FIVE PRIME THERAPEUTICS INC
Form S-1
January 22, 2014
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As filed with the Securities and Exchange Commission on January 22, 2014

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

Five Prime Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**2834**	**26-0038620**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

Two Corporate Drive

South San Francisco, California 94080

(415) 365-5600

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

Lewis T. Williams

President and Chief Executive Officer

Five Prime Therapeutics, Inc .

Two Corporate Drive

South San Francisco, California 94080

(415) 365-5600

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Laura A. Berezin	**Francis W. Sarena**	**David G. Peinsipp**
Hogan Lovells US LLP	**Senior Vice President, General Counsel & Secretary**	**Charles S. Kim**
4085 Campbell Avenue, Suite 100	**Five Prime Therapeutics, Inc.**	**Andrew S. Williamson**
Menlo Park, California 94025	**Two Corporate Drive**	**Cooley LLP**
(650) 463-4000	**South San Francisco, California 94080**	**101 California Street**
	(415) 365-5600	**San Francisco, California 94111**
		(415) 693-2000

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

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

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

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

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

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

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

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE[1]	AMOUNT OF REGISTRATION FEE[2]
Common Stock, $0.001 par value per share	$57,500,000	$7,406

(1) Estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(o) under the Securities Act of 1933, as amended, and includes the offering price of additional shares of common stock that the underwriters have an option to purchase.

(2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

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

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is declared effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 22, 2014

PRELIMINARY PROSPECTUS

$50,000,000

Five Prime Therapeutics, Inc.

Common Stock

We are offering up to $50,000,000 of shares of our common stock. Our common stock is listed on The NASDAQ Global Select Market under the symbol FPRX. On January 21, 2014, the last reported sale price of our common stock on The NASDAQ Global Select Market was $19.39 per share.

We are an emerging growth company as defined by the Jumpstart Our Business Startups Act of 2012 and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page 8 of this prospectus.

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

	PER SHARE	TOTAL
Public Offering Price	$	$
Underwriting Discounts and Commissions [1]	$	$
Proceeds, before expenses, to us	$	$

[1] See Underwriting for a description of the compensation payable to the underwriters.

Delivery of the shares of common stock purchased in this offering is expected to be made on or about , 2014. We have granted the underwriters an option for a period of 30 days to purchase up to $7,500,000 of additional shares of common stock.

Joint Book-Running Managers

Jefferies **BMO Capital Markets** **Wells Fargo Securities**

Co-Manager

Guggenheim Securities

Prospectus dated , 2014

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You should rely only on the information contained in this prospectus and any free writing prospectus prepared by or on behalf of us or to which we have referred you. We have not authorized anyone to provide you with information that is different. We are offering to sell shares of our common stock, and seeking offers to buy shares of our common stock, only in jurisdictions where offers and sales are permitted. The information in this prospectus is complete and accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or any sale of shares of our common stock.

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For investors outside the United States: neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of shares of our common stock and the distribution of this prospectus outside the United States.

Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to Five Prime, the company, we, us, ou and similar references refer to Five Prime Therapeutics, Inc. The Five Prime logo and RIPPS® are our registered trademarks. This prospectus also contains registered marks, trademarks and trade names of other companies. All other trademarks, registered marks and trade names appearing in this prospectus are the property of their respective holders.

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PROSPECTUS SUMMARY

The following summary highlights information contained elsewhere in this prospectus and is qualified in its entirety by the more detailed information and financial statements included elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. Before you decide to invest in our common stock, you should read and carefully consider the following summary together with the entire prospectus, including our financial statements and the related notes thereto appearing elsewhere in this prospectus and the matters discussed in the sections in this prospectus entitled Risk Factors, Selected Financial Data and Management s Discussion and Analysis of Financial Condition and Results of Operations. Some of the statements in this prospectus constitute forward-looking statements that involve risks and uncertainties. See Special Note Regarding Forward-Looking Statements and Industry Data. Our actual results could differ materially from those anticipated in such forward-looking statements as a result of certain factors, including those discussed in the Risk Factors and other sections of this prospectus.

Our Company

We are a clinical-stage biotechnology company focused on discovering and developing novel protein therapeutics. Protein therapeutics are antibodies or drugs developed from extracellular proteins or protein fragments that block disease processes, including cancer and inflammatory diseases. We have developed a library of more than 5,700 human extracellular proteins, which we believe represent substantially all of the body s medically important targets for protein therapeutics. We screen this comprehensive library with our proprietary high-throughput protein screening technologies to identify new targets for protein therapeutics. This platform has allowed us to develop a pipeline of novel product candidates for cancer and inflammatory diseases and to generate over $222 million under our collaboration arrangements through September 30, 2013.

Each of our product candidates has an innovative mechanism of action and addresses patient populations for which better therapies are still needed. In addition, we are pursuing companion diagnostics for each of our lead programs to allow us to select patients most likely to benefit from treatment and therefore accelerate clinical development and improve patient care. Our most advanced product candidates are as follows:

- ***FP-1039/GSK3052230, or FP-1039***, is a protein therapeutic that traps and neutralizes cancer-promoting fibroblast growth factors, or FGFs, involved in cancer cell proliferation and new blood vessel formation. FGFs are a family of related extracellular proteins that normally regulate cell proliferation and survival in humans. They act by binding to and activating FGF receptors, or FGFRs, which are cell surface proteins that transmit growth signals to cells. Certain FGFs promote growth of multiple solid tumors by binding and activating FGFRs. Unlike other therapies that indiscriminately block all FGFs, FP-1039 is designed to only block cancer-promoting FGFs and therefore may be associated with better tolerability than other known drug candidates targeting the FGF pathway. We have completed a Phase 1 clinical trial, and our partner, GlaxoSmithKline, or GSK, is conducting a multi-arm Phase 1b clinical trial in patients with abnormally high levels of *FGFR1*. We expect data from the dose escalation phase of this trial by the end of 2014. GSK is responsible for the development and commercialization of FP-1039 in the United States, the European Union and Canada. Under our agreement, we received a $50 million license fee and are eligible to receive up to $435 million in contingent payments. We have an option to co-promote FP-1039 in the United States.

- ***FPA008*** is an antibody that inhibits colony stimulating factor-1 receptor, or CSF1R, and is being developed to treat patients with inflammatory diseases, including rheumatoid arthritis, or RA. CSF1R is a cell surface protein that controls the survival and function of certain inflammatory cells called monocytes and macrophages. By inhibiting CSF1R activation, FPA008 prevents the production of multiple inflammatory factors, such as tumor necrosis factor, interleukin-6 and interleukin-1, that are individually targeted by approved therapeutics such as *Humira*® (adalimumab), *Actemra*® (tocilizumab) and *Kineret*® (anakinra), respectively. As a result, we believe FPA008 has the potential to have better efficacy than each of these approved drugs. In addition, unlike currently marketed RA

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drugs, FPA008 directly inhibits bone-destroying cells called osteoclasts. We began a Phase 1 clinical trial for FPA008 in October 2013 and expect preliminary data, including inflammation and bone turnover biomarker data, from the healthy volunteer portion of this trial by the end of 2014.

- ***FPA144*** is an antibody that inhibits FGF receptor 2b, or FGFR2b, and is being developed to treat patients with gastric cancer and potentially other solid tumors. In preclinical studies, FPA144 was highly effective in blocking the growth of gastric tumors that had abnormally high levels of FGFR2b. We plan to begin a Phase 1 clinical trial for FPA144 by the end of 2014 in patients with tumors expressing high levels of FGFR2b and expect preliminary data by the end of 2015.

Our Platform

The process of discovering targets for protein therapeutics has historically proven to be difficult and slow. There are more than 5,700 proteins in the body that represent potential protein therapeutic targets, but only about 30 are targeted by currently marketed protein drugs in cancer and inflammatory diseases. We spent seven years successfully developing a platform to improve and accelerate the protein therapeutic discovery process. Our platform is based on two components:

- a proprietary library of more than 5,700 human extracellular proteins that we believe is the most comprehensive collection of fully functional extracellular proteins available and is an abundant source of medically relevant novel targets for protein therapeutics; and

- proprietary and new technologies for producing and testing thousands of proteins at a time.

We believe our platform improves and accelerates the discovery of new protein targets and protein therapeutics because it can:

- identify novel medically relevant protein targets and protein therapeutics that have little or no previously known biological function or are not in the public domain and cannot easily be discovered by other methods;

- determine the best protein target among many alternatives for a particular disease by screening and comparing nearly all possible medically important targets simultaneously; and

- identify new targets more quickly and efficiently than previously possible because it can produce and test thousands of proteins at a time, rather than one or just a few at a time.

In the past several years we have used this platform to identify dozens of targets validated in rodent models and to build a growing pipeline of drug candidates. We have attracted numerous partnerships with leading biopharmaceutical companies, which have generated over $222 million in funding for our business through September 30, 2013. In addition to our FP-1039 license and collaboration agreement, under which we are eligible to receive up to $435 million in contingent payments, we have ongoing discovery collaborations with GSK and UCB Pharma, S.A., or UCB. We are eligible to receive potential option exercise fees and contingent payments up to $124.3 million per target under the GSK muscle diseases collaboration, $193.8 million per target under the GSK respiratory diseases collaboration and $92.2 million per target under the UCB fibrosis and CNS collaboration. We believe our platform will continue to provide funding opportunities through product and discovery collaborations.

We are currently focusing our internal research efforts primarily in the area of cancer immunotherapy and applying all aspects of our biologics discovery platform, including cell-based screening, *in vivo* screening and receptor-ligand matching technologies in our cancer immunotherapy research program. We have identified novel targets that we believe could be useful in cancer immunotherapy and are actively validating these and looking for additional targets. We plan to generate therapeutic proteins, including antibodies or ligand traps, directed to the targets we identify, and advance those product candidates into pre-clinical development.

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Our Strategy

Our goal is to use our proprietary platform to maintain our leadership position in the discovery of innovative protein therapeutic targets and to develop and commercialize protein therapeutics to treat cancer and inflammatory diseases. The key elements of our strategy to achieve this goal are to:

- focus on protein therapeutics to treat cancer and inflammatory diseases;
- continue to advance and expand our internal pipeline;
- employ smarter drug development techniques, including selecting indications where activity can be assessed in early clinical development and using companion diagnostics;
- build a commercial enterprise by retaining rights for products in targeted specialty markets; and
- enter into additional discovery and product collaborations to supplement our internal development capabilities and generate funding.

Management

Our executive management team has extensive experience in leading the discovery and development of innovative protein therapeutics and significant expertise in operational and business development functions. Our founder, President and Chief Executive Officer, Lewis T. Rusty Williams is a member of the National Academy of Sciences and was a co-founder and a member of the board of directors of COR Therapeutics, Inc., which was sold to Millennium Pharmaceuticals, Inc. for approximately $2.0 billion, and the Chief Scientific Officer and a member of the board of directors of Chiron Corporation. Our Senior Vice President and Chief Medical Officer, Julie Hambleton, led clinical development programs across all phases, including regulatory approvals, at Genentech, Inc. and Clovis Oncology, Inc. Our Senior Vice President and Chief Business Officer, Aron M. Knickerbocker, led oncology business development at Genentech, Inc. Our Senior Vice President and Chief Scientific Officer, W. Michael Kavanaugh, led protein therapeutic programs at Novartis Institutes for Biomedical Research and Chiron Corporation.

Risks Associated with Our Business

Our ability to implement our business strategy is subject to numerous risks and uncertainties. As a clinical-stage biotechnology company, we face many risks inherent in our business and our industry generally. You should carefully consider all of the information set forth in this prospectus and, in particular, the information under the heading Risk Factors, prior to making an investment in our common stock. These risks include, among others, the following:

- we have no source of predictable revenue, have incurred losses nearly every year, may never become profitable and may incur substantial and increasing net losses for the foreseeable future as we continue development of, seek regulatory approvals for, and begin to commercialize our product candidates;
- we will likely need to obtain additional funding to continue operations;
- only two of our product candidates are in clinical development;

- our success is primarily dependent on the successful development, regulatory approval and commercialization of our product candidates, all of which are in early development;

- if clinical trials of our product candidates fail to demonstrate safety and efficacy, we may be unable to obtain regulatory approvals and commercialize our product candidates;

- we are subject to regulatory approval processes that are lengthy, time-consuming and unpredictable. We may not obtain approval for any of our product candidates from the U.S. Food and Drug Administration or foreign regulatory authorities;

- it is difficult and costly to protect our intellectual property rights;

- we may be unable to recruit or retain key employees, including our senior management team; and

- we depend on the performance of third parties, including contract research organizations and third-party manufacturers.

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Our Corporate Information

We were incorporated under the laws of the State of Delaware in December 2001. Our principal executive offices are located at Two Corporate Drive, South San Francisco, California 94080, and our telephone number is (415) 365-5600. Our website address is www.fiveprime.com. Our website and the information contained on, or that can be accessed through, the website will not be deemed to be incorporated by reference in, and are not considered part of, this prospectus. You should not rely on any such information in making your decision whether to purchase our common stock.

Implications of Being an Emerging Growth Company

As a company with less than $1.0 billion in revenue during our last fiscal year, we qualify as an emerging growth company as defined in the Jumpstart our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting and other burdens that are otherwise applicable generally to public companies. These provisions include:

- a requirement to have only two years of audited financial statements and only two years of related management s discussion and analysis;
- an exemption from compliance with the auditor attestation requirement on the effectiveness of our internal controls over financial reporting;
- an exemption from compliance with any requirement that the Public Company Accounting Oversight Board may adopt regarding mandatory audit firm rotation or a supplement to the auditor s report providing additional information about the audit and the financial statements;
- reduced disclosure about the company s executive compensation arrangements; and
- exemptions from the requirements to obtain a non-binding advisory vote on executive compensation or a stockholder approval of any golden parachute arrangements.

We may take advantage of these provisions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company if we have more than $1.0 billion in annual revenues, have more than $700 million in market value of our capital stock held by non-affiliates, or issue more than $1.0 billion of non-convertible debt over a three-year period. We may choose to take advantage of some, but not all, of the available benefits under the JOBS Act. We have taken advantage of some reduced reporting burdens in this prospectus. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of delayed adoption of new or revised accounting standards and, therefore, we will be subject to the same requirements to adopt new or revised accounting standards as other public companies that are not emerging growth companies.

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THE OFFERING

Common stock to be offered	$50,000,000 of shares
Common stock to be outstanding immediately following this offering	shares
Option to purchase additional shares	We have granted the underwriters an option for 30 days from the date of this prospectus to purchase up to $7,500,000 of additional shares of common stock.
Use of proceeds	We plan to use the proceeds from this offering to fund additional research and development activities for our FPA008 program, completion of our planned Phase 1 clinical trial of FPA144, expansion of our cancer immunotherapy research efforts and for working capital and general corporate purposes. See Use of Proceeds for a more complete description of the intended use of proceeds from this offering.
Risk factors	You should read the Risk Factors section of this prospectus for a discussion of factors to carefully consider before deciding to invest in shares of our common stock.
NASDAQ Global Select Market symbol	FPRX

The number of shares of our common stock outstanding immediately following this offering set forth above is based on 16,818,008 shares of our common stock outstanding as of September 30, 2013.

The number of shares of our common stock outstanding immediately following this offering excludes:

- 2,234,322 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2013, under our 2002 Equity Incentive Plan, or 2002 Plan, and our 2010 Equity Incentive Plan, or 2010 Plan, at a weighted-average exercise price of $6.00 per share;
- 3,500,000 shares of our common stock reserved as of September 30, 2013 for future issuance under our 2013 Omnibus Incentive Plan, or 2013 Plan, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2013 Plan;
- 250,000 shares of our common stock reserved as of September 30, 2013 for future issuance under our 2013 Employee Stock Purchase Plan, or the ESPP, as well as any future increases in the number of shares of our common stock reserved for issuance under the ESPP; and

- 2,304 shares of our common stock issuable upon the exercise of a warrant issued to General Electric Capital Corporation on January 26, 2004, or the GE Warrant, at an exercise price of $12.30 per share.

Unless otherwise indicated, all information in this prospectus assumes:

- no exercise of outstanding stock options since September 30, 2013; and
- no exercise of the underwriters option to purchase additional shares.

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SUMMARY FINANCIAL DATA

The following table summarizes our financial data. We have derived the following statements of operations data for the years ended December 31, 2010, 2011 and 2012 from our audited financial statements, included elsewhere in this prospectus. The statements of operations data for the nine months ended September 30, 2012 and 2013 and the balance sheet data as of September 30, 2013, are derived from our unaudited financial statements, included elsewhere in this prospectus. Our historical results are not necessarily indicative of results to be expected for the full year or any period in the future. The summary financial data presented below should be read in conjunction with Management s Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and the related notes thereto, included elsewhere in this prospectus. The summary financial data in this section is not intended to replace our financial statements and the related notes thereto.

(in thousands, except per share amounts)	YEARS ENDED DECEMBER 31,			NINE MONTHS ENDED SEPTEMBER 30,	
	2010	2011	2012	2012	2013
				(unaudited)	
Statements of Operations Data:					
Collaboration revenue	$ 23,740	$ 64,916	$ 9,983	$ 7,059	$ 10,006
Operating expenses:					
Research and development	29,417	34,039	28,778	21,300	24,708
General and administrative	8,338	11,216	9,009	6,696	7,385
Total operating expenses	37,755	45,255	37,787	27,996	32,093
(Loss) income from operations	(14,015)	19,661	(27,804)	(20,937)	(22,087)
Interest income	58	114	88	70	35
Other income (expense), net	491	(65)	121	85	497
(Loss) income before benefit from income taxes	(13,466)	19,710	(27,595)	(20,782)	(21,555)
Benefit from income taxes	5				
Net (loss) income	$ (13,461)	$ 19,710	$ (27,595)	$ (20,782)	$ (21,555)
Net income attributable to participating securities		18,823			
Net (loss) income attributable to common stockholders	$ (13,461)	$ 887	$ (27,595)	$ (20,782)	$ (21,555)
Basic net (loss) income per share attributable to common stockholders [1]	$ (12.22)	$ 0.77	$ (23.05)	$ (17.46)	$ (12.60)
Diluted net (loss) income per share attributable to common stockholders [1]	$ (12.22)	$ 0.72	$ (23.05)	$ (17.46)	$ (12.60)
Weighted average shares of common stock outstanding used in computing basic net (loss) income per share [1]	1,102	1,152	1,197	1,190	1,711
Weighted average shares of common stock outstanding used in computing diluted net (loss) income per share [1]	1,102	1,904	1,197	1,190	1,711

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(in thousands)	AS OF SEPTEMBER 30, 2013 ACTUAL	AS ADJUSTED (1)(2)
Balance Sheet Data:		
Cash, cash equivalents and marketable securities	$ 86,637	$
Working capital	71,976	
Total assets	92,046	
Total stockholders equity	64,706	

(1) As adjusted balance sheet data give further effect to (i) the issuance and sale by us of shares of common stock in this offering at an assumed public offering price of $ per share, the last reported sale price on , 2014, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, and (ii) the application of net proceeds received by us in this offering as described in the section of this prospectus entitled Use of Proceeds.

(2) Each $ increase (decrease) in the assumed public offering price of $ per share, the last reported sale price of our common stock on The NASDAQ Global Select Market on , 2014, would increase (decrease) the as adjusted amount of cash and cash equivalents, working capital, total assets and total stockholders equity by approximately $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each increase of shares in the number of shares offered by us would increase the as adjusted amount of cash, cash equivalents and marketable securities, working capital, total assets and total stockholders equity by approximately $ million, assuming that the assumed public offering price remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each decrease of shares in the number of shares offered by us would decrease the as adjusted amount of cash, cash equivalents and marketable securities, working capital, total assets and total stockholders equity by approximately $ million, assuming that the assumed public offering price remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. The as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

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RISK FACTORS

Investing in our common stock involves a high degree of risk. Before making your decision to invest in shares of our common stock, you should carefully consider the risks described below, together with the other information contained in this prospectus, including our financial statements and the related notes appearing at the end of this prospectus. We cannot assure you that any of the events discussed below will not occur. These events could have a material and adverse impact on our business, results of operations, financial condition and cash flows. If that were to happen, the trading price of our common stock could decline, and you could lose all or part of your investment.

Risks Related to Our Financial Position and Capital Needs

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

We are a clinical-stage biotechnology company with a limited operating history. Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval and become commercially viable. We have no products approved for commercial sale and have not generated any revenue from product sales to date, and we continue to incur significant research and development and other expenses related to our ongoing operations. As a result, we are not profitable and have incurred losses in each period since our inception in 2001, with the exception of the fiscal year ended 2011 due to collaboration revenues from product candidates that we partnered. For the year ended December 31, 2012, and the nine months ended September 30, 2013, we reported a net loss of $27.6 million and $21.6 million, respectively. As of September 30, 2013, we had an accumulated deficit of $144.3 million.

We expect to continue to incur significant losses for the foreseeable future, and we expect these losses to increase as we continue our research and development of, and seek regulatory approvals for, our product candidates. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenues. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders equity and working capital.

We currently have no source of product revenue and may never become profitable.

To date, we have not generated any revenues from commercialization of our product candidates. Our ability to generate product revenue and ultimately become profitable depends upon our ability, alone or with our partners, to successfully commercialize products, including any of our current product candidates, or other product candidates that we may develop, in-license or acquire in the future. We do not anticipate generating revenue from the sale of products for the foreseeable future. Our ability to generate future product revenue from our current or future product candidates also depends on a number of additional factors, including our or our partners ability to:

- successfully complete research and clinical development of current and future product candidates;
- establish and maintain supply and manufacturing relationships with third parties, and ensure adequate and legally compliant manufacturing of bulk drug substances and drug products to maintain that supply;
- launch and commercialize future product candidates for which we obtain marketing approval, if any, and if launched independently, successfully establish a sales force, marketing and distribution infrastructure;
- obtain coverage and adequate product reimbursement from third-party payors, including government payors;
- achieve market acceptance for our or our partners products, if any;

- establish, maintain and protect our intellectual property rights; and

- attract, hire and retain qualified personnel.

In addition, because of the numerous risks and uncertainties associated with pharmaceutical product development, including that our product candidates may not advance through development or achieve the endpoints of applicable clinical trials, we are unable to predict the timing or amount of increased expenses, or if or when we will achieve or maintain profitability. In addition, our expenses could increase beyond expectations if we decide to or are required

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by the U.S. Food and Drug Administration, or FDA, or foreign regulatory authorities to perform studies or trials in addition to those that we currently anticipate. Even if we complete the development and regulatory processes described above, we anticipate incurring significant costs associated with launching and commercializing these products.

Even if we generate revenues from the sale of any of our products that may be approved, we may not become profitable and may need to obtain additional funding to continue operations. If we fail to become profitable or do not sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce our operations.

We will require additional capital to finance our operations, which may not be available to us on acceptable terms, or at all. As a result, we may not complete the development and commercialization of our product candidates or develop new product candidates.

As a research and development company, our operations have consumed substantial amounts of cash since inception. We expect our research and development expenses to increase substantially in connection with our ongoing activities, particularly as we advance our product candidates into clinical trials. We believe that the net proceeds from this offering, together with our existing cash and cash equivalents and funding we expect to receive under existing collaboration agreements, will fund our projected operating requirements into the first quarter of 2016. However, circumstances may cause us to consume capital more rapidly than we currently anticipate. For example, as we move our product candidates through preclinical studies and into clinical development we may have adverse results requiring us to find new product candidates, or our product collaboration partners may not elect to pursue the development and commercialization of any of our product candidates that are subject to their respective agreements with us. Any of these events may increase our development costs more than we expect. We may need to raise additional funds or otherwise obtain funding through product collaborations if we choose to initiate additional clinical trials for product candidates other than programs currently partnered. In any event, we will require additional capital to obtain regulatory approval for, and to commercialize, future product candidates.

If we need to secure additional financing, such additional fundraising efforts may divert our management from our day-to-day activities, which may adversely affect our ability to develop and commercialize future product candidates. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. If we do not raise additional capital when required or on acceptable terms, we may need to:

- significantly delay, scale back or discontinue the development or commercialization of any product candidates or cease operations altogether;
- seek strategic alliances for research and development programs at an earlier stage than we would otherwise desire or on terms less favorable than might otherwise be available; or
- relinquish, or license on unfavorable terms, our rights to technologies or any future product candidates that we otherwise would seek to develop or commercialize ourselves.

If we need to conduct additional fundraising activities and we do not raise additional capital in sufficient amounts or on terms acceptable to us, we may be prevented from pursuing development and commercialization efforts, which will have a material adverse effect on our business, operating results and prospects.

Our forecast of the period of time through which our financial resources will adequately support our operations is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors, including the factors discussed elsewhere in this Risk Factors section. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Our future funding requirements, both short and long-term, will depend on many factors, including:

- the initiation, progress, timing, costs and results of preclinical and clinical studies for our product candidates and future product candidates we may develop;

- the outcome, timing and cost of seeking and obtaining regulatory approvals from the FDA and comparable foreign regulatory authorities, including the potential for such authorities to require that we perform more studies than those that we currently expect;

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- the cost to establish, maintain, expand and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with licensing, preparing, filing, prosecution, defense and enforcement of any patents or other intellectual property rights;

- the effect of competing technological and market developments;

- market acceptance of any approved product candidates;

- the costs of acquiring, licensing or investing in additional businesses, products, product candidates and technologies;

- the cost and timing of selecting, auditing and potentially validating a manufacturing site for commercial-scale manufacturing; and

- the cost of establishing sales, marketing and distribution capabilities for our product candidates for which we may receive regulatory approval and that we determine to commercialize ourselves or in collaboration with our partners.

If a lack of available capital means that we cannot expand our operations or otherwise capitalize on our business opportunities, our business, financial condition and results of operations could be materially adversely affected.

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

Until we can generate a sufficient amount of revenue from our products, if ever, we expect to finance future cash needs through public or private equity or debt offerings. Additional capital may not be available on reasonable terms, if at all. Raising additional funds through the issuance of additional debt or equity securities could result in dilution to our existing stockholders, and/or increased fixed payment obligations. Furthermore, these securities may have rights senior to those of our common stock and could contain covenants that would restrict our operations and potentially impair our competitiveness, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Any of these events could significantly harm our business, financial condition and prospects.

We plan to use our federal and state net operating loss, or NOL, carryforwards to offset taxable income from revenue that may be generated from future operations. However, our ability to use NOL carryforwards could be limited as a result of issuance of equity securities.

We plan to use our current year operating losses to offset taxable income that may result from any revenue generated from future operations or corporate collaborations. To the extent that our taxable income exceeds any current year operating losses, we plan to use our NOL carryforwards to offset income that would otherwise be taxable. However, under the Tax Reform Act of 1986, the amount of benefits from our NOL carryforwards may be impaired or limited if we incur a cumulative ownership change of more than 50%, as interpreted by the U.S. Internal Revenue Service, over a three-year period. As a result, our use of federal NOL carryforwards could be limited by the provisions of Section 382 of the U.S. Internal Revenue Code of 1986, as amended, depending upon the timing and amount of additional equity securities that we issue. State NOL carryforwards may be similarly limited. Any such disallowances may result in greater tax liabilities than we would incur in the absence of such a limitation and any increased liabilities could adversely affect our business, results of operations, financial condition and cash flow.

Risks Related to Our Business and Industry

Only two of our product candidates are in clinical development. Preclinical testing of FPA144 may not lead to it advancing into clinical trials. We may not identify additional product candidates or identify or validate additional drug targets. If we do not successfully complete preclinical testing of FPA144, identify additional product candidates or identify or validate additional drug targets or experience significant delays in doing any of the foregoing, our business will be materially harmed.

We have invested a significant portion of our efforts and financial resources in the identification and validation of new targets for protein therapeutics and the identification and preclinical development of product candidates to these targets. To date, we have two product candidates,

FP-1039 and FPA008, in clinical development and one candidate, FPA144, in preclinical development. Our ability to generate product revenues, which we do not expect will occur for many years, if ever, will depend heavily on our ability to identify and validate new targets and identify

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and advance preclinical product candidates into clinical development. The outcome of target discovery and validation efforts and preclinical studies may not predict the success of clinical trials. Moreover, preclinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies have nonetheless failed in clinical development. Our inability to successfully identify and validate new targets and complete preclinical development could result in additional costs to us or impair our ability to generate product revenues or development, regulatory, commercialization and sales milestone payments and royalties on product sales.

If clinical trials of our product candidates fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

Before obtaining marketing approval from regulatory authorities for the sale of future product candidates, we or our partners must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans. Clinical testing is expensive and difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. The outcome of preclinical studies and early clinical trials may not predict the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety profiles, notwithstanding promising results in earlier trials. Despite the results reported in our Phase 1 clinical trial for FP-1039 and in preclinical studies for our other product candidates, we do not know whether the clinical trials we or our partners may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market any of our product candidates in any particular jurisdiction or jurisdictions. If later-stage clinical trials do not produce favorable results, our or our partners ability to achieve regulatory approval for any of our product candidates may be adversely impacted.

If we experience delays in clinical testing, we will be delayed in commercializing our product candidates, our costs may increase and our business may be harmed.

We do not know whether any clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Our product development costs will increase if we experience delays in clinical testing. Significant clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, which would impair our ability to successfully commercialize our product candidates and may harm our business, results of operations and prospects. Events which may result in a delay or unsuccessful completion of clinical development include:

- delays in reaching an agreement with or failure in obtaining authorization from the FDA, other regulatory authorities and institutional review boards, or IRBs;
- imposition of a clinical hold following an inspection of our clinical trial operations or trial sites by the FDA or other regulatory authorities, or decision by the FDA, other regulatory authorities, IRBs or the company, or recommendation by a data safety monitoring board, to suspend or terminate clinical trials at any time for safety issues or for any other reason;
- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites;
- deviations from the trial protocol by clinical trial sites and investigators, or failing to conduct the trial in accordance with regulatory requirements;
- failure of our third parties, such as CROs, to satisfy their contractual duties or meet expected deadlines;
- delays in the testing, validation, manufacturing and delivery of the product candidates to the clinical sites;

- for clinical trials in selected patient populations, delays in identification and auditing of central or other laboratories and the transfer and validation of assays or tests to be used to identify selected patients;

- delays in having patients complete participation in a trial or return for post-treatment follow-up;

- delays caused by patients dropping out of a trial due to side effects or disease progression;

- withdrawal of clinical trial sites from our clinical trials as a result of changing standards of care or the ineligibility of a site to participate in our clinical trials; or

- changes in government regulations or administrative actions or lack of adequate funding to continue the clinical trials.

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Any inability of us or our partners to timely complete clinical development could result in additional costs to us or impair our ability to generate product revenues or development, regulatory, commercialization and sales milestone payments and royalties on product sales.

If we are or our partners are unable to timely enroll patients in clinical trials, we will be unable to complete these trials on a timely basis.

The timely completion of clinical trials largely depends on the rate of patient enrollment. Many factors affect the rate of patient enrollment, including:

- the size and nature of the patient population;
- the number and location of clinical sites;
- competition with other companies for clinical sites or patients;
- the eligibility and exclusion criteria for the trial;
- the design of the clinical trial;
- inability to obtain and maintain patient consents;
- risk that enrolled subjects will drop out before completion; and
- competing clinical trials and clinicians and patients perceptions as to the potential advantages of the drug being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating.

There is significant competition for recruiting cancer and rheumatoid arthritis patients in clinical trials, and we or our partners may be unable to timely enroll the patients we need to complete clinical trials on a timely basis or at all.

We may not successfully identify, test, develop or commercialize potential product candidates.

The success of our business depends primarily upon our ability to identify and validate new protein therapeutic targets, including through the use of our discovery platform, and identify, test, develop and commercialize protein therapeutics, which we may develop ourselves or in-license from others. Our research efforts may initially show promise in discovering potential new protein therapeutic targets or candidates, yet fail to yield product candidates for clinical development for a number of reasons, including because:

- our research methodology, including our screening technology, may not successfully identify medically relevant protein therapeutic targets or potential product candidates;
- we tend to identify and select from our discovery platform novel, untested targets in the particular disease indication we are pursuing, which may be challenging to validate because of the novelty of the target or we may fail to validate at all after further research work;

- we may need to rely on third parties to generate antibody candidates for our product candidate programs;
- we may encounter product manufacturing difficulties that limit yield or produce undesirable characteristics that increase the cost of goods, cause delays or make the product candidates unmarketable;
- our product candidates may cause adverse effects in patients or subjects, even after successful initial toxicology studies, which may make the product candidates unmarketable;
- our product candidates may not demonstrate a meaningful benefit to patients or subjects; and
- our collaboration partners may change their development profiles or plans for potential product candidates or abandon a therapeutic area or the development of a partnered product.

If any of these events occur, we may be forced to abandon our development efforts for a program or programs, which would have a material adverse effect on our business, operating results and prospects and could potentially cause us to cease operations. Research programs to identify new product targets and candidates require substantial technical, financial and human resources. We may focus our efforts and resources on potential discovery efforts, programs or product candidates that ultimately prove to be unsuccessful.

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

The process of manufacturing our products is complex and subject to several risks, including:

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

- the manufacturing facilities in which our products are made could be adversely affected by equipment failures, labor and raw material shortages, natural disasters, power failures and numerous other factors; and

- any adverse developments affecting manufacturing operations for our products may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls, or other interruptions in the supply of our products. We may also have to take inventory write-offs and incur other charges and expenses for products that fail to meet specifications, undertake costly remediation efforts or seek more costly manufacturing alternatives.

Certain raw materials necessary for the manufacture of our FPA008 and FPA144 products under our current manufacturing process, such as growth media, resins and filters, are available from a single supplier. We do not have agreements in place that guarantee our supply or the price of these raw materials. Any significant delay in the acquisition or decrease in the availability of these raw materials could considerably delay the manufacture of our product candidates, which could adversely impact the timing of any planned trials or the regulatory approval of that product candidate.

We depend on third-party manufacturers for the manufacture of drug substance and drug product for clinical trials as well as on third parties for our supply chain. Any problems we experience with any of these third parties could delay the manufacturing of our product candidates, which could harm our results of operations.

We have process development and small-scale manufacturing capabilities. We do not have and we do not currently plan to acquire or develop the facilities or capabilities to manufacture bulk drug substance or filled drug product for use in human clinical trials or commercialization.

GSK-HGS is responsible for the manufacturing of FP-1039 for GSK-HGS s use in clinical trials. Under our license and collaboration agreement with GSK-HGS, we have the right to require GSK-HGS to manufacture and supply us with FP-1039 bulk drug substance and filled FP-1039 drug product. We have contracted with third parties for the manufacture of FPA008 bulk drug substance and drug product and labeling and distribution of FPA008 drug product and placebo for our Phase 1 clinical trial of FPA008. We have not yet contracted with a third party for the manufacture of FPA144 bulk drug substance or for the filling, labeling and distribution of FPA144 drug product for clinical trials. We have identified and negotiated with several third-party manufacturers with facilities and capabilities necessary to manufacture FPA144 bulk drug substance.

We have not contracted with alternate suppliers in the event the current organizations we utilize are unable to scale production, or if otherwise we experience any problems with them. If we are unable to arrange for alternative third-party manufacturing sources, or to do so on commercially reasonable terms or in a timely manner, we may be delayed in the development of our product candidates.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured product candidates or products ourselves, including reliance on the third party for regulatory compliance and quality assurance, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control (including a failure to manufacture our product candidates or any products we may eventually commercialize in accordance with our specifications) and the possibility of termination or nonrenewal of the agreement by the third party, based on its own business priorities, at a time that is costly or damaging to us.

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The regulatory approval processes of the FDA and comparable foreign regulatory authorities are lengthy, time-consuming and inherently unpredictable. Our inability to obtain regulatory approval for our product candidates would substantially harm our business.

The time required to obtain approval by the FDA and comparable foreign regulatory authorities is unpredictable but typically takes many years following the commencement of preclinical studies and clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate s clinical development and may vary among jurisdictions. We have not obtained regulatory approval for any product candidate and it is possible that none of our existing product candidates or any future product candidates will ever obtain regulatory approval.

Our product candidates could fail to receive regulatory approval from the FDA or a comparable foreign regulatory authority for many reasons, including:

- disagreement with the design or implementation of our clinical trials;
- failure to demonstrate that a product candidate is safe and effective for its proposed indication;
- failure of clinical trials to meet the level of statistical significance required for approval;
- failure to demonstrate that a product candidate s clinical and other benefits outweigh its safety risks;
- disagreement with our interpretation of data from preclinical studies or clinical trials;
- the insufficiency of data collected from clinical trials of our product candidates to support the submission and filing of a Biologic License Application or other submission or to obtain regulatory approval;
- failure to obtain approval of the manufacturing processes or facilities of third-party manufacturers with whom we contract for clinical and commercial supplies; or
- changes in the approval policies or regulations that render our preclinical and clinical data insufficient for approval.

The FDA or a comparable foreign regulatory authority may require more information, including additional preclinical or clinical data to support approval, which may delay or prevent approval and our commercialization plans, or we may decide to abandon the development program. If we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate.

Our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following any marketing approval.

Undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign regulatory authority. Results of our trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. In such an event, we could suspend or terminate our trials or the FDA or comparable foreign regulatory authorities could order us to cease clinical trials or deny approval of our product candidates for any or all targeted indications. Drug-related side effects could affect patient recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial

condition and prospects significantly.

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

- we may suspend marketing of, or withdraw or recall, such product;
- regulatory authorities may withdraw approvals of such product;
- regulatory authorities may require additional warnings on the label;

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- the FDA or other regulatory bodies may issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings about such product;

- the FDA may require the establishment or modification of REMS or a comparable foreign regulatory authority may require the establishment or modification of a similar strategy that may, for instance, restrict distribution of our products and impose burdensome implementation requirements on us;

- regulatory authorities may require that we conduct post-marketing studies;

- we could be sued and held liable for harm caused to subjects or patients; and

- our reputation may suffer.

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

If we are unable to successfully develop companion diagnostics for our therapeutic product candidates, or experience significant delays in doing so, we may not achieve marketing approval or realize the full commercial potential of our therapeutic product candidates.

We and certain of our partners plan to develop companion diagnostics for our therapeutic product candidates. We expect that, at least in some cases, the FDA and comparable foreign regulatory authorities may require the development and regulatory approval of a companion diagnostic as a condition to approving our therapeutic product candidates. We do not have experience or capabilities in developing or commercializing diagnostics and plan to rely in large part on third parties to perform these functions. We do not currently have any agreement in place with any third party to develop or commercialize companion diagnostics for any of our therapeutic product candidates.

Companion diagnostics are subject to regulation by the FDA and comparable foreign regulatory authorities as medical devices and may require separate regulatory approval prior to commercialization.

If we or our partners, or any third parties that either of us engage to assist us, are unable to successfully develop companion diagnostics for our therapeutic product candidates, or experience delays in doing so:

- the development of our therapeutic product candidates may be adversely affected if we are unable to appropriately select patients for enrollment in our clinical trials;

- our therapeutic product candidates may not receive marketing approval if their safe and effective use depends on a companion diagnostic; and

- we may not realize the full commercial potential of any therapeutic product candidates that receive marketing approval if, among other reasons, we are unable to appropriately identify patients with the specific genetic alterations targeted by our therapeutic product candidates.

If any of these events were to occur, our business would be harmed, possibly materially.

Even if our product candidates receive regulatory approval, they may still face future development and regulatory difficulties.

Even if we obtain regulatory approval for a product candidate, it would be subject to ongoing requirements by the FDA and comparable foreign regulatory authorities governing the manufacture, quality control, further development, labeling, packaging, storage, distribution, safety

surveillance, import, export, advertising, promotion, recordkeeping and reporting of safety and other post-market information. The FDA and comparable foreign regulatory authorities will continue to closely monitor the safety profile of any product even after approval. If the FDA or comparable foreign regulatory authorities become aware of new safety information after approval of any of our product candidates, they may require labeling changes or establishment of a REMS or similar strategy, impose significant restrictions on a product s indicated uses or marketing, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance.

In addition, manufacturers of drug products and their facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with current Good Manufacturing Practices, or cGMP, regulations and standards. If we or a regulatory agency discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the

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product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. If we, our product candidates or the manufacturing facilities for our product candidates fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue warning letters or untitled letters;
- mandate modifications to promotional materials or require us to provide corrective information to healthcare practitioners;
- require us to enter into a consent decree, which can include imposition of various fines, reimbursements for inspection costs, required due dates for specific actions and penalties for noncompliance;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical studies;
- refuse to approve pending applications or supplements to 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 products, or require us to initiate a product recall.

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

Advertising and promotion of any product candidate that obtains approval in the United States will be heavily scrutinized by the FDA, the Department of Justice, the Department of Health and Human Services Office of Inspector General, state attorneys general, members of Congress and the public. Violations, including promotion of our products for unapproved (or off-label) uses, are subject to enforcement letters, inquiries and investigations, and civil and criminal sanctions by the government. Additionally, comparable foreign regulatory authorities will heavily scrutinize advertising and promotion of any product candidate that obtains approval outside of the United States.

In the United States, engaging in the impermissible promotion of our products for off-label uses can also subject us to false claims litigation under federal and state statutes, which can lead to civil and criminal penalties and fines and agreements that materially restrict the manner in which a company promotes or distributes drug products. These false claims statutes include the federal False Claims Act, which allows any individual to bring a lawsuit against a pharmaceutical company on behalf of the federal government alleging submission of false or fraudulent claims, or causing to present such false or fraudulent claims, for payment by a federal program such as Medicare or Medicaid. If the government prevails in the lawsuit, the individual will share in any fines or settlement funds. Since 2004, these False Claims Act lawsuits against pharmaceutical companies have increased significantly in volume and breadth, leading to several substantial civil and criminal settlements regarding certain sales practices promoting off-label drug uses involving fines in excess of $1.0 billion. This growth in litigation has increased the risk that a pharmaceutical company will have to defend a false claim action, pay settlement fines or restitution, agree to comply with burdensome reporting and compliance obligations, and be excluded from Medicare, Medicaid and other federal and state healthcare programs. If we do not lawfully promote our approved products, we may become subject to such litigation and, if we do not successfully defend against such actions, those actions may have a material adverse effect on our business, financial condition and results of operations.

The FDA s policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

Our failure to obtain regulatory approval in international jurisdictions would prevent us from marketing our product candidates outside the United States.

In order to market and sell our products in other jurisdictions, we must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can

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involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, we must secure product reimbursement approvals before regulatory authorities will approve the product for sale in that country. Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. Further, clinical trials conducted in one country may not be accepted by regulatory authorities in other countries and regulatory approval in one country does not ensure approval in any other country, while a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory approval process in others. Also, regulatory approval for any of our product candidates may be withdrawn. If we fail to comply with the regulatory requirements in international markets and receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed and our business will be adversely affected. We may not obtain foreign regulatory approvals on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions. Approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. Our failure to obtain approval of any of our product candidates by regulatory authorities in another country may significantly diminish the commercial prospects of that product candidate and our business prospects could decline.

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than us.

The biotechnology industry is intensely competitive and subject to rapid and significant technological change. We face competition with respect to our current product candidates and will face competition with respect to any future product candidates from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. Many of our competitors have significantly greater financial, technical and human resources. Smaller and early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

Our competitors may obtain regulatory approval of their products more rapidly than we may or may obtain patent protection or other intellectual property rights that limit our ability to develop or commercialize our product candidates. Our competitors may also develop drugs that are more effective, more convenient, more widely used and less costly or have a better safety profile than our products and these competitors may also be more successful than us in manufacturing and marketing their products.

Our competitors will also compete with us in recruiting and retaining qualified scientific, management and commercial personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Although there are no approved therapies that specifically target the signaling pathways our product candidates are designed to modulate or inhibit, there are numerous currently approved therapies for treating the same diseases or indications for which our product candidates may be useful and many of these currently approved therapies act through mechanisms similar to our product candidates. Many of these approved drugs are well-established therapies or products and are widely accepted by physicians, patients and third-party payors. Some of these drugs are branded and subject to patent protection, and others are available on a generic basis. Insurers and other third-party payors may also encourage the use of generic products or specific branded products. We expect that if our product candidates are approved, they will be priced at a significant premium over competitive generic, including branded generic, products. This may make it difficult for us to differentiate our products from currently approved therapies, which may adversely impact our business strategy. In addition, many companies are developing new therapeutics, and we cannot predict what the standard of care will be as our product candidates progress through clinical development.

If FP-1039, our lead product candidate, were approved for the treatment of squamous non-small cell lung cancer, it could face competition from currently approved and marketed products, including carboplatin, cisplatin, paclitaxel, docetaxel, gemcitabine and *Tarceva*® (erlotinib). Further competition could arise from products currently in development, including several small molecules that act in the same pathway as FP-1039, including Novartis AG s BGJ-398, AstraZeneca plc s AZD-4547, Eli Lilly and Company s LY-2874455, ArQule Inc. s ARQ-087, Clovis

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Oncology/Les Laboratoires Servier/EOS S.p.A. s lucitanib and Janssen Pharmaceuticals, Inc. s JNJ-42756493. Some of these programs have been advanced further in clinical development than FP-1039 and could receive approval before FP-1039 is approved, if it is approved at all.

If FPA008 were approved for the treatment of rheumatoid arthritis, it could face competition from currently approved and marketed products, including *Humira*®, *Remicade*® (infliximab) and *Enbrel*® (etanercept). Further competition could arise from products currently in development, including Daiichi Sankyo Co., Ltd./Plexxikon Inc. s PLX5622 product and Janssen s JNJ-40346527, which act in the same pathway as FPA008.

If FPA144 were approved for the treatment of gastric cancer, it could face competition from currently approved and marketed products, including 5-fluorouracil, capecitabine, doxorubicin, cisplatin and docetaxel, all of which are available as generics. Further competition could arise from products currently in development, including AstraZeneca plc s AZD-4547 and Bayer s BAY1179470, an FGFR2 antibody.

We believe that our ability to successfully compete will depend on, among other things:

- the efficacy and safety profile of our product candidates, including relative to marketed products and product candidates in development by third parties;
- the time it takes for our product candidates to complete clinical development and receive marketing approval;
- the ability to commercialize any of our product candidates that receive regulatory approval;
- the price of our products, including in comparison to branded or generic competitors;
- whether coverage and adequate levels of reimbursement are available under private and governmental health insurance plans, including Medicare;
- the ability to establish, maintain and protect intellectual property rights related to our product candidates;
- the ability to manufacture commercial quantities of any of our product candidates that receive regulatory approval; and
- acceptance of any of our product candidates that receive regulatory approval by physicians and other healthcare providers.

Our product candidates may not achieve adequate market acceptance among physicians, patients, healthcare payors and others in the medical community necessary for commercial success.

Even if our product candidates receive regulatory approval, they may not gain adequate market acceptance among physicians, patients, healthcare payors and others in the medical community. Our commercial success also depends on coverage and adequate reimbursement of our product candidates by third-party payors, including government payors, generally, which may be difficult or time-consuming to obtain, may be limited in scope and may not be obtained in all jurisdictions in which we may seek to market our products. The degree of market acceptance of any of our approved product candidates will depend on a number of factors, including:

- the efficacy and safety profile as demonstrated in clinical trials;

- the timing of market introduction of the product candidate as well as competitive products;
- the clinical indications for which the product candidate is approved;
- acceptance of the product candidate as a safe and effective treatment by physicians, clinics and patients;
- the potential and perceived advantages of product candidates over alternative treatments, including any similar generic treatments;
- the cost of treatment in relation to alternative treatments;
- the availability of coverage and adequate reimbursement and pricing by third parties and government authorities;
- relative convenience and ease of administration;
- the frequency and severity of adverse events;
- the effectiveness of sales and marketing efforts; and
- unfavorable publicity relating to the product candidate.

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If any product candidate is approved but does not achieve an adequate level of acceptance by physicians, hospitals, healthcare payors and patients, we may not generate or derive sufficient revenue from that product candidate and may not become or remain profitable.

Even if we commercialize any of our product candidates, these products may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, which could harm our business.

The regulations that govern marketing approvals, pricing and reimbursement for new drug products vary widely from country to country. Current and future legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, which could negatively impact the revenues we generate from the sale of the product in that particular country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates even if our product candidates obtain marketing approval.

Our ability to commercialize any products successfully also will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, determine which medications they will cover and establish reimbursement levels. Government authorities and other 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 medical products. We cannot be sure that coverage and reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may not successfully commercialize any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may only be temporary. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Our inability to promptly obtain coverage and profitable reimbursement rates from both government-funded and private payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

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

The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidate for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or Medicare Modernization Act, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly by establishing Medicare Part D and introduced a new

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reimbursement methodology based on average sales prices for physician-administered drugs under Medicare Part B. In addition, this legislation provided authority for limiting the number of drugs that Medicare will cover in any therapeutic class under the new Medicare Part D program. Cost reduction initiatives and other provisions of this legislation could decrease the coverage and reimbursement rate that we receive for any of our approved products. While the Medicare Modernization Act applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private payors.

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or, collectively, the Affordable Care Act, a law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against healthcare fraud and abuse, add new transparency requirements for healthcare and health insurance industries, impose new taxes and fees on pharmaceutical and medical device manufacturers and impose additional health policy reforms. Among other things, the Affordable Care Act expanded manufacturers rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate for both branded and generic drugs, effective the first quarter of 2010 and revising the definition of average manufacturer price, or AMP, for reporting purposes, which could increase the amount of Medicaid drug rebates manufacturers are required to pay to states. The legislation also extended Medicaid drug rebates, previously due only on fee-for-service utilization, to Medicaid managed care utilization, and created an alternative rebate formula for certain new formulations of certain existing products that is intended to increase the amount of rebates due on those drugs. The Centers for Medicare and Medicaid Services, which administers the Medicaid Drug Rebate Program, also has proposed to expand Medicaid drug rebates to the utilization that occurs in the U.S. territories, such as Puerto Rico and the Virgin Islands. Also effective in 2010, the Affordable Care Act expanded the types of entities eligible to receive discounted 340B pricing, although, with the exception of children s hospitals, these newly eligible entities will not be eligible to receive discounted 340B pricing on orphan drugs. In addition, because 340B pricing is determined based on AMP and Medicaid drug rebate data, the revisions to the Medicaid rebate formula and AMP definition described above could cause the required 340B discounts to increase. Furthermore, as of 2011, the new law imposes a significant annual fee on companies that manufacture or import branded prescription drug products and requires manufacturers to provide a 50% discount off the negotiated price of prescriptions filled by beneficiaries in the Medicare Part D coverage gap, referred to as the donut hole. Substantial new provisions affecting compliance have also been enacted, which may affect our business practices with healthcare practitioners. Notably, a significant number of provisions are not yet, or have only recently become, effective. Although it is too early to determine the full effect of the Affordable Care Act, the new law appears likely to continue the downward pressure on pharmaceutical pricing, especially under the Medicare program, and may also increase our regulatory burdens and operating costs.

In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. For example, in August 2011, the President signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee on Deficit Reduction did not achieve a targeted deficit reduction of at least $1.2 trillion for fiscal years 2012 through 2021, triggering the legislation s automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013.

We expect that the Affordable Care Act, as well as other healthcare reform measures that have and may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product, and could seriously harm our future revenues. 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 products.

Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that we may develop.

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. Product

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liability claims may be brought against us by subjects enrolled in our clinical trials, patients, healthcare providers or others using, administering or selling our products. If we cannot successfully defend ourselves against claims that our product candidates or products that we may develop caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we may develop;
- termination of clinical trial sites or entire trial programs;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial subjects or patients;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize any products that we may develop.

We currently hold $10 million in clinical trial liability insurance coverage, which may not adequately cover all liabilities that we may incur. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. We intend to expand our insurance coverage for products to include the sale of commercial products if we obtain marketing approval for our product candidates in development, but we may be unable to obtain commercially reasonable product liability insurance for any products approved for marketing. Large judgments have been awarded in class action lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims brought against us, particularly if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business.

Our relationships with customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse, transparency and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the federal Anti-Kickback Statute prohibits persons from, among other things, 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, the referral of an individual

for the furnishing or arranging for the furnishing, or the purchase, lease or order, or arranging for or recommending purchase, lease or order, any good or service for which payment may be made under a federal healthcare program such as Medicare and Medicaid;

- the federal False Claims Act 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, or HIPAA, imposes criminal liability for knowingly and willfully executing a scheme to defraud any healthcare benefit program, knowingly and willfully embezzling or stealing from a health care benefit program, willfully obstructing a criminal investigation of a health care offense, or knowingly and willfully making false statements relating to healthcare matters;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 and its implementing regulations, also imposes obligations on certain covered entity health care providers, health plans, and health care clearinghouses as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

- the federal Open Payments program, created under Section 6002 of the Affordable Care Act and its implementing regulations, 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 U.S. Department of Health and Human Services 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 applicable manufacturers and applicable group purchasing organizations to report annually to the U.S. Department of Health and Human Services ownership and investment interests held by physicians (as defined above) and their immediate family members; and

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

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found not to be in compliance with applicable laws, that person or entity may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

We must attract and retain highly skilled employees in order to succeed.

To succeed, we must recruit, retain, manage and motivate qualified clinical, scientific, technical and management personnel and we face significant competition for experienced personnel. If we do not succeed in attracting and retaining qualified personnel, particularly at the management level, it could adversely affect our ability to execute our business plan and harm our operating results. In particular, the loss of one or more of our executive officers could be detrimental to us if we cannot recruit suitable replacements in a timely manner. The competition for qualified personnel in the pharmaceutical field is intense and as a result, we may be unable to continue to attract and retain qualified personnel necessary for the development of our business or to recruit suitable replacement personnel.

Many of the other pharmaceutical companies that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do. They also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high-quality candidates than what we have to offer. If we are unable to continue to attract and retain high-quality personnel, the rate and success at which we can discover and develop product candidates and our business will be limited.

Our operations are vulnerable to interruption by fire, earthquake, power loss, telecommunications failure, terrorist activity and other events beyond our control, which could harm our business.

Our facility has been subject to electrical blackouts as a result of a shortage of available electrical power. Future blackouts could disrupt the operations of our facility. Our facility is located in a seismically active region. We have not undertaken a systematic analysis of the potential consequences to our business and financial results from a major earthquake, fire, power loss, terrorist activity or other disasters and do not have a recovery plan for such

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disasters. In addition, we do not carry sufficient insurance to compensate us for actual losses from interruption of our business that may occur, and any losses or damages incurred by us could harm our business. We maintain multiple copies of each of our protein libraries, most of which we maintain at our headquarters. We maintain one copy of each of our protein libraries offsite in Central California. If both facilities were impacted by the same event, we could lose all our protein libraries, which would have a material adverse effect on our ability to perform our obligations under our discovery collaborations and discover new targets.

Risks Related to Our Dependence on Third Parties

We currently depend significantly on GlaxoSmithKline, or GSK, for the development and commercialization of our most advanced product candidate, FP-1039, and GSK s failure to timely develop and/or commercialize FP-1039 would result in a material adverse effect on our business and operating results.

We granted Human Genome Sciences, Inc., which was acquired by GSK, an exclusive license to develop, subject to certain rights retained by us, and commercialize FP-1039 for all companion diagnostic, therapeutic and prophylactic uses for humans in the United States, the European Union and Canada. Our development collaboration with GSK on FP-1039 may not be scientifically, medically or commercially successful due to a number of important factors, including the following:

- FP-1039 may fail to demonstrate sufficient safety or efficacy in clinical trials to support regulatory approval;
- GSK may be unable to successfully develop, test and obtain regulatory approval for a companion diagnostic;
- GSK may be unable to manufacture sufficient quantities of FP-1039 in a cost-effective manner;
- GSK may be unable to obtain regulatory approval to commercialize FP-1039 even if clinical and preclinical testing is successful;
- GSK may not be successful in obtaining sufficient reimbursement for FP-1039;
- the prevalence of the target population we may observe in clinical trials may be lower than what is reported in the literature, which would result in slower enrollment and a smaller potential commercial patient population than what we currently estimate for FP-1039; and
- existing or future products or technologies developed by competitors may be safer, more effective or more conveniently delivered than FP-1039.

In addition, we could be adversely affected by:

- GSK s failure to timely perform its obligations under our collaboration agreement;
- GSK s failure to timely or fully develop or effectively commercialize FP-1039; and
- a material contractual dispute between us and GSK.

Any of the foregoing could adversely impact the likelihood and timing of any milestone payments we are eligible to receive and could result in a material adverse effect on our business, results of operations and prospects and would likely cause our stock price to decline.

GSK can terminate our collaboration agreement under certain conditions and without cause, and in some cases on short notice. GSK could also separately pursue alternative potentially competitive products, therapeutic approaches or technologies as a means of developing treatments for the diseases targeted by FP-1039.

We may not succeed in establishing and maintaining additional development collaborations, which could adversely affect our ability to develop and commercialize product candidates.

In addition to our current FP-1039 development collaboration with GSK, a part of our strategy is to enter into additional product development collaborations in the future, including collaborations with major biotechnology or pharmaceutical companies. We face significant competition in seeking appropriate development partners and the negotiation process is time-consuming and complex. Moreover, we may not succeed in our efforts to establish a development collaboration or other alternative arrangements for any of our other existing or future product candidates and programs because our research and development pipeline may be insufficient, our product candidates and programs may be deemed to be at too early a stage of development for collaborative effort and/or third parties may not view our product candidates and programs as having the requisite potential to demonstrate

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safety and efficacy. Even if we are successful in our efforts to establish new development collaborations, the terms that we agree upon may not be favorable to us and we may not be able to maintain such development collaborations if, for example, development or approval of a product candidate is delayed or sales of an approved product candidate are disappointing. Any delay in entering into new development collaboration 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.

Moreover, if we fail to establish and maintain additional development collaborations related to our product candidates:

- the development of certain of our current or future product candidates may be terminated or delayed;
- our cash expenditures related to development of certain of our current or future product candidates would increase significantly and we may need to seek additional financing;
- we may be required to hire additional employees or otherwise develop expertise, such as sales and marketing expertise, for which we have not budgeted; and
- we will bear all of the risk related to the development of any such product candidates.

We may not succeed in maintaining our current discovery collaborations or establishing and maintaining new discovery collaborations, which would adversely affect our business plans.

Since 2006, we have entered into six discovery collaborations with Boehringer Ingelheim GmbH, or Boehringer, Centocor Research and Development Inc., or Centocor, GSK US, GSK UK, Pfizer Inc., or Pfizer, and UCB, under which we have developed and conducted cell-based and *in vivo* screens using our protein discovery platform. These discovery collaborations have provided us with approximately $105.6 million in non-equity funding through September 30, 2013, and allowed us to be less reliant on equity financing during this period. We currently have ongoing discovery collaborations with GSK US, GSK UK and UCB. As of September 30, 2013, we are eligible to receive up to an additional $13.1 million of research funding and technology access fees through 2016 under these collaborations. While we expect we will receive all of this funding and these fees, if GSK US, GSK UK or UCB terminates any of our discovery collaborations, we may not receive all or any of this $13.1 million, which would adversely affect our business or financial condition. The research obligations under each of our discovery collaborations with Boehringer, Centocor and Pfizer have ended. We have no ongoing performance obligations and do not expect to receive any significant additional payments under these discovery collaborations.

As part of our business strategy, we plan to continue to actively seek out discovery collaboration partners and engage in discussions with pharmaceutical and biotechnology companies regarding potential new discovery collaborations with the goal of entering into one new discovery collaboration per year. We face significant competition in seeking appropriate discovery collaboration partners, including from these partners internal research organizations, and the negotiation process is time-consuming and complex. Our failure to continue to enter into new discovery collaborations may require us to obtain financing earlier or in greater amounts than we currently plan.

We rely on third parties to conduct our clinical trials. The failure of these third parties to successfully carry out their contractual duties or meet expected deadlines, could substantially harm our business because we may not obtain regulatory approval for or commercialize our product candidates in a timely manner or at all.

