

VERTEX PHARMACEUTICALS INC / MA  
Form DEF 14A  
March 28, 2014

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of  
the Securities Exchange Act of 1934 (Amendment No. )

Filed by the Registrant  x

Filed by a Party other than the Registrant  o

Check the appropriate box:

- o Preliminary Proxy Statement
- o Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- x Definitive Proxy Statement
- o Definitive Additional Materials
- o Soliciting Material under §240.14a-12

Vertex Pharmaceuticals Incorporated  
(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

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- x No fee required.
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    - (3) Filing Party:
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March 28, 2014

DEAR FELLOW SHAREHOLDER:

We cordially invite you to attend our 2014 annual meeting of shareholders. We will hold our meeting on Wednesday, May 7, 2014, at 9:30 a.m. at our headquarters at 50 Northern Avenue, Boston, Massachusetts.

At this year's meeting, you will be asked to vote on the election of directors, to approve an amendment to our 2013 Stock and Option Plan that increases the number of shares authorized for issuance under this plan by 9.5 million shares, to ratify Ernst & Young LLP as our auditors and to provide your advisory views on our executive compensation program.

Whether or not you attend the meeting in person, we encourage you to vote by completing, signing and returning the enclosed proxy prior to the meeting. Every shareholder vote is important. To ensure your vote is counted at the annual meeting, please vote as promptly as possible.

Thank you for giving these materials your careful consideration.

Sincerely,

Jeffrey M. Leiden, M.D., Ph.D.  
Chairman, Chief Executive Officer and President

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NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

DATE: May 7, 2014  
TIME: 9:30 a.m.  
Vertex's Headquarters  
PLACE: 50 Northern Avenue  
Boston, Massachusetts 02210

AGENDA:

• Election of the three director nominees that are set forth in the attached proxy statement to the class of directors whose term will expire in 2017;

• Approval of an amendment to our 2013 Stock and Option Plan that increases the number of shares authorized for issuance under this plan by 9.5 million shares;

• Ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2014;

• Advisory vote to approve the compensation program for our named executive officers; and

• Transaction of other business that may properly come before the annual meeting or any adjournment or postponement of the annual meeting.

RECORD DATE: You can vote if you were a shareholder of record on March 10, 2014.

Your vote matters. Whether or not you plan to attend the annual meeting, please ensure that your shares are represented by voting, signing, dating and returning your proxy in the enclosed envelope, which requires no postage if mailed in the United States.

By Order of the Board of Directors

Kenneth L. Horton  
Secretary  
March 28, 2014

IMPORTANT NOTICE REGARDING AVAILABILITY OF PROXY MATERIALS. This proxy statement and the enclosed proxy card are first being mailed or furnished to our shareholders on or about April 2, 2014. This proxy statement and our Annual Report on Form 10-K for the year ended December 31, 2013 are available to holders of

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record of our common stock at [www.envisionreports.com/vrtx](http://www.envisionreports.com/vrtx) and to beneficial holders of our common stock at [www.edocumentview.com/vrtx](http://www.edocumentview.com/vrtx).

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## SUMMARY INFORMATION

To assist you in reviewing the proposals to be acted upon, we call your attention to the following business and compensation highlights. The following description is only a summary. For more complete information on these topics, please review our Annual Report on Form 10-K for the year ended December 31, 2013, or 2013 Annual Report, and this proxy statement in full.

### BUSINESS HIGHLIGHTS

2013 was a very successful year for us. Since the end of 2012, we:

Increased our net product revenues from KALYDECO (ivacaftor) by 116% from \$171.6 million in 2012 to \$371.3 million in 2013. Most patients with cystic fibrosis, or CF, who have the G551D mutation in their cystic fibrosis transmembrane conductance regulator, or CFTR, gene in the United States and Europe have started treatment with KALYDECO.

Completed enrollment in two Phase 3 clinical trials in which we are evaluating lumacaftor in combination with ivacaftor as a potential treatment for patients with CF who have two copies (homozygous) of the F508del mutation in their CFTR gene with data expected in mid-2014. The F508del mutation is the most prevalent genetic mutation that causes CF.

Obtained approval to market KALYDECO for the treatment of patients with CF six years of age and older who have eight other mutations in their CFTR gene based on a supplemental New Drug Application, or sNDA, submitted in the United States in September 2013; and submitted in October 2013 our first Marketing Authorization Application, or MAA, variation for ivacaftor in the European Union.

Completed a Phase 3 clinical trial of ivacaftor in patients with CF who have the R117H mutation in their CFTR gene. Although this clinical trial did not meet its primary endpoint, we believe a pre-specified subgroup analysis demonstrated a clinical benefit in patients with CF 18 years of age and older who have the R117H mutation on at least one allele.

Completed enrollment in a Phase 3 clinical trial to evaluate ivacaftor as a treatment for children with CF two to five years of age with specific mutations in their CFTR gene, including the G551D mutation, and a Phase 2 proof-of-concept clinical trial in patients with CF who have clinical evidence of residual CFTR function.

Completed a Phase 2 clinical trial that demonstrated a clinical benefit of ivacaftor in combination with VX-661 in patients with CF who have two copies (homozygous) of the F508del mutation in their CFTR

gene.

- Received Breakthrough Therapy designation for the combination regimen of ivacaftor and VX-661.

Conducted Phase 2a clinical trials evaluating VX-135 and a Phase 2b clinical trial evaluating VX-509.

Maintained high research productivity:

Advanced our CF research program to identify next-generation corrector compounds that could be included in future dual and/or triple combination treatment regimens.

Progressed multiple other research and early-stage development programs, including programs in the areas of oncology, multiple sclerosis and other serious and rare diseases.

Strengthened our balance sheet:

Ended 2013 with approximately \$1.47 billion in cash, cash equivalents and marketable securities, which was an increase of approximately \$143.9 million compared to the end of 2012.

Eliminated \$400 million in convertible debt.

Focused our research and development investment on our CF programs and our other research and early-stage development programs, and reduced our sales, general and administrative expenses to appropriately balance investment against revenues.

Increased our market capitalization from approximately \$9.1 billion at the end of 2012 to approximately \$17.4 billion at the end of 2013. The following chart sets forth the price of our common stock on December 31, 2011, 2012 and 2013.



## SUMMARY INFORMATION (continued)

## COMPENSATION HIGHLIGHTS

Our compensation program is structured to attract, retain and motivate talented and experienced individuals across all areas of our business and align the interests of our executive officers with the interests of our shareholders as we seek to create value through the discovery, development and commercialization of transformative medicines. 2013 was a very successful year for Vertex, and our 2013 executive compensation decisions were made by applying our pay-for-performance compensation philosophy and principles, as follows:

- Our executive officers' total compensation is comprised of a mix of base salary, annual cash bonus and long-term incentive awards that include both time-based stock options and performance-based restricted stock awards, and reflects a balance of elements so that a significant portion is performance-contingent, to better align our executives' financial interests with the interests of our shareholders.
- 92% of the total compensation in 2013 for Dr. Jeffrey M. Leiden, our chairman, chief executive officer and president, was incentive-based in the form of annual cash bonus and equity compensation.
- We awarded our eligible officers annual cash bonuses and long-term equity grants at above-target levels to reward them for the company's and their individual 2013 successes.

Our compensation for our named executive officers was supported by 78% of the "Say-on-Pay" advisory votes cast by our shareholders in 2013. In 2013, we continued our discussions with a number of our shareholders regarding, among other matters, our executive compensation program and dilution caused by our broad-based equity compensation program. During these discussions we listened to their perspectives and gained insight into how we could further align the interests of our company with the interests of our shareholders.

Our board of directors and management development and compensation committee reviewed our compensation programs and governance practices in light of our evolving business and implemented several changes in 2013 and early 2014, including:

Implementing a modification to our equity compensation programs that resulted in a 20% decrease in the number of options that we granted in 2013 as compared to 2012 and a 5% decrease in the number of shares of restricted stock that we granted in 2013 as compared to 2012;

Adopting stock ownership guidelines for all of our named executive officers, including our CEO; and  
Amending our by-laws to provide for a majority vote standard for uncontested elections of our directors.

The total compensation for 2013 for our named executive officers is set forth in the following table under the caption "Total Compensation." To supplement this information, we have included a column entitled "Total Realized Compensation," which subtracts the grant-date fair value of equity awards granted in 2013 and substitutes the actual value realized on the exercise of stock options and the vesting of restricted stock awards during 2013. Executives with a longer tenure had higher total realized compensation in 2013 because they exercised long-term incentive stock options that had increased in value over time as our stock price increased, which is consistent with the objectives of our compensation program.

Named Executive Officer	Title	Executive Since	Salary	Annual Cash Bonus	Grant-Date Fair Value of 2013 Equity Awards	Total Compensation	Total Realized Compensation
Jeffrey M. Leiden	Chairman, CEO and President	2011	\$1,038,462	\$2,772,000	\$9,303,337	\$13,126,474	\$8,112,903
Ian F. Smith	EVP & CFO	2001	\$582,959	\$682,500	\$2,906,628	\$4,184,762	\$36,597,952
Stuart A. Arbuckle	EVP & CCO	2012	\$553,846	\$630,000	\$3,622,501	\$4,819,022	\$2,534,960



Kenneth L. Horton	EVP & CLO	2012	\$465,000	\$439,425	\$3,622,501	\$4,539,551	\$1,505,376
Peter Mueller	EVP, Global R&D & CSO	2003	\$619,846	\$637,000	\$2,906,628	\$4,176,149	\$9,996,495

For information regarding our named executive officers' compensation, as calculated under Securities and Exchange Commission, or SEC, rules, see the narrative and notes accompanying the Summary Compensation Table set forth beginning on page 49. For more information regarding the calculation of "Total Realized Compensation" see the narrative accompanying the Total Realized Compensation Table on page 51.

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SUMMARY INFORMATION (continued)

VOTING MATTERS

Our board of directors recommends that our shareholders vote FOR the director nominees and FOR each of the proposals.

ELECTION OF DIRECTORS (Item 1 – Page 9)

Margaret G. McGlynn and Wayne J. Riley have been nominated for re-election and William D. Young has been nominated for election at the 2014 annual meeting of shareholders. You will find important information about the qualifications and experience of each of our director nominees and each of our continuing directors in the section of this proxy statement captioned “Item 1: Election of Directors.”

APPROVAL OF AN AMENDMENT TO OUR 2013 STOCK AND OPTION PLAN (Item 2 – Page 23)

We are asking our shareholders to approve an amendment to our 2013 Stock and Option Plan, or 2013 Plan, that increases the number of shares authorized for issuance pursuant to the 2013 Plan by 9.5 million shares. We have adopted, subject to shareholder approval, the amendment to the 2013 Plan. The 2013 Plan utilizes a “fungible share” concept, in conjunction with our decision implemented in 2013 to shift our overall compensation balance toward more cash and less equity. The fungible share approach allows us to issue a higher percentage of restricted shares relative to options than was permitted under our 2006 Stock and Option Plan, which is intended to reduce dilution and result in the issuance of a lower number of overall shares. This shift resulted in us granting 20% fewer options and 5% fewer shares of restricted stock in 2013 as compared to 2012. The 2013 Plan has a pool of shares of our common stock eligible for issuance, with each share of issued restricted stock reducing the pool by 1.66 shares.

We believe that our equity compensation program has been fundamental to our success, and that the requested additional 9.5 million shares are necessary in order to continue to attract, incent and retain the right employees to achieve our short- and long-term business objectives.

We expect to continue to review our compensation programs in future periods in light of the market for talented employees in our industry and our business and financial profile.

RATIFICATION OF THE APPOINTMENT OF OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM (Item 3 – Page 30)

We are asking our shareholders to ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for 2014.

“SAY-ON-PAY” ADVISORY VOTE (Item 4 – Page 33)

We are asking our shareholders to approve, on an advisory basis, the compensation program for our named executive officers. We believe that our compensation program has been and will continue to be successful in attracting, retaining and motivating the right executive team to lead our company. After consideration of the evolution of our business and the views expressed by our shareholders, under a program we implemented in 2013 we changed the amounts payable under our incentive compensation programs, and modified certain of our compensation and equity related policies. For a further discussion of these actions see “Item 4: Advisory Vote to Approve Named Executive Officer Compensation.”

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## PROXY STATEMENT

This proxy statement, with the enclosed proxy card, is being furnished to shareholders of Vertex Pharmaceuticals Incorporated in connection with the solicitation by our board of directors of proxies to be voted at our 2014 annual meeting of shareholders and at any postponements or adjournments thereof. The annual meeting will be held on Wednesday, May 7, 2014, at 9:30 a.m. at our headquarters, which are located at 50 Northern Avenue, Boston, Massachusetts.

This proxy statement and the enclosed proxy card are first being mailed or otherwise furnished to our shareholders on or about April 2, 2014. Our 2013 Annual Report on Form 10-K and other materials regarding our company are being mailed to the shareholders with this proxy statement, but are not part of the proxy statement.



## FREQUENTLY ASKED QUESTIONS REGARDING THE ANNUAL MEETING

### WHAT IS THE PURPOSE OF THE ANNUAL MEETING?

At the annual meeting, shareholders will act upon the matters outlined in the Notice of Annual Meeting of Shareholders. These include the election of directors, the approval of an amendment to our 2013 Stock and Option Plan, which authorizes for issuance 9.5 million additional shares of our common stock, the ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm and the approval on an advisory basis of the compensation program for our named executive officers. Management, chairs of each committee of our board and representatives of Ernst & Young LLP are expected to attend the annual meeting and be available to respond to questions from shareholders.

### WHAT IS A PROXY?

It is your legal designation of another person to vote the stock you own in the manner you direct. That other person is called a proxy. If you designate someone as your proxy in a written document, that document also is called a proxy or a proxy card. We have designated Jeffrey M. Leiden, Ian F. Smith and Kenneth L. Horton to serve as proxies at the annual meeting.

### WHAT IS A PROXY STATEMENT?

It is a document that provides certain information about a company and matters to be voted upon at a meeting of shareholders. The SEC requires us to give you, as a shareholder, the information in this proxy statement and certain other information when we are soliciting your vote.

### WHAT IS THE DIFFERENCE BETWEEN A SHAREHOLDER OF RECORD AND A SHAREHOLDER WHO HOLDS STOCK IN STREET NAME?

**Shareholders of Record.** If your shares are registered in your name with our transfer agent, Computershare, you are a shareholder of record with respect to those shares, and these proxy materials were sent directly to you by Computershare.

**Street Name Holders.** If you hold your shares in an account at a bank or broker, then you are the beneficial owner of shares held in "street name." The proxy materials were forwarded to you by your bank or broker, who is considered the shareholder of record for purposes of voting at the annual meeting. As a beneficial owner, you have the right to direct your bank or broker how to vote the shares held in your account.

### HOW MANY SHARES MUST BE REPRESENTED IN ORDER TO HOLD THE ANNUAL MEETING?

In order for us to conduct the annual meeting, holders of a majority of the shares entitled to vote as of the close of business on the record date must be present in person or by proxy. This constitutes a quorum. If you are a shareholder of record, your shares are counted as present if you properly return a proxy card or voting instruction form by mail or if you attend the annual meeting and vote in person. If you are the beneficial owner of shares held in "street name" you must follow the instructions of your bank or broker in order to direct them how to vote the shares held in your account. Abstentions and broker non-votes will be counted as present for purposes of establishing a quorum. If a quorum is not present, we will adjourn the annual meeting until a quorum is obtained.

### HOW CAN I VOTE AT THE ANNUAL MEETING IF I OWN SHARES IN STREET NAME?

If you are a street name holder, you may not vote your shares at the annual meeting unless you obtain a legal proxy from your bank or broker. A legal proxy is a bank's or broker's authorization for you to vote the shares it holds in its name on your behalf.

### WHAT IS THE RECORD DATE AND WHAT DOES IT MEAN?

The record date for the annual meeting is March 10, 2014 and was established by our board of directors. On the record date, there were 236,112,597 shares of our common stock entitled to vote. Owners of record of common stock at the close of business on the record date are entitled to:

- receive notice of the annual meeting; and
- vote at the annual meeting and any adjournment or postponement of the annual meeting.

### IF I SUBMIT A PROXY, MAY I LATER REVOKE IT AND/OR CHANGE MY VOTE?

Shareholders may revoke a proxy and/or change their vote prior to the completion of voting at the annual meeting by:  
• signing another proxy card with a later date and delivering it to our Secretary, Kenneth L. Horton, 50 Northern Avenue, Boston, Massachusetts 02210, before the annual meeting; or

voting at the annual meeting, if you are a shareholder of record or hold your shares in street name and have obtained a legal proxy from your bank or broker.

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FREQUENTLY ASKED QUESTIONS REGARDING THE ANNUAL MEETING (continued)

**WHAT IF I DO NOT SPECIFY A CHOICE FOR A MATTER WHEN RETURNING A PROXY?**

Shareholders should specify their choice for each matter following the directions described on their proxy card. If no specific instructions are given, proxies that are signed and returned will be voted:

FOR the election of all director nominees;

FOR approval of the amendment to our 2013 Stock and Option Plan;

FOR ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2014; and

FOR our executive compensation program.

**ARE MY SHARES VOTED IF I DO NOT PROVIDE A PROXY?**

If you are a shareholder of record and do not provide a proxy, you must attend the annual meeting in order to vote. If you hold shares through an account with a bank or broker, your shares may be voted by the bank or broker if you do not provide voting instructions. Banks and brokers have the authority under applicable rules to vote shares on routine matters for which their customers do not provide voting instructions. The ratification of Ernst & Young LLP as our independent registered public accounting firm is considered a routine matter. The election of directors, the approval of the amendment to our 2013 Stock and Option Plan and the advisory vote with respect to our executive compensation program are not considered routine, and banks and brokers cannot vote shares without instruction on those matters. Shares that banks and brokers are not authorized to vote on those matters are counted as “broker non-votes” and will have no effect on the results of those votes.

**WHAT VOTE IS REQUIRED TO APPROVE EACH PROPOSAL AND HOW ARE VOTES COUNTED?**

**Item 1: Election of Directors**

The nominees for director in an uncontested election who receive a majority of the votes from shareholders present in person or represented by proxy at the annual meeting (more votes cast “FOR” such director than “WITHHELD” from such director) will be elected. Abstentions are not counted for purposes of electing directors. You may vote either FOR or WITHHOLD your vote from any one or more of the nominees.

**Item 2: Approval of the Amendment to our 2013 Stock and Option Plan**

To be approved, this proposal must receive an affirmative vote from shareholders present in person or represented by proxy at the annual meeting representing a majority of the votes cast on the proposal. Abstentions will have no effect on the results of this vote.

**Item 3: Ratification of the Appointment of Independent Registered Public Accounting Firm**

To be approved, this proposal must receive an affirmative vote from shareholders present in person or represented by proxy at the annual meeting representing a majority of the votes cast on the proposal. Abstentions will have no effect on the results of this vote.

**Item 4: Advisory Vote to Approve Named Executive Officer Compensation**

To be approved, this proposal must receive an affirmative vote from shareholders present in person or represented by proxy at the annual meeting representing a majority of the votes cast on the proposal. Abstentions will have no effect on the results of this vote.

**WHERE CAN I FIND MORE INFORMATION ABOUT MY VOTING RIGHTS AS A SHAREHOLDER?**

The SEC has an informational website that provides shareholders with general information about how to cast their vote and why voting should be an important consideration for shareholders. You may access that website at [sec.gov/spotlight/proxymatters.shtml](http://sec.gov/spotlight/proxymatters.shtml).



## ITEM 1 - ELECTION OF DIRECTORS

Our board of directors has nominated Margaret G. McGlynn and Wayne J. Riley for re-election and William D. Young for election at our 2014 annual meeting of shareholders to hold office until our 2017 annual meeting of shareholders.

Our board of directors is our company's ultimate decision-making body except with respect to those matters reserved to the shareholders. Our board selects our senior management team, who in turn are responsible for the day-to-day operations of our company. Our board acts as an advisor and counselor to senior management and oversees its performance.

Our board consists of directors divided into three classes, with each class holding office for a three-year term. Margaret G. McGlynn and Wayne J. Riley, current Class I Directors, and William D. Young, who would join our board as a Class I Director upon election by our shareholders, have been nominated by our board for election at the 2014 annual meeting of shareholders for a three-year term that will expire at the 2017 annual meeting of shareholders. Each of the nominees has agreed to be named in this proxy statement and to serve if elected. We believe that all of the nominees will be able and willing to serve if elected. However, if any nominee should become unable for any reason or unwilling to serve, proxies may be voted for another person nominated as a substitute by our board of directors, or our board may reduce the number of directors.

### BOARD STRUCTURE AND COMPOSITION

The corporate governance and nominating committee of our board of directors is responsible for recommending the composition and structure of our board and for developing criteria for board membership. This committee regularly reviews director competencies, qualities and experiences, with the goal of ensuring that our board is comprised of an effective team of directors who function collegially and who are able to apply their experience toward meaningful contributions to general corporate strategy and oversight of corporate performance, risk management, organizational development and succession planning.

Our by-laws provide that the size of our board may range between three and eleven members. We currently have nine members on our board of directors. We have nominated William D. Young, who was recommended by our corporate governance and nominating committee, for election at the 2014 annual meeting of shareholders to fill the vacant tenth seat on our board of directors. Our corporate governance and nominating committee may seek one additional director candidate who meets the criteria below in order to complement the qualifications and experience of our existing board members. Our corporate governance and nominating committee may engage a search firm to recommend candidates who satisfy the criteria.

