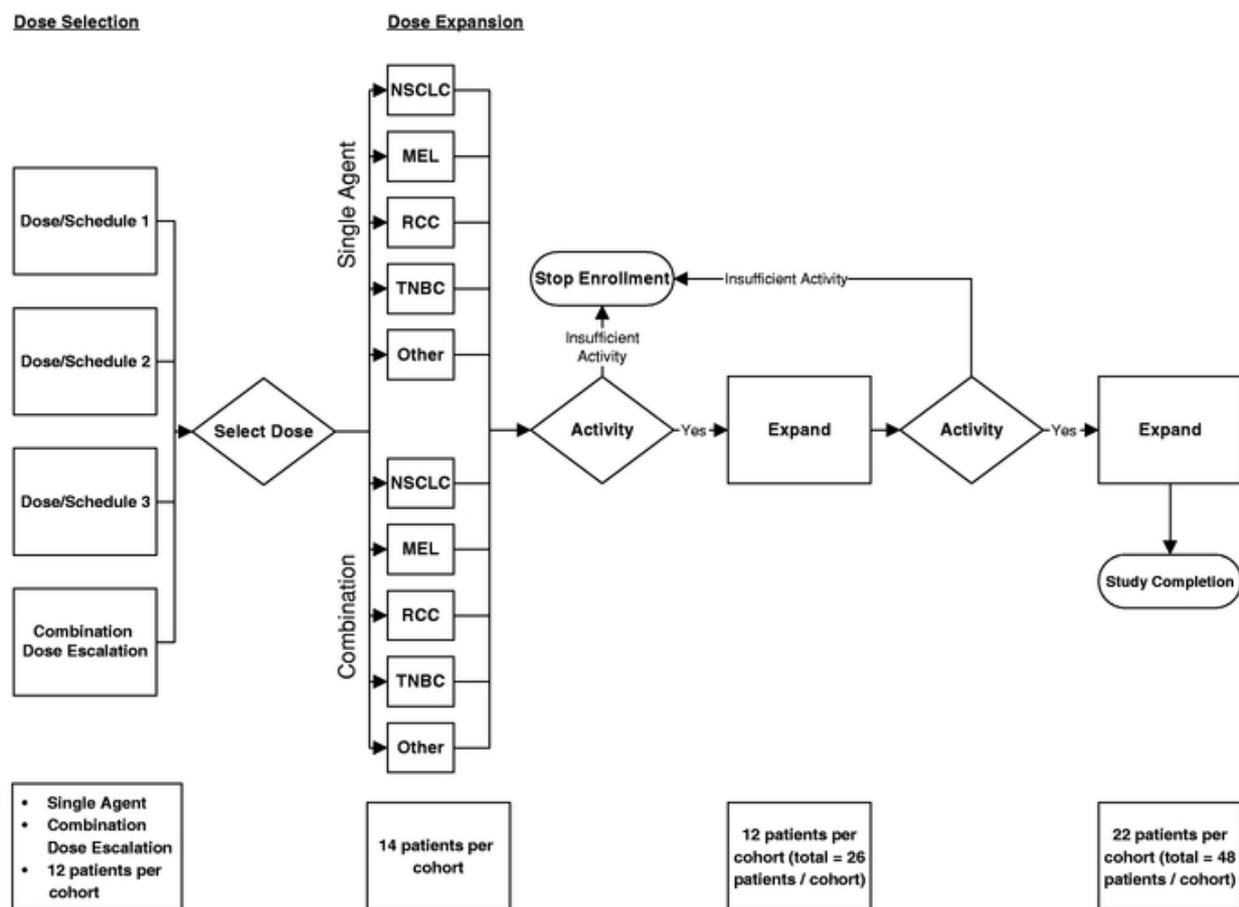
We expect to conduct our clinical trial of CPI-444, as a single agent and in combination with atezolizumab, in two steps:

- *Step 1—Dose Selection:* During this step, we intend to determine appropriate dosing based on safety, pharmacokinetic and biomarker studies. We intend to randomly enroll patients into one of four cohorts, with up to twelve patients per cohort. In three of the cohorts, we expect to test single agent CPI-444 at three different doses and schedules. In the fourth cohort, we expect to evaluate escalating doses of CPI-444 in combination with a fixed dose of atezolizumab.
- *Step 2—Dose Expansion:* During this step, we plan to further study the selected dose and schedule of CPI-444 as a single agent and in combination with atezolizumab in expansion cohorts. We expect this phase of the study to have ten cohorts, with five cohorts receiving single agent CPI-444 and five cohorts receiving the combination of CPI-444 and atezolizumab. Patients will enter disease-specific cohorts based on type of cancer and prior exposure to an anti-PD-1 or anti-PDL-1 antibody. We expect that each cohort will initially enroll up to 14 patients, with cohorts to be expanded. If a response (defined as partial or complete tumor response or disease stabilization for three months or more) in one or more patients out of 14 patients in a cohort is observed, then we intend to expand that cohort by twelve additional patients to a total of 26 patients. If no response is seen in the initial 14 patients, then we expect to cease enrollment in that cohort. If a response in five or more patients out of 26 patients in the expanded cohort respond is observed, then we intend to expand that cohort by an additional 22 patients, for a total of 48 patients. We believe this design will enhance our ability to detect responses in a range of tumor types.

The goal of this study is to determine dosing and scheduling for future studies. The endpoints for the trial are safety, tolerability and efficacy for CPI-444 given both as a single agent and in combination with atezolizumab. Numerous biomarker and immunologic analyses also may provide other exploratory endpoints. In addition to safety, the preliminary efficacy data will be useful for determining future clinical indications and the potential for enhancement of efficacy when CPI-444 is given in combination with atezolizumab.

The following is a schematic of the overall study design of our Phase 1/1b clinical trial showing three CPI-444 single agent dose selection and one combination CPI-444 and atezolizumab cohorts followed by disease-specific expansion cohorts that will receive single agent CPI-444 or CPI-444 combined with atezolizumab. The disease cohorts include non-small cell lung cancer (NSCLC), malignant melanoma (MEL), renal cell cancer (RCC) and triple-negative breast cancer (TNBC) and a single cohort (Other), which includes bladder cancer, head and neck cancer, colorectal cancer and metastatic castration-resistant prostate cancer.

Phase 1/1b Clinical Trial Protocol



Product Candidate: A monoclonal anti-CD73 antibody for cancer

Overview

In December 2014, we in-licensed from Scripps a mouse anti-human CD73 antibody. We have genetically engineered this antibody to be humanized by replacing the immunoglobulin (Ig) heavy and light chain constant regions, and by replacing the murine variable framework regions with human heavy and light chain Ig frameworks. In addition, we have further engineered the antibody to enhance binding to CD73 and to block its catalytic activity, which we expect will inhibit conversion of AMP to adenosine by tumor cells.

The Role of CD73 in Cancer

CD73 is an enzyme expressed on lymphocytes and tumor cells that regulates immune responses by producing immunosuppressive adenosine. The catalytic production of adenosine by CD73 may play an important role in tumor immune suppression by increasing the concentration of adenosine in the tumor microenvironment. CD73 has been shown to be overexpressed in many cancers, and high levels of CD73 have been shown to be associated with poor prognosis. CD73 expression on tumor cells as well as on the host immune cells has been shown to promote tumor immune suppression and metastasis in mice. Other studies in mice have shown that the targeted blockade of CD73 with antibodies can enhance the therapeutic activity of anti-PD-1 and anti-CTLA-4 checkpoint blockade. We believe CD73 and the adenosine-cancer axis may play a role in acquired resistance to anti-PD-1 and anti-PDL-1 therapies.

Preclinical Proof of Concept

In preclinical studies using tumor cells that express the CD73 enzyme, the addition of various concentrations of our humanized monoclonal anti-CD73 antibody to such cells in culture substantially inhibited the catalytic activity of the enzyme to background levels of the assay. This was studied by measuring the conversion of AMP to adenosine. These studies demonstrated that at concentrations of 10 µg/ml, the antibody was capable of substantially inhibiting the production of adenosine, which indicates that the antibody binds to a critical site in the CD73 enzyme necessary for its function. By blocking the cellular production of adenosine, we believe our anti-CD73 antibody could lead to enhancement of the anti-tumor immune response by lowering the amount of adenosine in the tumor environment. Other preclinical studies we conducted have shown that our anti-CD73 antibody binds to a variety of different types of cancer cell lines *in vitro*, including those derived from human breast cancer, lung cancer, lymphoma, leukemias and sarcomas.

Anti-CD73 Development Plan

We are initiating IND-enabling studies for the development of this antibody in potential clinical trials in patients with advanced cancer and plan to complete these studies in 2017. In particular, we intend to conduct additional preclinical studies in non-human primates to determine optimum dose and schedule.

Product Candidate: An antagonist of the adenosine A2B receptor

We have in-licensed several selective and potent adenosine A2B receptor antagonists from Vernalis. In addition, we are synthesizing and have identified other A2B receptor antagonists from our internal research program. Adenosine A2B receptors have recently been found to play an important role in the immune response to tumors. Similar to adenosine A2A receptors, adenosine binds to adenosine A2B receptors, which leads to immunosuppression. However, adenosine A2B receptor expression is found on different immune cells, and its function in tumor induced immune suppression is not yet well understood. We intend to further develop our A2B agents to improve potency, selectivity, pharmacokinetic behavior and immune enhancing properties. We have identified a candidate molecule that has exhibited over 200 times the selectivity for the A2B receptor as compared to the A2A receptor. We expect to conduct studies similar to those we have conducted for CPI-444 in order to select a development candidate in 2016. Upon selection, we intend to conduct further IND-enabling studies and potential phase 1 clinical trials.

ITK Inhibitor

ITK and Anti-tumor Immune Response

ITK is an enzyme expressed predominantly in T-cells where it plays a key role in T-cell signaling. T-cell signaling involving ITK is required in the development of T-cells within the thymus, where ITK

regulates the production of various T-cell subsets and functions. The ITK cell signaling pathway is similar to the signaling that occurs in B-cells, which is mediated by a homologous enzyme known as BTK, the target of ibrutinib, an approved treatment for patients with B-cell lymphomas and leukemias. We believe that inhibiting ITK in malignant T-cells may be of therapeutic benefit in patients with T-cell leukemias and lymphomas, analogous to the effects of ibrutinib on B-cell lymphomas and leukemias. In malignant T-cells, ITK was found to be over-expressed specifically in certain T-cell lymphomas, including peripheral T-cell lymphoma (PTCL), angioimmunoblastic T-cell lymphoma (AITL) and in a subgroup of T-lymphoblastic leukemia and lymphoma (T-ALL).

In ITK genetic knockout mice, which completely lack expression of ITK, T-cells exhibit defects in T helper cell differentiation and cytokine secretion but retain the ability to differentiate into cytotoxic T-cells that secrete IL-2 and IFN γ , which are the cells responsible for tumor rejection. We believe that skewing T helper cell differentiation to favor cytotoxic T-cells may be beneficial in treating cancer. T-cells also express a redundant enzyme called resting lymphocyte kinase (RLK). RLK can signal in place of ITK in killer T-cells. Therefore, blocking ITK selectively, without affecting RLK, results in production of anti-tumor cytotoxic T-cells necessary for tumor rejection, as occurs in ITK genetic knockout mice.

Product Candidate: An ITK kinase inhibitor

We have identified ITK as a product candidate target because it plays a key role in T-cell receptor signaling and in the differentiation of T-cells responsible for tumor immunity. Small molecule inhibitors of ITK, such as ibrutinib, have been shown to shift the balance in signaling to enhance anti-tumor immune responses in combination with a checkpoint inhibitor. While this observation provides important target validation, ibrutinib is primarily a BTK inhibitor and lacks the necessary potency and selectivity for ITK, which is believed to limit the clinical use of ibrutinib as an ITK inhibitor in this setting. As a result, we believe an inhibitor specifically targeting ITK could enhance anti-tumor immune response.

We are currently developing selective small molecule covalent inhibitors of ITK by targeting the cysteine amino acid residue at position 442 in the ITK protein. Covalent targeting of ITK is expected to provide a selective and prolonged duration of activity without the need for high systemic exposures and thereby improve the therapeutic window. This approach was previously used by our co-founders to generate ibrutinib. We have synthesized several ITK inhibitors that are selective for ITK and do not react appreciably with RLK. It is anticipated that this selectivity will mimic the immune properties seen in ITK knockout mice and skew the immune response toward a more favorable anti-tumor immune response. We plan to select a lead development candidate under this program in 2016 and, following selection, advance the candidate into clinical trials in patients with cancers, including patients with T-cell lymphoma and other cancers, such as solid tumors.

Manufacturing

We do not own or operate, and currently have no plans to establish, any manufacturing facilities. We currently rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for clinical testing, as well as for manufacture of any products that we may commercialize. We are able to internally produce small quantities of our product candidates required for relatively short preclinical animal studies. We believe that this allows us to accelerate the drug development process by not having to rely on third parties for all of our research and development needs. However, we currently rely, and expect to continue to rely, on a number of contract manufacturers to produce sufficient quantities of our product candidates for use in more lengthy preclinical development and clinical trials and in relation to any future commercialization of our product candidates. Additional contract manufacturers are used to fill, label, package and distribute investigational drug products. This strategy allows us to maintain a more efficient infrastructure, avoid depending on our own

manufacturing facility and equipment while simultaneously enabling us to focus our expertise on developing our products. Although we believe we have multiple potential sources for the manufacturing of our product candidates, we currently rely on single manufacturers for different components of CPI-444 and are in discussions with third-party manufacturers for our anti-CD73 antibody.

Commercialization Plan

We currently have no sales, marketing or commercial product distribution capabilities and have no experience as a company in commercializing products. We intend to build our own commercialization organization and capabilities over time.

As product candidates advance through our pipeline, our commercial plans may change. Clinical data, the size of the development programs, the size of the target market, the size of a commercial infrastructure and manufacturing needs may all influence our U.S., European Union and rest-of-world strategies.

Intellectual Property

We strive to protect and enhance the proprietary technology, inventions, and improvements that are commercially important to our business, including seeking, maintaining and defending patent rights, whether developed internally or licensed from our collaborators or other third parties. We do not yet own any issued patents relating to our product candidates. Our policy is to seek to protect our proprietary position by, among other methods, filing patent applications in the United States and in jurisdictions outside of the United States covering our proprietary technology, inventions, improvements and product candidates that are important to the development and implementation of our business. We also rely on trade secrets and know-how relating to our proprietary technology and product candidates, continuing innovation, and in-licensing opportunities to develop, strengthen and maintain our proprietary position in the field of immuno-oncology. We also plan to rely on data exclusivity, market exclusivity, and patent term extensions when available. Our commercial success will depend in part on our ability to obtain and maintain patent and other proprietary protection for our technology, inventions, and improvements; to preserve the confidentiality of our trade secrets; to obtain and maintain licenses to use intellectual property owned by third parties; to defend and enforce our proprietary rights, including any patents that we may own in the future; and to operate without infringing on the valid and enforceable patents and other proprietary rights of third parties.

We have in-licensed patents and patent applications directed to certain of our product candidates and related uses thereof. We also possess and in-license substantial know-how and trade secrets relating to the development and commercialization of our product candidates, including related manufacturing processes and technology. As of February 29, 2016, our owned and licensed patent portfolio consists of seven licensed U.S. issued patents, two licensed U.S. pending patent applications and five owned U.S. provisional patent applications directed to CPI-444 or certain of our proprietary technology, inventions, improvements or other potential product candidates. In addition, our licensed patent portfolio includes 14 licensed patents issued in jurisdictions outside of the United States and five licensed patent applications pending in jurisdictions outside of the United States that are foreign counterparts to one or more of the foregoing U.S. patents and patent applications. The patents and patent applications outside of the United States in our portfolio are held primarily in Europe, Canada, Japan, Australia and China.

With respect to the immuno-oncology product candidates and processes we intend to develop and commercialize in the normal course of business, we intend to pursue patent protection covering, when possible, compositions, methods of use, dosing and formulations. We may also pursue patent protection with respect to manufacturing and drug development processes and technologies.

Issued patents can provide protection for varying periods of time, depending upon the date of filing of the patent application, the date of patent issuance, and the legal term of patents in the

countries in which they are obtained. In general, patents issued for applications filed in the United States can provide exclusionary rights for 20 years from the earliest effective filing date. In addition, in certain instances, the term of an issued United States patent that covers or claims an FDA approved product can be extended to recapture a portion of the term effectively lost as a result of the FDA regulatory review period, which is called patent term extension. The restoration period cannot be longer than five years and the total patent term, including the restoration period, must not exceed 14 years following FDA approval. The term of patents outside of the United States varies in accordance with the laws of the foreign jurisdiction, but typically is also 20 years from the earliest effective filing date. The issued United States patents we license from Vernalis directed to the composition of matter of CPI-444 and its method of use for treating disorders treatable by purine receptor blocking are expected to expire between January 2022 and July 2029, excluding any patent term extension that may be available. However, the actual protection afforded by a patent varies on a product-by-product basis, from country-to-country, and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions, the availability of legal remedies in a particular country, and the validity and enforceability of the patent.

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. No consistent policy regarding the scope of claims allowable in patents in the field of immuno-oncology has emerged in the United States. The relevant patent laws and their interpretation outside of the United States is also uncertain. Changes in either the patent laws or their interpretation in the United States and other countries may diminish our ability to protect our technology or product candidates and enforce the patent rights that we license, and could affect the value of such intellectual property. In particular, our ability to stop third parties from making, using, selling, offering to sell, or importing products that infringe our intellectual property will depend in part on our success in obtaining and enforcing patent claims that cover our technology, inventions, and improvements. With respect to both licensed and company-owned intellectual property, we cannot guarantee that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications we may file in the future, nor can we be sure that any patents that may be granted to us in the future will be commercially useful in protecting our products, the methods of use or manufacture of those products. Moreover, even the issued patents that we license do not guarantee us the right to practice our technology in relation to the commercialization of our products. Patent and other intellectual property rights in the pharmaceutical and biotechnology space are evolving and involve many risks and uncertainties. For example, third parties may have blocking patents that could be used to prevent us from commercializing our product candidates and practicing our proprietary technology, and the issued patents that we in-license and those that may issue in the future may be challenged, invalidated, or circumvented, which could limit our ability to stop competitors from marketing related products or could limit the term of patent protection that otherwise may exist for our product candidates. In addition, the scope of the rights granted under any issued patents may not provide us with protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies that are outside the scope of the rights granted under any issued patents that we own or exclusively in-license. For these reasons, we may face competition with respect to our product candidates. Moreover, because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any particular product candidate can be commercialized, any patent protection for such product may expire or remain in force for only a short period following commercialization, thereby reducing the commercial advantage the patent provides.

Licenses and Collaborations

Vernalis Licensing Agreement

In February 2015, we entered into a license agreement with Vernalis, pursuant to which we were granted an exclusive, worldwide license under certain patent rights and know-how, including a limited

right to grant sublicenses, for all fields of use to develop, manufacture and commercialize products containing certain adenosine receptor antagonists, including CPI-444. The issued U.S. patents that we in-licensed from Vernalis pursuant to this agreement are directed to the composition of matter of CPI-444 and its method of use for treating disorders treatable by purine receptor blocking. These patents are expected to expire in the United States between January 2022 and July 2029, excluding any patent term extension that may be available. Vernalis has the first right to prosecute and maintain the licensed patent rights worldwide, subject to our right with respect to certain of the licensed patents to continue prosecution and maintenance if Vernalis elects not to do so. We also have the right to prosecute and maintain any patent rights that we may own that cover the licensed compounds that do not fall within the licensed patent rights. Pursuant to this agreement, we are required to use commercially reasonable efforts to conduct certain activities to obtain marketing authorizations for licensed products and to conduct certain preclinical and clinical studies for CPI-444. We also must use commercially reasonable efforts to conduct certain preclinical and clinical studies to support the use of CPI-444 as an immunotherapeutic agent for cancer studies, and to meet certain specified development, regulatory and commercial milestones within specified time periods.

Pursuant to this agreement, we made a one-time cash payment to Vernalis in the amount of \$1.0 million. We are also required to make cash milestone payments to Vernalis upon the successful completion of clinical and regulatory milestones for licensed products depending on the indications for which such licensed products are developed and upon achievement of certain sales milestones. The aggregate potential milestone payments are approximately \$220 million for all indications.

We have also agreed to pay Vernalis tiered incremental royalties based on the annual net sales of licensed products containing CPI-444 on a product-by-product and country-by-country basis, subject to certain offsets and reductions. The tiered royalty rates for products containing CPI-444 range from the mid-single digits up to the low-double digits on a country-by-country net sales basis. The royalties on other licensed products that do not include CPI-444 also increase with the amount of net sales on a product-by-product and country-by-country basis and range from the low-single digits up to the mid-single digits on a country-by-country net sales basis. We are also obligated to pay to Vernalis certain sales milestones as indicated above when worldwide net sales reach specified levels over an agreed upon time period.

The agreement will expire on a product-by-product and country-by-country basis upon the expiration of our payment obligations to Vernalis in respect of a particular product and country. Both parties have the right to terminate the agreement in the event of an uncured material breach by the other party. We may also terminate the agreement at our convenience by providing 90 days written notice, provided that we have not received notice of our own default under the agreement at the time we exercise such termination right. Vernalis may also terminate the agreement if we challenge a licensed patent or undergo a bankruptcy event.

Scripps Licensing Agreement

In December 2014, we entered into a license agreement with Scripps, pursuant to which we were granted a non-exclusive, world-wide license for all fields of use under Scripps' rights in certain know-how and technology related to a mouse hybridoma clone expressing an anti-human CD73 antibody, and to progeny, mutants or unmodified derivatives of such hybridoma and any antibodies expressed by such hybridoma. Scripps also granted us the right to grant sublicenses in conjunction with other proprietary rights we hold, or to others collaborating with or performing services for us. Under this license agreement, Scripps has agreed not to grant any additional commercial licenses with respect to such materials, other than march-in rights granted to the U.S. government.

Upon execution of the agreement, we made a one-time cash payment to Scripps of \$10,000 and are also obligated to pay a minimum annual fee to Scripps of \$25,000. The first minimum annual fee payment is due on the first anniversary of effective date of the agreement and will be due on each subsequent anniversary of the effective date for the term of the agreement. We are also required to make performance-based cash payments upon successful completion of clinical and sales milestones. The aggregate potential milestone payments are \$2.6 million. We are also required to pay royalties on net sales of licensed products sold by us, our affiliates and our sublicensees at a rate in the low-single digits. In addition, should we sublicense the rights licensed under the agreement, we have agreed to pay a percentage of sublicense revenue received at specified rates that start at double digit percentages and decrease to single digit percentages based on the elapsed time from the effective date of the agreement and the time of entry into such sublicense.

Our license agreement with Scripps will terminate upon expiration of our obligation to pay royalties to Scripps under the license agreement. The license agreement is terminable by the consent of the parties, at will by us or upon providing 90 days written notice to Scripps, or by Scripps for certain material breaches by us, or if we undergo a bankruptcy event. In addition, Scripps may terminate our license on a product-by-product basis, or the entire agreement, if we fail to meet specified diligence obligations related to the development and commercialization of licensed products. Scripps may also terminate the agreement after the third anniversary of the effective date of the agreement if it reasonably believes, based on reports we provide to Scripps, that we have not used commercially reasonable efforts as required under the agreement, subject to a specified notice and cure period.

Genentech Collaboration Agreement

In October 2015, we entered into a clinical trial collaboration agreement with Genentech to evaluate the safety, tolerability and preliminary efficacy of CPI-444 combined with Genentech's investigational cancer immunotherapy, atezolizumab (MPDL3280A), a fully humanized monoclonal antibody targeting PDL-1, in a variety of solid tumors in our Phase 1/1b clinical trial. Pursuant to this agreement, we will be responsible for the conduct and cost of the relevant studies, under the supervision of a joint development committee made up of our representatives and representatives of Genentech. Genentech will supply atezolizumab. As part of the agreement, we granted Genentech certain rights of first negotiation to participate in future clinical trials that we may conduct evaluating the administration of CPI-444 in combination with an anti-PD-1 or anti-PDL-1 antibody. If we do not reach agreement on the terms of any such participation by Genentech within a specified time period, we retain the right to collaborate with third parties in such activities. We also granted Genentech certain rights of first negotiation should we decide to license development and commercialization rights to CPI-444. Should we not reach agreement on the terms of such a license within a specified time period, we retain the right to enter into a license with another third party.

We and Genentech each have the right to terminate the agreement for material breach by the other party. In addition, the agreement may be terminated by either party due to safety considerations, if directed by a regulatory authority or if development of CPI-444 or atezolizumab is discontinued. Further, the agreement will expire after a set period of time following the provision by us of the final clinical study report to Genentech.

Competition

The pharmaceutical and biotechnology industries are characterized by intense competition and rely heavily on the ability to move quickly, adapt to changing medical and market needs, and to develop and maintain strong intellectual property positions. We believe that the development experience of our scientific and management team, as well as the strength and promise of our product candidates, provide us with a competitive advantage; nevertheless, we face potential competition from myriad

sources, including pharmaceutical and biotechnology companies, academic institutions, governmental agencies and public and private research institutions.

We are aware of companies that have advanced adenosine A2A receptor antagonists into early- or late-stage clinical development for non-oncology indications, primarily Parkinson's disease. These companies include Merck & Co., Inc. and Biotie Therapies Corp. In addition, Kyowa Hakko Kirin Pharma, Inc. has approval in Japan for an adenosine A2A receptor antagonist for use in Parkinson's disease and is currently conducting a Phase 3 study in the United States for Parkinson's disease. Within oncology, Palobiofarma SL has submitted an IND to begin a Phase 1 dose finding clinical trial with an adenosine A2A antagonist in lung cancer patients. Novartis has announced an exclusive licensing agreement with Palobiofarma. AstraZeneca plc has recently licensed a preclinical A2A antagonist for use in cancer therapy. In addition, Redoxtherapies, Inc. is developing an A2A receptor antagonist for cancer. More generally, in the field of immuno-oncology, there are large pharmaceutical companies with approved products or products in late-stage development that target other immune checkpoints, including PD-1, PDL-1 or CTLA-4. These companies include Bristol-Myers Squibb (nivolumab, ipilimumab), Merck (pembrolizumab), Genentech (atezolizumab) and AstraZeneca (tremelimumab). Also, AstraZeneca and MedImmune LLC have recently announced the initiation of a Phase 1 study with an anti-CD73 antibody. Finally, Janssen Pharmaceuticals, Inc. and AbbVie Inc. are co-marketing Imbruvica (ibrutinib), which is a small molecule inhibitor of the kinase BTK that has also been reported to inhibit ITK.

Regulation

Government authorities in the United States, at the federal, state and local level, and other countries extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, marketing and export and import of products such as those we are developing. A new drug must be approved by the FDA through the NDA process and a new biologic must be approved by the FDA through the BLA process before it may be legally marketed in the United States.

United States Drug Development Process

In the United States, the FDA regulates drugs under the federal Food, Drug, and Cosmetic Act (FDCA), and in the case of biologics, also under the Public Health Service Act (PHSA), and their implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval may subject an applicant to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us.

The process required by the FDA before a drug or biologic may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests, animal studies and formulation studies in accordance with GLP regulations and 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 in accordance with Good Clinical Practice (GCP) regulations to establish the safety and efficacy of the proposed drug for its intended use;
- submission to the FDA of an NDA or BLA;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current Good Manufacturing Practices (cGMP) requirements to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity; and
- FDA review and approval of the NDA or BLA.

Once a pharmaceutical candidate is identified for development, it enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information and analytical data, to the FDA as part of the IND. The sponsor will also include a protocol detailing, among other things, the objectives of the first phase of the clinical trial, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated, if the first phase lends itself to an efficacy evaluation. 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, within the 30-day time period, places the clinical trial on a clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Clinical holds also may be imposed by the FDA at any time before or during clinical trials due to safety concerns about on-going or proposed clinical trials or non-compliance with specific FDA requirements, and the trials may not begin or continue until the FDA notifies the sponsor that the hold has been lifted.