We rely on third-party CROs to monitor and manage data for our clinical programs. We rely on these parties for execution of our clinical trials, and 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 does not relieve us of our regulatory responsibilities. We and our CROs are required to comply with current Good Clinical Practices, or GCP, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities for all of our products in clinical development. Regulatory authorities enforce these GCP through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs fail to comply with applicable GCP, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory

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authority, such regulatory authority will determine that any of our clinical trials comply with GCP requirements. In addition, we must conduct our clinical trials with product produced under cGMP requirements. Failure to comply with these regulations may require us to repeat preclinical and clinical trials, which would delay the regulatory approval process.

Our CROs are not our employees, and except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our ongoing clinical, nonclinical and preclinical programs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed. To the extent we are unable to successfully identify and manage the performance of third-party service providers in the future, our business may be adversely affected.

Risks Related to Intellectual Property

If we are unable to obtain or protect intellectual property rights, we may not be able to compete effectively in our market.

Our success depends in significant part on our and our licensors , licensees or collaborators ability to establish, maintain and protect patents and other intellectual property rights and operate without infringing the intellectual property rights of others. We have filed numerous patent applications both in the United States and in foreign jurisdictions to obtain patent rights to inventions we have discovered. We have also licensed from third parties rights to patent portfolios. Some of these licenses give us the right to prepare, file and prosecute patent applications and maintain and enforce patents we have licensed, and other licenses may not give us such rights.

The patent prosecution process is expensive and time-consuming, and we and our current or future licensors, licensees or collaborators may not be able to prepare, file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we or our licensors, licensees or collaborators will fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Moreover, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from or license to third parties and are reliant on our licensors, licensees or collaborators. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. If our current or future licensors, licensees or collaborators fail to establish, maintain or protect such patents and other intellectual property rights, such rights may be reduced or eliminated. If our licensors, licensees or collaborators are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our and our current or future licensors , licensees or collaborators patent rights are highly uncertain. Our and our licensors , licensees or collaborators pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. The patent examination process may require us or our licensors, licensees or collaborators to narrow the scope of the claims of our or our licensors , licensees or collaborators pending and future patent applications, which may limit the scope of patent protection that may be obtained. Our and our licensors , licensees or collaborators patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications, and then only to the extent the issued claims cover the technology.

Furthermore, 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 owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from

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commercializing products similar or identical to ours. We expect to seek extensions of patent terms where these are available in any countries where we are prosecuting patents. This includes in the United States under the Drug Price Competition and Patent Term Restoration Act of 1984, which permits a patent term extension of up to five years beyond the expiration of the patent. However the applicable authorities, including the FDA in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case.

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

Filing, prosecuting, enforcing and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our or our licensors or collaborators 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 and our licensors or collaborators may not be able to prevent third parties from practicing our and our licensors or collaborators inventions in all countries outside the United States, or from selling or importing products made using our and our licensors or collaborators inventions in and into the United States or other jurisdictions. Competitors may use our and our licensors or collaborators 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 and our licensors or collaborators 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 and our licensors or collaborators patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

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

The requirements for patentability may differ in certain countries, particularly developing countries. For example, unlike other countries, China has a heightened requirement for patentability, and specifically requires a detailed description of medical uses of a claimed drug. In India, unlike the United States, there is no link between regulatory approval of a drug and its patent status. Furthermore, generic or biosimilar drug manufacturers or other competitors may challenge the scope, validity or enforceability of our or our licensors or collaborators patents, requiring us or our licensors or collaborators to engage in complex, lengthy and costly litigation or other proceedings. Generic or biosimilar drug manufacturers may develop, seek approval for, and launch biosimilar versions of our products. In addition to India, certain countries in Europe and developing countries, including China, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we and our licensors or collaborators may have limited remedies if patents are infringed or if we or our licensors or collaborators are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our and our licensors or collaborators efforts to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license.

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Changes in 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 biotechnology and pharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve technological and legal complexity, and obtaining and enforcing biopharmaceutical patents is costly, time-consuming, and inherently uncertain. 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 and our licensors or collaborators 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 U.S. Patent and Trademark Office, or USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our and our licensors or collaborators ability to obtain new patents or to enforce existing patents and patents we and our licensors or collaborators may obtain in the future.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our and our licensors or collaborators patent applications and the enforcement or defense of our or our licensors or collaborators issued patents. On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted and may also affect patent litigation. The USPTO recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our or our licensors or collaborators patent applications and the enforcement or defense of our or our licensors or collaborators issued patents, all of which could have a material adverse effect on our business and financial condition.

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

Periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors or collaborators fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market, which would have a material adverse effect on our business.

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

Third parties may infringe our or our licensors or collaborators patents or misappropriate or otherwise violate our or our licensors or collaborators intellectual property rights. In the future, we or our licensors or collaborators may initiate legal proceedings to enforce or defend our or our licensors or collaborators intellectual property rights, to protect our or our licensors or collaborators trade secrets or to determine the validity or scope of intellectual property rights we own or control. Also, third parties may initiate legal proceedings against us or our licensors or collaborators to challenge the validity or scope of intellectual property rights we own or control. The proceedings can be expensive and time-consuming and many of our or our licensors or collaborators adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than we or our licensors or collaborators can. Accordingly, despite our or our licensors or collaborators efforts, we or our licensors or collaborators may not prevent third parties from infringing upon or misappropriating intellectual property

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rights we own or control, particularly in countries where the laws may not protect those rights as fully as in the United States. Litigation could result in substantial costs and diversion of management resources, which could harm our business and financial results. In addition, in an infringement proceeding, a court may decide that a patent owned by or licensed to us is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our or our licensors or collaborators patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of our or our licensors or collaborators patents at risk of being invalidated, held unenforceable or interpreted narrowly.

Third-party preissuance submission of prior art to the USPTO, or opposition, derivation, reexamination, *inter partes* review or interference proceedings, or other preissuance or post-grant proceedings in the United States or other jurisdictions provoked by third parties or brought by us or our licensors or collaborators may be necessary to determine the priority of inventions with respect to our or our licensors or collaborators patents or patent applications. An unfavorable outcome could require us or our licensors or collaborators to cease using the related technology and commercializing our product candidates, 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 or our licensors or collaborators a license on commercially reasonable terms or at all. Even if we or our licensors or collaborators obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us or our licensors or collaborators. In addition, if the breadth or strength of protection provided by our or our licensors or collaborators patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates. Even if we successfully defend such litigation or proceeding, we may incur substantial costs and it may distract our management and other employees. We could be found liable for monetary damages, including treble damages and attorneys fees if we are found to have willfully infringed a patent.

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 shares of our common stock.

If we breach the agreements under which third parties have licensed intellectual property rights to us, we could lose the ability to use certain of our technologies or continue the development and commercialization of our product candidates.

Our commercial success depends upon our ability, and the ability of our licensors and collaborators, to discover and validate protein therapeutic targets and identify, test, develop, manufacture, market and sell product candidates and use our and our licensors or collaborators proprietary technologies without infringing the proprietary rights of third parties. A third party may hold intellectual property, including patent rights, that are important or necessary to the use of our technologies or development or commercialization of our products. As a result, we are a party to a number of technology licenses that are important to our business and expect to enter into additional licenses in the future. For example, we have entered into a non-exclusive license with BioWa, Inc. and Lonza Sales AG to use their Potelligent® CHOK1SV technology, which is necessary to produce our FPA144 antibody, and non-exclusive licenses with each of the National Research Council of Canada and the Board of Trustees of the Leland Stanford Junior University to use materials and technologies that we use in the production of our protein library. If we fail to comply with the obligations under these agreements, including payment and diligence terms, our licensors may have the right to terminate these agreements, in which event we may not be able to develop, manufacture, market or sell any product that is covered by these agreements or may face other penalties under the agreements. Such an occurrence could materially adversely affect the value of the product candidate being developed under any such agreement. Termination of these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or reinstated agreements, which may not be available to us on equally favorable terms, or at all, or cause us to lose our rights under these agreements, including our rights to intellectual property or technology important to our development programs.

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Third parties may initiate legal proceedings against us alleging that we infringe their intellectual property rights or we may initiate legal proceedings against third parties to challenge the validity or scope of intellectual property rights controlled by third parties, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Third parties may initiate legal proceedings against us or our licensors or collaborators alleging that we or our licensors or collaborators infringe their intellectual property rights or we or our licensors or collaborators may initiate legal proceedings against third parties to challenge the validity or scope of intellectual property rights controlled by third parties, including in oppositions, interferences, reexaminations, *inter partes* reviews or derivation proceedings before the United States or other jurisdictions. These proceedings can be expensive and time-consuming and many of our or our licensors or collaborators adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than we or our licensors or collaborators can.

An unfavorable outcome could require us or our licensors or collaborators to cease using the related technology or developing or commercializing our product candidates, 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 or our licensors or collaborators a license on commercially reasonable terms or at all. Even if we or our licensors or collaborators obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us or our licensors or collaborators. In addition, we could be found liable for monetary damages, including treble damages and attorneys fees, if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business.

In May 2011, the European Patent Office, or the EPO, granted European Patent No. 2092069, or the 069 patent, to Aventis Pharma S.A., or Aventis. The 069 patent claimed soluble fibroblast growth factor receptor Fc fusion proteins having certain levels of glycosylation, some of which claims could have been relevant to our FP-1039 product candidate. In February 2012, we filed an opposition to the 069 patent. In March 2013, we attended oral proceedings before the Opposition Division of the EPO and presented our arguments regarding our opposition to the 069 patent. In April 2013, the Opposition Division of the EPO published an Interlocutory Decision regarding the outcome of the oral proceedings. In the Interlocutory Decision the EPO maintained certain claims of the 069 patent covering FGFR2 fusion proteins, but not FGFR1 fusion proteins such as FP-1039. We and Aventis had the right until June 18, 2013, to appeal the Opposition Division s April 2013 decision, however, neither we nor Aventis appealed this decision and this proceeding has concluded. Aventis has pursued claims in other countries that are similar to those originally granted by the EPO in the 069 patent and we may need to initiate similar opposition or other legal proceedings in other jurisdictions with respect to patents that may issue with similar scope of claims as those originally granted in the 069 patent. If we unsuccessfully oppose Aventis similar patents in a country, we could be required to obtain a license from Aventis to continue developing and commercializing FP-1039 in that country.

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

Many of our employees, including our senior management, were previously employed at universities or at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Some of these employees executed proprietary rights, non-disclosure and non-competition agreements in connection with such previous employment. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed confidential information or intellectual property, including trade secrets or other proprietary information, of any such employee s former employer. Litigation may be necessary to defend against these claims.

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or sustain damages. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products. Such a license may not be available on commercially reasonable terms or at all. Even if we successfully prosecute or defend against such claims, litigation could result in substantial costs and distract management.

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Our inability to protect our confidential information and trade secrets would harm our business and competitive position.

In addition to seeking patents for some of our technology and products, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, 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 both within and outside the United States may be less willing or unwilling to protect trade secrets. If a competitor lawfully obtained or independently developed any of our trade secrets, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position.

Risks Related to this Offering and Ownership of Our Common Stock

The market price of our stock may be volatile.

The trading price of our common stock has been and is likely to continue to be volatile. Since shares of our common stock were sold in our initial public offering in September 2013, our closing stock price as reported on The NASDAQ Global Market and The NASDAQ Global Select Market has ranged from $8.49 to $19.74, through January 21, 2014. The following factors, in addition to other risk factors described in this section and elsewhere in this prospectus, may have a significant impact on the market price of our common stock:

- the success of competitive products or technologies;
- regulatory actions with respect to our products or our competitors products;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements by us or our competitors of significant acquisitions, strategic collaborations, joint ventures, collaborations or capital commitments;
- results of clinical trials of our product candidates or those of our competitors;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- the results of our efforts to in-license or acquire additional product candidates or products;

- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or our other stockholders;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors; and
- general economic, industry and market conditions.

In addition, the stock market in general, and The NASDAQ Global Select Market and biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. The realization of any

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of the above risks or any of a broad range of other risks, including those described in this Risk Factors section, could have a dramatic and material adverse impact on the market price of our common stock.

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

Our management will have broad discretion in the application of the net proceeds from this offering, and you will be relying on the judgment of our management regarding the application of these proceeds. You will not have the opportunity, as part of your investment decision, to assess whether we are using the proceeds appropriately. Our management might not apply our net proceeds in ways that ultimately increase the value of your investment. 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.

We may be subject to securities litigation, which is expensive and could divert management attention.

The market price of our common stock may be volatile, and in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management s attention from other business concerns, which could seriously harm our business.

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

As of December 31, 2013, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates beneficially own approximately 57.6% of our common stock and, upon completion of this offering that same group will, in the aggregate, beneficially own approximately % of our common stock. This significant concentration of share ownership may adversely affect the trading price of our common stock because investors often perceive disadvantages in owning stock in companies with controlling stockholders. As a result, these stockholders, acting together, could significantly influence all matters requiring approval by our stockholders, including the election of directors and the approval of mergers or other business combination transactions. The interests of these stockholders may not always coincide with our interests or the interests of other stockholders.

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and will be able to avail ourselves of reduced disclosure requirements applicable to emerging growth companies, which could make our common stock less attractive to investors and adversely affect the market price of our common stock.

For so long as we remain an emerging growth company as defined in the JOBS Act, we may take advantage of certain exemptions from various requirements applicable to public companies that are not emerging growth companies including:

- the provisions of Section 404(b) of the Sarbanes-Oxley Act of 2002 requiring that our independent registered public accounting firm provide an attestation report on the effectiveness of our internal control over financial reporting;
- the say on pay provisions (requiring a non-binding shareholder vote to approve compensation of certain executive officers) and the say on golden parachute provisions (requiring a non-binding shareholder vote to approve golden parachute arrangements for certain executive officers in connection with mergers and certain other business combinations) of the Dodd-Frank Act and some of the disclosure requirements of the Dodd-Frank Act relating to compensation of our chief executive officer;
- the requirement to provide detailed compensation discussion and analysis in proxy statements and reports filed under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and instead provide a reduced level of disclosure concerning executive compensation; and
- any rules that the Public Company Accounting Oversight Board may adopt requiring mandatory audit firm rotation or a supplement to the auditor s report on the financial statements.

We may take advantage of these exemptions until we are no longer an emerging growth company. We would cease to be an emerging growth company upon the earliest of: (i) the first fiscal year following the fifth anniversary of our initial public offering; (ii) the first fiscal year after our annual gross revenues are $1 billion or more; (iii) the date on which we have, during the previous three-year period, issued more than $1 billion in non-convertible debt securities; or (iv) as of the end of any fiscal year in which the market value of our common stock held by non-affiliates exceeded $700 million as of the end of the second quarter of that fiscal year.

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Although we are still evaluating the JOBS Act, we currently intend to take advantage of some, but not all, of the reduced regulatory and reporting requirements that will be available to us so long as we qualify as an emerging growth company. For example, we have irrevocably elected not to take advantage of the extension of time to comply with new or revised financial accounting standards available under Section 102(b) of the JOBS Act. Our independent registered public accounting firm will not be required to provide an attestation report on the effectiveness of our internal control over financial reporting so long as we qualify as an emerging growth company, which may increase the risk that material weaknesses or significant deficiencies in our internal control over financial reporting go undetected. Likewise, so long as we qualify as an emerging growth company, we may elect not to provide you with certain information, including certain financial information and certain information regarding compensation of our executive officers, that we would otherwise have been required to provide in filings we make with the Securities and Exchange Commission, or SEC, which may make it more difficult for investors and securities analysts to evaluate our company. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile and may decline.

We are incurring increased costs as a result of operating as a public company, and our management will devote substantial time to new compliance initiatives.

As a public company, we incur significant legal, accounting and other expenses, and these expenses may increase even more after we are no longer an emerging growth company. We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Protection Act, as well as rules adopted, and to be adopted, by the SEC and The NASDAQ Global Select Market. Our management and other personnel devote a substantial amount of time to these compliance initiatives. Moreover, we expect these rules and regulations to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. The increased costs will increase our net loss. 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 sufficient coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

Sales of a substantial number of shares of our common stock in the public market by our existing stockholders 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 depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock. All of our directors and officers and certain holders of common stock are subject to lock-up agreements with the underwriters of this offering that restrict the stockholders ability to transfer shares of our common stock for at least 90 days from the date of this prospectus. Subject to limitations, approximately shares will become eligible for sale upon expiration of the lockup period, as calculated and described in more detail in the section entitled Shares Eligible for Future Sale. In addition, shares issued or issuable upon exercise of options and warrants vested as of the expiration of the lock-up period will be eligible for sale at that time. Sales of stock by these stockholders could have a material adverse effect on the trading price of our common stock. Holders of an aggregate of 9,931,463 shares of our common stock are entitled to rights with respect to the registration of their shares under the Securities Act of 1933, as amended, or the Securities Act, subject to the lock-up arrangement described above. 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 our affiliates as defined in Rule 144 of the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

We are subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures

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or internal controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would benefit our stockholders and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders, or remove our current management. These provisions include:

- authorizing the issuance of blank check preferred stock, the terms of which we may establish and shares of which we may issue without stockholder approval;
- prohibiting cumulative voting in the election of directors, which would otherwise allow for less than a majority of stockholders to elect director candidates;
- prohibiting stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;
- eliminating the ability of stockholders to call a special meeting of stockholders; and
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, who are responsible for appointing the members of our management. Because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, or the DGCL, which may discourage, delay or prevent someone from acquiring us or merging with us whether or not it is desired by or beneficial to our stockholders. Under the DGCL, 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 things, the board of directors has approved the transaction. Any provision of our amended and restated certificate of incorporation or amended and restated bylaws or Delaware law that has the effect of delaying or deterring a change of control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

AND INDUSTRY DATA

Some of the statements made under Prospectus Summary, Risk Factors, Use of Proceeds, Management s Discussion and Analysis of Financial Condition and Results of Operations, Business and elsewhere in this prospectus constitute forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as may, will, should, expects, plans, anticipates, believes, estimates, pre intends or continue, or the negative of these terms or other comparable terminology.

Forward-looking statements include, but are not limited to, statements about:

- our estimates regarding our expenses, future revenues, anticipated capital requirements and our needs for additional financing;
- our or our partners ability to advance drug candidates into, and successfully complete, clinical trials alone or in combination with other drugs;
- the frequency of *FGFR1* gene amplification in various patient populations;
- the timing of the initiation, progress and results of preclinical studies and research and development programs;
- our expectations regarding the potential safety, efficacy or clinical utility of our product candidates;
- the implementation, timing and likelihood of success of our plans to develop companion diagnostics for our product candidates;
- our ability to maintain and establish collaborations;
- the implementation of our business model, strategic plans for our business, drug candidates and technology;
- the scope of protection we establish and maintain for intellectual property rights covering our drug candidates and technology;
- the size of patient populations targeted by products we or our partners develop and market adoption of our potential products by physicians and patients;
- the timing or likelihood of regulatory filings and approvals;
- developments relating to our competitors and our industry; and
- our expectations regarding licensing, acquisitions and strategic operations.

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

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

We obtained the industry, market and competitive position data in this prospectus from our own internal estimates and research as well as from industry and general publications and research surveys and studies conducted by third parties. While we believe that each of these studies and publications is reliable, we have not independently verified market and industry data from third-party sources. While we believe our internal company research is reliable and the market definitions we use are appropriate, neither such research nor these definitions have been verified by any independent source.

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USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of the common stock that we are offering will be approximately $ million, assuming a public offering price of $ per share, the last reported sale price of our common stock on , 2014, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

We currently plan to use the proceeds from this offering to fund additional research and development activities for our FPA008 program, completion of our planned Phase 1 clinical trial of FPA144, expansion of our cancer immunotherapy research efforts and for working capital and general corporate purposes.

The expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures depend on numerous factors, including the progress of our preclinical development efforts, the ongoing status of and results from our clinical trials and other studies and any unforeseen cash needs. As a result, our management will have broad discretion in applying the net proceeds from this offering. Although we may use a portion of the net proceeds from this offering for the acquisition or licensing, as the case may be, of product candidates, technologies, compounds, other assets or complementary businesses, we have no current understandings, agreements or commitments to do so. Pending these uses, we intend to invest the net proceeds from this offering in interest-bearing, investment-grade securities.

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MARKET PRICE OF COMMON STOCK

Our common stock has been listed on The NASDAQ Global Market under the symbol FPRX since September 18, 2013 and on The NASDAQ Global Select Market under the same symbol since January 2, 2014. Prior to September 18, 2013, there was no public trading market for our common stock. The following table sets forth for the periods indicated the high and low sales prices per share of our common stock as reported on The NASDAQ Global Market or The NASDAQ Global Select Market:

	HIGH	LOW
Year Ended December 31, 2013:		
Third Quarter (from September 18, 2013)	$ 16.00	$ 12.80
Fourth Quarter	$ 17.75	$ 8.02
Year Ended December 31, 2014:		
First Quarter (through January 21, 2014)	$ 21.68	$ 14.99

As of December 31, 2013, we had 139 holders of record of our common stock. The actual number of stockholders is greater than this number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business and do not intend to declare or pay any cash dividends in the foreseeable future. As a result, you will likely need to sell your shares of common stock to realize a return on your investment, and you may not be able to sell your shares at or above the price you paid for them. Payment of cash dividends, if any, in the future will be at the discretion of our board of directors and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

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CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of September 30, 2013, on:

- an actual basis;
- an as adjusted basis giving additional effect to the sale of shares of common stock in this offering at an assumed public offering price of $ per share (the last reported sale price of our common stock as reported on The NASDAQ Global Select Market on , 2014), after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The information in this table is illustrative only and our capitalization following the completion of this offering will be adjusted based on the actual public offering price and other terms of this offering determined at pricing. You should read this table in conjunction with the information contained in Use of Proceeds, Selected Financial Data and Management s Discussion and Analysis of Financial Condition and Results of Operations, as well as the financial statements and the notes thereto included elsewhere in this prospectus.

	SEPTEMBER 30, 2013	
(in thousands, except share amounts)	**ACTUAL**	**AS ADJUSTED[1]**
Cash, cash equivalents and marketable securities	$ 86,637	$
Stockholders equity (deficit):		
Common stock, par value $0.001: 100,000,000 shares authorized, 16,818,008 shares issued and outstanding, actual; shares issued and outstanding, as adjusted	17	
Preferred stock, par value $0.001: 10,000,000 shares authorized, no shares issued and outstanding, actual and as adjusted		
Additional paid-in capital	208,945	
Accumulated other comprehensive income	1	
Accumulated deficit	(144,257)	
Total stockholders equity	64,706	
Total capitalization	$ 64,706	$

(1) Each $ increase (decrease) in the assumed public offering price of $ per share, the last reported sale price of our common stock on The NASDAQ Global Select Market on , 2014, would increase (decrease) the as adjusted amount of cash and cash equivalents, working capital, total assets and total stockholders equity by approximately $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each increase of shares in the number of shares offered by us would increase the as adjusted amount of cash, cash equivalents and marketable securities, additional paid-in capital, total stockholders equity and total capitalization by approximately $ million, assuming that the assumed public offering price remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each decrease of shares in the number of shares offered by us would decrease the as adjusted amount of cash, cash equivalents and marketable securities, additional paid-in capital, total stockholders equity and total capitalization by approximately $ million, assuming that the assumed public offering price remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses

payable by us. The as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

The number of shares of our common stock outstanding immediately following this offering set forth above is based on 16,818,008 shares of our common stock outstanding as of September 30, 2013.

The number of shares of our common stock outstanding immediately following this offering set forth above excludes:

- 2,234,322 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2013, under our 2002 Plan and 2010 Plan at a weighted-average exercise price of $6.00 per share;

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- 3,500,000 shares of our common stock reserved as of September 30, 2013 for future issuance under our 2013 Plan, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2013 Plan;

- 250,000 shares of our common stock reserved as of September 30, 2013 for future issuance under our ESPP, as well as any future increases in the number of shares of our common stock reserved for issuance under the ESPP; and

- 2,304 shares of our common stock issuable upon the exercise of the GE warrant at an exercise price of $12.30 per share.

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DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the public offering price per share of our common stock and the as adjusted net tangible book value per share of our common stock immediately after this offering. Net tangible book value per share of our common stock is determined at any date by subtracting our total liabilities from the amount of our total tangible assets (total assets less intangible assets) and dividing the difference by the number of shares of our common stock deemed to be outstanding at that date.

Our historical net tangible book value as of September 30, 2013, was approximately $64.7 million, or $3.85 per share, based on 16,818,008 shares of common stock outstanding as of September 30, 2013. The pro forma net tangible book value as of September 30, 2013, is approximately $ million, or approximately $ per share.

After giving effect to the sale of shares of our common stock offered by us at an assumed public offering price of $ per share, the last reported sale price of our common stock on The NASDAQ Global Select Market on , 2014, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our net tangible book value as of September 30, 2013, would have been approximately $ million, or $ per share of common stock. This represents an immediate increase in net tangible book value of $ per share to existing stockholders and an immediate dilution in net tangible book value of $ per share to new investors purchasing shares of common stock in this offering at the assumed public offering price. The following table illustrates this dilution on a per share basis:

Assumed public offering price per share		$
Historical net tangible book value per share as of September 30, 2013	$ 3.85	
Increase in net tangible book value per share attributable to new investors		
As adjusted net tangible book value per share after this offering		
Dilution per share to new investors purchasing common stock in this offering		$

Each $ increase (decrease) in the assumed public offering price of $ per share, the last reported sale price of our common stock as reported on The NASDAQ Global Select Market on , 2014, would increase (decrease) our as adjusted net tangible book value after this offering by approximately $ million, or approximately $ per share, and the dilution per share to new investors by approximately $ per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase of shares in the number of shares offered by us would increase our as adjusted net tangible book value after this offering by approximately $ million, or $ per share, and the dilution per share to new investors would be $ per share, assuming that the assumed public offering price remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, a decrease of shares in the number of shares offered by us would decrease our as adjusted net tangible book value after this offering by approximately $ million, or $ per share, and the dilution per share to new investors would be $ per share, assuming that the assumed public offering price remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. The information discussed above is illustrative only and will adjust based on the actual public offering price and other terms of this offering determined at pricing.

If the underwriters exercise in full their option to purchase up to additional shares of common stock at the assumed public offering price of $ per share, the as adjusted net tangible book value after this offering would be $ per share, representing an increase in net tangible book value of $ per share to existing stockholders and immediate dilution in net tangible book value of $ per share to

investors purchasing our common stock in this offering at the assumed public offering price.

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The number of shares of our common stock outstanding immediately following this offering is based on 16,818,008 shares of our common stock outstanding as of September 30, 2013, and giving effect to the pro forma transactions described above. This number excludes:

- 2,234,322 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2013, under our 2002 Plan and 2010 Plan at a weighted-average exercise price of $6.00 per share;
- 3,500,000 shares of our common stock reserved as of September 30, 2013 for future issuance under our 2013 Plan, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2013 Plan;
- 250,000 shares of our common stock reserved as of September 30, 2013 for future issuance under our ESPP, as well as any future increases in the number of shares of our common stock reserved for issuance under the ESPP; and
- 2,304 shares of our common stock issuable upon the exercise of the GE warrant at an exercise price of $12.30 per share.

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SELECTED FINANCIAL DATA

You should read the following selected financial data together with the Management s Discussion and Analysis of Financial Condition and Results of Operations sections of this prospectus and our financial statements and the accompanying notes appearing at the end of this prospectus. We have derived the statements of operations data for the years ended December 31, 2010, 2011 and 2012 and the balance sheet data as of December 31, 2011 and 2012 from our audited financial statements appearing elsewhere in this prospectus. We have derived the statements of operations data for the years ended December 31, 2008 and 2009 and the balance sheet data as of December 31, 2008, 2009 and 2010 from our audited financial statements not included in this prospectus. The selected statements of operations data for the nine months ended September 30, 2012 and 2013 and the selected balance sheet data as of September 30, 2013, are derived from our unaudited financial statements appearing elsewhere in this prospectus. The unaudited financial statements have been prepared on a basis consistent with our audited financial statements included in this prospectus and include, in our opinion, all adjustments, consisting only of normal recurring adjustments, necessary for the fair statement of the financial information in those statements. Our historical results for any prior period are not necessarily indicative of results to be expected for the full year or in any future period.

(in thousands, except per share amounts)	YEARS ENDED DECEMBER 31,					NINE MONTHS ENDED SEPTEMBER 30,	
	2008	2009	2010	2011	2012	2012	2013
						(unaudited)	
Statements of Operations Data:							
Collaboration revenue	$ 15,571	$ 21,864	$ 23,740	$ 64,916	$ 9,983	$ 7,059	$ 10,006
Operating expenses:							
Research and development	22,363	26,070	29,417	34,039	28,778	21,300	24,708
General and administrative	4,936	5,652	8,338	11,216	9,009	6,696	7,385
Total operating expenses	27,299	31,722	37,755	45,255	37,787	27,996	32,093
Loss from operations	(11,728)	(9,858)	(14,015)	19,661	(27,804)	(20,937)	(22,087)
Interest income	857	304	58	114	88	70	35
Other income (expense), net	99	(235)	491	(65)	121	85	497
Income (loss) before benefit from income taxes	(10,772)	(9,789)	(13,466)	19,710	(27,595)	(20,782)	(21,555)
Benefit from income taxes	138	40	5				
Net (loss) income	$ (10,634)	$ (9,749)	$ (13,461)	$ 19,710	$ (27,595)	$ (20,782)	$ (21,555)
Net income attributable to participating securities				18,823			
Net (loss) income attributable to common stockholders	$ (10,634)	$ (9,749)	$ (13,461)	$ 887	$ (27,595)	$ (20,782)	$ (21,555)
Basic and diluted net (loss) income per share [1]	$ (10.23)	$ (9.15)	$ (12.22)	$ 0.77	$ (23.05)	$ (17.46)	$ (12.60)
Diluted net (loss) income per share [1]	$ (10.23)	$ (9.15)	$ (12.22)	$ 0.72	$ (23.05)	$ (17.46)	$ (12.60)
Weighted average shares of common stock outstanding used in computing basic net (loss) income per share [1]	1,040	1,066	1,102	1,152	1,197	1,190	1,711
Weighted average shares of common stock outstanding used in computing diluted net (loss) income per share [1]	1,040	1,066	1,102	1,904	1,197	1,190	1,711

(1) See Note 1 to our financial statements for an explanation of the method used to calculate basic and diluted net (loss) income per share of common stock, the unaudited pro forma basic and diluted net loss per share of common stock and the weighted average number of shares used in computation of the per share amounts.

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(in thousands)	AS OF DECEMBER 31,					AS OF SEPTEMBER 30,
	2008	2009	2010	2011	2012	2013
Balance Sheet Data:						
Cash, cash equivalents and marketable securities	$ 52,954	$ 35,853	$ 29,282	$ 50,743	$ 38,015	$ 86,637
Working capital	43,487	24,920	17,990	39,950	26,017	71,976
Total assets	58,199	39,941	36,622	58,579	44,091	92,046
Preferred stock warrant liability	430	666	622	682	563	
Convertible preferred stock	125,004	125,004	129,463	129,463	136,282	
Total stockholders (deficit) equity	(91,284)	(100,505)	(112,792)	(90,106)	(115,878)	64,706

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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 in conjunction with our financial statements and related notes thereto included elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the Risk Factors section of this prospectus, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a clinical-stage biotechnology company focused on discovering and developing novel protein therapeutics. Protein therapeutics are antibodies or drugs developed from extracellular proteins or protein fragments that block disease processes, including cancer and inflammatory diseases. We have developed a library of more than 5,700 human extracellular proteins, which we believe represent substantially all of the body s medically important targets for protein therapeutics. We screen this comprehensive library with our proprietary high-throughput protein screening technologies to identify new targets for protein therapeutics. This platform has allowed us to develop a pipeline of novel product candidates for cancer and inflammatory diseases and to generate over $222 million under our collaboration arrangements.

We have no products approved for commercial sale and have not generated any revenue from product sales to date, and we continue to incur significant research and development and other expenses related to our ongoing operations. We have incurred losses in each period since our inception in 2002, with the exception of the fiscal year ended 2011 due to collaboration revenues from product candidates under collaboration agreements with third parties. For the year ended December 31, 2012 and nine months ended September 30, 2013, we reported a net loss of $27.6 million and $21.6 million, respectively. As of September 30, 2013, we had an accumulated deficit of $144.3 million.

Critical Accounting Policies and Use of Estimates

Our management s discussion and analysis of financial condition and results of operations is based upon our financial statements, which we have prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities as of the date of the balance sheets and the reported amounts of collaboration revenue and expenses during the reporting periods. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances at the time we make such estimates. Actual results and outcomes may differ materially from our estimates, judgments and assumptions. We periodically review our estimates in light of changes in circumstances, facts and experience. The effects of material revisions in estimates are reflected in the financial statements prospectively from the date of the change in estimate. Our significant accounting policies are more fully described in Note 1 to our financial statements included elsewhere in this prospectus.

We define our critical accounting policies as those accounting principles generally accepted in the United States of America that require us to make subjective estimates and judgments about matters that are uncertain and are likely to have a material impact on our financial condition and results of operations as well as the specific manner in which we apply those principles. We believe the critical accounting policies used in the preparation of our financial statements that require significant estimates and judgments are as follows:

Revenue Recognition

We recognize revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; transfer of technology has been completed or services have been rendered; our price to the customer is fixed or determinable and collectability is reasonably assured.

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The terms of our collaborative research and development agreements include nonrefundable upfront and license fees, research funding, milestone and other contingent payments to us for the achievement of defined collaboration objectives and certain preclinical, clinical, regulatory and sales-based events, as well as royalties on sales of any commercialized products.

Multiple-Element Revenue Arrangements. Our collaborations primarily represent multiple-element revenue arrangements. To account for these transactions, we determine the elements, or deliverables, included in the arrangement and determine which deliverables are separable for accounting purposes. We consider delivered items to be separable if the delivered item(s) have stand-alone value to the customer. If the delivered items are separable, we allocate arrangement consideration to the various elements based on each element s relative selling price. The identification of individual elements in a multiple-element arrangement and the estimation of the selling price of each element involve significant judgment, including consideration as to whether each delivered element has standalone value to the customer. We determine the estimated selling price for deliverables within each arrangement using vendor-specific objective evidence, or VSOE, of selling price, if available, or third party evidence of selling price if VSOE is not available, or our best estimate of selling price, if neither VSOE nor third party evidence is available. Determining the best estimate of selling price for a deliverable requires significant judgment. We use our best estimate of selling price to estimate the selling price for licenses to our proprietary technology, since we do not have VSOE or third party evidence of selling price for these deliverables. We recognize consideration allocated to an individual element when all other revenue recognition criteria are met for that element. Our multiple-element revenue arrangements generally include the following:

- **Exclusive Licenses**. The deliverables under our collaboration agreements generally include exclusive licenses to discover, develop, manufacture and commercialize compounds with respect to one or more specified targets. To account for this element of the arrangement, we evaluate whether the exclusive license has standalone value apart from the undelivered elements to the collaboration partner based on the consideration of the relevant facts and circumstances of each arrangement, including the research and development capabilities of the collaboration partner and other market participants. We recognize arrangement consideration allocated to licenses upon delivery of the license, if facts and circumstances indicate that the license has standalone value apart from the undelivered elements, which generally include research and development services. If facts and circumstances indicate that the delivered license does not have standalone value from the undelivered elements, we recognize the revenue as a combined unit of accounting.

We have determined that some of our exclusive licenses lack standalone value apart from the related research and development services. In those circumstances we recognize collaboration revenue from non-refundable exclusive license fees in the same manner as the undelivered item(s), which is generally the period over which we provide the research and development services.

- **Research and Development Services**. The deliverables under our collaboration and license agreements generally include deliverables related to research and development services we perform on behalf of the collaboration partner. As the provision of research and development services is a part of our central operations and we are principally responsible for the performance of these services under the agreements, we recognize revenue on a gross basis for research and development services as we perform those services. Additionally, we recognize research funding related to collaborative research and development efforts as revenue as we perform or deliver the related services in accordance with contract terms as long as we will receive payment for such services upon standard payment terms.

Milestone Revenue. Our collaboration and license agreements generally include contingent milestone payments related to specified research, development and regulatory milestones and sales-based milestones. Research, development and regulatory milestones are typically payable under our collaborations when our collaborator claims or selects a target, or initiates or advances a covered product candidate in preclinical or clinical development, upon submission for marketing approval of a covered product with regulatory authorities, upon receipt of actual marketing approvals of a covered product or for additional indications, or upon the first commercial sale of a covered product. Sales-based milestones are typically payable when annual sales of covered products reach specified levels.

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At the inception of each arrangement that includes milestone payments, we evaluate whether each milestone is substantive and at risk to both parties on the basis of the contingent nature of the milestone. We evaluate factors such as the scientific, regulatory, commercial and other risks that we must overcome to achieve the respective milestone, the level of effort and investment required to achieve the respective milestone and whether the milestone consideration is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment.

We have elected to adopt the Financial Accounting Standards Board Accounting Standards Update 2010-17, *Revenue Recognition Milestone Method,* such that we recognize any payment that is contingent upon the achievement of a substantive milestone entirely in the period in which the milestone is achieved. A milestone is defined as an event that can only be achieved based in whole or in part on either our performance or the occurrence of a specific outcome resulting from our performance for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved. Therefore, a milestone does not include events for which occurrence is contingent solely on the performance of a collaborative partner. To be substantive, a milestone must meet all the following criteria: the consideration receivable upon the achievement of the milestone is commensurate with either our performance to achieve the milestone or the enhancement of value of delivered items as a result of a specific outcome resulting from our performance to achieve the milestone, the consideration relates solely to past performance, and the consideration is reasonable relative to all of the deliverables and payment terms in the arrangement.

Research and Development Expenses

Research and development expenses consist of costs we incur for our own and for sponsored and collaborative research and development activities. Expenses we incur related to collaborative research and development agreements approximate the revenue recognized under these agreements. Research and development costs are expensed as incurred. Research and development costs consist of salaries and benefits, including associated stock-based compensation, laboratory supplies and facility costs, as well as fees paid to other entities that conduct certain research and development activities on our behalf. We estimate preclinical study and clinical trial expenses based on the services performed pursuant to contracts with research institutions and contract research organizations, or CROs, that conduct and manage preclinical studies and clinical trials on our behalf based on actual time and expenses incurred by them. Further, we accrue expenses related to clinical trials based on the level of patient enrollment and activity according to the related agreement. We monitor patient enrollment levels and related activity to the extent reasonably possible and adjust estimates accordingly. If we do not identify costs that we have begun to incur or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates. To date, we have not experienced significant changes in our estimates of preclinical studies and clinical trial accruals.

We expense payments for the acquisition and development of technology as research and development costs if, at the time of payment: the technology is under development; is not approved by the U.S. Food and Drug Administration or other regulatory agencies for marketing; has not reached technical feasibility; or otherwise has no foreseeable alternative future use.

Stock-Based Compensation

We issue stock-based compensation awards to employees in the form of stock options. We measure stock-based compensation expense related to these awards based on the fair value of the award on the date of grant and recognize stock-based compensation expense, less estimated forfeitures, on a straight-line basis over the requisite service period of the awards, which generally equals the vesting period. Stock options we grant to employees generally vest over four years. We have selected the Black-Scholes option pricing model to determine the fair value of stock option awards, which model requires the input of various assumptions that require management to apply judgment and make assumptions and estimates, including with respect to:

- the expected term of the stock option award, which we calculate using the simplified method in accordance with the Securities and Exchange Commission Staff Accounting Bulletin Nos. 107 and 110, which calculates the expected term as the midpoint of the contractual term of the options and the ordinary vesting period, as we have insufficient historical information regarding our stock options to provide another basis for estimate;

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- the expected volatility of the underlying common stock, which we estimate based on the average historical volatility of a peer group of comparable publicly traded life sciences and biotechnology companies with product candidates in similar stages of clinical development, as we do not have significant trading history for our common stock; and

- historically, the fair value of our common stock determined on the date of grant, as described below.

We estimated the fair value of each stock option using the Black-Scholes option-pricing model based on the date of grant of such stock option with the following assumptions:

	YEARS ENDED DECEMBER 31,		
	2010	2011	2012
Expected term (years)	5.2-6.1	5.3-6.1	5.0-6.1
Expected volatility	80-85%	85%	85%
Risk-free interest rate	1.3-2.9%	1.3-2.6%	0.6-1.1%
Expected dividend yield	0%	0%	0%

The amount of stock-based compensation expense we recognize during a period is based on the value of the portion of the awards that we expect to ultimately vest. We estimate forfeitures for employee grants at the time of grant, and revise the estimates, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Ultimately, the actual expense recognized over the vesting period will only represent those options that vest. Changes in the estimated forfeiture rate can have a significant impact on our stock-based compensation expense as the cumulative effect of adjusting the rate is recognized in the period the forfeiture estimate is changed. For instance, if a revised forfeiture rate is lower than the previously estimated forfeiture rate, we make an adjustment that will result in an increase to the stock-based compensation expense recognized in our financial statements. To date, our forfeitures have been immaterial.

Options granted to individual service providers who are not employees or directors are accounted for at estimated fair value using the Black-Scholes option-pricing method and are subject to periodic remeasurement over the period during which the services are rendered.

The following table summarizes by grant date the number of shares of common stock underlying stock options granted from January 1, 2012 through September 30, 2013, as well as the associated per share exercise price, which was the estimated fair value per share of our common stock on the grant date.

GRANT DATE	NUMBER OF SHARES OF COMMON STOCK UNDERLYING OPTIONS GRANTED (#)	OPTION EXERCISE PRICE ($)	ESTIMATED FAIR VALUE PER SHARE OF COMMON STOCK ON GRANT DATE ($)
January 2, 2012	30,812	8.49	8.49

January 12, 2012	5,730	8.49	8.49
July 11, 2012	198,359	5.54	5.54
July 16, 2012	236,581	5.54	5.54
July 29, 2012	8,130	5.54	5.54
July 31, 2012	487	5.54	5.54
October 26, 2012	46,035	5.54	5.54
January 10, 2013	120,473	5.54	5.54
May 23, 2013	2,560	5.66	5.66
July 19, 2013	424,876	7.26	7.26

The intrinsic value of the vested and unvested options outstanding at September 30, 2013, was $9.3 million and $6.6 million, respectively, based on the closing price of $13.10 per share of our common stock as reported on The NASDAQ Global Market on September 30, 2013.

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Determination of the Fair Value of Common Stock on Grant Dates. For all stock options granted after the completion of our initial public offering in September 2013, the fair value for our underlying common stock is determined using the closing price as reported on The NASDAQ Global Select Market on the date of grant. All other options granted by our board of directors on the dates noted above were intended to be exercisable at the fair value of our stock based on information known at that time.

For all stock options granted prior to the completion of our initial public offering, the fair values of the common stock underlying our stock-based awards were estimated on each grant date by our board of directors, with input from management. Our board of directors periodically determined for financial reporting purposes the estimated per share fair value of our common stock at various dates using valuations performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants Practice Guide, *Valuation of Privately-Held Company Equity Securities Issued as Compensation*, also known as the Practice Guide. We performed these valuations contemporaneously as of June 15, 2011, May 31, 2012, April 15, 2013, and June 30, 2013.

In conducting the valuations, our board of directors, with input from management and independent third-party valuation specialists, considered objective and subjective factors that we believed to be relevant for each valuation conducted, including our best estimate of our business condition, prospects and operating performance at each valuation date. Within the valuations performed, we used a range of factors, assumptions and methodologies. The significant factors included:

- the rights, preferences and privileges of our preferred stock as compared to those of our common stock, including the liquidation preferences of our convertible preferred stock;
- our results of operations, financial position and the status of research and development efforts;
- the lack of liquidity of our common stock as a private company;
- our stage of development and business strategy and the material risks related to our business and industry;
- the achievement of enterprise milestones, including entering into collaboration and license agreements, and the likelihood of entering into such agreements;
- the valuation of publicly traded companies in the life sciences and biotechnology sectors, as well as recently completed mergers and acquisitions of peer companies;
- any external market conditions affecting the life sciences and biotechnology industry sectors;
- the likelihood of achieving a liquidity event for the holders of our common stock and stock options, such as an initial public offering or a sale of our company, given prevailing market conditions;
- the state of the initial public offering market for similarly situated privately held biotechnology companies;
- general U.S. economic conditions; and

- our most recent valuations prepared in accordance with methodologies outlined in the Practice Guide.

The dates of our valuations have not always coincided with the dates of our stock-based compensation grants. Our board of directors intended all options granted to be exercisable at a price per share not less than the per share fair value of our common stock underlying those options on the grant date. Accordingly, in determining the exercise prices of the options set forth in the table above, our board of directors considered, among other things, the most recent valuations of our common stock and our assessment of additional objective and subjective factors we believed to be relevant as of the grant date. The additional factors considered when determining any changes in fair value between the most recent valuation and the grant dates included our stage of development, our operating and financial performance and current business conditions. However, there were no events or circumstances existing on any of the grant dates that warranted a finding that the fair value per share of common stock had changed from the most recent valuation.

Methodology for Determining Volatility. We based our volatility assumption on historical volatilities of a peer group of similar companies whose shares are publicly available, using a measurement period commensurate to our expected time to liquidity. We developed the peer group by focusing on publicly traded biotechnology companies having products in either Phase 2 or Phase 3 clinical trials with earlier clinical or preclinical programs. We updated our peer group list of companies for each valuation date to include any newly listed public companies that met our criteria.

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We calculated a range of price volatilities for each company based on a range of measuring periods and determined the median volatility for the entire peer group.

There are significant judgments and estimates inherent in the determination of fair value of our common stock. These judgments and estimates include assumptions regarding our future operating performance, the time to completing an initial public offering or other liquidity event and the determinations of the appropriate valuation methods. If we had made different assumptions, our stock-based compensation expense, net (loss) income and net (loss) income per share of common stock could have been significantly different.

Common Stock Valuation Methodologies. We prepared the June 15, 2011, May 31, 2012, April 15, 2013, and June 30, 2013 valuations in accordance with the guidelines in the Practice Guide, which prescribes several valuation approaches for setting the value of an enterprise, such as the cost, market and income approaches, and various methodologies for allocating the value of an enterprise to its common stock. As more fully discussed below, we have used a variety of methodologies to estimate our enterprise value, including market multiple, initial public offering value, sales value and income approaches.

Methods Used to Allocate Our Enterprise Value to Classes of Securities. In accordance with the Practice Guide, we considered the various methods for allocating the enterprise value across our classes and series of capital stock to determine the fair value of our common stock at each valuation date. The methods we utilized consisted of the following:

- **Option Pricing Method**. Under the option pricing method, or 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 values of the preferred and common stock are inferred by analyzing these options.

- **Probability-Weighted Expected Return Method**. The probability-weighted expected return method, or PWERM, is a scenario-based analysis that estimates the 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.

We estimated the per share common stock fair value by allocating the enterprise value using the OPM for the June 15, 2011 and May 31, 2012 valuations, and using a PWERM and OPM for the April 15, 2013 valuation.

June 15, 2011 Valuation. We estimated that a share of our common stock had a value of $8.49 per share at June 15, 2011, an increase of $1.60 from the prior valuation at July 10, 2010. The increase in the common stock valuation reflected our entering into a license and collaboration agreement with Human Genome Sciences, Inc., or HGS, to develop and commercialize our FP-1039 product for multiple cancers, data from the FP-1039 Phase 1 clinical trial indicating that the drug was well tolerated, and entering into a research collaboration agreement with GSK to identify potential drug targets and drug candidates to treat skeletal muscle diseases. HGS was acquired by GlaxoSmithKline, or GSK, in August 2012, and we refer to HGS as GSK-HGS.

We utilized a combination of the market multiple approach, the initial public offering approach, and the sale value approach to determine our enterprise value, and we used the OPM to allocate the enterprise value to our common stock.

The market multiple approach estimates the value of a business by comparing a company to similar publicly traded companies. When we selected the comparable companies to use for our valuation, we focused on companies within the biopharmaceutical industry and in Phase 2 development, or those that were in Phase 3 and also had a variety of preclinical programs. We selected a group of comparable publicly traded companies and we calculated market multiples using each company s stock price and other financial data. We computed an estimate of value for our company by applying selected market multiples based on forecasted results for both the comparable companies and our company. Given that we were several years away from generating product revenue and we were unable to develop reliable long-term forecasts, our analysis applied the market approach based on our research and development expenses, which we determined to be the most relevant financial measure. We applied a 4.00 to 4.75 market multiple to our forecasted research and development expense. We based the multiple on our analysis of the comparable company data over the prior two- and three-year periods. In addition, we applied a 32% discount to

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reflect the lack of marketability of our common stock. We determined the discount for lack of marketability based on qualitative factors such as our expectation that a liquidity event was three years in the future, the difficulty in accurately predicting future research and development expenses, our ability to access additional capital and resultant dilution, and the degree of risk in the biotechnology industry to arrive at a 32% discount for lack of marketability to adjust downward the aggregate company value derived based on the market multiple approach. We believe the discount to be appropriate because after applying the discount the estimated value using the market multiple approach did not differ significantly from the estimated value of the initial public offering value approach and the sales value approach.

The initial public offering value approach estimates the value of a business by estimating a future value of initial public offerings of similar companies over approximately the preceding 12-month period, discounted to the present value. In estimating an initial public offering value, we applied a multiple of 7.0 to our projected research and development expense in 2012, to yield a future initial public offering value. We based the multiple utilized on selected cancer focused companies in various clinical stages, the majority of which were in either Phase 1 or Phase 2, at the time of their initial public offering. The pre-money enterprise value to research and development multiple ranged from 2.34 to 19.47 with a mean and median equal to 7.84 and 6.24, respectively. The future initial public offering value was then converted to present value using a discount rate equal to our estimated weighted average cost of capital of 20% over a three-year period. The sales value approach estimates the present value the business could be sold for based on similar-stage biopharmaceutical companies using a 20% discount rate over a three-year period.

Given that the market multiple approach, the initial public offering value approach, and the sales value approach provide relevant estimates of fair value, which did not differ significantly, we applied equal weighting to each of these approaches to determine an initial enterprise value. We then allocated the initial estimated enterprise value to the common stock using the OPM.

We considered the OPM appropriate to use since the range of possible future outcomes was so difficult to predict that forecasts would be highly speculative. The OPM treats common stock and convertible preferred stock as call options on the enterprise value, with exercise prices based on the liquidation preference of the convertible preferred stock. Therefore, the common stock has value only if the funds available for distribution to the stockholders exceed the value of the liquidation preference at the time of a liquidity event such as a merger, sale or initial public offering, assuming the enterprise has funds available to make a liquidation preference meaningful and collectible by the stockholders. We modeled the common stock to be a call option with a claim on the enterprise at an exercise price equal to the remaining value immediately after the convertible preferred stock is liquidated. The OPM uses the Black-Scholes option-pricing model to price the call option.

Our board of directors determined there were no events or circumstances that warranted a different fair value determination from the June 15, 2011 valuation to the grant dates of stock-based compensation on January 2, 2012 and January 12, 2012.

May 31, 2012 Valuation. We estimated that a share of our common stock had a value of $5.54 per share in May 2012, a decrease of $2.95 per share from the prior June 15, 2011 valuation. In 2012, we changed our market methodology from a research and development multiple approach to be based on the median expected value of comparable companies. We believe this median expected value methodology became more appropriate because we expected research and development expenses would increase as we advance our development programs more significantly than our value and in light of the difficulty in accurately predicting such future costs. As a result, we determined that continuing to use the research and development multiple approach would have resulted in an over-estimation of the fair value of our common stock. This methodology change, along with an increase in the discount to reflect the lack of marketability of our common stock, resulted in the decrease in the estimated fair value of the common stock.

To determine our enterprise value, we averaged the values determined using the publicly traded comparable company approach, the initial public offering approach and the sale value approach and then added to that average the value of the FP-1039 collaboration with GSK-HGS and retained rest of world rights, which we determined using the income approach. We believe it was appropriate to include the value of the FP-1039 collaboration and retained

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rest-of-world rights in determining our enterprise value because the collaboration included unusual features compared to collaborations generally observed at companies at our stage of development. The key differentiating factors in the GSK-HGS collaboration consist of the following: (1) the clinical trials are funded and executed by GSK-HGS at no cost to us; (2) we are entitled to use clinical data from GSK-HGS at no cost to us for the purpose of seeking marketing approvals in the retained rest-of-world territory; and (3) we have an option to co-promote FP-1039 in the United States. We considered the three elements above as non-operating assets, meaning that they required no further investment by us but still had monetizable value. Accordingly, we valued them separately and added them to our operational value to calculate the value of the entire enterprise. We used the OPM to allocate the enterprise value to our common stock.

The publicly traded comparable company approach estimates the value of a business by comparing a company to similar publicly traded companies. When selecting the comparable companies we used for the publicly traded comparable company approach, we focused on companies within the biopharmaceutical industry with revenues below $35 million per year and that were in Phase 2 clinical development. We discounted this value to present value over a period of 2.6 years, which is the amount of time we expected to need to reach Phase 2 clinical development, using a venture capital based rate of return of 37% to account for the time value of money and risks, such as achievement of clinical goals, and taking into account any interim cash flows.

In the sales value approach, we used the median equity value from actual acquisitions of companies in Phase 2 clinical development since January 1, 2005. We then discounted this value to present value using a venture capital based rate of return of 37% to account for the time value of money and risks, such as achievement of clinical goals, over a period of 2.6 years, the amount of time we expected to need to reach Phase 2 clinical development.

The initial public offering value approach analyzed the implied pre-initial public offering valuations from biotechnology companies that had effectuated an initial public offering on a major U.S. exchange after January 1, 2009. We focused on companies that were in Phase 2 clinical development or Phase 3 clinical development with preclinical candidates or additional candidates in Phase 1 or 2 clinical development at the time of their initial public offering. We then discounted the capital valuation from this analysis to present value using a venture capital based rate of return of 37% to account for the time value of money and risks, such as achievement of clinical goals, over a period of 2.6 years, the amount of time we expected to need to reach Phase 2 clinical development.

We then applied the income approach to value the FP-1039 collaboration with GSK-HGS and retained rest of world rights. We estimated the value based upon the present value, discounted at a venture based rate of return of 37%, of the after-tax revenue stream based upon a successful clinical and commercial outcome. We then added this value to the valuation and we applied a 44% discount to reflect the lack of marketability of our common stock. We determined the discount for lack of marketability by using the commonly used method of calculating the cost of purchasing a hypothetical put option that would guarantee the marketable value for the expected holding period. The magnitude of the marketability discount is determined by calculating the cost of purchasing a hypothetical put option that would guarantee the marketable value for the expected holding period. The marketability discount is measured as the amount an investor would pay to protect the cost of an investment. We used the Chaffe put option model to calculate this discount using the assumptions listed below. We changed our methodology for determining the discount for lack of marketability to coincide with our change in valuation methodology as explained above. Volatility was derived from the median two-year and three-year volatility from our peer group of comparable public companies.

Expected term (years)	2.6
Expected volatility	74%
Risk-free interest rate	0.33%
Discount for lack of marketability	44%

This change in methodology resulted in a higher discount for lack of marketability from the June 15, 2011 valuation. We believe that this discount was appropriate due to the lack of an existing market for shares of our common stock, the numerous risks and uncertainties to our ability to implement our business plan, and the likely

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need to obtain additional funding to continue operations during the expected length of time to a potential liquidity event. We then allocated the estimated enterprise value to the common stock using the OPM. We considered the OPM appropriate to use since the range of possible future outcomes was so difficult to predict that forecasts would be highly speculative.

Our board of directors determined there were no events or circumstances that warranted a different fair value determination from the May 31, 2012 valuation to the grant dates of stock-based compensation on July 11, 2012, July 16, 2012, July 29, 2012, July 31, 2012, October 26, 2012, and January 10, 2013. At the time of the January 10, 2013 grant our board of directors had not made a decision to explore accessing the public markets.

April 15, 2013 Valuation. We estimated that a share of our common stock had a value of $5.66 per share in April 2013, an increase of $0.12 from the prior May 31, 2012 valuation. In this valuation we changed from the OPM to the PWERM approach and the assignment of higher probabilities to future liquidity scenarios that would result in the conversion of our convertible preferred stock to common stock. In 2013, as more certainty developed regarding possible exit event outcomes, including an initial public offering in the following 12 to 18 months, the allocation methodology utilized to allocate our enterprise value to our common stock transitioned from the OPM to a PWERM approach.

PWERM is a scenario-based analysis that estimates the 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 rights of each share class. Our PWERM estimates the common stock value to our stockholders under each of five possible future scenarios: 36% probability of an initial public offering in late-2013; 24% probability of an initial public offering in late-2014; 5% probability of a sale of the company in late-2013; 10% probability of a sale of the company in late-2014; and 25% probability of remaining a private company.

In the initial public offering scenarios, we analyzed initial public offerings since January 2010 and publicly traded companies. For the initial public offerings peer group data, we reviewed the pre-money initial public offering value of a group of companies that effectuated a recent initial public offering while in Phase 2 clinical development and excluded unusually low pre-money valuation companies. For the publicly traded company peer group data, we reviewed companies in Phase 2 clinical development. For the various initial public offering scenarios, we estimated our initial public offering value based on the comparable company data and added our expected cash at the time of the expected initial public offering in December 2013 or September 2014, as appropriate.

For the sale scenarios, we analyzed merger and acquisition transactions involving certain targets in Phase 2 clinical development, and allocated the exit value to our capital structure according to the distribution waterfall.

In the stay-private scenario, we forecasted our cash flows to the end of 2015 and based the terminal value on the public company, initial public offering and mergers and acquisitions data of comparable companies in Phase 3 clinical development. We allocated the resulting value to our capital structure using the OPM.

We adjusted the valuation indicated by each peer group in each scenario by discounting for the time value of money at risk-adjusted rate of return, as determined using the capital asset pricing model, of 28% to reflect risks associated with achievement of clinical goals and of being a Phase 1b development company.

We then probability weighted the value per share under each scenario and summed the resulting weighted values per share to determine the fair value per share of our common stock. We also probability weighted the aggregate enterprise value indication under each scenario and summed the resulting weighted enterprise value indications to conclude the overall enterprise value.

In the initial public offering scenario, we assumed all outstanding shares of our convertible preferred stock would convert into common stock. In the sale and remain-a-private-company scenarios, we allocated the value per share by taking into account the liquidation preferences and participation rights of our convertible preferred stock consistent with the method outlined in the Practice Aid. We also considered the fact that our stockholders cannot freely trade our common stock in the public markets. Accordingly, we applied discounts to reflect the lack of marketability of our common stock that ranged from 19% to 42% based on the expected time to liquidity in each scenario. We

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determined the discount for lack of marketability by calculating the cost of purchasing a hypothetical put option that would guarantee the marketable value for the expected holding period. The magnitude of the marketability discount is determined by calculating the cost of purchasing a hypothetical put option that would guarantee the marketable value for the expected holding period. The marketability discount is measured as the amount an investor would pay to protect the cost of an investment. We used the Chaffe put option model to calculate this discount using the assumptions listed below. Volatility was derived from the six-month, one-year, two-year and five-year median volatility of our peer group of comparable public companies for the applicable expected terms. We used trend functions to match the time to liquidity assumption for each scenario to the observed historical volatility of these peer group companies.

	INITIAL PUBLIC OFFERING LATE-2013	INITIAL PUBLIC OFFERING LATE-2014	SALE LATE-2013	SALE LATE-2014	STAY PRIVATE
Probability	36%	24%	5%	10%	25%
Expected term (years)	0.7	1.5	0.7	1.5	2.7
Expected volatility	57%	62%	57%	62%	69%
Risk-free interest rate	0.09%	0.15%	0.09%	0.15%	0.37%
Discount for lack of marketability	19%	29%	19%	29%	42%

The discount for lack of marketability is lower than the prior valuation for the first four scenarios due to a shorter time to a potential liquidity event. We believe that this discount was appropriate due to the lack of an existing market for shares of our common stock, the numerous risks and uncertainties to our ability to implement our business plan, and the likely need to obtain additional funding to continue operations during the expected length of time to a potential liquidity event.