**Director Criteria, Qualifications and Experience; Diversity.** The corporate governance and nominating committee seeks to recommend for nomination directors of stature who have a substantive knowledge of our business and industry or who can bring to the board specific and valuable strategic or management capabilities acquired in other industries. The committee expects each of our directors to have proven leadership, sound judgment, integrity and a commitment to the success of our company. We also seek personal qualities that foster a respectful environment in which our directors listen to one another and are engaged and constructive. These goals for our board composition presuppose a diverse range of viewpoints, experiences and specific expertise. The corporate governance and nominating committee considers a nominee's personal characteristics and business experience relative to those of our existing board members, including the type of prior management experience, levels of expertise relevant to our business and its growth stage, prior board service, reputation in the business community, personal characteristics such as gender and race and other factors that the committee believe to be important at the specific point in time when choices for board membership are being made. At this time, our commitment to racial and gender diversity is demonstrated by the make-up of our board, which includes two members who are women and one member who is African-American.

The key experience, qualifications, attributes and skills brought by our directors to our board that are important to our business include:

**Corporate leadership experience.** We believe that directors who have held significant corporate leadership positions over extended periods of time provide our company with special insights. These people generally have a practical understanding of organizational processes and strategy that is valuable during periods of organizational change and growth.



ITEM 1 - ELECTION OF DIRECTORS (continued)

**Industry knowledge.** We seek directors with substantive knowledge of the biotechnology, pharmaceutical or related industries. We believe that having a substantial portion of our board of directors comprised of individuals with experience as executives or directors in these industries provides our board with the background necessary to counsel our management regarding the issues facing our company.

**Financial expertise.** We believe that an understanding of finance is important for our board of directors, and our budgeting processes and financial and strategic transactions require our directors to be financially knowledgeable. In addition, we seek to have a number of directors qualified to serve on our audit and finance committee and at least one director with in-depth knowledge of financial statements and financial reporting processes sufficient to qualify as an audit committee financial expert under applicable regulatory standards.

**Scientific experience.** As a biopharmaceutical company that seeks to develop transformative medicines for patients with serious diseases, we look for directors with backgrounds in science and technology and in particular the research and development of pharmaceutical products.

**Commitment to company values and goals.** We seek directors who are committed to our company and its values and goals and who value the contributions that can be provided by individuals who believe in our company and its prospects for success.

**SHAREHOLDER-RECOMMENDED DIRECTOR CANDIDATES**

The corporate governance and nominating committee will consider director candidates recommended by shareholders in accordance with the criteria for director selection described above under Director Criteria, Qualifications and Experience; Diversity. Shareholders recommending candidates for consideration should submit any pertinent information regarding the candidate, including biographical information and a statement by the proposed candidate that he or she is willing to serve if nominated and elected, by mail to our corporate secretary at our offices at 50 Northern Avenue, Boston, Massachusetts 02210. If a shareholder wishes to nominate a candidate to be considered for election as a director at the 2015 annual meeting of shareholders using the procedures set forth in our by-laws, the shareholder must follow the procedures described in Other Information—Shareholder Proposals for the 2015 Annual Meeting and Nominations for Director on page 68 of this proxy statement.

**MAJORITY VOTE STANDARD**

In 2014, following discussions with our shareholders, we amended our by-laws to provide for a majority vote standard for uncontested elections of our directors. Under our by-laws as amended, director nominees in an uncontested election who receive more votes cast “for” such director nominees than “withheld” from such director nominees are elected. Our board’s policy is that any nominee for director in an uncontested election who receives a greater number of votes “withheld” than votes “for” the nominee’s election shall promptly tender his or her resignation to the chair of our board following certification of the shareholder vote. Our corporate governance and nominating committee will promptly consider the tendered resignation. Based on all factors it deems in its discretion to be relevant, the committee will recommend that our board either accept or reject the resignation and may recommend that the board adopt measures designed to address any issues perceived to underlie the election results. Our board will then act on the corporate governance and nominating committee’s recommendation. We will promptly disclose our board’s decision, including, if applicable, the reasons for rejecting the tendered resignation. Any director whose resignation is being considered under this policy will not participate in the corporate governance and nominating committee or board considerations, recommendations or actions with respect to the tendered resignation.

**OUR BOARD OF DIRECTORS RECOMMENDS THAT SHAREHOLDERS VOTE FOR EACH OF THE NOMINEES.**

ITEM 1 - DIRECTOR NOMINEES

In each of the director nominee and continuing director biographies that follow, we highlight the specific experience, qualifications, attributes and skills that led the board of directors to conclude that the director nominee or continuing director should serve on our board of directors at this time.

DIRECTOR NOMINEES

CLASS I DIRECTORS—PRESENT TERMS EXPIRING IN 2014 AND PROPOSED TERMS TO EXPIRE IN 2017

Margaret G. McGlynn

Age: 54

Member – Management Development and Compensation Committee

Director Since: 2011

Ms. McGlynn has served as the President and Chief Executive Officer of the International AIDS Vaccine Initiative, a global not-for-profit organization whose mission is to ensure the development of safe, effective and accessible HIV vaccines for use throughout the world, since July 2011. Ms. McGlynn served as President, Vaccines and Infectious Diseases of Merck & Co., Inc. from 2005 until 2009. Ms. McGlynn joined Merck in 1983 and served in a variety of marketing, sales and managed care roles. Currently, Ms. McGlynn serves as a member of the Board of Directors of Air Products and Chemicals, Inc., a company specializing in gases and chemicals for industrial uses, and Amicus Therapeutics, Inc., a biopharmaceutical company. She is a member of the National Industrial Advisory Committee at the University at Buffalo School of Pharmacy and Pharmaceutical Sciences. Ms. McGlynn holds a B.S. in pharmacy and an M.B.A. in marketing from the State University of New York at Buffalo.

Skills and Qualifications: Ms. McGlynn's corporate leadership experience and industry knowledge make her a valuable contributor to our board. Her service as an executive at Merck and her service on the board of Amicus Therapeutics and the board and audit committee of Air Products and Chemicals, Inc. give her a practical understanding of organizational practices valuable to a company at our stage of growth. Her experience in the development of treatments for infectious diseases provides her with a valuable understanding of the scientific issues we face in the drug development process.

Wayne J. Riley, M.D.

Age: 54

Member – Corporate Governance and Nominating Committee

Director Since: 2010

Member – Science and Technology Committee

Dr. Riley is Clinical Professor of Medicine, Vanderbilt University School of Medicine and Adjunct Professor of Healthcare Management, Owen Graduate School of Management at Vanderbilt University. From January 2007 until July 2013, Dr. Riley was President and Chief Executive Officer of Meharry Medical College. At Meharry he held the rank of tenured Professor of Internal Medicine and was a Senior Health Policy Associate at the Robert Wood Johnson Center for Health Policy at Meharry. From May 2004 to December 2006, Dr. Riley served as a corporate officer and member of the executive management team as Vice President and Vice Dean for Health Affairs and Governmental Relations and Associate Professor of Medicine at Baylor College of Medicine, and Assistant Chief of Medicine at Ben Taub General Hospital. Dr. Riley is a member of the Board of Directors of HCA Holdings, Inc., the parent company of Hospital Corporation of America, a leading operator of hospitals and health facilities. Dr. Riley formerly served as a Director of Pinnacle Financial Partners and of the Nashville Branch Board of the Federal Reserve Bank of Atlanta. Dr. Riley earned a B.A. from Yale University, an M.P.H. in health systems management from Tulane University School of Public Health & Tropical Medicine, an M.D. from the Morehouse School of Medicine and an M.B.A. from Rice University's Jones Graduate School of Management.

Skills and Qualifications: Dr. Riley is a valuable contributor to our board due to the corporate leadership skills he has acquired through his experience as the President and CEO of Meharry Medical College and executive positions at Baylor College of Medicine and Ben Taub General Hospital. As a physician, executive, clinician educator, and public health and health policy expert, he brings a unique perspective on the scientific and medical issues we face in pharmaceutical development and commercialization.

ITEM 1 - DIRECTOR NOMINEES (continued)

DIRECTOR NOMINEE—PROPOSED TERM AS CLASS I DIRECTOR TO EXPIRE IN 2017

William D. Young

Age: 69

Mr. Young is a Venture Partner at Clarus Ventures, a life sciences venture capital firm, which he joined in 2010. Prior to Clarus Ventures, Mr. Young served from 1999 until June 2009 as the Chairman and Chief Executive Officer of Monogram Biosciences, Inc., a biotechnology company acquired by Laboratory Corporation of America in June 2009. From 1980 to 1999, Mr. Young was employed at Genentech, Inc. in positions of increasing responsibility, including as Chief Operating Officer from 1997 to 1999, where he was responsible for all product development, manufacturing and commercial functions. Prior to joining Genentech, Mr. Young was with Eli Lilly & Co. for 14 years. Mr. Young currently serves at the Chairman of the Boards of Directors of Biogen Idec and NanoString Technologies, Inc., and as a member of the Boards of Directors of Theravance, Inc. and Biomarin Pharmaceutical Inc. Mr. Young is retiring from Biogen Idec's Board of Directors when his term concludes in June 2014. Mr. Young holds a B.S. in Chemical Engineering from Purdue University, an M.B.A. from Indiana University and an Honorary Doctorate in Engineering from Purdue University. Mr. Young was elected to the National Academy of Engineering in 1993 for his contributions to biotechnology.

Skills and Qualifications: Mr. Young will be a valuable contributor to our board due to the in-depth knowledge of the pharmaceuticals industry that he acquired through his extensive experience as both a CEO and board member at numerous pharmaceutical and biotechnology organizations and as a venture capitalist focused on the life sciences industry. Mr. Young's strong leadership qualities, global industry knowledge and financial expertise provide him with the background to work collaboratively with both management and fellow board members in order to address issues facing our company.

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ITEM 1 - CONTINUING DIRECTORS

CONTINUING DIRECTORS

CLASS II DIRECTORS—TERMS EXPIRING IN 2015

David Altshuler, M.D., Ph.D.

Age: 49

Member – Corporate Governance and Nominating Committee

Director Since: 2012

Member – Science and Technology Committee

Dr. Altshuler is the Director of the Program in Medical and Population Genetics at the Broad Institute of Harvard University and the Massachusetts Institute of Technology, a position he has held since 2003. He has served as the Institute's Deputy Director and Chief Academic Officer since 2009. He is one of four founding members of the Broad Institute, a research collaboration of Harvard, MIT, The Whitehead Institute and the Harvard Hospitals. Dr. Altshuler joined the faculty at Harvard Medical School and the Massachusetts General Hospital in 2000 and has held the academic rank of Professor of Genetics and Medicine since 2008. He has served as Adjunct Professor of Biology at MIT since 2012. Dr. Altshuler earned a B.S. from MIT, a Ph.D. from Harvard University and an M.D. from Harvard Medical School. Dr. Altshuler completed his clinical training in Internal Medicine, and in Endocrinology, Diabetes and Metabolism, at the Massachusetts General Hospital.

**Skills and Qualifications:** Dr. Altshuler is a leading academic physician-scientist who brings an in-depth understanding of biology and human genetics and the use of advanced technologies in medical research to our board. In addition to his industry knowledge and scientific expertise, Dr. Altshuler's experience as a founding member of an innovative, collaborative research institute provides him with valuable leadership experience.

Jeffrey M. Leiden, M.D., Ph.D.

Chairman, Chief Executive Officer and President

Age: 58

Director Since: 2009

Dr. Leiden has held the positions of Chief Executive Officer and President since February 2012 after joining us as CEO Designee in December 2011. He has been the Chairman of our Board of Directors since May 2012, and served as our lead independent director from October 2010 through December 2011. Dr. Leiden was a Managing Director at Clarus Ventures, a life sciences venture capital firm, from 2006 through January 2012. Dr. Leiden was President and Chief Operating Officer of Abbott Laboratories, Pharmaceuticals Products Group, and a member of the Board of Directors of Abbott Laboratories from 2001 to 2006. From 1987 to 2000, Dr. Leiden held several academic appointments, including the Rawson Professor of Medicine and Pathology and Chief of Cardiology and Director of the Cardiovascular Research Institute at the University of Chicago, the Elkan R. Blout Professor of Biological Sciences at the Harvard School of Public Health, and Professor of Medicine at Harvard Medical School. He is an elected member of both the American Academy of Arts and Sciences, and the Institute of Medicine of the National Academy of Sciences. Dr. Leiden is a senior advisor to Clarus Ventures. Dr. Leiden was a director and the non-executive Vice Chairman of the Board of Directors of Shire plc, a specialty biopharmaceutical company, from 2006 to January 2012, and was also a member of the Board of Directors of Millennium Pharmaceuticals, Inc. from October 2007 until it was acquired in June 2008. Dr. Leiden received his M.D., Ph.D. and B.A. degrees from the University of Chicago.

**Skills and Qualifications:** Dr. Leiden possesses strong leadership qualities, demonstrated through his service as an executive in the pharmaceutical industry and as a life sciences venture capitalist, and has extensive knowledge of the science underlying drug discovery and development through his experiences as a distinguished physician, scientist and teacher. He also provides our board with in-depth knowledge of our company through the day-to-day leadership of our executives.

ITEM 1 - CONTINUING DIRECTORS (continued)

Bruce I. Sachs

Co-lead Independent Director

Age: 54

Chair – Management Development and Compensation Committee

Director Since: 1998

Member – Audit and Finance Committee

Mr. Sachs is a General Partner at Charles River Ventures, a venture capital firm he joined in 1999. From 1998 to 1999, he served as Executive Vice President and General Manager of Ascend Communications, Inc. From 1997 until 1998, Mr. Sachs served as President and Chief Executive Officer of Stratus Computer, Inc. From 1995 to 1997, he served as Executive Vice President and General Manager of the Internet Telecom Business Group at Bay Networks, Inc. From 1993 to 1995, he served as President and Chief Executive Officer at Xylogics, Inc. Mr. Sachs was a director of BigBand Networks, Inc., a network-based platform company, from 2005 through June 2009.

Mr. Sachs holds a B.S.E.E. in electrical engineering from Bucknell University, an M.E.E. in electrical engineering from Cornell University and an M.B.A. from Northeastern University.

Skills and Qualifications: Mr. Sachs brings strong business judgment and financial analytical skills, honed through his experience developing business strategy at a senior management level and his success in building companies and in venture capital, to the board. In addition, Mr. Sachs has extensive business leadership experience, including service as a CEO at a technology company, as well as financial expertise.

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ITEM 1 - CONTINUING DIRECTORS (continued)

CLASS III DIRECTORS—TERMS EXPIRING IN 2016

Joshua Boger, Ph.D.

Age: 62

Chair – Science and Technology Committee

Director Since: 1989

Dr. Boger is the founder of Vertex. He was our Chief Executive Officer from 1992 through May 2009. He was Chairman of our Board from 1997 until May 2006 and our President from our inception until December 2000, and from 2005 through February 2009. He was our Chief Scientific Officer from 1989 until May 1992. Prior to founding Vertex in 1989, Dr. Boger held the position of Senior Director of Basic Chemistry at Merck Sharp & Dohme Research Laboratories in Rahway, New Jersey, where he headed both the Department of Medicinal Chemistry of Immunology & Inflammation and the Department of Biophysical Chemistry. Dr. Boger holds a B.A. in chemistry and philosophy from Wesleyan University and M.S. and Ph.D. degrees in chemistry from Harvard University.

Skills and Qualifications: Dr. Boger’s qualifications for our board include his extensive industry knowledge and leadership experience. Dr. Boger brings an in-depth knowledge of issues facing our company and our industry as a result of his experience founding and leading Vertex and his distinguished career as a scientist.

Terrence C. Kearney

Age: 59

Chair – Audit and Finance Committee

Member – Management Development and Compensation Committee

Director Since: 2011

Mr. Kearney served as the Chief Operating Officer of Hospira, Inc., a specialty pharmaceutical and medication delivery company, from April 2006 to January 2011. From April 2004 to April 2006, he served as Hospira’s Senior Vice President, Finance, and Chief Financial Officer, and he served as Acting Chief Financial Officer through August 2006. Mr. Kearney served as Vice President and Treasurer of Abbott Laboratories from 2001 to April 2004. From 1996 to 2001, Mr. Kearney was Divisional Vice President and Controller for Abbott’s International Division. He received his B.S. in biology from the University of Illinois and his M.B.A. from the University of Denver.

Skills and Qualifications: Mr. Kearney’s corporate leadership experience, industry knowledge and financial expertise make him a valuable contributor to our board. He has a practical perspective on the management of global pharmaceutical operations, including commercial, manufacturing and research and development activities, and financial management strategies. He is an “audit committee financial expert” as defined in SEC regulations, with particular experience in matters faced by the audit committee of a company with pharmaceutical product revenues and related expenses.



ITEM 1 - CONTINUING DIRECTORS (continued)

Yuchun Lee

Age: 48

Director Since: 2012

Member – Audit and Finance Committee

Member – Science and Technology Committee

Mr. Lee has served as an Executive in Residence (XIR) and Partner of General Catalyst Partners, a venture capital firm, since April 2013. Mr. Lee was the Vice President of IBM's Enterprise Marketing Management Group from November 2010 through January 2013. Mr. Lee co-founded Unica Corporation, a provider of software and services used to automate marketing processes, in 1992, and was Unica's President and/or Chief Executive Officer from 1992 through November 2010, when Unica was acquired by IBM. From 1989 to 1992, Mr. Lee was a senior consultant at Digital Equipment Corporation, a supplier of general computing technology and consulting services. Mr. Lee holds B.S. and M.S. degrees in electrical engineering and computer science from the Massachusetts Institute of Technology and an M.B.A. from Babson College.

Skills and Qualifications: Mr. Lee's expertise in marketing processes, customer engagement and business and financial expertise make him a valuable contributor to our board. Mr. Lee is an innovator who founded and managed the growth of a successful technology company and gained further leadership experience while serving as an executive at IBM. Mr. Lee's experiences outside of the biopharmaceutical sector provide the board with a fresh perspective on the issues facing the company.

Elaine S. Ullian

Age: 66

Director Since: 1997

Co-lead Independent Director

Chair – Corporate Governance and Nominating Committee

Member – Audit and Finance Committee

From 1996 through January 2010, Ms. Ullian served as President and Chief Executive Officer of Boston Medical Center, a private, not-for-profit, 626-bed, academic medical center with a community-based focus. From 1994 to 1996, she served as President and Chief Executive Officer of Boston University Medical Center Hospital. From 1987 to 1994, Ms. Ullian served as President and Chief Executive Officer of Faulkner Hospital. She also serves as a director of Thermo Fisher Scientific Inc. and Hologic, Inc. Ms. Ullian holds a B.A. in political science from Tufts University and an M.P.H. from the University of Michigan.

Skills and Qualifications: Ms. Ullian brings significant leadership experience acquired as the CEO of large health care providers to our board. The knowledge she obtained serving as an executive, together with her extensive experience serving on the boards of directors of multiple public companies in the healthcare field, provide her with the expertise required to serve as one of our co-lead independent directors and as the chair of our corporate governance and nominating committee. She also provides the board with the perspective of providers, payors and patients, for whom our products are intended.

## CORPORATE GOVERNANCE AND RISK MANAGEMENT

We are committed to good corporate governance and integrity in our business dealings. Our governance practices are documented in our Statement of Corporate Governance Principles, which addresses the role and composition of our board and the functioning of the board and its committees. You can find our governance documents, including our Statement of Corporate Governance Principles, charters for each committee of the board and our Code of Conduct, on our website [www.vrtx.com](http://www.vrtx.com) under “Investors—Corporate Governance—Governance Documents.”

### INDEPENDENCE, CHAIR AND CO-LEAD INDEPENDENT DIRECTORS

Our board has determined that seven of our nine directors qualify as “independent” under the definition of that term adopted by The Nasdaq Stock Market LLC, or Nasdaq. These directors are Dr. Altshuler, Mr. Kearney, Mr. Lee, Ms. McGlynn, Dr. Riley, Mr. Sachs and Ms. Ullian. Our independent directors generally meet in executive session at each regularly scheduled board meeting.

Dr. Leiden, our president and chief executive officer, serves as the chairman of our board. Our employment agreement with Dr. Leiden provides that he will serve as the chairman of our board through January 31, 2016. In addition, we have two co-lead independent directors who are elected by the independent directors. Each of the board committees (other than the science and technology committee) is chaired by one of our independent directors.

Our board believes that strong, independent board leadership is a critical aspect of effective corporate governance, and our corporate governance principles require that if the chair is not an independent director, that the independent directors elect a lead independent director. Since December 2011, Mr. Sachs and Ms. Ullian have served as our co-lead independent directors. We believe this structure provides our board independent leadership, while providing the benefit of having our chief executive officer, the individual with primary responsibility for managing our day-to-day operations, chair regular board meetings as we discuss key business and strategic issues. Combined with the co-lead independent directors and experienced and independent committee chairs, this structure provides strong independent oversight of management.

Our co-lead independent directors’ responsibilities include:

- calling and leading regular and special meetings of the independent directors;
- serving as a liaison between our executive leaders and the independent directors;
- reviewing the planned dates for regularly scheduled board meetings and the primary agenda items for each meeting; and
- reviewing with the chair of each board committee agenda items that fall within the scope of the responsibilities of that committee.