All clinical trials must be conducted under the supervision of one or more qualified investigators in accordance with GCP regulations. They must be conducted under protocols detailing the objectives of the trial, dosing procedures, subject selection and exclusion criteria and the safety and effectiveness criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND, and timely safety reports must be submitted to the FDA and the investigators for serious and unexpected adverse events. An institutional review board (IRB) at each institution participating in the clinical trial must review and approve each protocol before a clinical trial commences at that institution and must also approve the information regarding the trial and the consent form that must be provided to each trial subject or his or her legal representative, monitor the study until completed and otherwise comply with IRB regulations.

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

- **Phase 1:** The product candidate is initially introduced into healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, such as cancer, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients. Sponsors sometimes designate their Phase 1 trials as Phase 1a or Phase 1b. Phase 1b trials are typically aimed at confirming dosing, pharmacokinetics and safety in larger number of patients. Some Phase 1b studies evaluate biomarkers or surrogate markers that may be associated with efficacy in patients with specific types of diseases.
- **Phase 2:** This phase involves clinical trials 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 and appropriate dosage.

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

Post-approval trials, sometimes referred to as Phase 4 studies, may be conducted after initial marketing approval. These trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA or BLA.

The FDA or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. 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 drug has been associated with unexpected serious harm to patients. In addition, some clinical trials are overseen by an independent group of qualified experts organized by the sponsor, known as a data safety monitoring board or committee. Depending on its charter, this group may determine whether a trial may move forward at designated check points based on access to certain data from the trial.

During the development of a new drug or biologic, sponsors are given opportunities to meet with the FDA at certain points. These points may be prior to submission of an IND, at the end of Phase 2, and before an NDA or BLA is submitted. Meetings at other times may be requested. These meetings can provide an opportunity for the sponsor to share information about the data gathered to date, for the FDA to provide advice, and for the sponsor and the FDA to reach agreement on the next phase of development. Sponsors typically use the meetings at the end of the Phase 2 trial to discuss Phase 2 clinical results and present plans for the pivotal Phase 3 clinical trial that they believe will support approval of the new drug or biologic.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug and finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final drug. In addition, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

While the IND is active and before approval, progress reports summarizing the results of the clinical trials and nonclinical studies performed since the last progress report must be submitted at least annually to the FDA, and written IND safety reports must be submitted to the FDA and investigators for serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to humans exposed to the same or similar drugs, findings from animal or *in vitro* testing suggesting a significant risk to humans, and any clinically important increased incidence of a serious suspected adverse reaction compared to that listed in the protocol or investigator brochure.

There are also requirements governing the reporting of ongoing clinical trials and completed trial results to public registries. Sponsors of certain clinical trials of FDA-regulated products are required to register and disclose specified clinical trial information, which is publicly available at www.clinicaltrials.gov. Information related to the product, patient population, phase of investigation, trial sites and investigators and other aspects of the clinical trial is then made public as part of the registration. Sponsors are also obligated to discuss the results of their clinical trials after completion. Disclosure of the results of these trials can be delayed until the new product or new indication being studied has been approved.

United States Review and Approval Process

The results of product development, preclinical and other non-clinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling and other relevant information are submitted to the FDA as part of an NDA or BLA requesting approval to market the product. The submission of an NDA or BLA is subject to the payment of user fees; a waiver of such fees may be obtained under certain limited circumstances. The FDA reviews all NDAs and BLAs submitted to ensure that they are sufficiently complete for substantive review before it accepts them for filing. The FDA may request additional information rather than accept an NDA or BLA for filing. In this event, the NDA or 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. The FDA may refer the NDA or BLA to an advisory committee for review, evaluation and recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. The approval process is lengthy and often difficult, and the FDA may refuse to approve an NDA or BLA if the applicable regulatory criteria are not satisfied or may require additional clinical or other data and information. Even if such data and information are submitted, the FDA may ultimately decide that the NDA or BLA does not satisfy the criteria for approval. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant to assure and preserve the product's identity, strength, quality and purity. The FDA reviews a BLA to determine, among other things whether the product is safe, pure and potent and the facility in which it is manufactured, processed, packed or held meets standards designed to assure the product's continued safety, purity and potency. Before approving an NDA or BLA, the FDA will inspect the facility or facilities where the product is manufactured.

After the FDA evaluates an NDA or BLA, it will issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application will not be approved in its present form. A Complete Response Letter usually describes the specific deficiencies in the NDA or BLA identified by the FDA and may require additional clinical data, such as an additional pivotal Phase 3 trial or other significant and time-consuming requirements related to clinical trials, nonclinical studies or manufacturing. If a Complete Response Letter is issued, the sponsor must resubmit the NDA or BLA, addressing all of the deficiencies identified in the letter, or withdraw the application. Even if such data and information are submitted, the FDA may decide that the NDA or BLA does not satisfy the criteria for approval.

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. In addition, the FDA may require a sponsor to conduct Phase 4 testing, which involves clinical trials designed to further assess a drug's safety and effectiveness after NDA or BLA approval, and may require testing and surveillance programs to monitor the safety of approved products which have been commercialized. The FDA may also place other conditions on approval including the requirement for a risk evaluation and mitigation strategy (REMS) to assure the safe use of the drug. If the FDA concludes a REMS is needed, the sponsor of the NDA must submit a proposed REMS. The FDA will not approve the NDA without an approved REMS, if required. A REMS could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Marketing approval may be withdrawn for non-compliance with regulatory requirements or if problems occur following initial marketing.

The Food and Drug Administration Safety and Innovation Act (FDASIA) made permanent the Pediatric Research Equity Act (PREA), which requires a sponsor to conduct pediatric clinical trials for most drugs and biologics, for a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration. Under PREA, original NDAs, BLAs and supplements thereto must contain a pediatric assessment unless the sponsor has received a deferral or waiver. The required assessment must evaluate the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations and support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The sponsor or FDA may request a deferral of pediatric clinical trials for some or all of the pediatric subpopulations. A deferral may be granted for several reasons, including a finding that the drug or biologic is ready for approval for use in adults before pediatric clinical trials are complete or that additional safety or effectiveness data needs to be collected before the pediatric clinical trials begin. The FDA must send a non-compliance letter to any sponsor that fails to submit the required assessment, keep a deferral current or fails to submit a request for approval of a pediatric formulation.

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 a disease or condition that affects fewer than 200,000 individuals in the United States or, if it affects more than 200,000 individuals in the United States, there is no reasonable expectation that the cost of developing and making a drug or biologic product available in the United States for this type of disease or condition will be recovered from sales of the product. Orphan designation must be requested before submitting an NDA or BLA. After the FDA grants orphan designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan designation subsequently receives the first FDA approval for the disease or condition 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 to market the same drug or biological product for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity or inability to manufacture the product in sufficient quantities. The designation of such drug or biologic also entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. However, competitors, may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan product has exclusivity. Orphan exclusivity also could block the approval of one of our product candidates for seven years if a competitor obtains approval of the same drug or biologic as defined by the FDA or if our product candidate is determined to be contained within the competitor's product for the same indication or disease. If an orphan designated product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan exclusivity. Orphan drug status in the European Union has similar but not identical benefits in that jurisdiction.

Although we have not sought or obtained orphan designation for any of our product candidates, we may pursue such designation in the future if we determine that our proposed indications meet the qualifying criteria for such designation.

Expedited Development and Review Programs

The FDA has a Fast Track program that is intended to expedite or facilitate the process for reviewing new drug products that meet certain criteria. Specifically, new drugs are eligible for Fast Track designation if they are intended to treat a serious or life-threatening disease or condition and

demonstrate the potential to address unmet medical needs for the disease or condition. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. Unique to a Fast Track product, the FDA may consider for review sections of the NDA or 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 NDA or BLA, the FDA agrees to accept sections of the NDA or BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA or BLA.

Any product submitted to the FDA for approval, including a product with a Fast Track designation, may also be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. A product is eligible for priority review if it has the potential to provide safe and effective therapy where no satisfactory alternative therapy exists or a significant improvement in the treatment, diagnosis or prevention of a disease compared to marketed products. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug designated for priority review in an effort to facilitate the review. The FDA endeavors to review applications with priority review designations within six months of the filing date as compared to ten months for review of original BLAs and new molecular entity NDAs under its standard review goals.

In addition, a product may be eligible for accelerated approval. Drug and biologic products intended to treat serious or life-threatening diseases or conditions may be eligible for accelerated approval upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product. Fast Track designation, priority review and accelerated approval do not change the standards for approval but may expedite the development or approval process.

FDASIA established a new category of drugs and biologics referred to as "breakthrough therapies" that may be eligible to receive Breakthrough Therapy Designation. A sponsor may seek FDA designation of a drug or biologic candidate as a "breakthrough therapy" if the product is intended, alone or in combination with one or more other products, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The designation includes all of the Fast Track program features, as well as more intensive FDA interaction and guidance. The Breakthrough Therapy Designation is a distinct status from both accelerated approval and priority review, which can also be granted to the same drug if relevant criteria are met. If a product is designated as breakthrough therapy, the FDA will expedite the development and review of such drug. All requests for breakthrough therapy designation will be reviewed within 60 days of receipt, and the FDA will either grant or deny the request.

Post-approval requirements

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market. After approval, some types of changes to the approved product, such as adding new indications, certain manufacturing changes and additional

labeling claims, are subject to further FDA review and approval. Drug and biologics manufacturers and other entities involved in the manufacture and distribution of approved drugs and biologics 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 regulations and other laws and regulations.

Any drug products manufactured or distributed by us or our partners pursuant to FDA approvals will be subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the drug, providing the FDA with updated safety and efficacy information, drug sampling and distribution requirements, complying with certain electronic records and signature requirements, and complying with FDA promotion and advertising requirements. The FDA strictly regulates labeling, advertising, promotion and other types of information on products that are placed on the market and imposes requirements and restrictions on drug and biologics manufacturers, such as those related to direct-to-consumer advertising, the prohibition on promoting products for uses or in patient populations that are not described in the product's approved labeling (known as "off-label use"), industry-sponsored scientific and educational activities, and promotional activities involving the internet. Discovery of previously unknown problems or the failure to comply with the applicable regulatory requirements may result in restrictions on the marketing of a product or withdrawal of the product from the market as well as possible civil or criminal sanctions. 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 or manufacturer to administrative or judicial civil or criminal sanctions and adverse publicity. FDA sanctions could include refusal to approve pending applications, withdrawal of an approval, clinical hold, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, mandated corrective advertising or communications with doctors, debarment, restitution, disgorgement of profits, or civil or criminal penalties.

Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of FDA approval of our product candidates, some of the U.S. patents that we may be granted in the future may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit 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 an NDA or BLA, plus the time between the submission date of an NDA or BLA and the approval of that application, less any time the applicant did not act with due diligence. Only one patent applicable to an approved drug is eligible for the extension, and the extension must be applied for prior to expiration of the patent. The United States 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 intend to apply for restorations of patent term for patents that may be issued to us, depending on the expected length of clinical trials and other factors involved in the filing of the relevant marketing application.

Market exclusivity provisions under the FDCA can also delay the submission or the approval of certain marketing applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not approve or even accept for review an

abbreviated new drug application (ANDA) or a NDA submitted under Section 505(b)(2), or 505(b)(2) NDA, submitted by another company for another drug based on the same active moiety, regardless of whether the drug is intended for the same indication as the original innovative drug or for another indication, where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder. The FDCA alternatively provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the modification for which the drug received approval on the basis of the new clinical investigations and does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for drugs containing the active agent for the original indication or condition of use. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Pediatric exclusivity is a type of marketing exclusivity available in the United States. Pediatric exclusivity under the Best Pharmaceuticals for Children Act (BPCA) provides for an additional six months of marketing exclusivity if a sponsor conducts clinical trials in children in response to a written request from the FDA. If such written request does not include clinical trials in neonates, the FDA is required to include its rationale for not requesting those clinical trials. The FDA may request studies on approved or unapproved indications in separate written requests. The issuance of a written request does not require the sponsor to undertake the described clinical trials. In addition, orphan drug exclusivity, as described above, may offer a seven-year period of marketing exclusivity, except in certain circumstances.

Biosimilars and Exclusivity

The Affordable Care Act includes a subtitle called the Biologics Price Competition and Innovation Act of 2009 (BPCIA), which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. To date, only one biosimilar has been licensed under the BPCIA, although numerous biosimilars have been approved in Europe. The FDA has issued several guidance documents outlining an approach to review and approval of biosimilars.

Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, can be shown through analytical studies, animal studies, and a clinical study or studies. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product in any given patient and, for products that are administered multiple times to an individual, the biologic and the reference biologic may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. However, complexities associated with the larger, and often more complex, structures of biological products, as well as the processes by which such products are manufactured, pose significant hurdles to implementation of the abbreviated approval pathway that are still being addressed by the FDA.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until twelve years from the date on which the reference product was first licensed. During this twelve-year period of exclusivity,

another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products. At this juncture, it is unclear whether products deemed "interchangeable" by the FDA will, in fact, be readily substituted by pharmacies, which are governed by state pharmacy law.

The BPCIA is complex and only beginning to be interpreted and implemented by the FDA. In addition, recent government proposals have sought to reduce the twelve-year reference product exclusivity period. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. As a result, the ultimate impact, implementation and meaning of the BPCIA is subject to significant uncertainty.

Government Regulation Outside of the United States

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 studies and any commercial sales and distribution of our product candidates.

Whether or not we obtain FDA approval for a product candidates, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical studies or marketing of the product candidates in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical study application much like the IND prior to the commencement of human clinical studies. In the European Union, for example, a clinical trial authorization (CTA) must be submitted to each country's national health authority and an independent ethics committee, much like the FDA and the IRB, respectively. Once the CTA is approved in accordance with a country's requirements, clinical study development may proceed.

The requirements and process governing the conduct of clinical studies, product licensing, pricing and reimbursement vary from country to country. In all cases, the clinical studies 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 biological product under European Union 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 European Union, with the exception of, among other things, country-specific document requirements. The European Union also provides opportunities for market exclusivity. For example, in the European Union, upon receiving marketing authorization, new chemical entities generally receive eight years of data exclusivity and an additional two years of market exclusivity. If granted, data exclusivity prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic application. During the additional two-year period of market exclusivity, a generic marketing authorization can be submitted, and the innovator's data may be referenced, but no generic product can be marketed until the expiration of the market exclusivity. However, there is no guarantee that a product will be considered by the European Union's regulatory authorities to be a new chemical entity, and products may not qualify for data exclusivity. Products receiving orphan designation in the European Union can receive ten years of market exclusivity, during which time no similar medicinal product for the same indication may be placed on the market. An orphan product can also obtain an additional two years of market exclusivity in the European Union for pediatric studies. No extension to any supplementary protection certificate can be granted on the basis of pediatric studies for orphan indications.

The criteria for designating an "orphan medicinal product" in the European Union are similar in principle to those in the United States. Under Article 3 of Regulation (EC) 141/2000, a medicinal product may be designated as orphan if (1) it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition; (2) either (a) such condition affects no more than five in 10,000 persons in the European Union when the application is made, or (b) the product, without the benefits derived from orphan status, would not generate sufficient return in the European Union to justify investment; and (3) there exists no satisfactory method of diagnosis, prevention or treatment of such condition authorized for marketing in the European Union, or if such a method exists, the product will be of significant benefit to those affected by the condition, as defined in Regulation (EC) 847/2000. Orphan medicinal products are eligible for financial incentives such as reduction of fees or fee waivers and are, upon grant of a marketing authorization, entitled to ten years of market exclusivity for the approved therapeutic indication. The application for orphan drug designation must be submitted before the application for marketing authorization. The applicant will receive a fee reduction for the marketing authorization application if the orphan drug designation has been granted, but not if the designation is still pending at the time the marketing authorization is submitted. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

The 10-year market exclusivity may be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan designation, for example, if the product is sufficiently profitable not to justify maintenance of market exclusivity. In addition, marketing authorization may be granted to a similar product for the same indication at any time if:

- the second applicant can establish that its product, although similar, is safer, more effective or otherwise clinically superior;
- the applicant consents to a second orphan medicinal product application; or
- the applicant cannot supply enough orphan medicinal product.

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

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

Other Healthcare Laws

In addition to FDA restrictions on marketing of pharmaceutical and biological products, other U.S. federal and state healthcare regulatory laws restrict business practices in the pharmaceutical industry, which include, but are not limited to, state and federal anti-kickback, false claims, data privacy and security and physician payment transparency laws. These laws may affect our sales, marketing and other promotional activities by limiting the kinds of financial arrangements we may have with physicians, customers and third-party payors including discount practices, customer support, education and training programs, physician consulting and other service arrangements. In addition, manufacturers can be held liable under the False Claims Act even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims by, for example, providing inaccurate billing or coding information to customers or promoting a product off-label. These laws are broadly written, and it is often difficult to determine precisely how these laws will be applied to specific circumstances.

Such laws include:

- The federal Anti-Kickback Statute, which prohibits, among other things, any person or entity from knowingly and willfully offering, paying, soliciting, receiving or providing any remuneration, directly or indirectly, overtly or covertly, to induce or in return for purchasing, leasing, ordering or arranging for or recommending the purchase, lease or order of any item or service reimbursable, in whole or in part, under Medicare, Medicaid or other federal healthcare programs. A person or entity does not need to have actual knowledge of the federal Anti-Kickback Statute or specific intent to violate it to have committed a violation. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;
- The federal false claims and civil monetary penalties laws, including the False Claims Act, which prohibit any person or entity from, among other things, knowingly presenting, or causing to be presented, a false, fictitious or fraudulent claim for payment to, or approval by, the federal government or knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government;
- The federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), which prohibits, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up 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;
- The Physician Payments Sunshine Act, which imposed, among other things, new annual reporting requirements for covered manufacturers for certain payments and "transfers of value" provided to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (HITECH), and their respective implementing regulations, impose specified requirements relating to the privacy, security and transmission of individually identifiable health information held by covered entities and their business associates; and
- Analogous state laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers.

If our operations are found to be in violation of any of such laws or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, administrative, civil and criminal penalties, damages, fines, disgorgement, contractual damages, reputational harm, diminished profits and future earnings, the curtailment or restructuring of our operations, exclusion from participation in federal and state healthcare programs and individual imprisonment, any of which could adversely affect our ability to operate our business and our financial results.

To the extent that any of our product candidates, once approved, are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or other transfers of value to healthcare professionals.

Coverage and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any pharmaceutical or biological product for which we obtain regulatory approval. In the United States and markets in other countries, patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products. Sales of any product candidates for which we receive regulatory approval for commercial sale will therefore depend, in part, on the availability of coverage and adequate reimbursement from third-party payors. Third-party payors include government authorities, managed care providers, private health insurers and other organizations.

The process for determining whether a third-party payor will provide coverage for a pharmaceutical or biological product typically is separate from the process for setting the price of such product or for establishing the reimbursement rate that the payor will pay for the product once coverage is approved. 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. A decision by a third-party payor not to cover our product candidates could reduce physician utilization of our products once approved and have a material adverse effect on our sales, results of operations and financial condition. Moreover, a third-party payor's decision to provide coverage for a pharmaceutical or biological product does not imply that an adequate reimbursement rate will be approved. 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. In addition, coverage and reimbursement for new products can differ significantly from payor to payor. One third-party payor's decision to cover a particular medical product or service does not ensure that other payors will also provide coverage for the medical product or service, or will provide coverage at an adequate reimbursement rate. As a result, the coverage determination process will require us to provide scientific and clinical support for the use of our products to each payor separately and will be a time consuming process.

The containment of healthcare costs has become a priority of federal, state and foreign governments, and the prices of pharmaceutical or biological products have been a focus in this effort. Third-party payors are increasingly challenging the prices charged for medical products and services, examining the medical necessity and reviewing the cost-effectiveness of pharmaceutical products, biological products, medical devices and medical services, in addition to questioning safety and efficacy. If these third-party payors do not consider our product candidates to be cost-effective compared to other available therapies, they may not cover our products after FDA approval or, if they do, the level of payment may not be sufficient to allow us to sell our products at a profit.

Healthcare Reform

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medical products. For example, in March 2010, the Affordable Care Act was enacted, which, among other things, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program; introduced a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected; extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care plans; imposed mandatory discounts for certain Medicare Part D beneficiaries as a condition for manufacturers' outpatient drugs coverage under Medicare Part D; subjected drug manufacturers to new annual fees based on pharmaceutical companies' share of sales to federal healthcare programs, and created a new

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

We expect that the Affordable Care Act, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and lower reimbursement, and additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government-funded 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 product candidates.

In addition, the Budget Control Act of 2011 and the Bipartisan Budget Act of 2015 led to aggregate reductions of Medicare payments to providers of up to 2% per fiscal year that will remain in effect through 2025 unless additional Congressional action is taken. On January 2, 2013, the American Taxpayer Relief Act was signed into law, which, among other things, further reduced Medicare payments to several types of 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.

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 limited coverage and reimbursement and reduced demand for our products, once approved, or additional pricing pressures.

Employees

As of December 31, 2015, we had 33 total employees, all of whom were full-time and 28 of whom were primarily engaged in research and development activities.

Facilities

We currently lease a total of approximately 22,135 square feet of office and research and development facilities in Burlingame, California. Our lease expires in 2021. We are currently exploring alternatives which would provide us with additional space to accommodate our anticipated growth.

Legal Proceedings

We are not currently a party to any material legal proceedings.

MANAGEMENT**Executive Officers and Directors**

The following table sets forth information regarding our executive officers and directors as of December 31, 2015:

<u>NAME</u>	<u>AGE</u>	<u>POSITION(S)</u>
Executive Officers and Employee Directors		
Richard A. Miller, M.D.	64	President, Chief Executive Officer and Chairman of the Board
Leiv Lea	62	Chief Financial Officer
William B. Jones, Ph.D.	50	Vice President, Pharmaceutical Development
Erik J. Verner, Ph.D.	51	Vice President, Chemistry Research
Key Employees		
Joseph J. Buggy, Ph.D.	49	Executive Vice President, Discovery Research
GINNA G. LAPORT, M.D.	51	Vice President, Clinical Development
Ian McCaffery, Ph.D.	46	Vice President, Translational Sciences
Non-Employee Directors		
Elisha P. (Terry) Gould III ⁽³⁾	58	Director
Steve E. Krognos ⁽¹⁾⁽²⁾	47	Director
Peter Moldt, Ph.D. ⁽¹⁾⁽³⁾	56	Director
Scott W. Morrison ⁽¹⁾⁽²⁾	58	Director
Peter Thompson, M.D. ⁽²⁾	56	Director

(1) Member of the audit committee.

(2) Member of the compensation committee.

(3) Member of the nominating and corporate governance committee.

Executive Officers and Employee Directors

Richard A Miller, M.D. has served as our President and Chief Executive Officer since February 2014 and chairman of our board of directors since January 2014. From April 2012 to October 2014, Dr. Miller was Chairman and Chief Executive Officer of Graphea, Inc., a privately-held chemical company, which he founded. Dr. Miller served as Chief Commercialization Officer, Associate Dean and Research Professor in Chemistry at The University of Texas at Austin from September 2010 to December 2011. Dr. Miller founded Principia Biopharma Inc., a privately-held biopharmaceutical company, and served as its President and Chief Executive Officer and a member of its board of directors from January 2009 to February 2011. He served as President, Chief Executive Officer and Director of Pharmacyclics, Inc., a biopharmaceutical company, from 1991, when he co-founded the company, to 2008. At Pharmacyclics, Dr. Miller led the initial discovery and development efforts for ibrutinib. Dr. Miller was a co-founder, Vice President and Director of IDEC Pharmaceuticals Corporation, a biotechnology company that merged with Biogen, Inc. in June 2003, where he led research efforts on lymphoma leading to the development of rituximab. Dr. Miller has been Adjunct Clinical Professor of Medicine (Oncology) at Stanford University Medical Center since 1991. Dr. Miller received a B.A. in Chemistry from Franklin & Marshall College and an M.D. from the State University of New York Medical School. He is board certified in both Internal Medicine and Medical Oncology. We believe Dr. Miller's experience as an officer and director of pharmaceutical and biopharmaceutical companies provides him with the qualifications and skills to serve as a member of our board of directors.

Leiv Lea has served as our Chief Financial Officer since November 2014. Mr. Lea was a financial consultant from 2009 to November 2014. From 1998 to 2008, Mr. Lea served as Chief Financial Officer of Pharmacyclics, Inc., a biopharmaceutical company. From 1996 to 1997, he was a financial consultant. From 1986 to 1996, Mr. Lea served as Chief Financial Officer of Margaux, Inc., a refrigeration equipment manufacturer. He received a B.S. in Agricultural Economics from the University of California, Davis and an M.B.A. from the Anderson School at the University of California, Los Angeles.

William B. Jones, Ph.D. has served as our Vice President, Pharmaceutical Development since December 2014. Dr. Jones was Director of Global Regulatory Affairs in the oncology business unit of Sanofi US, LLC, a pharmaceutical company, from December 2012 to December 2014. From 2008 to March 2012, Dr. Jones was Director of Project Management & Regulatory at Pharmacyclics, Inc., a biopharmaceutical company. Dr. Jones served as Associate Director of Development for Plexxikon, Inc., a pharmaceutical company, from 2005 to 2007. From 2002 to 2005, he was Senior Project Manager at Vertex Pharmaceuticals, Inc., a biotechnology company. Dr. Jones received a B.S. and a Ph.D. in Chemistry from the University of Cincinnati and an M.B.A. from Babson College. He completed a post-doctoral fellowship at the University of Oxford.

Erik J. Verner, Ph.D. has served as our Vice President, Chemistry Research since January 2015. From March 2011 to December 2014, Dr. Verner was Director of Chemistry for Principia Biopharma Inc., a biopharmaceutical company. Dr. Verner served as Director of Chemistry of Pharmacyclics, Inc., a biopharmaceutical company, from 2008 to February 2011, where he served as a principal scientist from 2006 to 2008. From 1996 to 2006, Dr. Verner was a principal scientist at Axyx Pharmaceuticals, Inc. (formerly Arris Pharmaceuticals, Incorporated), a biotechnology company, and Celera Corporation, a subsidiary of Axyx Pharmaceuticals, Inc. He was a senior scientist at Immunopharmaceuticals, Inc., a biotechnology company, from 1993 to 1996. Dr. Verner received a B.S. in Chemistry from the University of Idaho and a Ph.D. in Organic Chemistry from the University of Pittsburgh.

Key Employees

Joseph J. Buggy, Ph.D. has served as our Executive Vice President, Discovery Research since November 2014 and previously served as a member of our board of directors from January 2014, when he co-founded the Company, to November 2014. From 2006 to August 2013, Dr. Buggy held several positions with Pharmacyclics, Inc., a biopharmaceutical company, including, most recently, Vice President, Research. From 2001 to 2006, Dr. Buggy was with Celera Genomics Corporation, a biotechnology company, where he was Director and, prior to that, Principal Scientist. Dr. Buggy served as Senior Scientist and, later, Group Leader at Axyx Pharmaceuticals, Inc., a biotechnology company, from 1996 to 2001. From 1993 to 1996, Dr. Buggy was Scientist for Bayer Pharmaceuticals Corporation, a subsidiary of Bayer HealthCare AG, a health care company. Dr. Buggy received a B.S. in Microbiology from the University of Pittsburgh and a Ph.D. in Molecular, Cellular, and Development Biology from Indiana University.

Ginna G. Laport, M.D. has served as our Vice President, Clinical Development since October 2015. From 2001 to October 2015, Dr. Laport held various roles at the Stanford University School of Medicine, including Assistant Professor in the Division of Blood and Marrow Transplantation, Associate Professor and, most recently, Professor of Blood and Marrow Transplantation. From 1999 to 2001, Dr. Laport was Assistant Professor in Hematology/BMT at the University of Pennsylvania and Instructor in Hematology/Oncology at the University of Chicago. She received a B.A. in Psychology from Baylor University and an M.D. from the University of Texas. Dr. Laport completed a residency in Internal Medicine and fellowship in Hematology/Oncology at The University of Chicago.