We then summed the value per share under each scenario to determine the fair value per share of our common stock. In the sale and remain-private scenarios, we allocated the value per share taking into account the liquidation preferences and participation rights of our convertible preferred stock. The initial public offering scenarios assume that all outstanding shares of our convertible preferred stock would convert into common stock.

Our board of directors determined there were no events or circumstances that warranted a different fair value determination from the April 15, 2013 valuation to the grant dates of stock-based compensation on May 23, 2013.

June 30, 2013 Valuation. The June 30, 2013 valuation was performed contemporaneously with our annual mid-July stock option grants. We estimated that a share of our common stock had a value of $7.26 per share in June 2013, an increase of $1.60 from the prior April 15, 2013 valuation. The increase in the common stock valuation reflected the increased likelihood of a 2013 initial public offering resulting from submitting our draft registration statement on Form S-1 with the SEC on June 14, 2013. We used the PWERM approach to estimate the common stock value to our stockholders under each of five possible future scenarios: 70% probability of an initial public offering in September 2013; 10% probability of an initial public offering in September 2014; 5% probability of a sale of the company in December 2013; 5% probability of a sale of the company in September 2014; and 10% probability of remaining a private company.

In the initial public offering scenarios, we reviewed initial public offerings since January 2010 and publicly traded companies. For the initial public offerings peer data, we reviewed the pre-money initial public offering value of a group of companies that effectuated a recent initial public offering while in Phase 2 clinical development and excluded unusually low pre-money valuation companies. For the publicly traded company peer data, we reviewed companies in Phase 2 clinical development. We estimated our initial public offering value based on the comparable company data and added our expected cash at the time of the expected initial public offering as appropriate.

For the sale scenarios, we analyzed merger and acquisition transactions involving certain targets in Phase 2 clinical development, and allocated the exit value to our capital structure according to the distribution waterfall.

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In the stay-private scenario, we forecasted our cash flows to the end of 2015 and based the terminal value on the public company, initial public offering and mergers and acquisitions data of comparable companies in or near Phase 3 clinical development. We allocated the resulting value to our capital structure using the OPM.

We adjusted the valuation indicated by each peer group in each scenario by discounting for the time value of money at risk-adjusted rate of return, as determined using the capital asset pricing model, of 29% to reflect risks associated with achievement of clinical goals and of being a Phase 1b development company.

We then probability weighted the value per share under each scenario and summed the resulting weighted values per share to determine the fair value per share of our common stock. We also probability weighted the aggregate enterprise value indication under each scenario and summed the resulting weighted enterprise value indications to conclude the overall enterprise value.

In the initial public offering scenario, we assumed all outstanding shares of our convertible preferred stock would convert into common stock. In the sale and stay-private scenarios, we allocated the value per share by taking into account the liquidation preferences and participation rights of our convertible preferred stock consistent with the method outlined in the Practice Aid. We also considered the fact that our stockholders cannot freely trade our common stock in the public markets. Accordingly, we applied discounts to reflect the lack of marketability of our common stock that ranged from 10% to 45% based on the expected time to liquidity in each scenario. We determined the discount for lack of marketability by calculating the cost of purchasing a hypothetical put option that would guarantee the marketable value for the expected holding period. The magnitude of the marketability discount is commonly determined by calculating the cost of purchasing a hypothetical put option that would guarantee the marketable value for the expected holding period. The marketability discount is measured as the amount an investor would pay to protect the cost of an investment. We used the Chaffe put option model to calculate this discount using the following assumptions. Volatility was derived from the six-month, one-year, two-year and five-year median volatility of the guideline companies for the applicable expected terms. Trend functions were used to match the time to liquidity assumption for each scenario to the observed historical volatility of the publicly traded comparable companies.

	INITIAL PUBLIC OFFERING SEPT-2013	INITIAL PUBLIC OFFERING SEPT-2014	SALE DEC-2013	SALE SEPT-2014	STAY PRIVATE
Probability	70%	10%	5%	5%	10%
Expected term (years)	0.25	1.25	0.50	1.25	2.5
Expected volatility	48%	66%	53%	66%	87%
Risk-free interest rate	0.02%	0.29%	0.09%	0.29%	0.63%
Discount for lack of marketability	10%	28%	15%	28%	45%

We believe that this discount was appropriate due to the lack of an existing market for shares of our common stock, the numerous risks and uncertainties to our ability to implement our business plan, and the likely need to obtain additional funding to continue operations during the expected length of time to a potential liquidity event. We then summed the value per share under each scenario to determine the fair value per share of our common stock. In the sale and stay-private scenarios, we allocated the value per share taking into account the liquidation preferences and participation rights of our convertible preferred stock. The initial public offering scenarios assume that all outstanding shares of our convertible preferred stock would convert into common stock.

Preferred Stock Warrant Liability

We classify freestanding warrants for shares that are either putable or redeemable as liabilities on the balance sheet at fair value. Therefore, the freestanding warrants that gave the holders the right to purchase our convertible preferred stock were liabilities that we recorded at estimated fair value. At the end of each reporting period, we recorded changes in fair value during the period as a component of other income (expense), net.

We continued to adjust the liability for changes in the estimated fair value of the warrants until the earlier of the exercise or expiration of the warrants to purchase shares of convertible preferred stock or the completion of a

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liquidation event, including the completion of our initial public offering, at which time we reclassified the liabilities to stockholders deficit.

We use the Black-Scholes option pricing model and the PWERM approach to estimate the fair value of the preferred stock warrant liability. Inputs we used in the Black-Scholes option pricing model to determine estimated fair value include the estimated fair value of the underlying convertible preferred stock at the valuation measurement date, the remaining contractual term of the warrants, risk-free interest rates, expected dividends, and the expected volatility of the price of the underlying convertible preferred stock. Inputs we used in the PWERM approach to determine the estimated fair value included a risk-adjusted discount rate, probability-weighted outcomes and time to liquidity.

In December 2002, pursuant to the terms of an equipment loan and security agreement, we issued a fully exercisable warrant to the lender for the purchase of 3,902 shares of Series A convertible preferred stock at an exercise price of $12.30 per share. The warrant was exercisable through December 2012, subject to certain conditions. The warrant expired unexercised in December 2012.

In June 2004, pursuant to the terms of an equipment loan and security agreement, we issued a fully exercisable warrant to the lender for the purchase of 2,304 shares of Series A convertible preferred stock at an exercise price of $12.30 per share. The warrant will automatically net exercise if it is not exercised prior to its expiration on January 26, 2014.

In connection with the issuance of Series A convertible preferred stock in January and February 2005, we issued a warrant to purchase 81,300 shares of Series A convertible preferred stock at $12.30 per share to our preferred stock placement agent. During 2007, the warrant was canceled and replaced by the issuance of two warrants for 44,715 and 36,585 shares; all other terms remained unchanged. These warrants automatically exercised on a net issuance basis upon completion of our initial public offering in September 2013.

In connection with the completion of our initial public offering in September 2013, substantially all of the warrants were automatically net exercised for a total of 4,376 shares, pursuant to their terms. As a result of the net exercises, we recorded an $83,000 gain related to the change in fair value as part of other income, net on our Condensed Statement of Operations and reclassified the fair value of $57,000 to permanent equity. These warrants were remeasured using the intrinsic value of the warrant and the net settlement value based on the $13.00 per share initial public offering price. The remaining outstanding warrant to purchase Series A convertible preferred stock converted into a warrant to purchase 2,304 shares of common stock at $12.30 per share, expiring in January 2014. We remeasured the fair value of this remaining warrant through the date of the conversion to a common stock warrant and we recorded a $3,000 loss related to the change in fair value as part of other income, net on our Condensed Statements of Operations and reclassified the fair value of $6,000 to permanent equity.

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The following table sets forth a summary of all outstanding warrants and the estimated fair value for each of the warrants as of December 31, 2012:

(in thousands, except per share amounts)

STOCK	EXPIRATION DATE	EXERCISE PRICE PER SHARE	SHARES AS OF DECEMBER 31, 2012	ESTIMATED FAIR VALUE AS OF DECEMBER 31, 2012
Series A convertible preferred stock[1]	January 2014	$ 12.30	2,304	12
Series A convertible preferred stock	Earlier of: (i) April 2015 or (ii) the closing of an initial public offering of our common stock	$ 12.30	81,300	551
			83,604	$ 563

(1) Upon the completion of our initial public offering, the warrant to purchase Series A convertible preferred stock converted into a warrant to purchase 2,304 shares of common stock at $12.30 per share, expiring in January 2014.

As of December 31, 2012, we determined the fair value of the above warrants using the Black-Scholes valuation model with the following assumptions:

	AS OF DECEMBER 31, 2012
Risk-free interest rate	0.2% 0.3%
Remaining contractual term (years)	2.1
Volatility	85.0%

The remaining issued and unexpired warrant to purchase 2,304 shares of common stock was unexercised as of September 30, 2013. The intrinsic value of the outstanding warrant as of September 30, 2013 was approximately $2,000, based on the closing price of $13.10 per share of our common stock as reported on The NASDAQ Global Market on September 30, 2013.

Financial Overview

Collaboration Revenue

We have not generated any revenue from product sales. Our revenue to date has been derived from upfront payments, research and development funding and milestone payments under collaboration and license agreements with our collaboration partners, including GSK, GlaxoSmithKline LLC, or GSK US, Glaxo Group Limited, or GSK UK, GSK-HGS, Pfizer Inc., or Pfizer, and UCB Pharma S.A., or UCB.

FP-1039 License and Collaboration with GSK-HGS

In March 2011, we entered into a license and collaboration agreement with GSK-HGS, referred to as the FP-1039 license, pursuant to which we granted GSK-HGS an exclusive license to develop and commercialize FP-1039 and other FGFR1 fusion proteins in the United States, the European Union and Canada. We retain rights to develop and commercialize FP-1039 in territories outside the United States, the European Union and Canada.

We received an upfront payment of $50 million from GSK-HGS in connection with entering into the FP-1039 license. GSK-HGS is obligated to pay us contingent payments of up to $435 million comprising aggregate development-related contingent payments of up to $70 million, aggregate regulatory-related contingent payments of up to $195 million, and aggregate commercial-related contingent payments up to $170 million. Of the development-related contingent payments, we could receive, within the next 24 months, a $5 million contingent payment upon GSK-HGS s completion of its Phase 1b clinical trial and a $15 million contingent payment if GSK-

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HGS initiates a Phase 2 clinical trial. We are also eligible to receive tiered royalty payments from the low-double digits to the high-teens on net sales of FP-1039.

GSK-HGS is obligated to pay us for the costs of all FP-1039 related research and development activities we elect to undertake on behalf of GSK-HGS. GSK-HGS has paid us $3.3 million for our conduct of these activities through September 30, 2013.

GSK US Muscle Diseases Collaboration

In July 2010, we entered into a research collaboration and license agreement, referred to as the muscle diseases collaboration, with GSK US to identify potential drug targets and drug candidates to treat skeletal muscle diseases. In May 2011, we amended the muscle diseases collaboration to expand the research plan in scope and duration to include an additional cell-based screen and an *in vivo* screen using our Rapid *In Vivo* Protein Production System, or RIPPS®, technology. Under the muscle diseases collaboration, we will conduct a total of three customized cell-based screens and one *in vivo* screen of our protein library. The three-year research term for the original two cell-based screens ended in July 2013 and the three-year research term for the cell-based and *in vivo* screens will end in May 2014.

At the inception of the muscle diseases collaboration, GSK US made an upfront payment to us of $7.0 million and purchased shares of our Series A-2 convertible preferred stock for $7.5 million, of which we considered $3.0 million to be an implied premium. The implied premium was accounted for as revenue in the same manner as the upfront payment and allocated to the deliverables under the research collaboration agreement. Through September 30, 2013, we have also received $9.7 million in research funding, and we are eligible to receive up to an additional $0.2 million in research funding under this agreement through the remainder of the research term, which ends in May 2014. As of September 30, 2013, we had deferred revenue of $3.0 million related to this agreement, of which we expect to recognize $1.3 million in 2013 and $1.7 million in 2014 as we complete our obligation to provide research services.

Under the muscle diseases collaboration, GSK US has the right to evaluate proteins identified in the screens we conduct for limited periods of time and after such evaluation the right to obtain exclusive worldwide licenses to develop and commercialize products that incorporate or target selected proteins. In December 2012, GSK US selected a protein for further evaluation and triggered a $0.3 million selection fee. In September 2013, we and GSK US agreed to extend the evaluation period for this protein therapeutic target by approximately eight months and GSK US paid us a $0.2 million extension fee. In October 2013, GSK US selected several other protein therapeutic targets for further evaluation and paid us a $0.3 million selection fee in December 2013. We are eligible to receive up to $124.3 million in potential option exercise fees and contingent payments with respect to each protein target that GSK US elects to obtain rights. These potential fees and payments are composed of target evaluation and selection fees of up to $1.8 million, preclinical and development-related contingent payments of up to $28.5 million, regulatory-related contingent payments of up to $40.0 million and commercial-related contingent payments of up to $54.0 million. GSK US is also obligated to pay us tiered low- to mid-single digit royalties on global net sales for each product that incorporates or targets the protein.

GSK UK Respiratory Diseases Collaboration

In April 2012, we entered into a research collaboration and license agreement, referred to as the respiratory diseases collaboration, with GSK UK to identify new therapeutic approaches to treat refractory asthma and chronic obstructive pulmonary disease, COPD, function with a particular focus on identifying novel protein therapeutics and antibody targets. We plan to conduct up to six customized screens of our protein library under the respiratory diseases collaboration using both our cell-based and *in vivo* screening capabilities. The four-year research term will end in April 2016.

At the inception of the respiratory diseases collaboration, GSK UK made an upfront payment to us of $7.5 million and purchased from us shares of our Series A-3 convertible preferred stock for $10.0 million, of which we considered $3.1 million to be an implied premium. The implied premium was accounted for as revenue in the same manner as the upfront payment and allocated to the deliverables under the research collaboration agreement. Through September 30, 2013, we have also received $3.9 million of research funding and we are eligible to receive up to an additional $6.6 million of research funding under this agreement through the remainder of the research

term, which ends in April 2016. As of September 30, 2013, we had deferred revenue of $7.4 million related to this agreement, of which we expect to recognize $1.3 million in 2013 and the remainder ratably through the second quarter of 2016 as we complete our obligation to provide research services. We expect to receive $0.6 million of quarterly research payments during the remainder of 2013, $2.0 million in each of 2014 and 2015 and $1.3 million in 2016 as we complete our obligation to provide research services.

In the course of conducting screens of our protein library under the collaboration we expect to discover proteins that may be potential drug targets or drug candidates for treating refractory asthma or COPD. Under the collaboration agreement, GSK UK has the right to evaluate proteins identified in the screens we conduct for limited periods of time and after such evaluation has the right to obtain an exclusive worldwide license to develop and commercialize products that incorporate or selected target proteins.

Prior to the time GSK UK exercises its right to obtain an exclusive worldwide license to a protein target, we and GSK UK will discuss and agree on which protein targets GSK UK will have sole responsibility for the further development and commercialization of products that incorporate or target the protein targets, which we refer to as Track 1 Targets, and which protein targets to which we will develop biologics that incorporate or target the protein targets through to clinical proof of mechanism in either a Phase 1 clinical trial or Phase 2 clinical trial, which we refer to as Track 2 Targets. We and GSK UK will take into consideration each party s available resources and capabilities at the time in deciding which protein targets will be Track 1 Targets or Track 2 Targets, but subject to each party s general right to alternate in such selection with GSK UK have the right to first select.

We are eligible to receive up to $124.3 million in potential target evaluation and selection fees and contingent payments with respect to each Track 1 Target. These fees and payments are composed of target evaluation and selection fees of up to $1.8 million, preclinical and development-related contingent payments of up to $28.5 million, regulatory-related contingent payments of up to $40.0 million and commercial-related contingent payments of up to $54.0 million. GSK UK is also obligated to pay us tiered low- to mid-single digit royalties on global net sales for each product that incorporates or targets the Track 1 Target.

We are eligible to receive up to $193.8 million in potential target evaluation and selection fees and contingent payments with respect to each Track 2 Target. These fees and payments are composed of target evaluation and selection fees of up to $1.8 million, a clinical proof of mechanism option exercise fee of up to $23.0 million, preclinical and development-related contingent payments of up to $36.5 million, regulatory-related contingent payments of up to $53.0 million and commercial-related contingent payments of up to $79.5 million. GSK UK is also obligated to pay us tiered high-single to low-double digit royalties on global net sales for each product that incorporates or targets the Track 2 Target.

UCB Fibrosis and CNS Collaboration

In March 2013, we entered into a research collaboration and license agreement, referred to as the fibrosis and CNS collaboration, with UCB to identify innovative biologics targets and therapeutics in the areas of fibrosis-related immunologic diseases and central nervous system, or CNS, disorders. We plan to conduct up to five customized cell-based and *in vivo* screens of our protein library under the fibrosis and CNS collaboration. We currently expect to complete our initial research activities under the fibrosis and CNS collaboration by March 2016. Upon the completion of those research activities, UCB has up to a two-year evaluation period during which we may be obligated to perform additional services at the request of UCB.

At the inception of the fibrosis and CNS collaboration, UCB made payments to us of $8.2 million. We are eligible to receive up to an additional $6.4 million of technology access fees and research funding under the fibrosis and CNS collaboration starting in March 2014 through January 2016. In addition, we may be eligible to receive up to $1.3 million if UCB elects to have us conduct a third fibrosis screen. As of September 30, 2013, we had deferred revenue of $6.8 million related to this agreement, of which we expect to recognize $2.4 million in 2014, $1.2 million in 2015, and $1.2 million in 2016. We expect to receive research payments of $3.0 million and $3.2 million in 2014 and 2015, respectively.

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We are eligible to receive up to $92.2 million in potential evaluation and selection fees and contingent payments with respect to each protein target for which UCB elects to obtain an exclusive license, comprising aggregate target evaluation and selection fees of up to $0.4 million, preclinical and development-related contingent payments of up to $11.8 million, regulatory-related contingent payments of up to $20.0 million and commercial-related contingent payments of up to $60.0 million. UCB is also obligated to pay us tiered low- to mid-single digit royalties on global net sales for each product that incorporates or targets the protein.

Summary Revenue by Collaboration Partner

The following is a comparison of collaboration revenue for the years ended December 31, 2010, 2011 and 2012, and the nine months ended September 30, 2012 and 2013:

	YEARS ENDED DECEMBER 31,			NINE MONTHS ENDED SEPTEMBER 30,	
(in millions)	**2010**	**2011**	**2012**	**2012**	**2013**
R&D Funding					
Glaxo Group Limited	$	$	$ 1.3	$ 0.7	$ 2.1
GlaxoSmithKline LLC	0.5	2.5	3.3	2.5	2.3
Human Genome Sciences, Inc.		2.4	0.9	0.8	0.1
Pfizer, Inc.	10.0	3.8			0.1
Other	0.2	0.1	0.1	0.1	0.1
Ratable Revenue Recognition					
Glaxo Group Limited			1.9	1.3	2.0
GlaxoSmithKline LLC	1.4	2.7	2.4	1.8	1.8
Human Genome Sciences, Inc.		50.0			
Pfizer, Inc.	8.7	3.4			
UCB Pharma S.A.					1.4
Other	0.1				
Milestone and Contingent Payments					
Centocor Research and Development Inc.	2.8				
GlaxoSmithKline LLC			0.1		0.1
Total	$ 23.7	$ 64.9	$ 10.0	$ 7.1	$ 10.0

We expect that any revenue we generate will fluctuate from period to period as a result of the timing and amount of milestones and other payments from our existing collaborations or any new collaborations we may enter into.

Research and Development

Research and development expenses consist of costs we incur in performing internal and collaborative research and development activities. Expenses incurred related to collaborative research and development agreements approximate the revenue recognized under these agreements. Research and development costs consist of salaries and benefits, including associated stock-based compensation, lab supplies, and facility costs, as well as fees paid to other entities that conduct certain research and development activities, including manufacturing, on our behalf.

We are conducting research and development activities on several oncology and inflammatory disease targets.

We have a research and development team that designs, manages and evaluates the results of all of our research and development activities. We conduct nearly all of the core target discovery and early research and preclinical activities internally and rely on third parties, such as CROs, and clinical manufacturing organizations, or CMOs, for the execution of certain of our research and development activities, such as toxicology studies and drug substance and drug product manufacturing and the conduct of clinical trials. We account for research and development costs on a program-by-program basis. Costs associated with the early phases of research and discovery are often related to improving our discovery platform and are not necessarily allocable to a specific target. We assign costs for such activities to a distinct non-program related project code. We allocate research management, overhead, common usage laboratory supplies, and facility costs on a fulltime equivalent basis.

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The following is a comparison of research and development expenses for the years ended December 31, 2010, 2011 and 2012, and the nine months ended September 30, 2012 and 2013:

(in millions)	YEARS ENDED DECEMBER 31, 2010	2011	2012	NINE MONTHS ENDED SEPTEMBER 30, 2012	2013
Product programs:					
FP-1039	$ 5.5	$ 4.3	$ 1.0	$ 0.7	$ 0.7
FPA008	0.9	4.5	4.5	3.1	7.5
FPA144		3.0	4.8	3.1	3.8
Early preclinical programs, collectively	6.5	8.1	8.3	6.8	2.5
Subtotal pipeline	12.9	19.9	18.6	13.7	14.5
Product and discovery collaborations	11.3	7.5	7.0	5.1	7.5
Early research and discovery	5.2	6.6	3.2	2.5	2.7
Total research and development expenses	$ 29.4	$ 34.0	$ 28.8	$ 21.3	$ 24.7

We expect our research and development expenses to increase as we advance our development programs further, in particular as we increase the number and size of our clinical trials. We began a Phase 1 clinical trial for FPA008 in October 2013 and expect to begin a Phase 1 clinical trial for FPA144 in selected patients by the end of 2014. The process of conducting preclinical studies and clinical trials necessary to obtain regulatory approval is costly and time-consuming. We or our partners may never succeed in achieving marketing approval for any of our drug candidates. Numerous factors may affect the probability of success for each drug candidate, including preclinical data, clinical data, competition, manufacturing capability and commercial viability.

FP-1039, our most-advanced product candidate, entered Phase 1b clinical development in July 2013, FPA008 entered Phase 1 clinical development in October 2013 and our other product candidates are in preclinical development; therefore the successful development of our drug candidates is highly uncertain and may not result in approved products. Completion dates and completion costs can vary significantly for each drug candidate and are difficult to predict for each product. Given the uncertainty associated with clinical trial enrollments and the risks inherent in the development process, we are unable to determine the duration and completion costs of the current or future clinical trials of our drug candidates or if, or to what extent, we will generate revenues from the commercialization and sale of any of our drug candidates. We anticipate we will make determinations as to which programs to pursue and how much funding to direct to each program on an ongoing basis in response to the outcome of research, nonclinical and clinical activities, as well as ongoing assessment as to each drug candidate s commercial potential. We will need to raise additional capital or may seek additional product collaborations in the future in order to complete the development and commercialization of our drug candidates.

General and Administrative

General and administrative expenses consist primarily of salaries and related benefits, including associated stock-based compensation, related to our executive, finance, legal, business development, human resource and support functions. Other general and administrative expenses include allocated facility-related costs not otherwise included in research and development expenses, travel expenses and professional fees for auditing, tax and legal services, including intellectual property-related legal services.

We expect that our general and administrative expenses will increase for the foreseeable future as we incur additional costs associated with being a publicly traded company, including legal, auditing and filing fees, additional insurance premiums, investor relations expenses and

general compliance and consulting expenses. Also, we expect our intellectual property related legal expenses, including those related to preparing, filing, prosecuting and maintaining patent applications, to increase as our intellectual property portfolio expands.

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Interest Income

Interest income consists of interest income earned on our cash and cash equivalents, and marketable securities.

Other Income (Expense), Net

Other income (expense), net consists primarily of the revaluation of the preferred stock warrant liability and the gain or loss on the disposal of property and equipment, if any. Upon the completion of our initial public offering, the preferred stock warrant liability was reclassified to additional paid-in capital and we no longer record any related periodic fair value adjustment.

Results of Operations

Comparison for the Nine Months Ended September 30, 2013 and 2012

(in millions)	NINE MONTHS ENDED SEPTEMBER 30, 2012	2013
Collaboration revenue	$ 7.1	$ 10.0
Operating expenses:		
Research and development	21.3	24.7
General and administrative	6.7	7.4
Total operating expenses	28.0	32.1
Interest income		
Other income, net	0.1	0.5
Net loss	$ (20.8)	$ (21.6)

Collaboration Revenue

Collaboration revenue increased by $2.9 million, or 40.8%, to $10.0 million for the nine months ended September 30, 2013 from $7.1 million for nine months ended September 30, 2012. This increase for the nine months ended September 30, 2013 was primarily due to the $2.2 million increase in revenue recognized under our respiratory diseases collaboration with GSK UK entered into in April 2012, and the recognition of $1.4 million of revenue under our fibrosis and CNS collaboration with UCB entered into in March 2013, offset by a reduction in reimbursed clinical costs of $0.7 million for research and development we completed in 2012 under our FP-1039 license and collaboration agreement with GSK.

Research and Development

Our research and development expenses increased by $3.4 million, or 16.0%, to $24.7 million for the nine months ended September 30, 2013 from $21.3 million for the nine months ended September 30, 2012. This increase was primarily due to an increase of $4.4 million related to our FPA008 program primarily for the manufacture of drug substance and drug product for our Phase 1 clinical trial, a $0.7 million increase related to advancing our FPA144 program, a $2.4 million increase in discovery collaboration costs due to entering into the fibrosis and CNS collaboration in March 2013 and the respiratory diseases collaboration in April 2012, offset by a $4.3 million decrease in early preclinical program expenses due to a reduction in the number of programs we were actively pursuing.

General and Administrative

Our general and administrative expenses increased by $0.7 million, or 10.4%, to $7.4 million for the nine months ended September 30, 2013, from $6.7 million for the nine months ended September 30, 2012, primarily due to a $0.1 million increase in stock-based compensation, a $0.1 million increase in intellectual property legal fees and $0.2 million for activities related to preparing to become a public company.

Other Income, Net

Other income, net, increased to $0.5 million for the nine months ended September 30, 2013 from $0.1 million for the nine months ended September 30, 2012. This increase primarily reflects the decrease in estimated fair value of the preferred stock warrant liability and remeasurement through the date of the closing of our initial public offering.

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Comparison of the Years Ended December 31, 2011 and 2012

(in millions)	YEARS ENDED DECEMBER 31, 2011	2012
Collaboration revenue	$ 64.9	$ 10.0
Operating expenses:		
Research and development	34.0	28.8
General and administrative	11.2	9.0
Total operating expenses	45.2	37.8
Interest income	0.1	0.1
Other (expense) income, net	(0.1)	0.1
Net income (loss) before income taxes	19.7	(27.6)
Income tax expense		
Net income (loss)	$ 19.7	$ (27.6)

Collaboration Revenue

Collaboration revenue decreased by $54.9 million, or 84.6%, from $64.9 million in 2011 to $10.0 million in 2012. This decrease was primarily due to the recognition as revenue of the $50.0 million upfront payment in 2011 in connection with our FP-1039 license with GSK-HGS to develop our FP-1039 product candidate as well as a $7.2 million reduction of revenue from our Pfizer discovery research collaboration, which ended in May 2011. This was partially offset by the recognition of $3.2 million of revenue for a technology access fee and research services under our respiratory diseases collaboration with GSK UK entered into in April 2012.

Research and Development

Total research and development expenses decreased by $5.2 million, or 15.3%, from $34.0 million in 2011 to $28.8 million in 2012. This decrease was primarily due to the FP-1039 Phase 1 clinical trial activities nearing completion in 2011 and entering into the FP-1039 license with GSK-HGS to further develop FP-1039, for which GSK is now responsible for development and related costs, and a reduction in early research efforts.

Research and development expenses related to FPA144 increased by $1.8 million, or 60.0%, from $3.0 million in 2011 to $4.8 million in 2012. Expenses in 2011 related primarily to an exclusive license from Galaxy Biotech, LLC, or Galaxy, related to the development, manufacturing and commercialization of a monoclonal antibody while expenses in 2012 related primarily to preclinical studies.

Research and development expenses related to research collaborations decreased by $0.5 million, or 6.7%, from $7.5 million in 2011 to $7.0 million in 2012. The decrease was due to the completion of our Pfizer discovery research collaboration in May 2011, offset by the expansion of our muscle diseases collaboration with GSK US in May 2011 and entering into our respiratory diseases collaboration with GSK UK in April 2012.

Research and development expenses related to early research and discovery programs to expand our product platform decreased by $3.4 million, or 51.5%, from $6.6 million in 2011 to $3.2 million in 2012. This decrease was due to a reduction in the number of programs we were actively

pursuing.

General and Administrative

General and administrative expenses decreased by $2.2 million, or 19.6%, from $11.2 million in 2011 to $9.0 million in 2012. This decrease was primarily due to a decrease in stock-based compensation expenses resulting from amending terms of performance based options in 2011 for two employees, and amending vesting terms for a former chief executive officer in 2011.

Interest Income

Interest income decreased from $114,000 in 2011 to $88,000 in 2012 due to a decrease in our marketable securities portfolio, which resulted in lower interest income year-over-year.

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Other Income (Expense), Net

Other income, net increased from a $65,000 expense in 2011 to income of $121,000 for 2012. This increase primarily reflects a decrease in the estimated fair value of the preferred stock warrant liability. A warrant to purchase 3,902 shares of Series A convertible preferred stock expired unexercised in December 2012.

Income Tax Expense

Income tax expense for the year ended December 31, 2011, consisted solely of current state tax expense, as we were able to utilize federal net operating loss carryforwards to fully offset federal taxable income for the year. Income tax expense for the year ended December 31, 2012, consisted solely of current state tax expense. For 2012 and all years prior to 2011, we incurred taxable losses and accumulated significant federal and state net operating losses as well as research and development tax credits. Our ability to use our operating loss carryforwards and tax credits to offset future taxable income may become subject to restrictions under Section 382 of the United States Internal Revenue Code of 1986, as amended.

Comparison of the Years Ended December 31, 2010 and 2011

	YEARS ENDED DECEMBER 31,	
(in millions)	**2010**	**2011**
Collaboration revenue	$ 23.7	$ 64.9
Operating expenses:		
Research and development	29.4	34.0
General and administrative	8.4	11.2
Total operating expenses	37.8	45.2
Interest income	0.1	0.1
Other income (expense), net	0.5	(0.1)
Net (loss) income before income taxes	(13.5)	19.7
Benefit from income taxes		
Net (loss) income	$ (13.5)	$ 19.7

Collaboration Revenue

Collaboration revenue increased by $41.2 million from $23.7 million in 2010 to $64.9 million in 2011. The increase was primarily due to the recognition as revenue of the $50.0 million upfront license fee in April 2011 in connection with our FP-1039 license with GSK-HGS to develop our FP-1039 product, partially offset by an $11.5 million decrease in revenue recognized from our Pfizer discovery research collaboration, which ended in May 2011. In addition, we recognized as revenue $5.2 million in 2011 from our muscle diseases collaboration with GSK US that we entered into in July 2010 as compared to $1.9 million in 2010. Additionally, we recognized as revenue a $2.8 million milestone payment in 2010 from Centocor Research and Development Inc. for the selection of a target we discovered for immunology related indications from a discovery research program that ended in February 2010.

Research and Development

Total research and development expenses increased by $4.6 million, or 15.6%, from $29.4 million in 2010 to $34.0 million in 2011. This increase was primarily due to acquiring an exclusive license from Galaxy in 2011 for the development, manufacturing and commercialization of antibodies to FGFR2 and an increase in spending on FPA008.

Research and development expenses related to FP-1039 decreased by $1.2 million, or 21.8%, from $5.5 million in 2010 to $4.3 million in 2011 as the Phase 1 clinical trial activities neared completion in 2011.

Research and development expenses related to FPA008 increased $3.6 million from $0.9 million in 2010 to $4.5 million in 2011 as we advanced this program into later non-clinical development.

Research and development expenses related to FPA144 increased by $3.0 million from $0 in 2010 to $3.0 million in 2011 due to acquiring an exclusive license from Galaxy related to the development, manufacturing and commercialization of antibodies to FGFR2.

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Research and development expenses related to research collaborations decreased by $3.8 million, or 33.6%, from $11.3 million in 2010 to $7.5 million in 2011. The decrease was due to the completion of our Pfizer discovery research collaboration in May 2011, offset by the expansion of the GSK US muscle diseases collaboration in May 2011.

Research and development expenses related to early preclinical programs and early research and discovery to expand our product platform increased by $3.0 million, or 25.6%, from $11.7 million in 2010 to $14.7 million in 2011. The increase was related to identifying and advancing other early preclinical targets to leads for potential future Investigational New Drug Application submissions.

General and Administrative

General and administrative expenses increased by $2.8 million, or 33.3%, from $8.4 million in 2010 to $11.2 million in 2011. This increase was primarily due to stock-based compensation expenses resulting from amending terms of performance based options in 2011 for two employees and amending vesting terms for a former chief executive officer in 2011, and a sublicense fee under our agreement with The Regents of the University of California, under which we were granted an exclusive license under certain patent rights related to our FP-1039 program

Interest Income

Interest income increased from $58,000 in 2010 to $114,000 in 2011 due to an increase in our marketable securities portfolio, which resulted in higher interest income year-over-year.

Other Income (Expense), Net

Other income (expense), net decreased from income of $491,000 in 2010 to an expense of $65,000 in 2011 primarily due to receiving a one-time $489,000 grant from the U.S. Section 48D Qualifying Therapeutics Discovery Project Program in 2010 and an increase in the estimated fair value of the preferred stock warrant liability.

Benefit from Income Taxes

Income tax benefit for the year ended December 31, 2010, consisted of $5,000 related to an adjustment to the refund of research credits as provided by the Housing and Economic Recovery Act of 2009 and current state tax expense. Income tax expense for the year ended December 31, 2011, consisted solely of current state tax expense, as we were able to utilize federal net operating loss carryforwards to fully offset federal taxable income for the year.

Liquidity and Capital Resources

On September 23, 2013, we completed our initial public offering of our common stock, which resulted in the sale of 4,800,000 shares at a price of $13.00 per share. On September 26, 2013, the underwriters of our initial public offering exercised their over-allotment option in full to purchase an additional 720,000 shares of common stock at a price of $13.00 per share. We received net proceeds from the initial public offering of $63.9 million after deducting underwriting discounts, offering expenses and commissions paid by us. In connection with the initial public offering, two preferred stock warrants net exercised and all of our outstanding convertible preferred stock automatically converted to common stock on a one-for-one ratio on September 23, 2013.

Since inception and through September 30, 2013, we have raised an aggregate of $379.6 million to fund our operations, including $66.7 million from our initial public offering, $158.8 million under our collaboration agreements, $63.5 million from the sale of convertible preferred stock to discovery collaboration partners, $89.9 million from the sale of convertible preferred stock to parties other than our discovery collaboration partners and $0.7 million from the sale of common stock. As of September 30, 2013, we had $77.6 million in cash and cash equivalents and $9.0 million of marketable securities invested in a U.S. Treasury money market fund and U.S. government agencies securities with maturities less than one year.

In addition to our existing cash and cash equivalents, we are eligible to receive research and development funding and to earn milestone and other contingent payments for the achievement of defined collaboration objectives and certain nonclinical, clinical, regulatory and sales-based events, and royalty payments under our collaboration agreements. Our ability to earn these milestone and contingent payments and the timing of achieving these

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milestones is primarily dependent upon the outcome of our collaborators research and development activities and is uncertain at this time. Our rights to payments under our collaboration agreements are our only committed external source of funds.

Funding Requirements

Our primary uses of capital are, and we expect will continue to be, compensation and related expenses, third party clinical and preclinical research and development services, including manufacturing, laboratory and related supplies, legal, patent and other regulatory expenses and general overhead costs. We believe our use of CROs and contract manufacturers provides us with flexibility in managing our spending and limits our cost commitments at any point in time.

Because our product candidates are in various stages of clinical and preclinical development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of our product candidates or whether, or when, we may achieve profitability. Until such time, if ever, that we can generate substantial product revenues, we expect to finance our cash needs through collaboration arrangements and, if necessary, equity or debt financings. Except for any obligations of our collaborators to reimburse us for research and development expenses or to make milestone or royalty payments under our agreements with them, we will not have any committed external source of liquidity. To the extent that we raise additional capital through the future sale of equity or debt, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing stockholders. If we raise additional funds through collaboration arrangements in the future, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Based on our research and development plans and our timing expectations related to the progress of our programs, we expect that the net proceeds from this offering, together with our existing cash and cash equivalents and marketable securities as of September 30, 2013, and research funding that we expect to receive under our existing collaborations, will enable us to fund our operating expenses and capital expenditure requirements into the first quarter of 2016, without giving effect to any potential contingent payments we may receive under our collaboration agreements or entering into any new collaboration agreements. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect. Additionally, the process of testing drug candidates in clinical trials is costly, and the timing of progress and expenses in these trials is uncertain.

Cash Flows

The following is a summary of cash flows for the years ended December 31, 2010, 2011 and 2012 and the nine months ended September 30, 2012 and 2013:

	YEARS ENDED DECEMBER 31,			NINE MONTHS ENDED SEPTEMBER 30,	
(in millions)	**2010**	**2011**	**2012**	**2012**	**2013**
Net cash (used in) provided by operating activities	$ (7.8)	$ 23.3	$ (18.4)	$ (12.6)	$ (15.7)
Net cash provided by (used in) investing activities	3.9	(27.0)	18.5	12.1	16.7
Net cash provided by financing activities	4.6		6.9	6.9	65.3

Net Cash (Used in) Provided by Operating Activities

Net cash used in operating activities was $7.8 million for the year ended December 31, 2010, compared to net cash provided by operating activities of $23.3 million for the year ended December 31, 2011, and net cash used in operating activities of $18.4 million for the year ended December 31, 2012. The increase in cash provided by operating activities between 2010 and 2011 was primarily due to a $34.9 million increase in cash received from collaborations. The increase in cash used in operating activities from 2011 to 2012 was due to a $41.1 million

decrease in cash received from our collaborations. In 2011, we received a $50.0 million upfront payment pursuant to the FP-1039 license with GSK-HGS. We received a $7.5 million upfront payment for the respiratory diseases collaboration with GSK UK entered into in 2012.

Net cash used in operating activities was $15.7 million during the nine months ended September 30, 2013. The net loss of $21.6 million was offset by non-cash charges of $1.3 million for depreciation and amortization, $1.6 million for stock-based compensation expense, $0.3 million for amortization of premium on marketable securities and a $0.5 million non-cash gain for the revaluation of preferred stock warrant liabilities. The net change in operating assets and liabilities of $3.2 million is primarily due to a $2.7 million increase in deferred revenue due to upfront payments received under research collaborations. Net cash used in operating activities was $12.6 million during the nine months ended September 30, 2012. The increase in cash used in operating activities in the nine months ended September 30, 2013 is due to lower upfront proceeds from research collaborations during the first nine months of 2013 as compared to the same period in 2012.

Net Cash Provided by (Used in) Investing Activities

Net cash provided by or used in investing activities for the periods presented primarily relates to the purchases and maturities of marketable securities. Purchases of property and equipment were $3.3 million, $1.0 million and $0.7 million during the years ended December 31, 2010, 2011 and 2012, respectively. Property and equipment purchases in 2010 primarily related to improvements to our current facility that we moved into in 2010. The decrease in property and equipment purchases during the years ended December 31, 2011 and 2012 consisted primarily of a reduction in laboratory equipment purchases supporting our research and development activities.

Purchases of property and equipment were $0.5 million and $0.6 million, respectively, during the nine months ended September 30, 2012 and 2013. The property and equipment purchases during the nine months ended September 30, 2012 and 2013 consisted primarily of purchases of laboratory equipment to support our research and development activities.

Net Cash Provided by Financing Activities

Net cash provided by financing activities during the year ended December 31, 2010, primarily related to the sale of preferred stock. In July 2010, we sold 0.3 million shares of Series A-2 convertible preferred stock to GSK US for proceeds of $7.5 million, of which $3.0 million was considered to be an implied premium and was allocated to the deliverables under the muscle diseases collaboration, resulting in $4.5 million being allocated to the Series A-2 convertible preferred stock. Additionally, we received $0.1 million from employee stock option exercises. Net cash provided by financing activities of less than $0.1 million during the year ended December 31, 2011, reflect cash received from employee stock option exercises. Net cash provided by financing activities during the year ended December 31, 2012, primarily related to the sale of preferred stock. In April 2012, we sold 0.4 million shares of Series A-3 convertible preferred stock to GSK UK for proceeds of $10.0 million, of which $3.1 million was considered to be an implied premium and was allocated to the deliverables under the respiratory diseases collaboration, resulting in $6.8 million being allocated to the Series A-3 convertible preferred stock. Additionally, we received $0.1 million from employee stock option exercises.

Net cash provided by financing activities was $65.3 million during the nine months ended September 30, 2013 primarily related to our initial public offering of shares of our common stock in September 2013, which resulted in the sale of 5,520,000 shares of common stock at a price of $13.00 per share, which resulted in cash proceeds of $64.9 million after deducting underwriting discounts and commissions and expenses paid by us as of September 30, 2013. Additionally, we received $0.4 million from employee stock option exercises in 2013.

Net cash provided by financing activities for the nine months ended September 30, 2012, primarily related to the sale of preferred stock. In April 2012, we sold 0.4 million shares of Series A-3 convertible preferred stock to GSK UK for proceeds of $10.0 million, of which $3.1 million was considered to be an implied premium and was allocated to the deliverables under the respiratory diseases collaboration, resulting in $6.8 million being allocated to the Series A-3 convertible preferred stock. Additionally, we received $0.1 million from employee stock option exercises.

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Contractual Obligations and Contingent Liabilities

The following summarizes our significant contractual obligations as of December 31, 2012:

(in millions)

CONTRACTUAL OBLIGATIONS	TOTAL	LESS THAN 1 YEAR	1 TO 3 YEARS	3 TO 5 YEARS	MORE THAN 5 YEARS
Operating leases [1]	$ 13.3	$ 1.9	$ 5.5	$ 5.9	$
Total obligations	$ 13.3	$ 1.9	$ 5.5	$ 5.9	$

[1] Represents future minimum lease payments under non-cancelable operating leases in effect as of December 31, 2012, for our facilities in South San Francisco, California. The minimum lease payments above do not include common area maintenance charges or real estate taxes.

The contractual obligations table above does not include any potential future milestone payments to third parties as part of certain collaboration and in-licensing agreements, which could total up to $120.1 million, or any potential future royalty payments we may be required to make under our license agreements, including with:

- Galaxy, under which we were granted an exclusive worldwide license for the development, manufacturing and commercialization of anti-FGFR2b antibodies; and

- The Regents of the University of California, under which we were granted an exclusive license under certain patent rights related to our FP-1039 program.

Payments under these agreements are not included in the above contractual obligations table due to the uncertainty of the occurrence of the events requiring payment under these agreements, including our share of potential future milestone and royalty payments. These payments generally become due and payable only upon achievement of certain clinical development, regulatory or commercial milestones.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under SEC rules.

JOBS Act

In April 2012, the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, was enacted. Section 107 of the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period, and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

Quantitative and Qualitative Disclosures about Market Risk

The market risk inherent in our financial instruments and in our financial position represents the potential loss arising from adverse changes in interest rates and concentration of credit risk. As of September 30, 2013, we had cash and cash equivalents, and marketable securities of $86.6 million consisting of bank deposits, interest-bearing money market accounts and U.S. government agency securities. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates. Due to the short-term maturities of our cash equivalents and marketable securities, and the low risk profile of our marketable securities, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our cash equivalents and marketable securities. We have the ability to hold our marketable securities until maturity, and therefore we do not expect a change in market interest rates to affect our operating results or cash flows to any significant degree.

We contract with CROs and contract manufacturers internationally. Transactions with these providers are predominantly settled in U.S. dollars and, therefore, we believe that we have only minimal exposure to foreign currency exchange risks. We do not hedge against foreign currency risks.

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BUSINESS

Overview

We are a clinical-stage biotechnology company focused on discovering and developing novel protein therapeutics. Protein therapeutics are antibodies or drugs developed from extracellular proteins or protein fragments that block disease processes, including cancer and inflammatory diseases. We have developed a library of more than 5,700 human extracellular proteins, which we believe represent substantially all of the body s medically important targets for protein therapeutics. We screen this comprehensive library with our proprietary high-throughput protein screening technologies to identify new targets for protein therapeutics. This platform has allowed us to develop a pipeline of novel product candidates for cancer and inflammatory diseases and to generate over $222 million under our collaboration arrangements through September 30, 2013.

Each of our product candidates has an innovative mechanism of action and addresses patient populations for which better therapies are still needed. In addition, we are pursuing companion diagnostics for each of our lead programs to allow us to select patients most likely to benefit from treatment and therefore accelerate clinical development and improve patient care. Our most advanced product candidates are as follows:

- ***FP-1039/GSK3052230*, or *FP-1039***, is a protein therapeutic that traps and neutralizes cancer-promoting fibroblast growth factors, or FGFs, involved in cancer cell proliferation and new blood vessel formation. FGFs are a family of related extracellular proteins that normally regulate cell proliferation and survival in humans. They act by binding to and activating FGF receptors, or FGFRs, which are cell surface proteins that transmit growth signals to cells. Certain FGFs promote growth of multiple solid tumors by binding and activating FGFRs. Unlike other therapies that indiscriminately block all FGFs, FP-1039 is designed to only block cancer-promoting FGFs and therefore may be associated with better tolerability than other known drug candidates targeting the FGF pathway. We have completed a Phase 1 clinical trial, and our partner, GlaxoSmithKline, or GSK, is conducting a multi-arm Phase 1b clinical trial in patients with abnormally high levels of *FGFR1*. We expect data from the dose escalation phase of this trial by the end of 2014. GSK is responsible for the development and commercialization of FP-1039 in the United States, the European Union and Canada. We have an option to co-promote FP-1039 in the United States.

- ***FPA008*** is an antibody that inhibits colony stimulating factor-1 receptor, or CSF1R, and is being developed to treat patients with inflammatory diseases, including rheumatoid arthritis, or RA. CSF1R is a cell surface protein that controls the survival and function of certain inflammatory cells called monocytes and macrophages. By inhibiting CSF1R activation, FPA008 prevents the production of multiple inflammatory factors, such as tumor necrosis factor, interleukin-6 and interleukin-1, that are individually targeted by approved therapeutics such as *Humira*® (adalimumab), *Actemra*® (tocilizumab) and *Kineret*® (anakinra), respectively. As a result, we believe FPA008 has the potential to have better efficacy than each of these approved drugs. In addition, unlike currently marketed RA drugs, FPA008 directly inhibits bone-destroying cells called osteoclasts. We began a Phase 1 clinical trial for FPA008 in October 2013 and expect preliminary data, including inflammation and bone turnover biomarker data, from the healthy volunteer portion of this trial by the end of 2014.

- ***FPA144*** is an antibody that inhibits FGF receptor 2b, or FGFR2b, and is being developed to treat patients with gastric cancer and potentially other solid tumors. In preclinical studies, FPA144 was highly effective in blocking the growth of gastric tumors that had abnormally high levels of FGFR2b. We plan to begin a Phase 1 clinical trial for FPA144 by the end of 2014 in patients with tumors expressing high levels of FGFR2b and expect preliminary data by the end of 2015.

The process of discovering targets for protein therapeutics has historically proven difficult and slow. There are more than 5,700 proteins in the body that represent potential protein therapeutic targets, but only about 30 are targeted by currently marketed protein drugs in cancer and inflammatory diseases. We spent seven years successfully developing a platform to improve and accelerate the protein therapeutic discovery process. Our platform is based on two components:

- a proprietary library of more than 5,700 human extracellular proteins that we believe is the most comprehensive collection of fully functional extracellular proteins available and is an abundant source of medically relevant novel targets for protein therapeutics; and

- proprietary and new technologies for producing and testing thousands of proteins at a time.

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We believe our platform improves and accelerates the discovery of new protein targets and protein therapeutics because it can:

- identify novel medically relevant protein targets and protein therapeutics that have little or no previously known biological function or are not in the public domain and cannot easily be discovered by other methods;
- determine the best protein target among many alternatives for a particular disease by screening and comparing nearly all possible medically important targets simultaneously; and
- identify new targets more quickly and efficiently than previously possible because it can produce and test thousands of proteins at a time, rather than one or just a few at a time.

In the past several years we have used this platform to identify dozens of targets validated in rodent models and to build a growing pipeline of drug candidates. We have attracted numerous partnerships with leading biopharmaceutical companies, which have generated over $222 million in funding for our business through September 30, 2013. Under the FP-1039 license and collaboration agreement with GSK, we are eligible to receive up to $435 million in contingent payments. We also have discovery collaborations with GSK and UCB Pharma, S.A., or UCB, and are eligible to receive potential option exercise fees and contingent payments up to $124.3 million per target under the GSK muscle diseases collaboration, $193.8 million per target under the GSK respiratory diseases collaboration and $92.2 million per target under the UCB fibrosis and CNS collaboration. We believe our platform will continue to provide opportunities for monetization through product and discovery collaborations.

Our Strategy

Our goal is to use our proprietary platform to maintain our leadership position in the discovery of innovative protein therapeutic targets and to develop and commercialize protein therapeutics to treat cancer and inflammatory diseases. The key elements of our strategy to achieve this goal are:

- ***Focus on protein therapeutics to treat cancer and inflammatory diseases.*** Protein therapeutics accounted for over $71 billion in global sales in 2012 for the treatment of cancer and inflammatory diseases. However, there continue to be significant medical needs for novel and effective therapies. We believe that our library includes substantially all medically important extracellular proteins involved in cancer and inflammatory diseases, and, combined with the significant experience and expertise of our scientists in these fields, we believe we are well positioned to identify new targets and to develop effective, novel protein therapeutics.
- ***Continue to advance and expand our internal pipeline.*** We are currently developing three product candidates, FP-1039, FPA008 and FPA144. We plan to focus our resources on the development of these product candidates and on discovering and developing new product candidates with our platform.
- ***Employ smarter drug development techniques.*** We will pursue indications and specific patient populations in which activity of our product candidates can be assessed early in clinical development, potentially in Phase 1 clinical trials. We also plan to use companion diagnostics to identify patients most likely to respond to our product candidates. We believe selecting patients using companion diagnostics should increase the probability of success in our clinical trials.
- ***Build a commercial enterprise by retaining rights for products in targeted specialty markets.*** We plan to eventually build sales and marketing capabilities in selected specialty markets that we can adequately serve with a focused commercial organization. In our collaboration with GSK for FP-1039 we have an option to co-promote the product in the United States. In the event that we out-license other products in our pipeline, we plan to retain rights to market the products ourselves in the United States, where appropriate.

- ***Enter into additional discovery and product collaborations to supplement our internal development capabilities and generate funding.*** Because our platform is broadly applicable, we plan to pursue discovery collaborations in disease areas other than cancer and inflammation. In addition, we will license certain rights to products within cancer and inflammation to supplement our development and commercialization capabilities. These collaborations provide us with validation of our technology, significant funding to advance our pipeline and access to development, manufacturing and commercial expertise and capabilities.

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Product Pipeline

The following table summarizes key information about our three most advanced product candidates:

PRODUCT CANDIDATE	INDICATION	COMMERCIAL RIGHTS	STAGE OF DEVELOPMENT AND ANTICIPATED MILESTONES
FP-1039	*FGFR1* gene-amplified tumors, e.g., squamous non-small cell lung cancer	**GSK-HGS**: U.S., EU and Canada	n Completed Phase 1 clinical trial.
		Five Prime: Co-promote in U.S.; retained rest of world rights	n Phase 1b clinical trial underway.
			n Phase 1b clinical data from the dose escalation phase expected by the end of 2014.
FPA008	Rheumatoid arthritis; other inflammatory diseases	**Five Prime**: Global	n Phase 1 clinical trial underway.
			n Preliminary Phase 1 clinical trial data from healthy volunteer portion expected by the end of 2014.
			n Progress to dosing in RA patients expected by the end of 2014.
FPA144	*FGFR2* gene-amplified tumors, e.g., gastric cancer	**Five Prime**: Global	n Phase 1 clinical trial expected to commence by the end of 2014.
			n Preliminary Phase 1 clinical trial data expected by the end of 2015.

FP-1039

Overview. FP-1039 is a protein therapeutic we designed to treat multiple types of solid tumors by binding to FGFs that would otherwise bind to and activate FGFR1. We have licensed rights to FP-1039 in the United States, the European Union and Canada to Human Genome Sciences, Inc., or HGS. HGS was acquired by GSK in August 2012, and we refer to HGS as GSK-HGS. GSK commenced a multi-arm Phase 1b clinical trial in the United States and Europe in July 2013 in selected patients with tumors expressing high levels of FGFR1. We expect data from the dose escalation phase of this trial by the end of 2014.

FGFs and FGFRs regulate tumor cell proliferation and the growth of new blood vessels, called angiogenesis. The FGF family consists of 22 known proteins called ligands that exert their physiological effect on cells by binding to four FGFRs (FGFR1, FGFR2, FGFR3 and FGFR4). Dysregulation of the FGF pathway has been linked to the growth of human tumors and poor patient prognosis.

Certain tumors contain an excessive number of *FGFR1* genes, known as gene amplification. This gene amplification results in excess production, or the over-expression, of FGFR1 protein on the surface of the tumor cell. This over-expression of FGFR1 leads to increased binding of FGFs, which stimulate uncontrolled proliferation of some types of tumor cells. These tumors include squamous non-small cell lung cancer, or squamous NSCLC, small cell lung cancer, or SCLC, breast, and head and neck cancers. Patients who have squamous NSCLC or breast cancer with *FGFR1* gene amplification have significantly reduced survival relative to comparable patients whose tumors do not have this amplification.

In addition to directly stimulating uncontrolled cancer cell proliferation, some FGFs can promote tumor growth through angiogenesis. By triggering angiogenesis, cancerous cells can fuel their metabolic needs and direct their own uncontrolled cell division. The FGFs that cause angiogenesis are often present in a type of kidney cancer called renal cell carcinoma, or RCC, and in a type of liver cancer called hepatocellular carcinoma, or HCC.

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Market Opportunity. We believe there are currently no approved therapies that specifically block FGFs or FGFRs. FP-1039 is designed to treat patients with FGFR1 pathway dysregulation, particularly in patients with metastatic tumors that have spread to other organs. The following table shows our estimates of 2012 incidence and prevalence of advanced or metastatic tumors with *FGFR1* gene amplification:

TUMOR TYPE	FREQUENCY OF *FGFR1* GENE AMPLIFICATION BY TUMOR TYPE	PREVALENCE OF PATIENTS WITH *FGFR1* GENE AMPLIFICATION IN THE U.S.	INCIDENCE OF PATIENTS WITH *FGFR1* GENE AMPLIFICATION IN THE U.S.	PREVALENCE OF PATIENTS WITH *FGFR1* GENE AMPLIFICATION IN EUROPE AND ASIA	INCIDENCE OF PATIENTS WITH *FGFR1* GENE AMPLIFICATION IN EUROPE AND ASIA
Squamous NSCLC	22%	11,000	9,000	51,000	50,000
Head and Neck Cancer	17%	17,000	5,000	132,000	56,000
Breast Cancer	7-15% (mean 11%)	32,000	8,000	148,000	40,000
SCLC	6%	2,000	2,000	10,000	10,000
Total		**62,000**	**24,000**	**341,000**	**156,000**

In addition to our and GSK-HGS s research and development in the area of tumors with *FGFR1* gene amplification, we are exploring the potential development of FP-1039 in RCC or HCC. The following table shows the estimated 2012 incidence and prevalence of advanced and metastatic RCC and HCC, cancer types for which we believe FP-1039 may be effective when used in combination with other anti-angiogenic agents.

TUMOR TYPE	PREVALENCE IN THE U.S.	INCIDENCE IN THE U.S.	PREVALENCE IN EUROPE AND ASIA	INCIDENCE IN EUROPE AND ASIA
Kidney (RCC)	61,000	20,000	172,000	64,000
Liver (HCC)	9,000	10,000	250,000	301,000
Total	**70,000**	**30,000**	**422,000**	**365,000**

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Our Program. FP-1039 is a novel protein therapeutic, which includes the extracellular part of FGFR1. FP-1039 acts as an inhibitor of FGFs, because the FGFR1 portion of the molecule binds to FGFs and prevents them from binding to FGFR1 on tumor and blood vessel cells. Because FGF proteins circulating in the blood are called ligands, FP-1039 is called a ligand trap. FP-1039 also includes a portion of an antibody called the Fc region (see Figure 1). Because the Fc region of an antibody is inherently very stable in the bloodstream, we believe adding that fragment to FP-1039 makes our protein therapeutic more stable as well. The Fc region does not bind to FGFs, but instead serves only to improve the stability of FP-1039.

Figure 1: FP-1039 Binds to and Inactivates FGFs That Promote Tumor Cell Growth and New Blood Vessel Growth

Importantly, FP-1039 inhibits certain FGFs but not others. Because it binds to most FGFs associated with tumor growth and angiogenesis, it has the capability of inhibiting growth of many different kinds of cancers. However, it does not bind to an FGF called FGF23 that regulates phosphate levels in the blood. Therefore, FP-1039 treatment does not change phosphate levels in the blood. This is in contrast to small molecule inhibitors of FGF receptors being developed by Novartis AG and AstraZeneca plc, which block the activity of both cancer-associated FGFs and FGF23, and are reported to cause abnormally high phosphate levels in the blood, known as hyperphosphatemia. High phosphate levels can lead to calcification in tissues, including blood vessels. In our Phase 1 clinical trial, treatment with FP-1039 in patients with solid tumors was not associated with the side effects seen in the clinical trials with small molecule FGFR inhibitors, which included hyperphosphatemia and retinal detachment. We expect FP-1039 to be better tolerated by patients. We also expect that it could be used in dosages high enough to fully block cancer-promoting FGFs, and that it has the potential to be safely combined with standard of care chemotherapy.

FP-1039 Phase 1 Clinical Trial. Our Phase 1 clinical trial of FP-1039 was an open-label, non-randomized, ascending-dose study designed to assess the safety, tolerability and pharmacokinetics of FP-1039 administered weekly to patients with metastatic tumors for whom standard therapy did not exist or was no longer effective. We conducted this Phase 1 clinical trial under an Investigational New Drug, or IND, application that we submitted to the U.S. Food and Drug Administration, or FDA, on May 29, 2008. FP-1039 was administered intravenously by a 30-minute infusion. Patients received these infusions once a week for a total of four infusions, followed by a two-week observation period. Patients without progressive disease were given the option to continue on FP-1039 on a weekly basis.

The 39 patients enrolled in the study had a variety of tumors, including advanced or metastatic breast cancer, lung cancer, colon/rectal cancer, prostate cancer, head and neck cancers, or uterine cancer. Overall, FP-1039 was well tolerated over the dose range studied and no maximum tolerated dose was observed in this study. As a result, we

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believe that FP-1039 will be well tolerated in combination with standard of care chemotherapy. In the Phase 1 clinical trial, FP-1039 treatment was not associated with hyperphosphatemia or retinal detachment as have been observed in patients enrolled in trials with the small molecule FGFR inhibitors. We also studied blood levels of FGF2, one of the most important cancer-promoting FGFs, and observed a significant decrease of FGF2 in all patients tested.