### BOARD COMMITTEES

Our board has established various committees to assist in discharging its duties: the audit and finance committee, the corporate governance and nominating committee, the management development and compensation committee, or MDCC, and the science and technology committee. Each member of the audit and finance committee, corporate governance and nominating committee and MDCC is an independent director as that term is defined by the SEC and Nasdaq. The primary responsibilities of each of the committees are set forth below, and the committee memberships are provided in the table appearing on page 19.

Each of the committees has the authority, as its members deem appropriate, to engage legal counsel or other experts or consultants in order to assist the committee in carrying out its responsibilities.

CORPORATE GOVERNANCE AND RISK MANAGEMENT (continued)

RISK MANAGEMENT

Our board of directors discharges its overall responsibility to oversee risk management with a focus on our most significant risks. We face considerable risk related to the commercialization of our approved products, including regulatory risk with respect to our promotional activities and competition from approved drugs and investigational drug candidates that may have product profiles superior to our approved products. We continue to invest significant resources in research programs and clinical development programs as part of our strategy to develop transformative medicines for patients with serious diseases. With respect to each of our drug development and commercialization programs, we face considerable risk that the program will not ultimately result in a commercially successful pharmaceutical product. Our board and its committees monitor and manage the strategic, compliance and operational risks related to KALYDECO (ivacaftor) and INCIVEK (telaprevir) and our research and development programs through regular board and committee discussions that include presentations to the board and its committees by our executive officers as well as during in-depth short- and long-term strategic reviews held at least annually.

For certain specific risk types, our board of directors has delegated oversight responsibility to board committees as follows:

Our audit and finance committee oversees our risk management programs and policies related to our financial and accounting systems, accounting policies and investment strategies, information technology systems and steps our management has taken to monitor, mitigate and report on those exposures. The audit and finance committee also is responsible for addressing risks arising from related party transactions.

Our MDCC oversees risks associated with our compensation policies, management resources and structure, succession planning, and management development and selection processes.

Our corporate governance and nominating committee oversees risks related to the company's governance structure and litigation exposure, and reviews our enterprise risk management programs.

Our science and technology committee oversees risks related to our research and development investments.

CODE OF CONDUCT

We have adopted a Code of Conduct that applies to all of our directors and employees, including our chief executive officer and chief financial and accounting officers. Our Code of Conduct is available on our website [www.vrtx.com](http://www.vrtx.com) under "Investors—Corporate Governance—Governance Documents." Disclosure regarding any amendments to, or waivers from, provisions of the Code of Conduct that apply to our directors or principal executive, financial or accounting officers will be posted on our website or included in a Current Report on Form 8-K within four business days following the date of the amendment or waiver.

## CORPORATE GOVERNANCE AND RISK MANAGEMENT (continued)

## BOARD ATTENDANCE, COMMITTEE MEETINGS AND COMMITTEE MEMBERSHIP

Director (1)	Independence Board	Audit and Finance	Corporate Governance and Nominating	Management and Development Compensation	Science and Technology	2013 Attendance at Meetings (2)
David Altshuler	X					95%
Joshua Boger					Chair	100%
Terrence C. Kearney	X	Chair				100%
Yuchun Lee	X					100%
Jeffrey M. Leiden		Chair				100%
Margaret G. McGlynn	X					95%
Wayne J. Riley	X					100%
Bruce I. Sachs	X	Co-lead		Chair		97%
Elaine S. Ullian	X	Co-lead	Chair			100%
2013 Meetings	10	10	5	11	4	

(1) Each of our directors is encouraged to attend each meeting of shareholders. Each of our directors attended our 2013 annual meeting of shareholders.

(2) Includes meetings of the board of directors and meetings of each committee of the board of directors while the director served on such committee.

## Audit and Finance Committee

The primary purposes of the audit and finance committee are to:

- appoint, oversee and replace, if necessary, our independent registered public accounting firm;
- assist our board in fulfilling its responsibility for oversight of our accounting and financial reporting processes; and
- review and make recommendations to our board concerning our financial structure and financing strategy.

Our independent registered public accounting firm reports directly to, and is held accountable by, our audit and finance committee in connection with the audit of our annual financial statements and related services.

Mr. Kearney, the chair of our audit and finance committee, is an “audit committee financial expert” as that term is defined in applicable regulations of the SEC.

The report of the audit and finance committee appears on page 32 of this proxy statement.

Our audit and finance committee reviews and, if appropriate, recommends for approval or ratification by our board of directors, all transactions with related persons that are required to be disclosed by us pursuant to Item 404(a) of Regulation S-K, except for transactions, if any, related to the employment of executive officers, which would be recommended for approval by the MDCC. Our policies and procedures with respect to

transactions with related persons are governed by our written Related Party Transaction Policy. Pursuant to this policy, related party transactions include transactions, arrangements or relationships in which our company is a participant, the amount involved exceeds \$120,000, and one of our executive officers, directors, director nominees or 5% shareholders or their immediate family members, who we refer to as related persons, has a direct or indirect material interest, except where disclosure of such transaction would not be required pursuant to Item 404(a) of Regulation S-K. As appropriate for the circumstances, our audit and finance committee will review and consider the related person’s interest in the related party transaction and such other factors as it deems appropriate. Since January 1, 2013, we have not entered into any transactions disclosable pursuant to Item 404(a) of Regulation S-K.

## Corporate Governance and Nominating Committee

The corporate governance and nominating committee:

- assists our board of directors in developing and implementing our corporate governance principles;
- recommends the size and composition of our board and its committees;
- develops and recommends to our board an annual self-evaluation process to assess the effectiveness of our board and oversees this process;

- reviews and recommends director compensation;
- identifies qualified individuals to become members of our board;

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CORPORATE GOVERNANCE AND RISK MANAGEMENT (continued)

- recommends director nominations to the full board; and
- assists the board in recruiting and evaluating potential candidates for the CEO position.

Management Development and Compensation Committee

The primary purposes of the MDCC are to oversee the discharge of our board's responsibilities relating to:

- compensation of our executives;
- review and approval of our benefit and equity compensation plans; and
- planning for the succession of our executives, including our chief executive officer.

The MDCC has the authority to delegate any of its responsibilities to individual members of the MDCC to the extent deemed appropriate by the MDCC in its sole discretion, but subject always to the general oversight of the board of directors.

See Compensation Discussion and Analysis—Detailed Discussion below for a discussion of the MDCC's role in overseeing executive compensation.

The report of the MDCC appears at page 48 of this proxy statement.

Compensation Committee Interlocks and Insider Participation. Mr. Kearney, Ms. McGlynn and Mr. Sachs served on the MDCC during 2013. Each member of the MDCC was an independent director while serving on the MDCC. No member of our board of directors who was a member of our MDCC at any time during 2013 has ever been one of our employees or officers. No member of our board of directors who was a member of our MDCC at any time during 2013 has ever been a party to a transaction required to be disclosed pursuant to Item 404(a) of Regulation S-K prior to becoming a member of our MDCC. During 2013, none of our executive officers served as a member of the board of directors or compensation committee of the board of directors, or performed the equivalent functions, of any entity that has one or more executive officers serving as a member of our board or the MDCC.

Science and Technology Committee

Our science and technology committee discharges our board's responsibilities relating to the oversight of our investment in pharmaceutical research and development. In furtherance of that oversight function, the science and technology committee:

- reviews and assesses our current and planned research and development programs and technology initiatives from a scientific perspective;
- assesses the capabilities of our key scientific personnel and the depth and breadth of our scientific resources;
- provides strategic advice to our board regarding emerging science and technology issues and trends; and
- periodically reviews our patent portfolio and strategy.

## DIRECTOR COMPENSATION

We have designed and implemented our compensation program for our non-employee directors to attract, motivate and retain individuals who are committed to our values and goals and who have the expertise and experience that we need to achieve those goals.

## Compensation Program

Our compensation program for our non-employee directors is set forth in the following table:

## Compensation Element

## Cash

Annual Cash Retainer		\$50,000
Annual Committee Chair Retainer	Audit and Finance Committee	\$25,000
	Corporate Governance and Nominating Committee	\$20,000
	Management Development and Compensation Committee	\$20,000
	Science and Technology Committee	\$12,500
Annual Committee Retainer (non-Chair)		\$5,000
Annual Lead Independent Director Retainer (for each Co-lead)		\$25,000

## Equity

Initial Equity Grant Option to purchase 30,000 shares of common stock. These options vests quarterly over a four-year period from the date of grant.

Annual Equity Retainer Option to purchase 20,000 shares of common stock granted on June 1 of each year. These options are fully-vested upon the date of grant.

Co-lead Independent Director Annual Grant Option to purchase 2,500 shares of common stock granted on June 1 of each year. These options are fully-vested upon the date of grant.

We periodically review and may adjust our non-employee director compensation program in the future.

## Non-Employee Director Compensation and Equity Information

The following tables provide summary information regarding our non-employee directors.

## Summary 2013 Compensation

Director	Fees Earned or Paid in Cash	Option Awards (1)	Total
David Altshuler	\$60,000	\$728,422	\$788,422
Joshua Boger	\$62,500	\$728,422	\$790,922
Matthew W. Emmens (Director until May 8, 2013)	\$22,917	\$—	\$22,917
Terrence C. Kearney	\$80,000	\$728,422	\$808,422
Yuchun Lee	\$60,000	\$728,422	\$788,422
Margaret G. McGlynn	\$55,000	\$728,422	\$783,422
Wayne J. Riley	\$60,000	\$728,422	\$788,422
Bruce I. Sachs	\$100,000	\$819,474	\$919,474
Elaine S. Ullian	\$100,000	\$819,474	\$919,474

(1) The amounts set forth under the caption “Option Awards” in the table above represent the grant-date fair value for financial statement reporting purposes of the equity awards granted during 2013. Our methodology, including underlying estimates and assumptions, for calculating these values is set forth in Note N to our consolidated financial statements included in our 2013 Annual Report on Form 10-K, filed with the SEC on February 11, 2014.

## DIRECTOR COMPENSATION (continued)

## 2013 Equity Grants

Option Grant	Date	Shares	Exercise Price	Grant-Date Fair Value
Annual Non-employee Director Grant	June 1, 2013	20,000	\$81.54	\$728,422
Annual Grant to Co-lead Independent Directors	June 1, 2013	2,500	\$81.54	\$91,053

## Outstanding Equity

As of December 31, 2013, our non-employee directors had outstanding stock options to purchase our common stock as follows:

Director	Exercisable Options	Total Outstanding Options
David Altshuler	51,250	70,000
Joshua Boger	1,762,188	1,762,188
Terrence C. Kearney	78,750	90,000
Yuchun Lee	29,375	50,000
Margaret G. McGlynn	78,750	90,000
Wayne J. Riley	74,375	80,000
Bruce I. Sachs	165,000	165,000
Elaine S. Ullian	105,000	105,000

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ITEM 2 - APPROVAL OF AMENDMENT TO 2013 STOCK AND OPTION PLAN

Our board of directors believes that our broad-based equity compensation program is essential to attract, retain and motivate people with the necessary talent and experience and to provide additional incentive to achieve our short- and long-term business objectives. We are requesting that our shareholders approve an amendment to our 2013 Stock and Option Plan that would increase the number of shares available for issuance under the 2013 Plan by 9.5 million shares. In March 2014, our board amended our 2013 Stock and Option Plan, or 2013 Plan, subject to shareholder approval, by increasing the number of shares of common stock authorized for issuance under the 2013 Plan by 9.5 million shares from 3.3 million shares to 12.8 million shares. Our 2013 Plan utilizes “fungible” shares, with stock options counting as one share against the total authorized shares and full value awards, such as restricted stock or other stock grants, counting as 1.66 shares against the total authorized shares. We adopted this fungible share plan to provide flexibility in the types of awards we grant under our equity compensation program, while appropriately accounting for the difference between stock options and full value awards. In 2013, we implemented changes in our equity compensation program that were designed to reduce dilution from our employee equity awards while maintaining a broad-based equity program. We believe that our equity compensation program has been fundamental to our success over the last several years and that the amendment to the 2013 Plan, which authorizes the issuance of additional shares subject to the 2013 Plan, is necessary in order to support our equity compensation program going forward.

Key Provisions of our 2013 Plan

The 2013 Plan includes a number of provisions designed to serve shareholders’ interests and facilitate effective corporate governance, including the following:

**Fungible Shares:** Options and other awards granted at a purchase price of 100% of the fair market value of a share of our common stock on the date of grant count against the number of shares authorized under our 2013 Plan at a rate of one share for each share granted. Any restricted stock, restricted stock units or other awards granted under the 2013 Plan at a purchase price less than 100% of the fair market value of a share of our common stock on the date of grant count against the number of shares authorized for issuance under our 2013 Plan at a rate of 1.66 shares for each share granted.

**No Stock Option Re-pricing/Exchange:** Except in connection with specific corporate transactions (including stock dividends, stock splits, consolidations, mergers, recapitalizations and reorganizations), the 2013 Plan does not permit (i) the amendment of stock options or stock appreciation rights granted under the 2013 Plan to provide an exercise price that is lower than the then-current price per share of such outstanding option or stock appreciation right, (ii) the cancellation of any outstanding option or stock appreciation right (whether or not granted under the 2013 Plan) and the grant in substitution therefor of any award under the 2013 Plan covering the same or a different number of shares of common stock and having an exercise price per share lower than the then-current exercise price per share of the cancelled option or stock appreciation right or (iii) the cancellation in exchange for a cash payment of any outstanding option or stock appreciation right with an exercise price per share above the then-current fair market value of our common stock without shareholder approval.

**No Discounted Stock Options:** Stock options cannot be granted with an exercise price less than the fair market value on the date of grant.

**No “Evergreen” Provision:** The 2013 Plan does not contain an “evergreen” or similar provision. The 2013 Plan fixes the number of shares available for future grants and does not provide for any increase based on increases in the number of outstanding shares of common stock.

**No Reload Rights:** Stock options granted under the 2013 Plan do not contain provisions entitling participants to automatic grants of additional stock options in connection with the exercise of the original option.

**Limitation on Re-use of Shares:** Shares that are delivered to, or withheld by, the company under an award may not be reissued under the 2013 Plan. Shares may be delivered or withheld in connection with the exercise of stock options or the payment of required withholding taxes.

**Independent Committee:** As it relates to our employees, the 2013 Plan is administered by the MDCC, which consists of “outside directors” within the meaning of Section 162(m) of the Code, “non-employee directors” within the meaning of Rule 16b-3 of the Exchange Act and “independent directors” as defined by Nasdaq.



## ITEM 2 - APPROVAL OF AMENDMENT TO 2013 STOCK AND OPTION PLAN (continued)

## Broad-Based Equity Compensation Program

Since our inception, we have compensated all eligible employees using a mix of cash and equity. Our broad-based equity program has allowed us to conserve our cash resources while motivating our employees to act in the company's and our shareholders' interests. The broad-based nature of our equity compensation program is an important element of our overall employee compensation program and reflects our philosophy that it is important for all of our employees to approach their jobs with a long-term perspective. The amendment to our 2013 Plan, if approved, will provide opportunities for ownership of shares of our common stock through stock option grants, restricted stock grants and other stock-based awards to employees that in each case vest over time or on the basis of the achievement of performance objectives. Our equity compensation program rewards both past and future performance. The number of shares each employee is awarded on an annual basis is based on the employee's performance rating for the prior year, with higher performance levels rewarded with more shares. The future value of stock options is performance-based because it is tied directly to stock price increases over time, such that stock options have value only if the stock price increases. Similarly, the value of restricted stock is tied directly to the price of our stock over time.

Historically, we have provided incentive compensation to our executives weighted more heavily toward equity than cash relative to our peers, with the equity component weighted more heavily toward options than restricted shares. Based on our increased ability to fund cash compensation, together with our goal of reducing dilution, and guided by market-data regarding compensation programs of similar companies in our industry, our board of directors modified the 2013 target compensation to re-balance the mix of cash and equity and to weight the equity component more toward restricted stock awards, which provide higher value for a lower number of shares. As a result of these changes, we granted 20% fewer options and 5% fewer shares of restricted stock in 2013 as compared to 2012 as set forth in the following table:

	2012 Equity Awards	2013 Equity Awards	% Change
Stock Options	6,043,000	4,840,000	(20)%
Restricted Stock and Restricted Stock Units	1,428,000	1,356,000	(5)%
Total Shares Subject to Equity Awards	7,471,000	6,196,000	(17)%

We currently expect that we will grant approximately 4.0 million stock options in 2014 due to the modifications to our equity compensation program we began implementing in 2013. As a result, we expect that there will be a further decline in the dilution to our shareholders from our equity compensation program in 2014 as compared to 2013. However, our board of directors and MDCC retain the discretion to determine the number shares under our equity compensation programs and could determine that it is in the best interest of the company to issue more equity compensation in 2014 than we currently expect.

## Existing Plans

As of March 10, 2014, options to purchase (i) an aggregate of 1,157,650 shares having a weighted-average exercise price of \$83.36 and a weighted-average term before expiration of 9.36 years were outstanding under our 2013 Plan, (ii) an aggregate of 14,103,393 shares having a weighted-average exercise price of \$47.29 and a weighted-average term before expiration of 7.28 years were outstanding under our Amended and Restated 2006 Stock and Option Plan, or 2006 Plan, and (iii) an aggregate of 950,155 shares having a weighted-average exercise price of \$30.04 and a weighted-average term before expiration of 1.67 years were outstanding under our 1996 Stock and Option Plan. Also on March 10, 2014, there were outstanding an aggregate of 2,859,170 unvested shares of restricted stock and restricted stock units granted under our 2006 Plan.

We may grant additional awards under our 2013 Plan and 2006 Plan and may not grant additional awards under our 1996 Stock and Option Plan. As of March 10, 2014, there were 2,139,275 shares remaining available for award under our 2013 Plan. As of March 10, 2014, there were 412,810 shares remaining available for award under our 2006 Plan, of which 290,242 shares were available for issuance as restricted stock and/or restricted stock units and 122,568 shares were only available for issuance as stock options with an exercise price greater than or equal to the fair market value of our common stock on the date of grant.

## Submission of 2013 Plan

We are submitting the amendment to our 2013 Plan to our shareholders as required under applicable rules of Nasdaq and to ensure (i) favorable federal income tax treatment under Section 422 of the Internal Revenue Code of 1986, as

amended, or

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ITEM 2 - APPROVAL OF AMENDMENT TO 2013 STOCK AND OPTION PLAN (continued)

the Code, for any grants of incentive stock options that we may make under our 2013 Plan and (ii) continued eligibility under Rule 162(m) of the Code to receive a federal income tax deduction with respect to compensation earned upon exercise of options under our 2013 Plan.

**SUMMARY OF 2013 STOCK AND OPTION PLAN**

A summary of the principal features of our 2013 Plan is set forth below. A copy of our 2013 Plan, including the amendment that would become effective upon shareholder approval of this proposal, is attached to this proxy statement as Appendix A.

**Administration and Eligibility for Participation**

The 2013 Plan is administered by our board of directors or any committee to which it delegates all or a part of its administrative responsibilities under the 2013 Plan. Our board of directors has delegated the administration of the 2013 Plan to the MDCC. Subject to the provisions of the 2013 Plan, our board, or an authorized committee of our board, determines the persons to whom awards under the 2013 Plan will be granted, the number of shares to be covered by each award, the exercise price per share and the manner of exercise, and the terms and conditions upon which awards are granted, to accelerate the vesting or extend the date of exercise of any installment of any award, and to interpret the provisions of the 2013 Plan. Awards may be granted under the 2013 Plan to our employees, including officers and directors who are employees, and to our consultants, advisors and non-employee directors. As of March 10, 2014, we and our subsidiaries had approximately 1,900 employees and eight non-employee directors eligible to participate in the 2013 Plan. The number of consultants and advisors eligible for awards under our 2013 Plan varies from time to time. No participant may be granted awards in any calendar year for more than 1,000,000 shares, subject to adjustment for stock splits and similar recapitalizations.

**Description of Awards**

The 2013 Plan provides for the award of stock options, stock grants, and other stock-based awards. Any restricted stock grants, restricted stock units or other awards granted under the 2013 Plan at a purchase price less than 100% of the fair market value of a share of our common stock on the date of grant will count against the number of shares authorized for issuance under the 2013 Plan at a rate of 1.66 shares for each share granted. Shares of common stock reserved for awards granted under the 2013 Plan that lapse or are canceled or forfeited are added back to the share reserve available for future award with restricted stock grants, restricted stock units or other awards granted under the 2013 Plan at a purchase price less than 100% of the fair market value of a share of our common stock on the date of grant added back to the share reserve at a rate of 1.66 shares for each share that lapses or is canceled or forfeited. Shares of common stock issued pursuant to restricted stock agreements and restricted stock unit awards typically are purchased by employees for nominal value. If we were to permit shares of common stock to be delivered to us to pay the exercise price of a stock option or withheld to fund the payment of taxes, those shares would not be added back to the share reserve available for future awards. Pursuant to an amendment to the 2013 Plan adopted in March 2014, no option or stock appreciation right may be granted with a term exceeding ten years from the date of grant.