Ian McCaffery, Ph.D. has served as our Vice President, Translational Sciences since December 2015. Prior to joining Corvus Pharmaceuticals, Dr. McCaffery held the position of Head and Associate

Director, Companion Diagnostic Development with Genentech, Inc., a biopharmaceutical development company and member of the Roche Group from June 2012 to December 2015. Dr. McCaffery held various positions at Amgen Inc. from October 2004 to June 2012, including Director of Medical Sciences and Oncology Biomarker Therapeutic Area Leader from March 2009 to June 2012, Principal Scientist from September 2006 to March 2009 and Senior Scientist from October 2004 to September 2006. From January 2001 to October 2004, Dr. McCaffery held various roles at Celera Genomics Corporation, serving as Manager, Scientists from November 2002 to October 2004 and Senior Scientist from January 2001 to November 2002 in the Department of Protein Therapeutics. Dr. McCaffery received a B.S. in Biochemistry from the University of Newcastle-Upon-Tyne, United Kingdom and a Ph.D. in Biochemistry and Molecular Biology from the University of Leeds, United Kingdom.

Directors

Elisha P. (Terry) Gould III has served as a member of our board of directors since November 2014. Mr. Gould is currently a Partner and Head of Venture/Growth Equity Investments at Adams Street Partners, LLC, a private equity firm, and has been employed by Adams Street Partners or its predecessor organizations since 1994. Since 2006, Mr. Gould has served on the board of directors of OncoMed Pharmaceuticals, Inc., a biotechnology company. He also currently serves on the boards of directors of several private companies. Mr. Gould received a A.B. in Engineering Science from Dartmouth College and an M.B.A. from the Stanford University Graduate School of Business. We believe Mr. Gould's experience in the venture capital industry and as director of a pharmaceutical company provides him with the qualifications and skills to serve as a member of our board of directors.

Steve E. Krognnes has served as a member of our board of directors since January 2016. Mr. Krognnes has served as Chief Financial Officer of Denali Therapeutics Inc., a biotechnology company, since October 2015. From 2009 to September 2015, Mr. Krognnes served as Senior Vice President and Chief Financial Officer at Genentech, Inc., a biotechnology company. From 2004 to 2009, he was Head of Mergers & Acquisitions at Roche Holding AG, a biotechnology company. Mr. Krognnes served as Director of Mergers & Acquisitions at Danske Bank A/S, a Danish bank, from 2002 to 2003. He was a Venture Capitalist with Pylonia Ventures, a Norwegian venture investments company, from 2000 to 2002. From 1996 to 2000, he was a Management Consultant for McKinsey & Company, a consulting firm. Mr. Krognnes has served as a member of the board of directors of the California Academy of Sciences, a scientific and educational institution, since June 2014. He was a member of the board of directors and board executive committee of the California Life Sciences Association, an industry organization, from September 2010 to September 2015. Mr. Krognnes received a B.S. in Economics from the Wharton School of the University of Pennsylvania and an M.B.A. from Harvard Business School. We believe Mr. Krognnes's experience in finance and the biotechnology industry provides him with the qualifications and skills to serve as a member of our board of directors.

Peter Moldt, Ph.D. has served as a member of our board of directors since January 2015. Since May 2012, Dr. Moldt has been employed as a Partner with Novo Ventures (US) Inc., which provides certain consultancy services to Novo A/S, a Danish limited liability company that manages investments and financial assets. From 2009 to May 2012, Dr. Moldt was employed as a Partner with Novo A/S. Dr. Moldt founded and served as Chief Executive Officer of Curalogic A/S, a publicly listed Danish pharmaceutical company, from 2004 through its liquidation in 2009. From 2000 to 2004, Dr. Moldt was Chief Operating Officer of 7TM Pharma A/S, a private biotechnology company, which he also co-founded. For the prior eleven years, Dr. Moldt held various positions with NeuroSearch A/S, a publicly listed Danish biotechnology company, including Director of Drug Development where he was responsible for all aspects of preclinical and clinical drug development. Dr. Moldt currently serves on the boards of directors of several private biotechnology and biopharmaceutical companies. He received an M.Sc. and a Ph.D. in Pharmacy and Medicinal Chemistry from the Royal Danish School of Pharmacy. He also holds a post doctorate at Yale University in the Department of Organic Chemistry. We believe Dr. Moldt is qualified to serve on our board of directors because of his extensive industry

experience, his experience serving on the board of directors of numerous biopharmaceutical and biotechnology companies and his experience with venture capital investments.

Scott W. Morrison has served as a member of our board of directors since December 2015. From 1996 to December 2015, Mr. Morrison was a Partner with Ernst & Young LLP, a public accounting firm, where he also served as U.S. Life Sciences Leader from 2002 to December 2015. Since January 2016, he has served on the board of directors and as chair of the audit committee of each of Audentes Therapeutics, Inc., a biotechnology company, and Global Blood Therapeutics, Inc., a biopharmaceutical company. Mr. Morrison has held roles on the boards of directors of numerous life sciences industry organizations. Since 1999, he has served on the board of directors of the Biotechnology Institute, a nonprofit organization, where he has also served on the audit committee since 2002. Mr. Morrison has previously served on the boards of directors of the Life Sciences Foundation, a biotechnology nonprofit organization, the Bay Area Biosciences Association, a 501(c)(3) organization, and the Emerging Companies Section of the Biotechnology Industry Organization, a trade organization. He received a B.S. in Business Administration from the University of California-Berkeley and is a certified public accountant (inactive). We believe Mr. Morrison's experience in public accounting and the life sciences industry provides him with the qualifications and skills to serve as a member of our board of directors.

Peter Thompson, M.D. has served as a member of our board of directors since November 2014. Dr. Thompson currently serves as a Private Equity Partner for OrbiMed Advisors LLC, an investment firm focused on the healthcare sector, where he previously served as Venture Partner since joining in September 2010. Dr. Thompson has served as a director of Adaptimmune Therapeutics plc, a biopharmaceutical company, since September 2014, ProNAi Therapeutics, Inc., a clinical stage oncology company, since April 2014 and Response Biomedical Corp., a diagnostic technology company, since August 2010. Dr. Thompson currently serves on the boards of directors of several private companies. He is a board-certified internist and oncologist and has served as Affiliate Professor of Neurosurgery at the University of Washington since January 2010. Dr. Thompson co-founded and served as the Chief Executive Officer of Trubion Pharmaceuticals, Inc., a biopharmaceutical company, from 2002 to 2009. He was a medical staff fellow at the National Cancer Institute from 1985 to 1992. Dr. Thompson holds a Sc. B. in Molecular Biology and Mathematics from Brown University and an M.D. from Brown University Medical School. We believe Dr. Thompson's venture capital and management experience in the pharmaceuticals industry provides him with the qualifications and skills to serve as a member of our board of directors.

Board Composition

Director Independence

Our board of directors currently consists of five members. Our board of directors has determined that all of our directors, other than Dr. Miller, qualify as independent directors in accordance with The NASDAQ Stock Market LLC (NASDAQ) listing requirements. Dr. Miller is not considered independent because he is an employee of the Company. NASDAQ's independence definition includes a series of objective tests, such as that the director is not, and has not been for at least three years, one of our employees and that neither the director nor any of his or her family members has engaged in various types of business dealings with us. In addition, as required by NASDAQ rules, our board of directors has made a subjective determination as to each independent director that no relationships exist that, in the opinion of our board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In making these determinations, our board of directors reviewed and discussed information provided by the directors and us with regard to each director's business and personal activities and relationships as they may relate to us and our management. There are no family relationships among any of our directors or executive officers.

Classified Board of Directors

In accordance with our amended and restated certificate of incorporation to be in effect immediately prior to the consummation of this offering, our board of directors will be divided into three classes with staggered, three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Effective upon the consummation of this offering, we expect that our directors will be divided among the three classes as follows:

- the Class I directors will be Dr. Miller and Dr. Moldt, and their terms will expire at the annual meeting of stockholders to be held in 2017;
- the Class II director will be Mr. Morrison and Mr. Krognnes and their terms will expire at the annual meeting of stockholders to be held in 2018; and
- the Class III directors will be Mr. Gould and Dr. Thompson, and their terms will expire at the annual meeting of stockholders to be held in 2019.

Our amended and restated certificate of incorporation will provide that the authorized number of directors may be changed only by resolution of the board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control of the Company.

Voting Arrangements

The election of the members of our board of directors is governed by the amended and restated voting agreement, as amended, that we entered into with certain holders of our common stock and certain holders of our convertible preferred stock and the related provisions of our amended and restated certificate of incorporation. The holders of our common stock and preferred stock who are parties to our voting agreement are obligated to vote for certain designees identified therein. Pursuant to this agreement, our common stockholders designated Dr. Miller to serve on our board of directors; OrbiMed Private Investments V, LP designated Dr. Thompson to serve on our board of directors; Adams Street 2011 Direct Fund LP, Adams Street 2012 Direct Fund LP, Adams Street 2013 Direct Fund LP and Adams Street 2014 Direct Fund LP designated Mr. Gould to serve on our board of directors; and Novo A/S designated Dr. Moldt to serve on our board of directors. The provisions of our voting agreement will terminate upon the consummation of this offering and our certificate of incorporation will be amended and restated, after which there will be no further contractual obligations or charter provisions regarding the election of our directors. Our directors hold office until their successors have been elected and qualified or appointed, or the earlier of their death, resignation or removal.

Leadership Structure of the Board

Our bylaws and corporate governance guidelines provide our board of directors with flexibility to combine or separate the positions of Chairman of the board of directors and Chief Executive Officer and/or the implementation of a lead director in accordance with its determination that utilizing one or the other structure would be in our best interests. Dr. Miller currently serves as the Chairman of our board of directors. In that role, Dr. Miller presides over the meetings of our board of directors.

Our board of directors has concluded that our current leadership structure is appropriate at this time. However, our board of directors will continue to periodically review our leadership structure and may make such changes in the future as it deems appropriate.

Role of Board in Risk Oversight Process

Risk assessment and oversight are an integral part of our governance and management processes. Our board of directors encourages management to promote a culture that incorporates risk management into our corporate strategy and day-to-day business operations. Management discusses strategic and operational risks with the board of directors at regular board meetings as part of management presentations that focus on particular business functions, operations or strategies, and presents the steps taken by management to mitigate or eliminate such risks.

Our board of directors does not have a standing risk management committee, but rather administers this oversight function directly through our board of directors as a whole, as well as through various standing committees of our board of directors that address risks inherent in their respective areas of oversight. In particular, our board of directors is responsible for monitoring and assessing strategic risk exposure. Our audit committee is responsible for overseeing our major financial risk exposures and the steps our management has taken to monitor and control these exposures. The audit committee also monitors compliance with legal and regulatory requirements and considers and approves or disapproves any related person transactions. Our nominating and governance committee monitors the effectiveness of our corporate governance guidelines. Our compensation committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking.

Board Committees

Our board of directors has the following standing committees: an audit committee, a compensation committee and a nominating and corporate governance committee. Our board of directors may establish other committees to facilitate the management of our business. The composition and functions of each committee are described below.

Audit Committee

Our audit committee oversees our corporate accounting and financial reporting process. Among other matters, the audit committee:

- appoints our independent registered public accounting firm;
- evaluates the independent registered public accounting firm's qualifications, independence and performance;
- determines the engagement of the independent registered public accounting firm;
- reviews and approves the scope of the annual audit and the audit fee;
- discusses with management and the independent registered public accounting firm the results of the annual audit and the review of our quarterly financial statements;
- approves the retention of the independent registered public accounting firm to perform any proposed permissible audit and non-audit services;
- monitors the rotation of partners of the independent registered public accounting firm on our engagement team in accordance with requirements established by the SEC;
- is responsible for reviewing our financial statements and our management's discussion and analysis of financial condition and results of operations to be included in our annual and quarterly reports to be filed with the SEC;
- reviews our critical accounting policies and estimates; and
- annually reviews the audit committee charter and the audit committee's performance.

The current members of our audit committee are Mr. Krognnes, Dr. Moldt and Mr. Morrison. Mr. Morrison serves as the chairperson of the committee. All members of our audit committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and NASDAQ. Our board of directors has determined that Mr. Morrison is an audit committee financial expert as defined under the applicable rules of the SEC and has the requisite financial sophistication as defined under the applicable rules and regulations of NASDAQ. Under the rules of the SEC, members of the audit committee must also meet heightened independence standards. However, so long as at least one member of the audit committee satisfies the heightened audit committee independence standards on the date of the effectiveness of the registration statement of which this prospectus forms a part, a majority of members of the audit committee may be exempt from the heightened audit committee independence standards for 90 days from such date and a minority of members of the audit committee may be exempt from the heightened audit committee independence standards for one year from such date. Our board of directors has determined that each of the members of our audit committee is independent under the applicable rules of NASDAQ. The audit committee operates under a written charter that satisfies the applicable standards of the SEC and NASDAQ.

Compensation Committee

Our compensation committee reviews and recommends policies relating to compensation and benefits of our officers and employees. The compensation committee reviews and sets or makes recommendations to our board of directors regarding the compensation of our Chief Executive Officer and other executive officers. The compensation committee also reviews and makes recommendations to our board of directors regarding director compensation. In addition, the compensation committee reviews and approves or makes recommendations to our board of directors regarding our incentive compensation and equity-based plans. The compensation committee periodically reviews and evaluates the performance of the compensation committee and its members and must annually review and reassess the compensation committee charter and recommend any changes to our board of directors. The current members of our compensation committee are Mr. Krognnes, Mr. Morrison and Dr. Thompson. Dr. Thompson serves as the chairperson of the committee. Each of the members of our compensation committee is independent under the applicable rules and regulations of NASDAQ and is an "outside director" as that term is defined in Section 162(m) of the Internal Revenue Code of 1986, as amended (162(m)). Each of Mr. Krognnes and Mr. Morrison is also a "non-employee director" as defined in Rule 16b-3 under the Exchange Act. Mr. Thompson will not be a "non-employee director" if OrbiMed Private Investments V, LP continues to own more than ten percent of our capital stock after this offering. In such event and until such time as the compensation committee is comprised solely of "non-employee directors," equity compensation awards to directors and executive officers will be approved by the Board. The compensation committee operates under a written charter.

Nominating and Corporate Governance Committee

The nominating and corporate governance committee is responsible for making recommendations to our board of directors regarding candidates for directorships and the size and composition of our board of directors. In addition, the nominating and corporate governance committee is responsible for overseeing our corporate governance policies and reporting and making recommendations to our board of directors concerning governance matters. The current members of our nominating and corporate governance committee are Mr. Gould and Dr. Moldt. Mr. Gould serves as the chairman of the committee. Each of the members of our nominating and corporate governance committee is an independent director under the applicable rules and regulations of NASDAQ relating to nominating and corporate governance committee independence. The nominating and corporate governance committee operates under a written charter.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has at any time been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers on our board of directors or compensation committee.

Board Diversity

Upon consummation of this offering, our nominating and corporate governance committee will be responsible for reviewing with the board of directors, on an annual basis, the appropriate characteristics, skills and experience required for the board of directors as a whole and its individual members. In evaluating the suitability of individual candidates (both new candidates and current members), the nominating and corporate governance committee, in recommending candidates for election, and the board of directors, in approving (and, in the case of vacancies, appointing) such candidates, may take into account many factors, including, but not limited to, the following:

- diversity of personal and professional background, perspective and experience;
- personal and professional integrity, ethics and values;
- experience in corporate management, operations or finance, such as serving as an officer or former officer of a publicly held company, and a general understanding of marketing, finance and other elements relevant to the success of a publicly-traded company in today's business environment;
- experience relevant to our industry and relevant social policy concerns;
- experience as a board member or executive officer of another publicly held company;
- relevant academic expertise or other proficiency in an area of the our operations;
- practical and mature business judgment, including ability to make independent analytical inquiries;
- promotion of a diversity of business or career experience relevant to our success; and
- any other relevant qualifications, attributes or skills.

Currently, our board of directors evaluates, and following the consummation of this offering will evaluate, each individual in the context of the board of directors as a whole, with the objective of assembling a group that can best maximize the success of the business and represent stockholder interests through the exercise of sound judgment using its diversity of experience in these various areas.

Code of Business Conduct and Ethics

We have adopted a code of business conduct and ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. Following the consummation of this offering, the code of business conduct and ethics will be available on our website. We expect that any amendments to the code, or any waivers of its requirements, will be disclosed on our website.

Limitation on Liability and Indemnification Matters

Our amended and restated certificate of incorporation, which will become effective immediately prior to the consummation of this offering, will contain provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our

directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which the director derived an improper personal benefit.

Each of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to the consummation of this offering, will provide that we are required to indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. Our amended and restated bylaws will also obligate us to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by our board of directors. With specified exceptions, these agreements provide for indemnification for related expenses, including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors and officers for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and our stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damages.

Director Compensation

During the year ended December 31, 2015, we did not pay cash compensation to any non-employee members of our board of directors. We also did not grant our non-employee directors any stock options or other equity awards except for Mr. Morrison, who we granted an option to purchase 30,000 shares of our common stock on December 31, 2015. The option vests and becomes exercisable in equal installments on each of the first three anniversaries of the date of grant, subject to Mr. Morrison's continued service to the Company through the applicable vesting date. In addition, we reimburse our directors for travel and other necessary business expenses incurred in the performance of their services for us.

Director Compensation Table

The following table sets forth information for the year ended December 31, 2015 regarding the compensation awarded to, earned by or paid to our non-employee directors:

Name	Fees Earned or Paid in Cash (\$)	Option Awards \$(⁽¹⁾)	Total (\$)
Elisha P. (Terry) Gould III	\$ —	\$ —	\$ —
Peter Moldt, Ph.D.	\$ —	\$ —	\$ —
Scott W. Morrison	\$ —	\$ 330,451	\$ 330,451
Peter Thompson, M.D.	\$ —	\$ —	\$ —

(1) Amounts reported in the Option Awards column represent the grant date fair values of stock options granted under our 2014 Equity Incentive Plan, as amended, calculated in accordance with Financial Accounting Standards Board (FASB) ASC Topic 718, *Compensation—Stock Compensation*. For a discussion of the assumptions used to calculate the value of our stock options, see Note 2 to our audited financial statements included elsewhere in this prospectus. As of December 31, 2015, none of our non-employee directors held any stock options or other equity awards other than Mr. Morrison who held an option to purchase 30,000 shares of our common stock.

In December 2015, our board of directors approved a compensation policy for our non-employee directors to be effective in connection with the consummation of this offering (Post-IPO Director Compensation Program). Pursuant to the Post-IPO Director Compensation Program, our non-employee directors will receive cash compensation, paid quarterly in arrears, as follows:

- Each non-employee director will receive an annual cash retainer in the amount of \$35,000.
- The chairperson of the board will receive additional annual cash compensation of \$30,000 for such chairperson's service on the board.
- The chairperson of the audit committee will receive additional annual cash compensation in the amount of \$20,000 for such chairperson's service on the audit committee. Each non-chairperson member of the audit committee will receive additional annual cash compensation in the amount of \$10,000 for such member's service on the audit committee.
- The chairperson of the compensation committee will receive additional annual cash compensation in the amount of \$12,000 for such chairperson's service on the compensation committee. Each non-chairperson member of the compensation committee will receive additional annual cash compensation in the amount of \$6,000 for such member's service on the compensation committee.
- The chairperson of the nominating and corporate governance committee will receive additional annual cash compensation in the amount of \$8,000 for such chairperson's service on the nominating and corporate governance committee. Each non-chairperson member of the nominating and corporate governance committee will receive additional annual cash compensation in the amount of \$4,000 for such member's service on the nominating and corporate governance committee.

In addition, under the Post-IPO Director Compensation Program, each non-employee director who is elected or appointed to our board of directors after the completion of this offering will automatically be granted an option to purchase 30,000 shares of our common stock upon the director's initial appointment or election to our board of directors, referred to as the Initial Grant. In addition, each non-employee director who is serving on our board of directors immediately following an annual stockholder's meeting will automatically be granted an annual option to purchase 15,000 shares of our common stock on the date of such annual stockholder's meeting, referred to as the Annual Grant. The Initial Grant will vest as to 1/3rd of the shares subject to the Initial Grant on each anniversary of the applicable grant date, subject to continued service through the applicable vesting date. The Annual

Grant will vest as to all of the shares subject to the Annual Grant on the earlier of the first anniversary of the applicable grant date or the next annual stockholders' meeting, subject to continued service through the vesting date. All equity awards, including any Initial Grants and Annual Grants, held by our non-employee directors will vest in full immediately prior to the occurrence of a change in control.

In connection with this offering, our board of directors approved the grant of an option to purchase 30,000 shares of our common stock to automatically be made to each of Mr. Gould, Mr. Krognnes and Dr. Thompson, which became effective upon the pricing of this offering. Each option has an exercise price per share equal to the per share price to the public set forth on the cover to this prospectus and vests and becomes exercisable in equal installments on each of the first three anniversaries of the closing of this offering, subject to continued service through the applicable vesting date. The options are otherwise subject to the terms of the 2014 Equity Incentive Award Plan and the Company's standard form of option agreement.

EXECUTIVE COMPENSATION**Overview**

This section discusses the material components of the executive compensation program for our executive officers who are named in the "2015 Summary Compensation Table" below. In 2015, our "named executive officers" and their positions were as follows:

- Richard A. Miller, M.D., President and Chief Executive Officer;
- Leiv Lea, Chief Financial Officer;
- William B. Jones, Ph.D., Vice President, Pharmaceutical Development; and
- Erik J. Verner, Ph.D., Vice President, Chemistry Research.

2015 Summary Compensation Table

The following table shows information regarding the compensation of our named executive officers for services performed in the years ended December 31, 2014 and December 31, 2015.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Bonus (\$)</u>	<u>Option Awards (\$)⁽¹⁾</u>	<u>Total (\$)</u>
Richard A. Miller, M.D.	2015	\$ 252,769	\$ —	\$ 500,097	\$ 752,866
<i>President and Chief Executive Officer</i>	2014	\$ 20,215	\$ —	\$ —	\$ 20,215
Leiv Lea	2015	\$ 225,865	\$ —	\$ 62,512	\$ 288,377
<i>Chief Financial Officer and Treasurer</i>	2014	\$ 18,173	\$ —	\$ —	\$ 18,173
William B. Jones, Ph.D.	2015	\$ 187,466	\$ —	\$ 170,064	\$ 357,530
<i>Vice President, Pharmaceutical Development</i>	2014	\$ 5,692	\$ —	\$ —	\$ 5,692
Erik J. Verner, Ph.D. ⁽²⁾	2015	\$ 199,230	\$ —	\$ 170,064	\$ 369,294
<i>Vice President, Chemistry Research</i>	2014	\$ —	\$ —	\$ —	\$ —

(1) Amounts reported in the Option Awards column represent the grant date fair values of stock options granted under our 2014 Equity Incentive Plan, as amended, calculated in accordance with Financial Account Standards Board (FASB) ASC Topic 718, *Compensation—Stock Compensation*. For a discussion of the assumptions used to calculate the value of our stock options, see Note 2 to our audited financial statements included elsewhere in this prospectus.

(2) Dr. Verner commenced employment with us as our Vice President, Chemistry Research effective January 5, 2015.

Narrative Disclosure to Summary Compensation Table**Base Salary**

The named executive officers receive a base salary to compensate them for services rendered to us. The base salary payable to each named executive officer is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities. The actual base salaries paid to each named executive officer for 2015 are set forth in the 2015 Summary Compensation Table above. For 2015, Dr. Miller's annual base salary rate was \$250,000, Mr. Lea's annual base salary rate was \$225,000, Dr. Jones' annual base salary rate was \$185,000 and Dr. Verner's annual base salary rate was \$200,000.

In light of the increased responsibilities of our named executive officers following the completion of this offering, our board of directors has approved an increase in the base salary of our named executive officers effective as of the consummation of this offering as follows:

<u>Name</u>	<u>New Annual Base Salary</u>
Richard A. Miller, M.D.	\$ 300,000
Leiv Lea	\$ 275,000
William B. Jones, Ph.D.	\$ 250,000
Erik J. Verner, Ph.D.	\$ 235,000

Annual Cash Bonuses

Although we do not have a formal performance-based cash bonus plan, our board of directors may grant annual discretionary bonuses based upon the achievement of specific individual and/or Company-wide performance goals. We did not grant any cash bonuses to our named executive officers during, or related to performance in, fiscal year 2015.

Equity Compensation

We have historically granted stock options under our 2014 Equity Incentive Plan, as amended, to our directors and employees (including our named executive officers). Our board of directors has approved stock option grants which were made to each of our named executive officers as of the pricing of this offering as set forth in the table below.

<u>Name</u>	<u>Shares Underlying Option Grant</u>
Richard A. Miller, M.D.	500,000
Leiv Lea	60,000
William B. Jones, Ph.D.	60,000
Erik J. Verner, Ph.D.	60,000

Each option has an exercise price per share equal to the per share price to the public set forth on the cover to this prospectus. Each option vests and becomes exercisable in 48 substantially equal monthly installments from the closing of this offering, subject to continued service through the applicable vesting date. The options are otherwise subject to the terms of the 2014 Equity Incentive Plan and the Company's standard form of option agreement.

In connection with this offering, we adopted our 2016 Equity Incentive Award Plan in order to facilitate the grant of cash and equity incentives to directors, employees (including our named executive officers) and consultants of the Company and certain of its affiliates and to enable the Company and certain of its affiliates to obtain and retain services of these individuals, which is essential to our long-term success. The 2016 Equity Incentive Award Plan will become effective immediately prior to the consummation of this offering. For additional information about the 2016 Equity Incentive Award Plan, please see the section entitled "Equity Compensation Plans and Other Benefit Plans—2016 Equity Incentive Award Plan" below.

Other Elements of Compensation

Retirement Plan

We maintain a 401(k) retirement savings plan for the benefit of our employees, including our named executive officers, who satisfy certain eligibility requirements. Under the 401(k) plan, eligible employees may elect to defer a portion of their compensation, within the limits prescribed by the Internal Revenue Code, on a pre-tax or after-tax (Roth) basis through contributions to the 401(k) plan. We believe that providing a vehicle for tax-deferred retirement savings through our 401(k) plan adds to

the overall desirability of our executive compensation package and further incentivizes our employees, including our named executive officers, in accordance with our compensation policies.

Employee Benefits and Perquisites

All of our full-time employees, including our named executive officers, are eligible to participate in our health and welfare plans, including medical, dental and vision benefits, medical flexible spending accounts, short-term and long-term disability insurance, and life insurance. We do not provide our named executive officers with perquisites or other personal benefits, other than the retirement, health and welfare benefits that apply uniformly to all of our employees.

No Tax Gross-Ups

We are not required to make gross-up payments to cover our named executive officers' personal income taxes that may pertain to any of the compensation or perquisites paid or provided by us.

Outstanding Equity Awards at 2015 Fiscal Year-End

The following table provides information about outstanding stock options and stock awards held by each of our named executive officers as of December 31, 2015. All awards reflected were granted under the 2014 Equity Incentive Plan, as amended.

Name	Vesting Commencement Date	Option Awards				Stock Awards	
		Number of Securities Underlying Unexercised Options (#)		Option Exercise Price (\$)	Option Expiration Date	Number of Shares of Stock That Have Not Vested (#)	Market Value of Shares of Stock That Have Not Vested (\$) ⁽¹⁾
		Exercisable	Unexercisable				
Richard A. Miller, M.D.	— ⁽²⁾	—	—	\$ —	—	442,000 ⁽²⁾	\$ 6,979,180
	9/16/2015 ⁽³⁾	—	—	\$ —	—	150,000	\$ 2,368,500
Leiv Lea	— ⁽²⁾	—	—	\$ —	—	88,400 ⁽²⁾	\$ 1,395,836
	9/16/2015 ⁽³⁾	—	—	\$ —	—	18,750	\$ 296,063
William B. Jones, Ph.D.	12/22/14 ⁽⁴⁾	—	—	\$ —	—	47,830	\$ 755,236
	7/1/2015 ⁽⁴⁾	—	—	\$ —	—	50,000	\$ 789,500
Erik J. Verner, Ph.D.	1/26/15 ⁽⁴⁾	—	—	\$ —	—	63,773	\$ 1,006,976
	7/1/2015 ⁽⁵⁾	—	50,000	\$ 0.28	7/1/2025	—	\$ —

(1) Based on the per share fair market value of our common stock as of December 31, 2015 (\$15.79), as determined by our board of directors.