Because the primary objectives of the study were to assess safety and pharmacokinetics of FP-1039 infusions, we did not require patients to have tumors with *FGFR1* gene amplification. In this unselected patient population, no major tumor shrinkage was observed. Despite not being preselected for *FGFR1* gene amplification, 17 patients had stabilization of tumor growth, known as stable disease, for varying periods of time. One of the seventeen patients who had hormone-resistant prostate cancer that progressed during chemotherapy experienced tumor reduction of 20% following treatment with FP-1039, with stable disease duration of approximately seven months.

FP-1039 Preclinical Data. In preclinical testing, we observed inhibition of tumor growth with single-agent FP-1039, particularly in tumors with *FGFR1* gene amplification, including squamous NSCLC and SCLC (Figure 2).

Figure 2: Treatment with FP-1039 inhibits growth of squamous NSCLC and SCLC tumors with FGFR1 gene amplification in mouse models

Furthermore, when combined with standard chemotherapy, FP-1039 treatment improves anti-tumor activity in preclinical models. Figure 3 shows results in a preclinical model of squamous NSCLC and SCLC with *FGFR1* gene amplification in which the addition of FP-1039 to chemotherapy resulted in greater tumor growth inhibition than either FP-1039 or chemotherapy alone.

Figure 3: Addition of FP-1039 to standard chemotherapy results in greater inhibition of growth of squamous NSCLC and SCLC tumors with FGFR1 gene amplification in mouse models

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The FGF pathway has also been implicated in the progression of RCC. In some preclinical models of RCC, FGF levels are high and promote tumor growth and angiogenesis. Treatment of these RCC tumors with FP-1039 as a single agent resulted in inhibition of tumor growth (Figure 4).

Figure 4: FP-1039 is active in a mouse model of Caki-1 RCC

In most cases of human RCC there are abnormally high levels of a protein called VEGF that promotes angiogenesis. There are therapies designed to inhibit VEGF action, such as *Votrient*® (pazopanib), which are approved for use in patients with RCC. However, despite initial control of tumor growth with anti-VEGF therapy, RCC tumors eventually progress because other factors, including FGFs, replace VEGF in stimulating blood vessel formation. In this setting, anti-FGF therapy with FP-1039 may provide additional clinical benefit. In preclinical models of RCC with abnormally high VEGF, the addition of FP-1039 to *Votrient* resulted in greater inhibition of tumor growth than *Votrient* alone (Figure 5).

Figure 5: In a mouse model, FP-1039 in combination with Votrient, an anti-angiogenesis therapeutic approved for RCC, results in greater inhibition of RCC tumor growth than either therapeutic alone

Current Development Plan. GSK-HGS has commenced a Phase 1b clinical trial of FP-1039 in combination with several chemotherapies in patients with *FGFR1* gene-amplified tumors under an IND that GSK-HGS submitted to the FDA on April 30, 2012. In addition, GSK-HGS plans to explore use of FP-1039 as a single agent. The trial is designed as a three-arm, multicenter, non-randomized, parallel-group, uncontrolled, open-label Phase 1b clinical trial designed to evaluate the safety, tolerability, dosage and overall response rate of FP-1039:

- in combination with paclitaxel and carboplatin in previously untreated metastatic squamous NSCLC (Arm A);
- in combination with docetaxel in metastatic squamous NSCLC that has progressed after 1st-line chemotherapy (Arm B); or

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- in additional metastatic cancers with documented *FGFR1* gene amplification or FGF over-expression (Arm C).

Clinical development of FP-1039 in patients with *FGFR1* gene-amplified tumors will be accompanied by a diagnostic test at all stages of clinical trials designed to identify the selected patient population we believe to be the most likely to benefit from this protein therapeutic and to enable streamlined clinical development. Patients with *FGFR1* gene-amplified tumors are identified by staining tests performed on tumor samples. In the current Phase 1b trial of FP-1039, GSK-HGS is using a third party central lab to test tumor samples from prospective subjects to identify those with *FGFR1* gene-amplified tumors. Neither we nor GSK-HGS have yet engaged a third party to develop any companion diagnostic that would be used in any future clinical trials of FP-1039 or required for the registration and approval of FP-1039.

Additionally, we are exploring the feasibility of conducting a study in other tumors, possibly RCC or HCC, to assess the benefit of combining FP-1039 with a VEGF inhibitor.

GSK-HGS has the rights to develop and commercialize FP-1039 in the United States, the European Union and Canada. We retain a co-promotion option in the United States and full commercial rights in the rest of world territories.

FPA008

Overview. FPA008 is an antibody that inhibits CSF1R and is being developed to treat patients with RA. FPA008 also has the potential to treat patients with other inflammatory diseases, including lupus nephritis, psoriatic arthritis, ankylosing spondylitis, fibrosis, inflammatory bowel disease and multiple sclerosis. These are chronic, incurable disorders with serious medical complications and disability for which better therapies with novel mechanisms of action are needed. We believe FPA008 has the potential to be more efficacious than current therapies because it targets a group of important inflammatory cell types called monocytes and macrophages, which are key drivers of the inflammation and joint destruction process and are not targeted by currently approved drugs. These cells depend on CSF1R for their activity and survival. We initiated a Phase 1 clinical trial in October 2013 to evaluate safety, pharmacokinetics and modulation of inflammation and bone turnover biomarkers in healthy volunteer subjects and, additionally, to evaluate early clinical activity of FPA008 in patients with RA. We expect preliminary clinical data from the healthy volunteer portion of the trial by the end of 2014, at which time we expect to begin dosing RA patients with FPA008.

Monocytes and macrophages are cells of the immune system that, when abnormally activated, cause inflammation in diseases such as RA. These cells secrete a variety of proteins, including tumor necrosis factor alpha, or TNFa, interleukin-6, or IL-6, and interleukin-1 beta, or IL-1ß, that attract and activate inflammatory cells. Derivatives of these inflammatory cells directly destroy bone tissue in joints.

Until now, it has been difficult to block monocytes and macrophages because the protein targets that control these cells were only partially known. Protein therapeutics that are approved to treat RA, such as *Humira*, *Remicade*, *Enbrel* and *Actemra*, only block single factors released from monocytes and macrophages, and other protein therapeutics such as *Orencia*® (abatacept) and *Rituxan*® (rituximab) do not directly inhibit monocytes and macrophages or their factors. Using our library and proprietary platform, we discovered a novel protein target called interleukin-34, or IL-34, that is a key regulator of monocyte and macrophage numbers and activity and that is found in inflamed joints of RA patients. Once we discovered IL-34, we were able to use our protein library and our ligand-receptor matching technology to identify its receptor, CSF1R. This receptor is known to be expressed on the surface of monocytes and macrophages. Before our discovery of IL-34, CSF1R was thought to have only one ligand called CSF1. Both CSF1 and IL-34 bind to and activate CSF1R and therefore promote the survival and activity of monocytes and macrophages. FPA008 blocks the binding of both CSF1 and IL-34 to CSF1R and thereby inhibits the activity and survival of these cells.

Market Opportunity. RA is a systemic inflammatory disease that causes damage to the joints and other organs, affecting approximately 1% of people in the United States. RA is a major cause of disability and is associated with reduced life expectancy, especially if it is not adequately treated. In 2012, the top three RA biologic products by global sales, *Humira, Remicade* and *Enbrel*, represented over $25 billion in revenue. Currently available therapies for patients suffering from RA include non-steroidal anti-inflammatory drugs, or NSAIDs, corticosteroids,

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sulfasalazine, hydroxychloroquine, anti-tumor necrosis factor, or anti-TNFa, injectables and other biologic agents, and small molecule Janus kinase, or JAK, inhibitors.

The following table shows the estimated prevalence of RA in the United States in 2012:

TYPE OF PATIENTS IN THE UNITED STATES	NUMBER OF PATIENTS IN 2012
Diagnosed with RA	1,900,000
Patients treated with a pharmacological agent	1,800,000

Many RA patients are or will become unresponsive to current treatment options and experience significant disease activity with progressive joint and bone destruction, leading to pain and disability.

Our Program. FPA008 is an anti-CSF1R antibody, which we designed to block the ability of IL-34 and CSF1 to bind to and activate CSF1R. FPA008 reduces the numbers and activity of monocytes and macrophages that cause disease, and prevents the production and release of inflammatory factors (Figure 6). The advantage of this approach in comparison to, for example, *Humira* and *Actemra*, is that the production of multiple deleterious factors is inhibited simultaneously, potentially resulting in better efficacy (Figure 7). Another advantage of blocking CSF1R is that a special macrophage that breaks down bone, called an osteoclast, is inhibited. Therefore, not only could FPA008 potentially be superior in reducing inflammation, but it may also directly suppress bone destruction in the joints of patients with inflammatory diseases.

Figure 6: FPA008 mechanism of action

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Figure 7: Advantage of FPA008 versus other protein therapeutics

Preclinical Results. We and others have demonstrated that both IL-34 and CSF1 are present at increased levels in the inflamed joints of patients with RA. Biopsy samples of inflamed joints from patients with RA incubated with FPA008 *ex vivo* showed reduced levels of the inflammatory proteins TNFa, IL-6 and IL-1ß compared with samples incubated with a control antibody (Figure 8). These studies provide evidence that FPA008 can simultaneously inhibit the production of multiple cytokines that cause inflammation in RA.

*Figure 8: Incubation of joint tissue from patients with RA with FPA008 results in decreased TNF*a, IL-6 *and IL-1ß*[(1)]

(1) Each pair of linked dots corresponds to samples from the same patient and treated with either a control that does not bind to CSF1R, or with FPA008.

In other preclinical studies, treatment with FPA008 and a similar antibody called cmFPA008, used for studies in mice, resulted in several expected beneficial effects including:

- reduced blood levels of inflammatory monocytes, a specific type of monocyte whose numbers are elevated during chronic inflammation and produces high levels of inflammatory factors such as TNFa;
- reduced swelling of the joints (Figure 9); and
- reduced inflammation and bone destruction in the joint (Figure 10).

In preclinical studies shown in Figures 9 and 10, FPA008 was dosed to give roughly equivalent drug levels in the blood as *Enbrel*, an approved protein therapeutic for use in RA that blocks TNFa. In these preclinical studies, FPA008 was better at reducing joint swelling, inflammation and bone destruction compared to *Enbrel*.

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Figure 9: Treatment with cmFPA008, a mouse form of FPA008, prevents development of arthritis in a collagen-induced arthritis model

Figure 10: Treatment with cmFPA008, a mouse form of FPA008, prevents inflammation and bone damage in a collagen-induced arthritis model

Clinical Development Plan. We initiated a Phase 1 clinical trial in October 2013 to assess the safety, tolerability and early efficacy of FPA008. We are conducting the trial outside the U.S. Dosing commenced in healthy volunteers and will later expand to include patients with RA. The subsequent Phase 2 clinical trial will be a randomized study in patients with RA. We plan to submit an initial IND for FPA008 in connection with the Phase 2 clinical trial. In our ongoing Phase 1 clinical trial of FPA008, we will analyze clinical data and laboratory markers of inflammation and bone turnover for evidence of biologic effect. In addition, we will analyze biomarkers that may identify subsets of RA patients who would benefit from FPA008 treatment more than unselected patients with RA and to determine whether a companion diagnostic should be used in later clinical studies of FPA008. We believe this approach may enable us to streamline clinical development in the patient populations most likely to benefit from FPA008. We have not yet engaged any third parties to develop a companion diagnostic for FPA008. We expect preliminary clinical data from the healthy volunteer portion of the Phase 1 clinical trial by the end of 2014, at which time we expect to be dosing in patients with RA. Upon completion of the Phase 1 clinical trial, we may explore the clinical development of FPA008 in additional inflammatory diseases.

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FPA144

Overview. FPA144 is a monoclonal antibody directed against a form of FGFR2, or FGFR2b. When the *FGFR2* gene is amplified by cancer cells, the FGFR2b protein is expressed at abnormally high levels on the tumor s surface. This occurs in some patients with gastric and lower esophageal cancers. We plan to initiate a Phase 1 clinical trial by the end of 2014 in patients with gastric cancer that expresses abnormally high levels of FGFR2b as measured by a companion diagnostic test. We will evaluate early clinical activity and safety of FPA144 in this Phase 1 clinical trial. We expect preliminary Phase 1 clinical data from this trial by the end of 2015.

Market Opportunity. Scientific literature reports that approximately 3 9% of patients with gastric cancer have tumors with *FGFR2* gene amplification. We believe this results in abnormally high levels of FGFR2b protein on the tumor cell surface. In the United States, where the prevalence was approximately 73,500 patients in 2012, we estimate that approximately 2,200 to 6,600 gastric cancer patients have the *FGFR2* gene amplification. Outside of the United States, where the prevalence of gastric cancer was over 1 million patients in 2012, we estimate that approximately 31,000 to 93,000 gastric cancer patients have the *FGFR2* gene amplification. For patients in the United States with metastatic gastric cancer, the 5-year survival rate is only 4%. Those patients with *FGFR2* gene amplification have significantly reduced survival compared to other patients with gastric cancer.

Given the relatively small patient population and poor survival, we believe that the gastric cancer indication will be an orphan indication in the United States, and that the sub-set of patients with gastric cancer bearing the *FGFR2* gene amplification constitutes an ultraorphan indication. By developing FPA144 for an ultraorphan indication with a significant unmet medical need, we may be able to advance FPA144 substantially faster than industry average drug development timelines. We believe that our clinical development organization is well suited to conduct such a focused, capital-efficient clinical development plan for *FGFR2* gene-amplified gastric cancer. We plan to develop and commercialize FPA144 ourselves in the United States. We intend to seek a collaborator to commercialize FPA144 outside of the United States.

Our Program. We believe that FPA144 acts on the tumor cell in two ways:

- FPA144 prevents binding of certain FGFs to FGFR2b, and inhibits their ability to promote the growth of the tumor cells. The FGFs that bind to FGFR2b are different than the FGFs that bind to FP-1039. Thus, the spectrum of anti-tumor activity for FPA144 is different than FP-1039. Our preclinical studies indicate that FP-1039 is not effective against gastric cancer with abnormally high levels of FGFR2b, whereas FPA144 is effective.

- Once FPA144 binds to FGFR2b proteins on the surface of the tumor cell, it engages cells of the immune system to kill the tumor cell in a process called antibody-dependent cell-mediated cytotoxicity, or ADCC.

In preclinical studies, FPA144 is highly effective in blocking the growth of gastric cancers that produce abnormally high levels of FGFR2b. This is demonstrated in Figure 11, where human gastric tumors with *FGFR2* gene amplification were treated with increasing doses of FPA144, resulting in significant inhibition of tumor growth and tumor shrinkage when compared to a control antibody.

Figure 11: Increasing doses of FPA144 inhibit growth of human gastric tumors that contain an amplification of the FGFR2 gene in a mouse model

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Clinical Development Plan. The tumor cells that have too much FGFR2b protein on their surface can be identified by special staining tests performed on the tumor. Because FGFR2b is the target for FPA144, patients tumors can be screened for this protein, helping to identify the patients most likely to respond to FPA144 treatment. Thus, development of FPA144 in cancer patients will be accompanied by development of a companion diagnostic test to identify those tumors that have too much FGFR2b on their surface, enabling streamlined clinical development in the patient populations most likely to benefit. We plan to use a companion diagnostic test to identify patients with *FGFR2* gene-amplified tumors in clinical trials at all stages. We will need to engage a third party to develop any companion diagnostic that would be used in clinical trials of FPA144 or required for the registration and approval of FPA144, however, we have not yet engaged any third party for this purpose.

We plan to submit an IND with the FDA and initiate a Phase 1 clinical trial by the end of 2014 in the United States and Asia. We expect preliminary Phase 1 clinical data from this trial by the end of 2015. This trial will enroll patients with gastric cancer with abnormally high levels of FGFR2b in order to evaluate early clinical activity and safety of FPA144. If the Phase 1 trial demonstrates acceptable safety and evidence of clinical activity of FPA144, we plan to conduct a multinational Phase 2 clinical trial and consider initiating a Phase 1 clinical trial in Japan for further development in that country. If we see early evidence of a therapeutic effect in these patients, we intend to meet with regulatory authorities to discuss the possibility of an expedited clinical development and regulatory pathway for FPA144. We intend to seek orphan drug designation with the FDA before the end of the Phase 1 clinical trial, and if eligible, expedited review and approval programs, including breakthrough therapy and fast track designations for FPA144.

Cancer Immunotherapy Drug Discovery Program

Overview. We are currently focusing our internal research efforts primarily in the area of cancer immunotherapy. Cancers grow and spread because tumor cells have developed ways to evade elimination by the immune system. For example, cancer cells make proteins which apply the brakes to immune cells and prevent the immune cells from killing the tumor cells. One of the most exciting recent discoveries in cancer therapy has been the identification of ways to release these brakes and allow the immune cells to once again kill tumor cells. This new approach, called cancer immunotherapy, has the potential of not only reducing tumor growth like traditional therapies, but potentially eliminating the cancer entirely in some patients.

New targets for cancer immunotherapy are needed to address those patients that do respond to or cannot tolerate agents currently in development. We believe we are well positioned to identify new targets and protein drugs in cancer immunotherapy because we believe:

- *Protein drugs will be the best therapeutic strategy in cancer immunotherapy.* Anti-tumor immunity often involves interactions between extracellular proteins that are not easily modulated with small molecule drugs. We are focused on discovering and developing novel protein therapeutics.

- *There are likely many new targets yet to be discovered.* For example, the protein partners are not known for several of the proteins thought to have a role in modulating anti-tumor immunity, such as TIM-3, VISTA, B7-H3 and B7-H4. There are likely many additional proteins that regulate the immune response to tumors that have not yet been described or characterized.

- *Our biologics discovery platform is designed to identify targets such as those involved in cancer immunotherapy*. Our proprietary library of more than 5,700 human extracellular proteins contains many proteins that are candidate immunomodulators. We are using our discovery platform to discover novel pathways and to identify protein partners for molecules known to be involved in the anti-tumor immune response, such as TIM-3, VISTA, B7-H3 and B7-H4.

- *Our dual focus on cancer and inflammatory diseases* gives us expertise and capabilities needed to succeed in cancer immunotherapy.

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We are applying all aspects of our biologics discovery platform, as discussed below, including cell-based screening, *in vivo* screening and receptor-ligand matching technologies in our cancer immunotherapy research program. We have identified novel targets that we believe could be useful in cancer immunotherapy and are actively validating these and looking for additional targets. We plan to generate therapeutic proteins, including antibodies or ligand traps, directed to the targets we identify, and advance those product candidates into pre-clinical development.

Our Biologics Discovery Platform

Overview

Targets for protein therapeutics are proteins in the body that when inappropriately produced or altered can result in human diseases. Protein therapeutics can be designed to reverse these disease-causing mechanisms. Traditional ways to discover new targets for protein therapeutics have relied on a slow trial-and-error approach studying a single or a small number of proteins at a time. There are more than 5,700 proteins in the body that represent potential protein therapeutic targets, but only about 30 are targeted by currently marketed protein drugs in cancer and inflammatory diseases.

We have successfully developed a platform to improve the traditionally difficult and slow process of discovering new protein therapeutics. The platform is based on two components (Figure 12):

- a proprietary library of more than 5,700 human extracellular proteins that we believe is the most comprehensive collection of fully functional extracellular proteins and is an abundant source of medically relevant novel targets for protein therapeutics; and
- proprietary and new technologies for producing and testing thousands of proteins at a time.

We believe our platform improves and accelerates the discovery of new protein targets and protein therapeutics because it can:

- identify novel medically relevant protein targets and protein therapeutics that have little or no previously known biological function or are not in the public domain and cannot easily be discovered by other methods;
- determine the best protein target among many alternatives for a particular disease by screening and comparing nearly all possible medically important targets simultaneously; and
- identify new targets more quickly and efficiently than previously possible because it can produce and test thousands of proteins at a time, rather than one or just a few at a time.

In the past several years we have used this platform to identify dozens of targets validated in rodent models and a growing pipeline of drug candidates. We have attracted numerous partnerships with leading biopharmaceutical companies that have generated over $222 million in funding for our business since 2006. We are currently engaged in discovery collaborations with GSK and UCB. We are eligible to receive potential option exercise fees and contingent payments up to $124.3 million per target under the GSK muscle diseases collaboration, $193.8 million per target under the GSK respiratory diseases collaboration and $92.2 million per target under the UCB fibrosis and CNS collaboration.

We spent approximately seven years developing and integrating the components of our discovery platform. The scientific expertise and time required to develop our platform impose significant barriers to entry that would make it difficult for a competitor to reproduce what we have created. We believe that in our discovery platform we control a scarce and valuable set of resources. Given the dearth of new target discovery in the biopharmaceutical industry and the continued need for pharmaceutical companies to restock pipelines and replace aging products facing patent expiry, we believe that the platform will continue to provide opportunities for monetization through product and discovery collaborations as it has done in the past.

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Figure 12: Our Protein Therapeutic Discovery Platform

Protein Library

We have built a library that we believe represents substantially all of the body s medically important targets for protein therapeutics and an abundant source of potential future protein drugs. Our library is derived from more than 100 distinct human tissues, and comprises more than 5,700 human proteins. This library includes the proteins that form the basis of marketed blockbuster protein drugs, such as *Lantus*® (insulin glargine), *Herceptin*® (trastuzumab) and *Humira*, which we believe validates the utility of the platform. In addition, the library contains thousands of other proteins, including novel protein variants that are not disclosed in the public domain.

Generally, protein collections are generated from gene copies called cDNAs. cDNAs are copies of genes that actively direct the production of protein and can be used to reproduce in the laboratory the same protein that is made in the body. However, if one end of the cDNA, called the 5 prime end, is not present, the protein cannot be made. The 5 prime end is the most difficult part of the expressed gene to copy with traditional technology generally available to scientists. We used proprietary technology specifically developed to solve this problem by capturing more cDNAs with 5 prime ends intact. Accordingly, we believe our collection of cDNAs is more complete than those collections developed by other companies that were not able to produce the 5 prime end of many genes. We believe we have therefore been able to make a comprehensive collection of full-length, fully functional proteins that is now the basis of our discovery platform.

Novel Technologies to Produce and Screen the Library in High Throughput

We have developed a suite of technologies for producing and screening the proteins in our library that addresses the limitations of traditional drug screening methods when applied to proteins. These technologies are composed of a combination of our own proprietary technology along with other publicly available technologies, including technologies we have in-licensed on a non-exclusive basis from third parties. Generally, we protect these proprietary biologics discovery platform technologies as trade secrets or know-how and do not seek to obtain patents to cover the biologics discovery platform technologies we develop.

High-Throughput Protein Production. The difficulty of producing large numbers of new proteins in a functional form presents a limitation in the discovery of new protein drugs. Our high-throughput protein production system includes proprietary technologies developed over several years that allow us to produce more than 2,000 proteins per week at

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therapeutically relevant amounts and with a high level of consistency. We produce the proteins for our cell-based screening system using human cells to best ensure proteins are made in the same correct, functional form in which they are made in the human body. Our technologies enable us to reliably produce our entire protein library in less than three weeks. In contrast, typical methods producing one or a few proteins at a time would take years to produce a library of this size and would have to be repeated for each target discovery screen.

Cell-Based Screens to Identify Protein Therapeutic Targets. We design complex cell-based screens that better model the fundamental biological processes underlying the disease of interest, and adapt them to be compatible with our protein library. In contrast, because traditional small molecule drug screening can involve testing millions of compounds, pharmaceutical companies for practical reasons have often had to resort to using isolated enzymes or simple cultures of cell lines that can fail to mimic important aspects of how cells function in the body. We have undertaken what we believe to be some of the most complex cell-based screens in high throughput with protein libraries, including screens with rare stem cells and combinations of diseased primary human cell types. We execute these screens on automated, state-of-the-art screening systems designed and built in-house and analyzed using software developed by us. To date, we have screened each of the proteins in our protein library in screens using approximately 50 different cell types. Using our cell-based screens, we have discovered the target that forms the basis of our FPA008 program and numerous other novel targets for severe asthma, pulmonary fibrosis, muscle disease, cancer and others.

Rapid In Vivo Protein Production System. Our rapid *in vivo* protein production system, or RIPPS®, enables us to produce and test the proteins in our library directly *in vivo* in virtually any rodent model of disease and in high throughput. RIPPS technology identifies new targets that cannot be easily identified in other ways. Further, RIPPS not only identifies novel targets for protein therapeutics for example, targets for therapeutic antibodies it can also identify proteins that are new therapeutics themselves because each protein in the library is tested for its ability to affect a disease in a rodent model. RIPPS avoids the costly and time-consuming process required for conventional *in vivo* testing of efficacy and safety that includes expression, scale up, purification, characterization and formulation of each protein one at a time. Using RIPPS, we have identified and validated dozens of new targets and protein drug candidates in rodent models of cancer, inflammatory disorders, muscle disease and other conditions.

Receptor-Ligand Matching. Some proteins are referred to as ligands and exert their actions by binding to a receptor on a cell surface. In order to optimally treat some diseases, one must know the identity of both the receptor and the ligand. Our comprehensive collection of protein ligands and extracellular domains of cell surface receptors provides us with the ability to identify ligand and receptor pairs. Historically, this information has led to new therapeutic targets by identifying the best target in a disease pathway and has increased the probability of success of drug development by enhancing understanding of the mechanism of action of a therapeutic candidate. Using this technology, we have identified the target for FPA008 and several new ligands, including two new hormones.

Growing Database of Protein Function. Each of the proteins in our library has been tested in numerous screens on different cell types. This provides us with an extensive database of how each protein performs in different screens and whether it is specific to a given disease process or has a broader set of activities. The cumulative data from all the screens allows us to identify the most appropriate target.

Collaborations

Since 2006, we have entered into six discovery collaborations with Boehringer Ingelheim GmbH, or Boehringer, Centocor Research and Development Inc., or Centocor, GSK, Pfizer Inc., or Pfizer, and UCB, under which we have developed and conducted or plan to develop and conduct cell-based and *in vivo* screens using our protein discovery platform, library and expertise to identify, validate and characterize target proteins involved in several disease areas. These discovery collaborations have provided us with approximately $105 million in non-equity funding through September 30, 2013. We also sold shares of our convertible preferred stock to Johnson & Johnson Development Corporation, an affiliate of Centocor, Pfizer and GSK, in connection with entering into these discovery collaborations for total equity funding of $63 million from these collaboration partners. Our discovery collaborations with GSK and UCB are ongoing and, as of September 30, 2013, we are eligible to receive up to an additional $13.1 million of research funding and technology access fees through 2016 under these discovery collaborations. The research obligations under each of our discovery collaborations with Boehringer, Centocor and Pfizer have ended. We have no

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ongoing performance obligations and do not expect to receive any significant additional consideration under these discovery collaborations. We plan to continue to actively seek out discovery collaboration partners and engage in discussions with pharmaceutical and biotech companies regarding potential new discovery collaborations.

In addition to our discovery collaborations, in 2011 we entered into a regional product collaboration with HGS for FP-1039 that has provided us with approximately $53 million in upfront and research and development fees through September 30, 2013. We are also eligible to receive additional research, development, regulatory and sales-based contingent payments, as well as royalties on net product sales under our discovery and product collaborations. Certain terms of our collaboration with GSK-HGS and our active discovery collaborations with GSK and UCB are summarized below.

FP-1039 License and Collaboration with GSK-HGS

In March 2011, we entered into a license and collaboration agreement with GSK-HGS, or the FP-1039 license, pursuant to which we granted to HGS an exclusive license to develop and commercialize FP-1039, and other FGFR1 fusion proteins, in the United States, the European Union and Canada. GSK-HGS controls the development of FP-1039, which GSK-HGS refers to as GSK3052230, in these territories. We retain rights to develop and commercialize FP-1039 in territories outside the United States, the European Union and Canada.

GSK-HGS paid us an upfront license fee of $50 million in connection with entering into the FP-1039 license. GSK-HGS is obligated to pay us contingent payments, which could total up to $435 million based upon the achievement of pre-specified development, regulatory and commercial criteria. These contingent payments are composed of up to $70 million for the pre-specified development criteria, up to $195 million for the pre-specified regulatory criteria, and up to $170 million for the pre-specified commercial criteria. Related to the pre-specified development criteria, we could receive, within the next 24 months, a $5 million contingent payment upon GSK-HGS s completion of its Phase 1b clinical trial and a $15 million contingent payment if GSK-HGS initiates a Phase 2 clinical trial. If certain manufacturing criteria are not met, these aggregate potential contingent payments could total up to $310 million, instead of $435 million. We are also eligible to receive tiered royalty payments on a country-by-country basis from the low-double digits to the high-teens based on net sales of FP-1039 for the longer of the life of certain patents covering FP-1039 in such country or 12 years after the first commercial sale of FP-1039 in such country. We cannot determine the date on which GSK-HGS s royalty payment obligations to us would expire because no commercial sales of FP-1039 have occurred and the last-to-expire relevant patent covering FP-1039 in a given country may change in the future. Currently, the last-to-expire issued patents covering FP-1039 will expire in 2031 in the United States and in 2026 in certain European countries. Additional patents that may issue in the United States, Europe and Canada from pending patent applications would expire between 2026 and 2034. These patent expiration dates do not reflect any patent term extensions that may be available, which are not determinable at this time.

We have a minority co-promote option for FP-1039 in the United States. To exercise our right to co-promote FP-1039, we must notify GSK-HGS prior to the later of (i) five days after the filing of the first Biologic License Application, or BLA, with the FDA, for FP-1039 or (ii) six months after GSK-HGS notifies us of the anticipated filing of the first BLA for FP-1039. If we exercise our right to co-promote FP-1039, we would receive a low single-digit increase in the royalty rate that GSK-HGS would otherwise pay us relating to net sales in the United States.

GSK-HGS is responsible for conducting FP-1039 related research, development and commercialization activities in the United States, the European Union and Canada, at GSK-HGS s cost and expense. We do not have any obligation to fund any of these activities.

GSK-HGS is obligated to pay us for the costs of all FP-1039 related research and development activities we undertake on behalf of GSK-HGS. At the time we entered into the FP-1039 license, we agreed to perform services for the conduct of the then-concluding FP-1039 Phase 1 clinical trial. We also elected to conduct a Phase 2 clinical trial of FP-1039 in endometrial cancer for which we were reimbursed by GSK-HGS. Additionally, GSK-HGS is obligated to pay us for the costs of other FP-1039 related research and development activities we elect to undertake on behalf of GSK-HGS. GSK-HGS has paid us $3.3 million for our conduct of these activities through September 30, 2013. The Phase 2 clinical trial of FP-1039 in endometrial cancer was terminated in January 2012. We are no longer conducting any activities with respect to this trial and are not currently undertaking any other FP-1039 related research or development activities on behalf of GSK-HGS.

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We and HGS agreed to disclose to each other FP-1039 preclinical and clinical data in the form of final study reports, from future trials or studies conducted by either of us. We and HGS also agreed that either party may use, at no cost, any such exchanged preclinical or clinical data in regulatory filings we or GSK-HGS make with respect to FP-1039 in our respective territories. For example, after GSK-HGS completes its Phase 1b clinical trial of FP-1039, we would be able to use the clinical data from that filing in regulatory filings we may file in Japan regarding FP-1039, which is outside of GSK-HGS s territory.

The FP-1039 license will terminate upon the expiration of the royalty terms of any products that result from the collaboration. In addition, GSK-HGS may terminate this agreement at any time with advance written notice, and either party may terminate this agreement for the other party s material breach if such party fails to cure the breach or upon certain insolvency events. Either party may also terminate the agreement upon certain patent challenges made against one another. In the event that GSK-HGS terminates the agreement for convenience or if we terminate for certain material breaches or due to a patent challenge, we shall have to pay GSK-HGS royalties on any net sales in the United States, the European Union or Canada for 12 years after the first commercial sale.

GSK US Muscle Diseases Collaboration

In July 2010, we entered into a research collaboration and license agreement, referred to as the muscle diseases collaboration, with GlaxoSmithKline LLC, or GSK US, to identify potential drug targets and drug candidates to treat skeletal muscle diseases. In May 2011, we amended the muscle diseases collaboration to expand the research plan in scope and duration to include an additional cell-based screen and an *in vivo* screen using our RIPPS technology. We are conducting three customized cell-based screens and one *in vivo* screen of our protein library under the muscle diseases collaboration. The three-year research term for the original two cell-based screens ended in July 2013 and the three-year research term for the cell-based and *in vivo* screens added in May 2011 will end in May 2014.

At the inception of the muscle diseases collaboration, GSK US made an upfront payment to us of $7.0 million and purchased from us shares of our preferred stock for $7.5 million. Through September 30, 2013, we have received $9.7 million of research funding and we are eligible to receive up to an additional $0.2 million of research funding under the muscle diseases collaboration through the remainder of the research term, which ends in May 2014.

In the course of conducting cell-based and *in vivo* screens of our protein library in the muscle diseases collaboration we have discovered and expect to continue to discover proteins that may be potential drug targets or drug candidates for treating skeletal muscle diseases. Under the muscle diseases collaboration, GSK US has the right to evaluate proteins identified in the screens we conducted for limited periods of time and after such evaluation the right to obtain an exclusive worldwide license to develop and commercialize products that incorporate or target the selected protein. In December 2012, GSK US selected a protein for further evaluation and triggered a $0.3 million target evaluation fee. In September 2013, we and GSK US agreed to extend the evaluation period for this protein therapeutic target by approximately eight months and GSK US paid us a $0.2 million extension fee. In October 2013, GSK US exercised its right to reserve for further evaluation several additional protein therapeutic targets for muscle diseases that we discovered in this agreement with GSK US and paid us another $0.3 million target evaluation fee.

If GSK US elects to take an exclusive license to a protein it has evaluated, GSK US would have sole responsibility for the further development and commercialization of products that incorporate or target the protein at GSK US s cost and expense. We are eligible to receive up to $124.3 million in potential option exercise fees and contingent payments with respect to each protein target that GSK US elects to obtain rights, comprising aggregate target evaluation and selection fees of up to $1.8 million, preclinical and development-related contingent payments of up to $28.5 million, regulatory-related contingent payments of up to $40.0 million and commercial-related contingent payments of up to $54.0 million. For each product that incorporates or targets a licensed protein target, GSK US is also obligated to pay us tiered low- to mid-single digit royalties on net sales of such product for the longer of the life of certain patents licensed to GSK US covering such product or 12 years after the first commercial sale of such product. We cannot determine the date on which GSK US s potential royalty payment obligations to us would expire because GSK US has not yet elected to take an exclusive license to evaluate any protein target, and therefore we cannot identify related patents to any such relevant licensed protein target.

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The muscle diseases collaboration agreement will terminate upon the expiration of the royalty terms of any products that incorporate or target a protein exclusively licensed under the collaboration. In addition, GSK US may terminate the agreement at any time with advance written notice, and either party may terminate the agreement with written notice for the other party s material breach if such party fails to cure the breach or upon certain insolvency events.

GSK UK Respiratory Diseases Collaboration

In April 2012, we entered into a research collaboration and license agreement, referred to as the respiratory diseases collaboration, with Glaxo Group Limited, or GSK UK, to identify new therapeutic approaches to treat refractory asthma and chronic obstructive pulmonary disease, or COPD, function with a particular focus on identifying novel protein therapeutics and antibody targets. We plan to conduct up to six customized cell-based screens of our protein library under the respiratory diseases collaboration. The four-year research term will end in April 2016.

At the inception of the respiratory diseases collaboration, GSK UK made an upfront payment to us of $7.5 million and purchased shares of our preferred stock for $10.0 million. Through September 30, 2013, we have also received $3.9 million of research funding and we are eligible to receive up to an additional $6.6 million of research funding under the respiratory diseases collaboration through the remainder of the research term, which ends in April 2016.

In the course of conducting screens of our protein library in the respiratory diseases collaboration, we expect to discover proteins that may be potential drug targets or drug candidates for treating refractory asthma or COPD. Under the respiratory diseases collaboration, GSK UK has the right to evaluate proteins identified in the screens we conduct for limited periods of time and after such evaluation the right to obtain an exclusive worldwide license to develop and commercialize products that incorporate or target the protein.

Prior to the time GSK UK exercises its right to obtain an exclusive worldwide license to a protein target, we and GSK UK will discuss and agree on which protein targets GSK UK will have sole responsibility for the further development and commercialization of products that incorporate or target the protein targets, which we refer to as Track 1 Targets, and which protein targets to which we will develop biologics that incorporate or target the protein targets through to clinical proof of mechanism in either a Phase 1 clinical trial or Phase 2 clinical trial, which we refer to as Track 2 Targets. We and GSK UK will take into consideration each party s available resources and capabilities at the time in deciding which protein targets will be Track 1 Targets or Track 2 Targets, but subject to each party s general right to alternate in such selection.

For Track 1 Targets, GSK UK would have sole responsibility for the further development and commercialization of products that incorporate or target the protein, including with respect to preclinical studies, clinical development, manufacturing and commercialization, at GSK UK s cost and expense. For Track 2 Targets, we would have sole responsibility for the further development of biologic products that incorporate or target the protein, including with respect to preclinical studies, clinical development and manufacturing, at our cost and expense through agreed-upon proof-of-mechanism endpoints in a Phase 1 or Phase 2 clinical trial.

We are eligible to receive up to $124.3 million in potential target evaluation and selection fees and contingent payments with respect to each Track 1 Target. These potential fees and payments are composed of per target evaluation and selection fees of up to $1.8 million, preclinical and development-related contingent payments of up to $28.5 million, regulatory-related contingent payments of up to $40.0 million and commercial-related contingent payments of up to $54.0 million. For each product that incorporates or targets a Track 1 Target, GSK UK is also obligated to pay us tiered low- to mid-single digit royalties on net sales of such product for the longer of the life of certain patents licensed to GSK UK covering such product or 10 years after the first commercial sale of such product. We cannot determine the date on which GSK UK s potential royalty payment obligations to us would expire because GSK UK has not yet elected to take an exclusive license to any evaluated protein target, and therefore we cannot identify related patents to any such relevant licensed protein target.

We are eligible to receive up to $193.8 million in potential target evaluation and selection fees and contingent payments with respect to each Track 2 Target. These potential fees and payments are composed of per target evaluation and selection fees of up to $1.8 million, a clinical proof of mechanism option exercise fee of up to $23.0 million, preclinical and development-related contingent payments of up to $36.5 million, regulatory-related contingent payments of up to $53.0 million and commercial-related contingent payments of up to $79.5 million.

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For each product that incorporates or targets a Track 2 Target, GSK UK is also obligated to pay us tiered high-single to low-double digit royalties on net sales of such product for the longer of the life of certain patents licensed to GSK UK covering such product or 10 years after the first commercial sale of such product.

The respiratory diseases collaboration agreement will terminate upon the expiration of the royalty terms of any products that incorporate or target a protein exclusively licensed under the collaboration. In addition, GSK UK may terminate the agreement at any time with advance written notice, and either party may terminate the agreement with written notice for the other party s material breach if such party fails to cure the breach or immediately in the case of failure to comply with certain anti-bribery and anti-corruption policies or upon certain insolvency events.

UCB Fibrosis and CNS Collaboration

In March 2013, we entered into a research collaboration and license agreement with UCB, referred to as the fibrosis and CNS collaboration, to identify innovative biologics targets and therapeutics in the areas of fibrosis-related immunologic diseases and central nervous system, or CNS, disorders. We plan to conduct five customized cell-based and *in vivo* screens of our protein library under the fibrosis and CNS collaboration. We currently expect to complete our initial research activities under the fibrosis and CNS collaboration by March 2016. Upon the completion of those research activities, UCB has up to a two-year evaluation period during which we may be obligated to perform additional services at the request of UCB.

At the inception of the fibrosis and CNS collaboration, UCB made payments to us of $8.2 million. We are eligible to receive up to an additional $6.4 million of technology access fees and research funding under the fibrosis and CNS collaboration starting in March 2014 through March 2016. In addition, we may be eligible to receive up to $1.3 million if UCB elects to have us conduct a third fibrosis screen.

In the course of conducting screens of our protein library in the fibrosis and CNS collaboration we expect to discover proteins that may be potential drug targets or drug candidates for fibrosis-related immunologic diseases and CNS disorders. Under the fibrosis and CNS collaboration, UCB has the right to evaluate proteins identified in the screens we conduct for limited periods of time and after such evaluation the right to obtain an exclusive worldwide license to develop and commercialize products that incorporate or target the protein.

If UCB elects to obtain an exclusive license to a protein it has evaluated, UCB would have sole responsibility for the further development and commercialization of products that incorporate or target the protein at UCB s cost and expense. We are eligible to receive up to $92.2 million in potential evaluation and selection fees and contingent payments with respect to each protein target that UCB elects to obtain an exclusive license, comprising aggregate target evaluation and selection fees of up to $0.4 million, preclinical and development-related contingent payments of up to $11.8 million, regulatory-related contingent payments of up to $20.0 million and commercial-related contingent payments of up to $60.0 million. For each product that incorporates or targets a licensed protein target, UCB is also obligated to pay us tiered low- to mid-single digit royalties on net sales of such product for the longer of the life of certain patents covering such product or 10 years after the first commercial sale of such product. We cannot determine the date on which UCB s potential royalty payment obligations to us would expire because UCB has not yet elected to take an exclusive license to any evaluated protein target, and therefore we cannot identify related patents to any such relevant licensed protein target.

The fibrosis and CNS collaboration agreement will terminate upon the expiration of the royalty terms of any products that incorporate or target a protein exclusively licensed under the collaboration. In addition, UCB may terminate the agreement at any time with advance written notice, and either party may terminate the agreement with written notice for the other party s material breach if such party fails to cure the breach or upon certain insolvency events.

License Agreements

License Agreement with Galaxy

In December 2011, we entered into a license agreement with Galaxy Biotech LLC, or Galaxy, pursuant to which Galaxy granted to us an exclusive worldwide license to develop and commercialize FGFR2b antibodies, including FPA144. Under the license agreement, we are obligated to use commercially reasonable efforts to develop and commercialize at least one licensed product in at least one tumor indication. We paid Galaxy an upfront license fee of $3.0 million in connection with entering into the license agreement, which we paid in two equal installments in January 2012 and July 2012.

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We are obligated to pay Galaxy milestone payments of up to $92.5 million comprising aggregate preclinical and intellectual property-related milestone payments of up to $3.0 million, development-related milestone payments of up to $18.0 million for development in two indications, aggregate regulatory-related milestone payments of up to $41.5 million for two indications and aggregate commercial-related milestone payments of up to $30.0 million. We are also obligated to pay tiered royalties on net sales of FPA144 from the high-single digits to the low-double digits.

Our license agreement with Galaxy will remain in effect until the expiration of our royalty obligations under the license agreement in all countries. For each licensed product, we are obligated to pay Galaxy royalties on net sales of such product on a country-by-country basis for the longer of the life of the licensed patents covering such product in such country or 10 years after the first commercial sale of such product in such country. We cannot determine the date on which our royalty payment obligations to Galaxy would expire because no commercial sales of FPA144 have occurred and the last-to-expire relevant patent covering FPA144 in a given country may change in the future. Currently, Galaxy has an issued patent, which we have licensed, covering FPA144 in the United States that expires in 2029. Galaxy patents that may issue in other countries, including in Europe and Japan, from pending patent applications would expire in 2029. These patent expiration dates do not reflect any patent term extensions that may be available, which are not determinable at this time.

We may terminate the license agreement for convenience in its entirety or on a country-by-country basis upon prior written notice to Galaxy. Either party may terminate the license agreement in its entirety or with respect to certain countries after the first commercial sale of a licensed product in certain circumstances in the event of an uncured material breach by the other party. Either party may terminate the license agreement in the event of the other party s filing or institution of bankruptcy, reorganization, liquidation or receivership proceeding or upon an assignment of a substantial portion of its assets for the benefit of creditors. Galaxy may terminate the license agreement if we or any of our affiliates challenge the validity or enforceability of any patent licensed to us by Galaxy under the license agreement or if we aid or assist any affiliate or third party in such a challenge other than as required by law.

License Agreement with The Regents of the University of California

In September 2006, we entered into a license agreement with The Regents of the University of California, or the UC Regents, pursuant to which the UC Regents granted to us an exclusive license under certain patents to develop and commercialize products, including FP-1039, and practice certain methods covered by the patents. Under the license agreement, we are obligated to use commercially reasonable efforts to develop and commercialize at least one licensed product.

We are obligated to pay the UC Regents milestone payments of up to $0.8 million for the development and marketing approval of FP-1039 in cancer. We are also obligated to pay the UC Regents a low single-digit royalty on net sales of FP-1039 for the life of the relevant licensed patents. If we sublicense our rights under our license agreement with UC Regents, we would be obligated to pay the UC Regents a percentage of the total gross proceeds we receive in consideration of the grant of the sublicense, which total amount would be first reduced by the aggregate amount of certain research and development related expenses we have incurred. The portion of the total adjusted sublicense proceeds we would pay the UC Regents would be a mid-single digit percentage of the proceeds if such sublicense occurred prior to the first Phase 2 clinical trial of a licensed product, or a low-single digit percentage of the proceeds if such sublicense occurred after the initiation of the first Phase 2 clinical trial of a licensed product.

Our license agreement with the UC Regents will remain in effect until the expiration or abandonment of the last to expire of the licensed patents. We may terminate the license agreement for convenience in its entirety upon prior written notice to the UC Regents. The UC Regents may terminate the license agreement in its entirety in the event of our uncured material breach of the license agreement. The license agreement will automatically terminate upon the filing of a petition for bankruptcy relief that is not dismissed within a set period of time.

Non-exclusive License with BioWa-Lonza

In February 2012, we entered into a license agreement with BioWa, Inc. and Lonza Sales AG, or BioWa-Lonza, pursuant to which BioWa-Lonza granted us a non-exclusive license to use their Potelligent® CHOK1SV technology, including the CHOK1SV cell line, and a non-exclusive license to related know-how and patents. This license is necessary to produce our FPA144 antibody.

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We are obligated to pay BioWa-Lonza aggregate milestone payments of up to $25.7 million for development, regulatory and commercialization milestones achieved in our FPA144 antibody program. We are also obligated to pay BioWa-Lonza tiered royalties on net sales of FPA144 up to mid-single digit percentages of the proceeds of such sales.

Our license agreement with BioWa-Lonza will remain in effect until the expiration of our royalty obligations. For each licensed product, we are obligated to pay BioWa-Lonza royalties on net sales of such product on a country-by-country basis for the longer of the life of the licensed patents covering such product in such country or 10 years after the first commercial sale of such product in a major market country, which includes the United States. However, because we believe the last-to-expire patents currently licensed to us under the license agreement would expire in less than 10 years, we believe the date on which our royalty payment obligations to BioWa-Lonza would expire in any country would be 10 years after the first commercial sale of such product in a major market country.

We may terminate the license agreement for convenience subject to our continuing obligation to pay royalties. BioWa-Lonza may terminate the license agreement in the event of our uncured material breach, if we oppose or dispute the validity of patents licensed to us under the license agreement or if we are declared insolvent, make an assignment for the benefit of creditors, are the subject of bankruptcy proceedings or have a receiver or trustee appointed for substantially all of our property.

Non-exclusive License with Board of Trustees of the Leland Stanford Junior University

In February 2006, we entered into a license agreement with the Board of Trustees of the Leland Stanford Junior University, or Stanford, pursuant to which Stanford granted to us a non-exclusive license to use certain biological materials and a non-exclusive license to related patents. We use the licensed materials in the production of proteins in our protein library.

We are obligated to pay a non-material annual fee to maintain this license agreement. We have no milestone payment or royalty obligations under our license agreement with Stanford.

The license agreement has no fixed term. We may terminate the license agreement for convenience. Stanford may terminate the license agreement in the event of our uncured material breach.

Non-exclusive License with National Research Council of Canada

In December 2013, we entered into a license agreement with the National Research Council of Canada, or NRC, pursuant to which NRC granted to us a non-exclusive license to use certain biological materials and a non-exclusive license to related patents. We use the licensed materials in the production of proteins in our protein library.

We have no milestone payment or royalty obligations under our license agreement with NRC.

The initial term of the license agreement expires on December 31, 2018, after which we may annually renew for additional one-year terms for a fee. The NRC may terminate the license agreement if we become bankrupt or insolvent, have a receiver appointed to continue our operations or resolve to wind up. We may terminate at any time with written notice. Either party may terminate the license agreement in the event of the other party s uncured material breach.

Intellectual Property

Our intellectual property is critical to our business and we strive to protect it, including by obtaining and maintaining patent protection in the United States and internationally for our product candidates, novel biological discoveries, including new targets and applications, and other inventions that are important to our business. For our product candidates, generally we initially pursue patent protection covering both compositions of matter and methods of use.

Throughout the development of our product candidates, we seek to identify additional means of obtaining patent protection that would potentially enhance commercial success, including through additional methods of use and biomarker and companion diagnostic related claims. We also rely on trade secrets relating to our discovery platform and product candidates and seek to protect and maintain the confidentiality of proprietary information to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

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Our success will also depend significantly on our ability to obtain rights to intellectual property held by third parties that may be necessary or useful to our business, including for the discovery, development and commercialization of our product candidates. We generally obtain rights to third-party intellectual property through exclusive or non-exclusive licenses. For example, we have entered into a non-exclusive license with BioWa-Lonza to use their Potelligent® CHOK1SV technology, which is necessary to produce our FPA144 antibody, and non-exclusive licenses with each of the NRC and Stanford to use materials and technologies that we use in the production of our protein library. If we are not able to obtain rights to intellectual property held by third parties that are necessary or useful to our business, our business could be harmed, possibly materially.

The patent positions of biotechnology companies like ours are generally uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Consequently, we may not obtain or maintain adequate patent protection for any of our product candidates. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. Any patents that we hold may be challenged, circumvented or invalidated by third parties. For a more comprehensive discussion of the risks related to our intellectual property, please see Risk Factors Risks Related to Our Intellectual Property.

The patent portfolios for our three most advanced programs are summarized below:

FP-1039

Our patent portfolio for FP-1039 includes patents and patent applications wholly owned by us, as well as patents we exclusively licensed from UC Regents.

The FP-1039 patent portfolio that we wholly own includes issued patents and pending patent applications covering compositions of matter, methods of use, including certain combination therapies and dosing regimens, and biomarkers relating to FP-1039. This patent portfolio includes patents issued in the United States, Europe, Japan, Hong Kong, Australia and New Zealand. The issued U.S. patents covering composition of matter and methods for using FP-1039 expire in 2026 and 2031, respectively. The issued patent in Japan covering composition of matter for FP-1039 expires in 2026. The issued patents in Europe, Hong Kong, Australia and New Zealand covering composition of matter and methods of using FP-1039 expire in 2026. The FP-1039 patent portfolio that we wholly own also includes pending U.S. and foreign patent applications covering composition of matter and methods of use. Patents that may issue from these pending U.S. and foreign patent applications would expire between 2026 and 2034.

The FP-1039 patent portfolio also includes issued U.S. and foreign patents we exclusively license from the UC Regents that cover composition of matter and methods of producing FP-1039. These exclusively licensed patents include issued U.S. patents covering composition of matter and methods of producing FP-1039 that expire between 2019 and 2020 and an issued patent in Korea covering composition of matter and methods of producing FP-1039 that expires in 2014.

FPA008

Our FPA008 patent portfolio is wholly owned by us and includes an issued U.S. patent as well as pending U.S. and foreign patent applications covering compositions of matter, methods of use and biomarkers relating to FPA008. The issued U.S. composition of matter patent expires in 2031. Patents that may issue from these pending U.S. and foreign applications would expire between 2031 and 2033.

FPA144

Our patent portfolio for FPA144 includes patents and patent applications we exclusively licensed from Galaxy, as well as a pending U.S. patent application wholly owned by us. The patent portfolio we exclusively licensed from Galaxy includes an issued U.S. patent as well as pending U.S. and foreign patent applications covering compositions of matter and methods of use of FPA144. The issued U.S. composition of matter patent expires in 2029. Patents that may issue from these pending U.S. and foreign applications would expire in 2029. Patents that may issue from the pending U.S. patent application wholly owned by us would expire in 2034.

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The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the earliest date of filing a non-provisional patent application.

In the United States, the patent term of a patent that covers an FDA-approved drug may also be eligible for patent term extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory review process. The Hatch-Waxman Act permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review. Patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Similar provisions are available in Europe and other foreign jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our products receive FDA approval, we expect to apply for patent term extensions on patents covering those products. We plan to seek patent term extensions to any of our issued patents in any jurisdiction where these are available, however there is no guarantee that the applicable authorities, including the FDA in the United States, will agree with our assessment of whether such extensions should be granted, and if granted, the length of such extensions.

We also rely on trade secret protection for our confidential and proprietary information. Although we take steps to protect our proprietary information and trade secrets, including through contractual means with our employees and consultants, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology. Thus, we may not be able to meaningfully protect our trade secrets. It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information concerning our business or financial affairs developed or made known to the individual during the course of the individual s relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. Our agreements with employees also provide that all inventions conceived by the employee in the course of employment with us or from the employee s use of our confidential information are our exclusive property.

Manufacturing

We have process development and small-scale manufacturing capabilities. We generally perform cell line and process development for our product candidates and manufacture quantities of our drug candidates necessary to conduct preclinical studies of our investigational drug candidates. We do not have and we do not currently plan to acquire or develop the facilities or capabilities to manufacture bulk drug substance or filled drug product for use in human clinical trials. We rely on third-party manufacturers to produce bulk drug substance required for our clinical trials and expect to continue to rely on third parties to manufacture clinical trial drug supplies for the foreseeable future. We also contract with additional third parties for the filling, labeling, packaging, storage and distribution of investigational drug products. We have personnel with significant technical, manufacturing, analytical, quality and project management experience to oversee our third-party manufacturers and to manage manufacturing and quality data and information for regulatory compliance purposes.

We must manufacture drug product for clinical trial use in compliance with current Good Manufacturing Practices, or cGMP. The cGMP regulations include requirements relating to organization of personnel, buildings and facilities, equipment, control of components and drug product containers and closures, production and process controls, packaging and labeling controls, holding and distribution, laboratory controls, records and reports, and returned or salvaged products. The manufacturing facilities for our products must meet cGMP requirements and FDA satisfaction before any product is approved and we can manufacture commercial products. Our third-party manufacturers are also subject to periodic inspections of facilities by the FDA and other authorities, including procedures and operations used in the testing and manufacture of our products to assess our compliance with applicable regulations. Failure to comply with statutory and regulatory requirements subjects a manufacturer to possible legal or regulatory action, including warning letters, the seizure or recall of products, injunctions, consent decrees placing significant restrictions on or suspending manufacturing operations and civil and criminal penalties. These actions could have a material impact on the availability of our products. Contract manufacturers often encounter difficulties involving production yields, quality control and quality assurance, as well as shortages of qualified personnel.

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FP-1039 Manufacturing

GSK is responsible for the manufacture, at its cost and expense, of FP-1039 drug substance and filled drug product used in activities GSK undertakes under the FP-1039 license. Pursuant to the FP-1039 license, we have the right to require GSK to manufacture and supply to us FP-1039 bulk drug substance and filled FP-1039 drug product for our or our sublicensees use for development and commercial activities for territories outside of the United States, the European Union or Canada, which are the territories to which GSK has development and commercial rights for FP-1039. Under the FP-1039 license, we agreed to pay GSK 110% of GSK s manufacturing costs for supply to be used in connection with Phase 1 or Phase 2 clinical trials and 120% of GSK s manufacturing costs for supply to be used in Phase 3 or post-approval clinical studies or commercial activities. If we exclusively license our rights to develop and commercialize FP-1039 in territories outside of the United States, the European Union or Canada or we undergo a change of control transaction, then GSK s obligation to manufacture and supply FP-1039 for us will terminate 24 months after we or our licensee first commercializes FP-1039 outside of the United States, the European Union or Canada or, if later, 24 months after the exclusive license or change of control.

FPA008 Manufacturing

We contracted with third parties for the manufacture of FPA008 bulk drug substance and drug product and other third parties for the labeling and distribution of FPA008 drug product for our Phase 1 clinical trial of FPA008. We believe we have sufficient quantities of FPA008 drug substance and drug product manufactured to supply our needs for our Phase 1 clinical trial.

FPA144 Manufacturing

We have not yet contracted with a third party for the manufacture of FPA144 bulk drug substance or for the filling, labeling and distribution of FPA144 drug product for clinical trials. We have identified and negotiated with several third-party manufacturers with facilities and capabilities necessary to manufacture FPA144 bulk drug substance. We believe we will be able to contract with one of these third parties for the manufacture of FPA144 bulk drug substance in order to conduct a Phase 1 clinical trial of FPA144.

Commercialization

We have not yet established sales, marketing or product distribution operations because our lead candidates are still in preclinical or early clinical development. We generally expect to retain some commercial rights in the United States for our product candidates in specialty markets. Pursuant to our FP-1039 collaboration, we have a co-promotion right in the United States which, if exercised by us, will allow us to field a minority percentage of the total United States sales force promotional effort (from GSK and us combined). If we exercise our option to co-promote FP-1039 in the United States prior to submission of a BLA, we expect to commence commercialization activities by building a focused sales and marketing organization in the United States to sell FP-1039 with GSK. We believe that such an organization will be able to address the community of oncologists who are the key specialists in treating the patient populations for which FP-1039 is being developed.

Competition

The biotechnology and pharmaceutical industries are characterized by continuing technological advancement and significant competition. While we believe that our product candidates, technology, knowledge, experience and scientific resources provide us with competitive advantages, we face competition from major pharmaceutical and biotechnology companies, academic institutions, governmental agencies and public and private research institutions, among others. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future. Key product features that would affect our ability to effectively compete with other therapeutics include the efficacy, safety and convenience of our products and the ease of use and effectiveness of any companion diagnostics. The level of generic competition and the availability of reimbursement from government and other third-party payors will also significantly affect the pricing and competitiveness of our products. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market.

Many of the companies against which we may compete have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory

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approvals and marketing approved products than we do. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Government Regulation and Product Approval

In the United States, the FDA regulates protein therapeutics like FP-1039 and our other current product candidates as biological drug products, or biologics, under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and related regulations. Biologics are also subject to other federal, state and local statutes and regulations. Failure to comply with the applicable United States regulatory requirements at any time during the product development process, approval process or after approval may subject an applicant to administrative or judicial actions. These actions could include the suspension or termination of clinical trials by the FDA or an Institutional Review Board, or IRB, the FDA s refusal to approve pending applications or supplements, withdrawal of an approval, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, import detention, injunctions, fines, civil penalties or criminal prosecution. Any administrative or judicial action could have a material adverse effect on us.

The FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the clinical development, manufacture and marketing of biologics. These agencies and other federal, state and local entities regulate research and development activities and the testing, manufacture, quality control, safety, effectiveness, purity, potency, labeling, storage, distribution, record keeping and reporting, approval, import and export, advertising and promotion and post-market surveillance of our products.

The FDA s policies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of any future product candidates or approval of product or manufacturing changes, new disease indications, or label changes. We cannot predict the likelihood, nature or extent of adverse governmental regulation that might arise from future legislative or administrative action, either in the United States or abroad.

Biologics Marketing Approval

The process required by the FDA before biologics may be marketed in the United States generally involves the following:

- nonclinical laboratory and animal tests;
- submission of an IND application which must become effective before clinical trials may begin;
- adequate and well-controlled human clinical trials to establish the safety, purity and potency of the proposed biologic for its intended use or uses;
- pre-approval inspection of manufacturing facilities and clinical trial sites; and
- FDA approval of a BLA, which must occur before a biologic can be marketed or sold.

The testing and approval process requires substantial time and financial resources, and we cannot be certain that any new approvals for our product candidates will be granted on a timely basis, if at all.

Our planned clinical trials for our product candidates may not begin or be completed on schedule, if at all. Clinical trials can be delayed for a variety of reasons, including delays in:

- obtaining regulatory approval to commence a study;
- reaching agreement with third-party clinical trial sites and their subsequent performance in conducting accurate and reliable studies on a timely basis;
- obtaining institutional review board approval to conduct a study at a prospective site;
- recruiting patients to participate in a study; and
- supply of the investigational product and related materials, such as companion diagnostics.