**Stock Options**

Stock options granted under the 2013 Plan may be awarded as either non-qualified stock options or as incentive stock options within the meaning of Section 422 of the Code, referred to as ISOs. In 2013, all of the options we granted were non-qualified options. Stock options provide award recipients with the right, subject to the terms and conditions that are specified in connection with the option grant, to purchase a specified number of shares of our common stock at a specified exercise price. Only our employees are eligible to receive ISOs, and we have not granted ISOs under any of our equity plans since 2003. The maximum value of shares of common stock—determined at the time of grant—that may be subject to ISOs that become exercisable by an employee in any one year is limited to \$100,000.

Stock options granted under the 2013 Plan may not be granted with an exercise price that is less than the fair market value of our common stock on the date of grant, which is defined under the 2013 Plan as the average of the highest and lowest quoted selling prices on such date. ISOs may not be granted with an exercise price that is less than 110% of fair market value in the case of employees or officers holding 10% or more of our voting stock. ISOs granted to an employee or officer holding 10% or more of our voting stock must expire not more than five years from the date of grant.

Stock options granted under the 2013 Plan can only be exercised by the optionholder and are not transferable except by the laws of descent and distribution or pursuant to qualified domestic relations orders or Title I of the Employee Retirement Income Security Act or as otherwise determined by the MDCC provided such transfer is not for value.

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## ITEM 2 - APPROVAL OF AMENDMENT TO 2013 STOCK AND OPTION PLAN (continued)

The 2013 Plan provides specifically for stock option grants to non-employee directors under our director compensation program. Each non-employee director serving in office on June 1 of any year is granted pursuant to our equity plans a fully vested non-qualified option to purchase a specified number of shares determined from time to time by our board of directors. Currently, each non-employee director receives an option to purchase 20,000 shares of our common stock on June 1. The chair of our board, if the chair is an independent director, or the lead independent director(s), if the chair is not an independent director, receive(s) an additional option grant on June 1 of each year, in each case at an exercise price equal to 100% of the fair market value per share of our common stock on the date of grant. Currently, the additional option grant to each co-lead independent director is for 2,500 shares of our common stock. The option grants to our non-employee directors, including the grants to the co-lead independent directors, are fully vested non-qualified options and have a term of ten years.

The 2013 Plan permits the MDCC to determine the manner of payment of the exercise price of options. Such methods include payment by cash or check, or, at the discretion of the MDCC, by means of a broker assisted “cashless exercise,” delivery to us of shares of our common stock, any combination of such methods or any other lawful means approved by the MDCC, other than delivery of a promissory note.

#### Stock Grants

A stock grant is an award of shares of common stock. Stock grants may be issued subject to restrictions on transfer and vesting requirements, as determined by the board or an authorized committee of the board. Vesting requirements may take the form of our lapsing right to repurchase the stock from the award recipient, based on either continued employment for specified time periods or on the attainment of specified business performance goals set by our board of directors or the committee of our board. Subject to the transfer restrictions and our repurchase rights, if any, the grantee will have all rights with respect to unvested shares of common stock issued under a stock grant as are possessed by our other shareholders, including all voting and dividend rights, provided that dividends, if any, with respect to unvested shares shall accrue and be payable only upon the vesting of such shares.

#### Stock-Based Awards

The 2013 Plan provides that the MDCC may grant other stock-based awards, including share grants based upon specified conditions, the grant of securities convertible into shares, or the grant of stock appreciation rights, phantom stock awards or stock units, in each case upon terms and conditions established by the MDCC.

#### Performance Awards

Under the 2013 Plan, we will have the discretionary authority to structure one or more awards so that the shares of common stock subject to those particular awards will not vest unless certain pre-established objective performance goals are achieved, in order to qualify such awards as performance-based compensation that will not be subject to the \$1,000,000 limitation imposed by Section 162(m) of the Code on the income tax deductibility of the compensation paid to specified executive officers. Such objective goals may be based on one or more of the following criteria: (i) revenue targets or revenue growth; (ii) achievement of specified milestones in the discovery, development or regulatory approval of one or more of our drug candidates; (iii) achievement of specified milestones in the commercialization of one or more of our products; (iv) achievement of specified milestones in the manufacturing of one or more of our products; (v) cost reduction or other expense control targets; (vi) personal management objectives; (vii) stock price (including, but not limited to, growth measures); (viii) total shareholder return; (ix) income per share; (x) operating efficiency measures; (xi) operating margin; (xii) gross margin; (xiii) return measures (including, but not limited to, return on assets, capital, equity or sales); (xiv) net or total revenue levels; (xv) productivity ratios; (xvi) operating income; (xvii) net operating profit; (xviii) net earnings or net income (before or after taxes); (xix) cash flow (including, but not limited to, operating cash flow, free cash flow and cash flow return on capital); (xx) earnings or operating income before interest, taxes, depreciation, amortization and/or stock-based compensation expense; (xxi) mergers, acquisitions or divestitures objectives; (xxii) market share; (xxiii) customer satisfaction; (xxiv) working capital targets; (xxv) budget objectives and (xxvi) achievement of other balance sheet or statements of operations objectives.

Each financial measure may be determined pursuant to generally accepted accounting principles (GAAP) or on a non-GAAP basis. Such goals may reflect absolute entity or business unit performance or a relative comparison to the performance of a peer group of entities, or other external measure of the selected performance criteria, and may be

absolute in their terms or measured against or in relationship to other companies comparably, similarly or otherwise situated. Such performance measures: (1) may vary by participant and may be different for different awards; (2) may be particular to a participant or the

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ITEM 2 - APPROVAL OF AMENDMENT TO 2013 STOCK AND OPTION PLAN (continued)

department, branch, line of business, subsidiary or other unit in which the participant works and may cover such period as may be specified by us; and (3) shall be set within the time period prescribed by, and shall otherwise comply with the requirements of, Section 162(m) of the Code.

We may specify that such performance measures shall be adjusted to exclude or provide for appropriate adjustment for one or more of the following items: (A) asset impairments or write-downs; (B) litigation and governmental investigation expenses and judgments, verdicts or claim settlements; (C) the effect of changes in tax law, accounting principles or other laws, regulations or provisions affecting reported results; (D) the effect of exchange rates for non-US dollar denominated net sales or goals based on operating profit, earnings or income; (E) accruals for reorganization and restructuring programs; (F) any non-GAAP adjustments as described in our earnings releases or in the management's discussion and analysis of financial condition and results of operations appearing in our periodic reports; (G) items of income, gain, loss or expense attributable to the operations of any business acquired by us, any parent or subsidiary or of any joint venture established by us or any parent or subsidiary; (H) costs and expenses incurred in connection with mergers and acquisitions; (I) items of income, gain, loss or expense attributable to one or more business operations divested by us, or any parent or subsidiary or the gain or loss realized upon the sale of any such divested business or the assets thereof; or (J) the effect of any change in the outstanding shares of common stock effected by reason of a stock split, stock dividend, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change or any distributions to our shareholders other than regular cash dividends.

Notwithstanding any provision of the 2013 Plan, with respect to any award that is intended to qualify as performance-based compensation, we may adjust downwards, but not upwards, the number of shares payable pursuant to such award, and we may not waive the achievement of the applicable performance measures except in the case of the death or disability of the participant or a change in control of our company.

We shall have the power to impose such other restrictions on performance awards as we may deem necessary or appropriate to ensure that such awards satisfy all requirements for performance-based compensation.

#### Adjustments in the Event of Stock Dividends, Stock Splits, Recapitalizations or Reorganizations

The number of shares subject to stock rights and other terms applicable to such rights will be equitably adjusted if we issue a stock dividend, or in the event of a stock split, recapitalization or reorganization. In addition, in the event of certain consolidations or acquisitions or a sale of substantially all of our assets, either (i) the MDCC or the entity assuming our obligations under the 2013 Plan shall make appropriate provision for the continuation of all outstanding stock rights under the 2013 Plan or grant replacement stock rights on an equitable basis as determined by the MDCC or the relevant entity, or (ii) the vesting of all outstanding and unvested stock rights under the 2013 Plan will be accelerated and such stock rights will become fully exercisable immediately prior to such consolidation, acquisition or sale.

#### Effective Date, Amendment and Expiration

The 2013 Plan became effective on May 8, 2013 and will terminate on May 7, 2023. The amendment to our 2013 Plan will be effective, subject to shareholder approval, on May 7, 2014. Our board of directors may terminate or amend the 2013 Plan at any time, subject to shareholder approval under certain circumstances as provided in the 2013 Plan. No amendment or termination of the 2013 Plan will adversely affect the rights provided in any award made under the 2013 Plan prior to the plan amendment or termination. Neither our board of directors nor the administrator has the authority to reduce the exercise price of any stock option after the date of grant, except in the case of an equitable adjustment required under the 2013 Plan. No award may be made under the 2013 Plan after the plan expiration date. Awards made prior to expiration of the 2013 Plan may extend beyond the plan expiration date.

#### U.S. Federal Income Tax Consequences

The discussion of federal income tax consequences that follows is based on an analysis of the Code as currently in effect, existing law, judicial decisions and administrative regulations and rulings, all of which are subject to change, and is applicable to optionees who are U.S. taxpayers.

**Non-Qualified Options.** Options that are designated as non-qualified options are not intended to qualify for treatment under Section 422 of the Code. Options otherwise qualifying as ISOs, to the extent the aggregate fair market value of shares with respect to which such options are first exercisable by an individual in any calendar year exceeds \$100,000,

also will be treated as options that are not ISOs.

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ITEM 2 - APPROVAL OF AMENDMENT TO 2013 STOCK AND OPTION PLAN (continued)

A non-qualified option ordinarily will not result in income to the optionee or a deduction for us for tax purposes at the time of grant. Instead, the optionee will recognize compensation income at the time of exercise of a non-qualified option in an amount equal to the excess of the fair market value of the shares at the time of exercise over the option exercise price. Any compensation income may be subject to withholding taxes, and a deduction may then be allowable to us in an amount equal to the optionee's compensation income.

An optionee's initial basis in shares so acquired will be the amount paid on exercise of the non-qualified option plus the amount of any corresponding compensation income. Any gain or loss as a result of a subsequent disposition of the shares so acquired will be capital gain or loss.

**Incentive Stock Options.** ISOs are intended to qualify for treatment under Section 422 of the Code. An ISO does not result in taxable income to the optionee or a deduction for us at the time it is granted or exercised, provided that the optionee does not dispose of the shares acquired pursuant to the option either within two years after the date of grant of the option or within one year after the shares are issued, referred to as the ISO holding period. However, the difference between the fair market value of the shares on the date of exercise and the option exercise price will be an item of tax preference that is included in alternative minimum taxable income. Upon disposition of the shares after the expiration of the ISO holding period, the optionee generally will recognize long-term capital gain or loss based on the difference between the disposition proceeds and the option exercise price paid for the shares. If the shares are disposed of prior to the expiration of the ISO holding period, the optionee generally will recognize taxable compensation, and we will have a corresponding deduction, in the year of the disposition, equal to the excess of the fair market value of the shares on the date of exercise of the option over the option exercise price. Any additional gain realized on the disposition normally will constitute capital gain. If the amount realized upon such a disqualifying disposition is less than fair market value of the shares on the date of exercise, the amount of compensation income will be limited to the excess of the amount realized over the optionee's adjusted basis in the shares.

**Stock Grants.** With respect to stock grants that result in the issuance of shares that are either not restricted as to transferability or not subject to a substantial risk of forfeiture, the grantee must generally recognize ordinary income equal to the fair market value of shares received. Thus, deferral of the time of issuance generally will result in the deferral of the time the grantee will be liable for income taxes with respect to such issuance. We generally will be entitled to a deduction in an amount equal to the ordinary income recognized by the grantee.

With respect to stock grants involving the issuance of shares that are restricted as to transferability and subject to a substantial risk of forfeiture, the grantee generally must recognize ordinary income equal to the fair market value of the shares received at the time the shares become transferable or are not subject to a substantial risk of forfeiture, whichever occurs earlier. A grantee may elect to be taxed at the time of receipt of shares rather than upon lapse of restrictions on transferability or substantial risk of forfeiture, but if the grantee subsequently forfeits such shares, the grantee would not be entitled to any tax deduction, including as a capital loss, for the value of the shares on which the grantee previously paid tax. The grantee must file any such election with the Internal Revenue Service within 30 days of the receipt of the shares. We generally will be entitled to a deduction in an amount equal to the ordinary income recognized by the grantee.

**New Plan Benefits**

Amounts of future grants under the 2013 Plan are not currently determinable because awards under the 2013 Plan will be granted at the sole discretion of our board, or an authorized committee of our board, and we cannot determine at this time either the persons who will receive future awards under the 2013 Plan or the amount or types of any such awards.

**OUR BOARD OF DIRECTORS RECOMMENDS A VOTE FOR THE APPROVAL OF THE AMENDMENT TO OUR 2013 STOCK AND OPTION PLAN, WHICH AUTHORIZES THE ISSUANCE OF AN ADDITIONAL 9,500,000 SHARES OF COMMON STOCK. THE AFFIRMATIVE VOTE BY THE HOLDERS OF A MAJORITY OF THE VOTES CAST IN PERSON OR BY PROXY ON THIS MATTER IS REQUIRED FOR THE APPROVAL OF THIS PROPOSAL.**

## ITEM 2 - APPROVAL OF AMENDMENT TO 2013 STOCK AND OPTION PLAN (continued)

## EQUITY COMPENSATION PLAN INFORMATION

The following table provides aggregate information with respect to all of our equity compensation plans in effect as of December 31, 2013. We are required under applicable SEC rules to disclose in this table the number of shares remaining available for issuance under our equity plans as of December 31, 2013. Accordingly, the figures in the table below do not reflect the equity grants made to our employees under the 2006 Plan or 2013 Plan since December 31, 2013. As of March 10, 2014, there were 412,810 and 2,139,275 shares remaining available for award under our 2006 and 2013 equity plans, respectively.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options	Weighted-Average Exercise Price of Outstanding Options	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in first column)
Equity Compensation Plans Approved by Shareholders (1)	15,567,788	\$44.75	7,164,732
Equity Compensation Plans Not Approved by Shareholders (2)	161,511	\$10.58	—
Total	15,729,299	\$44.40	7,164,732

(1) These plans consist of our 2013 Plan, 2006 Plan and our Employee Stock Purchase Plan, and awards granted under our 1996 Stock and Option Plan for which we obtained shareholder approval.

(2) This category consists of certain options issued under our 1996 Stock and Option Plan for which we were not required to and did not obtain shareholder approval.

Please refer to Note M to the consolidated financial statements included in our 2013 Annual Report on Form 10-K, filed with the SEC on February 11, 2014, for a description of the material features of the 1996 Stock and Option Plan.

### ITEM 3 - RATIFICATION OF THE APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

#### ENGAGEMENT OF ERNST & YOUNG LLP

Ernst & Young LLP has been our independent registered public accounting firm since 2005. A new lead audit partner is designated at least every five years to provide a fresh perspective and a new lead audit partner was designated for the 2010 audit.

In determining whether to reappoint our independent registered public accounting firm, our audit and finance committee considers the quality of its discussions with and the performance of the lead audit partner, the audit team assigned to our account and the overall strength and reputation of the firm.

Representatives of Ernst & Young LLP are expected to attend the annual meeting, will have the opportunity to make a statement if they desire to do so and will be available to respond to appropriate questions from shareholders.

#### EFFECT OF VOTE

We are not required to have shareholders ratify the selection of Ernst & Young LLP. If our shareholders do not ratify the selection, our audit and finance committee will reconsider the selection of Ernst & Young LLP for the ensuing year, but may determine that continued retention of Ernst & Young LLP is in our company's and our shareholders' best interests. Even if the appointment is ratified, the audit and finance committee, in its discretion, may direct the appointment of a different independent registered public accounting firm at any time during the year if it determines that such a change would be in our company's and our shareholders' best interests.

#### INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FEES

The following is a summary and description of fees for services provided by Ernst & Young LLP in 2013 and 2012.

Service	2013	2012
Audit fees	\$1,638,000	\$1,360,000
Audit-related fees	98,425	241,565
Tax fees	1,737,771	1,251,564
All other fees	1,995	1,995
Total	\$3,476,191	\$2,855,124

"Audit fees" represented the aggregate fees for professional services rendered for the audit of our annual consolidated financial statements, and our internal controls over financial reporting, for the reviews of the consolidated financial statements included in our Form 10-Q filings for each fiscal quarter, for statutory audits of our international operations and providing consents with respect to registration statements. In 2013 and 2012, "Audit fees" included audit fees for Alios BioPharma, Inc., which are included because we consolidated Alios BioPharma, Inc.'s operations into our financial statements through December 31, 2013.

"Audit-related fees" consisted principally of fees for accounting consultations.

"Tax fees" consisted of fees related to tax compliance, worldwide tax planning and tax advice. In 2013 and 2012, "Tax fees" included tax compliance fees for Alios BioPharma, Inc., which are included because we consolidated Alios BioPharma, Inc.'s operations into our financial statements through December 31, 2013.

"All other fees" consisted of licensing fees paid to Ernst & Young LLP for access to its proprietary accounting research database.

**OUR BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE FOR RATIFICATION OF THE APPOINTMENT OF ERNST & YOUNG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE YEAR ENDING DECEMBER 31, 2014. THE AFFIRMATIVE VOTE BY THE HOLDERS OF A MAJORITY OF THE VOTES CAST IN PERSON OR BY PROXY ON THIS MATTER IS REQUIRED FOR THE APPROVAL OF THIS PROPOSAL.**

ITEM 3 - RATIFICATION OF THE APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM (continued)

AUDIT AND FINANCE COMMITTEE PRE-APPROVAL POLICIES AND PROCEDURES

Our audit and finance committee has established a policy to pre-approve all audit and permissible non-audit services provided by our independent registered public accounting firm. Prior to the engagement of the firm for each year's audit, management submits to our audit and finance committee for approval a description of services expected to be rendered during that year for each of the following four categories of services and a budget for those services in the aggregate.

Audit services include audit work performed in the preparation of financial statements, as well as work that generally only our independent registered public accounting firm can reasonably be expected to provide, including comfort letters, statutory audits, consents and attestation services.

Audit-related services are for assurance and related services that traditionally are performed by the independent registered public accounting firm, including due diligence related to mergers and acquisitions, employee benefit plan audits, special procedures required to meet certain regulatory requirements and consultation regarding financial accounting and/or reporting standards.

Tax services include all services performed by the independent registered public accounting firm's tax personnel except those services specifically related to the audit of our financial statements, and include fees in

the areas of tax compliance, tax planning and tax advice.

All other fees are those associated with services not captured in the three preceding categories.

Prior to the engagement of our independent registered public accounting firm, our audit and finance committee pre-approves these services by category of service. The fees are budgeted and our audit and finance committee requires the independent registered public accounting firm and management to report actual fees versus the budget periodically throughout the year by category of service. During the year, circumstances may arise when it may become necessary to engage the independent registered public accounting firm for additional services not contemplated in the original pre-approval. In those instances, our audit and finance committee requires that we obtain its specific pre-approval for these services.

The audit and finance committee may delegate pre-approval authority to one or more of its members. The member to whom such authority is delegated must report any pre-approval decisions to our audit and finance committee at its next scheduled meeting.

All of the services set forth above in the categories "audit-related fees," "tax fees" and "all other fees" were pre-approved and none were approved by our audit and finance committee pursuant to Rule 2-01(c)(7)(i)(C), which relates to the approval of a de minimis amount of non-audit services after the fact but before completion of the audit.

## AUDIT AND FINANCE COMMITTEE REPORT

The Audit and Finance Committee of the Board of Directors (the “Audit Committee”) of Vertex Pharmaceuticals Incorporated (the “Company”), which consists entirely of directors who meet the independence and experience requirements of the Securities and Exchange Commission and The Nasdaq Stock Market LLC, has furnished the following report:

The Audit Committee assists the Company’s Board of Directors in overseeing and monitoring the integrity of the Company’s financial reporting process, compliance with legal and regulatory requirements related to financial reporting and the quality of internal controls and external audit processes. The Audit Committee’s roles and responsibilities are set forth in a written charter, which is available on the Company’s website [www.vrtx.com](http://www.vrtx.com) under “Investors—Corporate Governance—Governance Documents.” Among its duties, the Audit Committee is responsible for recommending to the Company’s Board of Directors that the Company’s financial statements be included in the Company’s Annual Report on Form 10-K. As a basis for that recommendation, the Audit Committee engaged in the following activities. First, the Audit Committee discussed with Ernst & Young LLP (“Ernst & Young”), the Company’s independent registered public accounting firm for 2013, those matters that Ernst & Young is required to communicate to and discuss with the Audit Committee by the Public Company Accounting Oversight Board (United States) Auditing Standard AU Section 380 (The Auditor’s Communication With Those Charged With Governance), which included information regarding the scope and results of the audit. These communications and discussions are intended to assist the Audit Committee in overseeing the financial reporting and disclosure process. Second, the Audit Committee discussed with Ernst & Young the firm’s independence, and received from Ernst & Young the written disclosures and the letter concerning independence as required by Public Company Accounting Oversight Board Ethics and Independence Rule 3526 (Communication with Audit Committees Concerning Independence). This discussion and disclosure informed the Audit Committee of Ernst & Young’s relationships with the Company and was designed to assist the Audit Committee in considering Ernst & Young’s independence. Finally, the Audit Committee reviewed and discussed, with Ernst & Young and with the Company’s management, the Company’s audited consolidated balance sheet as of December 31, 2013, and the Company’s consolidated statements of operations, comprehensive income (loss), shareholders’ equity and noncontrolling interest, and cash flows for the year ended December 31, 2013, including the notes thereto.