(2) Represents shares of our common stock acquired by the named executive officer (directly or through a trust) for fair market value on the date of purchase, as determined by our board of directors, which were later subjected to vesting conditions. The shares of common stock held by the named executive officers (directly or through a trust) vests in substantially equal monthly installments through November 26, 2017.

(3) Represents shares of our common stock acquired upon the early exercise of stock options by the applicable holder that are subject to a right of repurchase in favor of the Company in the event the holder terminates employment with us prior to vesting. The shares vest in 48 substantially equal monthly installments from the vesting commencement date subject to the holder's continued service to us through the vesting date.

(4) Represents shares of our common stock acquired upon the early exercise of stock options by such named executive officer Dr. Verner that are subject to a right of repurchase in favor of the Company in the event such named executive officer terminates employment with us prior to vesting. The shares acquired upon exercise vest with respect to 25% of the shares initially subject to the option on the first anniversary of the vesting commencement date and with respect to 1/48th of the shares initially subject to the option on each monthly anniversary of the vesting commencement date thereafter such that the shares will be fully vested on the fourth anniversary of the vesting commencement date, in each case, subject to such named executive officer's continued service to us through the vesting date.

- (5) The stock option vests and becomes exercisable with respect to 25% of the shares initially subject to the option on the first anniversary of the vesting commencement date and with respect to 1/48th of the shares initially subject to the option on each monthly anniversary of the vesting commencement date thereafter such that the option will be fully vested and exercisable on the fourth anniversary of the vesting commencement date, in each case, subject to such named executive officer's continued service to us through the vesting date.

Employee Arrangements with our Named Executive Officers

We entered into written employment agreements with Dr. Miller and Mr. Lea on November 26, 2014, which were amended and restated in December 2015, and change in control and severance agreements with Dr. Jones and Dr. Verner on December 23, 2015. Pursuant to their respective agreements, each named executive officer is entitled to severance payments upon the occurrence of certain terminations of employment.

Pursuant to Dr. Miller's and Mr. Lea's employment agreements, as amended and restated, and Dr. Jones' and Dr. Verner's change in control and severance agreements, in the event that the executive's employment is terminated by us other than for "cause", or by the executive for "good reason" (each as defined below) at any time other than during the twelve month period immediately following a change in control of the Company, the executive is entitled to receive (i) severance payments in an amount equal to nine, or, in the case of Dr. Miller, twelve, months of his then-existing base salary; and (ii) continued healthcare coverage for the earlier of nine, or, in the case of Dr. Miller, twelve, months, or the date the executive and his dependents, if any, become eligible for healthcare coverage under another employer's plan(s). In addition, each outstanding equity award that vests subject to the executive's continued employment will automatically become vested, and, if applicable, all restrictions thereon will lapse, in each case, with respect to (i) in the case of Mr. Lea Dr. Jones and Dr. Verner, the number of shares that would have vested in the nine month period following such termination had the executive remained employed or (ii) in the case of Dr. Miller, (a) 100% of the shares subject thereto if the termination occurs prior to the second anniversary of the effective date of the amended and restated agreement or (b) the number of shares that would have vested in the twelve month period following such termination had Dr. Miller remained employed if the termination occurs after the second anniversary of the effective date of the amended and restated agreement.

Furthermore, pursuant to Dr. Miller's and Mr. Lea's employment agreements, as amended and restated, and Dr. Jones' and Dr. Verner's change in control and severance agreements, in the event that the executive's employment is terminated by us other than for "cause", or by the executive for "good reason" (each as defined below) during the twelve month period immediately following a change in control of the Company, the executive is entitled to receive (i) severance payments in an amount equal to the sum of twelve, or in the case of Dr. Miller, eighteen, months of his then-existing base salary plus 100%, or, in the case of Dr. Miller, 150%, of his target bonus opportunity; and (ii) continued healthcare coverage until the earlier of twelve, or in the case of Dr. Miller, eighteen, months, or the date the executive and his dependents, if any, become eligible for healthcare coverage under another employer's plan(s). In addition, each outstanding equity award that vests subject to executive's continued employment will automatically become vested, and, if applicable, all restrictions thereon will lapse, in each case, with respect to 100% of the shares subject thereto.

Any such severance payments and accelerated vesting are subject to the executive's timely execution and non-revocation of a general release of claims against us and our affiliates.

With respect to each of Dr. Miller and Mr. Lea's employment agreements and Dr. Jones' and Dr. Verner's change in control and severance agreements:

- "cause" means, subject to certain notice requirements and cure rights, the occurrence of any of the following events, as determined by our board of directors or a committee designated by our board, in its sole discretion: the executive's (i) commission of any felony or any crime involving fraud, dishonesty, or moral turpitude under the laws of the United States or any state thereof; (ii) attempted commission of, or participation in, a fraud or act of dishonesty against us;

(iii) intentional, material violation of any contract or agreement with us or of any statutory duty owed to us; (iv) unauthorized use or disclosure of our confidential information or trade secrets; (v) gross misconduct; or, with respect to Dr. Miller's employment agreement, (vi) willful failure to perform his duties and responsibilities to us.

- "good reason" means, subject to certain notice requirements and cure rights, the executive's resignation from all positions he then holds with us if (i) there is a material diminution in his duties and responsibilities with us; *provided, however*, that a change in title or reporting relationship will not constitute good reason; (ii) there is a material reduction of his base salary; *provided, however*, that a material reduction in base salary pursuant to a salary reduction program affecting all or substantially all of our employees and that does not adversely affect the executive to a greater extent than other similarly situated employees shall not constitute good reason; or (iii) the executive is required to relocate his primary work location to a facility or location that would increase his one-way commute distance by more than twenty-five (25) miles from his primary work location as of immediately prior to such change.

Restrictive Covenants

Pursuant to their respective agreements, our named executive officers are bound by certain restrictive covenants, including covenants relating to confidentiality and/or assignment of intellectual property rights. In addition, each named executive officer is bound by covenants not to solicit our officers or employees during employment and for a specified period following termination of employment. Each named executive officer is also bound by a covenant not to disparage us or our employees, clients, directors or agents or divert or attempt to divert any of our actual or potential business.

Equity Compensation Plans and Other Benefit Plans

2016 Equity Incentive Award Plan

In connection with this offering, we adopted a 2016 Equity Incentive Award Plan (2016 Plan), which will be effective immediately prior to the consummation of this offering. The principal purpose of the 2016 Plan is to attract, retain and motivate selected employees, consultants and directors through the granting of stock-based compensation awards and cash-based performance bonus awards. The material terms of the 2016 Plan, are summarized below.

Share Reserve. Under the 2016 Plan, an aggregate of 3,051,750 shares of our common stock will be initially reserved for issuance pursuant to a variety of stock-based compensation awards, including stock options, stock appreciation rights (SARS), restricted stock awards, restricted stock unit awards, deferred stock awards, dividend equivalent awards, stock payment awards and performance awards. The number of shares initially reserved for issuance or transfer pursuant to awards under the 2016 Plan will be increased by (1) the number of shares represented by awards outstanding under our 2014 Plan that are forfeited or lapse unexercised following the effective date up to a maximum of 1,136,229 shares and (2) an annual increase on the first day of each fiscal year beginning in 2017 and ending in 2026, equal to the lesser of (a) four percent (4%) of the shares of common stock outstanding (on an as-converted basis) on the last day of the immediately preceding fiscal year and (b) such smaller number of shares of stock as determined by our board of directors; provided, however, that no more than 15,000,000 (subject to stock splits, dividends, recapitalizations and the like) shares of stock may be issued upon the exercise of incentive stock options.

The following counting provisions will be in effect for the share reserve under the 2016 Plan:

- to the extent that an award terminates, expires or lapses for any reason or an award is settled in cash without the delivery of shares, any shares subject to the award at such time will be available for future grants under the 2016 Plan;

- to the extent shares are tendered or withheld to satisfy the grant, exercise price or tax withholding obligation with respect to any award under the 2016 Plan, such tendered or withheld shares will be available for future grants under the 2016 Plan;
- to the extent that shares of our common stock underlying unvested awards are repurchased by us, such shares will be available for future grants under the 2016 Plan;
- the payment of dividend equivalents in cash in conjunction with any outstanding awards will not be counted against the shares available for issuance under the 2016 Plan;
- to the extent permitted by applicable law or any exchange rule, shares issued in assumption of, or in substitution for, any outstanding awards of any entity acquired in any form of combination by us or any of our subsidiaries will not be counted against the shares available for issuance under the 2016 Plan; and
- to the extent that an entity acquired in any form of combination by us or any of our subsidiaries has shares available for grant under pre-existing plan, the shares available for grant pursuant to the terms of such pre-existing plan (as may be appropriately adjusted) may be used for awards under the 2016 Plan and will not be counted against the shares available for issuance under the 2016 Plan.

Administration. The compensation committee of our board of directors is expected to administer the 2016 Plan. The board or compensation committee may delegate their duties and responsibilities to committees of directors and/or officers, subject to certain limitations that may be imposed under Section 162(m), Section 16 of the Exchange Act and/or stock exchange rules. The administrator must consist of at least two members of our board of directors, each of whom is intended to qualify as an "outside director," within the meaning of Section 162(m), a "non-employee director" for purposes of Rule 16b-3 under the Exchange Act and an "independent director" within the meaning of the rules of the applicable stock exchange, or other principal securities market on which shares of our common stock are traded. The 2016 Plan provides that the board or compensation committee may delegate its authority to grant awards to employees other than executive officers and certain senior executives of the company to a committee consisting of one or more members of our board of directors or one or more of our officers, other than awards made to our non-employee directors, which must be approved by our full board of directors. Our board of directors may at any time remove the compensation committee as the administrator and re-vest in itself the authority to administer the 2016 Plan.

Subject to the terms and conditions of the 2016 Plan, the administrator has the authority to select the persons to whom awards are to be made, to determine the number of shares to be subject to awards, to prescribe the terms and conditions of awards and to make all other determinations and to take all other actions necessary or advisable for the administration of the 2016 Plan. The administrator is also authorized to adopt, amend or rescind rules relating to administration of the 2016 Plan.

Eligibility. Options, SARs, restricted stock and all other stock-based and cash-based awards under the 2016 Plan may be granted to individuals who are then our officers, employees or consultants or are the officers, employees or consultants of certain of our subsidiaries, if any. Such awards also may be granted to our directors. Only employees of us or certain of our subsidiaries, if any, may be granted incentive stock options (ISOs).

Awards. The 2016 Plan provides that the administrator may grant or issue stock options, SARs, restricted stock, restricted stock units, deferred stock, dividend equivalents, performance awards, stock payments and other stock-based and cash-based awards, or any combination thereof. Each award will be set forth in a separate agreement with the person receiving the award and will indicate the type of award, and the terms and conditions thereof.

- *Nonstatutory Stock Options (NSOs)* will provide for the right to purchase shares of our common stock at a specified price which may not be less than fair market value on the date of grant, and

usually will become exercisable (at the discretion of the administrator) in one or more installments after the grant date, subject to the participant's continued employment or service with us and/or subject to the satisfaction of corporate performance targets and individual performance targets established by the administrator. NSOs may be granted for any term specified by the administrator that does not exceed ten years.

- *Incentive Stock Options* will be designed in a manner intended to comply with the provisions of Section 422 of the Code and will be subject to specified restrictions contained in the Code. Among such restrictions, ISOs must have an exercise price of not less than the fair market value of a share of common stock on the date of grant, may only be granted to employees and must not be exercisable after a period of ten years measured from the date of grant. In the case of an ISO granted to an individual who owns (or is deemed to own) at least 10% of the total combined voting power of all classes of our capital stock, the 2016 Plan provides that the exercise price must be at least 110% of the fair market value of a share of common stock on the date of grant and the ISO must not be exercisable after a period of five years measured from the date of grant.
- *Restricted Stock* may be granted to any eligible individual and made subject to such restrictions as may be determined by the administrator. Restricted stock, typically, may be forfeited for no consideration or repurchased by us at the original purchase price if the conditions or restrictions on vesting are not met. In general, restricted stock may not be sold or otherwise transferred or hypothecated until certain restrictions are removed or expire. Holders of restricted stock, unlike recipients of options, will have voting rights and will have the right to receive dividends, if any, prior to the time when the restrictions lapse, however, extraordinary dividends will generally be placed in escrow, and will not be released until the restrictions are removed or expire.
- *Restricted Stock Units* may be awarded to any eligible individual, typically without payment of consideration, but subject to vesting conditions based on continued employment or service or on performance criteria established by the administrator. Like restricted stock, restricted stock units may not be sold, or otherwise transferred or hypothecated, until vesting conditions are removed or expire. Unlike restricted stock, stock underlying restricted stock units will not be issued until the restricted stock units have vested, and recipients of restricted stock units generally will have no voting or dividend rights prior to the time when vesting conditions are satisfied.
- *Deferred Stock Awards* represent the right to receive shares of our common stock on a future date. Deferred stock may not be sold or otherwise transferred or hypothecated until issued. Deferred stock will not be issued until the deferred stock award has vested, and recipients of deferred stock generally will have no voting or dividend rights prior to the time when the vesting conditions are satisfied and the shares are issued. Deferred stock awards generally will be forfeited, and the underlying shares of deferred stock will not be issued, if the applicable vesting conditions and other restrictions are not met.
- *Deferred Stock Units* may be awarded to any eligible individual, and may be subject to vesting conditions based on continued employment or service or on performance criteria established by the administrator. Like deferred stock, deferred stock units may not be sold, or otherwise transferred or hypothecated, until vesting conditions are removed or expire. Stock underlying deferred stock units will not be issued until the deferred stock units have vested or upon a specified settlement date thereafter. Recipients of deferred stock awards and recipients of deferred stock units generally will have no voting or dividend rights prior to the time when the vesting conditions are satisfied and the shares are issued.
- *Stock Appreciation Rights* may be granted in connection with stock options or other awards, or separately. SARs granted in connection with stock options or other awards typically will provide for payments to the holder based upon increases in the price of our common stock over a set exercise price. The exercise price of any SAR granted under the 2016 Plan must be at least

100% of the fair market value of a share of our common stock on the date of grant. Except as required by Section 162(m) with respect to a SAR intended to qualify as performance-based compensation as described in Section 162(m), there are no restrictions specified in the 2016 Plan on the exercise of SARs or the amount of gain realizable therefrom, although restrictions may be imposed by the administrator in the SAR agreements. SARs under the 2016 Plan will be settled in cash or shares of our common stock, or in a combination of both, at the election of the administrator.

- *Dividend Equivalents* represent the value of the dividends, if any, per share paid by us, calculated with reference to the number of shares covered by the award. Dividend equivalents may be settled in cash or shares and at such times as determined by the compensation committee or board of directors, as applicable.
- *Performance Awards* may be granted by the administrator on an individual or group basis. In general, these awards will be based upon specific performance targets and may be paid in cash or in common stock or in a combination of both. Performance awards may include "phantom" stock awards that provide for payments based upon the value of our common stock. Performance awards may also include bonuses that may be granted by the administrator on an individual or group basis and which may be payable in cash or in common stock or in a combination of both.
- *Stock Payments* may be authorized by the administrator in the form of common stock or an option or other right to purchase common stock as part of a deferred compensation or other arrangement in lieu of all or any part of compensation, including bonuses, that would otherwise be payable in cash to the employee, consultant or non-employee director.

Change in Control. In the event of a change in control where the acquiror does not assume or replace awards granted, prior to the consummation of such transaction, all awards other than performance awards issued under the 2016 Plan will be subject to accelerated vesting such that 100% of such awards will become vested and exercisable or payable, as applicable. Performance awards not assumed in a change in control transaction will continue to vest pursuant to the terms and conditions of the applicable award agreements. In the event that within the twelve-month period immediately following a change in control, the holder of an award under the 2016 Plan is terminated by the Company other than for cause or leaves the Company for good reason, then the vesting and, if applicable, exercisability of one hundred percent (100%) of the then-unvested shares subject to the outstanding awards shall accelerate upon the termination date. In addition, the administrator may, in its sole discretion, include such further provisions or limitations in any award agreement as it deems appropriate. The administrator may also make appropriate adjustments to awards under the 2016 Plan and is authorized to provide for the acceleration, cash-out, termination, assumption, substitution or conversion of such awards in the event of a change in control or certain other unusual or nonrecurring events or transactions. Under the 2016 Plan, a change in control is generally defined as:

- the transfer or exchange in a single transaction or series of related transactions by our stockholders of more than 50% of our voting stock to a person or group;
- a change in the composition of our board of directors over a two-year period such that 50% or more of the members of the board of directors elected by at least two-thirds of the directors who were directors at the beginning of the two-year period or whose election or nomination was so approved cease to constitute a majority of our board;
- a merger, consolidation, reorganization or business combination in which we are involved, directly or indirectly, other than a merger, consolidation, reorganization or business combination which results in our outstanding voting securities immediately before the transaction continuing to represent a majority of the voting power of the acquiring company's outstanding voting

securities and after which no person or group beneficially owns 50% or more of the outstanding voting securities of the surviving entity immediately after the transaction;

- the sale, exchange or transfer of all or substantially all of our assets; or
- stockholder approval of our liquidation or dissolution.

Adjustments of Awards. In the event of any stock dividend, stock split, combination or exchange of shares, merger, consolidation, spin-off, recapitalization, distribution of our assets to stockholders (other than normal cash dividends) or any other corporate event affecting the number of outstanding shares of our common stock or the share price of our common stock other than an equity restructuring (as defined below), the administrator may make appropriate, proportionate adjustments to:

- the aggregate number and kind of shares subject to the 2016 Plan;
- the number and kind of shares subject to outstanding awards;
- the terms and conditions of outstanding awards (including, without limitation, any applicable performance targets or criteria with respect to such awards); and
- the grant or exercise price per share of any outstanding awards under the 2016 Plan.

In the event of any transaction or event described above, or any unusual or nonrecurring transaction or events, and in order to prevent dilution or enlargement of the potential benefits intended to be made available under the 2016 Plan, the administrator in its sole discretion may:

- provide for the termination or replacement of an award in exchange for cash or other property;
- provide that any outstanding award cannot vest, be exercised or become payable after such event; and/or
- provide that awards may be exercisable, payable or fully vested as to shares of common stock covered thereby.

In the event of an equity restructuring, the administrator will make appropriate, proportionate adjustments to the number and type of securities subject to each outstanding award and the exercise price or grant price thereof, if applicable. In addition, the administrator will make equitable adjustments, as the administrator in its discretion may deem appropriate to reflect such equity restructuring, with respect to the aggregate number and type of shares subject to the 2016 Plan. The adjustments upon an equity restructuring are nondiscretionary and will be final and binding on the affected holders and the Company.

For purposes of the 2016 Plan, "equity restructuring" means a nonreciprocal transaction between us and our stockholders, such as a stock dividend, stock split, spin-off, rights offering or recapitalization through a large, nonrecurring cash dividend, that affects the number or kind of shares (or other securities) or the share price of our common stock (or other securities) and causes a change in the per share value of the common stock underlying outstanding stock-based awards granted under the 2016 Plan.

Foreign Participants, Claw-Back Provisions and Transferability. The administrator may modify award terms, establish subplans and/or adjust other terms and conditions of awards, subject to the share limits described above, in order to facilitate grants of awards subject to the laws and/or stock exchange rules of countries outside of the United States. All awards will be subject to the provisions of any claw-back policy implemented by the Company to the extent set forth in such claw-back policy and/or in the applicable award agreement. With limited exceptions for estate planning, domestic relations orders, certain beneficiary designations and the laws of descent and distribution, awards under the 2016 Plan are generally non-transferable prior to vesting unless otherwise determined by the administrator, and are exercisable only by the participant.

Amendment and Termination. Our board of directors or the compensation committee (with board approval) may terminate, amend or modify the 2016 Plan at any time and from time to time. However, we must generally obtain stockholder approval:

- to increase the number of shares available under the 2016 Plan (other than in connection with the automatic annual increases and certain corporate events, in each case, as described above);
- to reduce the price per share of any outstanding option or SAR granted under the 2016 Plan;
- to cancel any outstanding option or SAR in exchange for cash or another award when the option or SAR price per share exceeds the fair market value of the underlying shares; or
- to the extent required by applicable law, rule or regulation (including any applicable stock exchange rule).

Termination. The board of directors may terminate the 2016 Plan at any time. No incentive stock options may be granted pursuant to the 2016 Plan after the tenth anniversary of the effective date of the 2016 Plan, and no additional annual share increases to the 2016 Plan's aggregate share limit will occur from and after such anniversary. Any award that is outstanding on the termination date of the 2016 Plan will remain in force according to the terms of the 2016 Plan and the applicable award agreement.

We intend to file with the SEC a registration statement on Form S-8 covering the shares of our common stock issuable under the 2016 Plan.

2014 Equity Incentive Plan

We currently maintain the 2014 Equity Incentive Plan, as amended (2014 Plan). The purposes of the 2014 Plan are to attract and retain personnel for positions of substantial responsibility, to provide additional incentives to our employees, directors and consultants, and to promote the Company's business. The material terms of the 2014 Plan are summarized below:

Share Reserve. The 2014 Plan reserved an aggregate of 3,728,501 shares of our common stock for issuance pursuant to awards of stock options or stock purchase rights under the 2014 Plan. The following counting provisions are in effect for the share reserve under the 2014 Plan:

- to the extent that an award terminates, expires or is canceled for any reason, any shares subject to the award at such time will be available for future grants under the 2014 Plan.
- to the extent shares are subject to an award that is withheld or reacquired by the Company to satisfy the exercise price or tax withholding obligations under the 2014 Plan, such shares will be available for future grants under the 2014 Plan.
- to the extent shares of restricted stock are repurchased by the Company at their original purchase price, such shares shall again be available for future grant under the 2014 Plan.

Administration. The Company's board of directors administers the 2014 Plan. Subject to the terms and conditions of the 2014 Plan, the administrator has the authority to, among other things, select the persons to whom awards are to be made, to determine the kinds of awards granted, the number of shares to be subject to awards and the terms and conditions of awards, and to adopt, amend or rescind rules relating to administration of the 2014 Plan.

Eligibility. Awards under the 2014 Plan may be granted to individuals who are then our officers, employees or consultants or are the officers, employees or consultants of certain of our parents and subsidiaries. Such awards may also be granted to our directors. Only employees of us or certain of our subsidiaries may be granted incentive stock options.

Awards. The 2014 Plan provides that the administrator may grant or issue stock options or stock purchase rights, or any combination thereof. Each award will be set forth in a separate award

agreement with the person receiving the award and will indicate the type, terms and conditions of the award.

- *Nonstatutory Stock Options* provide for the right to purchase shares of our common stock at a specified price which may not be less than fair market value on the date of grant, and usually become exercisable (at the discretion of the administrator) in one or more installments after the grant date, subject to the participant's continued employment or service with us. NSOs may be granted for any term specified by the administrator that does not exceed ten years.
- *Incentive Stock Options* provide for the right to purchase shares of our common stock and designed in a manner intended to comply with the provisions of Section 422 of the Code. Among other such restrictions, ISOs must have an exercise price of not less than the fair market value of a share of common stock on the date of grant, may only be granted to employees and must not be exercisable after a period of ten years measured from the date of grant. In the case of an ISO granted to an individual who owns (or is deemed to own) at least 10% of the total combined voting power of all classes of our capital stock, the 2014 Plan provides that the price must be at least 110% of the fair market value of a share of common stock on the date of grant and the ISO must not be exercisable after a period of five years measured from the date of grant.
- *Stock Purchase Rights* represent the right to purchase shares of our common stock for a per share purchase price determined by the administrator. Stock purchase rights are exercisable during a specified period established by the administrator. Stock purchase rights are typically subject to vesting conditions based on continued employment or (other such other criteria as may be determined by the administrator) and are subject to a Company right of repurchase until such conditions are removed or expire. Stock purchase rights may generally also not be sold or otherwise transferred until such vesting conditions are removed or expire.

Change in Control. In the event of a change in control of the Company where the acquiror does not assume or replace awards granted with similar stock awards, then (1) any award issued under the 2014 Plan to participants who are still employed by or provide services to the Company prior to such change in control will be subject to accelerated vesting such that 100% of such awards will become vested and exercisable, and all restrictions thereon shall lapse; and (2) any other awards outstanding under 2014 Plan shall be terminated if not exercised prior to such change in control. The administrator may also make appropriate adjustments to awards under the 2014 Plan and is authorized to provide for the acceleration, cash out, termination, substitution or conversion of such awards in the event of a change in control or certain other unusual or nonrecurring events or transactions. Under the 2014 Plan, a change in control is generally defined as:

- a merger or consolidation in which we are involved and are not the surviving corporation, other than a merger, consolidation, reincorporation or other transaction in which there is no substantial change in the stockholders of the Company;
- a merger in which we are the surviving corporation but after which our stockholders immediately prior to the transaction cease to own at least a majority of the combined voting power of the surviving corporation's outstanding voting securities immediately after the transaction;
- a dissolution or liquidation of the Company; or
- the sale of all or substantially all of our assets.

Adjustments of Awards. In the event of any stock dividend, stock split, combination or exchange of shares, merger, consolidation, spin-off, recapitalization, distribution of our assets to stockholders (other than normal cash dividends) or any other corporate event affecting the number of outstanding shares of

our common stock or the share price of our common stock other than an equity restructuring (as defined below), the administrator may make appropriate, proportionate adjustments to:

- the aggregate number and kind of shares subject to the 2014 Plan;
- the number and kind of shares subject to outstanding awards;
- the grant or exercise price per share of any outstanding awards under the 2014 Plan.

In the event of any transaction or event described above, or any similar transaction or event, and in order to prevent dilution or enlargement of the potential benefits intended to be made available under the 2014 Plan, the administrator in its sole discretion may:

- provide for the termination or replacement of an award in exchange for cash or other property;
- provide that any outstanding award cannot vest, be exercised or become payable after such event; and/or
- provide that awards may be exercisable, payable or fully vested as to shares of common stock covered thereby.

In the event of an equity restructuring, the administrator will make appropriate, proportionate adjustments to the number and type of securities subject to each outstanding award and the exercise price or grant price thereof, if applicable. In addition, the administrator will make equitable adjustments, as the administrator in its discretion may deem appropriate to reflect such equity restructuring, with respect to the aggregate number and type of shares subject to the 2014 Plan. The adjustments upon an equity restructuring are nondiscretionary and will be final and binding on the affected holders and the Company.

For purposes of the 2014 Plan, "equity restructuring" means a nonreciprocal transaction between us and our stockholders, such as a stock dividend, stock split, spin-off, rights offering or recapitalization through a large, nonrecurring cash dividend, that affects the number or kind of shares (or other securities) or the share price of our common stock (or other securities) and causes a change in the per share value of the common stock underlying outstanding stock-based awards granted under the 2014 Plan.

Amendment and Termination. Our board of directors may amend, modify or terminate the 2014 Plan at any time. However, except in connection with certain changes in the company's capital structure and to the extent required by applicable law, stockholder approval will be required for an amendment that (1) increases the maximum number of shares which may be issued under the 2014 Plan or the number; or (2) extends the term of the 2014 Plan. In general, no amendment may impair the rights of a holder of an outstanding award without the holder's consent. Following the completion of this offering and in connection with the effectiveness of our 2016 Plan, the 2014 Plan will terminate and no further awards will be granted under the 2014 Plan. However, any awards under the 2014 Plan that are outstanding as of the effective date of the 2016 Plan will continue to be subject to the terms and conditions of the 2014 Plan.

2016 Employee Stock Purchase Plan

In connection with this offering, we adopted a 2016 Employee Stock Purchase Plan, which we refer to as our ESPP, which became effective immediately prior to the effectiveness of our registration statement filed on Form S-1 in connection with this offering. The ESPP is designed to allow our eligible employees to purchase shares of our common stock with accumulated payroll deductions. The ESPP is intended to qualify under Section 423 of the Code.