Before testing any compound in human subjects, a company must develop extensive preclinical data. Preclinical testing generally includes laboratory evaluation of product chemistry and formulation, as well as toxicological and

pharmacological studies in several animal species to assess the quality and safety of the product. Animal studies must be performed in compliance with the FDA s Good Laboratory Practice, or GLP, regulations and the United States Department of Agriculture s Animal Welfare Act and related regulations.

Prior to commencing the first clinical trial in humans, an initial IND application must be submitted to the FDA. A company must submit preclinical testing results to the FDA as part of the IND, and the FDA must evaluate whether there is an adequate basis for testing the drug in humans. The IND application automatically becomes effective 30 days after receipt by the FDA unless the FDA within the 30-day time period raises concerns or questions about the conduct of the clinical trial and places the trial on clinical hold. In such case, the IND application sponsor must resolve any outstanding concerns with the FDA before the clinical trial may begin. A separate submission to the existing IND application must be made for each successive clinical trial to be conducted during product development. Further, an independent IRB for each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial before it commences at that site. Informed consent must also be obtained from each study subject. Regulatory authorities, an IRB, a data safety monitoring board or the sponsor, may suspend or terminate a clinical trial at any time on various grounds, including a finding that the participants are being exposed to an unacceptable health risk.

A study sponsor is required to submit to the National Institutes of Health, or NIH, for public posting on NIH s clinical trial website, details about certain active clinical trials and clinical trial results. For purposes of BLA approval, human clinical trials are typically conducted in phases that may overlap:

- Phase 1 the biologic is initially given to healthy human subjects or patients and tested for safety, dosage tolerance, reactivity, absorption, metabolism, distribution and excretion. These studies may also gain early evidence on effectiveness. During Phase 1 clinical trials, sufficient information about the investigational product s effects may be obtained to permit the design of well-controlled and scientifically valid Phase 2 clinical trials.

- Phase 2 studies are conducted in a limited number of patients in the target population to identify possible adverse effects and safety risks, to determine the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage. Multiple Phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.

- Phase 3 when Phase 2 evaluations demonstrate that a dosage range of the product appears effective and has an acceptable safety profile, and provide sufficient information for the design of Phase 3 clinical trials, Phase 3 clinical trials are undertaken to provide statistically significant evidence of clinical efficacy and to further test for safety in an expanded patient population at multiple clinical trial sites. They are performed after preliminary evidence suggesting effectiveness of the drug has been obtained, and are intended to further evaluate dosage, effectiveness and safety, to establish the overall benefit-risk relationship of the investigational drug, and to provide an adequate basis for product approval by the FDA.

All of these trials must be conducted in accordance with Good Clinical Practice, or GCP, requirements in order for the data to be considered reliable for regulatory purposes.

Government regulation may delay or prevent marketing of product candidates for a considerable period of time and impose costly procedures upon our activities. We cannot be certain that the FDA or any other regulatory agency will grant approvals for any future product candidates on a timely basis, if at all. Success in early stage clinical trials does not ensure success in later stage clinical trials. Data obtained from clinical activities is not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval.

The Biologic License Application Approval Process

In order to obtain approval to market a biologic in the United States, a BLA must be submitted to the FDA that provides data establishing to the FDA s satisfaction the safety and effectiveness of the investigational product for the proposed indication. Each BLA submission requires a substantial user fee payment unless a waiver or exemption applies. The application includes all relevant data available from pertinent nonclinical studies and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product s chemistry, manufacturing, controls and proposed labeling, among other things. Data can come from company-sponsored clinical trials intended to test the safety and effectiveness of a use of a product, or from a number of alternative sources, including studies initiated by investigators.

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The FDA will initially review the BLA for completeness before it accepts it for filing. Under the FDA s procedures, the agency has 60 days from its receipt of a BLA to determine whether the application will be accepted for filing based on the agency s threshold determination that the application is sufficiently complete to permit substantive review. After the BLA submission is accepted for filing, the FDA reviews the BLA to determine, among other things, whether the proposed product is safe, pure and potent, which includes determining whether it is effective for its intended use, and whether the product is being manufactured in accordance with cGMP, to assure and preserve the product s identity, strength, quality, potency and purity. The FDA may refer applications for novel products or products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and, if so, under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

During the approval process, the FDA also will determine whether a Risk Evaluation and Mitigation Strategy, or REMS, is necessary to assure the safe use of the biologic. A REMS may include various elements depending on what the FDA considers necessary for the safe use of the drug. These elements range from a medication guide or patient package insert to limitations on who may prescribe or dispense the biologic. If the FDA concludes that a REMS is needed, the BLA sponsor must submit a proposed REMS; the FDA will not approve the BLA without a REMS, if required by the agency.

Based on pivotal Phase 3 clinical trial results submitted in a BLA, upon the request of an applicant, the FDA may grant a priority review designation to a product, which sets the target date for FDA action on the application at six months from the FDA s filing of the BLA, rather than the standard 10 months. Priority review is given where preliminary estimates indicate that a product, if approved, has the potential to provide a significant improvement compared to marketed products or offers a therapy where no satisfactory alternative therapy exists. Priority review designation does not change the scientific/medical standard for approval or the quality of evidence necessary to support approval.

After the FDA completes its initial review of a BLA, it will either communicate to the sponsor that it will approve the product, or issue a complete response letter to communicate that it will not approve the BLA in its current form and to inform the sponsor of changes that the sponsor must make or additional clinical, nonclinical or manufacturing data that must be received before the FDA can approve the application, with no implication regarding the ultimate approvability of the application. If a complete response letter is issued, the sponsor may either resubmit the BLA, addressing all of the deficiencies identified in the letter, or withdraw the application.

Before approving a BLA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and are adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA may inspect one or more clinical sites to assure compliance with GCP. If the FDA determines the application, manufacturing process or manufacturing facilities are not acceptable, it typically will outline the deficiencies and often will request additional testing or information. This may significantly delay further review of the application. If the FDA finds that a clinical site did not conduct the clinical trial in accordance with GCP, the FDA may determine the data generated by the clinical site should be excluded from the primary efficacy analyses provided in the BLA. Additionally, notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

The testing and approval process for a biologic requires substantial time, effort and financial resources and this process may take several years to complete. Data obtained from clinical activities are not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The FDA may not grant approval on a timely basis, or at all. We may encounter difficulties or unanticipated costs in our efforts to secure necessary governmental approvals, which could delay or preclude us from marketing our products.

The FDA may require, or companies may pursue, additional clinical trials after a product is approved. These so-called Phase 4 clinical trials may be made a condition to be satisfied for continuing drug approval. The results of Phase 4 clinical trials can confirm the effectiveness of a product candidate and can provide important safety

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information. In addition, the FDA has express statutory authority to require sponsors to conduct post-market studies to specifically address safety issues identified by the agency.

Even if a product candidate receives regulatory approval, the approval may be limited to specific disease states, patient populations and dosages, or might contain significant limitations on use in the form of warnings, precautions or contraindications, or in the form of onerous risk management plans, restrictions on distribution, or post-marketing study requirements. Further, even after regulatory approval is obtained, 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. In addition, we cannot predict what adverse governmental regulations may arise from future United States or foreign governmental action.

FDA Post-Approval Requirements

Any products manufactured or distributed by us or on our behalf pursuant to FDA approvals are subject to continuing regulation by the FDA, including requirements for record-keeping, reporting of adverse experiences with the biologic, and submitting biological product deviation reports to notify the FDA of unanticipated changes in distributed products. Manufacturers are required to register their facilities 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 standards, which impose certain quality processes, manufacturing controls and documentation requirements upon us and our third-party manufacturers in order to ensure that the product is safe, has the identity and strength, and meets the quality, purity and potency characteristics that it purports to have. Certain states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. We cannot be certain that we or our present or future suppliers will be able to comply with the cGMP and other FDA regulatory requirements. If our present or future suppliers are not able to comply with these requirements, the FDA may halt our clinical trials, refuse to approve any BLA or other application, force us to recall a drug from distribution, shut down manufacturing operations or withdraw approval of the BLA for that biologic. Noncompliance with cGMP or other requirements can result in issuance of warning letters, civil and criminal penalties, seizures, and injunctive action.

The FDA and other federal and state agencies closely regulate the labeling, marketing and promotion of drugs. While doctors are free to prescribe any product approved by the FDA for any use, a company can only make claims relating to safety and efficacy of a product that are consistent with FDA approval, and the company is allowed to market a drug only for the particular use and treatment approved by the FDA. In addition, any claims we make for our products in advertising or promotion must be appropriately balanced with important safety information and otherwise be adequately substantiated. Failure to comply with these requirements can result in adverse publicity, warning letters, corrective advertising, injunctions, potential civil and criminal penalties, criminal prosecution, and agreements with governmental agencies that materially restrict the manner in which a company promotes or distributes drug products. Government regulators, including the Department of Justice and the Office of the Inspector General of the Department of Health and Human Services, as well as state authorities, recently have increased their scrutiny of the promotion and marketing of drugs.

Orphan Drug Designation and Exclusivity

The Orphan Drug Act provides incentives for the development of products intended to treat rare diseases or conditions, which generally are diseases or conditions that affect fewer than 200,000 individuals in the United States. If a sponsor demonstrates that a biologic is intended to treat rare diseases or conditions, the FDA will grant orphan designation for that product. Orphan designation must be requested before submitting a BLA. The benefits of orphan drug designation include research and development tax credits and exemption from FDA user fees. Orphan designation, however, does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. Generally, if a product that receives orphan designation is approved for the orphan indication, it receives orphan drug exclusivity, which for seven years prohibits the FDA from approving another product with the same active ingredient for the same use. Additionally, if a biologic designated as an orphan product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan drug exclusivity.

Orphan exclusivity will not bar approval of another product under certain circumstances, including if a subsequent product with the same active ingredient for the same indication is shown to be clinically superior to the approved

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product on the basis of greater efficacy or safety, or providing a major contribution to patient care, or if the company with orphan drug exclusivity is not able to meet market demand. Further, the FDA may approve more than one product for the same orphan indication or disease as long as the products contain different active ingredients. As a result, even if one of our product candidates receives orphan exclusivity, the FDA can still approve other drugs that have a different active ingredient for use in treating the same indication or disease, which could create a more competitive market for us.

After the FDA grants orphan designation, the identity of the applicant, as well as the name of the therapeutic agent and its designated orphan use, are disclosed publicly by the FDA.

Biologics Price Competition and Innovation Act of 2009

The Biologics Price Competition and Innovation Act of 2009, or BPCIA, amended the Public Health Service Act to create a new licensure framework for follow-on biologic products, which could ultimately subject our biological product candidates to competition. Under the BPCIA, a manufacturer may submit an abbreviated application for licensure of a biologic that is biosimilar to a referenced branded biologic. This abbreviated approval pathway is intended to permit a biosimilar to come to market more quickly and less expensively than if a full BLA were submitted, by relaying to some extent on the FDA s previous review and approval of the reference biologic to which the proposed product is similar. Previously, there had been no licensure pathway for such biosimilar products.

Under the BPCIA, a biosimilar sponsor s ability to seek or obtain approval through the abbreviated pathway is limited by periods of exclusivity granted to the sponsor of the reference product. No biosimilar application may be submitted until four years after the date of approval of the reference product, and no such application, once submitted, may receive final approval until twelve years after that same date (with a potential six-month extension of exclusivity if certain pediatric studies are conducted and the results are reported to the FDA). Once approved, biosimilar products likely would compete with (and in some circumstances may be deemed under the law to be interchangeable with) the previously approved reference product.

FDA Regulation of Companion Diagnostics

As part of our clinical development plans, we are exploring the use of companion diagnostics to identify patients most likely to respond to our product candidates. Companion diagnostics are classified as medical devices under the Federal Food, Drug, and Cosmetic Act in the United States. In the United States, the FDA regulates the medical device design and development, preclinical and clinical testing, premarket clearance or approval, registration and listing, manufacturing, labeling, storage, reporting, recordkeeping, advertising and promotion, export and import, sales and distribution, and post-market surveillance of medical devices. Unless an exemption applies, companion diagnostics require marketing clearance or approval from the FDA prior to commercial distribution. The two primary types of FDA marketing authorization applicable to a medical device are premarket notification, also called 510(k) clearance, and premarket approval, or PMA. According to a 2011 draft guidance issued by FDA officials, companion diagnostics ordinarily will be considered to be high risk and, therefore, will require PMA approval before they are marketed. Some companion diagnostics, however, could potentially be cleared through 510(k) clearance.

To obtain 510(k) clearance, a manufacturer must submit a pre-market notification demonstrating that the proposed device is substantially equivalent to a predicate device, which is a previously 510(k) cleared Class I or Class II device, a pre-amendment Class III device for which the FDA has not yet called for PMA applications or a device that was in commercial distribution before May 28, 1976. To demonstrate substantial equivalence, the applicant must show that the device has the same intended use and the same technological characteristics as the predicate, or if the device has different technological characteristics than the predicate, the device does not raise new questions of safety and effectiveness, and is at least as safe and effective as the predicate. The FDA s 510(k) clearance pathway usually takes from four to twelve months, but it can last longer. After a device receives 510(k) clearance, any modification that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, requires a new 510(k) clearance or could require a PMA approval.

A product not eligible for 510(k) clearance must follow the PMA pathway, which requires proof that there is a reasonable assurance of a device s safety and efficacy to the FDA s satisfaction.

The PMA process is costly, lengthy and uncertain. PMA applications must be supported by valid scientific evidence, which typically requires extensive data, including technical, preclinical, clinical and manufacturing data, to

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demonstrate to the FDA s satisfaction the safety and effectiveness of the device. For companion diagnostic tests, a PMA application typically includes data regarding analytical and clinical validation studies. As part of its review of the PMA, the FDA will conduct a pre-approval inspection of the manufacturing facility or facilities to ensure compliance with the Quality System Regulation, or QSR, which requires manufacturers to follow design, testing, control, documentation and other quality assurance procedures. FDA review of an initial PMA application is required by statute to take between six to ten months, although the process typically takes longer, and may require several years to complete. If the FDA evaluations of both the PMA application and the manufacturing facilities are favorable, the FDA will either issue an approval letter or an approvable letter, which usually contains a number of conditions that must be met in order to secure the final approval of the PMA. If the FDA s evaluation of the PMA or manufacturing facilities is not favorable, the FDA will deny approval of the PMA or issue a not approvable letter. A not approvable letter will outline the deficiencies in the application, and where practical, will identify what is necessary to make the PMA. The FDA may also determine that additional clinical trials are necessary, in which case the PMA may be delayed for several months or years while the trials are conducted and then the data submitted in an amendment to the PMA. Once granted, PMA may be withdrawn by the FDA if compliance with post approval requirements, conditions of approval or other regulatory standards is not maintained or problems are identified following initial marketing.

The 2011 draft guidance issued by the FDA, if finalized, would address issues critical to developing companion diagnostics, such as biomarker qualification, establishing clinical validity, the use of retrospective data, the appropriate patient population and when the FDA will require that the device and the drug be approved simultaneously. According to the draft guidance, if safe and effective use of a therapeutic product depends on a diagnostic, then the FDA generally will require approval or clearance of the diagnostic at the same time that the FDA approves the therapeutic product. The FDA has yet to issue further guidance, and it is unclear whether it will do so, or what the scope would be.

The FDA previously has required in vitro companion diagnostics intended to select the patients who will respond to the cancer treatment to obtain PMA simultaneously with approval of the drug. Based on the draft guidance, and the FDA s past treatment of companion diagnostics, we believe that the FDA will require PMA of one or more companion diagnostics to identify patient populations suitable for our product candidates. The review of these companion diagnostics in conjunction with the review of our product candidates involves coordination of review by the FDA s Center for Drug Evaluation and Research and by the FDA s Center for Devices and Radiological Health Office of In Vitro Diagnostics Device Evaluation and Safety.

Coverage and Reimbursement

In both domestic and foreign markets, sales of any products for which we may receive regulatory approval will depend in part upon the availability of coverage and reimbursement from third-party payors. Such third-party payors include government health programs, such as Medicare and Medicaid, private health insurers and managed care providers, and other organizations. Coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available. Assuming coverage is granted, the reimbursement rates paid for covered products might not be adequate. Even if favorable coverage status and adequate reimbursement rates are attained, less favorable coverage policies and reimbursement rates may be implemented in the future. The marketability of any products for which we may receive regulatory approval for commercial sale may suffer if the government and other third-party payors fail to provide coverage and adequate reimbursement to allow us to sell such products on a competitive and profitable basis. For example, under these circumstances, physicians may limit how much or under what circumstances they will prescribe or administer, and patients may decline to purchase, such products. This, in turn, could affect our ability to successfully commercialize our products and impact our profitability, results of operations, financial condition, and future success.

The market for any product candidates for which we may receive regulatory approval will depend significantly on the degree to which these products are listed on third-party payors drug formularies, or lists of medications for which third-party payors provide coverage and reimbursement. The industry competition to be included on such formularies often leads to downward pricing pressures on pharmaceutical companies. Also, third-party payors may refuse to include a particular branded drug on their formularies or otherwise restrict patient access to a branded drug when a less costly generic equivalent or other alternative is available. In addition, because each third-party payor individually

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approves coverage and reimbursement levels, obtaining coverage and adequate reimbursement is a time-consuming and costly process. We may be required to provide scientific and clinical support for the use of any product to each third-party payor separately with no assurance that approval would be obtained, and we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the cost-effectiveness of our products. We cannot be certain that our product candidates will be considered cost-effective. This process could delay the market acceptance of any product candidates for which we may receive approval and could have a negative effect on our future revenues and operating results.

Anti-Kickback and False Claims Laws

In the United States, the research, manufacturing, distribution, sale and promotion of drug products and medical devices are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare & Medicaid Services, other divisions of the U.S. Department of Health and Human Services (e.g., the Office of Inspector General), the U.S. Department of Justice, state Attorneys General, and other state and local government agencies. For example, sales and marketing practices and scientific/educational grant programs or other financial relationships with health care providers must comply with fraud and abuse laws, the federal Anti-Kickback Statute, the federal False Claims Act, and similar state laws. Pricing and rebate programs must comply with the Medicaid Drug Rebate Program requirements of the Omnibus Budget Reconciliation Act of 1990 and the Veterans Health Care Act of 1992. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. All of these activities are also potentially subject to federal and state consumer protection and unfair competition laws.

As noted above, in the United States, we are subject to complex laws and regulations pertaining to healthcare fraud and abuse, including, but not limited to, the federal Anti-Kickback Statute, the federal False Claims Act, and other state and federal laws and regulations. The federal Anti-Kickback Statute makes it illegal for any person, including a prescription drug manufacturer (or a party acting on its behalf) or a health care provider, to knowingly and willfully solicit, receive, offer, or pay any remuneration that is in return for or intended to induce the referral of business, including the purchase, order, or prescription of a particular drug, for which payment may be made under a federal healthcare program, such as Medicare or Medicaid. In addition, many states have adopted laws similar to the federal Anti-Kickback Statute. Some of these state prohibitions apply to the referral of patients for healthcare services reimbursed by any insurer, not just federal healthcare programs such as Medicare and Medicaid. Due to the breadth of these federal and state anti-kickback laws, the limited availability of guidance in the form of regulations or court decisions, and the potential for additional legal or regulatory change in this area, it is possible that our future sales and marketing practices and/or our future relationships with physicians might be challenged under anti-kickback laws, which could harm our business.

The federal False Claims Act prohibits anyone from knowingly presenting, or causing to be presented, to federal programs (including Medicare and Medicaid) claims for payment for items or services, including drugs, that are false or fraudulent, claims for items or services not provided as claimed, and claims for medically unnecessary items or services, among other things. Although we would not submit claims directly to payors, manufacturers can be held liable under these laws 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. In addition, our future activities relating to the reporting of wholesaler or estimated retail prices for our products, the reporting of prices used to calculate Medicaid rebate information and other information affecting federal, state, and third-party reimbursement for our products, and the sale and marketing of our products, are subject to scrutiny under this law. For example, pharmaceutical companies have been prosecuted under the federal False Claims Act in connection with their marketing of drugs for unapproved, and thus non-reimbursable, uses. The Health Insurance Portability and Accountability Act of 1996, or HIPAA, created new federal criminal statutes that prohibit knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private third-party payors, 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. Also, many states have similar fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, regardless of the payor.

Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If our

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operations are found to be in violation of any of the federal or state laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including significant criminal and civil monetary penalties, damages, fines, imprisonment, exclusion from participation in government programs, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, private qui tam actions brought by individual whistleblowers in the name of the government, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our products 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 transfers of value to healthcare professionals.

There are also a number of state transparency laws that require manufacturers to make reports to states on pricing information and marketing practices and payments. Many of these laws contain ambiguities as to what is required to comply with the laws. Several states have enacted legislation requiring pharmaceutical companies to, among other things, establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical companies for use in sales and marketing, and to prohibit certain other sales and marketing practices. In addition, as discussed below, beginning in 2013, a similar federal requirement will require manufacturers to track and report to the federal government certain payments and other transfers of value made to physicians (defined to include doctors of medicine and osteopathy, dentists, optometrists, podiatrists, and chiropractors) and teaching hospitals made in the previous calendar year. These laws may affect our sales, marketing, and other promotional activities by imposing administrative and compliance burdens on us. In addition, given the lack of clarity with respect to these laws and their implementation, our reporting actions could be subject to the penalty provisions of the pertinent state and federal authorities.

Patient Protection and Affordable Care Act

The United States and some foreign jurisdictions are considering or have enacted a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our product candidates profitably, even if they are approved for sale. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the Affordable Care Act, was enacted, which includes measures that have or will significantly change the way health care is financed by both governmental and private insurers. Among the provisions of the Affordable Care Act of importance to the pharmaceutical industry are the following:

- The Affordable Care Act increased the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program, retroactive to January 1, 2010, from 15.1% to 23.1% and from 11% to 13% of the average manufacturer price, or AMP, for most branded and generic drugs and biologic agents, respectively. The Affordable Care Act also added a new rebate calculation for line extensions (i.e., new formulations, such as extended release formulations) of solid oral dosage forms of branded products and potentially impacted manufacturers Medicaid Drug Rebate liability by modifying the statutory definition of AMP. PPACA also expanded the universe of Medicaid utilization subject to drug rebates by requiring pharmaceutical manufacturers to pay rebates on covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations as of 2010 and by expanding the population potentially eligible for Medicaid drug benefits, to be phased-in by 2014.

- Effective in 2010, the Affordable Care Act expanded the types of entities eligible to receive discounted pricing through the 340B drug pricing program. In addition, as 340B drug pricing is determined based on AMP and Medicaid rebate data, the revisions to the Medicaid rebate formula and AMP definition described above could cause the required 340B discount to increase.

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- Effective in 2011, the Affordable Care Act imposed a requirement on manufacturers of branded drugs and biologic agents to provide a 50% discount off the negotiated price of branded drugs dispensed to Medicare Part D patients in the coverage gap (i.e., donut hole) as a condition for the manufacturers outpatient drugs to be covered under Medicare Part D.

- Effective in 2011, the Affordable Care Act imposed an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs, although this fee would not apply to sales of certain products approved exclusively for orphan indications.

- The Affordable Care Act expanded healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, and added new government investigative powers, and enhanced penalties for noncompliance.

- Effective in 2013, the Affordable Care Act will require pharmaceutical manufacturers to track and report annually certain financial arrangements with physicians and teaching hospitals, as defined in PPACA and its implementing regulations, including reporting any payments or other transfers of value made or distributed to such entities, and it will require applicable manufacturers and applicable group purchasing organizations to report annually any ownership and investment interests held by physicians and certain other healthcare providers and their immediate family members, with data collection to be required beginning August 1, 2013, and reporting to Centers for Medicare and Medicaid Services, or CMS, to be required by March 31, 2014, and by the 90th day of each subsequent calendar year.

- The Affordable Care Act added a new requirement to annually report drug samples that manufacturers and distributors provide to physicians beginning in 2012.

- As of 2010, a new Patient-Centered Outcomes Research Institute was established pursuant to PPACA to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research. The research conducted by the Patient-Centered Outcomes Research Institute may affect the market for certain pharmaceutical products.

- The Affordable Care Act created the Independent Payment Advisory Board which, beginning in 2014, will have authority to recommend certain changes to the Medicare program to reduce expenditures by the program that could result in reduced payments for prescription drugs. Under certain circumstances, these recommendations will become law unless Congress enacts legislation that will achieve the same or greater Medicare cost savings.

- The Affordable Care Act established the Center for Medicare and Medicaid Innovation within CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending. Funding has been allocated to support the mission of the Center for Medicare and Medicaid Innovation as of fiscal year 2010.

In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. On August 2, 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation s automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on our customers and accordingly, our financial operations.

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

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Other Regulations

We are also subject to numerous federal, state and local laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control, and disposal of hazardous or potentially hazardous substances. We may incur significant costs to comply with such laws and regulations now or in the future.

Employees

As of December 31, 2013, we had 105 full-time employees and 1 part-time employee. Of these employees, 84 were primarily engaged in research and development activities and 39 have an M.D. or a Ph.D. degree.

Properties and Facilities

Our principal executive office is located in South San Francisco, California, and consists of approximately 69,500 square feet of leased office and laboratory space under a lease that expires on December 31, 2017.

Legal Proceedings

We are not currently subject to any material legal proceedings.

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MANAGEMENT

Directors and Executive Officers

The following table sets forth the name, age and position of each of our directors and executive officers.

NAME	AGE	POSITION
Directors		
Brian G. Atwood [1][2]	61	Chairman of the Board
Franklin M. Berger, CFA [1]	64	Director
Fred E. Cohen, M.D., D.Phil [3]	57	Director
R. Lee Douglas [1]	62	Director
Peder K. Jensen, M.D. [2][3]	59	Director
Mark D. McDade [2]	58	Director
Executive Officers		
Lewis T. Rusty Williams, M.D., Ph.D.	64	Founder, President, Chief Executive Officer and Director
Marc L. Belsky	58	Senior Vice President and Chief Financial Officer
Julie Hambleton, M.D.	55	Senior Vice President and Chief Medical Officer
W. Michael Kavanaugh, M.D.	57	Senior Vice President and Chief Scientific Officer
Aron M. Knickerbocker	44	Senior Vice President, Chief Business Officer and Director
Francis W. Sarena	43	Senior Vice President, General Counsel and Secretary

[1] Member of the Audit Committee.

[2] Member of the Compensation Committee.

[3] Member of the Nominating and Corporate Governance Committee.

The following includes a brief biography for each of our executive officers and directors, with each director biography including information regarding the experiences, qualifications, attributes or skills that caused our board of directors to determine that each member of our board of directors should serve as a director as of the date of this prospectus. There are no family relationships among any of our executive officers or directors.

Directors

Brian G. Atwood has served as a member of our board of directors since May 2002 and as chairman of the board since January 2012. Since 1999, Mr. Atwood has served as Managing Director of Versant Ventures, a healthcare-focused venture capital firm he co-founded. Prior to co-founding Versant Ventures, Mr. Atwood spent four years at Brentwood Associates, a venture capital firm, where, as a general partner, he led investments in biotechnology, pharmaceuticals and bioinformatics. Mr. Atwood was also the founder, President and Chief Executive Officer of Glycomed, Inc., a public biotechnology company. Mr. Atwood currently serves on the boards of directors of Cadence Pharmaceuticals, Inc., Clovis Oncology, Inc. and Veracyte, Inc., each of which is a public biopharmaceutical company. Mr. Atwood was previously a member of the board of directors of Helicos BioSciences Corporation and Trius Therapeutics, Inc., both of which were public companies during Mr. Atwood s service as a director. Mr. Atwood received a B.S. in Biological Sciences from the University of California, Irvine, an M.S. in Ecology from the University of California, Davis, and an M.B.A. from Harvard Business School. We believe that Mr. Atwood s experience in the venture capital

industry, serving as a director of other publicly traded and privately held life science companies and founding and serving as President and Chief Executive Officer of a public biopharmaceutical company, give him the qualifications, skills and financial expertise to serve on our board of directors.

Franklin M. Berger, CFA has served as a member of our board of directors since September 2010. Mr. Berger is a consultant to biotechnology industry participants, including major biopharmaceutical firms, mid-capitalization biotechnology companies, specialist asset managers and venture capital companies, providing business development, strategic advisory, financing, partnering, and royalty acquisition advice. Mr. Berger is also a biotechnology industry analyst with over 25 years of experience in capital markets and financial analysis. Mr. Berger worked at Sectoral Asset Management as a founder of the small-cap focused NEMO Fund from 2007 through June 2008. From May 1998 to March 2003, he served at J.P. Morgan Securities, most recently as Managing Director, Equity Research and Senior Biotechnology Analyst. In this position, he initiated coverage of 26 biotechnology

companies and was responsible for technical, scientific and clinical due diligence as well as company selection. Previously, Mr. Berger served in similar capacities at Salomon Smith Barney and Josephthal & Co. Mr. Berger also serves on the boards of directors of BELLUS Health, Inc., BioTime, Inc., Seattle Genetics, Inc. and Thallion Pharmaceuticals, Inc., each of which is a public biotechnology company. Mr. Berger previously served as a member of the board of directors of Emisphere Technologies, Inc. and VaxGen, Inc., each of which were public biopharmaceutical companies during Mr. Berger s service as a director. Mr. Berger received a B.A. in International Relations and an M.A. in International Economics both from Johns Hopkins University and an M.B.A. from the Harvard Business School. Mr. Berger s financial background and experience as an equity analyst in the biotechnology industry combined with his experience serving on the boards of directors of multiple public companies is important to our strategic planning and financing activities and give him the qualifications, skills and financial expertise to serve on our board of directors.

Fred E. Cohen, M.D., D.Phil. has served as a member of our board of directors since May 2002. Dr. Cohen currently serves as a Partner of TPG Biotechnology Partners, L.P., which he joined in 2001, and serves as co-head of TPG s biotechnology group. Dr. Cohen is also an Adjunct Professor of Cellular and Molecular Pharmacology at University of California, San Francisco, where he has taught since 1988. Dr. Cohen is a member of the boards of directors of BioCryst Pharmaceuticals, Inc., Genomic Health Inc., Quintiles Transnational Holdings Inc., Tandem Diabetes Care, Inc., and Veracyte, Inc., each of which is a public company. He is a member of the Institute of Medicine and the American Academy of Arts and Sciences. Dr. Cohen received a B.S. in Molecular Biophysics and Biochemistry from Yale University, a D.Phil. in Molecular Biophysics from Oxford University, where he was a Rhodes Scholar, and an M.D. from Stanford University. We believe that Dr. Cohen s experience in the venture capital industry and serving as a director of other publicly traded and privately held companies give him the qualifications, skills and financial expertise to serve on our board of directors.

R. Lee Douglas has served as a member of our board of directors since January 2002. Since 1998, Mr. Douglas has been an independent consultant to biotechnology companies. Since 2003, he also has been a visiting scholar in the laboratory of Dr. Matthew Welch, Department of Molecular & Cell Biology at the University of California, Berkeley. Mr. Douglas was a co-founder of COR Therapeutics, Inc., a biotechnology company, and served in a variety of capacities there from 1988 to 1998, including as its Chief Executive Officer, Chief Financial Officer and Vice President, Corporate Development. Prior to co-founding COR, he was a general partner in the venture group at Robertson, Stephens & Co. Mr. Douglas was previously a member of the board of directors of Affymax, Inc., which is a public biotechnology company. Mr. Douglas received a B.A. from University of North Carolina at Charlotte, an MCRP from the Harvard Graduate School of Design and an M.B.A. from Harvard Business School. We believe that Mr. Douglas s experience serving as a director of other publicly traded and privately held life science companies, co-founding and serving in several executive positions of a public biopharmaceutical company and in the venture capital industry give him the qualifications, skills and financial expertise to serve on our board of directors.

Peder K. Jensen, M.D. has served as a member of our board of directors since July 2011. Dr. Jensen is currently President of Bay Way Consultants, LLC, a consulting firm founded by Dr. Jensen in 2010 that advises pharmaceutical and biotechnology companies. Dr. Jensen has over 24 years of global drug development experience in both pharmaceutical and biotechnology companies and has been responsible for more than 40 new drug approvals in the U.S., Europe and Japan during his career. Dr. Jensen s experience includes over 20 years with Schering-Plough Corporation, a global pharmaceutical company, and then Merck & Co., Inc. after the merger of Schering-Plough with Merck in 2009. Dr. Jensen most recently served at Schering-Plough as Corporate Senior Vice President, and General Manager, R&D for Japan and Asia/Pacific from 2006 to 2010. Dr. Jensen has also served at British Biotech plc and Chiron Corporation in clinical development executive positions and earlier in his career at CIBA-GEIGY Limited. Dr. Jensen is also a member of the board of directors of Acorda Therapeutics, Inc., a public biotechnology company, and BioCryst Pharmaceuticals, Inc., a public pharmaceutical company. Dr. Jensen received an M.D. from the University of Copenhagen, where he also completed his post-graduate medical training in neurology and internal medicine. We believe that Dr. Jensen s extensive experience in executive positions with several pharmaceutical companies and in the clinical development of pharmaceuticals in several therapeutic areas and his service as a director of other publicly traded and privately held life science companies give him the qualifications, skills and financial expertise to serve on our board of directors.

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Mark D. McDade has served as a member of our board of directors since July 2006. Mr. McDade currently serves as Executive Vice President, Established Brands, Solutions and Supply, at UCB S.A., which he joined in April 2008. UCB is a global biopharmaceutical company focused on the discovery and development of innovative medicines. Mr. McDade previously served as Chief Executive Officer and a member of the board of directors of PDL BioPharma, Inc., a biotechnology company, and as Chief Executive Officer of Signature BioScience, Inc., a drug discovery company focused on developing treatments and leads for cancer and other diseases. Mr. McDade also served as an officer and a director of Corixa Corporation, a company he co-founded, which focused on developing innovative products that regulate immunity. At Corixa, he most recently served as its President and Chief Operating Officer. Mr. McDade received a B.A. from Dartmouth College and an M.B.A. from Harvard Business School. We believe that Mr. McDade s experience serving in several executive positions with public biopharmaceutical companies, his experience co-founding a life sciences company and extensive business development and operations experience give him the qualifications, skills and financial expertise to serve on our board of directors.

Executive Officers

Lewis T. Rusty Williams, M.D., Ph.D. founded the company in December 2001 and has served as a member of our board of directors since January 2002, as our President and Chief Executive Officer since August 2011, and as our Executive Chairman from July 2003 to January 2012. Previously, Dr. Williams spent seven years at Chiron Corporation, a biopharmaceutical company, now Novartis Vaccines and Diagnostics, Inc., most recently as its Chief Scientific Officer. He also served on Chiron s board of directors from 1999 to 2001. Prior to joining Chiron, Dr. Williams was a professor of medicine at the University of California, San Francisco and served as director of the University s Cardiovascular Research Institution and Daiichi Research Center. Dr. Williams also has served on the faculties of Harvard Medical School and Massachusetts General Hospital and co-founded COR Therapeutics, Inc., a biotechnology company focused on cardiovascular disease. He is a member of the National Academy of Sciences and a fellow of the American Academy of Arts and Sciences. Dr. Williams was previously a member of the boards of directors of COR Therapeutics, Inc. and Beckman Coulter, Inc., each of which is a public company. Dr. Williams received a B.S. from Rice University and an M.D. and a Ph.D. from Duke University. We believe that Dr. Williams extensive experience in drug discovery and development and in executive positions with several pharmaceutical companies, his experience founding the company and his service as a director of other publicly traded healthcare companies give him the qualifications, skills and financial expertise to serve on our board of directors.

Marc L. Belsky has served as our Senior Vice President and Chief Financial Officer since December 2013. Mr. Belsky also served as our Vice President and Chief Financial Officer from October 2013 to December 2013 and as Vice President, Finance, from October 2009 to October 2013. From December 2006 to October 2009, Mr. Belsky served as Vice President, Finance, and Chief Accounting Officer of Cell Genesys, Inc., a biotechnology company acquired by BioSante Pharmaceuticals, Inc. Prior to 2006, Mr. Belsky served as Vice President, Global Visa Commerce at Visa Inc., Chief Financial Officer at Active Aero Group, Inc. and Chief Financial Officer at DataWave Systems Inc. Prior to these positions, he served for 15 years at Michigan National Corporation, a holding company for Michigan National Bank which was acquired by BANA Holding Corporation, in positions of increasing responsibility, most recently as Senior Vice President, U.S. Payment Products and Services. Mr. Belsky started his career as an auditor with Coopers & Lybrand. Mr. Belsky received a B.S. in Accounting from Wayne State University and an M.B.A. from University of Michigan. He is a certified public accountant, a chartered global management accountant and a certified treasury professional.

Julie Hambleton, M.D. has served as our Senior Vice President and Chief Medical Officer since December 2012. From April 2010 to December 2012, Dr. Hambleton served as Vice President, Clinical Development, at Clovis Oncology, Inc., a public biopharmaceutical company. From 2003 to April 2010, Dr. Hambleton served at Genentech, Inc., a biotechnology company acquired by Hoffman-LaRoche AG, in positions of increasing responsibility, most recently as Group Medical Director, Global Clinical Development from July 2009 to April 2010. Prior to 2003, Dr. Hambleton served for 10 years in academic positions in the Division of Hematology/Oncology at the University of California, San Francisco, most recently as Associate Professor of Clinical Medicine. Dr. Hambleton received a B.S. from Duke University and an M.D. from Case Western Reserve University School of Medicine. She is Board Certified in Hematology and Internal Medicine.

W. Michael Kavanaugh, M.D. has served as our Senior Vice President and Chief Scientific Officer since January 2013. From February 2009 to January 2013, Dr. Kavanaugh served as our Senior Vice President, Research and

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Development. Previously, Dr. Kavanaugh served at Novartis Vaccines and Diagnostics, Inc., a healthcare company, in positions of increasing responsibility, most recently as Vice President of Novartis Vaccines & Diagnostics, Inc. and Executive Director of Novartis Institutes of Biomedical Research from 2006 to February 2009. Novartis Vaccines and Diagnostics, Inc. was formerly known as Chiron Corporation before its acquisition in 2006. Dr. Kavanaugh also currently serves as an Attending Staff Physician, Coronary Intensive Care Unit at the San Francisco Veterans Administration Medical Center and as an Associate Clinical Professor of Medicine at the University of California, San Francisco. Dr. Kavanaugh received a B.S. in Molecular Biochemistry and Biophysics from Yale University and an M.D. from Vanderbilt University. He trained in Internal Medicine, Cardiovascular Disease and Molecular and Cellular Biology at the University of California, San Francisco and the Cardiovascular Research Institute. He is Board Certified in Cardiovascular Disease and Internal Medicine.

Aron M. Knickerbocker has served as our Senior Vice President and Chief Business Officer since April 2012 and as a member of our board of directors since October 2013. From September 2009 to April 2012, he served as our Vice President, Business Development. From 2001 to September 2009, Mr. Knickerbocker served at Genentech, Inc. in positions of increasing responsibility most recently as Senior Director, Business Development from 2005 to September 2009. Prior to 2001, Mr. Knickerbocker served as Director of Commercial Development at ALZA Corporation, a pharmaceutical company acquired by Johnson & Johnson, as Senior Manager, Corporate Development at Amgen Inc., a public biotechnology company and as a scientist at Bristol-Myers Squibb Company, a public biopharmaceutical company. Mr. Knickerbocker received an A.B. in biology from Washington University in St. Louis and an M.B.A. from the University of Michigan. We believe that Mr. Knickerbocker s extensive experience in drug discovery, commercialization and business development and in managerial positions with several pharmaceutical companies give him the qualifications, skills and financial expertise to serve on our board of directors.

Francis W. Sarena has served as our Senior Vice President since January 2013, and as General Counsel and Secretary since December 2010. Mr. Sarena also served as Vice President from December 2010 to January 2013. From December 2008 to July 2010, Mr. Sarena served as Vice President, General Counsel and Secretary of Facet Biotech Corporation, a public biotechnology company that was spun off from PDL BioPharma, Inc. that was later acquired by Abbott Laboratories. From April 2006 to December 2008, Mr. Sarena served at PDL BioPharma, Inc. in positions of increasing responsibility, most recently as Vice President, General Counsel and Secretary from June 2008 to December 2008. Prior to 2006, Mr. Sarena served as an associate at Bingham McCutchen LLP where he represented public and private life science and high tech clients primarily in merger and acquisition transactions, corporate and securities law matters and equity financing transactions. Mr. Sarena received a B.S. in Finance from San Francisco State University and a J.D. from University of California, Berkeley.

Composition of the Board of Directors

Our amended and restated bylaws provide that the size of our board of directors will be determined from time to time by resolution of our board of directors. Our board of directors currently consists of eight directors, six of whom qualify as independent directors under the rules and regulations of the Securities and Exchange Commission, or SEC, and NASDAQ Stock Market, LLC, or NASDAQ.

Election of Directors

Our amended and restated certificate of incorporation provides for a classified board of directors consisting of three classes of directors. We have three directors in Class I and Class II and two directors in Class III, each serving a staggered three-year term. At each annual meeting of stockholders, our stockholders will elect successors to directors whose terms then expire to serve from the time of election and qualification until the third annual meeting following election. Our directors are divided among the three classes as follows:

- Class I directors will be Brian G. Atwood, R. Lee Douglas and Mark D. McDade, and their terms will expire at the annual meeting of stockholders to be held in 2014;
- Class II directors will be Fred E. Cohen, Peder K. Jensen and Aron M. Knickerbocker, and their terms will expire at the annual meeting of stockholders to be held in 2015; and
- Class III directors will be Franklin M. Berger and Lewis T. Williams, and their terms will expire at the annual meeting of stockholders to be held in 2016.

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The classification of our board of directors may have the effect of delaying or preventing changes in control of our company. We expect that additional directorships resulting from an increase in the number of directors, if any, will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors.

Independence of the Board of Directors and Board Committees

Rule 5605 of the NASDAQ Marketplace Rules, or the NASDAQ Listing Rules, requires that independent directors compose a majority of a listed company s board of directors within one year of listing. In addition, the NASDAQ Listing Rules require that, subject to specified exceptions, each member of a listed company s audit, compensation, and nominating and corporate governance committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act of 1934, as amended, or the Exchange Act. Under NASDAQ Listing Rule 5605(a)(2), a director will only qualify as an independent director if, in the opinion of our board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3 under the Exchange Act, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries. Beginning in 2014, in addition to satisfying general independence requirements under the NASDAQ Listing Rules, members of the compensation committee must also satisfy additional independence requirements set forth in NASDAQ Listing Rule 5605(d)(2). In order to be considered independent for purposes of NASDAQ Listing Rule 5605(d)(2), a member of a compensation committee of a listed company may not, other than in his or her capacity as a member of the compensation committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries. Additionally, the board of directors of the listed company must consider whether the compensation committee member is an affiliated person of the listed company or any of its subsidiaries and, if so, must determine whether such affiliation would impair the director s judgment as a member of the compensation committee.

Our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family and other relationships, including those relationships described under Certain Relationships and Related Party Transactions, our board of directors determined that none of Messrs. Atwood, Berger, Douglas and McDade and Drs. Cohen and Jensen, representing six of our eight directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is independent as that term is defined under Rule 5605(a)(2) of the NASDAQ Listing Rules. Dr. Williams and Mr. Knickerbocker are not considered independent because of their current employment with us. Our board of directors also determined that each member of the audit, compensation, and nominating and corporate governance committees satisfy the independence standards for such committees established by the SEC and the NASDAQ Listing Rules, as applicable. In making these determinations on the independence of our directors, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director.

Board Leadership Structure and the Role of the Board in Risk Oversight

Board Leadership Structure

The positions of our chairman of the board and chief executive officer are separated. Separating these positions allows our chief executive officer to focus on our day-to-day business, while allowing the chairman of the board to lead our board of directors in its fundamental role of providing advice to and independent oversight of management. Our board of directors recognizes the time, effort and energy that the chief executive officer must devote to his position in the current business environment, as well as the commitment required to serve as our chairman, particularly as our board of directors oversight responsibilities continue to grow. Our board of directors also believes that this structure ensures a greater role for the independent directors in the oversight of the company and active

participation of the independent directors in setting agendas and establishing priorities and procedures for the work of our board of directors.

Although our amended and restated bylaws do not require that we separate the chairman of the board and chief executive officer positions, our board of directors believes that having separate positions is the appropriate leadership structure for us at this time. Our board recognizes that depending on the circumstances, other leadership models, such as combining the role of chairman of the board with the role of chief executive officer, might be appropriate. Accordingly, our board may periodically review its leadership structure. Our board of directors believes its administration of its risk oversight function has not affected its leadership structure.

Our independent directors will meet alone in executive session at no less than four regular meetings of our board of directors each year. The chairman of our board may call additional executive sessions of the independent directors at any time, and the chairman of our board shall call an executive session at the request of a majority of the independent directors. The purpose of these executive sessions is to promote open and candid discussion among non-employee directors.

Role of the Board in Risk Oversight

We face a number of risks, including those described under the caption Risk Factors contained elsewhere in this prospectus. Our board of directors believes that risk management is an important part of establishing, updating and executing on the company s business strategy. Our board of directors, as a whole and at the committee level, has oversight responsibility relating to risks that could affect the corporate strategy, business objectives, compliance, operations, and the financial condition and performance of the company. Our board of directors focuses its oversight on the most significant risks facing the company and on its processes to identify, prioritize, assess, manage and mitigate those risks. Our board of directors and its committees receive regular reports from members of the company s senior management on areas of material risk to the company, including strategic, operational, financial, legal and regulatory risks. While our board of directors has an oversight role, management is principally tasked with direct responsibility for management and assessment of risks and the implementation of processes and controls to mitigate their effects on the company.

The audit committee, as part of its responsibilities, oversees the management of financial risks, including accounting matters, liquidity and credit risks, corporate tax positions, insurance coverage, and cash investment strategy and results. The audit committee is also responsible for overseeing the management of risks relating to the performance of the company s internal audit function, if required, and its independent registered public accounting firm, as well as our systems of internal controls and disclosure controls and procedures. The compensation committee is responsible for overseeing the management of risks relating to our executive compensation and overall compensation and benefit strategies, plans, arrangements, practices and policies. The nominating and corporate governance committee oversees the management of risks associated with our overall compliance and corporate governance practices, and the independence and composition of our board of directors. These committees provide regular reports, on at least a quarterly basis, to the full board of directors.

Committees of the Board

Our board of directors has a standing audit committee, compensation committee and nominating and corporate governance committee. The composition and responsibilities of each committee are described below. Members serve on these committees until their resignation or until otherwise determined by our board.

Audit Committee

The audit committee is responsible for assisting our board of directors in its oversight of the integrity of our financial statements, the qualifications and independence of our independent auditors, and our internal financial and accounting controls. The audit committee has direct responsibility for the appointment, compensation, retention (including termination) and oversight of our independent auditors, and our independent auditors report directly to the audit committee. The audit committee also prepares the audit committee report that the SEC requires to be included in our annual proxy statement.

The members of the audit committee are Messrs. Atwood, Berger and Douglas, and Mr. Berger serves as chair of the audit committee. All members of the audit committee qualify as an independent director under the corporate

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governance standards of the NASDAQ Listing Rules and the independence requirements of Rule 10A-3 of the Exchange Act. Our board of directors has determined that Mr. Berger qualifies as an audit committee financial expert as such term is currently defined in Item 407(d)(5) of Regulation S-K. The audit committee has adopted a written charter that satisfies the applicable standards of the SEC and the NASDAQ Listing Rules, which is available on our website at www.fiveprime.com.

Compensation Committee

The compensation committee approves the compensation objectives for the company, approves the compensation of the chief executive officer and approves or recommends to our board of directors for approval the compensation for other executives. The compensation committee reviews all compensation components, including base salary, bonus, benefits and other perquisites.

The members of the compensation committee are Messrs. Atwood and McDade and Dr. Jensen, and Mr. McDade serves as chair of the compensation committee. Each member of the compensation committee is a non-employee director within the meaning of Rule 16b-3 of the rules promulgated under the Exchange Act, each is an outside director as defined by Section 162(m) of the U.S. Internal Revenue Code of 1986, as amended, or the Code, and each is an independent director as defined by the NASDAQ Listing Rules, including NASDAQ Listing Rule 5605(d)(2). The compensation committee has adopted a written charter that satisfies the applicable standards of the SEC and the NASDAQ Listing Rules, which is available on our website at www.fiveprime.com.

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 structure and composition of our board and the board committees. In addition, the nominating and corporate governance committee is responsible for developing and recommending to our board corporate governance guidelines applicable to the company and advising our board on corporate governance matters.

The members of the nominating and corporate governance committee are Drs. Jensen and Cohen and Dr. Jensen serves as chair of the nominating and corporate governance committee. Each member of the nominating and corporate governance committee is a non-employee director within the meaning of Rule 16b-3 of the rules promulgated under the Exchange Act and an independent director as defined by the NASDAQ Listing Rules. The nominating and corporate governance committee has adopted a written charter that satisfies the applicable standards of the NASDAQ Listing Rules, which is available on our website at www.fiveprime.com.

Code of Business Conduct and Ethics

We 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. The code of business conduct and ethics is available on our website at www.fiveprime.com. We intend to disclose future amendments to the code or any waivers of its requirements on our website to the extent permitted by the applicable rules and exchange requirements.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has ever been an officer or employee of the company. None of our executive officers serves, or has served during the last three year, as a member of the board of directors, compensation committee or other board committee performing equivalent functions of any entity that has one or more executive officers serving as one of our directors or on our compensation committee.

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EXECUTIVE AND DIRECTOR COMPENSATION

Executive Compensation

The following table sets forth information for each of the last two completed fiscal years regarding compensation awarded to or earned by our named executive officers.

Summary Compensation Table

NAME AND PRINCIPAL POSITION	YEAR	SALARY ($)	OPTION AWARDS [1] ($)	NON-EQUITY INCENTIVE PLAN COMPENSATION [2] ($)	TOTAL ($)
Lewis T. Williams, M.D., Ph.D.	2013	525,000	423,180	300,000	1,248,180
Founder, President and Chief Executive Officer	2012	525,000	239,573	250,000	1,014,573
Julie Hambleton, M.D.	2013	350,000	575,880	137,900	1,063,780
Senior Vice President and Chief Medical Officer					
Aron M. Knickerbocker	2013	362,833	126,950	149,300	639,083
Senior Vice President and Chief Business Officer	2012	332,667	326,393	104,300	763,360

(1) Amounts reflect the grant date fair value of option awards determined in accordance with ASC 718. For information regarding assumptions underlying the value of equity awards, see Note 1 to our financial statements and the discussion under Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies Stock-Based Compensation, included elsewhere in this prospectus. These amounts do not correspond to the actual value that the named executive officers will recognize.

(2) Amounts represent amounts earned under our bonus program for the respective year based on the achievement of company and individual performance goals and other factors deemed relevant by our board of directors and compensation committee. In 2013, our company goals related to the advancement of our clinical and preclinical programs, business and corporate development objectives, internal discovery and discovery collaboration objectives and financial management objectives. We determined our chief executive officer s annual performance bonus based on attainment of company objectives and Dr. Williams leadership of the company, which bonus our board of directors and compensation committee determined was appropriate given our chief executive officer s responsibility for the overall direction and success of our business. We base annual performance bonuses for each of the other named executive officers on an equal balance of company performance (50%) and individual performance (50%), which our board of directors and compensation committee determined is appropriate in order to reinforce the importance of integrated and collaborative leadership. For 2013, the compensation committee determined that each of Dr. Williams, Dr. Hambleton and Mr. Knickerbocker were entitled to an annual bonus equal to approximately 57.1%, 39.4% and 41.0%, respectively, of their annual base salary.

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Outstanding Equity Awards at Fiscal Year-End

The following table provides information regarding equity awards held by the named executive officers that were outstanding as of December 31, 2013.

	OPTION AWARDS			
NAME	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS EXERCISABLE (#)	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS UNEXERCISABLE (#)	OPTION EXERCISE PRICE ($/SH)	OPTION EXPIRATION DATE
Lewis T. Williams, M.D., Ph.D.	81,300		1.23	10/25/2016
	162,601		4.56	4/15/2019
	52,083	8,892 (1)	6.89	7/28/2020
	71,139	50,812 (1)	8.49	10/19/2021
	21,595	39,380 (1)	5.54	7/15/2022
	8,469	72,831 (1)	7.26	7/18/2023
Julie Hambleton, M.D.	28,455	85,366 (2)	5.54	1/9/2023
	2,541	21,849 (1)	7.26	7/18/2023
Aron M. Knickerbocker	1,186		4.56	10/20/2019
	10,068	1,720 (1)	6.89	7/28/2020
	9,823	6,437 (1)	8.49	7/13/2021
	8,141	8,850 (1)	8.49	1/1/2022
	20,155	36,755 (1)	5.54	7/15/2022
	2,540	21,850 (1)	7.26	7/18/2023

(1) This option vests over four years in equal monthly installments.

(2) This option vests 25% on the one-year anniversary of the vesting commencement date and then the remainder vests over three years in equal monthly installments.

Offer Letter and Severance Agreements

Offer Letter Agreements. We have entered into employment offer letter agreements with all of our named executive officers other than our founder, Dr. Williams. We designed these agreements to be part of a competitive compensation package and to keep our executive officers focused on our business goals and objectives. These agreements provide for base salaries and incentive compensation benefits, and each component reflects the scope of each named executive officer s anticipated responsibilities and the individual experience they bring to the company.

We entered into an employment offer letter with Dr. Hambleton on November 19, 2012, for the position of senior vice president and chief medical officer. Pursuant to Dr. Hambleton s employment offer letter, we agreed to an initial annual base salary and target bonus. We also agreed to pay Dr. Hambleton a sign-on bonus and to grant to Dr. Hambleton an option to purchase shares of our common stock, subject to approval by our board of directors. Dr. Hambleton s annual base salary will be increased from $350,000 to $385,000 effective February 1, 2014. Dr. Hambleton s annual target bonus is currently 35% of her annual base salary. Dr. Hambleton is eligible to participate in our employee benefit

plans on the same terms as other regular, full-time employees.

We entered into an employment offer letter with Mr. Knickerbocker on September 8, 2009, for the position of vice president, business development. We subsequently promoted Mr. Knickerbocker to senior vice president and chief business officer. Pursuant to Mr. Knickerbocker s employment offer letter, we agreed to an initial annual base salary, a target bonus and a hiring bonus. We also agreed to grant to Mr. Knickerbocker options to purchase shares of our common stock, subject to approval by our board of directors. Currently, Mr. Knickerbocker s annual base salary is $364,000 and his annual target bonus is 40% of his annual base salary. Mr. Knickerbocker is eligible to participate in our employee benefit plans on the same terms as other regular, full-time employees.

Severance Agreements. We have entered into executive severance benefits agreements, or the severance agreements, with each of our named executive officers. These severance agreements provide that, in the event we terminate the

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executive s employment without cause, as defined in the severance agreements, at any time or we terminate the executive s employment without cause or he resigns for good reason, as defined in the severance agreements, within three months prior to or 12 months following a change of control of the company, the executive will be entitled to receive the severance benefits described below, subject to executing a general release of claims in favor of us and complying with, among other things, the confidentiality and non-compete provisions of the severance agreements.

In addition, the severance agreements provide that in the event that the severance and other benefits provided for or otherwise payable to the executive constitute parachute payments within the meaning of Section 280G of the Code and are subject to the excise tax imposed by Section 4999 of the Code, then we will pay (1) the executive s severance benefits under the severance agreement in full if the quotient obtained by dividing (a) the excess of (i) the full payment, over (ii) the largest payment possible without the imposition of the excise tax, or the reduced payment, by (b) the reduced payment, is greater than 10%, or (2) the reduced payment if such quotient is less than or equal to 10%.

Lewis T. Williams. In the event of termination without cause or his resignation for good reason, Dr. Williams will be entitled to: (i) payments equal to 12 months of his base salary and pro-rata annual bonus, as in effect on the date of his termination payable in substantially equal installments in accordance with our normal payroll policies then in effect, less applicable withholdings, with such installments to commence on the first payroll period following the later of the date of his termination and the effective date of his general release of claims; (ii) acceleration of 50% of any unvested shares subject to outstanding options to purchase our common stock held by Dr. Williams on the date of his termination; (iii) lapse of our reacquisition or repurchase rights with respect to 50% of any unvested shares of common stock issued or issuable pursuant to any other stock award granted to Dr. Williams pursuant to an equity incentive plan; and (iv) if elected by Dr. Williams, payment or reimbursement of COBRA premiums through the earlier of 12 months from his termination date or the date he and his covered dependents, if any, become eligible for group health insurance through another employer.

In connection with termination without cause or resignation for good reason following a change of control, Dr. Williams will be entitled to: (i) payments equal to 24 months of his base salary and pro-rata annual bonus, as in effect on the date of the change of control or the date of his termination payable in substantially equal installments in accordance with our normal payroll policies then in effect, less applicable withholdings, with such installments to commence on the first payroll period following the later of the date of his termination and the effective date of his general release of claims; (ii) acceleration of all unvested shares subject to outstanding options to purchase our common stock held by Dr. Williams on the date of his termination; (iii) lapse of our reacquisition or repurchase rights with respect to all unvested shares of common stock issued or issuable pursuant to any other stock award granted to Dr. Williams pursuant to an equity incentive plan; and (iv) if elected by Dr. Williams, payment or reimbursement of COBRA premiums through the earlier of 24 months from his termination date or the date he and his covered dependents, if any, become eligible for group health insurance through another employer.

Julie Hambleton. In the event of termination without cause, Dr. Hambleton will be entitled to (i) payments equal to nine months of her base salary and pro-rata annual bonus, as in effect on the date of her termination payable in substantially equal installments in accordance with our normal payroll policies then in effect, less applicable withholdings, with such installments to commence on the first payroll period following the later of the date of her termination and the effective date of her general release of claims; (ii) acceleration of 50% of any unvested shares subject to outstanding options to purchase our common stock held by Dr. Hambleton on the date of her termination; (iii) lapse of our reacquisition or repurchase rights with respect to 50% of any unvested shares of common stock issued or issuable pursuant to any other stock award granted to Dr. Hambleton pursuant to an equity incentive plan; and (iv) if elected by Dr. Hambleton, payment or reimbursement of COBRA premiums through the earlier of nine months from her termination date or the date she and her covered dependents, if any, become eligible for group health insurance through another employer.

In connection with termination without cause or resignation for good reason following a change of control, Dr. Hambleton will be entitled to: (i) payments equal to 18 months of her base salary and pro-rata annual bonus, as in effect on the date of the change of control or the date of her termination payable in substantially equal

installments in accordance with our normal payroll policies then in effect, less applicable withholdings, with such

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installments to commence on the first payroll period following the date of her termination; (ii) acceleration of all unvested shares subject to outstanding options to purchase our common stock held by Dr. Hambleton on the date of her termination; (iii) lapse of our reacquisition or repurchase rights with respect to all unvested shares of common stock issued or issuable pursuant to any other stock award granted to Dr. Hambleton pursuant to an equity incentive plan; and (iv) if elected by Dr. Hambleton, payment or reimbursement of COBRA premiums through the earlier of 18 months from her termination date or the date she and her covered dependents, if any, become eligible for group health insurance through another employer.

Aron M. Knickerbocker. In the event of termination without cause, Mr. Knickerbocker will be entitled to: (i) payments equal to nine months of his base salary and pro-rata annual bonus, as in effect on the date of his termination payable in substantially equal installments in accordance with our normal payroll policies then in effect, less applicable withholdings, with such installments to commence on the first payroll period following the later of the date of his termination and the effective date of his general release of claims; (ii) acceleration of 50% of any unvested shares subject to outstanding options to purchase our common stock held by Mr. Knickerbocker on the date of his termination; (iii) lapse of our reacquisition or repurchase rights with respect to 50% of any unvested shares of common stock issued or issuable pursuant to any other stock award granted to Mr. Knickerbocker pursuant to an equity incentive plan; and (iv) if elected by Mr. Knickerbocker, payment or reimbursement of COBRA premiums through the earlier of nine months from his termination date or the date he and his covered dependents, if any, become eligible for group health insurance through another employer.