Management of the Company is responsible for the consolidated financial statements and reporting process, including establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)); establishing and maintaining internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f)); evaluating the effectiveness of disclosure controls and procedures; evaluating the effectiveness of internal control over financial reporting; and evaluating any change in internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, internal control over financial reporting. The independent registered public accounting firm is responsible for expressing an opinion on the conformity of these consolidated financial statements with accounting principles generally accepted in the United States, as well as expressing an opinion on the effectiveness of internal control over financial reporting.

During 2013, management tested and evaluated the Company’s system of internal control over financial reporting in response to the requirements set forth in Section 404 of the Sarbanes-Oxley Act of 2002 and related regulations. At the conclusion of the process, management provided the Audit Committee with a report on the effectiveness of the Company’s internal control over financial reporting, which the Audit Committee reviewed. The Audit Committee also reviewed the report of management contained in the Company’s Annual Report on Form 10-K for the year ended December 31, 2013 filed with the Securities and Exchange Commission, as well as Ernst & Young’s Reports of Independent Registered Public Accounting Firm included in the Company’s Annual Report on Form 10-K. The latter reports relate to Ernst & Young’s audit of (i) the consolidated financial statements and (ii) the effectiveness of internal control over financial reporting.

Based on (i) discussions with Ernst & Young concerning the audit and the consolidated financial statements, (ii) the independence discussions, (iii) discussions with the Company’s management concerning the consolidated financial statements, and (iv) such other matters deemed relevant and appropriate by the Audit Committee, the Audit Committee recommended to the Company’s Board of Directors that the consolidated financial statements be included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2013. This report is provided by the

following independent directors, who comprise the Audit Committee:

Terrence C. Kearney (Chair)

Yuchun Lee

Bruce I. Sachs

Elaine S. Ullian

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#### ITEM 4 - ADVISORY VOTE TO APPROVE NAMED EXECUTIVE OFFICER COMPENSATION

Our compensation program is structured to attract, retain and motivate talented, experienced leaders and reward our executive officers for the achievement of short- and long-term strategic and operational goals while avoiding inappropriate or excessive risk-taking. Our board and the MDCC believe that our executive compensation program is effective in closely aligning the interests of our executive officers with the interests of our shareholders and paying for performance.

As described in the Business Highlights and Compensation Highlights on pages 3 and 4 of this proxy statement, we believe that our compensation program has been and will continue to be successful in attracting and motivating the right executive team to lead our company as we seek to create value through the discovery, development and commercialization of transformative medicines.

Our compensation for our named executive officers was supported by 78% of the “Say-on-Pay” advisory votes cast by our shareholders in 2013. In 2013, we continued discussions with a number of our shareholders regarding, among other matters, our executive compensation program and dilution caused by our broad-based equity compensation program. During these discussions we listened to their perspectives and gained insight into how we could further align the interests of our company with the interests of our shareholders.

Our board of directors and MDCC reviewed our compensation programs and governance practices in light of our evolving business and made the following adjustments in 2013 and early 2014:

Implementing a modification to our equity compensation programs that resulted in a 20% decrease in the number of options that we granted in 2013 as compared to 2012 and a 5% decrease in the number of shares of restricted stock we granted in 2013 as compared to 2012;

Implementing stock ownership guidelines for all of our named executive officers, including our CEO; and

Amended our by-laws to provide for a majority vote standard for uncontested elections of our directors.

Our executive compensation program, including our performance and the compensation earned by our named executive officers, is discussed in greater detail in the Compensation Discussion and Analysis section beginning on page 34 of this proxy statement. In that section, we discuss our executive compensation program and policies and explain the compensation decisions relating to our named executive officers for 2013. In addition, the compensation tables and related narratives, which begin on page 49 of this proxy statement, provide additional information regarding the compensation received by our named executive officers in 2013.

We are presenting the following proposal, which gives you as a shareholder the opportunity to endorse or not endorse our 2013 executive compensation program by voting for or against the following resolution:

RESOLVED, that the shareholders approve, on an advisory basis, the compensation of our named executive officers, as disclosed in the Compensation Discussion and Analysis section, the Compensation and Equity Tables and the related narrative executive compensation disclosures contained in this proxy statement.

While the vote on this resolution is advisory in nature, and therefore will not bind us to take any particular action, our MDCC and board intend to consider carefully the shareholder vote resulting from the proposal in making future decisions regarding our executive compensation program.

**OUR BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE FOR THE APPROVAL OF THE RESOLUTION SET FORTH ABOVE. THE AFFIRMATIVE VOTE BY THE HOLDERS OF A MAJORITY OF THE VOTES CAST IN PERSON OR BY PROXY ON THIS MATTER IS REQUIRED FOR THE APPROVAL OF THIS PROPOSAL.**

## COMPENSATION DISCUSSION AND ANALYSIS - EXECUTIVE SUMMARY

Our compensation program is designed to attract, retain and motivate talented and experienced individuals across all areas of our business and align the interests of our executive officers with the interests of our shareholders as we seek to create value through the discovery, development and commercialization of transformative medicines. Our named executive officers for 2013 were:

Dr. Jeffrey M. Leiden, our Chairman, Chief Executive Officer and President, who has served in that role for two years  
Ian F. Smith, our Executive Vice President and Chief Financial Officer, who has been one of our executives for 12 years

Stuart A. Arbuckle, our Executive Vice President and Chief Commercial Officer, who joined us in 2012

Kenneth L. Horton, our Executive Vice President and Chief Legal Officer, who joined us in 2012

Dr. Peter Mueller, our Executive Vice President, Global Research and Development, and Chief Scientific Officer, who has been one of our executives for 10 years

**Compensation Philosophy.** We believe that our compensation program has been and will continue to be successful in attracting, retaining and motivating the right executive team. Our philosophy is to reward superior company and individual performance with total compensation that compares favorably to that of executives at our comparator companies while not reaching such compensation levels when outstanding performance is not achieved. In addition, we believe that the compensation paid to executives should closely align the interests of our executive officers with the interests of our shareholders. Our compensation programs are structured to attract, retain and motivate talented, experienced leaders and reward our executive officers for the achievement of short- and long-term strategic and operational goals while avoiding inappropriate or excessive risk taking. We link pay to performance by rewarding achievement of pre-determined goals through an annual cash bonus program and by awarding significant time-based and performance-based vesting grants under our equity compensation plans.

Our executive officers' total compensation is comprised of a mix of base salary, annual cash bonus and long-term equity incentive awards that include both time-based stock options and performance-based restricted stock awards, and reflects a balance of elements so that a significant portion is performance-contingent, to better align our executives' financial interests with the interests of our shareholders. As illustrated by the chart to the right, 92% of the total compensation in 2013 for Dr. Leiden was incentive-based in the form of annual cash bonus and equity compensation.

We have implemented a number programs and policies designed to align our compensation program with the long-term interests of our shareholders and to manage risks related to the incentive compensation that we provide to our executives. These programs include (i) a global insider trading policy that prohibits, among other things, hedging and pledging our securities, (ii) a compensation recoupment policy and (iii) stock-ownership guidelines that are applicable to our named executive officers, including our CEO.

**2013 Performance.** Our company's performance rating for 2013 was "leading," with a score of 95%. In 2013, we:  
Achieved higher-than-forecasted KALYDECO (ivacaftor) net product revenues as a result of the successful launch of KALYDECO in Europe as well as strong compliance rates in patients with CF who have the G551D mutation in their CFTR gene in both the United States and Europe;

Completed enrollment of Phase 3 clinical trials to evaluate lumacaftor in combination with ivacaftor, in patients with CF who have two copies (homozygous) of the F508del mutation in their CFTR gene, with data expected in mid-2014;  
Maintained a leading share of the direct-acting antiviral agent market in HCV through the first three quarters of 2013, but, due to competitive pressures that caused the market to decline, recorded lower-than-forecasted INCIVEK net product revenues;

Advanced multiple clinical trials designed to support the expansion of the ivacaftor label and filed our first sNDA and MAA variation for ivacaftor;



## COMPENSATION DISCUSSION AND ANALYSIS - EXECUTIVE SUMMARY (continued)

Completed a Phase 2 clinical trial that demonstrated a clinical benefit of ivacaftor in combination with VX-661 in patients with CF who are homozygous for the F508del mutation in their CFTR gene;

Progressed multiple research and early-stage development programs, including programs in the areas of cystic fibrosis, oncology, multiple sclerosis and other serious and rare diseases;

Continued to build our organizational capabilities and effectively managed our corporate restructuring and the transition of our corporate headquarters to Boston; and

Strengthened our balance sheet, ending 2013 with approximately \$1.47 billion in cash, cash equivalents and marketable securities and no convertible debt following the elimination of \$400 million in convertible debt in the second quarter of 2013.

Our named executive officers' total compensation for 2013 as determined under the rules of the SEC is set forth in the following table under the caption "Total Compensation." To supplement this information, we have included a column entitled "Total Realized Compensation," which subtracts the grant-date fair value of equity awards granted in 2013 and substitutes the actual value realized on the exercise of stock options and the vesting of restricted stock awards during 2013. Executives with a longer tenure had higher total realized compensation in 2013 because they exercised long-term incentive stock options that had increased in value over time as our stock price increased, which is consistent with the objectives of our compensation program.

Named Executive Officer	Individual Rating	Salary	Annual Cash Bonus	Grant-Date Fair Value of 2013 Equity Awards	Total Compensation	Total Realized Compensation
Jeffrey M. Leiden	Leading Exemplary	\$1,038,462	\$2,772,000	\$9,303,337	\$13,126,474	\$8,112,903
Ian F. Smith	Leading Exemplary	\$582,959	\$682,500	\$2,906,628	\$4,184,762	\$36,597,952
Stuart A. Arbuckle	Leading Exemplary	\$553,846	\$630,000	\$3,622,501	\$4,819,022	\$2,534,960
Kenneth L. Horton	Leading	\$465,000	\$439,425	\$3,622,501	\$4,539,551	\$1,505,376
Peter Mueller	Leading	\$619,846	\$637,000	\$2,906,628	\$4,176,149	\$9,996,495

For more information regarding our named executive officers' compensation as calculated under SEC rules, see the narrative and notes accompanying the Summary Compensation Table set forth beginning on page 49. For more information regarding the calculation of "Total Realized Compensation" see the narrative accompanying the Total Realized Compensation Table on page 51.

**Independent Decision-Making Practices.** Our compensation decision-making practices are designed to ensure the integrity of our compensation decisions and to ensure that the decision makers act independently and on the basis of complete and relevant information. All executive compensation decisions are made by our independent directors on the basis of recommendations from the MDCC. Dr. Leiden is not present for board or MDCC discussions with respect to his compensation. The MDCC routinely reviews compensation information from companies it chooses as comparators, as well as industry surveys; refers to tally sheets that provide information about the total compensation of each executive officer and the effect of any compensation decision on that total; considers information compiled for it by its independent compensation consultant, Meridian Compensation Partners, when requested on a periodic basis; and reviews all other information it deems relevant.

## COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS

## DETAILED DISCUSSION AND ANALYSIS

## Elements of Annual Compensation

The elements of our annual executive compensation program are base salary, annual cash bonus, equity awards in the form of stock option and restricted stock grants, and benefits available to all our employees, including health insurance, matching payments under our 401(k) plan and payment of life insurance premiums. Each year we review the balance of the elements of our executive compensation program to ensure that they are appropriately designed in light of our goals of aligning the program with our shareholders' interests, the competitive environment and our business strategy. In 2013, our CEO's total compensation was comprised of 8% base salary, 21% performance-based cash bonus and 71% unvested equity awards.

## Base Salary

The MDCC recommends base salaries for each of our executive officers on the basis of a market analysis, on a position-by-position basis. Annually, the MDCC reviews tables showing a comparison of each executive's prior year base salary and cash bonus opportunity, measured at the target level, to salaries and cash bonuses reported for executives with similar responsibilities at specified comparator companies. For a discussion of our practices in selecting comparator companies, the identity of our comparator companies and our use of comparative compensation data, see the discussion below under the heading Compensation Decision-Making Process-Analysis of Compensation Practices of Comparator Companies. We do not strictly benchmark to a particular level of compensation relative to compensation levels at the comparator companies, but rather make a subjective judgment about where each executive should fall in comparison with executives with similar responsibilities at the comparator companies, taking into account the executive's general level of experience and capability, the significance of his or her job responsibilities to the achievement of our business strategy and company goals, and general performance over time, including demonstration of the values and desirable behaviors under our core values program. On the basis of that information, and taking into consideration the executive's base salary for the previous year, the MDCC recommends an appropriate salary for each executive officer, subject to final approval by our independent directors.

In July 2013, the MDCC reviewed base salary levels after relevant executive compensation data from comparator companies for 2013 became available. As a result of this analysis, (i) Dr. Leiden's base salary was increased from \$1.0 million to \$1.1 million, (ii) Mr. Smith's base salary was increased from \$541,059 to \$650,000, (iii) Mr. Arbuckle's base salary was increased from \$525,000 to \$600,000 and (iv) Dr. Mueller's base salary was increased from \$601,000 to \$650,000. Our MDCC expects to review base salary levels in mid-2014 when relevant executive compensation data from comparator companies for 2013 becomes available.

## Performance-Based Elements of Compensation-Annual Cash Bonus and Equity Awards

Two of the principal elements of our executive compensation program-annual cash bonus and annual equity awards-are awarded in amounts determined on the basis of annual performance. The cash bonus (referred to in the Summary Compensation Table on page 49 as "Non-Equity Incentive Plan Compensation") is determined based on a formula that incorporates the executive's base salary, target bonus and separate company-wide and individual performance ratings. Annual equity award amounts are determined on the basis of the executive's individual performance rating.

## Annual Company Performance Rating

At the beginning of each year, our board of directors, in consultation with our chief executive officer, establishes company-wide goals for that year. Our performance against these goals is the most important factor considered by the board in assessing our corporate performance, but our board also may consider other relevant factors at its discretion. At year end, the board assigns a company performance rating intended to reflect performance at one of the following levels:

Score	Company Rating	Level of Company Performance
90-100%	Leading	Exceptional performance across our overall business achieving or exceeding a very high proportion of performance goals.
70-89%	Strong	A high level of performance, in which a substantial majority of performance goals were met.
51-69%	Building	

0-50%	Not Building	Failure to successfully implement a substantial portion of the annual performance goals. Unacceptable and disappointing performance.
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## COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS (continued)

Although the directors discuss and analyze our performance as a group, each director makes his or her own judgment about specific performance factors and accomplishment of the goals in reaching a conclusion.

## 2013 Company Rating

Our 2013 company performance score was 95%, corresponding with company rating of “leading” performance. For 2013, the board of directors set company goals and assigned relative weights that reflected our operational, strategic and financial objectives for the year. Our 2013 weighted goals and the year-end score assigned by the board are set forth in the following table:

Goal(s)	Weight	2013 Performance Score
Marketed and Approval-Stage Products	30%	25%
<ul style="list-style-type: none"> <li>• Optimize uptake of KALYDECO in eligible patients in Europe and Canada and support patient compliance through compliant commercial activities</li> <li>• Maximize INCIVEK revenues by maintaining class leading market share of direct acting antiviral agents and supporting patient compliance through compliant commercial activities</li> </ul>		
Pipeline Growth (Late and Early-stage)	45%	42%
<ul style="list-style-type: none"> <li>• Enhance position in CF through label-expansions and combination regimens (ivacaftor, lumacaftor and VX-661)</li> <li>• Enhance position in HCV by identifying the best all-oral short-duration, high viral cure regimens with VX-135 as the backbone</li> <li>• Assess and advance high-value mid-stage projects to enable long-term growth (including VX-509 and VX-787)</li> <li>• Maintain high research and exploratory development productivity growth for pipeline; initiate new first-in-human clinical trials</li> </ul>		
Organizational Development and Capability	10%	10%
<ul style="list-style-type: none"> <li>• Attract, develop and retain Vertex expertise and key talent necessary to drive near- and long-term company growth</li> <li>• Establish and execute key organizational development plans (including enterprise collaboration, operating efficiencies, disease area team effectiveness, leadership development and Fan Pier Real Estate strategy)</li> <li>• Identify and execute activities to ensure a strong compliance mindset and protection of the company</li> </ul>		
Financial Strength	15%	15%
<ul style="list-style-type: none"> <li>• Ensure financial strength to fund pipeline maturation and support long-term growth and shareholder returns <ul style="list-style-type: none"> <li>i) Maintain financial strength to provide platform to support future growth/investment (net of board approved asset/technologies in-sourcing activities)</li> <li>ii) Manage balance sheet to create greater financial capacity for future investment</li> <li>iii) Consider capital structure to manage shares outstanding and improve shareholder return</li> </ul> </li> </ul>		
Additional Accomplishments		3%
Total		95%

In assigning a company performance rating of “leading,” the board considered the following:

## Goals - Marketed and Approval-Stage Products

KALYDECO. KALYDECO net product revenues increased by more than 100% from \$171.6 million in 2012 to \$371.3 million in 2013. This exceptional performance was driven by successful completion of reimbursement discussions with relevant agencies in a number of European countries, the rapid uptake of KALYDECO in many

markets and strong patient compliance rates in the United States and European Union. INCIVEK. Our INCIVEK net product revenues of \$466.4 million were significantly below the forecasted amount. The lower-than-forecast INCIVEK net product revenues resulted principally from declining sales of HCV protease inhibitors generally with the anticipation and approval of a next generation of therapy. Despite this declining market, we achieved our patient compliance goals and maintained our market-leading share of the HCV market until the approval of competitive regimens in the fourth quarter of 2013.

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COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS (continued)

For marketed and approval-stage products goals, our board assigned the company a score of 25% out of 30%, due to (1) our exceptional achievements in successfully commercializing KALYDECO in Europe and compliantly maintaining our strong position in the U.S. market, which resulted in net KALYDECO revenues that increased by more than 100% and (2) our success in maintaining a leading share of the HCV market; partially offset by disappointing INCIVEK net product revenues.

Goals - Pipeline Growth (Late and Early-stage)

We made significant progress in our research and development programs in 2013.

CF. In 2013, we significantly progressed our development of ivacaftor as a potential treatment for additional patients with CF, completing or advancing several clinical trials and submitting our first sNDA and first MAA variation for ivacaftor. We also initiated, and within approximately six months completed, enrollment in two Phase 3 clinical trials designed to evaluate lumacaftor in combination with ivacaftor in patients with CF who have two copies (homozygous) of the F508del mutation in their CFTR gene, which is the most prevalent form of CF; and established proof-of-concept in a Phase 2 clinical trial for VX-661 in combination with ivacaftor as a potential treatment for patients with CF who are homozygous for the F508del mutation in their CFTR gene.

HCV. In 2013, we evaluated VX-135 in multiple clinical trials, including a Phase 2a clinical trial of VX-135 with daclatasvir, an NS5A replication complex inhibitor being developed by Bristol-Myers-Squibb, to assess the appropriate development approach for VX-135.

Mid-stage projects. In 2013, we successfully completed a Phase 2b clinical trial of VX-509 in rheumatoid arthritis and completed a successful “proof-of-concept” clinical trial of VX-787 in influenza. We are seeking collaborators and/or external funding to advance clinical development of VX-509 and VX-787.

Research; Early-stage Development. In 2013, we advanced our CF research program to identify additional corrector compounds that could be included in future dual- and/or triple-combination treatment regimens that have the potential to provide additional benefits to patients with cystic fibrosis. We also advanced multiple other research and early-stage development programs, including programs in the areas of oncology, multiple sclerosis and other serious and rare diseases.

On the basis of the accomplishments in advancing our research and development programs and, in particular, the advancement of our cystic fibrosis programs across multiple initiatives, partially offset by the challenges encountered in our efforts to enhance our mid-stage pipeline, the board assigned the company a score of 42% out of 45% for our research and development goals.

Goals - Organizational Development and Capability

Talent and expertise. In 2013, we strengthened our organizational capabilities by attracting, developing and retaining the key talent necessary to operate our business, including the implementation of leadership development programs. Organizational development plans. In 2013, we implemented programs to increase our operational efficiencies, which resulted in significant budget savings during 2013 and which we expect will contribute to continued savings in 2014. We also designed and implemented successful disease area teams to manage and advance our key programs and implemented enterprise collaboration platforms. We successfully executed our real estate and organizational plans related to relocating our corporate headquarters to Boston, Massachusetts, bringing the project in within budget and on schedule, moving a significant portion of our Massachusetts-based employees over the holiday week in time for the building opening at the beginning of 2014.

Compliance. During 2013, we successfully expanded our compliance policies and the implementation of training and monitoring programs in order to ensure a strong compliance mindset and protect the interests of our company and its shareholders.

To reflect the improvements to our organizational structure, processes and systems achieved in 2013, the board assigned the company a score of 10% out of 10% for our organizational development and capability goals.

COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS (continued)

Goals - Financial Strength

We met all of our financial strength goals in 2013. During 2013, we maintained our financial strength by managing our operating expenses and strengthened our balance sheet. We (i) ended the year with approximately \$1.47 billion in cash, cash equivalents and marketable securities, which was an increase of \$143.9 million over the prior year and (ii) eliminated \$400.0 million in principal amount of 3.35% senior subordinated convertible debt and completed the year free of convertible debt. Finally, we implemented changes to our compensation programs that should over time decrease the number of shares issued under our equity plans.