Plan Administration. Our compensation committee will administer the ESPP, subject to the terms and conditions of the ESPP. Our compensation committee may delegate administrative tasks under the ESPP to the services of an agent and/or employees. The administrator will have the discretionary authority to administer and interpret the ESPP. Interpretations and constructions of the administrator

of any provision of the ESPP or of any rights thereunder will be conclusive and binding on all persons. We will bear all expenses and liabilities incurred by the ESPP administrator.

Shares Available Under ESPP. The maximum number of shares of our common stock which will be authorized for sale under the ESPP is equal to the sum of (1) 200,000 shares of common stock and (2) an annual increase on the first day of each year beginning in 2017 and ending in 2026, equal to the lesser of (a) one percent (1%) of the shares of our common stock outstanding (on an as-converted basis) on the last day of the immediately preceding fiscal year and (b) such number of shares of common stock as determined by our board of directors; provided, however, no more than 3,000,000 shares of our common stock may be issued under the ESPP. The shares made available for sale under the ESPP may be authorized but unissued shares or reacquired shares reserved for issuance under the ESPP.

Eligible Employees. Employees eligible to participate in the ESPP for a given offering period generally include employees who are employed by us or one of our designated subsidiaries on the first day of the offering period, or the enrollment date. Our employees and any employees of our subsidiaries who customarily work less than five months in a calendar year or are customarily scheduled to work less than 20 hours per week will not be eligible to participate in the ESPP. Finally, an employee who owns (or is deemed to own through attribution) 5% or more of the combined voting power or value of all our classes of stock or the stock of one of our subsidiaries will not be allowed to participate in the ESPP.

Participation. Employees will enroll under the ESPP by completing a payroll deduction form permitting the deduction from their compensation of at least 1% of their compensation but not more than the lesser of 15% of their compensation and \$50,000 per offering period. Such payroll deductions are expressed as a whole number percentage and the accumulated deductions will be applied to the purchase of shares on each semi-annual purchase date. However, a participant may not purchase more than 25,000 shares in each offering period, and may not subscribe for more than \$25,000 in fair market value of shares of our common stock (determined at the time the option is granted) per calendar year falling in the offering period. The ESPP administrator has the authority to change these limitations for any subsequent offering period.

Offering. Under the ESPP, participants are offered the option to purchase shares of our common stock at a discount during a series of successive offering periods. The offering periods will commence and end on dates as determined by the ESPP administrator. However, in no event may an offering period be longer than 27 months in length.

The option purchase price will be the lower of 85% of the closing trading price per share of our common stock on the first trading date of an offering period in which a participant is enrolled or 85% of the closing trading price per share on the semi-annual purchase date, which will occur on the last trading day of each offering period.

Unless a participant cancels his or her participation in the ESPP before the purchase date, the participant will be deemed to have exercised his or her option in full as of each purchase date. Upon exercise, the participant will purchase the number of whole shares that his or her accumulated payroll deductions will buy at the option purchase price, subject to the participation limitations listed above.

A participant may cancel his or her payroll deduction authorization at any time prior to the end of the offering period. Upon cancellation, the participant will have the option to either (1) receive a refund of the participant's account balance in cash without interest or (2) exercise the participant's option for the current offering period for the maximum number of shares of common stock on the applicable purchase date, with the remaining account balance refunded in cash without interest. Following at least one payroll deduction, a participant may also decrease (but not increase) his or her payroll deduction authorization once during any offering period. If a participant wants to increase or

decrease the rate of payroll withholding, he or she may do so effective for the next offering period by submitting a new form before the offering period for which such change is to be effective.

A participant may not assign, transfer, pledge or otherwise dispose of (other than by will or the laws of descent and distribution) payroll deductions credited to a participant's account or any rights to exercise an option or to receive shares of our common stock under the ESPP. During a participant's lifetime, his or her options in the ESPP shall be exercisable only by such participant. Any unauthorized attempt at assignment, transfer, pledge or other disposition will not be given effect.

Adjustments upon Changes in Recapitalization, Dissolution, Liquidation, Merger or Asset Sale. In the event of any increase or decrease in the number of issued shares of our common stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the common stock or any other increase or decrease in the number of shares of common stock effected without receipt of consideration by us, we will proportionately adjust the aggregate number of shares of our common stock offered under the ESPP, the number and price of shares which any participant has elected to purchase pursuant to the ESPP and the maximum number of shares which a participant may elect to purchase in any single offering period.

If there is a proposal to dissolve or liquidate us, then the ESPP will terminate immediately prior to the consummation of such proposed dissolution or liquidation, and any offering period then in progress will be shortened by setting a new purchase date to take place before the date of our dissolution or liquidation. We will notify each participant of such change in writing at least ten business days prior to the new exercise date. If we undergo a merger with or into another corporation or sale of all or substantially all of our assets, each outstanding option will be assumed or an equivalent option substituted by the successor corporation or the parent or subsidiary of the successor corporation. If the successor corporation refuses to assume the outstanding options or substitute equivalent options, then any offering period then in progress will be shortened by setting a new purchase date to take place before the date of our proposed sale or merger. We will notify each participant of such change in writing at least ten business days prior to the new exercise date.

Amendment and Termination. Our board of directors may amend, suspend or terminate the ESPP at any time. However, the board of directors may not amend the ESPP without obtaining stockholder approval within 12 months before or after such amendment to the extent required by applicable laws.

We intend to file with the SEC a registration statement on Form S-8 covering the shares issuable under the ESPP.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from the director or executive officer. The director or executive officer may amend or terminate the plan in limited circumstances. Our directors and executive officers may also buy or sell additional shares of common stock outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions since our inception on January 27, 2014 to which we have been a party, in which the amount involved exceeds \$120,000, and in which any of our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest.

Sales and Purchases of Securities***Issuance of Series B Convertible Preferred Stock***

In September 2015, we issued an aggregate of 5,353,312 shares of our Series B convertible preferred stock at a price per share of \$14.01 for aggregate net proceeds of \$74.8 million to 33 accredited investors. The table below sets forth the number of shares of Series B convertible preferred stock sold to our directors, executive officers or holders of more than 5% of our common stock, or an affiliate or immediate family member thereof:

<u>Name</u>	<u>Number of Shares of Series B Convertible Preferred Stock</u>	<u>Aggregate Purchase Price</u>
Fidelity Select Portfolios ⁽¹⁾	1,284,797	\$ 18,000,005.97
OrbiMed Private Investment V, LP ⁽²⁾	713,776	\$ 10,000,001.76
Entities affiliated with Adams Street Partners ⁽³⁾	356,888	\$ 5,000,000.88
Novo A/S ⁽⁴⁾	356,888	\$ 5,000,000.88
Miller-Horning Family Trust u/a/d January 25, 1985 ⁽⁵⁾	62,455	\$ 874,994.55

- (1) Includes 747,748 shares purchased by Mag & Co fbo Fidelity Select Portfolios: Biotechnology Portfolio, 338,682 shares purchased by M Gardiner & Co fbo Fidelity Securities Fund: Fidelity Blue Chip Growth Fund, 180,163 shares purchased by Bangle & Co fbo Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund, 15,935 shares purchased by FLAPPER CO fbo Pyramis Lifecycle Blue Chip Growth Commingled Pool and 2,269 shares purchased by Mag & Co fbo Fidelity Blue Chip Growth Commingled Pool.
- (2) Peter Thompson, M.D., who is a member of our board of directors, is a private equity partner of OrbiMed Advisors LLC (OrbiMed Advisors), the sole managing member of the sole general partner of OrbiMed Private Investment V, LP (OrbiMed V).
- (3) Includes 92,278 shares purchased by Adams Street 2011 Direct Fund LP (Adams Street 2011), 95,001 shares purchased by Adams Street 2012 Direct Fund LP (Adams Street 2012), 71,863 shares purchased by Adams Street 2013 Direct Fund LP (Adams Street 2013) and 97,746 shares purchased by Adams Street 2014 Direct Fund LP (Adams Street 2014). Elisha P. (Terry) Gould III, who is a member of our board of directors, is a partner of Adams Street Partners, LLC, the managing member of the general partner of the general partner of each of Adams Street 2011, Adams Street 2012, Adams Street 2013 and Adams Street 2014.
- (4) Peter Moldt, Ph.D., who is a member of our board of directors, is employed as a partner of Novo Ventures (US) Inc., which provides certain consultancy services to Novo A/S (Novo). Dr. Moldt is not deemed to be a beneficial owner of, nor does he have a pecuniary interest in, the shares held by Novo.
- (5) Richard A. Miller, M.D., who is a member of our board of directors and our President and Chief Executive Officer, is a trustee of the Miller-Horning Family Trust u/a/d January 25, 1985.

Issuance of Series A Convertible Preferred Stock

In November 2014, we issued an aggregate of 3,395,468 shares of our Series A convertible preferred stock at a price per share of \$3.755 for aggregate net proceeds of \$12.6 million to twelve accredited investors. In January 2015 and June 2015 we issued an additional 1,065,246 and 4,460,715 shares, respectively, of our Series A convertible preferred stock in additional closings. The table below sets forth the number of shares of Series A convertible preferred stock sold to our directors, executive

officers or holders of more than 5% of our common stock, or an affiliate or immediate family member thereof:

<u>Name</u>	<u>Number of Shares of Series A Convertible Preferred Stock</u>	<u>Aggregate Purchase Price</u>
November 2014 Issuances		
OrbiMed Private Investments V, LP ⁽¹⁾	1,997,337	\$ 7,500,000.44
Entities affiliated with Adams Street Partners ⁽²⁾	1,065,246	\$ 3,999,998.74
Miller-Horning Family Trust u/a/d January 25, 1985 ⁽³⁾	133,155	\$ 499,997.03
Karlson Lea Family Trust UTA dated February 11, 1998 ⁽⁴⁾	21,304	\$ 79,996.52
January 2015 Issuance		
Novo A/S ⁽⁵⁾	1,065,246	\$ 3,999,998.73
June 2015 Issuances		
OrbiMed Private Investments V, LP ⁽¹⁾	1,997,337	\$ 7,500,000.44
Entities affiliated with Adams Street Partners ⁽⁶⁾	1,065,247	\$ 4,000,002.50
Novo A/S ⁽⁵⁾	1,065,246	\$ 3,999,998.73
Miller-Horning Family Trust u/a/d January 25, 1985 ⁽³⁾	133,155	\$ 499,997.03
Karlson Lea Family Trust UTA dated February 11, 1998 ⁽⁴⁾	21,304	\$ 79,996.52

- (1) Peter Thompson, M.D., who is a member of our board of directors, is a private equity partner of OrbiMed Advisors, the sole managing member of the sole general partner of OrbiMed V.
- (2) Includes 275,432 shares purchased by Adams Street 2011, 283,560 shares purchased by Adams Street 2012, 214,499 shares purchased by Adams Street 2013 and 291,755 shares purchased by Adams Street 2014. Elisha P. (Terry) Gould III, who is a member of our board of directors, is a partner of Adams Street Partners, LLC, the managing member of the general partner of the general partner of each of Adams Street 2011, Adams Street, 2012, Adams Street 2013 and Adams Street 2014.
- (3) Richard A. Miller, M.D., who is a member of our board of directors and our President and Chief Executive Officer, is a trustee of the Miller-Horning Family Trust u/a/d January 25, 1985.
- (4) Leiv Lea, who is our Chief Financial Officer, is a trustee of the Karlson Lea Family Trust UTA dated February 11, 1998.
- (5) Peter Moldt, Ph.D., who is a member of our board of directors, is employed as a partner of Novo Ventures (US) Inc., which provides certain consultancy services to Novo. Dr. Moldt is not deemed to be a beneficial owner of, nor does he have a pecuniary interest in, the shares held by Novo.
- (6) Includes 275,432 shares purchased by Adams Street 2011, 283,561 shares purchased by Adams Street 2012, 214,499 shares purchased by Adams Street 2013 and 291,755 shares purchased by Adams Street 2014. Elisha P. (Terry) Gould III, who is a member of our board of directors, is a partner of Adams Street Partners, LLC, the managing member of the general partner of the general partner of each of Adams Street 2011, Adams Street, 2012, Adams Street 2013 and Adams Street 2014.

Participation in this Offering

Certain of our existing institutional investors affiliated with certain of our directors have agreed to purchase an aggregate of 1,416,666 shares of our common stock in this offering and certain of our other existing institutional investors have been allocated shares in this offering in the ordinary course, in each case, at the initial public offering price. These purchases will be made on the same terms as the shares that are sold to the public generally and not pursuant to any pre-existing contractual rights or obligations. The underwriters will receive the same underwriting discounts and any commissions on any shares purchased by these investors as they will on any other shares sold to the public in this offering. See the footnotes to the beneficial ownership table in "Principal Stockholders" for more details.

Investors' Rights Agreement

We entered into an amended and restated investors' rights agreement with the purchasers of our outstanding convertible preferred stock, including entities with which certain of our directors are affiliated. As of December 31, 2015, the holders of approximately 14.3 million shares of common stock

issuable upon conversion of our convertible preferred stock are entitled to rights with respect to the registration of their shares under the Securities Act. For a more detailed description of these registration rights, see "Description of Capital Stock—Registration Rights."

Voting Agreement

We entered into an amended and restated voting agreement with certain holders of our common stock and convertible preferred stock. Upon the consummation of this offering, the amended and restated voting agreement will terminate. For a description of the amended and restated voting agreement, see "Management—Board Composition—Voting Arrangements."

Right of First Refusal and Co-Sale Agreement

We have entered into a right of first refusal and co-sale agreement with certain holders of our common stock and holders of our convertible preferred stock. This agreement provides for rights of first refusal and co-sale relating to the shares of our common stock held by certain key holders of our common stock. Upon the consummation of this offering, the amended and restated right of first refusal and co-sale agreement will terminate.

Director and Executive Officer Compensation

Please see "Management—Director Compensation" and "Executive Compensation" for information regarding compensation of directors and executive officers.

Employment Agreements

We have entered into employment agreements with our executive officers. For more information regarding these agreements, see "Executive and Director Compensation—Narrative to Summary Compensation Table and Outstanding Equity Awards at 2014 Fiscal Year End."

Indemnification Agreements and Directors' and Officers' Liability Insurance

We have entered into or intend to enter into indemnification agreements with each of our directors and executive officers. These agreements will require us to, among other things, indemnify each and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys' fees, judgments, penalties, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person's services as a director or executive officer. We have obtained an insurance policy that insures our directors and officers against certain liabilities, including liabilities arising under applicable securities laws. For additional information see "Management—Limitation on Liability and Indemnification Matters."

Policies and Procedures for Related Party Transactions

Our board of directors has adopted a written related person transaction policy to set forth the policies and procedures for the review and approval or ratification of related person transactions. This policy will cover, with certain exceptions set forth in Item 404 of Regulation S-K, any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships in which we were or are to be a participant, where the amount involved exceeds \$120,000 and a related person had, has or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related person. As provided by our related person transaction policy, our audit committee will be responsible for reviewing and approving in advance the related party transactions covered by the company's related person transaction policies and procedures. All of the transactions described in this section occurred prior to the adoption of this policy.

PRINCIPAL STOCKHOLDERS

The following table sets forth information relating to the beneficial ownership of our common stock as of February 29, 2016, by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our outstanding shares of common stock;
- each of our directors;
- each of our named executive officers; and
- all directors and executive officers as a group.

The number of shares beneficially owned by each entity, person, director or executive officer is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days after February 29, 2016 through the exercise of any stock option, warrants or other rights. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock held by that person or entity.

Certain of our existing institutional investors affiliated with certain of our directors have agreed to purchase an aggregate of 1,416,666 shares of our common stock in this offering and certain of our other existing institutional investors have been allocated shares in this offering in the ordinary course, in each case, at the initial public offering price and on the same terms as the other purchasers in this offering. The figures in the table below reflect the purchase of the shares in this offering (based on the initial public offering price of \$15.00 per share) by these investors in the amounts they have agreed to purchase or have been allocated.

The percentage of shares beneficially owned is computed on the basis of 15,706,356 shares of our common stock outstanding as of February 29, 2016, which reflects the assumed conversion of all of our outstanding shares of convertible preferred stock into an aggregate of 14,274,741 shares of common stock. Shares of our common stock that a person has the right to acquire within 60 days after February 29, 2016 are deemed outstanding for purposes of computing the percentage ownership of the person or entity holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person, except with respect to the percentage ownership of all directors and executive officers as a group. Unless otherwise indicated below, the address for each beneficial owner listed is c/o Corvus Pharmaceuticals, Inc., at 863 Mitten Road, Suite 102, Burlingame, CA 94010.

Name of Beneficial Owner	Beneficial Ownership Prior to this Offering				Beneficial Ownership After this Offering	
	Number of Outstanding Shares Beneficially Owned	Number of Shares Exercisable Within 60 Days	Number of Shares Beneficially Owned	Percentage of Beneficial Ownership	Number of Shares Beneficially Owned	Percentage of Beneficial Ownership
5% and Greater Stockholders						
Entities affiliated with Adams Street						
Partners ⁽¹⁾	2,487,381	0	2,487,381	15.84%	2,687,381	13.17%
Entities affiliated with Fidelity						
Management & Research ⁽²⁾	1,284,797	0	1,284,797	8.18%	2,134,797	10.46%
Novo A/S ⁽³⁾	2,487,380	0	2,487,380	15.84%	3,154,046	15.46%
OrbiMed Private Investments V, LP ⁽⁴⁾	4,708,450	0	4,708,450	29.98%	5,258,450	25.77%
Executive Officers and Directors						
Richard A. Miller, M.D. ⁽⁵⁾	1,046,993	0	1,046,993	6.67%	1,046,993	5.13%
Elisha P. (Terry) Gould III ⁽⁶⁾	2,487,381	0	2,487,381	15.84%	2,687,381	13.17%
Steve E. Krognnes	0	0	0	—	0	*
Peter Moldt, Ph.D. ⁽⁷⁾	0	0	0	—	0	*
Scott W. Morrison	0	0	0	—	0	*
Peter Thompson, M.D. ⁽⁸⁾	4,708,450	0	4,708,450	29.98%	5,258,450	25.77%
William Ben Jones, Ph.D. ⁽⁹⁾	113,773	0	113,773	*	113,773	*
Leiv Lea ⁽¹⁰⁾	199,253	0	199,253	1.27%	199,253	*
Erik Verner, Ph.D. ⁽¹¹⁾	63,773	0	63,773	*	63,773	*
All directors and executive officers as a group (9 persons) ⁽¹²⁾	8,619,623	0	8,619,623	54.88%	9,369,623	45.92%

* Indicates beneficial ownership of less than 1% of the total outstanding common stock.

- (1) Consists of (a) 550,864 shares of common stock issuable upon conversion of Series A convertible preferred stock and 92,278 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Adams Street 2011 Direct Fund LP; (b) 567,121 shares of common stock issuable upon conversion of Series A convertible preferred stock and 95,001 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Adams Street 2012 Direct Fund LP; (c) 428,998 shares of common stock issuable upon conversion of Series A convertible preferred stock and 71,863 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Adams Street 2013 Direct Fund LP and (d) 583,510 shares of common stock issuable upon conversion of Series A convertible preferred stock and 97,746 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Adams Street 2014 Direct Fund LP. The number of shares beneficially owned after this offering also includes 200,000 shares the holders have agreed to purchase in this offering. The address of Adams Street Partners, LLC is One North Wacker Drive, Suite 2200, Chicago, IL 60606-2823.
- (2) Consists of (a) 747,748 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Mag & Co fbo Fidelity Select Portfolios: Biotechnology Portfolio; (b) 338,682 shares of common stock issuable upon conversion of Series B convertible preferred stock held by M Gardiner & Co fbo Fidelity Securities Fund: Fidelity Blue Chip Growth Fund; (c) 180,163 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Bangle & Co fbo Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund; (d) 15,935 shares of common stock issuable upon conversion of Series B convertible preferred stock held by FLAPPER CO fbo Pyramis Lifecycle Blue Chip Growth Commingled Pool; and (e) 2,269 shares of common stock issuable upon conversion of Series B convertible preferred stock held by Mag & Co fbo Fidelity Blue Chip Growth Commingled Pool. The number of shares beneficially owned after this offering includes 850,000 shares, which these and other entities affiliated with Fidelity Management & Research have agreed to purchase in this offering. The address of all funds affiliated with Fidelity Select Portfolio is 245 Summer Street, Boston, MA 02110.
- (3) Consists of (a) 2,130,492 shares of common stock issuable upon conversion of Series A convertible preferred stock; and (b) 356,888 shares of common stock issuable upon conversion of Series B convertible preferred stock held directly by Novo A/S, a Danish limited liability company. The number of shares beneficially owned

after this offering also includes 666,666 shares the holder has agreed to purchase in this offering. The board of directors of Novo A/S, which is currently comprised of Sten Scheibye, Göran Ando, Jeppe Christiansen, Steen Riisgaard and Per Wold-Olsen, has shared voting and investment power with respect to these shares and may exercise such control only with the support of a majority of the board. As such, no individual member of the board is deemed to hold any beneficiary ownership in these shares. Dr. Peter Moldt, a member of our board of directors, is employed as a Partner of Novo Ventures (US) Inc., which provides certain consultancy services to Novo A/S, and is not deemed to beneficially own or have a pecuniary interest in the shares held by Novo A/S. The address of Novo A/S is Tuborg Havnevej 19, 2900 Hellerup, Denmark.

- (4) Consists of (a) 3,994,674 shares of common stock issuable upon conversion of Series A convertible preferred stock and (b) 713,776 shares of common stock issuable upon conversion of Series B convertible preferred stock held by OrbiMed Private Investments V, LP (OrbiMed V). The number of shares beneficially owned after this offering also includes 550,000 shares the holder has agreed to purchase in this offering. OrbiMed Capital GP V LLC (OrbiMed GP) is the sole general partner of OrbiMed V, and OrbiMed Advisors LLC (OrbiMed Advisors), a registered adviser under the Investment Advisers Act of 1940, as amended, is the sole managing member of OrbiMed GP. Samuel D. Isaly, a natural person, is the managing member of, and holder of a controlling interest in, OrbiMed Advisors. By virtue of such relationships, OrbiMed GP, OrbiMed Advisors and Mr. Isaly may be deemed to have voting and investment power with respect to the shares held by OrbiMed V noted above and as a result may be deemed to have beneficial ownership over such shares. Peter Thompson, M.D., is an employee of OrbiMed Advisors and is its designee to our board of directors pursuant to our amended and restated voting agreement. Each of OrbiMed GP, OrbiMed Advisors, Mr. Isaly and Dr. Thompson disclaims beneficial ownership of the shares held by OrbiMed V, except to the extent of its or his pecuniary interest therein, if any. The address of OrbiMed Advisors is 601 Lexington Avenue (at 53rd Street), 54th Floor, New York, NY 10022-4629.
- (5) Consists of (a) 718,228 shares of common stock held by Richard A. Miller and Sandra J. Horning, Trustees of the Miller-Horning Family Trust u/a/d January 25, 1985 (Miller-Horning Trust), of which 560,078 shares were subject to repurchase as of February 29, 2016, (b) 266,310 shares of common stock issuable upon conversion of Series A convertible preferred stock held by The Miller-Horning Trust and (c) 62,455 shares of common stock issuable upon conversion of Series B convertible preferred stock held by The Miller-Horning Trust. Dr. Miller has shared voting, investment and dispositive power over the shares held by The Miller-Horning Trust.
- (6) Consists of (a) 550,864 shares of common stock issuable upon conversion of Series A convertible preferred stock and 92,278 shares of common stock issuable upon conversion of Series B convertible preferred stock beneficially owned by Adams Street 2011 Direct Fund LP; (b) 567,121 shares of common stock issuable upon conversion of Series A convertible preferred stock and 95,001 shares of common stock issuable upon conversion of Series B convertible preferred stock beneficially owned by Adams Street 2012 Direct Fund LP; (c) 428,998 shares of common stock issuable upon conversion of Series A convertible preferred stock and 71,863 shares of common stock issuable upon conversion of Series B convertible preferred stock beneficially owned by Adams Street 2013 Direct Fund LP and (d) 583,510 shares of common stock issuable upon conversion of Series A convertible preferred stock and 97,746 shares of common stock issuable upon conversion of Series B convertible preferred stock beneficially owned by Adams Street 2014 Direct Fund LP, as set forth in footnote (1). The number of shares beneficially owned after this offering also includes 200,000 shares the entities affiliated with Adams Street Partners have agreed to purchase in this offering. Mr. Gould disclaims beneficial ownership of the shares listed in footnote (1), except to the extent of his pecuniary interest therein.
- (7) Dr. Moldt is employed as a partner of Novo Ventures (US) Inc., which provides certain consultancy services to Novo A/S, and is not deemed to beneficially own or have a pecuniary interest in the shares held by Novo A/S.
- (8) Consists of (a) 3,994,674 shares of common stock issuable upon conversion of Series A convertible preferred stock and (b) 713,776 shares of common stock issuable upon conversion of Series B convertible preferred stock beneficially owned by OrbiMed V as set forth in footnote (4). The number of shares beneficially owned after this offering also includes 550,000 shares OrbiMed V has agreed to purchase in this offering. Dr. Thompson disclaims beneficial ownership of the shares listed in footnote (4), except to the extent of his pecuniary interest therein.
- (9) Consists of 113,773 shares of common stock, of which 95,173 were subject to repurchase as of February 29, 2016.

- (10) Consists of (a) 156,645 shares of common stock held by Mr. Lea and Deborah Karlson, Trustees of the Karlson Lea Family Trust UTA dated February 11, 1998 (Karlson Lea Trust), of which 101,266 shares were subject to repurchase as of February 29, 2016 and (b) 42,608 shares of common stock issuable upon conversion of Series A convertible preferred stock held by the Karlson Lea Trust. Mr. Lea has shared voting, investment and dispositive power over the shares held by the Karlson Lea Trust.
- (11) Consists of 63,773 shares of common stock, of which 46,502 were subject to repurchase as of February 29, 2016.
- (12) Includes 1,802,419 shares of common stock and 7,567,204 shares of common stock issuable upon the conversion of shares of preferred stock, of which 803,019 shares were subject to repurchase as of February 29, 2016. The number of shares beneficially owned after this offering includes (a) 200,000 shares the entities affiliated with Adams Street Partners have agreed to purchase in this offering and (b) 550,000 shares OrbiMed V has agreed to purchase in this offering as set forth in footnotes (6) and (8).

DESCRIPTION OF CAPITAL STOCK

The following summary describes our capital stock and the material provisions of our amended and restated certificate of incorporation and our amended and restated bylaws, which will become effective immediately prior to the consummation of this offering, the amended and restated investors' rights agreement to which we and certain of our stockholders are parties and of the Delaware General Corporation Law. Because the following is only a summary, it does not contain all of the information that may be important to you. For a complete description, you should refer to our amended and restated certificate of incorporation, amended and restated bylaws and amended and restated investors' rights agreement, copies of which have been filed as exhibits to the registration statement of which this prospectus is part.

General

Immediately prior to the consummation of this offering, we will file our amended and restated certificate of incorporation that authorizes 290,000,000 shares of common stock, \$0.0001 par value per share, and 10,000,000 shares of preferred stock, \$0.0001 par value per share. As of December 31, 2015, there were outstanding:

- 15,706,356 shares of our common stock, on an as-converted basis, held by approximately 44 stockholders of record; and
- 784,136 shares of our common stock issuable upon exercise of outstanding stock options.

Common Stock

Voting Rights

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Our stockholders do not have cumulative voting rights in the election of directors. In addition, the affirmative vote of holders of 66²/3% of the voting power of all of the then-outstanding voting stock will be required to take certain actions, including amending certain provisions of our amended and restated certificate of incorporation, such as the provisions relating to amending our amended and restated bylaws, the classified board and director liability.

Dividends

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

Rights and Preferences

Holders of our common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to and may be adversely

affected by the rights of the holders of shares of any series of our preferred stock that we may designate in the future.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering will be, fully paid and nonassessable.

Preferred Stock

Immediately prior to the consummation of this offering, all outstanding shares of our convertible preferred stock will be converted into shares of our common stock. See Note 7 to our financial statements included elsewhere in this prospectus for a description of our currently outstanding convertible preferred stock. Immediately prior to the consummation of this offering, our amended and restated certificate of incorporation will be amended and restated to delete all references to such shares of convertible preferred stock. From and after the consummation of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of our common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon a liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change of control of the Company or other corporate action. Immediately after consummation of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Registration Rights

Under our amended and restated investors' rights agreement, following the consummation of this offering, the holders of approximately 14.3 million shares of common stock, or their transferees, have the right to require us to register their shares under the Securities Act so that those shares may be publicly resold, or to include their shares in any registration statement we file, in each case as described below.