In connection with termination without cause or resignation for good reason following a change of control, Mr. Knickerbocker will be entitled to: (i) payments equal to 18 months of his base salary and pro-rata annual bonus, as in effect on the date of the change of control or the date of his termination payable in substantially equal installments in accordance with our normal payroll policies then in effect, less applicable withholdings, with such installments to commence on the first payroll period following the date of his termination; (ii) acceleration of all unvested shares subject to outstanding options to purchase our common stock held by Mr. Knickerbocker on the date of his termination; (iii) lapse of our reacquisition or repurchase rights with respect to all unvested shares of common stock issued or issuable pursuant to any other stock award granted to Mr. Knickerbocker pursuant to an equity incentive plan; and (iv) if elected by Mr. Knickerbocker, payment or reimbursement of COBRA premiums through the earlier of 18 months from his termination date or the date he and his covered dependents, if any, become eligible for group health insurance through another employer.

Other Benefits

Our named executive officers are eligible to participate in all of our employee benefit plans, such as medical, dental, vision, group life, short and long-term disability, and our 401(k) plan, in each case on the same basis as other employees, subject to applicable laws. We also provide vacation and other paid holidays to all employees, including our named executive officers.

We believe these benefits are important to attracting and retaining experienced executives. We do not currently provide perquisites to our executive officers, given our attention to the cost-benefit tradeoff of such benefits, and the board of directors knowledge of the benefit offerings at other public companies.

Tax and Accounting Considerations

Section 162(m) of the Code generally disallows a tax deduction for compensation in excess of $1.0 million paid to our chief executive officer and our three other most highly paid executive officers other than our principal financial officer. Qualifying performance-based compensation is not subject to the deduction limitation if specified requirements are met. We generally intend to structure the performance-based portion of our executive compensation, when feasible, to comply with exemptions in Section 162(m) so that the compensation remains tax deductible to us. However, our board of directors may, in its judgment, authorize compensation payments that do not comply with the exemptions in Section 162(m) when it believes that such payments are appropriate to attract and retain executive talent.

The compensation committee also takes into account whether components of our compensation program may be subject to the penalty tax associated with Section 409A of the Code, and aims to structure the elements of compensation to be compliant with or exempt from Section 409A to avoid such potential adverse tax consequences.

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In addition, we account for equity compensation paid to our employees in accordance with ASC 718, which requires us to estimate and record an expense over the service period of the award. We record cash compensation as an expense at the time the obligation is accrued. The accounting impact of our compensation programs is one of many factors that we consider in determining the size and structure of our programs.

Equity Benefit Plans

2013 Omnibus Incentive Plan

In June 2013, our board of directors adopted and in Sept 2013, our stockholders approved our 2013 Plan, for the purpose of attracting and retaining non-employee directors, executive officers and other key employees and service providers, including officers, employees and service providers of our affiliates, and to stimulate their efforts toward our continued success, long-term growth and profitability. The 2013 Plan provides for the grant of stock options, stock appreciation rights, restricted stock, unrestricted stock, stock units, dividend equivalent rights, other equity-based awards and cash bonus awards. As of September 30, 2013, we had 3,500,000 shares of common stock reserved for issuance pursuant to the 2013 Plan, subject to certain adjustments set forth in the plan. In addition, effective January 1, 2014, the number of shares of common stock available for issuance under the 2013 Plan shall automatically increase annually by 4% of the total number of issued and outstanding shares of our common stock as of December 31 of the immediately preceding year. On January 1, 2014, the total number of shares available for issuance under the 2013 Plan was increased by 673,685 shares pursuant to this provision. This summary is qualified in its entirety by the detailed provisions of the 2013 Plan, which is filed as an exhibit to the registration statement of which this prospectus is a part.

Section 162(m) of the Code limits publicly held companies to an annual deduction for U.S. federal income tax purposes of $1,000,000 for compensation paid to each of their principal executive officer and their three highest compensated executive officers (other than the chief executive officer or the chief financial officer) determined at the end of each year, referred to as covered employees. However, performance-based compensation is excluded from this limitation. The 2013 Plan is designed to permit the compensation committee to grant awards that qualify as performance-based for purposes of satisfying the conditions of Section 162(m), but it is not required under the 2013 Plan that awards qualify for this exception.

Administration of the 2013 Plan. Our compensation committee will administer the 2013 Plan and determine all terms of awards under the plan. Each member of our compensation committee that administers the plan will be both a non-employee director within the meaning of Rule 16b-3 of the Exchange Act, and an outside director within the meaning of Section 162(m) of the Code. Our compensation committee will also determine who will receive awards under the plan, the type of award and its terms and conditions and the number of shares of our common stock subject to the award, if the award is equity-based. Our compensation committee will also interpret the provisions of the plan. During any period of time in which we do not have a compensation committee, our board of directors or another committee appointed by our board of directors will administer the plan. References below to the compensation committee include a reference to the board of directors or another committee appointed by the board of directors for those periods in which the board of directors or such other committee appointed by the board of directors is acting.

Eligibility. All of our employees and the employees of our affiliates are eligible to receive awards under the 2013 Plan. In addition, our non-employee directors and consultants and advisors who perform services for us and our affiliates may receive awards under the 2013 Plan, other than incentive stock options.

Share Authorization. As stated above, as of September 30, 2013, we had 3,500,000 shares of common stock reserved for issuance under the 2013 Plan. In connection with stock splits, dividends, recapitalizations and certain other events, our board will make proportionate adjustments that it deems appropriate in the aggregate number of shares of common stock that we may issue under the 2013 Plan and the terms of outstanding awards. If any shares of stock covered by an award granted under the 2013 Plan, the 2010 Plan or the 2002 Plan are not purchased or are forfeited or expire, or if an award otherwise terminates without delivery of any shares of stock subject thereto, or is settled in cash in lieu of shares of stock, then the number of shares of stock counted against the aggregate number of shares of stock available under the 2013 Plan with respect to such award shall again be available for making awards under the plan.

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During any time that the transition period under Section 162(m) of the Code has expired or does not apply, the maximum number of shares of common stock subject to options or stock appreciation rights that we can issue under the 2013 Plan to any person is 700,000 in any single calendar year. The maximum number of shares of common stock that we can issue under the 2013 Plan to any person other than pursuant to an option or stock appreciation right is 350,000 in any single calendar year. The maximum amount that any one person may earn as an annual incentive award or other cash award in any calendar year is $1,000,000 and the maximum amount that any one person may earn as a performance award or other cash award in respect of a performance period is $3,000,000.

Options. The 2013 Plan authorizes our compensation committee to grant incentive stock options (under Section 421 of the Code) and options that do not qualify as incentive stock options, or non-qualified stock options. Any or all of the shares of stock available for issuance under the 2013 Plan at the time of this offering shall be available for issuance pursuant to incentive stock options. The compensation committee will determine the exercise price of each option, provided that the price will be equal to at least the fair market value of the shares of common stock on the date on which the option is granted. If we were to grant incentive stock options to any 10% stockholder, the exercise price may not be less than 110% of the fair market value of our shares of common stock on the date of grant.

The term of an option cannot exceed 10 years from the date of grant. If we were to grant incentive stock options to any 10% stockholder, the term cannot exceed five years from the date of grant. The compensation committee determines at what time or times each option may be exercised and the period of time, if any, after retirement, death, disability or termination of employment during which options may be exercised. Options may be made exercisable in installments. The compensation committee may accelerate the exercisability of options. The exercise price of an option may not be amended or modified after the grant of the option, and an option may not be surrendered in consideration of or exchanged for a grant of a new option having an exercise price below that of the option which was surrendered or exchanged without stockholder approval.

The aggregate fair market value, determined at the time of grant, of our common stock with respect to incentive stock options that are exercisable for the first time by an optionee during any calendar year under all of our stock plans may not exceed $100,000. We will generally treat options or portions thereof that exceed such limit as non-qualified stock options.

Stock Awards. The 2013 Plan also provides for the grant of stock awards (which includes restricted stock and stock units). A stock award is an award of shares of common stock that may be subject to restrictions on transferability and other restrictions as our compensation committee determines in its sole discretion on the date of grant. The restrictions, if any, may lapse over a specified period of time or through the satisfaction of conditions, in installments or otherwise, as our compensation committee may determine. A participant who receives a restricted stock award will have all of the rights of a stockholder as to those shares, including the right to vote and the right to receive dividends or distributions on the shares, except that the board of directors may require any dividends to be reinvested in shares. During the period, if any, when stock awards are non-transferable or forfeitable, a participant is prohibited from selling, transferring, assigning, pledging or otherwise encumbering or disposing of his or her award shares.

Stock Appreciation Rights. The 2013 Plan authorizes our compensation committee to grant stock appreciation rights that provide the recipient with the right to receive, upon exercise of the stock appreciation right, cash, shares of common stock or a combination of the two. The amount that the recipient will receive upon exercise of the stock appreciation right generally will equal the excess of the fair market value of our common stock on the date of exercise over the shares fair market value on the date of grant. Stock appreciation rights will become exercisable in accordance with terms determined by our compensation committee. Stock appreciation rights may be granted in tandem with an option grant or independently from an option grant. The term of a stock appreciation right cannot exceed 10 years from the date of grant.

Stock Units. The 2013 Plan also authorizes our compensation committee to grant stock units. Stock units represent the participant s right to receive a compensation amount, based on the value of the shares of common stock, if vesting criteria established by the compensation committee are met. If the vesting criteria are met, we will pay stock units in cash, shares of common stock or a combination thereof.

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Bonuses. We may base cash performance bonuses payable under the 2013 Plan on the attainment of performance goals that the compensation committee establishes that relate to one or more performance criteria described in the plan. Cash performance bonuses, for which there is no minimum payout, must be based upon objectively determinable bonus formulas established in accordance with the plan, as determined by the compensation committee.

Dividend Equivalents. Our compensation committee may grant dividend equivalents in connection with the grant of any equity-based award other than options and appreciation rights. Dividend equivalents may be paid currently or may be deemed to be reinvested in additional shares of stock, which may thereafter accrue additional equivalents, and may be payable in cash, shares of common stock or a combination of the two. Our compensation committee will determine the terms of any dividend equivalents.

Performance awards. The 2013 Plan permits the grant of performance-based stock and cash awards that may qualify as performance-based compensation not subject to the $1,000,000 limitation on the income tax deductibility of compensation paid to a covered executive officer imposed by Section 162(m) of the Code. To help assure that the compensation attributable to performance-based awards will so qualify, our compensation committee can structure such awards so that stock or cash will be issued or paid pursuant to such award only after the achievement of certain pre-established performance goals during a designated performance period.

We may select performance goals from one or more of the following: (1) net earnings or net income; (2) operating earnings; (3) pretax earnings; (4) earnings per share of stock; (5) stock price, including growth measures and total stockholder return; (6) earnings before interest and taxes; (7) earnings before interest, taxes, depreciation and/or amortization; (8) sales or revenue growth, whether in general, by type of product or service, or by type of customer; (9) gross or operating margins; (10) return measures, including return on assets, capital, investment, equity, sales or revenue; (11) cash flow, including operating cash flow, free cash flow, cash flow return on equity and cash flow return on investment; (12) productivity ratios; (13) expense targets; (14) market share; (15) financial ratios as provided in credit agreements of our company; (16) working capital targets; (17) completion of acquisitions of business or companies; (18) completion of divestitures and asset sales; (19) revenues under management; (20) funds from operations; (21) successful implementation of clinical trials, including components thereof; and (22) any combination of any of the foregoing business criteria.

We may base performance goals on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. We may not adjust upward any awards that we intend to qualify as performance-based compensation. The plan administrator retains the discretion to adjust performance-based awards downward, either on a formula or discretionary basis, or any combination as the compensation committee determines. Performance goals may differ from participant to participant and from award to award.

Other Equity-Based Awards. Our compensation committee may grant other types of equity-based awards under the 2013 Plan. Other equity-based awards are payable in cash, shares of common stock or other equity, or a combination thereof, and may be restricted or unrestricted, as determined by our compensation committee. The terms and conditions that apply to other equity-based awards are determined by the compensation committee.

Change in Control. If we experience a change in control in which equity-based awards that are not exercised prior to the change in control will not be assumed or continued by the surviving entity, unless otherwise provided in an award agreement: (1) all restricted shares will vest, and all stock units and dividend equivalents will vest and the underlying shares will be delivered immediately before the change in control, and (2) at the board of directors discretion either all options and stock appreciation rights will become exercisable 15 days before the change in control and terminate upon the consummation of the change in control, or all options, stock appreciation rights, restricted shares and stock units may be cancelled before the change in control in exchange for payment of any amount in cash or securities having a value (as determined by our board), in the case of restricted shares or stock units equal to the formula or fixed price per share paid to our stockholders and, in the case of options and stock appreciation rights equal to the product of the number of shares subject to the option or stock appreciation right multiplied by the amount by which the formula or fixed price paid to our stockholders exceeds the exercise price of the option or the stock appreciation right. In the case of performance shares and performance units, however, if

more than half of the performance period has lapsed, we will convert the performance shares based on actual performance to date. If less than half of the performance period has lapsed, or if we cannot determine actual performance, we will convert the performance shares and performance units assuming target performance has been achieved.

Amendment; Termination. Our board of directors may amend or terminate the 2013 Plan at any time; provided that no amendment may adversely impair the benefits of participants with outstanding awards. Our stockholders must approve any amendment if such approval is required under applicable law or NASDAQ Listing Rules. Unless terminated sooner by our board of directors or extended with stockholder approval, the 2013 Plan will terminate on the tenth anniversary of the adoption of the plan.

2010 Equity Incentive Plan

General. In October 2010, our board of directors adopted our 2010 Plan as a successor to and continuation of our 2002 Plan, and in December 2010, our stockholders approved our 2010 Plan. Our board of directors administers the 2010 Plan. The 2010 Plan was terminated upon the completion of our initial public offering. Since the termination of the 2010 Plan, we may not grant any additional awards under the 2010 Plan. However, the 2010 Plan will continue to govern the terms and conditions of the outstanding awards granted under the 2010 Plan which, as of September 30, 2013, constitute stock options to purchase 1,454,892 shares of our common stock.

Our 2010 Plan does not allow for the transfer of option awards other than by will or the laws of descent and distribution and only the recipient of an award may exercise such award during his or her lifetime, unless our board of directors provides for additional transfer terms as permitted by applicable tax and securities laws upon the recipient s request.

Corporate Transaction. Our 2010 Plan provides that in the event of our merger with or into another corporation, or a sale of all or substantially all of our assets, the successor corporation or its parent may assume or substitute for each outstanding award. If the outstanding awards are not assumed or substituted, the vesting of such awards held by current service providers will accelerate in full prior to the consummation of the transaction and our reacquisition or repurchase rights will lapse with respect to any awards held by current service providers. Any awards not exercised prior to the closing shall terminate upon the closing of the corporate transaction.

2002 Equity Incentive Plan

General. In March 2002, our board of directors and our stockholders adopted our 2002 Plan, which was subsequently amended and restated on May 21, 2003, January 11, 2005, July 26, 2007 and June 23, 2009. The 2002 Plan was succeeded by our 2010 Plan and terminated on October 28, 2010. Since the termination of the 2002 Plan, we may not grant any additional awards under the 2002 Plan. However, the 2002 Plan will continue to govern the terms and conditions of the outstanding awards granted under the 2002 Plan which, as of September 30, 2013, constitute stock options to purchase 779,430 shares of common stock. Our board of directors administers the 2002 Plan.

Our 2002 Plan does not allow for the transfer of awards other than by will or the laws of descent and distribution and only the recipient of an award may exercise such award during his or her lifetime. However, a recipient of an incentive stock option or nonstatutory stock option may, by delivering written notice to us, designate a third party who, in the event of the death of such recipient, will be entitled to exercise such option. Our board of directors may provide for additional transfer terms for nonstatutory stock options as permitted by Section 260.140.41(d) of Title 10 of the California Code of Regulations at the time of grant.

Corporate Transaction. Our 2002 Plan provides that in the event of our merger with or into another corporation, or a sale of all or substantially all of our assets, the successor corporation may assume or substitute for each outstanding award. If the outstanding awards are not assumed or substituted, the vesting of such awards held by current service providers will accelerate in full prior to the consummation of the transaction and any awards not exercised will terminate upon closing of the corporate transaction.

2013 Employee Stock Purchase Plan

In August 2013, our board of directors adopted and in September 2013, our stockholders approved a 2013 Employee Stock Purchase Plan, or ESPP. The purpose of the ESPP is to enable our eligible employees, through

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payroll deductions or cash contributions, to purchase shares of our common stock, to increase our employees interest in our growth and success and encourage employees to remain in our employment.

As of September 30, 2013, we had 250,000 shares of common stock reserved for purchase by our eligible employees. In addition, effective January 1, 2014, the number of shares of common stock available for purchase by our eligible employees under the ESPP will automatically increase annually on January 1 until (and including) January 1, 2023, in an amount equal to the lesser of (i) 1% of the total number of issued and outstanding shares of our common stock as of December 31 of the immediately preceding year, or (ii) 300,000 shares of our common stock. Notwithstanding the foregoing, our board of directors may act prior to January 1 of any calendar year to provide that there shall be no increase in the share reserve for such calendar year or that the increase in the share reserve for such calendar year shall be a lesser number of shares of common stock than would otherwise occur pursuant to the preceding sentence. On January 1, 2014, the total number of shares available for issuance under the ESPP was increased by 168,421 shares pursuant to this provision. In the event there is any change in the number of outstanding shares of our common stock, or the shares of common stock are changed into or exchanged for a different number or type of shares without receipt of consideration by us (for instance, by a recapitalization or stock split), we will proportionately adjust the number or type of shares that the eligible employees may purchase under the ESPP. The shares of common stock issuable under the ESPP may, in the discretion of our board of directors, be authorized but unissued shares, treasury shares or shares purchased on the open market. This summary is qualified in its entirety by the detailed provisions of the ESPP, which is filed as an exhibit to the registration statement of which this prospectus is a part.

Offering Periods and Optional Purchase Periods. Our compensation committee will determine the length and duration of the periods during which payroll deductions or other cash payments will accumulate to purchase shares of common stock, which period will not exceed 27 months. Each of these periods is known as an offering period. The first six-month offering period commenced on November 16, 2013.

Our compensation committee may, but is not required to, permit periodic purchases of common stock within a single offering period. The periods during which payroll deductions or other cash payments will accumulate for these purchases are referred to as purchase periods. We expect that each offering period will consist of a single purchase period for six months. The first six-month offering period and purchase period commenced on November 16, 2013 and will end on May 15, 2014. The second six-month offering period and purchase period will commence on May 16, 2014 and end on November 15, 2014. Thereafter, we expect offering periods and purchase periods to commence on May 15 and November 15 of each succeeding year for six months.

Administration of the ESPP. Our compensation committee will administer the ESPP. Each member of our compensation committee that administers the ESPP will be both a non-employee director within the meaning of Rule 16b-3 of the Exchange Act, and an outside director within the meaning of Section 162(m) of the Code. Our compensation committee will also interpret the provisions of the ESPP, prescribe, amend and rescind rules relating to it, and make all other determinations necessary or advisable in administering the ESPP, all of which determinations will be final and binding. During any period of time in which we do not have a compensation committee, another committee appointed by our board of directors will administer the ESPP. References to our compensation committee include a reference to any other committee appointed by our board of directors for those periods in which such other committee appointed by our board of directors is acting.

Eligibility. Any of our employees may participate in the ESPP, except: (i) an employee whose customary employment is less than 20 hours per week; and (ii) an employee who, after exercising his or her rights to purchase common stock under the ESPP, would own shares of common stock (including shares that may be acquired under any outstanding options) representing 5% or more of the total combined voting power of all classes of our capital stock. An employee must be employed on the last trading day of the purchase period, or a purchase date, to acquire common stock under the ESPP unless the employee has retired, died or become disabled, been laid off, discharged without cause or is on an approved leave of absence.

Participation Election. An eligible employee may participate in the ESPP by completing and submitting to us an election form to participate. Such election will authorize us to make payroll deductions on each pay day following enrollment in the ESPP, or if authorized by our compensation committee, participating employees may provide other cash contributions. Our compensation committee will credit the deductions or contributions to the employee s

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account under the ESPP. Subject to certain exceptions, an employee may not during any offering period change his or her percentage of payroll deduction or contribution for that offering period, nor may an employee withdraw any contributed funds. A participating employee may decrease his or her rate of contribution once during a purchase period, or change his or her rate of contribution to take effect on the first day of the next offering period, by delivering to us a new election form to participate in the ESPP. A participating employee may terminate payroll deductions or contributions at any time prior to a purchase date.

Purchase Price. Rights to purchase shares of our common stock will be deemed granted to participating employees as of the first trading day of each offering period. Our compensation committee will determine the purchase price for each share, or the purchase price. The purchase price for an offering period may not be less than 85% of the fair market value of our common stock on the first trading day of the offering period or the purchase date, whichever is lower, and in no event may the purchase price be less than the par value of our common stock.

Purchase Limit. No employee may purchase shares of our common stock in any offering period or in any calendar year under the ESPP and all other employee stock purchase plans of the company having an aggregate fair market value in excess of $25,000, determined as of the first trading date of the offering period. Prior to the start of an offering period, our compensation committee, in its discretion, may impose an additional limit on the number or value of shares of common stock an employee may purchase during the offering period. We expect that participating employees will be able to contribute between 1% and 15% of their earnings during an offering period.

Purchase of Common Stock. On each purchase date, a participating employee will be credited with the number of whole shares of common stock purchased under the ESPP during such purchase period. Shares of common stock purchased under the ESPP will be held in the custody of an agent designated by our board of directors. The agent may hold such shares in stock certificates in nominee names and may commingle shares held in its custody in a single account or in stock certificates without identification as to individual participating employees. Subject to any additional restrictions imposed by our compensation committee, in its discretion, a participating employee may, at any time following his or her purchase of shares of common stock under the ESPP, instruct the agent to have all or part of such shares reissued in the employee s own name and have the stock certificate delivered to the employee. Our compensation committee may impose a holding period requirement of up to two years from the date participating employees purchase shares of common stock under the ESPP.

If in any purchase period the number of unsold shares that may be made available for purchase under the ESPP is insufficient to permit eligible employees to exercise their rights to purchase shares, our compensation committee will make a participation adjustment and proportionately reduce the number of shares purchasable by all participating employees. Our compensation committee will refund to a participating employee any funds then remaining in his or her account after such exercise.

Lay-off, Authorized Leave of Absence or Disability. Our compensation committee may suspend payroll deductions for a participating employee during any period of absence of the employee from work due to lay-off, authorized leave of absence or disability or, if the employee so elects, he or she may continue to pay periodic cash contributions to the ESPP. If such participating employee returns to active service prior to a purchase date, our compensation committee will resume the employee s payroll deductions. If such employee did not pay periodic cash contributions during the employee s period of absence, the employee may elect to either: (i) make up any deficiency in his or her account resulting from a suspension of payroll deductions by an immediate cash payment; (ii) not make up such deficiency in his or her account, in which event the number of shares to be purchased by the employee will be reduced to the number of whole shares that may be purchased with the amount, if any, credited to the employee s account on the purchase date, plus the aggregate amount, if any, of all payroll deductions to be made thereafter; or (iii) withdraw the amount in his or her account and terminate his or her option to purchase. If a participating employee s period of lay-off, authorized leave of absence or disability terminates on or before a purchase date, and the employee has not resumed active employment with us, the employee will receive a distribution of his or her account.

Termination of Participation. Our compensation committee will terminate a participating employee s participation in the ESPP and refund all monies in his or her account if: (i) our board of directors terminates the ESPP, or (ii) the employee ceases to be eligible to participate in the ESPP. In the event a participating employee voluntarily leaves the employ of the company, other than by retirement, or is discharged for cause prior to a purchase date, the amount in the employee s account will be distributed and his or her option to purchase will terminate.

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If a participating employee terminates participation in the ESPP, or his or her participation terminates because of his or her retirement or death or because of an involuntary termination of employment without cause, the employee (or his or her representative in the event of death) may elect to either: (a) purchase shares of common stock on the purchase date with the amount then credited to his or her account, or (b) withdraw the amount in his or her account.

Transferability of Shares. No participating employee may transfer or assign his or her rights to purchase shares of common stock under the ESPP, whether voluntarily, by operation of law or otherwise. Any payment of cash or issuance of shares of common stock under the ESPP may be made only to the participating employee (or, in the event of the employee s death, to the employee s estate). During a participating employee s lifetime, only such participating employee may exercise his or her rights to purchase shares of common stock under the ESPP.

Amendment; Termination. Our board of directors may, at any time, amend the ESPP in any respect; provided that without stockholder approval, it may not (i) increase the number of shares that may be made available for purchase under the ESPP, or (ii) change the eligibility requirements for participating in the ESPP. Additionally, our board of directors may not make any amendment to the ESPP that impairs the vested rights of participating employees. Our board of directors may terminate the ESPP at any time and for any reason or for no reason; provided that such termination will not impair any rights of participating employees that have vested at the time of termination. In any event, the ESPP will, without further action of our board of directors, terminate at the earlier of (a) ten years after the date of adoption of the ESPP, or (b) such time as all shares of common stock that may be made available for purchase under the ESPP have been issued.

Reorganizations. Upon our dissolution or liquidation, or upon a merger, consolidation or reorganization of the company with one or more other corporations in which we are not the surviving entity, or upon a sale of all or substantially all of our assets or any other transaction approved by our board of directors resulting in any person or entity owning more than 50% of the combined voting power of all classes of our capital stock, the ESPP and all rights outstanding thereunder will terminate, except to the extent provision is made in writing in connection with such transaction for the continuation or assumption of the ESPP, or for the substitution of the rights under the ESPP with new rights covering the stock of the successor entity.

401(k) Retirement Plan

We maintain a defined contribution employee retirement plan for our employees. Our 401(k) plan is intended to qualify as a tax-qualified plan under Section 401 of the Code so that contributions to our 401(k) plan and income earned on such contributions are not taxable to participants until withdrawn or distributed from the 401(k) plan. Our 401(k) plan provides that each participant may contribute up to 100% of his or her pre-tax compensation, up to a statutory limit of $17,500 for 2013 and 2014. Participants who are at least 50 years old can also make catch-up contributions, which in 2013 and 2014 may be up to an additional $5,500 above the statutory limit. Under our 401(k) plan, each employee is fully vested in his or her deferred salary contributions. Employee contributions are held and invested by the plan s trustee. Our 401(k) plan also permits us to make discretionary and matching contributions, subject to established limits and a vesting schedule. To date, we have not made any discretionary or matching contributions to the plan on behalf of participating employees.

Non-Employee Director Compensation

Cash and Equity Compensation

We maintain a non-employee director compensation policy that became effective in September 2013 pursuant to which each non-employee director receives an annual base cash retainer of $35,000. In addition, our non-employee directors receive additional cash compensation for serving in the following board or committee capacities:

- the chairman of the board of directors receives an additional annual retainer of $35,000;
- each member of our audit, compensation and nominating and corporate governance committees, other than the chairperson, receives an additional annual retainer of $8,000, $6,000 and $4,000, respectively; and
- each chairperson of our audit, compensation and nominating and corporate governance committees receives an additional annual retainer of $20,000, $15,000 and $9,500, respectively.

We pay all amounts in quarterly installments. We also reimburse each of our directors for their travel expenses incurred in connection with their attendance at board of directors and committee meetings.

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In addition, newly appointed non-employee directors will receive a one-time initial award of options to purchase 25,000 shares of our common stock, which will vest in equal annual installments over a three-year period, subject to the director s continued service on the board of directors. Thereafter, each non-employee director will receive an annual award of options to purchase 12,500 shares of our common stock, which will vest in its entirety on the earlier to occur of (i) the one-year anniversary of the grant date and (ii) the day before the subsequent annual meeting of stockholders, subject to the director s continued service on the board of directors.

Director Compensation Table

The following table sets forth information concerning compensation accrued or paid to our independent, non-employee directors during the year ended December 31, 2013, for their service on our board of directors. Directors who are also our employees receive no additional compensation for their services as directors and are not set forth in the table below.

NAME	FEES EARNED OR PAID IN CASH ($)	OPTION AWARDS (1)(2)(3) ($)	TOTAL ($)
Brian G. Atwood (4)	23,992	20,143	44,135
Franklin M. Berger	31,851	20,143	51,994
Brook H. Byers (5)			
Fred E. Cohen, M.D., D.Phil. (4)	11,139	20,143	31,282
R. Lee Douglas	27,282	20,143	47,425
Peder K. Jensen, M.D.	29,424	20,143	49,567
Mark D. McDade	29,281	20,143	49,424

(1) Amounts reflect the grant date fair value of option awards granted in 2013 in accordance with ASC 718. For information regarding assumptions underlying the value of equity awards, see Note 1 to our financial statements and the discussion under Management s Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies Stock-Based Compensation, included elsewhere in this prospectus. These amounts do not correspond to the actual value that the named directors will recognize.

(2) On July 19, 2013, the board of directors granted options to purchase 4,065 shares of our common stock to each director listed above. These options vest over one year in equal monthly installments.

(3) The following table provides the total number of options outstanding for each director as of December 31, 2013:

NAME	OPTIONS OUTSTANDING (#)

Brian G. Atwood	12,195
Franklin M. Berger	24,390
Brook H. Byers	
Fred E. Cohen, M.D., D.Phil.	12,195
R. Lee Douglas	24,390
Peder K. Jensen, M.D.	20,325
Mark D. McDade	34,145

(4) These directors are affiliated with certain of our investors and as such received no cash compensation for their services as directors prior to September 2013.

(5) Mr. Byers is affiliated with one of our investors and as such received no cash compensation for his service as a director. Mr. Byers resigned from our board of directors effective May 28, 2013.

Limitation of Liability and Indemnification Agreements

Our amended and restated certificate of incorporation and amended and restated bylaws provide that we will limit the liability of our directors, and may indemnify our directors and officers, to the maximum extent permitted by the Delaware General Corporation Law, or DGCL. The DGCL provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except for liability for any:

- breach of their duty of loyalty to the corporation or its stockholders;
- act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

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- unlawful payment of dividends or redemption of shares; or

- transaction from which the directors derived an improper personal benefit.

These limitations of liability do not apply to liabilities arising under federal securities laws and do not affect the availability of equitable remedies such as injunctive relief or rescission.

We have entered into separate indemnification agreements with our directors and officers in addition to the indemnification provided for in our amended and restated bylaws. These indemnification agreements provide, among other things, that we will indemnify our directors and officers for certain expenses, including damages, judgments, fines, penalties, settlements and costs and attorneys fees and disbursements, incurred by a director or officer in any claim, action or proceeding arising in his or her capacity as a director or officer of our company or in connection with service at our request for another corporation or entity. The indemnification agreements also provide for procedures that will apply in the event that a director or officer makes a claim for indemnification.

We also maintain a directors and officers insurance policy pursuant to which our directors and officers are insured against liability for actions taken in their capacities as directors and officers. We believe that these indemnification provisions and insurance are useful to attract and retain qualified directors and officers.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder s investment may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. There is no pending litigation or proceeding naming any of our directors or officers as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director or officer.

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CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions, since January 1, 2011, to which we have been a party or will be a party, in which the amount involved exceeded or will exceed $120,000, and in which any of our executive officers, directors or holders of more than 5% of any class of our voting securities, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest, other than compensation, termination and change of control arrangements, which are described under Executive and Director Compensation. We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that we would pay or receive, as applicable, in arm s-length transactions with unrelated third parties.

Participation in Our Initial Public Offering

The following table summarizes the participation in our initial public offering by certain holders of 5% or more of our capital stock and their affiliated entities:

PARTICIPANTS	COMMON STOCK PURCHASED IN THE INITIAL PUBLIC OFFERING (#)	AGGREGATE PURCHASE PRICE ($)
Advanced Technology Ventures	38,462	500,006
Domain Associates, LLC	38,462	500,006
Entities affiliated with HealthCap	38,462	500,006
Kleiner Perkins Caufield & Byers	38,462	500,006
Pfizer International LLC	38,462	500,006
Texas Pacific Group [1]	38,462	500,006
Versant Ventures [2]	76,923	999,999

(1) Dr. Cohen, a member of our board of directors, is a partner and managing director of TPG Biotechnology Partners, L.P.

(2) Mr. Atwood, a member of our board of directors, is a managing member of Versant Ventures I, L.L.C.

Other Transactions

We have entered into various employment-related agreements and compensatory arrangements with our directors and executive officers that, among other things, provide for compensatory and certain severance and change of control benefits. For a description of these agreements and arrangements, see the section entitled Executive Compensation Offer Letter and Severance Agreements.

We have entered into indemnification agreements with each of our current directors and officers. See Executive Compensation Limitation of Liability and Indemnification Agreements.

Policies and Procedures Regarding Transactions with Related Persons

We have adopted a policy in which all proposed related person transactions are reviewed and approved by either (i) our audit committee (or any other committee of our board of directors consisting of independent directors), or (ii) our full board of directors. This review covers any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we were or are to be a

participant, the amount involved exceeds $120,000, and a related person had or will have a direct or indirect material interest, including purchases of goods or services by or from a related person or entities in which the related person has a material interest, and indebtedness, guarantees of indebtedness and employment by us of a related person. A related person is any person who is or was one of our executive officers, directors or director nominees or is a holder of more than 5% of our common stock, or their immediate family members or any entity owned or controlled by any of the foregoing persons.

Other than the participation in our initial public offering, all of the transactions described above were entered into prior to the adoption of this policy and were approved by our board of directors.

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PRINCIPAL STOCKHOLDERS

The following table sets forth certain information known to us regarding the beneficial ownership of our common stock as of December 31, 2013, and as adjusted to reflect the sale of shares of common stock in this offering by:

- each of our named executive officers;
- each of our directors;
- all of our executive officers and directors as a group; and
- each person, or group of affiliated persons, known by us to beneficially own more than 5% of any class of our voting securities.

We have based our calculation of beneficial ownership prior to this offering on 16,842,134 shares of common stock outstanding on December 31, 2013. We have based our calculation of beneficial ownership after this offering on shares of our common stock outstanding immediately following the completion of this offering, which gives effect to the issuance of shares of common stock in this offering. Ownership information assumes no exercise of the underwriters option.

Information with respect to beneficial ownership is based on information furnished to us by each director, executive officer or stockholder who holds more than 5% of any class of our voting securities, and Schedules 13G or 13D filed with the SEC, as the case may be. Beneficial ownership is determined according to the rules of the SEC and generally means that a person has beneficial ownership of a security if he or she possesses sole or shared voting or investment power of that security, and includes options and warrants that are currently exercisable within 60 days of December 31, 2013. Options to purchase shares of our common stock that are exercisable within 60 days of December 31, 2013 are deemed to be beneficially owned by the persons holding these options for the purpose of computing percentage ownership of that person, but are not treated as outstanding for the purpose of computing any other person s ownership percentage. Except as indicated in the footnotes below, each of the beneficial owners named in the table below has, and upon completion of this offering will have, to our knowledge, sole voting and investment power with respect to all shares of common stock listed as beneficially owned by him or her, except for shares owned jointly with that person s spouse. Unless otherwise indicated, the address for each of the stockholders in the table below is c/o Five Prime Therapeutics, Inc., Two Corporate Drive, South San Francisco, California 94080.

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NAME AND ADDRESS OF BENEFICIAL OWNER	SHARES OF COMMON STOCK BENEFICIALLY OWNED BEFORE OFFERING	SHARES OF COMMON STOCK BENEFICIALLY OWNED AFTER OFFERING	PERCENTAGE OF SHARES BENEFICIALLY OWNED BEFORE OFFERING	PERCENTAGE OF SHARES BENEFICIALLY OWNED AFTER OFFERING
Named Executive Officers and Directors:				
Lewis T. Williams, M.D., Ph.D. (1)	817,236		4.7%	
Julie Hambleton, M.D. (2)	36,753		*	
Aron M. Knickerbocker (3)	92,251		*	
Brian G. Atwood (4)	1,102,653		6.5%	
Franklin M. Berger (5)	21,171		*	
Fred E. Cohen, M.D., D.Phil. (6)	10,501		*	
R. Lee Douglas (7)	53,980		*	
Peder K. Jensen, M.D. (8)	14,311		*	
Mark D. McDade (9)	32,451		*	
All executive officers and directors as a group (12 persons)	2,346,544		13.3%	
5% Stockholders:				
Advanced Technology Ventures (10)	1,053,682		6.3%	
Domain Associates, LLC (11)	1,053,698		6.3%	
Entities affiliated with HealthCap (12)	1,053,693		6.3%	
Entities affiliated with HealthCor (13)	965,000		5.7%	
Kleiner Perkins Caufield & Byers (14)	1,053,699		6.3%	
Pfizer International LLC (15)	1,576,585		9.4%	
Texas Pacific Group (16)	1,053,692		6.3%	
Versant Ventures (17)	1,092,152		6.5%	

* Represents beneficial ownership of less than one percent.

(1) Consists of (a) 406,503 shares of common stock and (b) 410,733 shares of common stock issuable upon the exercise of stock options within 60 days of December 31, 2013.

(2) Consists solely of 36,753 shares of common stock issuable upon the exercise of stock options within 60 days of December 31, 2013.

(3) Consists of (a) 35,073 shares of common stock and (b) 57,178 shares of common stock issuable upon the exercise of stock options within 60 days of December 31, 2013.

(4) Consists of (a) 10,501 shares of common stock issuable upon the exercise of stock options within 60 days of December 31, 2013, (b) 20,303 shares of common stock held by Versant Affiliates Fund I-A, L.P., (c) 42,637 shares of common stock held by Versant Affiliates Fund I-B, L.P., (d) 19,779 shares of common stock held by Versant Side Fund I, L.P. and (e) 1,009,433 shares of common stock held by Versant Venture Capital I, L.P. Mr. Atwood is a managing member of Versant Ventures I, L.L.C., or Versant Ventures, which is the general partner of each of Versant Affiliates Fund I-A, L.P., Versant Affiliates Fund I-B, L.P., Versant Side Fund I, L.P. and Versant Venture Capital I, L.P., or collectively the Versant Entities. As such, Mr. Atwood shares voting and dispositive control over the shares held by the Versant Entities and may be deemed to have indirect beneficial ownership of such shares. Mr. Atwood disclaims beneficial ownership of all shares held by the Versant Entities, except to the extent of his proportionate pecuniary interest therein.

(5) Consists solely of 21,171 shares of common stock issuable upon the exercise of stock options within 60 days of December 31, 2013.

(6) Consists solely of 10,501 shares of common stock issuable upon the exercise of stock options within 60 days of December 31, 2013. Dr. Cohen is a partner of TPG Biotechnology Partners, L.P. Dr. Cohen has no voting or dispositive control over and disclaims beneficial ownership of the shares held by the funds affiliated with Texas Pacific Group listed in footnote 16 below.

(7) Consists of (a) 27,100 shares of common stock, (b) 4,184 shares of common stock held by The Robert Lee Douglas and Elizabeth A. Strode Revocable Trust dated October 6, 1994 and (c) 22,696 shares of common stock issuable upon the exercise of stock options within 60 days of December 31, 2013.

(8) Consists solely of 14,311 shares of common stock issuable upon the exercise of stock options within 60 days of December 31, 2013.

(9) Consists solely of 32,451 shares of common stock issuable upon the exercise of stock options within 60 days of December 31, 2013.

(10) Consists of (a) 136,330 shares of common stock held by Advanced Technology Ventures VI, L.P., (b) 34,116 shares of common stock held by Advanced Technology Ventures VII (B), L.P., (c) 16,396 shares of common stock held by Advanced Technology Ventures VII (C), L.P., (d) 850,190 shares of common stock held by Advanced Technology Ventures VII, L.P., (e) 2,852 shares of common stock held by ATV Alliance 2003, L.P., or ATV Alliance 2003, (f) 8,699 shares of common stock held by ATV Entrepreneurs VI, L.P. and (g) 5,099 shares of common stock held by ATV Entrepreneurs VII, L.P. ATV Associates VI, L.L.C., or ATV A VI, is the general partner of each of Advanced Technology Ventures VI, L.P. and ATV Entrepreneurs VI, L.P., or collectively the ATV VI Entities, and has voting and dispositive control over the shares held by the ATV VI Entities. Michael A. Carusi, Steven N. Baloff, Pieter J.

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Schiller, Robert C. Hower and William C. Wiberg, the managing directors of ATV A VI, share voting and dispositive control over the shares held by the ATV VI Entities. ATV A VI and each of its managing directors disclaim beneficial ownership of the shares held by the ATV VI Entities, except to the extent of their respective actual pecuniary interest therein. ATV Associates VII, L.L.C., or ATV A VII, is the general partner of each of Advanced Technology Ventures VII (B), L.P., Advanced Technology Ventures VII (C), L.P., Advanced Technology Ventures VII, L.P. and ATV Entrepreneurs VII, L.P., or collectively the ATV VII Entities, and has voting and dispositive control over the shares held by the ATV VII Entities. Michael A. Carusi, Jean M. George, Steven N. Baloff, Robert C. Hower and William C. Wiberg, the managing directors of ATV A VII, share voting and dispositive control over the shares held by the ATV VII Entities. ATV A VII and each of its managing directors disclaim beneficial ownership of the shares held by the ATV VII Entities, except to the extent of their respective actual pecuniary interest therein. ATV Alliance Associates, L.L.C., or ATV Alliance, is the general partner of ATV Alliance 2003 and has voting and dispositive control over the shares held by ATV Alliance 2003. Jean M. George, the managing director of ATV Alliance, has voting and dispositive control over the shares held by ATV Alliance 2003. ATV Alliance and Mr. George disclaim beneficial ownership of the shares held by ATV Alliance 2003, except to the extent of their respective actual pecuniary interest therein. The address for the funds affiliated with Advanced Technology Ventures is 500 Boylston Street, Suite 1380, Boston, MA 02116.

(11) Consists of (a) 1,042,935 shares of common stock held by Domain Partners VI, L.P. and (b) 10,763 shares of common stock held by DP VI Associates, L.P. One Palmer Square Associates VI, LLC, or One Palmer Square, is the general partner of Domain Partners VI, L.P. and DP VI Associates, L.P., or collectively the Domain Entities. James Blair, Kathleen Schoemaker, Jesse Treu, Brian Dovey and Nicole Vitullo, the managing members of One Palmer Square, share voting and dispositive control over the shares held by the Domain Entities. Each managing member of One Palmer Square disclaims beneficial ownership of the shares held by the Domain Entities, except to the extent of each such managing member s actual pecuniary interest therein. The address for the funds affiliated with Domain Associates, LLC is One Palmer Square, Suite 515, Princeton, NJ 08542.

(12) Consists of (a) shares of common stock held by HealthCap IV Bis, L.P., or HCBIS, (b) shares of common stock held by HealthCap IV KB, or HCKB, (c) shares of common stock held by HealthCap IV, L.P., or HCLP, and (d) shares of common stock held by OFCO Club IV, or OFCO. HealthCap IV GP SA, L.L.C., or HCSA, is the general partner of HCLP and HCBIS, and has voting and dispositive control over the shares held by HCLP and HCBIS. HealthCap IV GP AB, L.L.C., or HCAB, is the general partner of HCKB and has voting and dispositive control over the shares held by HCKB. Johan Christenson, Carl-Johan Dalsgaard, M.D., Per-Olof Eriksson, Anki Forsberg, Peder Fredrikson, Jacob Gunterberg, Staffan Lindstrand, Björn Odlander, Per Samuelsson and Eugen Steiner, the members of HCSA and HCAB, may be deemed to possess voting and dispositive control over the shares held by HCLP, HCBIS and HCKB, and may be deemed to have indirect beneficial ownership of the shares held by such entities. HCSA and HCAB and each of their members disclaim beneficial ownership of the shares held by HCLP, HCBIS and HCKB, except to the extent of their respective actual pecuniary interest therein. Odlander, Fredrikson & Co AB, L.L.C., or OFCO AB, is a member of OFCO and has voting and dispositive control over the shares held by OFCO. Johan Christenson, Carl-Johan Dalsgaard, M.D., Per-Olof Eriksson, Anki Forsberg, Peder Fredrikson, Staffan Lindstrand, Björn Odlander, Per Samuelsson and Eugen Steiner, the members of OFCO AB, may be deemed to possess voting and dispositive control over the shares held by OFCO and may be deemed to have indirect beneficial ownership of the shares held by OFCO. OFCO AB and each of its members disclaim beneficial ownership of the shares held by OFCO, except to the extent of their respective actual pecuniary interest therein. The address for the entities affiliated with HealthCap is 18 Avenue d Ouchy, CH-1006 Lausanne, Switzerland.

(13) Information is based on a Schedule 13G filed with the SEC on November 15, 2013. The HealthCor Offshore Master Fund, L.P., or HealthCor Offshore and HealthCor Long Offshore Master Fund, L.P, or HealthCor Long Offshore, are the beneficial owners of 965,000 shares of common stock. HealthCor Offshore GP, LLC is the general partner of HealthCor Offshore and has voting and dispositive control over the shares held by HealthCor Offshore. HealthCor Long Master GP, LLC is the general partner of HealthCor Long Offshore and has voting and dispositive control over the shares held by HealthCor Long Offshore. HealthCor Group, LLC is the general partner of HealthCor Offshore GP, LLC and HealthCor Long Master GP, LLC, and has voting and dispositive control over the shares held by HealthCor Offshore and HealthCor Long Offshore. HealthCor Management, L.P. is the investment manager of HealthCor Offshore and HealthCor Long Offshore, and has voting and dispositive control over the shares held by HealthCor Offshore and HealthCor Long Offshore. HealthCor Associates, LLC is the general partner of HealthCor Management, L.P. and has voting and dispositive control over the shares held by HealthCor Offshore and HealthCor Long Offshore. Arthur Cohen and Joseph Healey, the managers of HealthCor Associates, LLC, share voting and dispositive control over the shares held by HealthCor Offshore and HealthCor Long Offshore. Each of HealthCor Offshore GP, LLC, HealthCor Long Master GP, LLC, HealthCor Group, LLC, HealthCor Management, L.P., HealthCor Associates, LLC, Arthur Cohen and Joseph Healey disclaims beneficial ownership of the shares held by HealthCor Offshore and HealthCor Long Offshore, except to the extent of each such entity s or manager s actual pecuniary interest therein. The address for the funds affiliated with HealthCor is Carnegie Hall Tower, 152 West 57th Street, 43rd Floor, New York, New York 10019.

(14) Consists of (a) 409,573 shares of common stock held by Kleiner Perkins Caufield & Byers IX-A, L.P., or KPCB IX-A, (b) 12,644 shares of common stock held by Kleiner Perkins Caufield & Byers IX-B, L.P., or KPCB IX-B, (c) 360,524 shares of common stock held by Kleiner Perkins Caufield & Byers X-A, L.P., or KPCB X-A, (d) 10,168 shares of common stock held by Kleiner Perkins Caufield & Byers X-B, L.P., or KPCB X-B, and (e) 260,790 shares of common stock held by individuals and entities associated with Kleiner Perkins Caufield & Byers. All shares are held for convenience in the name of KPCB Holdings, Inc., as nominee, for the accounts of such individuals and entities who each exercise their own voting and dispositive control over such shares. KPCB IX Associates, LLC, or KPCB IX Associates, is the general partner of KPCB IX-A and KPCB IX-B. KPCB X Associates, LLC, or KPCB X Associates, is the general partner of KPCB X-A and KPCB X-B. Brook H. Byers, L. John Doerr, Joseph Lacob, Kevin Compton, Doug Mackenzie, Raymond J. Lane and Theodore E. Schlein, the managers of KPCB IX Associates, share voting and dispositive control over the shares held by KPCB IX-A and KPCB IX-B. Brook H. Byers, L. John Doerr, Thomas Jermoluk, Joseph Lacob, Kevin Compton, Doug

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Mackenzie, Raymond J. Lane and Theodore E. Schlein, the managers of KPCB X Associates, share voting and dispositive control over the shares held by KPCB X-A and KPCB X-B. Each manager of KPCB IX Associates and KPCB X Associates disclaims beneficial ownership of the shares held by KPCB IX-A, KPCB IX-B, KPCB X-A and KPCB X-B, except to the extent of each such manager s actual pecuniary interest therein. The address for the funds affiliated with Kleiner Perkins Caufield & Byers is 2750 Sand Hill Road, Menlo Park, CA 94025.

(15) The address for Pfizer International LLC is 235 East 42nd Street, New York, NY 10017.

(16) Consists of (a) 18,969 shares of common stock held by TPG Biotechnology GenPar, L.P., or TPG Bio GenPar, (b) 718,618 shares of common stock held by TPG Biotechnology Partners, L.P., or TPG Bio Partners, (c) 8,129 shares of common stock held by TPG Ventures GenPar, L.P., or TPG Ventures GenPar, and (d) 307,976 shares of common stock held by TPG Ventures, L.P., or TPG Ventures. We refer to TPG Bio GenPar, TPG Bio Partners, TPG Ventures GenPar and TPG Ventures, collectively, as the TPG Entities. David Bonderman and James G. Coulter are directors, officers and sole shareholders of Tarrant Capital Advisors, Inc., the sole stockholder of Tarrant Advisors, Inc., which is the general partner of TPG Ventures Professionals, L.P., which is the general partner of TPG Ventures Partners, L.P., which is the managing member of TPG Ventures Holdings, L.L.C., which is the sole member of TPG Biotech Advisors, L.L.C., which is the general partner of TPG Bio GenPar, which is the general partner of TPG Bio Partners. Messrs. Bonderman and Coulter are also directors, officers and stockholders of TPG Group Holdings (SBS) Advisors, Inc., which is the general partner of TPG Group Holdings (SBS), L.P., which is the sole member of TPG Holdings I-A, LLC, which is the general partner of TPG Holdings I, L.P., which is the sole member of TPG Ventures GenPar Advisors, LLC, which is the general partner of TPG Ventures GenPar, which is the general partner of TPG Ventures. Therefore, Messrs. Bonderman and Coulter may be deemed to possess voting and dispositive control over the shares held by the TPG Entities and may be deemed to have indirect beneficial ownership of the shares held by the TPG Entities. Each of Messrs. Bonderman and Coulter disclaims beneficial ownership of the shares held by the TPG Entities, except to the extent of his actual pecuniary interest therein. The address for the funds affiliated with Texas Pacific Group is 345 California Street, Suite 3300, San Francisco, CA 94104.

(17) Consists of (a) 20,303 shares of common stock held by Versant Affiliates Fund I-A, L.P., (b) 42,637 shares of common stock held by Versant Affiliates Fund I-B, L.P., (c) 19,779 shares of common stock held by Versant Side Fund I, L.P. and (d) 1,009,433 shares of common stock held by Versant Venture Capital I, L.P. Versant Ventures is the general partner of the Versant Entities and has voting and dispositive control over the shares held by the Versant Entities. Mr. Atwood, Samuel D. Colella, Ross Jaffe, M.D., William J. Link, Barbara N. Lubash, Donald M. Milder and Rebecca R. Robertson, the managing directors of Versant Ventures, may be deemed to possess voting and dispositive control over the shares held by the Versant Entities and may be deemed to have indirect beneficial ownership of the shares held by the Versant Entities. Versant Ventures and each of its managing directors disclaim beneficial ownership of the shares held by the Versant Entities, except to the extent of their respective actual pecuniary interest therein. The address for the funds affiliated with Versant Ventures is 3000 Sand Hill Road, Building 4, Suite 210, Menlo Park, CA 94025.

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DESCRIPTION OF CAPITAL STOCK

Our amended and restated certificate of incorporation authorizes us to issue up to 100,000,000 shares of common stock, par value $0.001 per share and 10,000,000 shares of preferred stock, par value $0.001 per share. As of September 30, 2013, there were outstanding:

- 16,818,008 shares of our common stock;
- 2,234,322 shares of our common stock subject to outstanding options; and
- 2,304 shares of our common stock issuable upon the exercise of the GE Warrant at an exercise price of $12.30 per share.

As of September 30, 2013, we had 135 holders of record of our common stock. The actual number of stockholders is greater than this number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

The following description of our capital stock is not complete and is subject to and qualified in its entirety by our amended and restated certificate of incorporation and amended and restated bylaws and by the provisions of applicable Delaware law. Copies of these documents are filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part.

Common Stock

Voting Rights

Each holder of common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders. The affirmative vote of holders of substantially 66% of the voting power of all of the then-outstanding shares of capital stock, voting as a single class, will be required to amend certain provisions of our amended and restated certificate of incorporation, including provisions relating to amending our amended and restated bylaws, the classified board, the size of our board, removal of directors, director liability, vacancies on our board, special meetings, stockholder notices, actions by written consent and exclusive jurisdiction.

Dividends

Subject to preferences that may apply to any outstanding preferred stock, holders of our common stock are entitled to receive ratably any dividends that our board of directors may declare out of funds legally available for that purpose.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preference of any outstanding 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 outstanding shares of our common stock are fully paid and non-assessable, and the shares of common stock to be issued upon completion of this offering will be fully paid and non-assessable.

Preferred Stock

Our board of directors has 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 number, rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, and sinking fund terms, and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of

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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 liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change of control or other corporate action. We have no current plan to issue any shares of preferred stock.

Warrant

General Electric Capital Corporation Warrant

We issued the GE Warrant to General Electric Capital Corporation to purchase 2,304 shares of our Series A convertible preferred stock, which converted to a warrant to purchase common shares upon completion of our initial public offering at an exercise price of $12.30 per share. The GE Warrant contains a cashless exercise feature and General Electric Capital Corporation may, at its option, exercise the warrant in whole or in part at any time prior to expiration on January 26, 2014.

Registration Rights

Holders of 9,931,463 shares of our common stock and common stock issuable upon exercise of warrants, have the right to demand that we file a registration statement or request that we cover their shares by a registration statement that we otherwise file, as described below.

Demand Registration Rights

At any time after 180 days after the completion of our initial public offering, the holders of a majority of the shares having demand registration rights may request that we register all or a portion of their shares of common stock for sale under the Securities Act. We will effect the registration as requested, unless, in the good faith judgment of our board of directors, such registration would be materially detrimental to the company and its stockholders and should be delayed. In addition, when we are eligible for the use of Form S-3, or any successor form, holders of the shares having demand registration rights may make unlimited requests that we register all or a portion of their common stock for sale under the Securities Act on Form S-3, or any successor form, so long as the aggregate price to the public in connection with any such offering is at least $1 million.

Incidental Registration Rights

In addition, if at any time after our initial public offering we register any shares of our common stock, the holders of all shares having piggyback registration rights are entitled to notice of the registration and to include all or a portion of their shares of common stock in the registration.

Other Provisions

In the event that any registration in which the holders of registrable shares participate pursuant to the registration rights agreement is an underwritten public offering, the number of registrable shares to be included may, in specified circumstances, be limited due to market conditions.

We will pay all registration expenses, other than underwriting discounts and selling commissions, and the reasonable fees and expenses of a single special counsel for the selling stockholders, related to any demand, piggyback and Form S-3 registration. The registration rights agreement contains customary cross-indemnification provisions, pursuant to which we must indemnify the selling stockholders in the event of material misstatements or omissions in the registration statement attributable to us, and they must indemnify us for material misstatements or omissions in the registration statement attributable to them. The demand, piggyback and Form S-3 registration rights described above will expire, with respect to any particular stockholder, four years after our initial public offering.

Anti-Takeover Provisions

Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation and amended and restated bylaws include a number of provisions that may deter or impede hostile takeovers or changes of control or management. These provisions include:

- *Issuance of undesignated preferred stock.* Our board of directors has the authority, without further action by the stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with rights and

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preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock enables our board of directors to make it more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.

- *Classified board.* Our amended and restated certificate of incorporation provides for a classified board of directors consisting of three classes of directors, 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. This provision may have the effect of delaying a change in control of our board.

- *Board of directors vacancies.* Our amended and restated certificate of incorporation and amended and restated bylaws authorize only our board of directors to fill vacant directorships. In addition, the number of directors constituting our board of directors may be set only by resolution adopted by a majority vote of our entire board of directors. These provisions prevent a stockholder from increasing the size of our board of directors and gaining control of our board of directors by filling the resulting vacancies with its own nominees.

- *Stockholder action; special meetings of stockholders.* Our amended and restated certificate of incorporation provides that our stockholders may not take action by written consent, but may only take action at annual or special meetings of our stockholders. Stockholders will not be permitted to cumulate their votes for the election of directors. Our amended and restated certificate of incorporation further provides that only the chairman of our board of directors or a majority of our board of directors may call special meetings of our stockholders.

- *Advance notice requirements for stockholder proposals and director nominations.* Our amended and restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at our annual meeting of stockholders. Our amended and restated bylaws also specify certain requirements as to the form and content of a stockholder s notice. These provisions may make it more difficult for our stockholders to bring matters before our annual meeting of stockholders or to nominate directors at annual meetings of stockholders.

We designed these provisions to enhance the likelihood of continued stability in the composition of our board of directors and its policies, to discourage certain types of transactions that may involve an actual or threatened acquisition of us, and to reduce our vulnerability to an unsolicited acquisition proposal. We also designed these provisions to discourage certain tactics that may be used in proxy fights. However, these provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they may also reduce fluctuations in the market price of our shares that could result from actual or rumored takeover attempts.

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the DGCL, which prohibits a Delaware corporation from engaging in a business combination with any interested stockholder for a period of three years following the date the person became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested holder;

- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (a) by persons who are directors and also officers and (b) pursuant to employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; and

- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least $66\,^{2}/_{3}\%$ of the outstanding voting stock that is not owned by the interested stockholder.

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In general, Section 203 of the DGCL defines business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 of the DGCL defines an interested stockholder as an entity or person who, together with the entity s or person s affiliates and associates, beneficially owns, or is an affiliate of the corporation and within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

A Delaware corporation may opt out of these provisions with an express provision in its certificate of incorporation. We have not opted out of these provisions, which may as a result, discourage or prevent mergers or other takeover or change of control attempts of us.

Choice of Forum

Our amended and restated certificate of incorporation will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty owed by any director, officer, employee or agent to us or our stockholders, any action asserting a claim against us arising pursuant to the DGCL or our certificate of incorporation or bylaws, any action to interpret, apply, enforce or determine the validity of our certificate of incorporation or bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine. However, several lawsuits involving other companies have been brought challenging the validity of choice of forum provisions in certificates of incorporation, and it is possible that a court could rule that such provision is inapplicable or unenforceable.

Transfer Agent and Registrar

Our transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

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SHARES ELIGIBLE FOR FUTURE SALE

Prior to our initial public offering in September 2013, no public market for our common stock existed, and a liquid trading market for our common stock may not develop or be sustained after this offering. Future sales of substantial amounts of our common stock in the public market, including shares issued upon exercise of outstanding options and warrants, or the anticipation of such sales, could adversely affect prevailing market prices of our common stock from time to time and could impair our ability to raise equity capital in the future.

Upon completion of this offering, we will have shares of common stock outstanding, assuming (1) no exercise of any options outstanding as of September 30, 2013, (2) no exercise of any warrants to purchase shares outstanding as of September 30, 2013, and (3) no exercise of the underwriters option to purchase additional shares. Of those shares, all of the shares sold in this offering and all 5,520,000 shares sold in our initial public offering will be freely tradable, except that any shares held by our affiliates, as that term is defined in Rule 144 of the Securities Act, may only be sold in compliance with the limitations described below.