As a result of our success in maintaining our financial strength by managing our operating expenses and securing a strong cash position, the board assigned the company a score of 15% out of 15% for our financial stability goals.

Additional Factors

In connection with determining our 2013 company rating, our board awarded additional percentage points for proactive steps taken to manage changes in the HCV market, adding 2% for the effectiveness of the organizational restructuring undertaken in October 2013 and 1% for the monetization of future INCIVO royalties from Janssen.

Annual Cash Bonus (Non-Equity Incentive Plan Compensation)

The annual cash bonus paid to each of the executive officers is calculated by multiplying the executive officer's target bonus by both the company performance factor and the individual performance factor, in accordance with the following formula:

$$\begin{array}{rcccl}
 \text{Target Bonus} & & \times & \text{Performance Factors} & = & \text{Cash Bonus} \\
 & & & & & \\
 \text{Base Salary} & & & & & \\
 \text{(at year end)} & \times & \text{Individual} & \text{Company} & & \\
 & & \text{Incentive Target} & \text{Performance} & \text{Individual Performance} & \\
 & & \text{(expressed as} & \text{Factor} & \text{Factor} & \\
 & & \text{a percentage} & \text{(expressed as a} & \text{(expressed as a} & \\
 & & \text{of base salary)} & \text{percentage of the} & \text{percentage of the} & \\
 & & & \text{target bonus)} & \text{target bonus)} & \\
 & & & & & = & \text{Annual Cash Bonus Award}
 \end{array}$$

Target Bonus/Individual Incentive Targets

Individual incentive targets are assigned on the basis of responsibility level, and are higher for positions of greater responsibility. Thus, a greater portion of annual cash compensation is contingent on performance for our executives than for our other employees, reflecting our policy that a significant portion of executive compensation should be performance-based.

The individual incentive targets (expressed as a percentage of base salary) for the named executive officers are set forth below:

Position	2013 Individual Incentive Target
Chief Executive Officer	120%
Executive Vice President	50%

The individual incentive targets were established, and are reviewed annually, by the MDCC based on available data about comparator company compensation.

Performance Factors

The MDCC determines each executive's annual bonus amount by multiplying his or her target bonus by performance factors based on both the company performance rating and the individual performance rating for the completed year. These adjustments allow for payouts significantly above the target bonus in a year where both the individual executive and the company significantly exceed performance expectations, and awards significantly below the target bonus in years in which the company and/or the executive falls short of performance expectations.

**Company Performance Factors.** When our board of directors assigns a performance rating for the completed year, it also assigns a company performance factor for executives from within a pre-specified range of company performance



## COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS (continued)

factors. The company and individual performance factor ranges are designed to reward superior performance with total compensation that compares favorably to that of executives at our comparator companies while not reaching such compensation levels when outstanding performance is not achieved. These possible company ratings and corresponding company performance factor ranges are set forth in the table below:

Company Rating	Company Performance Factor
Not Building	0%-25%
Building	0%-80%
Strong	80%-120%
Leading	120%-150%

As discussed above, for 2013, our board of directors assigned the company a “leading” rating, as discussed above, and a company performance factor of 140%, which is in the range for a “leading” company performance rating.

Individual Performance Factors. The possible individual ratings and corresponding individual performance factor ranges for our executive officers in 2013 are set forth in the table below:

Individual Rating	Individual Performance Factor
Not Building	0%
Building	50%-80%
Strong	80%-120%
Leading	120%-150%
Leading/Exemplary	150%

The MDCC evaluates executives’ individual performances on a “results-based, values-tempered” basis, which takes into account not only “what” was accomplished, but “how” it was accomplished. The results-based component evaluates the executive officer’s performance in his or her individual role and as a leader of our company in achieving our objectives. The possible individual results-based performance ratings are “not building,” “building,” “strong” or “leading,” with standards comparable to the company ratings set forth in the table above. The values-tempered component of the individual evaluations builds upon our company core values: “uncompromising commitment to patients;” “innovation is our lifeblood;” “fearless pursuit of excellence” and “we wins.” Under our Values Into Practice program, we expect all employees to demonstrate our company core values in all aspects of job performance. We further expect that our executives will be stewards of our core values, and the performance ratings assigned to them incorporate our board’s assessment of the strength of their leadership with respect to, and demonstration of, value-based behavior. This evaluation results in ratings of “not demonstrating,” “living the values” or “exemplary demonstration.” The possible individual performance ratings under this program are as set forth in the following table:

Values Evaluation	Results Evaluation			
	Not Building	Building	Strong	Leading
Exemplary Demonstration	[Not Possible]	Strong	Leading	Leading/Exemplary
Living the Values	Not Building	Building	Strong	Leading
Not Demonstrating	Not Building	Not Building	Building	[Not Possible]

The 2013 results-based rating recommendation for each named executive officer is the combined result of the committee members’ observations and review of the officer’s role in the accomplishment of the corporate goals, and factors and recommendations provided to the MDCC by our chief executive officer made on the basis of his independent assessment of each executive officer’s performance. The MDCC and Dr. Leiden discussed the recommendations at length, on both an individual-by-individual basis, and on a comparative basis. Upon completion of these discussions, the MDCC finalized its recommendation for the results-based rating for each executive, taking into account Dr. Leiden’s recommendations, factors considered in the discussions and the opinions of committee members based on the executive’s contributions and the committee members’ interactions with the executive. When considering the more subjective values-based rating, the MDCC



## COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS (continued)

also discussed Dr. Leiden's recommendations, giving them greater weight than for the results-based rating, because the values-based rating is pertinent to the executive's daily interactions in carrying out his or her duties, and the MDCC believes that, in his role as CEO, Dr. Leiden had greater visibility than the committee members into the quality of these interactions. Taking into account all of the factors raised in the discussion and the assigned individual performance rating, the MDCC assigns an individual performance factor for each named executive officer within the ranges set forth above.

## 2013 Individual Ratings and Individual Performance Factors for Named Executive Officers

On the basis of the MDCC's recommendation, our independent directors rated Dr. Leiden's overall performance for 2013 as "leading/exemplary." The performance rating for Dr. Leiden combined a "leading" results-based rating with an "exemplary demonstration" values-based rating. The results-based rating derived principally from the company's performance, leading to a 95% performance score, and in part from his actions in leading the company's successful execution of its strategy for 2013. Dr. Leiden's personal and leadership qualities, as well as his strategic vision, savvy in the operational aspects of development, manufacture and commercialization of pharmaceutical products, understanding of the perspective of clinicians and commitment to patients positioned him to lead our company as we advanced our cystic fibrosis and other research and early-stage development programs and realigned our operations in response to competition in the market for HCV therapies. These qualities further led our directors to assign Dr. Leiden the values-based rating of "exemplary demonstration" for his stewardship of our values-into-practice program. The MDCC recommended a "leading/exemplary" rating for Mr. Smith based on a results-based rating of "leading" and a values-based rating of "exemplary demonstration." Mr. Smith's results-based rating derived in part from the company's leading performance and in part from the performance of Mr. Smith's finance and accounting, investor relations, real estate and information systems groups, particularly with respect to maintaining financial stability and the highly successful transition to our new corporate headquarters. The MDCC recommended an overall rating of "leading/exemplary" for Mr. Arbuckle based on a results-based rating of "leading" and a values-based rating of "exemplary demonstration." The MDCC noted Mr. Arbuckle's leadership with respect to the effective commercialization of KALYDECO in international markets and the realignment of the commercial organization in response to competitive pressures in the market for HCV therapies. The MDCC recommended an overall "leading" rating for Mr. Horton based on a results-based rating of "strong" and a values-based rating of "exemplary demonstration." The MDCC noted the effectiveness of Mr. Horton with respect to the support his legal and compliance teams provided toward achievement of company-wide goals, in particular with respect to enterprise risk management and maintenance of compliant research, development and commercial practices. The MDCC recommended an overall rating of "leading" for Dr. Mueller based on a results-based rating of "leading" and a values-based rating of "living the values." Dr. Mueller's results-based rating derived principally from his leadership of the research and development organizations, whose activities resulted in the significant progress of our research and development programs discussed above. On the basis of the factors described above, our independent directors approved, upon the MDCC's recommendation, results-based and values-based ratings, individual performance factors and annual bonus awards for each of the named executive officers on account of 2013 performance, as set forth in the table below.

Name	Results—Based Rating	Values—Based Rating	2013 Overall Performance Rating	Individual Performance Factor	2013 Annual Cash Bonus
Jeffrey M. Leiden	Leading	Exemplary	Leading Exemplary	150%	\$2,772,000
Ian F. Smith	Leading	Exemplary	Leading Exemplary	150%	\$682,500
Stuart A. Arbuckle	Leading	Exemplary	Leading Exemplary	150%	\$630,000
Kenneth L. Horton	Strong	Exemplary	Leading	135%	\$439,425
Peter Mueller	Leading	Living	Leading	140%	\$637,000

## Annual Equity Awards

Equity awards are granted pursuant to our equity plans to all eligible employees, including our named executive officers, for the purpose of creating a link between compensation and shareholder return, and to provide the named executive officers and employees with the opportunity to develop and maintain a significant stock ownership position

in our company that will act through delayed vesting as an incentive for the employee to remain employed by us. The number of shares awarded increases with increased responsibility and with higher year-end individual performance ratings. All annual stock option

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## COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS (continued)

awards are granted with an exercise price equal to the fair market value on the date of grant, which under our equity plans is determined by averaging the high and low price of our common stock on the date of grant, and vest quarterly over four years. Accordingly, the intrinsic value of any stock option grant is proportional to both the increase in fair market value of our common stock between grant and exercise, and to the increasing number of vested shares over time.

Each of our executive officers is eligible annually for a combined grant of stock options and restricted stock, in amounts recommended by the MDCC and ultimately determined by our independent directors during the annual performance review process on the basis of the executive officer's performance rating. Stock options serve to motivate executives to achieve company successes that are aligned with shareholder interests, because stock options have realizable value only if the value of our common stock increases after the grant date. We also believe that stock options serve as a retention tool, progressively rewarding an executive for time-in-service. Generally, we have awarded a mid-year option grant at our regularly scheduled summer board meeting to our named executive officers. At this time, we grant stock options to all eligible employees, including executive officers, in amounts that are equal to 50% of the number of shares for which the employee would be eligible assuming a "strong" performance. This grant is considered part of the annual equity award related to performance in that year. Upon completion of the individual's annual performance evaluation early in the following year, each employee typically receives a second option award. At that time, we determine the aggregate number of shares to be awarded on the basis of the employee's individual performance rating for the entire year and then subtract the amount granted in the mid-year award and award the balance. Equity awards granted to our named executive officers are subject to contractual obligations that in certain circumstances provide for partial or full acceleration of vesting in connection with a termination of such officer's employment. Additional information regarding our equity grant practices and our arrangements with our named executive officers is set forth under the headings Compensation Decision-Making Process—Equity Grant Practices, Summary of Termination and Change of Control Benefits and Employment Contracts and Change of Control Arrangements.

Our executive officers also are eligible for a performance-accelerated restricted stock, or PARS, award after the year-end performance review. Restricted stock grants serve as a retention tool and are designed to reward performance. These grants have value that is not limited, as is the case with stock options, to an increase over the prevailing stock price on the date of grant. PARS grants are linked to performance because they are more valuable if our stock price increases and they vest sooner if the performance-based accelerators are achieved. All restricted stock awards made to our executive officers under our annual program are issued at par value, or \$0.01, and vest on the fourth anniversary of the grant date, subject to accelerated vesting for certain performance-based factors.

Our named executive officers were eligible in 2013 and are eligible in 2014 for equity grants, based on their ratings, in the amounts below:

	Building		Strong		Leading		Leading and Exemplary	
	Restricted Stock		Restricted Stock		Restricted Stock		Restricted Stock	
	Stock	Options	Stock	Options	Stock	Options	Stock	Options
Chief Executive Officer	21,500	106,500	43,000	213,000	53,750	266,250	64,500	319,500
Executive Vice President	6,900	34,000	13,800	68,000	17,250	85,000	20,700	102,000

Equity awards made to our named executive officers in 2013 (and included in the compensation and equity tables beginning on page 49) included an award in February 2013, on the basis of 2012 performance, and a mid-year award of 50% of the stock options for which the executive would be eligible (as described in the table above) if the executive's year-end rating was "strong." The final equity awards made to the named executive officers on account of 2013 performance were made in February 2014, on the basis of the performance ratings set forth above.



## COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS (continued)

The total equity awards made to each of our named executive officers for 2013 performance are as follows:

	2013 Individual Performance Rating	Stock Options Awarded in July 2013	Stock Options Awarded in February 2014	Total Stock Options Awarded for 2013 Performance	Restricted Stock Awarded in February 2014 for 2013 Performance
Jeffrey M. Leiden	Leading Exemplary	106,500	213,000	319,500	64,500
Ian F. Smith	Leading Exemplary	34,000	68,000	102,000	20,700
Stuart A. Arbuckle	Leading Exemplary	34,000	68,000	102,000	20,700
Kenneth L. Horton	Leading	34,000	51,000	85,000	17,250
Peter Mueller	Leading	34,000	51,000	85,000	17,250

#### Benefits

Our executives are eligible to participate in all benefits programs on the terms made generally available to our employees, including medical insurance, dental insurance, payment of life insurance premiums, disability coverage, and participation in our employee stock purchase plan. Our retirement benefits are limited to a defined contribution—a 401(k)—plan, in which our named executive officers are eligible to participate, subject to all applicable limitations under the plan. We make matching contributions to the 401(k) plan, which are made in the form of fully vested unitized interests in a Vertex common stock fund, and are subject to certain limitations. The formula for determining the amount of our matching contributions is the same for our named executive officers as for our other employees (and are subject to the same statutory maximum), but the actual contributions made to the accounts of our named executive officers generally are at the top end of the range, due to the executives' higher salaries and correspondingly higher cash contribution levels. We do not provide any other retirement benefits to our executive officers.

#### Other-Than-Annual Compensation Arrangements

##### Employment Agreements and Post-Termination Compensation and Benefits

The initial compensation terms for newly hired members of our executive team are the result of negotiations between us, in consultation with the MDCC and our board, and the executive being recruited. Accordingly, the initial employment terms for each of the named executive officers may vary significantly because they take into account both our interests and the executive's interests under the circumstances at the time of negotiation, and depend on the level of job responsibility, the market for the executive's services, the value of other opportunities then available to the executive and similar considerations. Executives who join us from other companies may sacrifice potential bonuses and/or equity payouts, and may request compensation elements of similar value. More experienced individuals may seek higher compensation than individuals who are still establishing their careers. We seek to balance the need to be competitive in a competitive market against the need for the executive's compensation to be comparable with the executive's peers at the company. In general, each newly hired executive team member enters into an employment agreement and a change of control agreement and is awarded a stock option grant and a restricted stock grant, and in some cases a cash sign-on bonus, reimbursement of moving expenses, and other benefits. We also enter into employment and change of control agreements with executives who are promoted to our executive team, on the basis of standard terms and conditions that have been recommended by our MDCC and approved by our board of directors for such circumstances. We have entered into agreements providing for severance and change of control payments with each of the members of our executive team, including all of the named executive officers, because we believe that they are a fair and effective way to allow our executives to maintain focus on our business in the face of market and other volatility in our industry.

In general, each employment arrangement provides for cash severance and continuation of certain employee benefits in the event that an executive's employment is terminated by us without cause or is terminated by the executive for good reason. We use a "double trigger" with respect to benefits that are to be provided in connection with a change of control. A change of control does not itself trigger benefits; rather, benefits are paid only if the employment of the executive is terminated by us other than for cause, death or disability, or by the executive for good reason, during a specified period before or after a change of control. We believe a "double trigger" benefit maximizes shareholder value

because it prevents a windfall to executives in the event of a change of control in which the executive retains significant responsibility as defined in his or her individual agreement, while still providing our executives appropriate incentives to cooperate in negotiating any change of control that may put their jobs at risk.

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COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS (continued)

In addition to the benefits that only accrue in connection with a change of control, our agreements with our executive officers provide benefits if we terminate their employment with us without cause or they terminate their employment with us for good reason, as such terms are defined in the applicable agreement with the executive officer. A further discussion of the terms and projected payments under each of these agreements is set forth below under the heading Employment Contracts and Change of Control Arrangements.

#### Supplemental Grants of Equity Compensation

In the past, the MDCC has recommended that our board of directors make an additional, off-cycle equity award to an executive officer or group of officers in order to achieve one or more of the objectives of our executive compensation program. Supplemental grants have been made on an ad hoc basis, when warranted in the judgment of the MDCC and our board. No such supplemental grants of equity compensation were made during 2013. We cannot predict if the board will make supplemental grants in the future, or characterize the likely size and/or terms of any such grants.

#### Compensation Decision-Making Process

##### Role of MDCC and Chief Executive Officer in Setting Executive Compensation

The MDCC has responsibility for overseeing the design, development and implementation of the compensation program for our chief executive officer and other named executive officers. The MDCC evaluates the performance of our chief executive officer and the performance of the other executive officers. Our chief executive officer and our senior vice president, human resources, assist the MDCC in evaluating the performance of our other executive officers, including the named executive officers other than the chief executive officer. Our chief executive officer does not participate in board discussions relating to his compensation, and the other named executive officers do not play a role in their own compensation determination.

The members of the MDCC, each of whom is an independent director, or the MDCC, together with the other independent directors, make final compensation decisions for the chief executive officer's and other executive officers' compensation levels based on these assessments.

##### Role of Compensation Consultant

The MDCC (i) is directly responsible for the appointment and oversight of its compensation consultants, (ii) has the authority to determine the fees that we pay for services provided by such compensation consultants and (iii) prior to engaging any compensation consultant, considers applicable factors potentially affecting the independence of the compensation consultant, including the factors set forth in Nasdaq Marketplace Rule 5605(d)(3). Annually, the MDCC has engaged a compensation consultant to conduct an analysis of all elements of compensation paid to our executive officers, including our named executive officers, compared to similar elements paid to similarly situated executives at companies in our comparator group and to provide a written report and presentation of findings at the meeting of the MDCC that occurs in July each year. In 2013, the MDCC selected Meridian Compensation Partners, or Meridian, to conduct and present this analysis to the MDCC. Meridian does not advise our management and receives no other compensation from us other than the compensation it receives for the advice it provides to the MDCC. In addition, the MDCC considered the following information provided to it by Meridian: (a) Meridian's policies and procedures designed to prevent conflicts of interest, (b) that fees paid by us to Meridian represent less than 1% of Meridian's total annual revenues, (c) the absence of business and personal relationships between the compensation consultant and the MDCC or any of our executive officers and (d) that Meridian's partners, consultants and employees who provide services to the MDCC, and their immediate family members, do not own shares of our common stock. Based on these, and other factors considered by the MDCC, the MDCC determined that Meridian's work did not raise a conflict of interest. The services provided by Meridian to the MDCC were used as described in the Compensation Discussion and Analysis-Executive Summary and under the headings Base Salary, Target Bonus/Individual Incentive Targets and Analysis of Compensation Practices of Comparator Companies.

##### Analysis of Compensation Practices of Comparator Companies

In order to make judgments about elements of executive compensation on a competitive basis, we consider information about the compensation practices of a representative group of companies with whom we compete for executive talent. We select companies for this comparator group on the basis of similarity of industry,

innovation-based business model, risk profile, annual operating expense level, number of employees and market capitalization. We review and revise the list of companies

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COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS (continued)

on a regular basis. As a result of this analysis, and on the basis of the criteria listed above, the MDCC selected the comparator companies set forth below for 2013.

Comparator Group

Alexion Pharmaceuticals, Inc.

Biogen Idec Inc.

BioMarin Pharmaceutical Inc.

Celgene Corporation

Dendreon Corporation

Elan Corporation, plc

Gilead Sciences, Inc.

Regeneron Pharmaceuticals, Inc.

Shire plc

United Therapeutics Corporation

This comparator group was the same as the comparator group used in 2012 by the company, with the exception that Human Genome Sciences, Inc. was removed from the list because it had been acquired.

We do not strictly benchmark to a particular level of compensation relative to compensation levels at the comparator companies, but rather make a subjective judgment about where each executive should fall in comparison with executives with similar responsibilities at the comparator companies. The MDCC does look at comparator company information to confirm that our compensation practices and the result of applying our policies and programs in general results in compensation levels that are competitive with those of the comparator companies and consistent with our compensation philosophy. In addition, the MDCC reviews broader industry specific executive compensation surveys published by Radford, Mercer SIRS and Towers Watson.

Interdependence of Elements and Tally Sheets

The elements of our compensation program operate independently from one another, except that an adjustment to an executive's base salary level also will result in a corresponding change in the executive's annual cash bonus opportunity, and potentially, any severance or change of control payments. When the MDCC evaluates an amount to award or pay for a specific compensation element, we typically provide a tally sheet that sets forth all elements of the executive's compensation, including salary, cash bonus, value of equity compensation, the dollar value to the executive and cost to us of all personal benefits, and the actual projected payout obligations under potential severance and change of control scenarios. The purpose of the tally sheets is to assist the MDCC in establishing and administering an overall executive compensation program that is fair and reasonable both to our executives and to our shareholders. The review of tally sheets does not result in specific awards. Rather, the tally sheets provide background information for the MDCC to use in considering one or more components of compensation. Each MDCC member uses the tally sheets as he or she deems appropriate when making compensation decisions.