Demand Registration Rights

Based on the number of shares outstanding as of December 31, 2015, after the consummation of this offering, the holders of approximately 14.3 million shares of our common stock (on an as-converted basis), or their transferees, will be entitled to certain demand registration rights. Beginning one hundred eighty (180) days following the effectiveness of the registration statement of which this prospectus is a part, the holders of at least thirty percent (30%) of these shares can, on not more than two occasions, request that we register all or a portion of their shares if the aggregate price to the public of the shares offered is at least \$5,000,000 (after deduction of underwriter's discounts and expenses related to the issuance). In addition, we will not be required to effect a demand registration during the period beginning 30 days prior to the filing and ending 180 days following the effectiveness of a company initiated registration statement relating to an initial public offering of our securities.

Piggyback Registration Rights

Based on the number of shares outstanding as of December 31, 2015, after the consummation of this offering, in the event that we determine to register any of our securities under the Securities Act

(subject to certain exceptions), in another offering, either for our own account or for the account of other security holders, the holders of approximately 14.3 million shares of our common stock (on an as-converted basis), or their transferees, will be entitled to certain "piggyback" registration rights allowing holders to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, other than with respect to a registration related to employee benefit plans, the offer and sale of debt securities, or corporate reorganizations or certain other transactions, the holders of these shares are entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of shares included in the registration, to include their shares in the registration. In an underwritten offering, the underwriters have the right, subject to specified conditions and limitations, to limit the number of shares such holders may include.

Form S-3 Registration Rights

Based on the number of shares outstanding as of December 31, 2015, after the consummation of this offering, the holders of approximately 14.3 million shares of our common stock (on an as-converted basis), or their transferees, will be entitled to certain Form S-3 registration rights. The holders of any of these shares may make a written request that we register their shares on Form S-3 if we are eligible to file a registration statement on Form S-3 and if the aggregate price to the public of the shares offered is at least \$2,000,000 (after deduction of underwriter's discounts and expenses related to the issuance). These stockholders may make an unlimited number of requests for registration on Form S-3, but in no event shall we be required to file more than two registrations on Form S-3 in any twelve-month period.

Expenses of Registration

We will pay the registration expenses of the holders of the shares registered pursuant to the demand, piggyback and Form S-3 registration rights described above, including the expenses in an amount not to exceed \$35,000 of one special counsel for the selling holders.

Expiration of Registration Rights

The demand, piggyback and Form S-3 registration rights described above will expire, with respect to any particular stockholder, upon the earlier of four years after the consummation of this offering or when such stockholder can immediately sell all of its shares under Rule 144 of the Securities Act during any 90 day period (and without the requirement for the Company to be in compliance with the current public information required under Section c(1) of Rule 144 of the Securities Act).

Anti-Takeover Effects of Provisions of our Amended and Restated Certificate of Incorporation, our Amended and Restated Bylaws and Delaware Law

Certain provisions of Delaware law, and our amended and restated certificate of incorporation and our amended and restated bylaws that will become effective immediately prior to the consummation of this offering contain provisions that could make the following transactions more difficult: acquisition of us by means of a tender offer; acquisition of us by means of a proxy contest or otherwise; or removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions that might result in a premium over the market price for our shares.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited

proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits persons deemed "interested stockholders" from engaging in a "business combination" with a publicly-held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. In general, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock. In general, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors, such as discouraging takeover attempts that might result in a premium over the market price of our common stock.

Undesignated Preferred Stock

The ability to authorize undesignated preferred stock pursuant to our amended and restated certificate of incorporation will make it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of the Company.

Special Stockholder Meetings

Our amended and restated bylaws will provide that a special meeting of stockholders may be called at any time by the board of directors, but such special meetings may not be called by the stockholders or any other person or persons.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our amended and restated bylaws will establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors.

Elimination of Stockholder Action by Written Consent

Our amended and restated certificate of incorporation will eliminate the right of stockholders to act by written consent without a meeting.

Classified Board; Election and Removal of Directors; Filling Vacancies

Effective upon consummation of this offering, our board of directors will be divided into three classes. The directors in each class will serve for a three-year term, one class being elected each year by our stockholders, with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the shares of common stock outstanding will be able to elect all of our directors. Our amended and restated certificate of incorporation will provide for the removal of any of our directors only for cause and requires a stockholder vote by the holders of at least a 66²/3%

of the voting power of the then-outstanding voting stock. For more information on the classified board, see "Management—Board Composition." Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of the board, may only be filled by a resolution of the board of directors unless the board of directors determines that such vacancies shall be filled by the stockholders. This system of electing and removing directors and filling vacancies may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Choice of Forum

Our amended and restated certificate of incorporation and our amended and restated bylaws will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a claim of breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. Although our amended and restated certificate of incorporation and amended and restated bylaws contain the choice of forum provision described above, it is possible that a court could find that such a provision is inapplicable for a particular claim or action or that such provision is unenforceable.

Amendment of Charter Provisions

The amendment of any of the above provisions in our amended and restated certificate of incorporation, except for the provision making it possible for our board of directors to issue undesignated preferred stock, or the amendment of any provision in our amended and restated bylaws (other than by action of the board of directors), would require approval by holders of at least 66²/₃% of the voting power of the then-outstanding voting stock.

The provisions of the Delaware General Corporation Law, our amended and restated certificate of incorporation and our amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Limitations on Liability and Indemnification Matters

For a discussion of liability and indemnification, please see "Management—Limitation on Liability and Indemnification Matters."

The NASDAQ Global Market Listing

Our common stock has been approved for listing on The NASDAQ Global Market under the symbol "CRVS."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare, Inc. The transfer agent and registrar's address is 480 Washington Boulevard, 29th Floor, Jersey City, New Jersey 07130.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock. Future sales of our common stock, including shares issued upon the exercise of outstanding options or warrants, in the public market after this offering, or the perception that those sales may occur, could cause the prevailing market price for our common stock to fall or impair our ability to raise equity capital in the future. As described below, only a limited number of shares of our common stock will be available for sale in the public market for a period of several months after completion of this offering due to contractual and legal restrictions on resale described below. Future sales of our common stock in the public market either before (to the extent permitted) or after restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price of common stock at such time and our ability to raise equity capital at a time and price we deem appropriate.

Sale of Restricted Shares

Based on the number of shares of our common stock outstanding as of December 31, 2015 and the initial public offering price of \$15.00 per share, upon the closing of this offering and assuming (1) the conversion of our outstanding convertible preferred stock into 14,274,741 shares of common stock, (2) no exercise of the underwriters' option to purchase additional shares of common stock, and (3) no exercise of outstanding options, we will have outstanding an aggregate of approximately 20,406,356 shares of common stock. Of these shares, all of the shares of common stock to be sold in this offering, and any shares sold upon exercise of the underwriters' option to purchase additional shares, will be freely tradable in the public market without restriction or further registration under the Securities Act, unless the shares are held by any of our "affiliates" as such term is defined in Rule 144 of the Securities Act. All remaining shares of common stock held by existing stockholders immediately prior to the completion of this offering will be "restricted securities" as such term is defined in Rule 144. These restricted securities were issued and sold by us, or will be issued and sold by us, in private transactions and are eligible for public sale only if registered under the Securities Act or if they qualify for an exemption from registration under the Securities Act, including the exemptions provided by Rule 144 or Rule 701, which rules are summarized below.

As a result of the lock-up agreements referred to below and the provisions of Rule 144 and Rule 701 under the Securities Act, based on the number of shares of our common stock outstanding as of December 31, 2015 and assumptions (1) - (3) as described above, the number of shares of our common stock (excluding the shares sold in this offering) that will be available for sale in the public market, subject (1) to any waivers by the underwriters and/or our board of directors under the respective lock-up agreements and (2) with respect to shares held by directors, executive officers and other affiliates, the volume limitations under Rule 144 under the Securities Act, are as follows:

<u>Approximate Number of Shares</u>	<u>First Date Available for Sale Into Public Market</u>
15,706,356 shares	180 days after the date of this prospectus

Lock-Up Agreements

In connection with this offering, we, our officers, directors and holders of substantially all of our outstanding shares of capital stock and other securities have agreed with the underwriters, subject to specified exceptions, not to offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any of our common stock or securities convertible into or exchangeable or exercisable for shares of our common stock, enter into a transaction which would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any such aforementioned transaction is to be settled by delivery of our common stock or other securities, in cash or otherwise, or publicly disclose the intention to make any such offer, sale, pledge or disposition, or to enter into any such transaction,

swap, hedge or other arrangement, without, in each case, the prior written consent of Credit Suisse Securities (USA) LLC and Cowen and Company, LLC prior to the date that is 180 days after the date of this prospectus.

This restriction terminates after the close of trading of the common shares on and including the 180th day after the date of this prospectus.

Credit Suisse Securities (USA) LLC and Cowen and Company, LLC may, in their sole discretion and at any time or from time to time before the termination of the 180-day period, without public notice, release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our stockholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Rule 144

In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, a person (or persons whose shares are required to be aggregated) who is not deemed to have been one of our "affiliates" for purposes of Rule 144 at any time during the three months preceding a sale, and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months, including the holding period of any prior owner other than one of our "affiliates," is entitled to sell those shares in the public market (subject to the lock-up agreement referred to above, if applicable) without complying with the manner of sale, volume limitations or notice provisions of Rule 144, but subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than "affiliates," then such person is entitled to sell such shares in the public market without complying with any of the requirements of Rule 144 (subject to the lock-up agreement referred to above, if applicable). In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, our "affiliates," as defined in Rule 144, who have beneficially owned the shares proposed to be sold for at least six months are entitled to sell in the public market, upon expiration of any applicable lock-up agreements and within any three-month period, a number of those shares of our common stock that does not exceed the greater of:

- 1% of the number of common shares then-outstanding, which will equal approximately 204,063 shares of common stock immediately after this offering (calculated on the basis of the assumptions described above and assuming no exercise of the underwriter's option to purchase additional shares and no exercise of outstanding options); or
- the average weekly trading volume of our common stock on The NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Such sales under Rule 144 by our "affiliates" or persons selling shares on behalf of our "affiliates" are also subject to certain manner of sale provisions, notice requirements and to the availability of current public information about us. Notwithstanding the availability of Rule 144, the holders of substantially all of our restricted securities have entered into lock-up agreements as referenced above and their restricted securities will become eligible for sale (subject to the above limitations under Rule 144) upon the expiration of the restrictions set forth in those agreements.

Rule 701

In general, under Rule 701 as currently in effect, any of our employees, directors, officers, consultants or advisors who acquired common stock from us in connection with a written compensatory

stock or option plan or other written agreement in compliance with Rule 701 under the Securities Act before the effective date of the registration statement of which this prospectus is a part (to the extent such common stock is not subject to a lock-up agreement) is entitled to rely on Rule 701 to resell such shares beginning 90 days after we become subject to the public company reporting requirements of the Exchange Act in reliance on Rule 144, but without compliance with the holding period requirements contained in Rule 144. Accordingly, subject to any applicable lock-up agreements, beginning 90 days after we become subject to the public company reporting requirements of the Exchange Act, under Rule 701 persons who are not our "affiliates," as defined in Rule 144, may resell those shares without complying with the minimum holding period or public information requirements of Rule 144, and persons who are our "affiliates" may resell those shares without compliance with Rule 144's minimum holding period requirements (subject to the terms of the lock-up agreement referred to above, if applicable).

Registration Rights

Based on the number of shares outstanding as of December 31, 2015, after the consummation of this offering, the holders of approximately 14.3 million shares of our common stock, or their transferees, will, subject to any lock-up agreements they have entered into, be entitled to certain rights with respect to the registration of the offer and sale of those shares under the Securities Act. For a description of these registration rights, please see the section titled "Description of Capital Stock—Registration Rights." If the offer and sale of these shares are registered, they will be freely tradable without restriction under the Securities Act.

Equity Incentive Plans

We intend to file with the SEC a registration statement under the Securities Act covering the shares of common stock that we may issue upon exercise of outstanding options under our 2014 Plan and the shares of common stock that we may issue pursuant to future awards under our 2016 Plan and under our 2016 Employee Stock Purchase Plan. Such registration statement is expected to be filed and become effective as soon as practicable after the completion of this offering. Accordingly, shares registered under such registration statement will be available for sale in the open market following its effective date, subject to Rule 144 volume limitations and the lock-up agreements described above, if applicable.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following discussion is a summary of the material U.S. federal income tax consequences to Non-U.S. Holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended (Code), Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service (IRS), in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a Non-U.S. Holder. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to Non-U.S. Holders that hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a Non-U.S. Holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to Non-U.S. Holders subject to special rules, including, without limitation:

- U.S. expatriates and former citizens or long-term residents of the United States;
- persons subject to the alternative minimum tax;
- persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies, and other financial institutions;
- brokers, dealers or traders in securities;
- "controlled foreign corporations," "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- tax-exempt organizations or governmental organizations;
- persons deemed to sell our common stock under the constructive sale provisions of the Code; and
- tax-qualified retirement plans.

If an entity treated as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of Non-U.S. Holder

For purposes of this discussion, a "Non-U.S. Holder" is any beneficial owner of our common stock that is neither a "U.S. person" nor an entity treated as a partnership for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and all substantial decisions of which are subject to the control of one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code), or (2) has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes.

Distributions

As described in the section entitled "Dividend Policy," we do not anticipate paying any cash dividends in the foreseeable future. However, if we do make distributions of cash or property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a Non-U.S. Holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "—Sale or Other Taxable Disposition."

Subject to the discussion below on effectively connected income, dividends paid to a Non-U.S. Holder will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the Non-U.S. Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

If dividends paid to a Non-U.S. Holder are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such dividends are attributable), the Non-U.S. Holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption, the Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States.

Any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Sale or Other Taxable Disposition

Subject to the discussions below under "—Information Reporting and Backup Withholding" and "Additional Withholding Tax on Payments Made to Foreign Accounts," a Non-U.S. Holder will not be subject to U.S. federal income or withholding tax on any gain realized upon the sale or other taxable disposition of our common stock unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such gain is attributable);
- the Non-U.S. Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our common stock constitutes a U.S. real property interest (USRPI) by reason of our status as a U.S. real property holding corporation (USRPHC) for U.S. federal income tax purposes.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

Gain described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty), which may be offset by certain U.S. source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States), provided the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a Non-U.S. Holder of our common stock will not be subject to U.S. federal income tax if our common stock is "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, and such Non-U.S. Holder owned, actually and constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-U.S. Holder's holding period.

Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Payments of dividends on our common stock will not be subject to backup withholding, provided the applicable withholding agent does not have actual knowledge or reason to know the holder is a United States person and the holder either certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any dividends on our common stock paid to the Non-U.S. Holder, regardless of whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our common stock within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting, if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a United States person, or the holder otherwise establishes an exemption. Proceeds of a disposition of our

common stock conducted through a non-U.S. office of a non-U.S. broker that does not have certain enumerated relationships with the United States generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as the Foreign Account Tax Compliance Act (FATCA) on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or gross proceeds from the sale or other disposition of, our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on our common stock, and, beginning on January 1, 2019, will apply to payments of gross proceeds from the sale or other disposition of such stock.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.

UNDERWRITING

Under the terms and subject to the conditions contained in an underwriting agreement dated March 22, 2016, we have agreed to sell to the underwriters named below, for whom Credit Suisse Securities (USA) LLC and Cowen and Company, LLC are acting as representatives, the following respective numbers of shares of common stock:

<u>Underwriter</u>	<u>Number of Shares</u>
Credit Suisse Securities (USA) LLC	1,880,000
Cowen and Company, LLC	1,410,000
Guggenheim Securities LLC	752,000
BTIG, LLC	329,000
Cantor Fitzgerald & Co.	329,000
Total	<u>4,700,000</u>

The underwriting agreement provides that the underwriters are obligated to purchase all the shares of common stock in the offering if any are purchased, other than those shares covered by the over-allotment option described below. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may be increased or the offering may be terminated.

We have granted to the underwriters a 30-day over-allotment option to purchase on a pro rata basis up to 705,000 additional shares at the initial public offering price less the underwriting discounts and commissions. The option may be exercised only to cover any over-allotments of our common stock in this offering.

Certain of our existing institutional investors affiliated with certain of our directors have agreed to purchase an aggregate of 1,416,666 shares of our common stock in this offering and certain of our other existing institutional investors have been allocated shares in this offering in the ordinary course, in each case, at the initial public offering price. Any such purchases will be made on the same terms as the shares that are sold to the public generally and not pursuant to any pre-existing contractual rights or obligations. Whether or not these investors purchase any or all of the shares will not affect the underwriters' commitment to purchase the common shares offered by us. The underwriters will receive the same underwriting discounts and any commissions on any shares purchased by these investors as they will on any other shares sold to the public in this offering.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel including the validity of the shares, and subject to other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The offering of the shares by the underwriters is also subject to the underwriters' right to reject any order in whole or in part.

The underwriters propose to offer the shares of common stock initially at the public offering price on the cover page of this prospectus at that price less a selling concession of up to \$0.63 per share. After the initial public offering the representatives may change the public offering price and selling concession.

The following table summarizes the compensation we will pay:

	<u>Per Share</u>		<u>Total</u>	
	<u>Without Over-allotment</u>	<u>With Over-allotment</u>	<u>Without Over-allotment</u>	<u>With Over-allotment</u>
Underwriting discounts and commissions paid by us	\$ 1.05	\$ 1.05	\$ 4,935,000	\$ 5,675,250

We estimate that our out of pocket expenses for this offering (not including any underwriting discounts and commissions) will be approximately \$2.1 million.

We have agreed to reimburse the underwriters for expenses of up to \$40,000 related to clearance of this offering with the Financial Industry Regulatory Authority, Inc. (FINRA).

The underwriters have informed us that they do not expect sales to accounts over which the underwriters have discretionary authority to exceed 5% of the shares of common stock being offered.

We have agreed that we will not, directly or indirectly, take any of the following actions with respect to our common stock or any securities convertible into or exchangeable or exercisable for any of our common stock: offer, sell, issue, contract to sell, pledge or otherwise dispose of our common stock or such securities; offer, sell, issue, contract to sell, contract to purchase or grant any option, right or warrant to purchase our common stock or such securities; enter into any swap, hedge or any other agreement that transfers, in whole or in part, the economic consequences of ownership of our common stock or such securities; establish or increase a put equivalent position or liquidate or decrease a call equivalent position in our common stock or such securities within the meaning of Section 16 of the Exchange Act; file with the Securities and Exchange Commission a registration statement under the Securities Act relating to our common stock or such securities; or publicly disclose the intention to take any of the foregoing actions; in each case, without the prior written consent of Credit Suisse Securities (USA) LLC and Cowen and Company, LLC, prior to the date that is 180 days after the date of this prospectus. The restrictions described in this paragraph do not apply to: (a) grants of employee stock options or other equity-based awards pursuant to the terms of our equity incentive plans; (b) issuances of shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock pursuant to the exercise of such options or other equity-based awards; (c) issuances of shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock pursuant to the conversion or exchange of convertible or exchangeable securities or the exercise of options or vesting of restricted stock; (d) issuances or sales of shares of our common stock or securities convertible into or exercisable for any shares of our common stock in connection with a debt or credit financing facility or equipment leasing arrangement; (e) issuances or sales of or entry into an agreement to sell or issue shares of our common stock or securities convertible into or exercisable for any shares of our common stock in connection with any (1) mergers, (2) acquisition of securities, businesses, property or other assets, (3) joint ventures or (4) collaborations, licensing or strategic alliances; provided, that the aggregate number of shares of securities (on as-converted or as-exercised basis, as the case may be) that we may sell or issue or agree to sell or issue pursuant to clauses (d) and (e), in each case, shall not exceed 5% of the total number of shares of our securities issued and outstanding immediately following the completion of this offering; or (f) the issuance of shares of our common stock in this offering; provided in the case of clauses (b), (c), (d) and (e), the recipients of such shares of our common stock or securities agree to (A) be bound by a lockup letter in the form executed by our directors, officers and existing securityholders and (B) enter stop transfer instructions for the Company's transfer agent and registrar on such securities, which the Company agrees it will not waive or amend without prior written consent.

Our officers, directors and holders of substantially all of our outstanding shares of capital stock and other securities have agreed with the underwriters not to offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, enter into a transaction that would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any of these transactions are to be settled by delivery of our common stock or other securities, in cash or otherwise, or publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge or other arrangement, without, in each case, the prior written consent

of Credit Suisse Securities (USA) LLC and Cowen and Company, LLC prior to the date that is 180 days after the date of this prospectus. The restrictions described in this paragraph do not apply to:

- (a) transfers of our common stock or other securities as a bona fide gift or gifts or by testate succession or intestate distribution;
- (b) any shares of our common stock acquired by the lock-up signatory in the offering or in the open market following the offering;
- (c) the exercise of stock options or other similar awards granted pursuant to our equity incentive plans, provided that such restrictions shall apply to any of the lock-up signatory's shares of our common stock issued upon such exercise;
- (d) any shares of our common stock or such other securities that are transferred to us for the primary purpose of satisfying any tax or other governmental withholding obligation, through cashless surrender or otherwise, with respect to any award of equity-based compensation granted pursuant to our equity incentive plans or in connection with tax or other obligations as a result of testate succession or intestate distribution;
- (e) the establishment of any contract, instruction or plan, that satisfies all of the requirements of Rule 10b5-1(c)(1)(i)(B) under the Exchange Act, provided that no sales of the lock-up signatory's shares of our common stock shall be made pursuant to such a plan prior to the expiration of the 180-day period referred to above;
- (f) transfers not involving a disposition for value to a member or members of the lock-up signatory's family or to a trust, the direct or indirect beneficiaries of which are the lock-up signatory and/or a member or members of his or her family;
- (g) transfers or dispositions of the lock-up signatory's shares of our common stock by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the lock-up signatory;
- (h) distributions not involving a disposition for value of shares of our common stock or such other securities to members, partners or stockholders of the lock-up signatory or to any corporation, partnership or other person or entity that is a direct or indirect affiliate of the lock-up signatory (including, for the avoidance of doubt, a fund managed by the same manager or managing member or general partner or management company or by an entity controlling, controlled by, or under common control with such manager or managing member or general partner or management company as the undersigned or who shares a common investment advisor with the undersigned);
- (i) the transfer or disposition of the lock-up signatory's shares of our common stock or any security convertible into or exercisable or exchangeable for shares of our common stock that occurs because of operation of law;
- (j) if the lock-up signatory is an investment company registered under the Investment Company Act of 1940, as amended, transfers of the lock-up signatory's shares of our common stock pursuant to a merger or reorganization with or into another investment company registered under the Investment Company Act of 1940, as amended, that shares the same investment adviser registered pursuant to the requirements of the Investment Advisers Act of 1940, as amended;
- (k) the transfer of the lock-up signatory's shares of our common stock or any security convertible into or exercisable or exchangeable for shares of our common stock to us pursuant to any contractual arrangement in effect on the date of the lock-up agreement that provides for the repurchase of the lock-up signatory's shares of our common stock or such other securities by us or in connection with the termination of the lock-up signatory's employment or other service relationship with us or the lock-up.

In the case of any transfer or distribution pursuant to clause (a), (f), (g), (h), (i) or (j) above, each donee, distributee or transferee must execute a lock-up letter containing the foregoing restrictions. In the case of any transfer or distribution pursuant to clause (a), (b) or (d) through (i), no filing by any

party under Section 16 of the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on Form 5 made after the expiration of the 180-day period referred to above and other than disclosures required by Form 13F, Schedule 13D or Schedule 13G that are not (A) triggered by a specific transaction and (B) required to be filed prior to the expiration of the 180-day period referred to above).

We have agreed to indemnify the several underwriters against liabilities under the Securities Act, or contribute to payments that the underwriters may be required to make in that respect.

Our common stock has been approved for listing on The NASDAQ Global Market under the symbol "CRVS."

Prior to the offering, there has been no public market for our common stock. The initial public offering price was determined through negotiations between us and the representatives. In determining the initial public offering price, we and the representatives considered a number of factors including:

- the information set forth in this prospectus and otherwise available to the underwriters;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future earnings;
- the recent market prices of, and demand for, publicly-traded common stock of generally comparable companies;
- the general condition of the securities markets at the time of the offering; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for our common stock, or that shares of our common stock will trade in the public market at or above the initial public offering price.

In connection with the offering the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions, penalty bids and passive market making in accordance with Regulation M under the Exchange Act.

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment involves sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option or a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

- Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.
- In passive market making, market makers in the common stock who are underwriters or prospective underwriters may, subject to limitations, make bids for or purchases of our common stock until the time, if any, at which a stabilizing bid is made.

These stabilizing transactions, over-allotment transactions, syndicate covering transactions, penalty bids and passive market making may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result the price of our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on The NASDAQ Global Market or otherwise and, if commenced, may be discontinued at any time.

A prospectus in electronic format may be made available on the web sites maintained by one or more of the underwriters, or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations.

Other relationships

Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future. The underwriters are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities.

NOTICE TO INVESTORS

Notice to prospective investors in the European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter represents and agrees that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, it has not made and will not make an offer of shares which are the subject of the offering contemplated by this prospectus to the public in that Relevant Member State other than:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression Prospectus Directive means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

Notice to prospective investors in the United Kingdom

Each of the underwriters severally represents, warrants and agrees as follows:

- (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (FSMA) received by it in connection with the issue or sale of the shares in circumstances in which Section 21 of the FSMA does not apply to us; and
- (b) it has complied with, and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

Notice to prospective investors in Switzerland

This document is not intended to constitute an offer or solicitation to purchase or invest in the shares described herein. The shares may not be publicly offered, sold or advertised, directly or indirectly, in, into or from Switzerland and will not be listed on the SIX Swiss Exchange or on any other exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares constitutes a prospectus as such term is understood pursuant to article 652a or article 1156 of the Swiss Code of Obligations or a listing prospectus within the meaning of the listing rules of the SIX Swiss Exchange or any other regulated trading facility in Switzerland, and neither this document nor any other offering or marketing material relating to the shares may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, nor the Company nor the shares have been or will be filed with or approved by any Swiss regulatory authority. The shares are not subject to the supervision by any Swiss regulatory authority, e.g., the Swiss Financial Markets Supervisory Authority (FINMA), and investors in the shares will not benefit from protection or supervision by such authority.

Notice to Canadian Residents

Resale Restrictions

The distribution of shares of common stock in Canada is being made only in the provinces of Ontario, Quebec, Alberta and British Columbia on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of these securities are made. Any resale of the common stock in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the securities.

Representations of Canadian Purchasers

By purchasing shares of our common stock in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

- the purchaser is entitled under applicable provincial securities laws to purchase the shares of common stock without the benefit of a prospectus qualified under those securities laws as it is an "accredited investor" as defined under National Instrument 45-106—*Prospectus Exemptions*,
- the purchaser is a "permitted client" as defined in National Instrument 31-103—*Registration Requirements, Exemptions and Ongoing Registrant Obligations*,
- where required by law, the purchaser is purchasing as principal and not as agent, and
- the purchaser has reviewed the text above under Resale Restrictions.

Conflicts of Interest

Canadian purchasers are hereby notified that the underwriters are relying on the exemption set out in section 3A.3 or 3A.4, if applicable, of National Instrument 33-105—*Underwriting Conflicts* from having to provide certain conflict of interest disclosure in this document.

Statutory Rights of Action

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if the offering memorandum (including any amendment thereto) such as this document contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser of these securities in Canada should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Enforcement of Legal Rights

All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process

within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

Taxation and Eligibility for Investment

Canadian purchasers of our common stock should consult their own legal and tax advisors with respect to the tax consequences of an investment in the shares of common stock in their particular circumstances and about the eligibility of the shares of common stock for investment by the purchaser under relevant Canadian legislation.