We may issue shares of common stock from time to time as consideration for future acquisitions, investments or other corporate purposes. In the event that any such acquisition, investment or other transaction is significant, the number of shares of common stock that we may issue may in turn be significant. We may also grant registration rights covering those shares of common stock issued in connection with any such acquisition and investment.

In addition, 5,986,626 shares of common stock that are either subject to outstanding options or warrants or reserved for future issuance under our equity incentive plans as of September 30, 2013, 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 of the Securities Act.

Rule 144

In general, under Rule 144 of the Securities Act, as in effect on the date of this prospectus, any person who is not our affiliate at any time during the preceding three months, and who has beneficially owned their shares for at least six months, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares of our common stock provided current public information about us is available, and, after owning such shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares of our common stock without restriction.

A person who is our affiliate or who was our affiliate at any time during the preceding three months, and who has beneficially owned restricted securities for at least six months, including the holding period of any prior owner other than one of our affiliates, is entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares, or shares if the underwriters exercise their option to purchase additional shares in full, immediately following this offering, based on the number of shares of our common stock outstanding upon completion of this offering; or

- the average weekly trading volume of our common stock on NASDAQ during the four calendar weeks preceding the filing of a Notice of Proposed Sale of Securities pursuant to Rule 144 with respect to the sale.

Sales under Rule 144 by our affiliates are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us.

Subject to the lock-up agreements described below and under Underwriting included elsewhere in this prospectus, as of September 30, 2013, 11,298,008 shares of our common stock qualify for resale under Rule 144.

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Rule 701

In general, Rule 701 of the Securities Act permits the resale of shares in reliance on Rule 144 without complying with the holding period requirements of Rule 144. Most of our employees, directors, officers, consultants or advisors who purchased shares from us under a compensatory stock or option plan or other written agreement may be entitled to rely on the resale provisions of Rule 701. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and under Underwriting included elsewhere in this prospectus and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Lock-up Agreements

In connection with our initial public offering, we, our executive officers, senior management and directors and substantially all of our stockholders and optionholders agreed with the underwriters that we and they will not, for a period of 180 days following the date of the initial public offering prospectus, offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any shares of our common stock (including any shares issued in this offering or other issuer-directed shares), or any options or warrants to purchase any shares of our common stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of our common stock, whether now owned or later acquired, owned directly or with respect to which they have beneficial ownership within the rules and regulations of the SEC, subject to specified exceptions. These lock-up agreements are set to expire on March 17, 2014. However, for purposes of this offering, the underwriters intend to release the lock-up restrictions applicable to us solely to the extent necessary to permit the sale of shares offered in this offering. The underwriters may, in their sole discretion, at any time without prior notice, release all or any portion of the shares from the restrictions in any such agreement.

In addition, in connection with this offering, all of our directors and executive officers and certain holders of 5% or more of our outstanding stock, options and warrants, together holding an aggregate of shares, have agreed with the underwriters that, for a period of 90 days following the date of this prospectus, they will not offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any shares of our common stock (including any shares issued in this offering or other issuer-directed shares), or any options or warrants to purchase any shares of our common stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of our common stock, whether now owned or later acquired, owned directly or with respect to which they have beneficial ownership within the rules and regulations of the SEC, subject to specified exceptions. The underwriters may, in their sole discretion, at any time without prior notice, release all or any portion of the shares from the restrictions in any such agreement.

Equity Incentive Plans

As of September 30, 2013, we had outstanding options to purchase 2,234,322 shares of common stock, of which 1,196,206 shares were vested. We have registered all shares of common stock subject to outstanding stock options and common stock issuable under our equity incentive plans on one or more registration statements on Form S-8 under the Securities Act. The registration statement on Form S-8 permits the resale of such shares by non-affiliates in the public market without restriction under the Securities Act and the sale by affiliates in the public market, subject to compliance with the resale provisions of Rule 144. Subject to the lock-up agreements and the restrictions imposed under our equity incentive plans, shares of common stock issued pursuant to such equity incentive plans after the effective date of the registration statement on Form S-8 will be available for sale in the public market without restriction to the extent that they are held by persons who are not our affiliates. For more information on our equity incentive plans, see Executive and Director Compensation Equity Benefit Plans.

Registration Rights

Holders of 9,931,463 shares of our common stock, and common stock issuable upon exercise of warrants, have the right to demand that we file a registration statement or request that we cover their shares by a registration statement that we otherwise file. For more information, see Description of Capital Stock Registration Rights. Except for shares purchased by affiliates, registration of their shares under the Securities Act would result in these shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration statement, subject to the expiration of the lock-up period and to the extent these shares have been released from any repurchase option that we may hold.

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MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following summary describes the material U.S. federal income and estate tax consequences of the acquisition, ownership and disposition of our common stock acquired in this offering by Non-U.S. Holders (as defined below). This discussion does not address all aspects of U.S. federal income and estate taxes and does not deal with foreign, state and local consequences that may be relevant to Non-U.S. Holders in light of their particular circumstances, nor does it address U.S. federal tax consequences other than income and estate taxes. Special rules different from those described below may apply to certain Non-U.S. Holders that are subject to special treatment under the Code such as financial institutions, insurance companies, tax-exempt organizations, broker-dealers and traders in securities, U.S. expatriates, controlled foreign corporations, passive foreign investment companies, corporations that accumulate earnings to avoid U.S. federal income tax, persons that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or integrated investment or other risk reduction strategy, partnership and other pass-through entities, and investors in such pass-through entities. Such Non-U.S. Holders are urged to consult their own tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them. Furthermore, the discussion below is based upon the provisions of the Code, and Treasury regulations, rulings and judicial decisions thereunder as of the date hereof, and such authorities may be repealed, revoked or modified, perhaps retroactively, so as to result in U.S. federal income and estate tax consequences different from those discussed below. We have not requested a ruling from the U.S. Internal Revenue Service, or IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions. This discussion assumes that the Non-U.S. Holder holds our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment).

The following discussion is for general information only and is not tax advice. Persons considering the purchase of our common stock pursuant to this offering should consult their own tax advisors concerning the U.S. federal income and estate tax consequences of acquiring, owning and disposing of our common stock in light of their particular situations as well as any consequences arising under the laws of any other taxing jurisdiction, including any state, local or foreign tax consequences.

For the purposes of this discussion, a Non-U.S. Holder is, for U.S. federal income tax purposes, a beneficial owner of common stock that is neither a U.S. Holder, a partnership (or other entity treated as a partnership for U.S. federal income tax purposes regardless of its place of organization or formation), nor an entity that is treated as a disregarded entity for U.S. federal income tax purposes (regardless of its place of organization or formation). A U.S. Holder means a beneficial owner of our common stock that is for U.S. federal income tax purposes (a) an individual who is a citizen or resident of the United States, (b) a corporation or other entity treated as a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (c) an estate the income of which is subject to U.S. federal income taxation regardless of its source or (d) a trust if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

Distributions

Subject to the discussion below, distributions, if any, made on our common stock to a Non-U.S. Holder of our common stock to the extent made out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles) generally will constitute dividends for U.S. tax purposes and will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. To obtain a reduced rate of withholding under a treaty, a Non-U.S. Holder generally will be required to provide us with a properly executed IRS Form W-8BEN, or other appropriate form, certifying the Non-U.S. Holder s entitlement to benefits under that treaty. In the case of a Non-U.S. Holder that is an entity, Treasury regulations and the relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of a tax treaty, dividends will be treated as paid to the entity or to those holding an interest in that entity. If a Non-U.S. Holder holds stock through a financial institution or other agent acting on the holder s behalf, the holder will be required to provide appropriate documentation to such agent. The holder s agent will then be required to provide certification to us or our paying

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agent, either directly or through other intermediaries. If a Non-U.S. Holder is eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty, the Non-U.S. Holder should contact its tax advisor regarding the possibility of obtaining a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

We generally are not required to withhold tax on dividends paid to a Non-U.S. Holder that 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, are attributable to a permanent establishment that such holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to us (or, if stock is held through a financial institution or other agent, to such agent). In general, such effectively connected dividends will be subject to U.S. federal income tax, on a net income basis at the regular graduated rates, unless a specific treaty exemption applies. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to an additional branch profits tax, which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S. Holder s effectively connected earnings and profits, subject to certain adjustments.

To the extent distributions on our common stock, if any, exceed our current and accumulated earnings and profits, they will constitute a non-taxable return of capital and will first reduce the Non-U.S. Holder s adjusted basis in our common stock, but not below zero, and then will be treated as gain and taxed in the same manner as gain realized from a sale or other disposition of common stock as described in the next section.

Gain on Disposition of Our Common Stock

Subject to the discussion below, a Non-U.S. Holder generally will not be subject to U.S. federal income tax with respect to gain realized on a sale or other disposition of our common stock unless (a) the gain is effectively connected with a trade or business of such holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment that such holder maintains in the United States), (b) the Non-U.S. Holder is a nonresident alien individual and is present in the United States for 183 or more days in the taxable year of the disposition and certain other conditions are met, or (c) we are or have been a United States real property holding corporation within the meaning of Code Section 897(c)(2) at any time within the shorter of the five-year period preceding such disposition or such holder s holding period. In general, we would be a United States real property holding corporation if interests in U.S. real estate comprised (by fair market value) at least half of our business assets. We believe that we are not, and do not anticipate becoming, a United States real property holding corporation. Even if we are treated as a United States real property holding corporation, gain realized by a Non-U.S. Holder on a disposition of our common stock will not be subject to U.S. federal income tax so long as (1) the Non-U.S. Holder owned, directly, indirectly and constructively, no more than five percent of our common stock at all times within the shorter of (i) the five-year period preceding the disposition or (ii) the holder s holding period and (2) our common stock is regularly traded on an established securities market. There can be no assurance that our common stock will qualify as regularly traded on an established securities market.

If you are a Non-U.S. Holder described in (a) above, you will be required to pay tax on the net gain derived from the sale at regular graduated U.S. federal income tax rates, unless a specific treaty exemption applies, and corporate Non-U.S. Holders described in (a) above may be subject to the additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. If you are an individual Non-U.S. Holder described in (b) above, you will be required to pay a flat 30% tax on the gain derived from the sale, which gain may be offset by U.S. source capital losses (even though you are not considered a resident of the United States).

Information Reporting Requirements and Backup Withholding

Generally, we must report information to the IRS with respect to any dividends we pay on our common stock including the amount of any such dividends, the name and address of the recipient, and the amount, if any, of tax withheld. A similar report is sent to the holder to whom any such dividends are paid. Pursuant to tax treaties or certain other agreements, the IRS may make its reports available to tax authorities in the recipient s country of residence.

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Dividends paid by us (or our paying agents) to a Non-U.S. Holder may also be subject to U.S. backup withholding. U.S. backup withholding generally will not apply to a Non-U.S. Holder who provides a properly executed IRS Form W-8BEN or otherwise establishes an exemption. The current backup withholding rate is 28%.

Under current U.S. federal income tax law, U.S. information reporting and backup withholding requirements generally will apply to the proceeds of a disposition of our common stock effected by or through a U.S. office of any broker, U.S. or foreign, except that information reporting and such requirements may be avoided if the holder provides a properly executed IRS Form W-8BEN or otherwise meets documentary evidence requirements for establishing Non-U.S. Holder status or otherwise establishes an exemption. Generally, U.S. information reporting and backup withholding requirements will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the United States through a non-U.S. office of a non-U.S. broker. Information reporting and backup withholding requirements may, however, apply to a payment of disposition proceeds if the broker has actual knowledge, or reason to know, that the holder is, in fact, a U.S. person. For information reporting purposes, certain brokers with substantial U.S. ownership or operations will generally be treated in a manner similar to U.S. brokers.

Backup withholding is not an additional tax. A holder subject to backup withholding should contact the holder s tax advisor regarding the possibility of obtaining a refund or a tax credit and any associated requirements to provide information to the IRS or other relevant tax authority.

Legislation Affecting Taxation of Our Common Stock Held by or Through Foreign Entities

The Foreign Account Tax Compliance Act, or FATCA, which was enacted in 2010, imposes a 30% withholding tax on certain types of payments made to foreign financial institutions and certain other non-U.S. entities unless certain due diligence, reporting, withholding, and certification requirements are satisfied.

On January 17, 2013, final regulations under FATCA were published. As a general matter, FATCA imposes a 30% withholding tax on dividends on, and gross proceeds from the sale or other disposition of, our common stock if paid to a foreign entity unless either (i) the foreign entity is a foreign financial institution that undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) the foreign entity is not a foreign financial institution and identifies certain of its U.S. investors, or (iii) the foreign entity otherwise is excepted under FATCA. An intergovernmental agreement between the United States and an applicable non-U.S. government may modify these rules.

Pursuant to the delayed effective dates provided for in the final regulations, the required withholding does not begin until July 1, 2014, with respect to dividends on our common stock and January 1, 2017, with respect to gross proceeds from a sale or other disposition of our common stock.

If withholding is required under FATCA on a payment related to our common stock, investors that otherwise would not be subject to withholding (or that otherwise would be entitled to a reduced rate of withholding) generally will be required to seek a refund or credit from the IRS to obtain the benefit of such exemption or reduction (provided that such benefit is available). Prospective investors should consult their tax advisors regarding the effect of FATCA in their particular circumstances.

Federal Estate Tax

An individual Non-U.S. Holder who is treated as the owner of, or has made certain lifetime transfers of, an interest in our common stock will be required to include the value thereof in his or her gross estate for U.S. federal estate tax purposes, and may be subject to U.S. federal estate tax unless an applicable estate tax treaty provides otherwise, even though such individual was not a citizen or resident of the United States at the time of his or her death.

THE PRECEDING DISCUSSION OF U.S. FEDERAL INCOME AND ESTATE TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY. IT IS NOT TAX ADVICE. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAW.

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UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated , 2014, among us and Jefferies LLC, BMO Capital Markets Corp. and Wells Fargo Securities, LLC, as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of shares of common stock shown opposite its name below:

UNDERWRITERS	NUMBER OF SHARES
Jefferies LLC	
BMO Capital Markets Corp.	
Wells Fargo Securities, LLC	
Guggenheim Securities, LLC	
Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock if any of them are purchased, other than those shares covered by the option to purchase additional shares of common stock described below. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in our common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for our common stock, that you will be able to sell any of the shares of our common stock held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the shares of common stock subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. In addition, the underwriters have advised us that they do not intend to confirm sales to any account over which they exercise discretionary authority.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock to the public at the public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of $ per share of common stock. After the offering, the public offering price and concession may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

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The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters option to purchase additional shares.

	PER SHARE		TOTAL	
	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES
Public offering price	$	$	$	$
Underwriting discounts and commissions paid by us	$	$	$	$
Proceeds to us, before expenses	$	$	$	$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately $. We have also agreed to reimburse the underwriters for certain other expenses in an amount not to exceed $20,000 as set forth in the underwriting agreement.

Listing

Our common stock is listed on The NASDAQ Global Select Market under the trading symbol FPRX.

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter s initial purchase commitment as indicated in the table above. This option may be exercised only if the underwriters sell more shares than the total number set forth on the cover page of this prospectus.

No Sales of Similar Securities

We, our officers, directors and certain of our existing holders of our capital stock and other securities have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer, contract or grant any option to sell (including any short sale), lend, pledge, transfer, establish or increase an open put equivalent position or liquidate or decrease a call equivalent position within the meaning of Rule 16a-1(h) and Rule 16a-1(b) under the Exchange Act;

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otherwise dispose of any shares of our common stock, options or warrants to acquire shares of our common stock, or securities exchangeable or exercisable for or convertible into shares of our common stock currently or hereafter owned either of record or beneficially;

- enter into any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of shares of our common stock, or of options or warrants to shares of our common stock, or securities or rights exchangeable or exercisable for or convertible into shares of our common stock;

- make any demand for, or exercise any right with respect to, the registration under the Securities Act of the offer and sale of any shares of our common stock, or of options or warrants to shares of our common stock, or securities or rights exchangeable or exercisable for or convertible into shares of our common stock, or cause to be filed a registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) with respect to any such registration; or

- publicly announce an intention to do any of the foregoing for a period of 90 days after the date of this prospectus without the prior written consent of the representatives.

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The foregoing restriction terminates after the close of trading of our common stock on and including the 90th day after the date of this prospectus. In addition, the foregoing restriction shall not apply to issuances of common stock or grants of stock options, restricted stock or other incentive compensation pursuant to the terms of certain stock plans or arrangements described herein.

The representatives may, in their sole discretion and at any time or from time to time before the termination of the 90-day period 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.

Stabilization

The underwriters have advised us that, pursuant to Regulation M under the Exchange Act, certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of our common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either covered short sales or naked short sales.

Covered short sales are sales made in an amount not greater than the underwriters option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

Naked short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, an underwriter s purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

The underwriters may also engage in passive market making transactions in our common stock on The NASDAQ Global Select Market in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker s bid, that bid must then be lowered when specified purchase limits are exceeded.

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Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on the websites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters websites and any information contained in any other website maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriters and certain of their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of their respective affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and certain of their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Disclaimers About Non-U.S. Jurisdictions

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) an offer to the public of any shares which are the subject of the offering contemplated by this prospectus may not be made in that Relevant Member State except that an offer to the public in that Relevant Member State of any shares may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

(a) to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;

(b) to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than 43,000,000 and (3) an annual net turnover of more than 50,000,000, as shown in its last annual or consolidated accounts;

(c) to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the representatives for any such offer; or

(d) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of the shares shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

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Each person in a Relevant Member State who receives any communication in respect of, or who acquires any shares under, the offers contemplated in this prospectus will be deemed to have represented, warranted and agreed to and with each underwriter and us that:

(a) it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive; and

(b) in the case of any shares acquired by it as a financial intermediary, as that term is used in Article 3(2) of the Prospectus Directive, (i) the shares acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Relevant Member State, other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives has been given to the offer or resale; or (ii) where shares have been acquired by it on behalf of persons in any Relevant Member State other than qualified investors, the offer of those shares to it is not treated under the Prospectus Directive as having been made to such persons.

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 any shares to be offered so as to enable an investor to decide to purchase any shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

United Kingdom

Each underwriter has represented, warranted and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, or the FSMA) to persons who are investment professionals falling within Article 19(5) of the FSMA (Financial Promotion) Order 2005 or in circumstances in which Section 21(1) 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.

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LEGAL MATTERS

The validity of the shares of our common stock to be issued in this offering will be passed upon for us by our counsel, Hogan Lovells US LLP, Menlo Park, California. Certain legal matters relating to this offering will be passed upon for the underwriters by Cooley LLP, San Francisco, California. As of the date of this prospectus, GC&H Investments, LLC, an entity consisting of current and former partners and associates of Cooley LLP, beneficially owns 8,369 shares of our common stock.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements at December 31, 2012 and 2011, and for each of the three years in the period ended December 31, 2012, as set forth in their report. We have included our financial statements in this prospectus and elsewhere in this registration statement in reliance on Ernst & Young LLP s report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of our common stock offered by this prospectus. This prospectus, which constitutes part of that registration statement, does not contain all of the information set forth in the registration statement or the accompanying exhibits and schedules. Some items included in the registration statement are omitted from this prospectus in accordance with the rules and regulations of the SEC. For further information with respect to us and the common stock offered in this prospectus, we refer you to the registration statement and the accompanying exhibits and schedules. Statements contained in this prospectus regarding the contents of any contract, agreement or any other document are summaries of the material terms of these contracts, agreements or other documents. With respect to each of these contracts, agreements or other documents filed as an exhibit to the registration statement, reference is made to such exhibit for a more complete description of the matter involved.

A copy of the registration statement and the accompanying exhibits and schedules and any other document we file may be inspected without charge and copied at the SEC s public reference room at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. The SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the SEC s website is http://www.sec.gov.

We are subject to the information and periodic reporting requirements of the Exchange Act, and we will file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available for inspection and copying at the public reference room and website of the SEC referred to above. We maintain a website at http://www.fiveprime.com. You may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, proxy statements and other information filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of this prospectus.

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FIVE PRIME THERAPEUTICS, INC.

FINANCIAL STATEMENTS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and

Stockholders of Five Prime Therapeutics, Inc.

We have audited the accompanying balance sheets of Five Prime Therapeutics, Inc. (the Company) as of December 31, 2011 and 2012, and the related statements of operations, comprehensive (loss) income, convertible preferred stock and stockholders deficit and cash flows for each of the three years in the period ended December 31, 2012. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company at December 31, 2011 and 2012, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2012, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Redwood City, California

June 14, 2013, except for Note 12 as to which the

date is September 4, 2013

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FIVE PRIME THERAPEUTICS, INC.

Balance Sheets

(In thousands, except share and per share amounts)

	DECEMBER 31	
	2011	**2012**
Assets		
Current assets:		
Cash and cash equivalents	$ 4,361	$ 11,391
Marketable securities	46,382	26,624
Short-term restricted cash	38	
Receivable from collaborative partners	846	397
Prepaid and other current assets	1,052	689
Total current assets	52,679	39,101
Property and equipment, net	5,532	4,631
Other long-term assets	368	359
Total assets	$ 58,579	$ 44,091
Liabilities, convertible preferred stock, and stockholders deficit		
Current liabilities:		
Accounts payable	$ 2,452	$ 2,470
Accrued personnel-related expenses	2,269	2,250
Payable to collaborative partner	3,000	
Other accrued liabilities	321	303
Preferred stock warrant liability	682	563
Deferred revenue, current portion	4,005	7,498
Total current liabilities	12,729	13,084
Deferred revenue, long-term portion	3,372	7,258
Deferred rent, long-term portion	1,991	2,448
Other long-term liabilities	1,130	897
Commitments		
Series A convertible preferred stock, $0.001 par value; 85,676,349 shares authorized; 6,878,001 shares issued and outstanding; aggregate liquidation preference of $84,600	84,600	84,600
Series A1 convertible preferred stock, $0.001 par value; 7,006,369 shares authorized; 569,623 shares issued and outstanding; aggregate liquidation preference of $11,000	11,000	11,000
Series A2 convertible preferred stock, $0.001 par value; 25,828,254 shares authorized; 2,099,842 shares issued and outstanding; aggregate liquidation preference of $47,782	33,863	33,863
Series A3 convertible preferred stock, $0.001 par value; 4,694,836 shares authorized; 381,693 shares issued and outstanding; aggregate liquidation preference of $10,000		6,819
Stockholders deficit:		
Common stock, $0.001 par value; 193,000,000 shares authorized; 1,161,781 and 1,225,989 shares issued and outstanding at December 31, 2011 and 2012, respectively	1	1
Additional paid-in capital	4,990	6,816
Accumulated other comprehensive income	10	7

Accumulated deficit	(95,107)	(122,702)
Total stockholders deficit	(90,106)	(115,878)
Total liabilities, convertible preferred stock, and stockholders deficit	$ 58,579	$ 44,091

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

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FIVE PRIME THERAPEUTICS, INC.

Statements of Operations

(In thousands except per share data)

	YEAR ENDED DECEMBER 31		
	2010	**2011**	**2012**
Collaboration revenue, including revenues from related party of $18,773, $7,150 and zero for 2010, 2011 and 2012, respectively	$ 23,740	$ 64,916	$ 9,983
Operating expenses:			
Research and development	29,417	34,039	28,778
General and administrative	8,338	11,216	9,009
Total operating expenses	37,755	45,255	37,787
(Loss) income from operations	(14,015)	19,661	(27,804)
Interest income	58	114	88
Other income (expense), net	491	(65)	121
(Loss) income before benefit from income taxes	(13,466)	19,710	(27,595)
Benefit from income taxes	5		
Net (loss) income	$ (13,461)	$ 19,710	$ (27,595)
Net income attributable to participating securities		18,823	
Net (loss) income attributable to common stockholders	$ (13,461)	$ 887	$ (27,595)
Net (loss) income per share attributable to common stockholders			
Basic	$ (12.22)	$ 0.77	$ (23.05)
Diluted	$ (12.22)	$ 0.72	$ (23.05)
Weighted-average shares used to compute net (loss) income per share attributable to common stockholders:			
Basic	1,102	1,152	1,197
Diluted	1,102	1,904	1,197
Pro forma basic and diluted loss per common share (unaudited)			$ (2.50)
Shares used to compute pro forma basic and diluted loss per common share (unaudited)			11,021

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

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FIVE PRIME THERAPEUTICS, INC.

Statements of Comprehensive (Loss) Income

(In thousands)

	YEAR ENDED DECEMBER 31		
	2010	**2011**	**2012**
Net (loss) income	$ (13,461)	$ 19,710	$ (27,595)
Other comprehensive income (loss):			
Net unrealized (loss) gain on marketable securities		10	(3)
Comprehensive (loss) income	$ (13,461)	$ 19,720	$ (27,598)

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

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FIVE PRIME THERAPEUTICS, INC.

Statement of Convertible Preferred Stock and Stockholders Deficit

(In thousands)

	CONVERTIBLE PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED OTHER COMPREHENSIVE INCOME	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS DEFICIT
	SHARES	AMOUNT	SHARES	AMOUNT				
Balances at December 31, 2009	9,217,869	$ 125,004	1,073,179	$ 1	$ 850	$	$ (101,356)	$ (100,505)
Issuance of Series A2 convertible preferred stock for cash at $22.76 per share, net of issuance costs of $49 and a fair value adjustment of $2,992	329,597	4,459						
Issuance of common stock at $1.23 $7.14 per share upon exercise of stock options for cash			62,450		111			111
Stock-based compensation expense related to employee and director option grants					1,045			1,045
Nonemployee stock-based compensation expense					18			18
Net loss							(13,461)	(13,461)
Balances at December 31, 2010	9,547,466	129,463	1,135,629	1	2,024		(114,817)	(112,792)
Issuance of common stock at $1.23 $7.14 per share upon exercise of stock options for cash			26,152		39			39
Stock-based compensation expense related to employee and director option grants					2,850			2,850
Nonemployee stock-based compensation expense					77			77
Other comprehensive income						10		10
Net income							19,710	19,710
Balances at December 31, 2011	9,547,466	129,463	1,161,781	1	4,990	10	(95,107)	(90,106)
Issuance of Series A3 convertible preferred stock for cash at $26.20 per share, net of issuance costs of $35 and a fair value adjustment of $3,146	381,693	6,819						
Issuance of common stock at $1.23 $6.89 per share upon exercise of stock options for cash			64,208		105			105
Stock-based compensation expense related to employee and director option grants					1,655			1,655
Nonemployee stock-based compensation expense					66			66
Other comprehensive loss						(3)		(3)
Net loss							(27,595)	(27,595)
Balances at December 31, 2012	9,929,159	$ 136,282	1,225,989	$ 1	$ 6,816	$ 7	$ (122,702)	$ (115,878)

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

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FIVE PRIME THERAPEUTICS, INC.

Statements of Cash Flows

(In thousands)

	YEAR ENDED DECEMBER 31		
	2010	**2011**	**2012**
Operating activities			
Net (loss) income	$ (13,461)	$ 19,710	$ (27,595)
Adjustments to reconcile net (loss) income to net cash provided by (used in) operating activities:			
Depreciation and amortization	1,210	1,631	1,643
(Gain) loss on disposal of property and equipment	44	2	(5)
Stock-based compensation expense	1,063	2,927	1,721
Amortization of premium on marketable securities	574	892	538
Revaluation of preferred stock warrant liability	(44)	60	(119)
Changes in operating assets and liabilities:			
Receivable from collaborative partners		(846)	449
Prepaid, other current assets, and other long-term assets	2	(313)	372
Accounts payable	1,264	285	18
Accrued personnel-related expenses	374	656	(19)
Payable to collaborative partner		3,000	(3,000)
Deferred revenue	202	(5,188)	7,379
Deferred rent	1,251	696	457
Other accrued liabilities and other long-term liabilities	(303)	(225)	(236)
Net cash provided by (used in) operating activities	(7,824)	23,287	(18,397)
Investing activities			
Purchases of marketable securities	(43,387)	(71,773)	(45,419)
Maturities of marketable securities	50,000	45,738	64,636
Purchases of property and equipment	(3,319)	(970)	(737)
Restricted cash			38
Proceeds received from lease incentives	576		
Proceeds from disposal of property and equipment	6		
Net cash provided by (used in) investing activities	3,876	(27,005)	18,518
Financing activities			
Proceeds from issuances of convertible preferred stock (net of issuance costs)	4,459		6,819
Proceeds from issuances of common stock	111	39	105
Payments under capital lease obligation	(6)	(13)	(15)
Net cash provided by financing activities	4,564	26	6,909
Net increase (decrease) in cash and cash equivalents	616	(3,692)	7,030
Cash and cash equivalents at beginning of year	7,437	8,053	4,361
Cash and cash equivalents at end of year	$ 8,053	$ 4,361	$ 11,391
Supplemental Schedule of Noncash Investing Activities			

Capitalization of leasehold improvement through non-cash lease incentive	$ 1,161	$	$

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

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements

December 31, 2012

1. Organization and Summary of Significant Accounting Policies

Five Prime Therapeutics, Inc. (we, us, our, or the Company) is a clinical-stage biotechnology company focused on discovering and developing novel protein therapeutics. Protein therapeutics are antibodies or drugs developed from extracellular proteins or protein fragments that block disease processes, including cancer and inflammatory diseases. We were incorporated in December 2001 in Delaware. Our operations are based in South San Francisco, California and we operate in one segment.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ materially from those estimates.

Subsequent Events

Except as noted in Note 12, we have evaluated subsequent events and transactions for potential recognition or disclosure in the financial statements through June 14, 2013, the day the financial statements were available for issuance.

Cash and Cash Equivalents

We consider all highly liquid investments purchased with original maturities of three months or less at the date of purchase to be cash equivalents. Cash equivalents are stated at fair value.

Marketable Securities

All marketable securities have been classified as available for sale and are carried at fair value, based upon quoted market prices. We consider our available-for-sale portfolio as available for use in current operations. Accordingly, we may classify certain investments as short-term marketable securities, even though the stated maturity date may be one year or more beyond the current balance sheet date. Unrealized gains and losses, net of any related tax effects, are excluded from earnings and are included in other comprehensive income and reported as a separate component of stockholders deficit until realized. Realized gains and losses and declines in value judged to be other than temporary, if any, on available-for-sale securities are included in other income (expense), net. The cost of securities sold is based on the specific-identification method. The amortized cost of securities is adjusted for amortization of premiums and accretion of discounts to maturity. Interest on short-term investments is included in interest income. In accordance with our investment policy, management invests to diversify credit risk and only invests in debt securities with high credit quality, including U.S. government securities, and does not invest in mortgage-backed securities or mortgage loans.

We periodically evaluate whether declines in the fair value of our investments below their cost are other than temporary. The evaluation includes consideration of the cause of the impairment, including the creditworthiness of the security issuers, the number of securities in an unrealized loss position, the severity and duration of the unrealized losses, whether we have the intent to sell the securities, and whether it is more likely than not that we will be required to sell the securities before the recovery of their amortized cost basis. If we determine that the decline in fair value of an investment is below its accounting basis and this decline is other than temporary, we would reduce the carrying value of the security we hold and record a loss for the amount of such decline. We have not recorded any realized losses or declines in value judged to be other than temporary on our investments in debt securities.

Restricted Cash

We had a certificate of deposit that served collateral under a revolving credit agreement. Amounts related to the certificate of deposit were reported as short-term restricted cash and totaled $38,000 at December 31, 2011. In March 2012, we terminated this revolving credit agreement, and the certificate of deposit was refunded to us in 2012.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

1. Organization and Summary of Significant Accounting Policies (continued)

Concentrations of Credit Risk

Financial instruments that potentially subject us to significant concentrations of credit risk consist primarily of cash and cash equivalents and marketable securities. Cash and cash equivalents and marketable securities are invested through banks and other financial institutions in the United States. Such deposits in the United States may be in excess of insured limits.

Fair Value of Financial Instruments

We determine the fair value of financial and nonfinancial assets and liabilities using the fair value hierarchy, which describes three levels of inputs that may be used to measure fair value, as follows:

Level 1 Quoted prices in active markets for identical assets or liabilities;

Level 2 Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. For our marketable securities, we review trading activity and pricing as of the measurement date. When sufficient quoted pricing for identical securities is not available, we use market pricing and other observable market inputs for similar securities obtained from various third-party data providers. These inputs either represent quoted prices for similar assets in active markets or have been derived from observable market data; and

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Level 1 securities consist of highly liquid money market funds and U.S. Treasury securities. The fair value of Level 1 assets has been determined using quoted prices in active markets for identical assets. Level 2 securities consist of corporate debt securities and U.S. government agencies securities and were measured at fair value using Level 2 inputs. We review trading activity and pricing for these investments as of each measurement date. Level 2 inputs, obtained from various third-party data providers, represent quoted prices for similar assets in active markets, were derived from observable market data, or, if not directly observable, were derived from or corroborated by other observable market data. There were no transfers between Level 1 and Level 2 securities in the periods presented.

In certain cases where there is limited activity or less transparency around inputs to valuation, securities are classified as Level 3 within the valuation hierarchy. The Level 3 liability that is measured at estimated fair value on a recurring basis consists of the preferred stock warrant liability. The estimated fair value of the outstanding preferred stock warrant liability is measured using the Black-Scholes option-pricing model. Inputs used to determine estimated fair value include the estimated fair value of the underlying stock at the valuation measurement date, the remaining contractual term of the warrants, risk-free interest rates, expected dividends, and the expected volatility of the price of the underlying stock.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

1. Organization and Summary of Significant Accounting Policies (continued)

The following table summarizes, for assets and the liability recorded at fair value, the respective fair value and the classification by level of input within the fair value hierarchy defined above (in thousands):

	DECEMBER 31, 2011			
		BASIS OF FAIR VALUE MEASUREMENTS		
	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Assets				
Money market funds	$ 1,358	$ 1,358	$	$
U.S. Treasury securities	18,305	18,305		
U.S. government agency securities	12,510		12,510	
Corporate debt securities[1]	15,567		15,567	
Total cash equivalents and marketable securities	$ 47,740	$ 19,663	$ 28,077	$
Liability				
Preferred stock warrant liability	$ 682	$	$	$ 682

[1] All of our corporate debt securities were fully FDIC insured under the Temporary Liquidity Guarantee Program.

	DECEMBER 31, 2012			
		BASIS OF FAIR VALUE MEASUREMENTS		
	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Assets				
Money market funds	$ 6,910	$ 6,910	$	$
U.S. Treasury securities	3,577	3,577		

U.S. government agency securities	23,047		23,047	
Total cash equivalents and marketable securities	$ 33,534	$ 10,487	$ 23,047	$
Liability				
Preferred stock warrant liability	$ 563	$	$	$ 563

The change in the estimated fair value of the preferred stock warrant liability is summarized below (in thousands):

	YEARS ENDED DECEMBER 31		
	2010	2011	2012
Balance, beginning of year	$ 666	$ 622	$ 682
Change in fair value recorded in other income (expense), net	(44)	60	(119)
Balance, end of year	$ 622	$ 682	$ 563

Property and Equipment

Property and equipment are stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets, ranging from three to five years. Leasehold improvements are amortized over the shorter of their estimated useful lives or the related lease term.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

1. Organization and Summary of Significant Accounting Policies (continued)

Impairment of Long-Lived Assets

Long-lived assets include property and equipment. The carrying value of long-lived assets is reviewed for impairment whenever events or changes in circumstances indicate that the assets may not be recoverable. An impairment loss is recognized when the total estimated future cash flows expected to result from the use of the asset and its eventual disposition are less than the carrying amount. Through December 31, 2012, there have been no such impairment losses.

Preferred Stock Warrant Liability

Freestanding warrants for shares that are either putable or redeemable are classified as liabilities on the balance sheet at fair value. Therefore, the freestanding warrants that give the holders the right to purchase our convertible preferred stock are liabilities that are recorded at estimated fair value. At the end of each reporting period, changes in fair value during the period are recorded as a component of other income (expense), net.

We will continue to adjust the liability for changes in the estimated fair value of the warrants until the earlier of the exercise or expiration of the warrants to purchase shares of convertible preferred stock or the completion of a liquidation event, including the completion of an initial public offering, at which time the liabilities would be reclassified to stockholders deficit.

Revenue Recognition

We recognize revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; transfer of technology has been completed or services have been rendered; our price to the customer is fixed or determinable and collectability is reasonably assured.

The terms of our collaborative research and development agreements include nonrefundable upfront and license fees, research funding, milestone and other contingent payments to us for the achievement of defined collaboration objectives and certain preclinical, clinical, regulatory and sales-based events, as well as royalties on sales of any commercialized products.

Multiple-Element Revenue Arrangements. Our collaborations primarily represent multiple-element revenue arrangements. To account for these transactions, we determine the elements, or deliverables, included in the arrangement and determine which deliverables are separable for accounting purposes. We consider delivered items to be separable if the delivered items have stand-alone value to the customer. If the delivered items are separable, we allocate arrangement consideration to the various elements based on each element s relative selling price. The identification of individual elements in a multiple-element arrangement and the estimation of the selling price of each element involve significant judgment, including consideration as to whether each delivered element has standalone value to the customer. We determine the estimated selling price for deliverables within each agreement using vendor-specific objective evidence (VSOE) of selling price, if available, or third party evidence of selling price if VSOE is not available, or our best estimate of selling price, if neither VSOE nor third party evidence is available. Determining the best estimate of selling price for a deliverable requires significant judgment. We use our best estimate of selling price to estimate the selling price for licenses to our proprietary technology, since we do not have VSOE or third party evidence of selling price for these deliverables.

We recognize consideration allocated to an individual element when all other revenue recognition criteria are met for that element. Our multiple-element revenue arrangements generally include the following:

- **Exclusive Licenses.** The deliverables under our collaboration agreements generally include exclusive licenses to discover, develop, manufacture and commercialize compounds with respect to one or more specified targets. To account for this element of the

arrangement, we evaluate whether the exclusive license has standalone value apart from the undelivered elements to the collaboration partner based on the consideration of the relevant facts and circumstances of each arrangement, including the research and development capabilities of the collaboration partner and other market participants. We recognize arrangement consideration allocated to licenses upon delivery of the license, if facts and circumstances indicate that the

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

1. Organization and Summary of Significant Accounting Policies (continued)

license has standalone value apart from the undelivered elements, which generally include research and development services. If facts and circumstances indicate that the delivered license does not have standalone value from the undelivered elements, we recognize the revenue as a combined unit of accounting.

We have determined that some of our exclusive licenses lack standalone value apart from the related research and development services. In those circumstances we recognize collaboration revenue from non-refundable exclusive license fees in the same manner as the undelivered item(s), which is generally the period over which we provide the research and development services.

- **Research and Development Services.** The deliverables under our collaboration and license agreements generally include deliverables related to research and development services we perform on behalf of the collaboration partner. As the provision of research and development services is a part of our central operations and we are principally responsible for the performance of these services under the agreements, we recognize revenue on a gross basis for research and development services as we perform those services. Additionally, we recognize research funding related to collaborative research and development efforts as revenue as we perform or deliver the related services in accordance with contract terms as long as we will receive payment for such services upon standard payment terms.

Milestone Revenue. Our collaboration and license agreements generally include contingent payments and milestone payments related to specified research, development and regulatory milestones and sales-based milestones. Research, development and regulatory contingent payments and milestone payments are typically payable under our collaborations when our collaborator claims or selects a target, or initiates or advances a covered product candidate in preclinical or clinical development, upon submission for marketing approval of a covered product with regulatory authorities, upon receipt of actual marketing approvals of a covered product or for additional indications, or upon the first commercial sale of a covered product. Sales-based milestones are typically payable when annual sales of a covered product reach specified levels.

At the inception of each arrangement that includes milestone payments, we evaluate whether each milestone is substantive and at risk to both parties on the basis of the contingent nature of the milestone. We evaluate factors such as the scientific, regulatory, commercial and other risks that we must overcome to achieve the respective milestone, the level of effort and investment required to achieve the respective milestone and whether the milestone consideration is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment.

We have elected to adopt the Financial Accounting Standards Board Accounting Standards Update 2010-17, *Revenue Recognition Milestone Method*, such that we recognize any payment that is contingent upon the achievement of a substantive milestone entirely in the period in which the milestone is achieved. A milestone is defined as an event that can only be achieved based in whole or in part on either our performance or the occurrence of a specific outcome resulting from our performance for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved. Therefore, a milestone does not include events for which occurrence is contingent solely on the performance of a collaborative partner. To be substantive, a milestone must meet all the following criteria: the consideration receivable upon the achievement of the milestone is commensurate with either our performance to achieve the milestone or the enhancement of value of delivered items as a result of a specific outcome resulting from our performance to achieve the milestone, the consideration relates solely to past performance, and the consideration is reasonable relative to all of the deliverables and payment terms in the arrangement.

Research and Development Expenses

Research and development expenses consist of costs we incur for our own and for sponsored and collaborative research and development activities. Expenses we incur related to collaborative research and development agreements approximate the revenue recognized under these agreements. Research and development costs are expensed as incurred. Research and development costs consist of salaries and benefits, including associated stock-based compensation, laboratory supplies and facility costs, as well as fees paid to other entities that conduct certain

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

1. Organization and Summary of Significant Accounting Policies (continued)

research and development activities on our behalf. We estimate preclinical study and clinical trial expenses based on the services performed pursuant to contracts with research institutions and clinical research organizations that conduct and manage preclinical studies and clinical trials on our behalf based on actual time and expenses incurred by them. Further, we accrue expenses related to clinical trials based on the level of patient enrollment and activity according to the related agreement. We monitor patient enrollment levels and related activity to the extent reasonably possible and adjust estimates accordingly.

We expense payments for the acquisition and development of technology as research and development costs if, at the time of payment: the technology is under development; is not approved by the U.S. Food and Drug Administration or other regulatory agencies for marketing; has not reached technical feasibility; or otherwise has no foreseeable alternative future use.

Stock-Based Compensation

We recognize compensation expense using a fair-value-based method for costs related to all share-based payments, including stock options. Stock-based compensation cost related to employees and directors is measured at the grant date, based on the fair-value-based measurement of the award estimated using the Black-Scholes method, and is recognized as expense over the requisite service period on a straight-line basis. We are required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. We use historical data to estimate prevesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. We recorded stock-based compensation expense for stock-based awards to employees and directors of approximately $1,045,000, $2,850,000 and $1,655,000 for the years ended December 31, 2010, 2011 and 2012, respectively.

Options granted to individual service providers who are not employees or directors are accounted for at estimated fair value using the Black-Scholes option-pricing method and are subject to periodic remeasurement over the period during which the services are rendered. Stock-based compensation expense related to options granted to individual service providers who are not employees or directors was approximately $18,000, $77,000 and $66,000 for the years ended December 31, 2010, 2011 and 2012, respectively.

Income Taxes

We account for income taxes using the liability method, under which deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. Valuation allowances are provided when the expected realization of the deferred tax assets does not meet the more-likely-than-not criteria. We are required to determine whether it is more likely than not that a tax position will be sustained upon examination by the appropriate taxing authorities before any part of the benefit can be recorded in the financial statements. It is our practice to recognize interest and penalties related to unrecognized tax benefits, if any, as a component of income tax expense.

Net (Loss) Income Per Share and Pro Forma Net (Loss) Income Per Share

We compute net (loss) income per share of common stock using the two-class method required for participating securities. We consider all series of our convertible preferred stock to be participating securities. In accordance with the two-class method, earnings allocated to these participating securities, which include participation rights in undistributed earnings, are subtracted from net income to determine total undistributed earnings to be allocated to common stockholders.

Basic net (loss) income per common share is computed by dividing net (loss) income attributable to common stockholders by the weighted-average number of common shares outstanding during the period. All participating securities are excluded from basic weighted-average common shares outstanding. In computing diluted net (loss) income attributable to common stockholders, undistributed earnings are re-allocated to reflect the potential impact of dilutive securities, including stock options and warrants. Diluted net (loss) income per share attributable to

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

1. Organization and Summary of Significant Accounting Policies (continued)

common stockholders is computed by dividing net (loss) income attributable to common stockholders by the weighted-average number of common equivalent shares outstanding for the period. Diluted net (loss) income per share attributable to common stockholders includes any dilutive effect from outstanding stock options and warrants using the treasury stock method.

The following common stock issuable upon the conversion or exercise of dilutive securities has been excluded from the diluted net (loss) income per share attributable to common stockholders calculation because their effect would have been antidilutive for the periods presented:

(Shares in thousands)	YEARS ENDED DECEMBER 31,		
	2010	2011	2012
Convertible preferred stock	9,547		9,929
Options to purchase common stock	1,997	551	2,545
Warrants to purchase convertible preferred stock	88	88	84
	11,632	639	12,558

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

1. Organization and Summary of Significant Accounting Policies (continued)

The unaudited pro forma basic and diluted (loss) income per share calculation assumes the conversion of all outstanding shares of convertible preferred stock into common stock using the as-if converted method, as if such conversion had occurred as of January 1, 2012 or the original issuance date, if later.

(in thousands, except per share data)	YEARS ENDED DECEMBER 31, 2010	2011	2012
Basic			
Numerator:			
Net (loss) income	$ (13,461)	$ 19,710	$ (27,595)
Net income attributable to participating securities		(18,823)	
Net (loss) income attributable to common stockholders for basic net (loss) income per share	$ (13,461)	$ 887	$ (27,595)
Denominator:			
Weighted-average common shares outstanding	1,102	1,152	1,197
Basic net (loss) income per common share	$ (12.22)	$ 0.77	$ (23.05)
Diluted			
Numerator:			
Net (loss) income attributable to common stockholders for basic net (loss) income per share	$ (13,461)	$ 887	$ (27,595)
Reallocation of net (loss) income attributable to participating securities		483	
Net (loss) income attributable to common stockholders for diluted net (loss) income per share	$ (13,461)	$ 1,370	$ (27,595)
Denominator:			
Weighted-average number of common shares outstanding used in computing basic net (loss) income per common share	1,102	1,152	1,197
Dilutive effect of:			
Stock options		752	
Weighted-average number of common shares outstanding used in computing diluted net (loss) income per common share	1,102	1,904	1,197
Diluted net (loss) income per common share	$ (12.22)	$ 0.72	$ (23.05)

Pro Forma	
Weighted-average shares used in the computation of basic net loss per common share above	1,197
Pro forma adjustment to reflect the assumed conversion of convertible preferred stock (unaudited)	9,824
Shares used to compute pro forma basic and diluted net loss per common share (unaudited)	11,021
Pro forma basic and diluted net loss per common share (unaudited)	$ (2.50)

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

2. Cash Equivalents and Marketable Securities

The following is a summary of our cash equivalents and marketable securities at December 31, 2011 and 2012:

(in thousands)	DECEMBER 31, 2011			
	AMORTIZED COST BASIS	UNREALIZED GAINS	UNREALIZED LOSSES	ESTIMATED FAIR VALUE
Money market funds	$ 1,358	$	$	$ 1,358
U.S. Treasury securities	18,301	4		18,305
U.S. government agency securities	12,509	2	(1)	12,510
Corporate debt securities	15,562	6	(1)	15,567
	47,730	12	(2)	47,740
Less: cash equivalents	(1,358)			(1,358)
Total marketable securities	$ 46,372	$ 12	$ (2)	$ 46,382

(in thousands)	DECEMBER 31, 2012			
	AMORTIZED COST BASIS	UNREALIZED GAINS	UNREALIZED LOSSES	ESTIMATED FAIR VALUE
Money market funds	$ 6,910	$	$	$ 6,910
U.S. Treasury securities	3,576	1		3,577
U.S. government agency securities	23,041	6		23,047
	33,527	7		33,534
Less: cash equivalents	(6,910)			(6,910)
Total marketable securities	$ 26,617	$ 7	$	$ 26,624

As of December 31, 2011 and 2012, the contractual maturities of our marketable securities were less than one year. There were no sales of available-for-sale securities in any of the periods presented.

3. Property and Equipment

Property and equipment consist of the following:

(in thousands)	**DECEMBER 31**	
	2011	**2012**
Computer equipment and software	$ 835	$ 1,145
Furniture and fixtures	670	690
Laboratory equipment	8,716	9,112
Leasehold improvements	2,135	2,135
	12,356	13,082
Less: accumulated depreciation and amortization	(6,824)	(8,451)
Property and equipment, net	$ 5,532	$ 4,631

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

4. Preferred Stock Warrant Liability

In December 2002, pursuant to the terms of an equipment loan and security agreement, we issued a fully exercisable warrant to the lender for the purchase of 3,902 shares of Series A convertible preferred stock at an exercise price of $12.30 per share. The warrant was exercisable through December 2012, subject to certain conditions. The warrant expired unexercised in December 2012.

In June 2004, pursuant to the terms of an equipment loan and security agreement, we issued a fully exercisable warrant to the lender for the purchase of 2,304 shares of Series A convertible preferred stock at an exercise price of $12.30 per share. The warrant is exercisable through January 2014, subject to certain conditions.

In connection with the issuance of Series A convertible preferred stock in January and February 2005, we issued a warrant to purchase 81,300 shares of Series A convertible preferred stock at $12.30 per share to our preferred stock placement agent. During 2007, the warrant was canceled and replaced by the issuance of two warrants for 44,715 and 36,585 shares; all other terms remained unchanged. The warrants will either automatically exercise on a net issuance basis or will expire upon completion of this offering.

All issued and unexpired warrants were unexercised as of December 31, 2012. The following table sets forth a summary of all outstanding warrants and the estimated fair value for each of the warrants as of December 31, 2011 and 2012 (in thousands, except share and per share amounts):

STOCK	EXPIRATION DATE	EXERCISE PRICE PER SHARE	SHARES AS OF DECEMBER 31, 2011	SHARES AS OF DECEMBER 31, 2012	ESTIMATED FAIR VALUE AS OF DECEMBER 31, 2011	ESTIMATED FAIR VALUE AS OF DECEMBER 31, 2012
Series A convertible preferred stock	December 2012	$ 12.30	3,902		$ 20	$
Series A convertible preferred stock	January 2014	$ 12.30	2,304	2,304	16	12
Series A convertible preferred stock	Earlier of: (i) April 2015 or (ii) the closing of an initial public offering of our common stock	$ 12.30	81,300	81,300	646	551
			87,506	83,604	$ 682	$ 563

The fair value of the above warrants was determined using the Black-Scholes valuation model with the following assumptions:

	DECEMBER 31	
	2011	2012
Risk-free interest rate	0.1% 0.4%	0.2% 0.3%
Remaining contractual term (years)	3.0	2.1
Volatility	85.0%	85.0%

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

5. Commitments

In March 2010, we entered into office and laboratory facility lease agreements for a facility located in South San Francisco, California. These leases enable us to utilize the facility through December 31, 2017, with an option to extend the term for an additional three years. The leases require us to pay rent as well as additional amounts for operating expenses and maintenance.

The minimum annual rent under the leases is subject to increases based on stated rental adjustment terms. For financial reporting purposes, rent expense is recognized on a straight-line basis over the term of the leases. Accordingly, rent expense recognized in excess of rent paid is reflected as deferred rent. Deferred rent totaled $2.0 million and $2.4 million at December 31, 2011 and 2012, respectively. In addition, the leases contain a $1.7 million incentive in the form of reimbursement or payments from the landlord for a portion of the costs of leasehold improvements we make to the facility. We made these improvements and received the benefit of the $1.7 million incentive in 2010. The assets purchased with the incentive are included in property and equipment, net in the accompanying balance sheets as of December 31, 2011 and 2012, respectively. The incentive is being recognized as a reduction of rental expense on a straight-line basis over the term of the underlying leases. The unamortized leasehold improvement incentive totaled $1.3 million and $1.1 million as of December 31, 2011 and 2012, respectively, of which $1.1 million and $0.9 million is included in other long-term liabilities in the accompanying balance sheets as of December 31, 2011 and 2012, respectively.

Rent expense for each of the years ended December 31, 2011 and 2012 was $1.9 million. Rent expense for the year ended December 31, 2010 was $3.2 million. The estimated future minimum commitments under these noncancelable operating leases are as follows:

(in thousands)	
Year ending December 31:	
2013	$ 1,915
2014	2,710
2015	2,794
2016	2,877
2017	2,960
Total estimated minimum payments	$ 13,256

6. Convertible Preferred Stock

As of December 31, 2012, we had an aggregate of 123,205,808 authorized shares of convertible preferred stock, of which 85,676,349 shares were designated as Series A convertible preferred stock, 7,006,369 shares were designated as Series A-1 convertible preferred stock, 25,828,254 shares were designated as Series A-2 convertible preferred stock, and 4,694,836 shares were designated as Series A-3 convertible preferred stock. Holders of shares of Series A, Series A-1, Series A-2, and Series A-3 convertible preferred stock (collectively, the convertible preferred stock) have the same rights with respect to conversion and voting, except that the holders of shares of Series A convertible preferred stock, voting as a separate class, are entitled to elect five members of our Board of Directors at each meeting or pursuant to each consent of our stockholders for the election of directors, and to remove from office such directors and to fill any vacancy caused by the resignation, death or

removal of such directors.

Dividends and Distributions

The holders of the outstanding shares of convertible preferred stock as of December 31, 2012 are entitled to receive, when and if declared by our Board of Directors, a noncumulative dividend at an annual rate of 8% of $12.30, $19.31, $22.76, and $26.20 per share for the Series A, Series A-1, Series A-2 and Series A-3 convertible preferred stock, respectively. Such dividend is payable in preference to any dividends payable to holders of shares of common stock declared by our Board of Directors. No dividends have been declared to date.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

6. Convertible Preferred Stock (continued)

Conversion and Voting Rights

As of December 31, 2012, shares of convertible preferred stock are convertible at the option of the holder at any time into shares of common stock on a one-for-one basis, subject to certain adjustments. Additionally, each share of convertible preferred stock automatically converts into a share of common stock in the event of an initial public offering of our common stock in which gross offering proceeds exceed $25 million or upon the affirmative vote of the holders of a majority of the outstanding shares of convertible preferred stock. The holders of each share of convertible preferred stock have one vote for each share of common stock into which such convertible preferred stock may be converted.

Liquidation Rights

As of December 31, 2012, upon our liquidation or dissolution or in the event that we are a party to an acquisition or asset transfer as defined in our Certificate of Incorporation, the holders of shares of convertible preferred stock would be entitled to receive, prior and in preference to any distribution of any of our assets or surplus funds to the holders of shares of common stock, an amount equal to $12.30, $19.31, $22.76, and $26.20 per share for the Series A, Series A-1, Series A-2 and Series A-3 convertible preferred stock, respectively, subject to certain adjustments (each, a Liquidation Preference). After payment of the full Liquidation Preferences, the remaining assets available for distribution to stockholders would be distributed to the holders of shares of common stock. If, upon any such liquidation, dissolution, acquisition or asset transfer, our assets (or the consideration received in such transaction) are insufficient to pay the full Liquidation Preferences, then such assets (or consideration) would be distributed among the holders of shares of convertible preferred stock ratably in proportion to the full amounts to which they would otherwise be entitled.

The term acquisition is defined in our Certificate of Incorporation to mean any consolidation or merger of the Company with or into any other corporation or other entity or person, or any other corporate reorganization, in which our stockholders immediately prior to such consolidation, merger or reorganization own less than 50% of the voting power of the surviving entity immediately after such consolidation, merger or reorganization; or any transaction or series of related transactions to which we are a party in which in excess of 50% of our voting power is transferred, except for any consolidation or merger effected exclusively to change our domicile, or any transaction or series of transactions principally for *bona fide* equity financing purposes in which cash is received by us or our indebtedness is canceled or converted, or a combination thereof. The term asset transfer is defined in our Certificate of Incorporation to mean a sale, lease, or other disposition of all or substantially all of our assets.

Because a majority of our outstanding stock is in the control of investors who control our Board of Directors, a hostile takeover or other sale could occur outside our control and thereby trigger an acquisition and payment of Liquidation Preferences. Accordingly, we have classified convertible preferred stock outside of stockholders deficit for all periods presented.

We have elected not to adjust the carrying values of the convertible preferred stock to the Liquidation Preferences of such shares because it is uncertain whether or when an event would occur that would obligate us to pay the Liquidation Preferences to holders of shares of convertible preferred stock. Subsequent adjustments to increase the carrying values to the Liquidation Preferences will be made if and when it becomes probable that an event would occur that would obligate us to pay the Liquidation Preferences to holders of shares of convertible preferred stock.

Stock Option Plans

In March 2002, we established the 2002 Equity Incentive Plan (the 2002 Plan). The 2002 Plan provided for the granting of stock-based compensation awards, including incentive and nonstatutory stock options, to our employees, officers, directors and consultants.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

7. Stockholders Deficit

In October 2010, our stockholders approved the 2010 Equity Incentive Plan (the 2010 Plan). Upon approval of the 2010 Plan, shares in the 2002 Plan that had been reserved but not issued were reserved for issuance under the 2010 Plan. Since such approval, shares that would otherwise return to the 2002 Plan as a result of option cancellations or expirations are rolled into and are reserved for issuance under the 2010 Plan. No additional grants will be made under the 2002 Plan.

In addition, the number of shares of common stock available for issuance under the 2010 Plan will automatically increase on January 1 of each year for a period of ten years commencing on January 1, 2011, and ending on January 1, 2020, in an amount equal to 4% of the total number of shares of common stock outstanding (assuming the conversion to common stock of all convertible preferred stock) on December 31 of the preceding calendar year unless our Board of Directors acts prior to the first day of any calendar year to provide that there shall be no increase in the share reserve for such calendar year or that the increase in the share reserve for such calendar year shall be for a number of shares of common stock less than 4% of the total number of shares of common stock outstanding (assuming the conversion to common stock of all convertible preferred stock) on December 31 of the relevant calendar year.

Incentive stock options may be granted with an exercise price of not less than estimated fair value, and nonstatutory stock options may be granted with an exercise price of not less than 85% of the estimated fair value of the common stock on the date of grant. Stock options granted to a stockholder owning more than 10% of our voting stock must have an exercise price of not less than 110% of the estimated fair value of the common stock on the date of grant. Our Board of Directors determines the estimated fair value of our common stock. Stock options are granted with terms of up to ten years and generally vest over a period of four years.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

7. Stockholders Deficit (continued)

The following table summarizes option activity under our stock plans and related information:

		OPTIONS OUTSTANDING	
	NUMBER OF SHARES AVAILABLE FOR GRANT	NUMBER OF SHARES	WEIGHTED-AVERAGE EXERCISE PRICE PER SHARE
Balance at December 31, 2009	495,732	1,716,654	$ 3.32
Options authorized	81,301		
Options granted	(382,746)	382,746	$ 6.89
Options exercised		(62,450)	$ 1.72
Options forfeited	19,097	(19,097)	$ 4.92
Options expired	21,340	(21,340)	$ 2.09
Balance at December 31, 2010	234,724	1,996,513	$ 4.06
Options authorized	427,328		
Options granted	(448,443)	448,443	$ 8.36
Options exercised		(26,152)	$ 1.48
Options forfeited	206,157	(206,157)	$ 5.04
Options expired	21,264	(21,264)	$ 3.57
Balance at December 31, 2011	441,030	2,191,383	$ 4.92
Options authorized	428,375		
Options granted	(526,134)	526,134	$ 5.78
Options exercised		(64,208)	$ 1.60
Options forfeited	32,611	(32,611)	$ 6.89
Options expired	75,467	(75,467)	$ 3.20
Balance at December 31, 2012	451,349	2,545,231	$ 5.17
Options exercisable		1,730,253	$ 4.43

As of December 31, 2012, options to purchase 2,504,448 shares of common stock were outstanding that are fully vested or expected to vest with a weighted-average exercise price of $5.17 per share and a weighted-average remaining contractual term of 6.6 years. As of December 31, 2012, the weighted-average remaining contractual term for options exercisable was 5.6 years. The aggregate intrinsic value of options outstanding was $2.7 million. The aggregate intrinsic value of options exercisable was $2.7 million. The aggregate intrinsic value was calculated as the difference between the exercise price of the options and the estimated fair value of $5.54 per share as of December 31, 2012.