Although the tally sheets include certain information about the current and projected value of each executive's inventory of outstanding vested and unvested equity awards, we believe it is inconsistent with our compensation philosophy to give this "accumulated wealth" weight in setting current executive compensation levels. The value of an executive's equity inventory is largely a function of prior performance, in terms of the size of the grants, the duration of the executive's tenure with us, the performance of our common stock during that tenure and whether a particular executive has disposed of equity compensation items. We do not believe that reducing the amount of an executive's current compensation on account of wealth accumulated for prior performance would be consistent with our compensation objectives.

Tax Considerations

We would like our compensation program to be reasonably cost and tax effective. To the extent consistent with our other goals, we seek to preserve corporate tax deductions, while maintaining the flexibility to approve compensation arrangements that we believe are in the best interests of the company and our shareholders. The approach does not always result in full tax deductibility.



COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS (continued)

#### Equity Grant Practices

The exercise price for each stock option awarded to our executive officers under our equity compensation program is equal to the fair market value of our common stock on the date of grant, which under our equity plans is the average of the high and low price for our common stock on the date of grant. Our board generally grants employee options two times per year, on the date of its mid-summer meeting, usually in July, and on the date of its first meeting of each new year, usually in late January or early February. Supplemental equity grants, if any, are made at board meetings at the time when the board determines they are appropriate in order to meet the objectives of our compensation program. Board and committee meetings generally are scheduled at least a year in advance, and scheduling decisions are made without regard to anticipated earnings or other major announcements by the company.

Newly hired employees, including executive officers, are sometimes granted options and/or restricted stock effective on the first day of employment, with the options having an exercise price set at the average of the high and low price for our common stock on the employment start date. The employees' start dates are scheduled without regard to anticipated earnings or other major announcements by the company.

#### Other Compensation Practices

##### Compensation Recoupment ("Clawback") Policy

We have adopted a recoupment or claw-back policy providing that, if our board determines that an executive officer engaged in fraud or intentional misconduct that resulted in an incorrect determination that an incentive compensation performance goal had been achieved, the board may take appropriate action to recover from such executive officer any compensation that resulted from such determination. The board may require reimbursement for any bonus, equity or incentive compensation awarded to an executive officer who engaged in the fraud or intentional misconduct to the extent it was based on such incorrect determination.

#### Stock Ownership Guidelines

In 2013, our board adopted stock ownership guidelines for our chief executive officer and named executive officers. Our chief executive officer should, within five years of becoming subject to the guidelines, satisfy at least one of the following two criteria: (i) ownership of shares of our common stock with a value at least six times his then-current base salary or (ii) ownership of at least 150,000 shares of our common stock. Our executive vice presidents should, within five years of becoming subject to these guidelines, achieve ownership of shares of our common stock with a value at least four times such executive vice president's then-current base salary. Individual holdings, and holdings of immediate family members, of (a) common stock, including unvested restricted stock, (b) restricted stock units and deferred stock units and (c) shares held through our 401(k) plan count toward meeting these guidelines. Each of our named executive officers, including our chief executive officer, currently satisfies the minimum individual holding requirements.

#### Anti-Hedging Policy

We prohibit all of our directors and employees worldwide, including our named executive officers, from (i) short selling or hedging our securities, (ii) purchasing or selling derivative securities based on our securities and (iii) pledging our securities.

#### Risk Mitigation

Our MDCC reviews the risks and rewards associated with our compensation programs. The programs are designed with features that mitigate risk without diminishing the incentive nature of the compensation. We believe our compensation programs encourage and reward prudent business judgment and appropriate risk-taking over the short term and the long term. Our MDCC regularly evaluates the risks involved with our compensation programs and does not believe that any of our compensation programs create risks that are reasonably likely to have a material adverse effect on our company.

We believe that our annual cash bonus and long-term equity compensation programs, which account for most of our executive officers' compensation, contain appropriate risk mitigation factors, as summarized below:

COMPENSATION DISCUSSION AND ANALYSIS - DETAILED DISCUSSION AND ANALYSIS (continued)

	Risk Mitigation Factor	
	Cap on Awards	
	Multiple Performance Factors	
Annual Cash Bonus	Range of Awards (not all or nothing)	
	Clawback Policy	Equity Grants
	Balance of Short-term and Long-term Incentives (through annual cash bonuses and equity awards)	
	Anti-hedging Policy	
	Executive Stock Ownership Guidelines	



MANAGEMENT DEVELOPMENT AND COMPENSATION COMMITTEE REPORT

The Management Development and Compensation Committee has reviewed the Compensation Discussion and Analysis and discussed that analysis with management. Based on its review and its discussions with management, the Management Development and Compensation Committee recommended to Vertex's Board of Directors that the Compensation Discussion and Analysis be included in Vertex's proxy statement for its 2014 annual meeting of shareholders and incorporated by reference into Vertex's Annual Report on Form 10-K for the year ended December 31, 2013. This report is provided by the following directors who comprise the Management Development and Compensation Committee:

Bruce I. Sachs (Chair)

Terrence C. Kearney

Margaret G. McGlynn

## COMPENSATION AND EQUITY TABLES

## SUMMARY COMPENSATION TABLE

The following table provides summary information concerning compensation earned by our chief executive officer; our chief financial officer; and our other three most highly compensated employees who were serving as executive officers on December 31, 2013. We refer to these officers collectively as our named executive officers.

Name and Principal Position	Year	Salary	Bonus	Stock Awards	Option Awards	Non-Equity Incentive Plan Compensation	All Other Compensation	Total
Jeffrey M. Leiden Chairman, President & CEO	2013	\$1,038,462	\$—	\$1,773,963	\$7,529,374	\$2,772,000	\$12,675	\$13,126,474
	2012	\$1,000,000	\$—	\$—	\$2,556,234	\$2,088,000	\$12,450	\$5,656,684
	2011	\$50,000	\$—	\$3,497,678	\$7,077,542	\$—	\$92,441	\$10,717,661
Ian F. Smith EVP & Chief Financial Officer	2013	\$582,959	\$—	\$544,988	\$2,361,640	\$682,500	\$12,675	\$4,184,762
	2012	\$539,241	\$—	\$457,379	\$1,723,546	\$376,577	\$12,450	\$3,109,193
Stuart A. Arbuckle EVP & Chief Commercial Officer	2011	\$523,535	\$—	\$468,738	\$1,914,319	\$425,493	\$12,495	\$3,344,580
	2013	\$553,846	\$—	\$544,988	\$3,077,513	\$630,000	\$12,675	\$4,819,022
Kenneth L. Horton EVP & Chief Legal Officer	2012	\$169,615	\$365,000	\$2,131,308	\$1,731,692	\$117,600	\$293,482	\$4,808,697
	2013	\$465,000	\$—	\$544,988	\$3,077,513	\$439,425	\$12,625	\$4,539,551
Peter Mueller EVP, Global R&D & Chief Scientific Officer	2012	\$259,327	\$—	\$539,612	\$1,822,615	\$169,260	\$11,921	\$2,802,735
	2013	\$619,846	\$—	\$544,988	\$2,361,640	\$637,000	\$12,675	\$4,176,149
	2011	\$598,980	\$—	\$548,863	\$2,036,301	\$418,296	\$12,450	\$3,614,890
	2011	\$581,534	\$—	\$562,494	\$2,255,943	\$525,146	\$12,495	\$3,937,612

## Bonus

Pursuant to applicable SEC rules, the annual cash bonuses earned by our named executive officers are set forth under the caption “Non-Equity Incentive Plan Compensation.” Other bonuses, such as sign-on bonuses, are listed separately under the caption “Bonus.”

## Stock Awards and Options Awards

Pursuant to applicable SEC rules the grant-date fair values of the equity awards granted in February 2013 for 2012 performance are included in 2013 compensation. Equity awards granted in February 2014 for 2013 performance are not reflected in the Summary Compensation Table above and will be included as 2014 compensation in next year’s proxy statement.

The amounts set forth under the captions “Stock Awards” and “Option Awards” in the table above represent the grant-date fair value of awards granted during the applicable fiscal year. Our methodology for determining the grant-date fair value, including underlying estimates and assumptions for calculating these values, is set forth in Note N to our consolidated financial statements included in our 2013 Annual Report on Form 10-K filed with the SEC on February 11, 2014.

The amount set forth above for Dr. Leiden under the caption “Stock Awards” for 2011 includes the grant-date fair value of (i) a December 14, 2011 restricted stock award of 50,017 shares that vests on December 14, 2014, and (ii) a December 14, 2011 performance-vesting restricted stock award of 133,378 shares subject to vesting upon the attainment of certain performance conditions. The grant-date fair value of the performance-vesting restricted stock award was \$1,998,669. We determined that as of the date of the grant it was probable that 50% of the performance conditions would be achieved and assigned a grant-date fair value based on this evaluation. In 2013, 50% of the performance conditions were met resulting in the vesting of the related shares. The remaining 50% of the performance conditions will not be met and the shares will not vest.



## COMPENSATION AND EQUITY TABLES (continued)

## Non-Equity Incentive Plan Compensation—Annual Cash Bonus

The amounts set forth under the caption “Non-Equity Incentive Plan Compensation” in the table above represent annual cash bonuses for 2013, 2012 and 2011 performance, each of which was paid in the first quarter of the subsequent year.

The cash bonus awards to the named executive officers for 2013 performance were determined as follows:

Name	Base Salary Dec. 31, 2013	Individual Incentive Target	2013 Target Bonus	Company Performance Factor	Individual Performance Factor	2013 Performance Cash Bonus
Jeffrey M. Leiden	\$1,100,000	x 120%	= \$1,320,000	x 140%	x 150%	= \$2,772,000
Ian F. Smith	\$650,000	x 50%	= \$325,000	x 140%	x 150%	= \$682,500
Stuart A. Arbuckle	\$600,000	x 50%	= \$300,000	x 140%	x 150%	= \$630,000
Kenneth L. Horton	\$465,000	x 50%	= \$232,500	x 140%	x 135%	= \$439,425
Peter Mueller	\$650,000	x 50%	= \$325,000	x 140%	x 140%	= \$637,000

## All Other Compensation

The amounts set forth under the caption “All Other Compensation” in the table for 2013 consist of:

Name	401(k) Match	Life Insurance Premiums	Total
Jeffrey M. Leiden	\$11,475	\$1,200	\$12,675
Ian F. Smith	\$11,475	\$1,200	\$12,675
Stuart A. Arbuckle	\$11,475	\$1,200	\$12,675
Kenneth L. Horton	\$11,475	\$1,150	\$12,625
Peter Mueller	\$11,475	\$1,200	\$12,675

“All Other Compensation” for Mr. Arbuckle in 2012 consisted primarily of relocation costs.

## OPTION EXERCISES AND STOCK VESTED FOR 2013

The following table sets forth the value realized by our named executive officers from options to purchase common stock exercised by the named executive officers during 2013 and shares of restricted stock that vested during 2013.

The value realized per share for options is based on the difference between the exercise price and the fair market value of the shares of common stock on the date the options were exercised. The value realized on vesting of restricted stock awards is based on the fair market value of the shares on the vesting date.

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise	Value Realized on Exercise	Number of Shares Acquired on Vesting	Value Realized on Vesting
Jeffrey M. Leiden	—	\$—	86,356	\$4,289,766
Ian F. Smith	739,643	\$34,925,940	6,042	\$393,878
Stuart A. Arbuckle	—	\$—	18,459	\$1,338,439
Kenneth L. Horton	—	\$—	8,549	\$588,326
Peter Mueller	167,300	\$8,333,096	6,042	\$393,878

## COMPENSATION AND EQUITY TABLES (continued)

## TOTAL REALIZED COMPENSATION TABLE

To supplement the SEC-required disclosure in the Summary Compensation Table set forth above, we have included the additional table below, which shows “Total Realized Compensation” representing the total compensation realized by each named executive officer in each of the years shown. Total compensation as calculated under SEC rules, as shown in the Summary Compensation Table, includes several items that are driven by accounting assumptions, which are not necessarily reflective of compensation actually realized by the named executive officers in a particular year. The amounts reported in the Total Realized Compensation column differ substantially from the amounts reported in the Total column required under SEC rules and are not a substitute for those Total amounts. Total Realized Compensation represents: (1) Total compensation, as determined under applicable SEC rules, minus (2) the aggregate grant-date fair value of restricted stock awards and stock option awards (as determined under applicable SEC and accounting rules and reflected in the Stock Awards column and Option Awards column), plus (3) the value realized in the applicable year from the vesting of restricted stock and exercises of stock options (calculated in the same manner as for the Option Exercises and Stock Vested for 2013 table on page 50). Executives with a longer tenure had higher total realized compensation in 2013 because they exercised long-term incentive stock options that had increased in value over time as our stock price increased, which is consistent with the objectives of our compensation program.

Name	Year	Salary	Annual Cash Bonus	All Other Compensation/Bonus	Value Realized from Vesting of Restricted Stock	Value Realized from Stock Options	Total Realized Compensation
Jeffrey M. Leiden	2013	\$1,038,462	\$2,772,000	\$ 12,675	\$4,289,766	\$—	\$8,112,903
	2012	\$1,000,000	\$2,088,000	\$ 12,450	\$—	\$—	\$3,100,450
	2011	\$50,000	\$—	\$ 92,441	\$—	\$—	\$142,441
Ian F. Smith	2013	\$582,959	\$682,500	\$ 12,675	\$393,878	\$34,925,940	\$36,597,952
	2012	\$539,241	\$376,577	\$ 12,450	\$1,070,188	\$2,372,275	\$4,370,731
	2011	\$523,535	\$425,493	\$ 12,495	\$1,143,871	\$—	\$2,105,394
Stuart A. Arbuckle	2013	\$553,846	\$630,000	\$ 12,675	\$1,338,439	\$—	\$2,534,960
	2012	\$169,615	\$117,600	\$ 658,482	\$—	\$—	\$945,697
Kenneth L. Horton	2013	\$465,000	\$439,425	\$ 12,625	\$588,326	\$—	\$1,505,376
	2012	\$259,327	\$169,260	\$ 11,921	\$—	\$—	\$440,508
Peter Mueller	2013	\$619,846	\$637,000	\$ 12,675	\$393,878	\$8,333,096	\$9,996,495
	2012	\$598,980	\$418,296	\$ 12,450	\$1,393,307	\$4,430,642	\$6,853,675
	2011	\$581,534	\$525,146	\$ 12,495	\$1,209,980	\$3,669,659	\$5,998,814

## COMPENSATION AND EQUITY TABLES (continued)

## GRANTS OF PLAN-BASED AWARDS DURING 2013

The following table provides information with respect to grants of awards to each of our named executive officers during 2013:

Name	Grant Date	Estimated Possible Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards (shares)	All Other Awards: Number of Securities Underlying Options (shares)	Exercise or Closing Base Price of Option Awards (per share)	Price of Stock on Grant Date (per share)	Grant-Date Fair Value of Stock and Option Awards
		Threshold	Target	Maximum					
Jeffrey M. Leiden	2/5/2013	\$—	\$1,320,000	\$2,970,000	39,334			\$1,773,963	
	2/5/2013					177,000	\$45.11	\$45.60	\$3,495,431
	7/30/2013					106,500	\$83.36	\$81.91	\$4,033,943
Ian F. Smith	2/5/2013	\$—	\$325,000	\$731,250	12,084				\$544,988
	2/5/2013					54,375	\$45.11	\$45.60	\$1,073,808
	7/30/2013					34,000	\$83.36	\$81.91	\$1,287,832
Stuart A. Arbuckle	2/5/2013	\$—	\$300,000	\$675,000	12,084				\$544,988
	2/5/2013					90,625	\$45.11	\$45.60	\$1,789,681
	7/30/2013					34,000	\$83.36	\$81.91	\$1,287,832
Kenneth L. Horton	2/5/2013	\$—	\$232,500	\$523,125	12,084				\$544,988
	2/5/2013					90,625	\$45.11	\$45.60	\$1,789,681
	7/30/2013					34,000	\$83.36	\$81.91	\$1,287,832
Peter Mueller	2/5/2013	\$—	\$325,000	\$731,250	12,084				\$544,988
	2/5/2013					54,375	\$45.11	\$45.60	\$1,073,808
	7/30/2013					34,000	\$83.36	\$81.91	\$1,287,832

The amounts in the “Estimated Possible Payouts Under Non-Equity Incentive Plan Awards” column represent the minimum threshold, target and maximum amounts that our named executive officers were eligible for pursuant to our 2013 annual cash bonus program. Actual amounts paid to each of the named executive officers under this program for 2013 performance are set forth in the Summary Compensation Table above.

The amounts in the “Estimated Future Payouts Under Equity Incentive Plan Awards” column represent the number of shares of restricted stock granted to the named executive officers in 2013. The restricted stock awards to the named executive officers were made in February 2013 on account of the executives’ performances in 2012. Each of these restricted stock awards is characterized as a performance-accelerated restricted stock, or PARS, award that is subject to time-based vesting on the fourth anniversary of the grant date, subject to acceleration as described under the heading Outstanding Equity Awards at Fiscal Year-End for 2013 below.

In accordance with our stock and option plans, the exercise prices for the stock options granted to our named executive officers during 2013 were equal to the average of the high and the low prices of our common stock on the grant date. As a result, in 2013 the exercise prices of options granted to our named executive officers were lower than

the grant-date closing price of our common stock for the February 5, 2013 grants, and higher than the grant-date closing price for the July 30, 2013 grants. In the future, we expect that options will continue to be granted with exercise prices equal to the average of the high and low prices of our common stock on the grant date, and that as a result the exercise prices are likely to be different from the closing price of our common stock on the grant date. Each stock option set forth in the table above was granted subject to vesting in 16 quarterly installments during the first four years of its ten-year term.

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## COMPENSATION AND EQUITY TABLES (continued)

## OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END FOR 2013

The following table provides information with respect to outstanding equity awards held by each of our named executive officers on December 31, 2013, based on the closing price of \$74.30 per share of our common stock on December 31, 2013:

Name	Option Awards				Stock Awards		Equity Incentive Plan Awards: Number of Unearned Shares, Rights That Have Not Vested (shares)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested
	Number of Securities Underlying Unexercised Options Exercisable (shares) (1)	Number of Securities Underlying Unexercised Options (shares) (1)	Option Exercise Price (per share)	Option Expiration Date (2)	Number of Shares or Units of Stock That Have Not Vested (shares)	Market Value of Shares or Units of Stock That Have Not Vested		
Jeffrey M. Leiden	Restricted Stock				19,667	(3) \$1,461,258		
					50,017	(4) \$3,716,263	66,689	(5) \$4,954,993
	Stock Options							
		229,054	229,054	\$29.98	12/13/2021			
		30,000	0	\$34.05	7/5/2019			
		20,000	0	\$34.24	5/31/2020			
		1,527	0	\$34.39	12/14/2020			
		33,187	143,813	\$45.11	2/4/2023			
		36,875	81,125	\$48.74	7/24/2022			
		22,500	0	\$53.85	5/31/2021			
		6,656	99,844	\$83.36	7/29/2023			
Ian F. Smith	Restricted Stock				12,084	(6) \$897,841		
					6,042	(3) \$448,921		
	Stock Options							
		2,267	0	\$33.28	7/15/2019			
		4,532	6,797	\$33.82	7/13/2020			
		10,196	30,586	\$37.86	2/1/2022			
		10,196	16,992	\$38.80	2/2/2021			
		10,195	3,399	\$39.05	2/3/2020			
		10,195	44,180	\$45.11	2/4/2023			
		11,328	24,922	\$48.74	7/24/2022			
		4,533	15,859	\$51.75	7/12/2021			
		2,125	31,875	\$83.36	7/29/2023			



Stuart A. Arbuckle	Restricted Stock			
			20,000	(7) \$1,486,000
			7,250	(8) \$538,675
			6,042	(3) \$448,921
	Stock Options			
	16,992	73,633	\$45.11	2/4/2023
	22,656	49,844	\$53.74	9/3/2022
	2,125	31,875	\$83.36	7/29/2023

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## COMPENSATION AND EQUITY TABLES (continued)

Name	Option Awards				Stock Awards		Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (shares)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested
	Number of Securities Underlying Unexercised Options (shares) (1)	Number of Securities Underlying Unexercisable Options (shares) (1)	Option Exercise Price (per share)	Option Expiration Date (2)	Number of Shares or Units of Stock That Have Not Vested (shares)	Market Value of Shares or Units of Stock That Have Not Vested		
Kenneth L. Horton	Restricted Stock				7,250	(9) \$538,675		
					6,042	(3) \$448,921		
	Stock Options							
	16,992	73,633	\$45.11	2/4/2023				
	27,000	45,000	\$55.83	6/10/2022				
	2,125	31,875	\$83.36	7/29/2023				
Peter Mueller	Restricted Stock				14,501	(6) \$1,077,424		
					6,042	(3) \$448,921		
	Stock Options							
	24,250	0	\$28.84	7/11/2017				
	36,250	0	\$32.16	7/23/2018				
	195,000	0	\$33.00	10/21/2019				
	36,250	0	\$33.28	7/15/2019				
	54,375	0	\$33.55	2/4/2019				
	29,453	6,797	\$33.82	7/13/2020				
	36,250	0	\$35.35	7/19/2016				
	73,500	0	\$35.64	2/1/2016				
	54,375	0	\$36.30	1/23/2017				
	31,718	40,782	\$37.86	2/1/2022				
	49,843	22,657	\$38.80	2/2/2021				
	67,968	4,532	\$39.05	2/3/2020				
	10,195	44,180	\$45.11	2/4/2023				
	11,328	24,922	\$48.74	7/24/2022				
	20,391	15,859	\$51.75	7/12/2021				
	2,125	31,875	\$83.36	7/29/2023				

(1) Unvested stock options are vesting in 16 quarterly installments during the first four years of their ten-year terms. The option expiration dates listed above reflect the final expiration date for each of the listed options. If the named executive officer's service with us is terminated, the options would expire, subject to certain exceptions, three

months after the termination of service.