LEGAL MATTERS

The validity of the issuance of our common stock offered in this prospectus will be passed upon for us by Latham & Watkins LLP, Menlo Park, California. Certain matters in connection with this offering will be passed upon for the underwriters by Davis Polk & Wardwell LLP, Menlo Park, California. Latham & Watkins LLP and certain attorneys and investment funds affiliated with the firm collectively own an aggregate of 23,992 shares of our convertible preferred stock which will be converted into an aggregate of 23,992 shares of common stock immediately prior to the completion of this offering.

EXPERTS

The financial statements of Corvus Pharmaceuticals, Inc. as of December 31, 2014 and 2015 and for the period from January 27, 2014 (inception) to December 31, 2014 and the year ended December 31, 2015 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to Corvus Pharmaceuticals, Inc. and the common stock offered hereby, reference is made to the registration statement and the exhibits and schedules filed therewith. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. A copy of the registration statement and the exhibits and schedules filed therewith may be inspected without charge at the public reference room maintained by the SEC, located at 100 F Street N.E., Room 1580, Washington, D.C. 20549, and copies of all or any part of the registration statement may be obtained from such offices upon the payment of the fees prescribed by the SEC. Please call the SEC at 1-800-SEC-0330 for further information about the public reference room. The SEC also maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address is www.sec.gov.

Upon completion of this offering, we will become subject to the information and periodic reporting requirements of the Exchange Act and, in accordance therewith, will file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information will be available for inspection and copying at the public reference room and website of the SEC referred to above. We maintain a website at www.corvusbiotech.com. You may access our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information contained on our website is not part of or incorporated by reference in this prospectus and you should not consider the contents of our website in making an investment decision with respect to our common stock.

CORVUS PHARMACEUTICALS, INC.

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders
of Corvus Pharmaceuticals, Inc.

In our opinion, the accompanying balance sheets and the related statements of operations and comprehensive loss, of changes in convertible preferred stock and stockholders' deficit, and of cash flows present fairly, in all material respects, the financial position of Corvus Pharmaceuticals, Inc. at December 31, 2014 and 2015 and the results of its operations and its cash flows for the period from January 27, 2014 (inception) to December 31, 2014 and for the year ended December 31, 2015 in conformity with accounting principles generally accepted in the United States of America. 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 of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, 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.

/s/ PricewaterhouseCoopers LLP

San Jose, California

February 8, 2016

Corvus Pharmaceuticals, Inc.

Balance Sheets

(In thousands, except share and per share data)

	December 31, 2014	December 31, 2015	Pro Forma Stockholders' Equity as of December 31, 2015 (See Note 2) (unaudited)
Assets			
Current assets:			
Cash and cash equivalents	\$ 12,517	\$ 4,105	
Marketable securities	—	90,281	
Prepaid and other current assets	12	1,277	
Total current assets	12,529	95,663	
Property and equipment, net	—	1,845	
Deferred offering costs	—	951	
Total assets	<u>\$ 12,529</u>	<u>\$ 98,459</u>	
Liabilities, Convertible Preferred Stock, and Stockholders' (Deficit) Equity			
Current liabilities:			
Accounts payable	\$ 57	\$ 1,575	
Accrued and other liabilities	17	1,495	
Convertible preferred stock liability	2,600	—	
Total current liabilities	2,674	3,070	
Other liabilities	3	710	
Total liabilities	2,677	3,780	
Commitments and contingencies (Note 13)			
Convertible preferred stock: \$0.0001 par value; 8,921,438 and 14,274,741 shares authorized at December 31, 2014 and 2015, respectively; 3,395,468 and 14,274,741 issued and outstanding at December 31, 2014 and 2015, respectively (liquidation preference of \$12,750 and \$108,500 at December 31, 2014 and 2015, respectively); 10,000,000 shares authorized, no shares issued or outstanding pro forma (unaudited)			
	10,011	125,780	—
Stockholders' (deficit) equity:			
Common stock: \$0.0001 par value; 11,500,000 and 20,000,000 shares authorized at December 31, 2014 and 2015, respectively; 1,046,749 and 1,431,615 shares issued and outstanding at December 31, 2014 and 2015, respectively; 290,000,000 shares authorized, 15,706,356 shares issued and outstanding at December 31, 2015, pro forma (unaudited)	—	—	\$ 2
Additional paid-in capital	2	440	126,218
Accumulated other comprehensive loss	—	(45)	(45)
Accumulated deficit	(161)	(31,496)	(31,496)
Total stockholders' (deficit) equity	(159)	(31,101)	<u>\$ 94,679</u>
Total liabilities, convertible preferred stock and stockholders' (deficit) equity	<u>\$ 12,529</u>	<u>\$ 98,459</u>	

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

Corvus Pharmaceuticals, Inc.**Statements of Operations and Comprehensive Loss****(In thousands, except share and per share data)**

	Period from January 27, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015
Operating expenses:		
Research and development	\$ 38	\$ 11,352
General and administrative	123	2,418
Total operating expenses	<u>161</u>	<u>13,770</u>
Loss from operations	(161)	(13,770)
Change in fair value of convertible preferred stock liability	—	(17,600)
Interest income	—	35
Net loss	<u>\$ (161)</u>	<u>\$ (31,335)</u>
Net loss per share, basic and diluted	<u>\$ (0.95)</u>	<u>\$ (83.86)</u>
Shares used to compute net loss per share, basic and diluted	<u>170,278</u>	<u>373,643</u>
Pro forma net loss per share, basic and diluted (unaudited)	<u>\$ (0.30)</u>	<u>\$ (1.54)</u>
Shares used to compute pro forma net loss per share, basic and diluted (unaudited)	<u>530,859</u>	<u>8,894,425</u>
Other comprehensive loss:		
Unrealized loss on marketable securities	—	(45)
Total other comprehensive loss	<u>—</u>	<u>(45)</u>
Comprehensive loss	<u>\$ (161)</u>	<u>\$ (31,380)</u>

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

Corvus Pharmaceuticals, Inc.

Statements of Changes in Convertible Preferred Stock and Stockholders' Deficit

(In thousands, except share data)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount				
Balance at January 27, 2014 (inception)	—	\$ —	—	\$ —	—	\$ —	—	\$ —
Issuance of common stock to founders, net of repurchase	—	—	1,046,749	—	2	—	—	2
Issuance of Series A convertible preferred stock for cash, net of issuance costs of \$139 and convertible preferred stock liability of \$2,600	3,395,468	10,011	—	—	—	—	—	—
Net loss	—	—	—	—	—	—	(161)	(161)
Balance at December 31, 2014	3,395,468	10,011	1,046,749	—	2	—	(161)	(159)
Issuance of Series A convertible preferred stock, net of issuance costs of \$20	5,525,961	20,730	—	—	—	—	—	—
Reclassification of convertible preferred stock liability	—	20,200	—	—	—	—	—	—
Issuance of Series B convertible preferred stock, net of issuance costs of \$161	5,353,312	74,839	—	—	—	—	—	—
Issuance of common stock for cash upon early exercise of stock options and lapse of restrictions	—	—	384,866	—	10	—	—	10
Stock-based compensation expense	—	—	—	—	428	—	—	428
Unrealized loss on marketable securities	—	—	—	—	—	(45)	—	(45)
Net loss	—	—	—	—	—	—	(31,335)	(31,335)
Balance at December 31, 2015	<u>14,274,741</u>	<u>\$ 125,780</u>	<u>1,431,615</u>	<u>\$ —</u>	<u>\$ 440</u>	<u>\$ (45)</u>	<u>\$ (31,496)</u>	<u>\$ (31,101)</u>

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

Corvus Pharmaceuticals, Inc.

Statements of Cash Flows

(In thousands)

	Period from January 27, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015
Cash flows from operating activities		
Net loss	\$ (161)	\$ (31,335)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	—	148
Amortization/accretion related to marketable securities	—	(41)
Stock-based compensation	—	428
Change in fair value of convertible preferred stock liability	—	17,600
Other	—	40
Changes in operating assets and liabilities:		
Prepaid and other current assets	(12)	(1,265)
Accounts payable	57	1,240
Accrued and other liabilities	17	1,218
Other long-term liabilities	3	639
Net cash used in operating activities	<u>(96)</u>	<u>(11,328)</u>
Cash flows from investing activities		
Purchases of marketable securities	—	(104,385)
Maturities of marketable securities	—	14,100
Purchase of property and equipment	—	(1,747)
Net cash used in investing activities	<u>—</u>	<u>(92,032)</u>
Cash flows from financing activities		
Proceeds from issuance of common stock, net of repurchase	2	—
Proceeds from issuance of convertible preferred stock, net of issuance costs	12,611	95,569
Payment of offering costs	—	(729)
Proceeds from exercise of common stock options	—	108
Net cash provided by financing activities	<u>12,613</u>	<u>94,948</u>
Net increase (decrease) in cash and cash equivalents	12,517	(8,412)
Cash and cash equivalents at beginning of the period	—	12,517
Cash and cash equivalents at end of the period	<u>\$ 12,517</u>	<u>\$ 4,105</u>
Supplemental disclosures of cash flow information:		
Convertible preferred stock issuance costs incurred but not paid	\$ 36	\$ —
Purchases of property and equipment incurred but not paid	—	286
Convertible preferred stock liability	2,600	—
Deferred offering costs incurred but not paid	—	222

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

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements

1. Organization

Corvus Pharmaceuticals, Inc. ("Corvus" or the "Company") was incorporated in Delaware on January 27, 2014 and commenced operations in November 2014. Corvus is a clinical stage biopharmaceutical company focused on the development and commercialization of novel immuno-oncology therapies that are designed to harness the immune system to attack cancer cells. The Company's primary activities have been establishing its facilities, recruiting personnel, conducting research and development of its product candidates, including preparing for a clinical trial, and raising capital. The Company's operations are located in Burlingame, California.

2. Summary of 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 ("U.S. GAAP"). The Company's functional and reporting currency is the U.S. dollar. The accompanying financial statements have been prepared on a going-concern basis, which contemplates the realization of assets and discharge of liabilities in the normal course of business. Since its inception, the Company has incurred significant losses and negative cash flows from operations. As of December 31, 2015, the Company had an accumulated deficit of \$31.5 million and cash, cash equivalents and marketable securities of \$94.4 million. The Company has financed its operations primarily with the proceeds from the sale of convertible preferred stock. The Company will need to raise additional capital to meet its business objectives.

Use of Estimates

The preparation of the Company's financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from such estimates.

Unaudited Pro Forma Stockholders' Equity

The unaudited pro forma stockholders' equity has been prepared assuming the automatic conversion of all outstanding shares of convertible preferred stock into shares of common stock immediately upon completion of the Company's initial public offering ("IPO"). The unaudited pro forma stockholders' equity does not assume the receipt of any proceeds from the proposed IPO.

Reverse Stock Split

In conjunction with the convertible preferred stock issuance in November 2014, the Company's Board of Directors approved filing an amendment to the Certificate of Incorporation to reflect a 0.13312-for-1 reverse stock split of the Company's outstanding common stock. The par value per share was not adjusted as a result of the reverse stock split. All authorized, issued and outstanding shares of common stock, and related per share amounts contained in the financial statements, have been retroactively adjusted to reflect this reverse stock split for all periods presented.

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Concentrations of Credit Risk and Other Risks and Uncertainties

Substantially all of the Company's cash and cash equivalents are deposited in accounts with two financial institutions that management believes are of high credit quality. Such deposits may, at times, exceed federally insured limits. The Company maintains its cash with an accredited financial institution and accordingly, such funds are subject to minimal credit risk. The Company's marketable securities are direct obligations of the United States government. The Company has not experienced any losses on its deposits of cash, cash equivalents or marketable securities. The Company has no off-balance sheet concentrations of credit risk, such as foreign currency exchange contracts, option contracts or other hedging arrangements.

Since inception, the Company has incurred net losses and negative cash flows from operations. During the year ended December 31, 2015, the Company incurred a net loss of \$31.3 million and used \$11.3 million of cash in operations. At December 31, 2015, the Company had an accumulated deficit of \$31.5 million and does not expect to experience positive cash flows from operations in the near future. The Company has financed operations to date primarily through private placements of convertible preferred stock.

The Company is subject to a number of risks similar to other early stage biopharmaceutical companies, including, but not limited to, the need to obtain adequate additional funding, possible failure of preclinical testing or clinical trials, its reliance on third parties to conduct its clinical trials, the need to obtain marketing approval for its product candidates, competitors developing new technological innovations, the need to successfully commercialize and gain market acceptance of the Company's product candidates, its right to develop and commercialize its product candidates pursuant to the terms and conditions of the licenses granted to the Company, and protection of proprietary technology. If the Company does not successfully commercialize or partner any of its product candidates, it will be unable to generate product revenue or achieve profitability.

Segments

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker in making decisions regarding resource allocation and assessing performance. The Company views its operations and manages its business in one operating segment, that of the development of and commercialization of novel immuno-oncology therapies that are designed to harness the immune system to attack cancer cells.

Cash and Cash Equivalents and Marketable Securities

The Company considers all highly liquid investment securities with remaining maturities at the date of purchase of three months or less to be cash equivalents.

Investments with remaining maturities, at the date of purchase, greater than three months, but less than one year are considered short-term. The Company determines the appropriate classification of marketable securities at the time of purchase and evaluates such designation as of each balance sheet date. To date, all marketable securities have been classified as available-for-sale and are carried at fair value with unrealized gains and losses, if any, included as a component of accumulated other comprehensive income (loss) in stockholders' deficit. Interest and realized gains and losses are included

Corvus Pharmaceuticals, Inc.**Notes to Financial Statements (Continued)****2. Summary of Significant Accounting Policies (Continued)**

in interest income. Realized gains and losses are recognized based on the specific identification method.

Fair Value Measurements

Fair value accounting is applied for all financial assets and liabilities and non-financial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). The carrying amount of the Company's financial instruments, including cash equivalents, accounts payable and accrued liabilities, approximate fair value due to their short-term maturities. The convertible preferred stock liability is carried at fair value.

Deferred Offering Costs

Deferred offering costs consist primarily of direct incremental costs related to the Company's initial public offering of its common stock. Upon completion of the initial public offering, these amounts will be offset against the proceeds of the offering. If the offering is terminated, the deferred offering costs will be expensed.

Property and Equipment, Net

Property and equipment are stated at cost and depreciated using the straight-line method over the estimated useful lives of the respective assets:

Laboratory equipment	5 years
Computer equipment and purchased software	3 years
Leasehold improvements	Shorter of asset's useful life or remaining term of lease

Maintenance and repairs that do not extend the life or improve the asset are expensed when incurred. When assets are retired or otherwise disposed of, the cost and accumulated depreciation are removed from the balance sheet and any resulting gain or loss is reflected in operations.

Impairment of Long-Lived Assets

The Company regularly reviews the carrying value and estimated lives of all of its long-lived assets, including property and equipment, to determine whether indicators of impairment may exist which warrant adjustments to carrying values or estimated useful lives. The determinants used for this evaluation include management's estimate of the asset's ability to generate positive income from operations and positive cash flow in future periods as well as the strategic significance of the assets to the Company's business objectives. Should impairment exist, the impairment loss to be recognized is measured by the amount by which the carrying amount of the asset exceeds the projected discounted future net cash flows arising from the asset. All long-lived assets are maintained in the United States of America.

Convertible Preferred Stock Liability

The Company has determined that the Company's obligation to issue additional shares of the Company's convertible preferred stock represents a freestanding financial instrument, which was accounted for as a liability. The freestanding convertible preferred stock liability was initially recorded

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

at fair value, with fair value changes recognized in the statements of operations and comprehensive loss. The Company estimated the fair value of this liability using an option-pricing model that included assumptions for future financings, expected volatility, expected life and risk-free interest rate. At the time of the exercise of the option, the remaining value of the convertible preferred stock liability was reclassified to convertible preferred stock with no further remeasurement required.

Research and Development Expense

The Company records research and development expenses as incurred. The Company accounts for nonrefundable advance payments for goods and services that will be used in future research and development activities as expenses when the goods have been received or when the service has been performed rather than when the payment is made. Research and development expenses consist of costs incurred by the Company for the discovery and development of the Company's product candidates and include:

- employee-related expenses, including salaries, benefits, travel and non-cash stock-based compensation expense;
- external research and development expenses incurred under arrangements with third parties, such as contract research organizations, contract manufacturing organizations, academic and non-profit institutions and consultants;
- costs to acquire technologies to be used in research and development that have not reached technological feasibility and have no alternative future use;
- license fees; and
- other expenses, which include direct and allocated expenses for laboratory, facilities and other costs.

Clinical Trial Accruals

Costs for preclinical studies and clinical trial activities are recognized based on an evaluation of the vendors' progress towards completion of specific tasks, using data such as clinical site activations, patient enrollment or information provided to the Company by its vendors regarding their actual costs incurred. Payments for these activities are based on the terms of individual contracts and payment timing may differ significantly from the period in which the services are performed. The Company determines accrual estimates through reports from and discussions with applicable personnel and outside service providers as to the progress or state of completion, or the services completed. The Company's estimates of accrued expenses as of each balance sheet date are based on the facts and circumstances known at the time.

Stock-Based Compensation

The Company maintains incentive plans under which incentive stock options and nonqualified stock options may be granted to employees and non-employee service providers.

The Company accounts for stock-based employee compensation arrangements in accordance with the provisions of ASC 718, "*Compensation—Stock Compensation*." For stock options granted to employees, the Company recognizes compensation expense for all stock-based awards based on the

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

grant-date estimated fair values, net of an estimated forfeiture rate. The value of the portion of the award that is ultimately expected to vest is recognized as an expense ratably over the requisite service period. The fair value of stock options is determined using the Black-Scholes option pricing model. The Company estimates its forfeiture rate and will continue to evaluate the adequacy of the forfeiture rate assumption.

Stock-based compensation expense related to stock options granted to non-employees is recognized based on the fair value of the stock options, determined using the Black-Scholes option pricing model. The expense for options granted to non-employees is periodically re-measured as the underlying options vest. The awards generally vest over the time period the Company expects to receive service from the non-employee.

Income Taxes

The Company accounts for income taxes under the asset and liability method. The Company estimates actual current tax exposure together with assessing temporary differences resulting from differences in accounting for reporting purposes and tax purposes for certain items, such as accruals and allowances not currently deductible for tax purposes. These temporary differences result in deferred tax assets and liabilities, which are included in the Company's balance sheets. In general, deferred tax assets represent future tax benefits to be received when certain expenses previously recognized in the Company's statements of operations and comprehensive loss become deductible expenses, under applicable income tax laws or when net operating loss or credit carryforwards are utilized. Accordingly, realization of the Company's deferred tax assets is dependent on future taxable income against which these deductions, losses and credits can be utilized.

The Company must assess the likelihood that the Company's deferred tax assets will be recovered from future taxable income and a valuation allowance is recorded when it is more likely than not that the deferred tax asset will not be recovered. The Company applies judgment in the determination of the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Based on the available evidence, the Company is unable, at this time, to support the determination that it is more likely than not that its deferred tax assets will be utilized in the future. Accordingly, the Company recorded a full valuation allowance for all periods presented. The Company intends to maintain valuation allowances until sufficient evidence exists to support its reversal. The Company recognizes any material interest and penalties related to unrecognized tax benefits in income tax expense.

The Company recognizes benefits of uncertain tax positions if it is more likely than not such positions will be sustained upon examination based solely on their technical merits as the largest amount of benefit that is more likely than not to be realized upon the ultimate settlement. The Company is required to file income tax returns in the U.S. federal jurisdiction. The Company currently is not under examination by the Internal Revenue Service or other jurisdictions for any tax years.

Comprehensive Loss

Comprehensive loss includes net loss as well as other changes in stockholders' equity (deficit) that result from transactions and economic events other than those with stockholders. The Company's only element of other comprehensive loss in any period presented was unrealized losses on available for sale marketable securities.

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Net Loss per Share

Basic net loss per share is calculated by dividing the net loss by the weighted average number of common shares outstanding during the period, without consideration of potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss by the weighted average number of common shares and potentially dilutive securities outstanding for the period. For purposes of the diluted net loss per share calculation, the convertible preferred stock, common stock subject to repurchase, and stock options are considered to be potentially dilutive securities. Because the Company has reported a net loss for all periods presented, diluted net loss per common share is the same as basic net loss per common share for those periods.

Unaudited Pro Forma Net Loss per Share

The unaudited pro forma basic and diluted net loss per share reflects the automatic conversion of all outstanding shares of convertible preferred stock as if the conversion had occurred at the beginning of the earliest period presented or the date of issuance, if later. In addition, the unaudited pro forma net loss per share adjusts net loss for the change in fair value of the convertible preferred stock liability. The unaudited pro forma basic and diluted net loss per share amounts do not give effect to the issuance of shares from the proposed IPO nor do they give effect to potential issuances of dilutive securities where the impact would be anti-dilutive.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU 2014-09, *Revenue from Contracts with Customers*, which required an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. ASU 2014-09 will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. The new standard is effective January 1, 2018 for public companies. Early application is permitted as of January 1, 2017. The standard permits the use of either the retrospective or cumulative effect transition method. The Company does not believe adopting ASU 2014-09 will have a material impact on its financial statements as the Company is not yet generating revenues.

In August 2014, the FASB issued Accounting Standards Update No. 2014-15, *Disclosure of Uncertainties About an Entity's Ability to Continue as a Going Concern*. This standard update provides guidance around management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. The new guidance is effective for all annual and interim periods ending after December 15, 2016. The Company does not believe that adopting ASU 2014-15 will have a material impact on its financial statements.

In November 2015, the FASB issued Accounting Standards Update No 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*. This standard amends the accounting for income taxes and requires all deferred tax assets and liabilities to be classified as non-current on the balance sheet. The new standard is effective for reporting periods beginning after December 15, 2016, with early adoption permitted. The standard may be adopted either prospectively or retrospectively. We are currently evaluating the impact of ASU 2015-17.

Corvus Pharmaceuticals, Inc.**Notes to Financial Statements (Continued)****3. Net Loss per Share and Unaudited Pro Forma Net Loss per Share**

The following table shows the calculation of net loss per share (in thousands, except share and per share data):

	<u>Period from January 27, 2014 (inception) to December 31, 2014</u>	<u>Year Ended December 31, 2015</u>
Numerator:		
Net loss—basic and diluted	\$ (161)	\$ (31,335)
Denominator:		
Weighted average common shares outstanding	641,046	1,269,315
Less: weighted average common shares subject to repurchase	(470,768)	(895,672)
Weighted average common shares used to compute basic and diluted net loss per share	170,278	373,643
Net loss per share, basic and diluted	\$ (0.95)	\$ (83.86)

The amounts in the table below were excluded from the calculation of diluted net loss per share, due to their anti-dilutive effect:

	<u>Period from January 27, 2014 (inception) to December 31, 2014</u>	<u>Year Ended December 31, 2015</u>
Convertible preferred stock	3,395,468	14,274,741
Common stock subject to repurchase	768,706	924,535
Outstanding options	32,320	784,136
Total shares of common stock equivalents	4,196,494	15,983,412

Corvus Pharmaceuticals, Inc.**Notes to Financial Statements (Continued)****3. Net Loss per Share and Unaudited Pro Forma Net Loss per Share (Continued)****Unaudited Pro Forma Net Loss Per Share, Basic and Diluted**

The following table summarizes unaudited pro forma net loss per share (in thousands, except share and per share data):

	Period from January 27, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015
Numerator:		
Net loss	\$ (161)	\$ (31,335)
Change in fair value of convertible preferred stock liability	—	17,600
Pro forma net loss	<u>\$ (161)</u>	<u>\$ (13,735)</u>
Denominator:		
Weighted average common shares outstanding, basic and diluted	170,278	373,643
Pro forma adjustments to reflect assumed conversion of convertible preferred stock	360,581	8,520,782
Pro forma weighted average common shares outstanding, basic and diluted	<u>530,859</u>	<u>8,894,425</u>
Pro forma net loss per share, basic and diluted	<u>\$ (0.30)</u>	<u>\$ (1.54)</u>

4. Fair Value Measurements

Financial assets and liabilities are measured and recorded at fair value. The Company is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. The fair value hierarchy prioritizes valuation inputs based on the observable nature of those inputs. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments and is not a measure of the investment credit quality. The hierarchy defines three levels of valuation inputs:

Level 1—Quoted prices in active markets for identical assets or liabilities

Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly

Level 3—Unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability

Corvus Pharmaceuticals, Inc.**Notes to Financial Statements (Continued)****4. Fair Value Measurements (Continued)**

The following tables present information as of December 31, 2014 and December 31, 2015 about the Company's assets that are measured at fair value on a recurring basis and indicate the level of the fair value hierarchy the Company utilized to determine such fair values (in thousands):

	December 31, 2014			
	Fair Value Measured Using			Total Balance
	(Level 1)	(Level 2)	(Level 3)	
Assets				
Cash equivalents	\$ 12,311	\$ —	\$ —	\$ 12,311
Liabilities				
Convertible preferred stock liability	\$ —	\$ —	\$ 2,600	\$ 2,600

	December 31, 2015			
	Fair Value Measured Using			Total Balance
	(Level 1)	(Level 2)	(Level 3)	
Assets				
Cash equivalents	\$ 3,245	\$ —	\$ —	\$ 3,245
Marketable securities	90,281	—	—	90,281
	\$ 93,526	\$ —	\$ —	\$ 93,526

The Company's marketable securities are invested in direct obligations of the United States government for all periods.

As of December 31, 2015, marketable securities had a maximum remaining maturity of nine months and consisted of U.S. Treasury securities.

The fair value measurement of the convertible preferred stock call option liability was based on significant inputs not observed in the market and thus represents a Level 3 measurement. Level 3 instruments are valued based on unobservable inputs that are supported by little or no market activity and reflect the Company's assumptions in measuring fair value. See Note 8 for a further discussion of the convertible preferred stock liability.

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

4. Fair Value Measurements (Continued)

The following table presents the issuances, changes in fair value, exercise and reclassification of the Company's Level 3 financial instrument which is measured at fair value on a recurring basis (in thousands):

	Convertible Preferred Stock Call Option Liability
Balance as of January 27, 2014 (inception)	\$ —
Fair value of convertible preferred stock liability recognized upon issuance of convertible preferred stock	2,600
Balance as of December 31, 2014	2,600
Change in fair value of convertible preferred stock liability through date of Series A second tranche issuance	17,600
Recognition of fair value upon issuance of second tranche Series A convertible preferred stock	(20,200)
Balance as of December 31, 2015	\$ —

As of December 31, 2015, the fair value of available for sale marketable securities by type of security were as follows (in thousands):

	December 31, 2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury securities	\$ 90,326	\$ —	\$ 45	\$ 90,281

5. License and Collaboration Agreements

Scripps Licensing Agreement

In December 2014, the Company entered into a license agreement with The Scripps Research Institute ("Scripps"), pursuant to which it was granted a non-exclusive, world-wide license for all fields of use under Scripps' rights in certain know-how and technology related to a mouse hybridoma clone expressing an anti-human CD73 antibody, and to progeny, mutants or unmodified derivatives of such hybridoma and any antibodies expressed by such hybridoma. Scripps also granted the Company the right to grant sublicenses in conjunction with other proprietary rights the Company holds, or to others collaborating with or performing services for the Company. Under this license agreement, Scripps has agreed not to grant any additional commercial licenses with respect to such materials, other than march-in rights granted to the U.S. government.

Upon execution of the agreement, the Company made a one-time cash payment to Scripps of \$10,000 in 2015 and is also obligated to pay a minimum annual fee to Scripps of \$25,000. The one-time cash payment was recorded as research and development expense as technological feasibility of the asset had not been established and there was no alternative future use. The first minimum annual fee payment is due on the first anniversary of effective date of the agreement and will be due on each subsequent anniversary of the effective date for the term of the agreement. The Company is also required to make performance-based cash payments upon successful completion of clinical and sales milestones. The aggregate potential milestone payments are \$2.6 million. The Company is also required

Corvus Pharmaceuticals, Inc.**Notes to Financial Statements (Continued)****5. License and Collaboration Agreements (Continued)**

to pay royalties on net sales of licensed products sold by it, its affiliates and its sublicensees at a rate in the low-single digits. In addition, should the Company sublicense the rights licensed under the agreement, it has agreed to pay a percentage of sublicense revenue received at specified rates that start at double digit percentages and decrease to single digit percentages based on the elapsed time from the effective date of the agreement and the time of entry into such sublicense.