Stock-Based Compensation

Effective March 2011, we amended the vesting conditions for two outstanding stock options with performance-based vesting criteria (the performance-based options). The original terms of the performance-based options provided that the options to two employees would partially vest in the event we enter into a definitive agreement for a strategic alliance or partnership with an upfront payment over $50 million. As amended, the terms of the performance-based options provide that the options would partially vest in the event we enter into one or more definitive agreements for strategic alliances or partnerships within a 12-month period with aggregate upfront payments over $50 million. As a result of the amendment, 80,649 unvested shares subject to the performance-based options vested and the modification resulted in total incremental stock-based compensation expense of $0.6 million that was recorded in 2011.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

7. Stockholders Deficit (continued)

In August 2011, we entered into a separation agreement with our former President and Chief Executive Officer (former CEO) pursuant to which (i) we accelerated the vesting of 50% of certain outstanding nonvested options held by the former CEO upon separation, which resulted in stock-based compensation of $0.5 million, and (ii) the post-termination exercise period for all of the former CEO s outstanding vested options were extended upon separation from 3 months to 18 months, which resulted in additional incremental stock-based compensation of $0.5 million.

Employee stock-based compensation expense recognized was calculated based on awards ultimately expected to vest and has been reduced for estimated forfeitures. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Total stock-based compensation expense recognized was as follows:

(in thousands)	YEARS ENDED DECEMBER 31		
	2010	2011	2012
Research and development	$ 483	$ 668	$ 705
General and administrative	580	2,259	1,016
Total	$ 1,063	$ 2,927	$ 1,721

The fair value of each stock option was estimated using the Black-Scholes option-pricing model based on the date of grant of such stock option with the following assumptions:

	YEARS ENDED DECEMBER 31,		
	2010	2011	2012
Expected term (years)	5.2-6.1	5.3-6.1	5.0-6.1
Expected volatility	80-85%	85%	85%
Risk-free interest rate	1.3-2.9%	1.3-2.6%	0.6-1.1%
Expected dividend yield	0%	0%	0%

The expected term of options granted represents the period of time that options granted are expected to be outstanding and was determined by calculating the midpoint between the date of vesting and the contractual life of each option. Volatility is based on the average historical volatility of a peer group of public companies over the past six years of trading. The peer group was selected on the basis of operational and economic similarity with our principal business operations. The risk-free interest rate for the expected term of the options is based on the U.S. Treasury yield curve with a maturity equal to the expected term of the option in effect at the time of grant. We have not paid, and do not anticipate paying, cash dividends on our shares of common stock; therefore, the expected dividend yield is zero.

The weighted-average grant-date fair value per share of stock options granted during the years ended December 31, 2010, 2011 and 2012, was $4.92, $6.03 and $4.06 per share, respectively. The total intrinsic value of options exercised during the years ended December 31, 2010, 2011 and 2012, was $303,000, $183,000 and 328,000, respectively. As of December 31, 2012, there was $3,476,000 of total unrecognized compensation expense related to nonvested employee and director stock options that is expected to be recognized over a weighted-average period of 2.6 years.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

8. Employee Benefit Plans

We sponsor a 401(k) plan that stipulates that eligible employees can elect to contribute to the 401(k) plan, subject to certain limitations, up to the lesser of the statutory maximum or 100% of eligible compensation on a pre-tax basis. Through December 2012, we have not elected to match employee contributions as permitted by the plan. We pay the administrative costs for the plan.

9. Collaborative Research and Development Agreements

Pfizer Inc.

In May 2008, we entered into a discovery research collaboration and license agreement with Pfizer Inc. (Pfizer). Under the terms of the agreement, we received an upfront technology access payment of $7.5 million in May 2008 and received a $7.5 million milestone payment in August 2008. In addition, Pfizer provided for research funding over the research program term, and we received $10.0 million and $3.8 million of such research funding in the years ended December 31, 2010 and 2011, respectively.

The $7.5 million upfront technology access payment was recorded as deferred revenue and was recognized over the three-year research period under the agreement. The $7.5 million milestone payment was determined to not represent a substantive, at-risk milestone at the time we entered into the collaboration and, therefore, was recognized over the three-year research period under the agreement.

In connection with the agreement, Pfizer purchased 1,538,123 shares of our Series A-2 convertible preferred stock at a price of $22.76 per share, resulting in net cash proceeds to us of $35.0 million. As a result of the purchase of shares of our Series A-2 convertible preferred stock, in May 2008, Pfizer became a related party to us. We determined that the purchase price of $22.76 per share exceeded the estimated fair value of the Series A-2 convertible preferred stock by $10.9 million and, therefore, recorded the $10.9 million as revenue over the three-year research period.

The agreement expired at the end of the research term in 2011. Total revenue recognized under this arrangement was $18.7 million and $7.2 million for the years ended December 31, 2010 and 2011, respectively.

Fast Forward LLC

In May 2010, we entered into a sponsored research agreement with Fast Forward LLC (Fast Forward), pursuant to which Fast Forward will fund the development of our preclinical-stage therapeutic candidate for treatment of multiple sclerosis. Under the agreement and subject to advancement of the therapeutic candidate, Fast Forward is obligated to pay us an aggregate amount of up to $1.0 million, of which $0.6 million was received in June 2010. Revenue will be recognized based on expenses incurred by us in the conduct of the research set forth in the agreement. Revenues attributable to research and development activities performed under the agreement were $0.1 million for each of the years ended December 31, 2010, 2011 and 2012. As of December 31, 2011 and 2012, we had deferred revenue relating to this research agreement of $0.4 million and $0.3 million, respectively. In addition, we are obligated to make certain contingent payments to Fast Forward, dependent solely on the results of the research and development having future economic benefit. Future contingent payments to Fast Forward consist of a $0.2 million milestone payment upon the administration of a certain compound to the first patient in a Phase III trial in multiple sclerosis and double-digit royalties, up to $2.8 million in the aggregate, based on net sales after commercialization in certain jurisdictions, if any, of such compounds.

The agreement will terminate upon the expiration of the royalty terms of any products that result from the collaboration. In addition, Fast Forward may terminate this agreement for certain scientific or commercial reasons with advance written notice, and either party may terminate this agreement for the other party s uncured material breach or bankruptcy.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

9. Collaborative Research and Development Agreements (continued)

GlaxoSmithKline

Muscle Disorders Discovery Collaboration

In July 2010, we entered into a research collaboration and license agreement with GlaxoSmithKline LLC (GSK US) to identify potential drug targets and drug candidates to treat skeletal muscle diseases. Under the terms of the agreement, we received an upfront technology access payment of $7.0 million in August 2010. The $7.0 million upfront technology access payment was recorded as deferred revenue and was being recognized over the initial three-year research period under the agreement. In addition, GSK US provides for research funding over the research program term.

In May 2011, we amended the agreement to expand the research plan in scope and duration to include an additional cell-based screen and an *in vivo* screen using our RIPPS technology. Under the amendment, GSK US agreed to provide an additional $6.3 million of research funding over a three-year research program term beginning on the date of the expansion. We received $0.6 million, $3.6 million and $4.2 million of research funding in the years ended December 31, 2010, 2011 and 2012, respectively, related to all research being performed under the GSK US collaboration. Due to this amendment, in May 2011 we revised our estimate of our substantive performance period under this collaboration to extend through the end of this additional research term and began recognizing the remaining unamortized portion of the upfront payment over this revised period into May 2014.

We are eligible to receive certain option and selection payments related to targets identified in the collaboration, payments for the achievement of certain development activities, and royalties on the sales of products related to targets GSK US selects for exclusive development, if any.

We are eligible to receive up to $1.8 million of preclinical milestone payments for each screening assay when a target is claimed or selected for further development. Substantive uncertainty exists as to whether any of these milestones will be achieved because of the numerous variables that may affect our ability to identify targets that GSK US would be interested in further evaluating or with respect to which GSK US would develop products. In accordance with ASU No. 2010-17, we concluded that these milestones under the agreement with GSK are substantive and will be accounted for under the milestone method of revenue recognition.

In accordance with ASU No. 2010-17, we determined that the remaining contingent payments under the agreement with GSK US do not constitute milestone payments and will not be accounted for under the milestone method of revenue recognition. The events leading to these payments under the agreement with GSK US do not meet the definition of a milestone under ASU 2010-17 because the achievement of these events is solely dependent on GSK US s performance. Any revenue from these contingent payments would be subject to an allocation of arrangement consideration and would be recognized over any remaining period of performance obligations, if any, relating to this arrangement. If there are no remaining performance obligations under the arrangement at the time the contingent payment is triggered, the contingent payment would be recognized as revenue in full upon the triggering event.

In connection with the agreement, GSK US purchased 329,597 shares of our Series A-2 convertible preferred stock at a price of $22.76 per share, resulting in net cash proceeds to us of $7.5 million. We determined that the purchase price of $22.76 per share exceeded the estimated fair value of the Series A-2 convertible preferred stock by $3.0 million and, therefore, recorded the $3.0 million as revenue in the same manner as the upfront technology access payment.

In December 2012, GSK US selected a protein for further evaluation. The related milestone payment of $0.3 million was recorded as accounts receivable as of December 31, 2012.

Total revenue recognized under this arrangement was $1.9 million, $5.2 million and $5.8 million for the years ended December 31, 2010, 2011 and 2012, respectively. As of December 31, 2011 and 2012, we had deferred revenue relating to this collaboration agreement of $7.0 million and $5.7 million, respectively.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

9. Collaborative Research and Development Agreements (continued)

The agreement will terminate upon the expiration of the royalty terms of any products that incorporate or target a protein exclusively licensed under the collaboration. In addition, GSK US may terminate this agreement at any time with advance written notice, and either party may terminate this agreement with written notice for the other party s material breach if such party fails to cure the breach or upon certain insolvency events.

Respiratory Diseases Discovery Collaboration

In April 2012, we entered into a research collaboration and license agreement with Glaxo Group Limited (GSK UK) to identify new therapeutic approaches to treat refractory asthma and chronic obstructive pulmonary disease (COPD) function with a particular focus on identifying novel protein therapeutics and antibody targets. We plan to conduct up to six customized cell-based screens of our protein library under this agreement. The four-year research term will end in April 2016. Under the terms of the agreement, GSK UK paid us an upfront technology access payment of $7.5 million in April 2012.

We applied ASU No. 2009-13, *Multiple-Deliverable Revenue Arrangements*, in evaluating the appropriate accounting for this agreement. In accordance with this guidance, we concluded that the arrangement should be accounted for as a single unit of accounting and that the arrangement consideration should be recognized in the same manner as the final deliverable, which is the research service. The $7.5 million upfront technology access payment was recorded as deferred revenue and is being recognized over the initial four-year research period under the agreement. In addition, GSK UK agreed to pay us $10.5 million of research funding over the research program term. We received $1.3 million of research funding in the year ended December 31, 2012, related to all research being performed under the GSK UK discovery collaboration.

We are eligible to receive certain option and selection payments, payments for the achievement of certain development activities, and royalties on the sales of products related to targets GSK UK selects for exclusive development, if any.

We are eligible to receive up to $1.8 million of preclinical milestone payments for each screen assay when a target is claimed or selected for further development. In addition, prior to the time GSK UK exercises its right to obtain an exclusive worldwide license to a protein target, we and GSK UK will discuss and agree on Track 1 Targets, which GSK UK will have sole responsibility for the further development and commercialization of products that incorporate or target the protein targets, and Track 2 Targets, which we will develop biologics that incorporate or target the protein targets through to clinical proof of mechanism in either a Phase 1 clinical trial or Phase 2 clinical trial. We and GSK UK will take into consideration each party s available resources and capabilities at the time in deciding which protein targets will be Track 1 Targets or Track 2 Targets, but subject to each party s general right to alternate in such selection with GSK UK have the right to first select. For each Track 2 Target, we are eligible to receive a $4.0 million milestone payment upon initiation of the first GLP toxicology study, a $6.5 million milestone payment upon the initiation of Phase 1 clinical trial and a $11.0 million milestone payment upon the initiation of Phase 2 clinical trial. We are also eligible to receive a $14.0 million option exercise milestone if GSK UK exercises its option to develop the Track 2 Target prior to the initiation of Phase 2 clinical trial or a $23.0 million option exercise milestone if GSK UK exercises after the initiation of Phase 2 clinical trial for the Track 2 Targets. Substantive uncertainty exists at the inception of the agreement as to whether any of these milestones will be achieved because of the numerous variables that may affect our ability to identify targets that GSK UK would be interested in further evaluating or with respect to which GSK UK would develop products. In accordance with ASU No. 2010-17, we concluded that these milestones under the agreement with GSK UK are substantive and will be accounted for under the milestone method of revenue recognition.

In accordance with ASU No. 2010-17, we determined that the remaining contingent payments under the agreement with GSK UK do not constitute milestone payments and will not be accounted for under the milestone method of revenue recognition. The events leading to these payments under the agreement with GSK UK do not meet the definition of a milestone under ASU 2010-17 because the achievement of these events is solely dependent on GSK UK s

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

9. Collaborative Research and Development Agreements (continued)

performance. Any revenue from these contingent payments would be subject to an allocation of arrangement consideration and would be recognized over any remaining period of performance obligations, if any, relating to this arrangement. If there are no remaining performance obligations under the arrangement at the time the contingent payment is triggered, the contingent payment would be recognized as revenue in full upon the triggering event.

In connection with the agreement, GSK UK purchased 381,693 shares of our Series A-3 convertible preferred stock at a price of $26.20 per share, resulting in net cash proceeds to us of $10.0 million. We determined that the purchase price of $26.20 per share exceeded the estimated fair value of the Series A-3 convertible preferred stock by $3.1 million and, therefore, recorded the $3.1 million as deferred revenue to be recognized initially over the four-year research period.

Total revenue recognized under this arrangement was $3.2 million for the year ended December 31, 2012. As of December 31, 2012, we had deferred revenue relating to this collaboration agreement of $8.8 million.

The agreement will terminate upon the expiration of the royalty terms of any products that incorporate or target a protein exclusively licensed under the collaboration. In addition, GSK UK may terminate this agreement at any time with advance written notice, and either party may terminate this agreement with written notice for the other party s material breach if such party fails to cure the breach or immediately in the case of failure to comply with certain anti-bribery and anti-corruption policies or upon certain insolvency events.

Human Genome Sciences, Inc.

In March 2011, we entered into a license and collaboration agreement with Human Genome Sciences, Inc. (HGS), which was acquired by GlaxoSmithKline (GSK) in 2012 and we refer to HGS as GSK-HGS. Pursuant to the agreement we granted HGS an exclusive license to develop and commercialize our FP-1039 product and other FGFR1 fusion proteins for multiple cancers in the United States, the European Union and Canada. Under the terms of the agreement, GSK-HGS paid us an upfront license fee of $50 million. We received full payment of the $50 million upfront license fee in March 2011. The agreement also calls for tiered double-digit percentage royalty payments on net sales. GSK-HGS, has exclusive rights to develop and commercialize FP-1039 for all indications in the United States, the European Union and Canada. We have an option to co-promote FP-1039 in the United States, and retain development and commercialization rights in territories outside the United States, the European Union and Canada.

We applied ASU No. 2009-13, *Multiple-Deliverable Revenue Arrangements*, in evaluating the appropriate accounting for this agreement. In accordance with this guidance, we identified the initial license, associated technology transfer and services for the conduct of the then-concluding FP-1039 Phase 1 clinical trial as substantive deliverables under this agreement. However, since all of the deliverables were fully delivered by December 31, 2011, the $50 million upfront license fee associated with the deliverables was entirely recognized as revenue in 2011.

Additionally, GSK-HGS is obligated to reimburse us for all future research and development costs associated with FP-1039 incurred by us in the conduct of research and development activities on behalf of GSK-HGS. At the time we entered into the FP-1039 license, we agreed to perform services for the conduct of the then-concluding Phase 1 clinical trial. We also elected to conduct a Phase 2 clinical trial of FP-1039 in endometrial cancer for which we were reimbursed by GSK-HGS. The Phase 2 clinical trial was terminated in January 2012 and we are no longer conducting any activities with respect to this trial. Additionally, GSK-HGS is obligated to pay us for the costs of other FP-1039 related research and development activities we elect to undertake on behalf of GSK-HGS. Revenue from GSK-HGS related to these development costs associated with FP-1039 is recognized as we incur these costs. For the years ended December 31, 2011 and 2012, we recognized $2.4 million and $0.9 million, respectively, in revenue from GSK-HGS related to development costs associated with FP-1039. As of December 31, 2011 and 2012, the receivable from GSK-HGS under the agreement related to such costs was $0.8 million and $0.1 million, respectively.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

9. Collaborative Research and Development Agreements (continued)

GSK-HGS is obligated to pay us certain amounts contingent upon the achievement of pre-specified development, regulatory and commercial criteria, which could total approximately $435 million. We determined that these contingent payments will not be accounted for under the milestone method of revenue recognition as the events that trigger these payments under the agreement with GSK-HGS do not meet the definition of a milestone under ASU 2010-17 because the achievement of these milestones is solely dependent on GSK-HGS s performance. Revenue from these contingent payments will be recognized if and when such payments become due, subject to satisfaction of all the criteria necessary to recognize revenue at that time, because we do not have any outstanding performance obligations under this arrangement.

The agreement will terminate upon the expiration of the royalty terms of any products that result from the collaboration. In addition, GSK-HGS may terminate this agreement at any time with advance written notice, and either party may terminate this agreement for the other party s material breach if such party fails to cure the breach or upon certain insolvency events.

10. Acquired Technologies

Galaxy Biotech, LLC

In December 2011, we entered into an exclusive license agreement with Galaxy Biotech, LLC (Galaxy) for the development, manufacturing, and commercialization of certain anti-FGFR2b (fibroblast growth factor receptor 2) monoclonal antibodies. Under the terms of the agreement, we agreed to pay Galaxy an upfront license payment of $3.0 million. The upfront payment was paid in two equal installments in January 2012 and July 2012. As we had full access to the technology and materials upon execution of the agreement, the lead compound is in an early stage of development, and the underlying technology has no alternative future uses, the entire upfront payment was recorded to research and development expenses in our statement of operations for the year ended December 31, 2011. We are also required to make additional payments based upon the achievement of certain intellectual property, development, regulatory, and commercial milestones, as well as royalties on future net sales of products resulting from development of this purchased technology, if any. As of December 31, 2011 and 2012, the payable due to Galaxy under the agreement was $3.0 million and zero, respectively.

11. Income Taxes

The components of the income tax benefit are as follows:

(in thousands)	YEARS ENDED DECEMBER 31,		
	2010	2011	2012
Current benefit from income taxes:			
Federal	$ 5	$	$
State			
Total current benefit from income taxes	5		
Deferred (benefit from) provision for income taxes:			
Federal			

State			
Total deferred tax (benefit from) provision for income taxes			
Benefit from income taxes	$ 5	$	$

No income tax benefit or expense was recorded for the years ended December 31, 2011 and 2012. We recorded an income tax benefit for the year ended December 31, 2010, of $5,000 related to an adjustment to the refund of research tax credits as provided by the Housing and Economic Recovery Act of 2009.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

11. Income Taxes (continued)

A reconciliation of the federal statutory income tax rate to our effective income tax rate is as follows:

(in thousands)	YEARS ENDED DECEMBER 31,		
	2010	2011	2012
Federal statutory income tax rate	$ (4,577)	$ 6,899	$ (9,658)
Nondeductible stock compensation	197	414	386
Nontaxable equity premiums	(1,374)	(825)	(452)
Deferred tax assets (utilized) not benefitted	5,751	(6,527)	9,750
Other permanent items	(2)	39	(26)
(Benefit) from income taxes	$ (5)	$	$

The tax effects of temporary differences and carryforwards that give rise to significant portions of the deferred tax assets consist of the following (in thousands):

	YEARS ENDED DECEMBER 31,		
	2010	2011	2012
Net operating loss carryforwards	$ 46,406	$ 37,905	$ 48,613
Research and development credit	6,346	5,218	5,372
Reserves and accruals	2,738	5,204	6,020
Total deferred tax assets	55,490	48,327	60,005
Deferred tax liability			
Net deferred tax asset	55,490	48,327	60,005
Less: valuation allowance	(55,490)	(48,327)	(60,005)

Net deferred tax assets	$	$	$

Realization of deferred tax assets is dependent upon future taxable income, if any, the amount and timing of which are uncertain. Accordingly, net deferred tax assets have been fully offset by a valuation allowance. Our valuation allowance increased by approximately $8.1 million, decreased by $7.2 million and increased by $11.7 million during 2010, 2011 and 2012 respectively. We have established a full valuation allowance against our deferred tax assets due to the uncertainty surrounding the realization of such assets. We evaluate on a periodic basis the recoverability of deferred tax assets and the need for a valuation allowance. At such time that it is determined that it is more likely than not that the deferred tax assets are realizable, the valuation allowance will be reduced.

At December 31, 2012, we had approximately $115.6 million and $141.7 million of federal and state net operating loss carryforwards, respectively, available to offset future taxable income. The net operating loss carryforwards begin to expire in 2024 for federal and 2015 for state purposes. We also had approximately $4.5 million and $3.3 million of federal and state tax credits, respectively, available to offset future tax. These credits begin to expire in 2023 for federal purposes, and state research and development tax credits can be carried forward indefinitely.

Utilization of the net operating loss and credit carryforwards may be subject to substantial annual limitation due to ownership change provisions of the Internal Revenue Code of 1986 and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. To the extent net operating loss carryforwards, when realized, relate to non-qualified stock option deductions, the resulting benefits will be credited to stockholders equity.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Financial Statements (continued)

11. Income Taxes (continued)

As of December 31, 2011 and 2012, we had no accrued interest or penalties related to income taxes, and no such interest and penalties have been incurred through December 31, 2012. As of December 31, 2012, no significant increases or decreases are expected to our uncertain tax positions within the next 12 months. A reconciliation of our unrecognized tax benefits for the years ended December 31, 2010, 2011 and 2012**,** is as follows:

(in thousands)	**UNRECOGNIZED INCOME TAX BENEFITS**
Balance as of January 1, 2010	$ 1,233
Deductions for prior year tax positions	(40)
Additions for current year tax positions	120
Balance as of December 31, 2010	1,313
Additions for current year tax positions	144
Balance as of December 31, 2011	1,457
Additions for current year tax positions	78
Balance as of December 31, 2012	$ 1,535

We file U.S. and state income tax returns with varying statutes of limitations. The tax years from inception in 2001 forward remain open to examination due to the carryover of unused net operating losses and tax credits. We have no ongoing tax examinations by tax authorities at this time.

We received $0.5 million from the U.S. government under the Section 48D Qualifying Therapeutic Discovery Project Program in 2010. This amount has been included within other income (expense), net in the accompanying statement of operations for the year ended December 31, 2010.

12. Subsequent Events

UCB Pharma S.A.

In March 2013, we and UCB Pharma, S.A. (UCB) entered into a research collaboration and license agreement to identify innovative biologics targets and therapeutics in the areas of fibrosis-related inflammatory diseases and central nervous system disorders. We plan to conduct five customized cell-based and *in vivo* screens of our protein library under this agreement. We currently expect to complete our initial research activities under this agreement by March 2016. Upon the completion of those research activities, UCB has up to a two-year evaluation period during which we may be obligated to perform additional services at the request of UCB.

Under the terms of the agreement, we would be eligible to receive up to approximately $15.9 million from a combination of an upfront fee, technology access fees, research funding and success-based research payments. In addition, we would be eligible for potential option exercise fees and product-related milestone payments, as well as tiered royalties on global net sales on future products related to each licensed protein.

Reverse Stock Split

On September 4, 2013, the Company effected a 1-for-12.3 reverse stock split. All information in this report relating to the number of shares, price per share and per share amounts of stock gives retroactive effect to the 1-for-12.3 reverse stock split of the Company s stock. Otherwise, the Company evaluated subsequent events through June 14, 2013, the date at which the financial statements were available for issuance.

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FIVE PRIME THERAPEUTICS, INC.

Condensed Balance Sheets

(In thousands)

	DECEMBER 31, 2012	SEPTEMBER 30 2013
Assets		
Current assets:		
Cash and cash equivalents	$ 11,391	$ 77,648
Marketable securities	26,624	8,989
Receivable from collaborative partners	397	383
Prepaid and other current assets	689	866
Total current assets	39,101	87,886
Property and equipment, net	4,631	3,976
Other long-term assets	359	184
Total assets	$ 44,091	$ 92,046
Liabilities, convertible preferred stock and stockholders equity (deficit)		
Current liabilities:		
Accounts payable	$ 2,470	$ 3,760
Accrued personnel-related expenses	2,250	2,096
Other accrued liabilities	303	685
Preferred stock warrant liability	563	
Deferred revenue, current portion	7,498	9,015
Deferred rent, current portion		354
Total current liabilities	13,084	15,910
Deferred revenue, long-term portion	7,258	8,418
Deferred rent, long-term portion	2,448	2,283
Other long-term liabilities	897	729
Commitments		
Convertible preferred stock	136,282	
Stockholders equity (deficit):		
Common stock	1	17
Preferred stock		
Additional paid-in capital	6,816	208,945
Accumulated other comprehensive income	7	1
Accumulated deficit	(122,702)	(144,257)
Total stockholders equity (deficit)	(115,878)	64,706
Total liabilities, convertible preferred stock and stockholders equity (deficit)	$ 44,091	$ 92,046

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

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FIVE PRIME THERAPEUTICS, INC.

Condensed Statements of Operations

(In thousands, except share and per share amounts)

	NINE MONTHS ENDED SEPTEMBER 30,	
	2012	2013
Collaboration revenue	$ 7,059	$ 10,006
Operating expenses:		
Research and development	21,300	24,708
General and administrative	6,696	7,385
Total operating expenses	27,996	32,093
Loss from operations	(20,937)	(22,087)
Interest income	70	35
Other income, net	85	497
Net loss	$ (20,782)	$ (21,555)
Basic and diluted net loss per common share	$ (17.46)	$ (12.60)
Shares used to compute basic and diluted net loss per common share	1,190	1,711

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

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FIVE PRIME THERAPEUTICS, INC.

Condensed Statements of Comprehensive Loss

(In thousands)

	NINE MONTHS ENDED SEPTEMBER 30,	
	2012	2013
Net loss	$ (20,782)	$ (21,555)
Other comprehensive loss:		
Net unrealized loss on marketable securities	(6)	(6)
Comprehensive loss	$ (20,788)	$ (21,561)

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

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FIVE PRIME THERAPEUTICS, INC.

Condensed Statement of Cash Flows

(In thousands)

	NINE MONTHS ENDED SEPTEMBER 30,	
	2012	2013
	(Unaudited)	
Operating activities		
Net loss	$ (20,782)	$ (21,555)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	1,226	1,288
Gain on disposal of property and equipment	(5)	
Stock-based compensation expense	1,237	1,554
Amortization of premium on marketable securities	416	272
Revaluation of preferred stock warrant liability	(82)	(500)
Changes in operating assets and liabilities:		
Receivable from collaborative partners	767	14
Prepaid, other current assets, and other long-term assets	211	(2)
Accounts payable	(519)	467
Accrued personnel-related expenses	(431)	(154)
Payable to collaborative partner	(3,000)	
Deferred revenue	8,193	2,677
Deferred rent	373	189
Other accrued liabilities and other long-term liabilities	(208)	18
Net cash used in operating activities	(12,604)	(15,732)
Investing activities		
Purchases of marketable securities	(36,058)	(12,078)
Maturities of marketable securities	48,636	29,435
Purchases of property and equipment	(501)	(633)
Restricted cash	38	
Net cash provided by investing activities	12,115	16,724
Financing activities		
Proceeds from issuances of common stock		64,887
Issuances of convertible preferred stock proceeds (net of issuance costs)	6,819	
Proceeds from exercise of stock options	77	387
Payments under capital lease obligation	(11)	(9)
Net cash provided by financing activities	6,885	65,265
Net increase in cash and cash equivalents	6,396	66,257
Cash and cash equivalents at beginning of period	4,361	11,391
Cash and cash equivalents at end of period	$ 10,757	$ 77,648

Supplemental schedule of noncash financing activities		
Accrued and deferred offering costs	$	$ 1,026

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

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FIVE PRIME THERAPEUTICS, INC.

Notes to Condensed Financial Statements

September 30, 2013

1. Description of Business

Five Prime Therapeutics, Inc. (we, us, our, or the Company) is a clinical-stage biotechnology company focused on discovering and developing novel protein therapeutics. Protein therapeutics are antibodies or drugs developed from extracellular proteins or protein fragments that block disease processes, including cancer and inflammatory diseases. We were incorporated in December 2001 in Delaware. Our operations are based in South San Francisco, California and we operate in one segment.

Unaudited Interim Financial Information

The accompanying financial information as of September 30, 2013 is unaudited. The Condensed Financial Statements included in this report reflect all adjustments (consisting only of normal recurring adjustments) that our management considers necessary for the fair statement of the results of operations for the interim periods covered and of the financial condition of the Company at the date of the interim balance sheet. The December 31, 2012 Condensed Balance Sheet was derived from audited financial statements, but does not include all disclosures required by generally accepted accounting principles in the United States of America, or GAAP. The results for interim periods are not necessarily indicative of the results for the entire year or any other interim period. The accompanying Condensed Financial Statements and related financial information should be read in conjunction with the audited financial statements and the related notes thereto for the year ended December 31, 2012 included in the Company s prospectus filed pursuant to Rule 424(b)(4) on September 18, 2013 with the U.S. Securities and Exchange Commission.

Initial Public Offering

In September 2013, we completed our initial public offering of shares of our common stock, or IPO, pursuant to which we issued 5,520,000 shares of common stock, which includes shares we issued pursuant to our underwriters exercise of their over-allotment option, and received net proceeds of $63.9 million, after underwriting discounts, commissions and estimated offering expenses. In addition, in connection with the completion of our IPO, all convertible preferred stock converted into common stock.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ materially from those estimates.

Reverse Stock Split

On September 4, 2013, the Company effected a 1-for-12.3 reverse stock split. All information in this report relating to the number of shares, price per share and per share amounts of stock gives retroactive effect to the 1-for-12.3 reverse stock split of the Company s stock.

Fair Value of Financial Instruments

We determine the fair value of financial and nonfinancial assets and liabilities using the fair value hierarchy, which describes three levels of inputs that may be used to measure fair value, as follows:

Level 1 Quoted prices in active markets for identical assets or liabilities;

Level 2 Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Condensed Financial Statements (continued)

2. Summary of Significant Accounting Policies (continued)

We determine the fair value of Level 1 assets using quoted prices in active markets for identical assets. We review trading activity and pricing for Level 2 investments as of each measurement date. Level 2 inputs, obtained from various third-party data providers, represent quoted prices for similar assets in active markets, were derived from observable market data, or, if not directly observable, were derived from or corroborated by other observable market data.

In certain cases where there is limited activity or less transparency around inputs to valuation, we classify securities as Level 3 within the valuation hierarchy. As of December 31, 2012, our Level 3 liability consists of a preferred stock warrant liability that we measured at estimated fair value.

The following table summarizes, for assets and the liability recorded at fair value, the respective fair value and the classification by level of input within the fair value hierarchy defined above (in thousands):

	DECEMBER 31, 2012			
	BASIS OF FAIR VALUE MEASUREMENTS			
	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Assets				
Money market funds	$ 6,910	$ 6,910	$	$
U.S. Treasury securities	3,577	3,577		
U.S. government agency securities	23,047		23,047	
Total cash equivalents and marketable securities	$ 33,534	$ 10,487	$ 23,047	$
Liability				
Preferred stock warrant liability	$ 563	$	$	$ 563

SEPTEMBER 30, 2013

		BASIS OF FAIR VALUE MEASUREMENTS		
	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Assets				
Money market funds	$ 75,463	$ 75,463	$	$
U.S. government agency securities	9,740		9,740	
Total cash equivalents and marketable securities	$ 85,203	$ 75,463	$ 9,740	$

Prior to our IPO in September 2013, we had outstanding warrants which were classified as a liability and remeasured to fair value each reporting period. We measured the estimated fair value of the preferred stock warrant liability using the Black-Scholes option-pricing model. Inputs used to determine estimated fair value include the estimated fair value of the underlying stock at the valuation measurement date, the remaining contractual term of the warrants, risk-free interest rates, expected dividends, and the expected volatility of the price of the underlying stock. In connection with the completion of the Company s IPO in September 2013, substantially all of the warrants were automatically net exercised for a total of 4,376 shares, pursuant to the terms of the warrants. As a result of the net exercises, we recorded an $83,000 gain related to the change in fair value as part of other income, net on our Condensed Statement of Operations and reclassified the fair value of $57,000 to permanent equity. These warrants were remeasured using the intrinsic value of the warrant and the net settlement value based on the $13.00 per

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FIVE PRIME THERAPEUTICS, INC.

Notes to Condensed Financial Statements (continued)

2. Summary of Significant Accounting Policies (continued)

share IPO price. The remaining outstanding warrant to purchase Series A convertible preferred stock converted into a warrant to purchase 2,304 shares of common stock at $12.30 per share, expiring in January 2014. We remeasured the fair value of these remaining warrants through the date of the conversion to a common stock warrant and we recorded a $3,000 loss related to the change in fair value as part of other income, net on our Condensed Statement of Operations and reclassified the fair value of $6,000 to permanent equity.

The change in the estimated fair value of the preferred stock warrant liability is summarized below (in thousands):

	NINE MONTHS ENDED SEPTEMBER 30,	
	2012	2013
Balance, beginning	$ 682	$ 563
Change in fair value recorded in other income, net	(82)	(500)
Exercises		(57)
Conversion of preferred stock warrant to common stock warrants and reclassification to permanent equity		(6)
Balance, ending	$ 600	$

As of September 30, 2012, the fair value of the above warrants was determined using the following assumptions:

Risk-free interest rate	0.1-0.4%
Estimated term (years)	2.3
Volatility	85.0%

Net Loss Per Share of Common Stock

We compute basic net loss per common share dividing net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period. We did not include potentially dilutive securities consisting of stock options, the preferred stock warrants, the common stock warrant and convertible preferred stock in the diluted net loss per common share calculations for all periods presented, because the inclusion of such shares would have had an antidilutive effect. The convertible preferred stock contains certain participation rights.

For the nine months ended September 30, 2012 and 2013, we excluded the following securities from the calculation of diluted net loss per share as the effect would have been antidilutive (in thousands):

	SEPTEMBER 30,	
	2012	2013
Convertible preferred stock	9,929	
Options to purchase common stock	2,526	2,235
Warrants to purchase common stock		2
Warrants to purchase convertible preferred stock	88	
	12,543	2,237

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FIVE PRIME THERAPEUTICS, INC.

Notes to Condensed Financial Statements (continued)

3. Cash Equivalents and Marketable Securities

The following is a summary of our cash equivalents and marketable securities (in thousands):

	DECEMBER 31, 2012			
	AMORTIZED COST BASIS	UNREALIZED GAINS	UNREALIZED LOSSES	ESTIMATED FAIR VALUE
Money market funds	$ 6,910	$	$	$ 6,910
U.S. Treasury securities	3,576	1		3,577
U.S. government agency securities	23,041	6		23,047
	33,527	7		33,534
Less: cash equivalents	(6,910)			(6,910)
Total marketable securities	$ 26,617	$ 7	$	$ 26,624

	SEPTEMBER 30, 2013			
	AMORTIZED COST BASIS	UNREALIZED GAINS	UNREALIZED LOSSES	ESTIMATED FAIR VALUE
			(unaudited)	
Money market funds	$ 75,463	$	$	$ 75,463
U.S. government agency securities	9,739	1		9,740
	85,202	1		85,203
Less: cash equivalents	(76,214)			(76,214)
Total marketable securities	$ 8,988	$ 1	$	$ 8,989

As of December 31, 2012 and September 30, 2013, the contractual maturities of our marketable securities were less than one year. There were no sales of available-for-sale securities in any of the periods presented.

4. Conversion of Convertible Preferred Stock

In connection with the completion of the Company s IPO in September 2013, all outstanding shares of convertible preferred stock converted into 9,929,159 shares of common stock.

5. Equity Incentive Plans

Our Board of Directors, or Board, and stockholders previously approved the 2002 Equity Incentive Plan, or the 2002 Plan, and the 2010 Equity Incentive Plan, or the 2010 Plan, and collectively with the 2002 Plan, the Prior Plans. The 2002 Plan terminated in March 2012. In September 2013, our stockholders approved the 2013 Omnibus Incentive Plan, or the 2013 Plan. As of September 23, 2013, the effective date of the 2013 Plan, we suspended the 2010 Plan and no additional awards may be granted under the 2010 Plan. Any shares of common stock covered by awards granted under the Prior Plans that terminate after September 23, 2013 by expiration, forfeiture, cancellation or other means without the issuance of such shares, will be added to the 2013 Plan reserve.

As of September 30, 2013, the total number of shares of common stock available for issuance under the 2013 Plan was 3,500,000, which includes the 1,069,985 shares of common stock that were available for issuance under the Prior Plans as of the effective date of the 2013 Plan. Unless our Board provides otherwise, beginning on January 1, 2014, and continuing until the expiration of the 2013 Plan, the total number of shares of common stock available

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FIVE PRIME THERAPEUTICS, INC.

Notes to Condensed Financial Statements (continued)

5. Equity Incentive Plans (continued)

for issuance under the 2013 Plan will automatically increase annually on January 1 by 4% of the total number of issued and outstanding shares of common stock as of December 31 of the immediately preceding year. As of September 30, 2013, no shares of common stock were subject to outstanding awards under the 2013 Plan.

In September 2013, our stockholders approved the 2013 Employee Stock Purchase Plan, or the ESPP, which became effective as of September 23, 2013. We have reserved a total of 250,000 shares of common stock for issuance under the ESPP. Unless our Board provides otherwise, beginning on January 1, 2014, and continuing until the expiration of the ESPP, the total number of shares of common stock available for issuance under the ESPP will automatically increase annually on January 1 by the lesser of (i) 1% of the total number of issued and outstanding shares of common stock as of December 31 of the immediately preceding year, or (ii) 300,000 shares of common stock. As of September 30, 2013, we have not issued any shares of common stock under the ESPP.

The following table summarizes option activity under our stock plans and related information:

		OPTIONS OUTSTANDING	
	NUMBER OF SHARES AVAILABLE FOR GRANT	NUMBER OF SHARES	WEIGHTED-AVERAGE EXERCISE PRICE PER SHARE
Balance at December 31, 2012	451,349	2,545,231	$ 5.17
Options authorized	2,876,226		
Options granted	(547,909)	547,909	$ 6.87
Options exercised		(138,484)	$ 2.79
Options forfeited	53,246	(53,246)	$ 6.87
Options expired	667,088	(667,088)	$ 4.10
Balance at September 30, 2013	3,500,000	2,234,322	$ 6.00
Options exercisable		1,196,206	$ 5.34

As of September 30, 2013, options to purchase 2,177,736 shares of common stock were outstanding that are vested and therefore exercisable with a weighted-average exercise price of $5.98 per share and a weighted-average remaining contractual term of 7.5 years. As of September 30, 2013, the weighted-average remaining contractual term for outstanding options that are vested and therefore exercisable was 6.3 years. The

aggregate intrinsic value of options outstanding was $15.9 million. The aggregate intrinsic value of outstanding options that are exercisable was $9.3 million. We calculated the aggregate intrinsic value as the difference between the exercise price of the options and the closing price of common stock of $13.10 per share as of September 30, 2013.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Condensed Financial Statements (continued)

5. Equity Incentive Plans (continued)

Stock Based Compensation

We calculated employee stock-based compensation expense based on awards ultimately expected to vest reduced by estimated forfeitures. We estimate forfeitures at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Total stock-based compensation expense recognized was as follows (in thousands):

	NINE MONTHS ENDED SEPTEMBER 30,	
	2012	2013
Research and development	$ 480	$ 661
General and administrative	757	893
Total	$ 1,237	$ 1,554

In February 2013, we amended stock options held by our former CEO to extend the post-termination exercise period for the former CEO s outstanding vested options from 18 months to 20 months, which resulted in additional incremental stock-based compensation of $157,000 in the first quarter of 2013.

We estimated the fair value of each stock option using the Black-Scholes option-pricing model based on the date of grant of such stock option with the following weighted-average assumptions:

	NINE MONTHS ENDED SEPTEMBER 30,	
	2012	2013
Expected term (years)	5.0-6.1	5.0-6.1
Expected volatility	85%	85%

Risk-free interest rate	0.6-1.1%	0.8-1.6%
Expected dividend yield	0%	0%

As of September 30, 2013, we had $4.6 million of total unrecognized compensation expense related to nonvested employee and director stock options that we expect to recognize over a weighted-average period of 2.9 years.

6. Collaborative Research and Development Agreements

UCB Pharma S.A.

In March 2013, we and UCB Pharma S.A., or UCB, entered into a research collaboration and license agreement to identify potential biologics targets and therapeutics in the areas of fibrosis-related inflammatory diseases and central nervous system disorders. We plan to conduct five customized cell-based and *in vivo* screens of our protein library under this agreement. We currently expect to complete our initial research activities under this agreement by March 2016. Upon the completion of those research activities, UCB has up to a two-year evaluation period during which we may be obligated to perform additional services at the request of UCB.

We applied the Financial Accounting Standards Board Accounting Standards Update, or ASU, No. 2009-13, *Multiple-Deliverable Revenue Arrangements*, in evaluating the appropriate accounting for this agreement. In accordance with this guidance, we concluded that we should account for the arrangement as a single unit of accounting and recognize the arrangement consideration in the same manner as the final deliverable, which is research service.

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FIVE PRIME THERAPEUTICS, INC.

Notes to Condensed Financial Statements (continued)

6. Collaborative Research and Development Agreements (continued)

Under the terms of the agreement, UCB paid us an upfront payment of $6.0 million in March 2013. In addition, we received $2.2 million of a $6.6 million technology access fee in March 2013. The remaining $4.4 million technology access fee is due in two equal installments on the first and second anniversaries of this agreement. UCB also agreed to pay us $2.0 million of research funding during the second and the third years of the research program term. We recorded the $6.0 million upfront payment and $2.2 million technology access payment as deferred revenue, which we will recognize over the initial five-year research period under the agreement.

We are eligible to receive certain evaluation and selection fees and contingent payments with respect to each protein target that UCB elects to obtain an exclusive license, and royalties on the sales of products related to such targets, if any.

We are eligible to receive up to $0.4 million of target evaluation and selection fees with respect to each target we offer to UCB in the collaboration. Substantive uncertainty exists at the inception of the agreement as to whether any of these fees will be received because of the numerous variables that may affect our ability to identify targets that UCB would be interested in further evaluating or with respect to which UCB would develop products. In accordance with ASU No. 2010-17, we concluded that these fees under the agreement with UCB are substantive and will be accounted for under the milestone method of revenue recognition.

In accordance with ASU No. 2010-17, we determined that the remaining contingent payments under the agreement with UCB do not constitute milestone payments and will not be accounted for under the milestone method of revenue recognition. The events leading to these payments under the agreement with UCB do not meet the definition of a milestone under ASU 2010-17 because the achievement of these events solely depends on UCB s performance. Any revenue from these contingent payments would be subject to an allocation of arrangement consideration and would be recognized over any remaining period of performance obligations, if any, relating to this arrangement. If we have no remaining performance obligations under the arrangement at the time the contingent payment is triggered, we would recognize the contingent payment as revenue in full upon the triggering event.

During the nine months ended September 30, 2013, we recognized $1.4 million of revenue under this arrangement. As of September 30, 2013, we have deferred revenue relating to this collaboration agreement of $6.8 million.

The agreement will terminate upon the expiration of the royalty terms of any products that incorporate or target a protein exclusively licensed under the collaboration. In addition, UCB may terminate this agreement at any time with advance written notice, and either party may terminate the agreement with written notice for the other party s material breach if such party fails to cure the breach or upon certain insolvency events.

GlaxoSmithKline

Muscle Diseases Discovery Collaboration

In July 2010, we entered into a research collaboration and license agreement with GlaxoSmithKline LLC, or GSK US, to identify potential drug targets and drug candidates to treat skeletal muscle diseases. In December 2012, GSK US selected a protein target for further evaluation under the collaboration agreement. In September 2013, we and GSK US entered into an agreement to extend by approximately eight months the evaluation period for this protein target. In connection with the extension of the evaluation period, GSK US agreed to pay a $0.2 million extension fee. We are recognizing the $0.2 million extension fee over the eight-month extension period, which we recorded as accounts receivable as of September 30, 2013.

7. Subsequent Events

In October 2013, GSK US exercised its right to reserve for further evaluation several protein therapeutic targets for muscle diseases that we discovered in our muscle diseases discovery collaboration with GSK US. In connection with reserving these targets for further evaluation, GSK

US will pay us a selection fee of $0.3 million.

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$50,000,000

Common Stock

PRELIMINARY PROSPECTUS

Joint Book-Running Managers

Jefferies

BMO Capital Markets

Wells Fargo Securities

Co-Manager

Guggenheim Securities

, 2014

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, payable in connection with the registration of the common stock hereunder. All amounts are estimates, except the SEC registration fee, the FINRA filing fee and The NASDAQ Global Select Market listing fee.

	AMOUNT
SEC registration fee	$ 7,406
FINRA filing fee	9,125
The NASDAQ Global Select Market listing fee	30,000
Accountants fees and expenses	*
Legal fees and expenses	*
Blue Sky fees and expenses	*
Transfer Agent s fees and expenses	*
Printing and engraving expenses	*
Miscellaneous	*
Total	*

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 102(b)(7) of the Delaware General Corporation Law, or DGCL, provides that a Delaware corporation, in its certificate of incorporation, may limit the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duties as a director, except for liability for any:

- transaction from which the director derived an improper personal benefit;
- act or omission not in good faith or that involved intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or redemption of shares; or
- breach of the director s duty of loyalty to the corporation or its stockholders.

Section 145(a) of the DGCL provides, in general, that a Delaware corporation may indemnify any person who was or is a party, or is threatened to be made a party, to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) because that person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise. The indemnity may include expenses (including attorneys fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, so long as the person acted in good faith and in a manner he or she reasonably believed was in or not opposed to the corporation s best interests, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the DGCL provides, in general, that a Delaware corporation may indemnify any person who was or is a party, or is threatened to be made a party, to any threatened, pending or completed action or suit by or in the right of the corporation to obtain a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise. The indemnity may include expenses (including attorneys fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action, so long as the person acted in good faith and in a manner the person reasonably believed was in or not opposed to the corporation s best interests, except that no indemnification shall be permitted without judicial approval if a court has determined that the person is to be liable to the corporation with respect to such claim. Section 145(c) of the DGCL

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provides that, if a present or former director or officer has been successful in defense of any action referred to in Sections 145(a) and (b) of the DGCL, the corporation must indemnify such officer or director against the expenses (including attorneys fees) he or she actually and reasonably incurred in connection with such action.

Section 145(g) of the DGCL provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise against any liability asserted against and incurred by such person, in any such capacity, or arising out of his or her status as such, whether or not the corporation could indemnify the person against such liability under Section 145 of the DGCL.

Our amended and restated certificate of incorporation and our amended and restated bylaws provide for the indemnification of our directors and officers to the fullest extent permitted under the DGCL.

We have entered into separate indemnification agreements with our directors and officers in addition to the indemnification provided for in our amended and restated bylaws. These indemnification agreements provide, among other things, that we will indemnify our directors and officers for certain expenses, including damages, judgments, fines, penalties, settlements and costs and attorneys fees and disbursements, incurred by a director or officer in any claim, action or proceeding arising in his or her capacity as a director or officer of our company or in connection with service at our request for another corporation or entity. The indemnification agreements also provide for procedures that will apply in the event that a director or officer makes a claim for indemnification.

We also maintain a directors and officers insurance policy pursuant to which our directors and officers are insured against liability for actions taken in their capacities as directors and officers.

We have entered into an underwriting agreement, which provides for indemnification by the underwriters of us, our officers and directors, for certain liabilities, including liabilities arising under the Securities Act of 1933, as amended, or the Securities Act.

See also the undertakings set out in response to Item 17 herein.

Item 15. Recent Sales of Unregistered Securities.

The following lists set forth information regarding all securities sold or granted by us within the past three years that were not registered under the Securities Act, and the consideration, if any, received by us for such securities:

Issuances of Capital Stock

(1) On April 16, 2012, we issued and sold to an accredited investor an aggregate of 381,693 shares of our Series A-3 convertible preferred stock in exchange for cash at a price per share of $26.20 for gross proceeds of $10 million. Each share of Series A-3 convertible preferred stock converted into one share of our common stock upon completion of our initial public offering.

(2) Between January 21, 2011 and January 21, 2014, we issued an aggregate of 231,099 shares of our common stock at prices ranging from $1.23 to $8.49 per share to certain of our employees and directors pursuant to the exercise of stock options under the 2010 and 2002 Plans for an aggregate purchase price of $509,991.

Grants of Stock Options

(3) Between January 21, 2011 and January 21, 2014, we have granted stock options to purchase an aggregate of 1,522,486 shares of our common stock with exercise prices ranging from $5.54 to $8.49 per share, to our employees and directors pursuant to our 2010 and 2002 Plans.

We deemed the offers, sales and issuances of the securities described in paragraphs (1) through (2) above to be exempt from registration under the Securities Act, in reliance on Section 4(2) of the Securities Act, including Regulation D and Rule 506 promulgated thereunder, relative to transactions by an issuer not involving a public offering. All purchasers of securities in transactions exempt from registration pursuant to Regulation D represented to us that they were accredited investors and were acquiring the shares for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment

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and could hold the securities for an indefinite period of time. The purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

We deemed the grants of stock options described in paragraph (3) above, except to the extent described above as exempt pursuant to Section 4(2) of the Securities Act, to be exempt from registration under the Securities Act in reliance on Rule 701 of the Securities Act as offers and sales of securities under compensatory benefit plans and contracts relating to compensation in compliance with Rule 701. Each of the recipients of securities in any transaction exempt from registration either received or had adequate access, through employment, business or other relationships, to information about us.

All of the foregoing securities are deemed restricted securities for purposes of the Securities Act. The certificates representing the securities issued in the transactions described in this Item 15 included appropriate legends setting forth that the securities had not been offered or sold pursuant to a registration statement and describing the applicable restrictions on transfer of the securities. There were no underwriters employed in connection with any of the transactions set forth in this Item 15.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits
See the Index to Exhibits attached to this registration statement, which is incorporated by reference herein.

(b) Financial Statement Schedules
No financial statement schedules are provided, because the information called for is not required or is shown either in the financial statements or the notes thereto.

Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, in the State of California, on this 22nd day of January, 2014.

FIVE PRIME THERAPEUTICS, INC.

By: /s/ Lewis T. Williams
Lewis T. Williams
Chief Executive Officer and President

POWER OF ATTORNEY

Each person whose individual signature appears below hereby authorizes and appoints Lewis T. Williams and Francis W. Sarena and each of them, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this registration statement, including any and all post-effective amendments and amendments thereto, and any subsequent registration statement relating to the same offering as this registration statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

SIGNATURE	TITLE	DATE
/s/ Lewis T. Williams **Lewis T. Williams**	Chief Executive Officer, President and Director (Principal Executive Officer)	January 22, 2014
/s/ Marc L. Belsky **Marc L. Belsky**	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	January 22, 2014
/s/ Brian G. Atwood **Brian G. Atwood**	Chairman of the Board	January 22, 2014
/s/ Franklin M. Berger **Franklin M. Berger**	Director	January 22, 2014

/s/ Fred E. Cohen	Director	January 22, 2014
Fred E. Cohen		
/s/ R. Lee Douglas	Director	January 22, 2014
R. Lee Douglas		
/s/ Peder K. Jensen	Director	January 22, 2014
Peder K. Jensen		
/s/ Aron M. Knickerbocker	Director	January 22, 2014
Aron M. Knickerbocker		
/s/ Mark D. McDade	Director	January 22, 2014
Mark D. McDade		

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INDEX TO EXHIBITS

EXHIBIT NUMBER	EXHIBIT DESCRIPTION
1.1*	Form of Underwriting Agreement.
3.1	Amended and Restated Certificate of Incorporation (incorporated herein by reference to Exhibit 3.1 to the company s Current Report on Form 8-K (File No. 001-36070), filed with the SEC on September 23, 2013).
3.2	Amended and Restated Bylaws (incorporated herein by reference to Exhibit 3.4 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
4.1	Specimen common stock certificate (incorporated herein by reference to Exhibit 4.1 to the company s Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on September 4, 2013).
4.2	Warrant to purchase Series A Convertible Preferred Stock issued to General Electric Capital Corporation, dated as of January 26, 2004 (incorporated herein by reference to Exhibit 4.3 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
5.1*	Opinion of Hogan Lovells US LLP.
10.1	Seventh Amended and Restated Investor Rights Agreement by and among the company and the investors named therein, dated as of April 16, 2012 (incorporated herein by reference to Exhibit 10.1 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.2+	2002 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.2 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.3+	Form of Option Agreement under 2002 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.3 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.4+	2010 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.4 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.5+	Form of Option Agreement under 2010 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.5 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.6+	2013 Omnibus Incentive Plan (incorporated herein by reference to Exhibit 4.8 to the company s Registration Statement on Form S-8 (File No. 333-191700), filed with the SEC on October 11, 2013).
10.7+	Form of Incentive Stock Option Agreement under 2013 Omnibus Incentive Plan (incorporated herein by reference to Exhibit 10.7 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.8+	Form of Non-Qualified Option Agreement under 2013 Omnibus Incentive Plan (incorporated herein by reference to Exhibit 10.8 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.9+	Form of Restricted Stock Agreement under 2013 Omnibus Incentive Plan.
10.10+	Offer Letter Agreement by and between the company and Aron M. Knickerbocker, dated as of September 4, 2009 (incorporated herein by reference to Exhibit 10.9 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.11+	Offer Letter Agreement by and between the company and Julie Hambleton, dated as of November 19, 2012.
10.12+	Offer Letter Agreement by and between the company and Marc L. Belsky, dated as of September 3, 2009.

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EXHIBIT NUMBER	EXHIBIT DESCRIPTION
10.13+	Executive Severance Benefits Agreement by and between the company and Lewis T. Williams, dated as of April 19, 2007 (incorporated herein by reference to Exhibit 10.11 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.14+	Executive Severance Benefits Agreement by and between the company and Aron M. Knickerbocker, dated as of December 30, 2009 (incorporated herein by reference to Exhibit 10.12 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.15+	Amendment No. 1 to the Executive Severance Benefits Agreement by and between the company and Aron M. Knickerbocker, effective December 5, 2012 (incorporated herein by reference to Exhibit 10.13 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.16+	Executive Severance Benefits Agreement by and between the company and Julie Hambleton, dated as of December 3, 2012.
10.17+	Executive Severance Benefits Agreement by and between the company and Marc L. Belsky, dated as of December 30, 2009.
10.18+	Amendment No. 1 to the Executive Severance Benefits Agreement by and between the company and Marc L. Belsky, effective January 16, 2014.
10.19+	Form of Indemnification Agreement by and between the company and each of its directors and officers (incorporated herein by reference to Exhibit 10.16 to the company s Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on August 16, 2013).
10.20	Research Collaboration and License Agreement by and between the company and UCB Pharma S.A., dated as of March 14, 2013 (incorporated herein by reference to Exhibit 10.17 to the company s Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on August 16, 2013).
10.21	License and Collaboration Agreement by and between the company and Human Genome Sciences, Inc., dated as of March 16, 2011 (incorporated herein by reference to Exhibit 10.18 to the company s Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on August 16, 2013).
10.22	Respiratory Diseases Research Collaboration and License Agreement by and between the company and Glaxo Group Limited, dated as of April 11, 2012 (incorporated herein by reference to Exhibit 10.19 to the company s Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on August 16, 2013).
10.23	Amendment No. 1 to the Respiratory Diseases Research Collaboration and License Agreement by and between the company and Glaxo Group Limited, dated as of August 9, 2012 (incorporated herein by reference to Exhibit 10.20 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.24	Research Collaboration and License Agreement by and between the company and GlaxoSmithKline LLC, dated as of July 29, 2010 (incorporated herein by reference to Exhibit 10.21 to the company s Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on August 16, 2013).
10.25	Amendment No. 1 to the Research Collaboration and License Agreement by and between the company and GlaxoSmithKline LLC, dated as of May 17, 2011 (incorporated herein by reference to Exhibit 10.22 to the company s Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on August 16, 2013).
10.26	Exclusive License Agreement by and between the company and Galaxy Biotech, LLC, dated as of December 22, 2011 (incorporated herein by reference to Exhibit 10.23 to the company s Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on August 16, 2013).

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EXHIBIT NUMBER	EXHIBIT DESCRIPTION
10.27	Exclusive License Agreement by and between the company and the Regents of the University of California, dated as of September 7, 2006 (incorporated herein by reference to Exhibit 10.24 to the company s Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on August 16, 2013).
10.28	Master Services Agreement by and between the company and Cytovance Biologics Inc., dated as of October 1, 2012 (incorporated herein by reference to Exhibit 10.25 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.29	Lease by and between the company and Britannia Biotech Gateway Limited Partnership, dated as of March 22, 2010 (incorporated herein by reference to Exhibit 10.26 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.30	Sublease by and between the company and AMGEN SF, LLC, dated as of March 22, 2010 (incorporated herein by reference to Exhibit 10.27 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.31+	Stock Option Grant Notice by and between the company and Aron M. Knickerbocker, dated as of December 16, 2009 (incorporated herein by reference to Exhibit 10.28 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.32+	Amendment to Stock Option by and between the company and Aron M. Knickerbocker, dated as of March 15, 2011 (incorporated herein by reference to Exhibit 10.29 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
10.33	Non-Exclusive License Agreement by and among the company, BioWa, Inc. and Lonza Sales AG, dated as of February 6, 2012 (incorporated herein by reference to Exhibit 10.30 to the company s Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on August 16, 2013).
10.34+	2013 Employee Stock Purchase Plan (incorporated herein by reference to Exhibit 4.11 to the company s Registration Statement on Form S-8 (File No. 333-191700), filed with the SEC on October 11, 2013).
10.35	Non-Exclusive License Agreement by and between the company and the Board of Trustees of the Leland Stanford Junior University, dated as of February 1, 2006 (incorporated herein by reference to Exhibit 10.32 to the company s Amendment No. 2 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on August 23, 2013).
10.36	Amendment No. 1 to the License Agreement effective February 1, 2006 by and between the company and Stanford University, dated as of January 22, 2010 (incorporated herein by reference to Exhibit 10.33 to the company s Amendment No. 2 to the Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on August 23, 2013).
10.37	Agreement by and between the company and National Research Council of Canada, effective December 3, 2013 (incorporated herein by reference to Exhibit 10.1 to the company s Current Report on Form 8-K (File No. 001-36070), filed with the SEC on December 9, 2013).
21.1	Subsidiaries of the company (incorporated herein by reference to Exhibit 21.1 to the company s Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).
23.1	Consent of Independent Registered Accounting Firm.
23.2*	Consent of Hogan Lovells US LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included on the signature page to this registration statement).
101.INS^*	XBRL Instance Document.
101.SCH^*	XBRL Taxonomy Extension Schema Document.
101.CAL^*	XBRL Taxonomy Extension Calculation Linkbase Document.

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EXHIBIT NUMBER	EXHIBIT DESCRIPTION
101.DEF^*	XBRL Taxonomy Extension Definition.
101.LAB^*	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE^*	XBRL Taxonomy Presentation Linkbase Document.

* To be filed by amendment.

\+ Indicates a management contract or compensatory plan.

Registrant has requested confidential treatment for certain portions of this exhibit. This exhibit omits the information subject to this confidentiality request. Omitted portions have been filed separately with the SEC.

^ In accordance with Rule 406T of Regulation S-T, the XBRL related information in Exhibit 101 of this Registration Statement is deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act, is deemed not filed for purposes of Section 18 of the Exchange Act, and otherwise is not subject to liability under these sections.