The Company's license agreement with Scripps will terminate upon expiration of its obligation to pay royalties to Scripps under the license agreement. The Company's license agreement with Scripps is terminable by the consent of the parties, at will by the Company upon providing 90 days written notice to Scripps, or by Scripps for certain material breaches, or if the Company undergoes a bankruptcy event. In addition, Scripps may terminate the license on a product-by-product basis, or the entire agreement, if the Company fails to meet specified diligence obligations related to the development and commercialization of licensed products. Scripps may also terminate the agreement after the third anniversary of the effective date of the agreement if it reasonably believes, based on reports the Company provides to Scripps, that the Company has not used commercially reasonable efforts as required under the agreement, subject to a specified notice and cure period.

Vernalis Licensing Agreement

In February 2015, as amended November 5, 2015, the Company entered into a license agreement with Vernalis (R&D) Limited ("Vernalis"), pursuant to which the Company was granted an exclusive, worldwide license under certain patent rights and know-how, including a limited right to grant sublicenses, for all fields of use to develop, manufacture and commercialize products containing certain adenosine receptor antagonists, including CPI-444. Pursuant to this agreement, a one-time cash payment to Vernalis in the amount of \$1.0 million, which was recorded as research and development expense as technological feasibility of the asset had not been established and there was no alternative future use. The Company is also required to make cash milestone payments to Vernalis upon the successful completion of clinical and regulatory milestones for licensed products depending on the indications for which such licensed products are developed and upon achievement of certain sales milestones. The aggregate potential milestone payments exceed \$200 million for all indications.

The Company has also agreed to pay Vernalis tiered incremental royalties based on the annual net sales of licensed products containing CPI-444 on a product-by-product and country-by-country basis, subject to certain offsets and reductions. The tiered royalty rates for products containing CPI-444 range from the mid-single digits up to the low-double digits on a country-by-country net sales basis. The royalties on other licensed products that do not include CPI-444 also increase with the amount of net sales on a product-by-product and country-by-country basis and range from the low-single digits up to the mid-single digits on a country-by-country net sales basis. The Company is also obligated to pay to Vernalis certain sales milestones as indicated above when worldwide net sales reach specified levels over an agreed upon time period.

The agreement will expire on a product-by-product and country-by-country basis upon the expiration of the Company's payment obligations to Vernalis in respect of a particular product and country. Both parties have the right to terminate the agreement for an uncured material breach by the other party. The Company may also terminate the agreement at its convenience by providing 90 days written notice, provided that the Company has not received notice of its own default under the agreement at the time the Company exercises such termination right. Vernalis may also terminate the agreement if the Company challenges a licensed patent or undergoes a bankruptcy event.

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

5. License and Collaboration Agreements (Continued)

Genentech Collaboration Agreement

In October 2015, the Company entered into a clinical trial collaboration agreement with Genentech to evaluate the safety, tolerability and preliminary efficacy of CPI-444 combined with Genentech's investigational cancer immunotherapy, atezolizumab (MPDL3280A), a fully humanized monoclonal antibody targeting PDL-1, in a variety of solid tumors in a Phase 1/1b clinical trial. Pursuant to this agreement, the Company will be responsible for the conduct and cost of the relevant studies, under the supervision of a joint development committee made up of representatives of the Company and representatives of Genentech. Genentech will supply atezolizumab. As part of the agreement, the Company granted Genentech certain rights of first negotiation to participate in future clinical trials that the Company may conduct evaluating the administration of CPI-444 in combination with an anti-PD-1 or anti-PDL-1 antibody. If the Company and Genentech do not reach agreement on the terms of any such participation by Genentech within a specified time period, the Company retains the right to collaborate with third parties in such activities. The Company also granted Genentech certain rights of first negotiation should it decide to license development and commercialization rights to CPI-444. Should the Company and Genentech not reach agreement on the terms of such a license within a specified time period, it retains the right to enter into a license with another third party.

The Company and Genentech each have the right to terminate the agreement for material breach by the other party. In addition, the agreement may be terminated by either party due to safety considerations, if directed by a regulatory authority or if development of CPI-444 or atezolizumab is discontinued.

Further, the agreement will expire after a set period of time following the provision by the Company of the final clinical study report to Genentech.

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

6. Balance Sheet Components (in thousands):

	December 31, 2014	December 31, 2015
Prepaid and Other Current Assets		
Prepaid research and development manufacturing expenses	\$ —	\$ 722
Tenant improvement allowance receivable	—	347
Other	12	208
	<u>\$ 12</u>	<u>\$ 1,277</u>
Property and Equipment, net		
Laboratory equipment	\$ —	\$ 829
Computer equipment and purchased software	—	18
Leasehold improvements	—	74
Construction in progress	—	1,059
	—	1,980
Less: accumulated depreciation and amortization	—	(135)
	<u>\$ —</u>	<u>\$ 1,845</u>
Accrued and Other Liabilities		
Personnel related	\$ 17	\$ 305
Accrued legal and accounting	—	314
Accrued clinical trial related	—	376
Deferred rent	—	223
Accrued construction in progress costs	—	101
Other accrued expenses	—	176
	<u>\$ 17</u>	<u>\$ 1,495</u>
Other Liabilities		
Deferred rent	\$ 0	\$ 642
Shares subject to vesting	3	68
	<u>\$ 3</u>	<u>\$ 710</u>

7. Convertible Preferred Stock

Under the amended and restated certificate of incorporation in effect as of December 31, 2015, the Company is authorized to issue two classes of stock: convertible preferred stock and common stock.

Convertible preferred stock consisted of the following (in thousands, except share data):

	December 31, 2014			
	Shares Authorized	Shares Issued & Outstanding	Net Carrying Value	Liquidation Value
Series A	<u>8,921,438</u>	<u>3,395,468</u>	<u>\$ 10,011</u>	<u>\$ 12,750</u>

Corvus Pharmaceuticals, Inc.**Notes to Financial Statements (Continued)****7. Convertible Preferred Stock (Continued)**

	December 31, 2015			
	Shares Authorized	Shares Issued & Outstanding	Net Carrying Value	Liquidation Value
Series A	8,921,429	8,921,429	\$ 50,941	\$ 33,500
Series B	5,353,312	5,353,312	74,839	75,000
Total	14,274,741	14,274,741	\$ 125,780	\$ 108,500

The rights, preferences and privileges of the convertible preferred stock (Series A & B) are summarized below.

Conversion

Shares of convertible preferred stock are convertible into common stock based on a defined conversion ratio, which was set at one-for-one, adjustable for certain dilutive events. No such adjustment had occurred as of December 31, 2014 or December 31, 2015.

The convertible preferred stock is convertible at the option of the holder at any time without any additional consideration, and all shares automatically convert into shares of common stock upon the closing of the sale of shares of common stock in an underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended (the "Securities Act"), pursuant to which at least \$50 million in the aggregate of such common stock is issued, prior to deductions for underwriting discounts, commissions and expenses, or (ii) the vote of the holders of at least 60% of the voting power of all then outstanding shares of convertible preferred stock (voting together as a single class and not as separate series, and on an as-converted to common stock basis); provided, however that the outstanding shares of Series B convertible preferred stock shall not be automatically converted into shares of common stock pursuant such vote without the affirmative vote or written consent of the holders of at least 60% of the outstanding shares of Series B convertible preferred stock, consenting or voting as a single class.

Dividends

Each holder of convertible preferred stock is entitled to receive non-cumulative dividends, when and if declared by the Company's board of directors, at a rate of 8% of the original issue price prior to and in preference to the declaration or payment of a dividend on common stock. After convertible preferred holders have received their dividend preferences, any additional dividends are to be paid to the holders of common stock and convertible preferred on an as converted, pari passu basis. No dividends have been declared to date.

Liquidation Preference

In the event of a liquidation, dissolution or winding up of the Company either voluntarily or involuntarily, or if any event occurs that is deemed a liquidation under the Company's amended and restated certificate of incorporation, as amended, each holder of convertible preferred stock will be entitled to receive, on a pari-passu basis, the liquidation preference for each share out of any proceeds available for distribution to stockholders before any distributions are made to the holders of common stock. The liquidation preference for each share of the convertible preferred stock is equal to the original issue price for such series (plus any declared but unpaid dividends). If upon such liquidation, dissolution or winding up of the Company or deemed liquidation, the assets available for distribution to

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

7. Convertible Preferred Stock (Continued)

stockholders are insufficient to pay in full holders of the convertible preferred stock amounts to which they are entitled, the holders of convertible preferred stock shall share ratably in any assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect to the shares held by them. Following payment in full to the holders of convertible preferred stock, the remaining assets and funds of the Company, if any, shall be divided among and paid ratably to the holders of common stock and convertible preferred stock in proportion to the number of shares held by them on an as converted basis.

A consolidation or merger of the Company with or into any other corporation or corporations, acquisition by any other corporation or corporations, or a sale of all or substantially all of the assets or voting control of the Company in which the prior stockholders of the Company do not own a majority of the outstanding shares of the surviving corporation is deemed to be a liquidation.

The Company classifies its convertible preferred stock outside of permanent equity as certain change in control events are outside the Company's control.

Voting Rights

The convertible preferred stock votes on an as-converted to common stock basis with the other voting stock of the Company. Certain actions specified in the certificate of incorporation require the consent of the holders of at least 60% of the voting power of all then outstanding shares of convertible preferred stock (voting together as a single class and not as separate series, and on an as-converted to common stock basis).

In addition, the stockholders of the Company have entered into a voting agreement pursuant to which three of the holders of Series A convertible preferred stock are permitted to each designate one member of the Company's board of directors, which right expires upon an IPO.

8. Convertible Preferred Stock Liability

On November 26, 2014, the Company executed the Series A Convertible Preferred Stock Purchase Agreement for the issuance of up to 8,921,438 shares of Series A convertible preferred stock and issued 3,395,468 shares for net proceeds of \$12.6 million in connection with the first closing of the first tranche. In January 2015, in connection with the second closing of the first tranche, the Company issued 1,065,246 shares of Series A convertible preferred stock for net proceeds of \$4.0 million and in June 2015, in connection with the closing of the second tranche, an additional 4,460,715 shares of Series A convertible preferred stock were issued for net proceeds of \$16.7 million.

The Series A Convertible Preferred Stock Purchase Agreement provided that, upon the earliest to occur of any of three defined triggers, each investor of the first tranche agreed to purchase its pro-rata portion of the shares to be issued in the second tranche and the Company agreed to sell and issue said shares of Series A convertible preferred stock on the same terms as the first tranche.

A convertible preferred stock liability was recorded for the Company's obligation to sell the second tranche of the Series A convertible preferred stock to the first tranche stockholders at a fixed price of \$3.755 per share upon the satisfaction of certain conditions. A liability was recorded in connection with the first tranche of the Series A convertible preferred stock financing at its initial estimated fair value of \$2.6 million, with gains and losses arising from changes in fair value recognized in the statements of operations at each period while such instrument was classified as a liability. A \$17.6 million charge was recorded for the change in estimated fair value of the Series A convertible preferred stock liability for the period from January 1, 2015 to the closing of the second tranche in June 2015. Upon the closing of

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

8. Convertible Preferred Stock Liability (Continued)

the second tranche in June 2015, the liability terminated and the balance of the liability of \$20.2 million was reclassified to convertible preferred stock.

The preferred stock liability related to Series A convertible preferred stock was valued at issuance and at December 31, 2014 using a backsolve option-pricing method based on the consideration paid for the Series A convertible preferred stock and the convertible preferred stock liability using an assumed term of 1.0 years, an interest rate of 0.13% and a volatility of 85%.

Immediately prior to its exercise on June 10, 2015, the convertible preferred stock liability's fair value was estimated based on its intrinsic value, with the fair value of the Series A convertible preferred stock estimated as of June 10, 2015 and compared to the exercise price of the Series A convertible preferred stock liability.

To estimate the fair value of the Series A convertible preferred stock as of June 10, 2015, the enterprise value of the Company was estimated based on potential IPO and sale estimates. The enterprise value was then allocated to the various classes of securities using an option pricing model that assumed a term of two years to a liquidity event, an interest rate of 0.75% and a volatility of 75% based on market conditions and expectations as of the June valuation date.

9. Common Stock

As of December 31, 2015, the amended and restated certificate of incorporation authorizes the Company to issue 20 million shares of common stock.

Each share of common stock is entitled to one vote, subject to certain voting rights of the convertible preferred stock. Common stockholders are entitled to dividends if and when declared by the board of directors subject to the prior rights of the convertible preferred stockholders. As of December 31, 2015, no dividends on common stock had been declared.

In March and August 2014, the Company sold a net amount of 1,046,749 shares of fully vested common stock to its founders ("founders' stock"), who are related parties, for approximately \$5,000.

In November 2014, in conjunction with the sale of its Series A convertible preferred stock, the Company and the founders agreed to subject 75% of each founders' stock to vesting requirements. Under the related stock restriction agreements, the Company has the right to repurchase the common stock, which right lapses monthly over four years. In order to vest, the holders are required to provide continued service to the Company. Upon vesting, the appropriate amounts are transferred from liabilities to additional paid-in capital. If the holder of any restricted common stock is terminated for any reason, the Company has the right to repurchase the unvested shares at the stockholder's original purchase price. The vesting of the restricted common stock is contingent upon continued service to the Company and therefore, accounted for as compensation in accordance with the provisions of ASC 718, "*Compensation—Stock Compensation*." The compensation expense related to the vesting of the restricted common stock was not material for all periods presented.

In addition, the Company's 2014 Equity Incentive Plan (the "2014 Plan") allows for the early exercise of stock options. Options exercised prior to vesting are subject to repurchase at the original price, in accordance with the original vesting schedule of the options. These repurchase terms are considered to be a forfeiture provision. The cash received from employees for exercise of unvested options is treated as a refundable deposit and is classified as a liability on the balance sheets. Upon vesting, the appropriate amounts are transferred from liabilities to permanent equity.

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

9. Common Stock (Continued)

As of December 31, 2014 and December 31, 2015, 768,706 and 924,535 shares remained subject to repurchase, respectively and approximately \$4,000 and \$102,000, respectively, were recorded as liabilities pertaining to the stock restriction agreements and early exercised stock options.

The Company reserved shares of common stock on an as-converted basis, for issuance as follows:

	December 31, 2014	December 31, 2015
Convertible preferred stock	8,921,438	14,274,741
Unvested restricted common stock (founders and early exercise of stock options)	768,706	924,535
Outstanding options	32,320	784,136
Shares available for future option grants	837,547	2,559,499
Total	10,560,011	18,542,911

10. Stock Option Plan

In February 2014, the Company adopted the 2014 Plan, which was subsequently amended in November 2014, July 2015 and September 2015, under which it may grant incentive stock options, non-statutory stock options, stock purchase rights and other stock-based awards. Terms of stock agreements, including vesting requirements, are determined by the board of directors or a committee authorized by the board of directors, subject to the provisions of the 2014 Plan. In general, awards granted by the Company vest over four years and have maximum exercise term of 10 years. The 2014 Plan provides that grants must be at an exercise price of 100% of fair market value of the Company's common stock as determined by the board of directors on the date of the grant.

A summary of the Company's stock option activity for the period from January 27, 2014 (inception) to December 31, 2015, is as follows:

	Shares Available for Grant	Options Outstanding	
		Number of Options	Weighted- Average Exercise Price
Balance at January 27, 2014 (inception)	—	—	\$ —
Shares authorized for plan	869,867		
Granted	(32,320)	32,320	0.28
Balance at December 31, 2014	837,547	32,320	0.28
Additional shares authorized for plan	2,858,634	—	
Granted	(1,150,182)	1,150,182	2.88
Exercised	—	(384,866)	0.28
Forfeited	13,500	(13,500)	0.28
Balance at December 31, 2015	2,559,499	784,136	\$ 4.09

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

10. Stock Option Plan (Continued)

The following table summarizes information about stock options outstanding at December 31, 2015:

Exercise Price	Options Outstanding		Options Vested	
	Number	Weighted Average Remaining Contractual Life (in Years)	Number	Weighted Average Remaining Contractual Life (in Years)
\$0.28 - 4.65	629,136	9.54	9,637	9.06
\$6.75-15.79	155,000	10.00	—	—
	<u>784,136</u>	<u>9.63</u>	<u>9,637</u>	<u>9.06</u>

The weighted average grant date fair value of options granted during the period of January 27, 2014 (inception) through December 31, 2014 was \$0.22 and \$4.37 for the year ended December 31, 2015.

Options outstanding and exercisable that had vested or were expected to vest at December 31, 2015 were as follows:

	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value (In thousands)
Vested	9,637	\$ 0.28	9.06	\$ 149
Expected to vest	634,347	\$ 3.93	9.62	\$ 7,522

In the table above, aggregate intrinsic value represent the difference between the exercise price of the options to purchase common stock and the estimated fair value of the Company's common stock of \$15.79.

The aggregate intrinsic value of stock options exercised in the year ended December 31, 2015 was \$714,000.

The total fair value of options that vested in the period January 27, 2014 (inception) to December 31, 2014 and the year ended December 31, 2015 were \$100 and \$75,428, respectively.

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

11. Stock-Based Compensation

The Company's results of operations include expenses relating to employee and non-employee stock-based awards as follows (in thousands):

	Period from January 27, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015
Research and development	\$ —	\$ 292
General and administrative	—	136
Total	<u>\$ —</u>	<u>\$ 428</u>

Valuation Assumptions

The fair value of share-based awards to employees was estimated using the Black-Scholes option pricing model using the following weighted-average assumptions:

	Period from January 27, 2014 (inception) to December 31, 2014	Year Ended December 31, 2015
Risk-free interest rate	1.7%	1.7%
Expected volatility	97%	83.3%
Expected term (in years)	6.1	6.1
Expected dividend yield	0%	0%

Fair Value of Common Stock

The Company uses significant estimates and assumptions in determining the fair value of its common stock. The Company recorded expense for stock option grants at exercise prices not less than the fair market value of its common stock as determined by management with consideration of the American Institute of Certified Public Accountants ("AICPA") Accounting and Valuation Guide, *Valuation of Privately-Held Company Equity Securities Issued as Compensation*. The estimated fair value of the Company's common stock was based on a number of objective and subjective factors, including the Company's current financial condition, anticipated expenses, the market value of stock or equity interests in similar corporations and other entities engaged in businesses substantially similar to those engaged in by the Company, the present value of anticipated future cash flows of the Company, valuations of comparable companies, financing prospects, current and potential strategic relationships, competitive developments and related matters, the aggregate liquidation preference of the Company's convertible preferred stock, the price at which shares of the Company's outstanding capital stock have previously been issued by the Company, the current market and venture capital financing environment and the lack of marketability of the Company's common stock.

Risk-free Interest Rate: The Company based the risk-free interest rate over the expected term of the options based on the constant maturity rate of U.S. Treasury securities with similar maturities as of the date of the grant.

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

11. Stock-Based Compensation (Continued)

Volatility: The Company used an average historical stock price volatility of comparable public companies within the biotechnology and pharmaceutical industry that were deemed to be representative of future stock price trends as the Company is not a public company and does not have any trading history for its common stock.

Expected Term: The Company uses the simplified method prescribed in the ASC 718, *Compensation—Stock Compensation*, to calculate the expected term of options granted to employees and directors.

Expected Dividends: The Company has not paid and does not anticipate paying any dividends in the near future.

At December 31, 2014 and 2015, the unrecognized compensation expense associated with respect to options granted to employees was \$4,800 and \$4.7 million, respectively, and is expected to be recognized on a straight-line basis over 3.74 and 3.64 years, respectively.

Stock-based compensation expense related to awards to non-employees is recognized based on the then-current fair value at each measurement date over the associated service period of the award, which is generally the vesting term, on a straight line basis. The Company used the Black-Scholes valuation model to assist it in determining the fair value of stock-based awards. Stock-based compensation expense for non-employees was \$— and \$428,000 for the period January 27, 2014 (inception) to December 31, 2014 and the year ended December 31, 2015, respectively. For the year ended December 31, 2015 the following assumptions were used in the valuation of non-employee stock options: risk free interest rate of 1.8%-2.2%, expected life of 9.1-10 years, dividend yield of 0% and expected volatility of 82.0%-84.7%.

12. Income Taxes

During 2014 and 2015, the Company recorded no income tax benefits for the net operating losses (NOLs) incurred due to the uncertainty of realizing a benefit from those items.

As of December 31, 2015, the Company had federal NOL carryforwards of approximately \$11.7 million and state NOL carryforwards of approximately \$11.7 million which are available to reduce future taxable income. The NOLs will begin to expire in 2034, if not utilized.

As of December 31, 2015, the Company also had \$0.3 million of federal and \$0.3 million of state research and development tax credit carryforwards available to reduce future income taxes. The federal research and development tax credits will begin to expire in 2035, if not utilized. The state research and development tax credits have no expiration date.

Utilization of NOL carryforwards and credits may be subject to an annual limitation due to the ownership change provisions provided by the Internal Revenue Code of 1986, as amended ("Code"), and similar state provisions. An annual limitation may result in the expiration of NOLs and credits before utilization. During the third quarter of 2015, the Company issued a new series of convertible preferred stock that in conjunction with other preferred stock issuances may have created an ownership change under these provisions of the Code and similar state provisions. As of December 31, 2015, utilization of NOLs and credits are not expected to expire unused in the carryforward period as a result of these recent issuances of convertible preferred shares.

Corvus Pharmaceuticals, Inc.**Notes to Financial Statements (Continued)****12. Income Taxes (Continued)**

A reconciliation of the Company's effective tax rate to the U.S. Federal statutory rate is as follows:

	December 31, 2014	December 31, 2015
Federal tax benefit at statutory rate	34%	34%
State tax, net of Federal benefit	6	3
Loss due to change in fair value of convertible preferred stock liability	—	(19)
Change in valuation allowance	(40)	(18)
Effective income tax rate	<u>—%</u>	<u>—%</u>

The effective tax rate is different from the federal statutory tax rate primarily due to a valuation allowance against deferred tax assets as a result of the Company's history of losses.

The principal components of the Company's net deferred tax assets are as follows (in thousands):

	December 31, 2014	December 31, 2015
Deferred tax assets:		
Net operating loss carryforwards	\$ 22	\$ 4,671
Tax credit carryforwards	—	445
Capitalized tax assets	36	528
Accruals	6	108
Other	—	114
Total deferred tax assets	<u>64</u>	<u>5,866</u>
Valuation allowance	(64)	(5,866)
Net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>

The Company recorded a valuation allowance against its deferred tax assets at December 31, 2014 and 2015 because Company management believed that it was more likely than not that these assets would not be fully realized. The valuation allowance increased by approximately \$5.8 million. Changes in the valuation allowance for deferred tax assets relate primarily to the increase in the Company's net operating loss carryforward.

As of December 31, 2015, the Company had unrecognized tax benefits ("UTBs") of approximately \$0.1 million. All of the deferred tax assets associated with these UTBs are fully offset by a valuation allowance. The following table summarizes the activity related to UTBs:

	December 31, 2015
Unrecognized tax benefits beginning of the period	\$ —
Increase (decrease) related to the prior year	—
Increase related to the current year	135
Unrecognized tax benefits, end of the period	<u>\$ 135</u>

Corvus Pharmaceuticals, Inc.**Notes to Financial Statements (Continued)****12. Income Taxes (Continued)**

The Company follows the provisions of ASC 740, *Accounting for Income Taxes*, and the accounting guidance related to accounting for uncertainty in income taxes. The Company determines its uncertain tax positions based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is more likely than not to be sustained upon examination by the relevant income tax authorities. The Company will recognize both accrued interest and penalties related to unrecognized benefits in income tax expense. Since the Company is in a loss carryforward position, the Company is generally subject to examination by the U.S. federal, state and local income tax authorities for all tax years in which a loss carryforward is available.

13. Commitments and Contingencies**Facility Lease**

In January 2015, the Company signed an operating lease, effective February 1, 2015, for 8,138 square feet of office and laboratory space located in Burlingame, California with a one-year term. In March 2015, the Company signed the first amendment to the lease, effective April 15, 2015, whereby the original premises were expanded by an additional 3,163 square feet and the lease term was extended through January 2017. In August 2015, the Company signed the second amendment to the lease whereby the size of the existing premises was increased by adding 10,834 square feet and the term of the lease was extended through the date that is 60 months after the date at which rent begins on the second expansion space premises. Rent commences on the earlier of substantial completion of the tenant improvements or February 17, 2016. The landlord agreed to provide \$1.6 million to fund qualifying tenant improvements, defined as building design, permits and construction costs. The Company estimates tenant improvements associated with the tenant improvement allowance will be approximately \$1.6 million. The lease agreement includes an annual rent escalation clause, a right to extend the term at the then current market rate for three years and a right of first refusal on certain space. The Company records rent expense on a straight-line basis over the effective term of the lease, including any free rent periods and incentives. The lease requires the Company to pay additional amounts for operating and maintenance expenses. Rent expense related to the facilities lease for the year ended December 31, 2015 was approximately \$347,000.

The Company leases its facilities under a non-cancelable operating lease that expires in 2021.

As of December 31, 2015, future minimum lease payments under the facility lease were as follows (in thousands):

2016	\$	726
2017		821
2018		848
2019		873
2020		900
Thereafter		113
Total	\$	<u>4,281</u>

Pursuant to the Company's license agreements with each of Vernalis and Scripps, it has obligations to make future milestone and royalty payments to these parties, respectively. However, because these

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

13. Commitments and Contingencies (Continued)

amounts are contingent and not fixed or determinable, they have not been included on the Company's balance sheet or in the table above.

Indemnifications

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. Pursuant to such agreements, the Company may indemnify, hold harmless and defend an indemnified party for losses suffered or incurred by the indemnified party. Some of the provisions will limit losses to those arising from third-party actions. In some cases, the indemnification will continue after the termination of the agreement. The maximum potential amount of future payments the Company could be required to make under these provisions is not determinable. The Company has never incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. The Company has also entered into indemnification agreements with its directors and officers that may require the Company to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers to the fullest extent permitted by Delaware corporate law. There have been no claims to date and the Company has a directors and officers insurance policy that may enable it to recover a portion of any amounts paid for future claims.

Legal Proceedings

The Company is not a party to any material legal proceedings.

14. 401(k) Plan

In April 2015, the Company adopted a 401(k) retirement and savings plan (the "401(k) Plan") covering all employees. The 401(k) Plan allows employees to make pre- and post-tax contributions up to the maximum allowable amount set by the IRS. The Company does not make matching contributions to the 401(k) plan on behalf of participants.

15. Subsequent Events

The Company's board of directors and shareholders approved, on December 21, 2015 and January 15, 2016, respectively, the amendment and restatement of the Company's certificate of incorporation to increase the number of convertible preferred stock and common stock authorized thereunder to 10,000,000 shares and 290,000,000 shares, respectively, effective as of immediately prior to the consummation of the Company's initial public offering.

In December 2015, the Company's board of directors adopted, subject to the approval of the Company's stockholders, the 2016 Equity Incentive Award Plan (the "2016 Plan"), which will become effective immediately prior to the consummation of the Company's initial public offering and will serve as a successor to the 2014 Plan. 3,051,750 shares of the Company's common stock will be available for issuance under the 2016 Plan, plus (i) an annual increase on the first day of each fiscal year beginning in 2017 and ending in 2026 and (ii) all shares that are subject to outstanding options under the 2014 Plan on the completion of this offering that thereafter expire, terminate, or otherwise are forfeited or reacquired, up to a maximum of 1,136,229 shares.

Corvus Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

15. Subsequent Events (Continued)

In December 2015, the Company's board of directors adopted, subject to the approval of the Company's stockholders, the 2016 Employee Stock Purchase Plan (the "ESPP"), which will become effective immediately prior to the consummation of the Company's initial public offering. 200,000 shares of the Company's common stock will be available for future grant or issuance under the ESPP, plus an annual increase on the first day of each fiscal year beginning in 2017 and ending in 2026.

The Company has evaluated subsequent events through February 8, 2016.