- (2) Dr. Leiden's options expiring in 2019 and 2020, and on May 31, 2021, which were granted in connection with service as a non-employee director, have ten-year terms and will not expire as a result of a termination of service. Each of these restricted stock awards is a PARS award, which is subject to time-based vesting on February 5, 2017, the fourth anniversary of grant, subject to acceleration of vesting upon the achievement of specified performance objectives. The vesting accelerates for the shares of each award outstanding as of December 31, 2013 upon (i) the announcement of proof-of-concept data for a drug candidate other than a hepatitis C virus infection, cystic fibrosis, influenza or JAK3 inhibition drug candidate or (ii) reaching \$1.0 billion in net product revenues over a twelve-month period from our cystic fibrosis products.
- (3) This restricted stock award vests on December 14, 2014.
- (4) This award is a performance-vesting restricted stock award. The remaining performance conditions as of December 31, 2013 will not be met and the shares will not vest.
- (5) Each of these restricted stock awards is a PARS award, which is subject to time-based vesting on February 2, 2016, the fourth anniversary of grant, subject to acceleration of vesting upon the achievement of specified performance objectives. The vesting accelerates for half of the shares of each award (i) upon the achievement of \$4.0 billion of cumulative net product revenues and royalty revenues recognized after May 23, 2011 or (ii) if we and/or our collaborator complete enrollment in a pivotal clinical trial in each of two distinct disease indications other than HCV or CF for drug
- (6)

COMPENSATION AND EQUITY TABLES (continued)

candidates that we control. The vesting of the remaining half of the shares of each award would accelerate if we receive written filing confirmation from the FDA for an NDA that we submit for an all-oral HCV treatment regimen.

(7) This restricted stock award vests in two remaining annual installments on September 30, 2014 and 2015.

(8) This restricted stock award vests in three remaining annual installments on September 30, 2014, 2015 and 2016.

(9) This restricted stock award vests in three remaining annual installments on June 11, 2014, 2015 and 2016.

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## SUMMARY OF TERMINATION AND CHANGE OF CONTROL BENEFITS

## SUMMARY OF TERMINATION AND CHANGE OF CONTROL BENEFITS

The amounts shown in the following table are calculated based on the amounts that would have been payable by us had the listed named executive officer experienced an employment termination on December 31, 2013.

	Voluntary Termination or Retirement/Termination for Cause	Separate From a Change of Control Involuntary Termination Other Than for Cause/ Termination by Executive With Good Reason	In Connection With a Change of Control Involuntary Termination Other Than for Cause/ Termination by Executive for Good Reason	Disability	Death
<b>Jeffrey M. Leiden</b>					
Cash Severance Benefits	\$ —	\$6,160,000	\$8,555,800	\$2,772,000	\$2,772,000
Continuation of Employee Benefits	—	32,607	32,607	—	—
Accelerated Vesting of Stock Options	—	—	16,423,130	12,197,351	16,423,130
Continued Vesting of Stock Options	—	10,682,249	—	—	—
Accelerated Vesting of Restricted Stock	—	3,716,263	10,132,514	2,867,881	10,132,514
<b>Total</b>	<b>\$ —</b>	<b>\$20,591,119</b>	<b>\$35,144,051</b>	<b>\$17,837,232</b>	<b>\$29,327,644</b>
<b>Ian F. Smith</b>					
Cash Severance Benefits	\$ —	\$1,300,000	\$1,300,000	\$650,000	\$650,000
Continuation of Employee Benefits	—	21,738	21,738	—	—
Accelerated Vesting of Stock Options	—	2,990,419	4,396,968	2,205,681	4,396,968
Accelerated Vesting of Restricted Stock	—	1,034,055	1,346,762	867,093	1,346,762
<b>Total</b>	<b>\$ —</b>	<b>\$5,346,212</b>	<b>\$7,065,468</b>	<b>\$3,722,774</b>	<b>\$6,393,730</b>
<b>Stuart A. Arbuckle</b>					
Cash Severance Benefits	\$ —	\$900,000	\$1,200,000	\$—	\$—
Continuation of Employee Benefits	—	21,738	21,738	—	—
Accelerated Vesting of Stock Options	—	—	3,174,140	—	3,174,140
Accelerated Vesting of Restricted Stock	—	1,486,000	2,473,596	—	2,473,596
<b>Total</b>	<b>\$ —</b>	<b>\$2,407,738</b>	<b>\$6,869,474</b>	<b>\$—</b>	<b>\$5,647,736</b>
<b>Kenneth L. Horton</b>					
Cash Severance Benefits	\$ —	\$697,500	\$930,000	\$—	\$—
Continuation of Employee Benefits	—	21,738	21,738	—	—
Accelerated Vesting of Stock Options	—	—	2,980,497	—	2,980,497
	—	—	987,596	—	987,596

Accelerated Vesting of Restricted Stock					
Total	\$ —	\$719,238	\$4,919,831	\$—	\$3,968,093
Peter Mueller					
Cash Severance Benefits	\$ —	\$975,000	\$1,300,000	\$—	\$—
Continuation of Employee Benefits	—	21,738	32,607	—	—
Accelerated Vesting of Stock Options	—	—	5,009,556	—	5,009,556
Accelerated Vesting of Restricted Stock	—	—	1,526,345	—	1,526,345
Total	\$ —	\$996,738	\$7,868,508	\$—	\$6,535,901

The amounts in the table above do not include any life insurance payments or disability insurance payments that the executive or the executive's estate may receive under existing insurance policies. The assumptions underlying the calculations in the table include:

the value of each share subject to an option to purchase common stock that would be accelerated or continue to vest in the circumstances described below under Employment Contracts and Change of Control Arrangements equals \$74.30 per share (the closing price on the last trading day of 2013), minus the exercise price per share;

the value of each share of restricted stock for which our repurchase right would lapse in the circumstances described below equals \$74.30 per share (the closing price on the last trading day of 2013);

appropriate provision for the continuation of all then-outstanding options would be made in connection with a change of control;

our board of directors would elect not to pay a pro rata portion of an executive's target bonus for the year of termination in cases where the executive's employment is terminated voluntarily by the executive (for any reason, including retirement) or for cause, under our policy that cash bonuses are payable only to employees who are otherwise eligible and who remain employed by us on the date of bonus payment, typically in February of the next year;

our board of directors would have assigned the same 2013 individual and company performance ratings on December 31, 2013 as they assigned in the first quarter of 2014; and

none of the unvested shares subject to Dr. Leiden's December 14, 2011 performance-vesting restricted stock award would vest for the purposes of columns 3 and 5 and 100% of the unvested shares subject to this grant would vest for the purposes of columns 4 and 6.

The actual amounts that the named executive officers could receive in the future as a result of a termination of employment would likely differ materially from the amounts set forth above as a result of, among other things, changes in our stock price, changes in their base salary, target bonus amounts and actual bonus amounts, and the vesting and grants of additional equity awards.

## EMPLOYMENT CONTRACTS AND CHANGE OF CONTROL ARRANGEMENTS

We have entered into agreements and maintain plans that will require us to provide to our named executive officers cash compensation, benefits and/or acceleration of the vesting of equity awards in the event of termination of employment or service as a director under specified circumstances. The following summary descriptions of such agreements with our named executive officers are qualified by the complete terms and conditions set forth in each of the agreements. In addition to the agreements described below, outstanding options granted under our stock and option plans provide that, in the event of certain changes of control, either appropriate provision for the continuation of all then-outstanding options must be made, or the vesting of those options will be accelerated and they will become fully exercisable immediately prior to such change of control. As described below, the benefits that are to be provided in connection with a change of control are subject to a “double trigger.” A change of control does not itself trigger benefits; rather, benefits are paid only if the employment of the executive is terminated by us other than for cause, death or disability or by the executive for good reason during a specified period before or after a change of control. In addition to the benefits described below, under programs applicable to all employees:

If a named executive officer dies while an employee, his estate and/or beneficiaries would receive full acceleration of all outstanding stock options and restricted stock awards.

Qualified employees who have provided significant service to us are entitled to partial or full acceleration of vesting of certain equity awards upon a termination of employment other than for cause. This provision applies to equity awards granted on or after February 5, 2014, subject to certain exceptions. In order to qualify the employee must (i) be at least 55 years old, (ii) have completed at least five years of service as an employee to the company and (iii) have an age plus full years of service as an employee equal to or greater than 65. Qualified employees receive (x) additional vesting of a number of shares equal to (A) the sum of 50% plus 10% for each full year of service as an employee in excess of five full years of service multiplied by (B) the number of unvested shares subject to the award immediately prior to the employee’s termination of service, and (y) extended exercisability of the applicable options, which remain outstanding for their original 10 year-terms. Dr. Mueller is our only named executive officer who currently qualifies for this program, which only applies to the equity awards granted to him in February 2014 for 2013 performance.

Jeffrey M. Leiden

The terms and conditions of Dr. Leiden’s employment are governed by a written employment contract, which was entered into on December 14, 2011 and expires on January 31, 2016, provided that, if Dr. Leiden’s employment with us extends beyond the contract expiration date, certain provisions providing for severance benefits upon a “not-for-cause” employment termination by the company survive the contract expiration. Dr. Leiden’s employment agreement provides that he is entitled to receive compensation as determined by our board of directors and is eligible to receive the benefits generally made available to our executives. In addition, Dr. Leiden has agreed not to engage in specified competitive activities for 18 months after his employment with us terminates.

If Dr. Leiden’s employment is terminated by us without cause or he terminates his employment for good reason, he would be entitled to receive:

- |                    |   |
|--------------------|---|
| Severance Payment: | <ul style="list-style-type: none"> <li>A) 200% of the sum of his (i) base salary at the time of termination and (ii) target bonus for the year in which his employment is terminated</li> <li>B) A pro-rated bonus for the year in which the termination occurs based on his target bonus for the year in which the termination occurs</li> </ul> |
| Options:           | <p>Outstanding options unvested on the date of termination shall be subject to continued vesting for an additional 18 months following termination</p> <p style="padding-left: 2em;">Vesting in full of each outstanding restricted stock award that would have otherwise</p>   |
| Restricted Stock:  | <ul style="list-style-type: none"> <li>A) vested in the 18 months following the termination, excluding his initial cliff-vesting restricted stock award and his initial performance-vesting restricted stock award</li> <li>B) Vesting in full of his initial cliff-vesting restricted stock award</li> </ul>                                     |
| Employee Benefits: | Continuation of certain employee benefits for up to 18 months   |





EMPLOYMENT CONTRACTS AND CHANGE OF CONTROL ARRANGEMENTS (continued)

If Dr. Leiden's employment is terminated by us without cause or he terminates his employment for good reason within two years after a change of control of Vertex, he would instead be entitled to receive:

Severance Payment:     A) 299% of the sum of his (i) base salary at the time of termination and (ii) target bonus for the year in which his employment is terminated  
                                   B) A pro-rated bonus for the year in which the termination occurs based on his target bonus for the year in which the termination occurs

Options:                   Full vesting of all outstanding options

Restricted Stock:       Full vesting of all outstanding restricted stock awards

Employee Benefits:     Continuation of certain employee benefits for up to 18 months

Severance payments to Dr. Leiden in connection with a change of control may be reduced to increase their value to Dr. Leiden if such payments would be subject to an excise tax under Section 4999 of the Code. Dr. Leiden's employment agreement does not provide for a so-called Section 4999 excise tax "gross-up."

Under the employment agreement, Dr. Leiden would have the right to terminate his employment for good reason upon the occurrence of any of the following events without Dr. Leiden's consent:

- our failure to continue Dr. Leiden in the positions of chairman of the board, chief executive officer and president at any time during the term of the employment agreement;

- a material adverse change in his duties, authority and/or responsibilities that, taken as a whole, effectively constitutes a demotion;

- a material breach of the employment agreement by us, including a material reduction in base salary or target bonus; or the relocation of the office to which he is assigned to a place 35 or more miles away from Cambridge, Massachusetts or Fan Pier, Boston, Massachusetts and such relocation is not at his request or is other than in connection with a change in location of our principal executive offices.

In addition, if there is a change of control and a resulting change in Dr. Leiden's reporting relationship, without his consent, such that he is reporting to an executive officer of a parent entity, rather than to the board of directors of our company (or a successor corporation) or to the board of directors of a parent thereof, any material erosion of Dr. Leiden's independent authority shall in itself constitute good reason for termination; provided that (a) such termination for good reason occurs within two years of such change of control and (b) the fact that there has been a change in Dr. Leiden's reporting relationship shall not itself constitute an erosion of his independent authority.

Under Dr. Leiden's employment agreement a change of control shall be deemed to have occurred if:

- any person or group, as such terms are used in Sections 13(d) and 14(d)(2) of the Exchange Act, becomes the beneficial owner, as such term is used in Rule 13d-3 promulgated under the Exchange Act, of securities representing more than 50% of the combined voting power of our outstanding securities, having the right to vote in the election of directors; or

- all or substantially all our business or assets are sold or disposed of, or we or our subsidiary combines with another company pursuant to a merger, consolidation, or other similar transaction (subject to exceptions set forth in the agreement, including transactions in which our shareholders immediately prior to such merger or consolidation continue to own at least a majority of our outstanding voting securities or the outstanding voting securities of the surviving entity immediately after the merger or consolidation).

If Dr. Leiden's employment is terminated as a result of disability, he would be entitled to receive:

- a pro-rated bonus for the year of employment termination;

- full vesting of his new-hire stock option grant and vesting of other options that would have vested during the 12 months following employment termination;

- for each restricted stock award that vests proportionally over time, vesting of all shares that would have vested in the 12 months following the employment termination; and

- for each restricted stock award that cliff-vests on a specified date, vesting of shares pro rata over time on a daily basis from the date of grant through the date of employment termination.



EMPLOYMENT CONTRACTS AND CHANGE OF CONTROL ARRANGEMENTS (continued)

If Dr. Leiden dies while he is an employee, his estate and/or beneficiaries would receive a pro-rated bonus for the year of employment termination, as well as the full acceleration of his equity awards provided under our company-wide program.

Ian F. Smith

The terms and conditions of Mr. Smith's employment are governed by a written employment contract, which was entered into in 2001, amended and restated in 2004 and amended in 2008. Mr. Smith's employment agreement provides that he is entitled to receive compensation as determined by our board of directors and is eligible to receive the benefits generally made available to our executives. In addition, Mr. Smith has agreed not to engage in specified competitive activities for a period of one year after the termination of his employment with us.

If Mr. Smith's employment is terminated without cause, or if he terminates his employment with us of his own initiative for good reason or we do not renew his agreement, other than in connection with a change of control as described below, he would be entitled to receive:

Severance Payment:	A) The sum of his (i) base salary at the time of termination and (ii) target bonus for the year in which his employment is terminated
	B) A pro rata portion of his target bonus for the year in which the termination occurs
Options:	Vesting of outstanding options that otherwise would have vested in the 18 months following termination
Restricted Stock:	Vesting of each outstanding restricted stock award that would otherwise have vested in the 18 months following the termination, treating each award that vests other than ratably (such as PARS awards as described on page 54 of this proxy statement) as if it vests ratably over the term of the grant
Employee Benefits:	Continuation of certain employee benefits for up to 12 months

If we terminate Mr. Smith's employment without cause or he terminates his employment with us for good reason on a date within the 90 days prior to or the 12 months after a change of control he would be entitled to receive:

Severance Payment:	A) The sum of his (i) base salary at the time of termination and (ii) target bonus for the year in which his employment is terminated
	B) A pro rata portion of his target bonus for the year in which the termination occurs
Options:	Full vesting of all outstanding options
Restricted Stock:	Full vesting of all outstanding restricted stock awards
Employee Benefits:	Continuation of certain employee benefits for up to 12 months
Tax Benefits:	Additional payments required to compensate him if payments made under the employment agreement result in certain adverse tax consequences including excise taxes under Section 4999 of the Code

If Mr. Smith's employment is terminated as a result of his disability, he would receive six months of severance pay, a pro rata portion of his target bonus for the year in which the termination occurred and 12 months' acceleration of outstanding stock options and restricted stock awards. If Mr. Smith dies while he is an employee, his estate and/or beneficiaries would receive six months of severance pay and a pro-rated bonus for the year of employment termination, as well as the full acceleration of his equity awards provided under our company-wide program.

Under the employment agreement, Mr. Smith would have the right to terminate his employment for good reason upon the occurrence of the following events without Mr. Smith's consent:

- he is assigned to any duties or responsibilities that are inconsistent, in any significant respect, with the scope of duties and responsibilities associated with his positions and offices on the date of the agreement, provided that such reassignment of duties or responsibilities is not due to his disability or performance, or is at his request;

he suffers a reduction in the authorities, duties and responsibilities associated with his positions and offices on the date of the agreement, on the basis of which he makes a determination in good faith that he can no longer carry out those positions or offices in the manner contemplated on the date the agreement was entered into, provided that any such reduction of duties or responsibilities is not due to his disability or performance, or at his request;

his base salary is decreased;

his office location as assigned to him by us is relocated 35 or more miles from Cambridge, Massachusetts; or  
in the event of a change of control, failure of any successor to assume the obligations and liabilities of the  
employment agreement.

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EMPLOYMENT CONTRACTS AND CHANGE OF CONTROL ARRANGEMENTS (continued)

Under Mr. Smith's employment agreement cause means:

he is convicted of a crime involving moral turpitude;

he commits a material breach of any provision of his employment agreement; or

in carrying out his duties, he acts or fails to act in a manner which is determined, in the sole discretion of our board, to be (A) willful gross neglect or (B) willful gross misconduct resulting, in either case, in material harm to us unless such act, or failure to act, was believed by him, in good faith, to be in our best interests.

Under Mr. Smith's employment agreement a change of control shall be deemed to have occurred if:

any person or group as such terms are used in Sections 13(d) and 14(d)(2) of the Exchange Act, becomes the beneficial owner, as such term is used in Rule 13d-3 promulgated under the Exchange Act, of securities representing 51% or more of the combined voting power of our outstanding securities, having the right to vote in the election of directors;

a majority of our board during any 12-month period is replaced at a meeting of our board or at a meeting of our shareholders with individuals other than individuals nominated or approved by a majority of the disinterested directors (as such term is defined in the employment agreement);

all or substantially all of our business is disposed of pursuant to a merger, consolidation or other transaction (subject to exceptions set forth in the agreement) in which we are not the surviving corporation or we are materially or completely liquidated; or

we combine with another company and are the surviving corporation but, immediately after the combination, our shareholders hold, directly or indirectly, less than 50% of the total outstanding securities of the combined company having the right to vote in the election of directors.

Stuart A. Arbuckle

Employment Agreement

The terms and conditions of Mr. Arbuckle's employment are governed by a written employment contract, which was entered into in August 2012. His employment agreement provides that he is entitled to receive compensation as determined by our board of directors and is eligible to receive the benefits generally made available to our executives. In addition, Mr. Arbuckle has agreed not to engage in specified competitive activities for a period of one year after the termination of his employment with us.

Under his employment agreement, if (i) Mr. Arbuckle's employment is terminated without cause or (ii) he terminates his employment with us for good reason within 30 days of the event giving rise to his right to terminate for good reason, subject to notice and cure provisions, he would be entitled to receive:

Severance Payment: The sum of his (i) base salary at the time of termination and (ii) target bonus for the year in which his employment is terminated

Restricted Stock: Full vesting of his initial restricted stock award that vests over the three-year period ending in September 2015

Employee Benefits: Continuation of certain employee benefits for up to 12 months

Under the employment agreement, Mr. Arbuckle would have the right to terminate his employment for good reason upon the occurrence of the following events without his consent:

his duties are materially diminished to an extent that results in Mr. Arbuckle either (i) no longer being an "officer," as such term is defined in Rule 16a-1(f) promulgated under the Exchange Act, or (ii) ceasing to be a member of our executive management team;

his base salary is decreased, unless such reduction is part of an across-the-board proportionate reduction in the salaries of our senior management team; or

the office to which he is assigned is relocated to a place 35 or more miles away and such relocation is not at his request or with his prior agreement (and other than in connection with a change in location of our principal executive offices).

EMPLOYMENT CONTRACTS AND CHANGE OF CONTROL ARRANGEMENTS (continued)

Under the employment agreement, cause means:

Mr. Arbuckle is convicted of a crime involving moral turpitude;  
he commits a material breach of any provision of the agreement not involving the performance or nonperformance of duties; or  
in carrying out his duties, Mr. Arbuckle acts or fails to act in a manner that is determined, in the sole discretion of our board, after written notice of any such act or failure to act and a reasonable opportunity to cure the deficiency has been provided to Mr. Arbuckle, to be (A) willful gross neglect or (B) willful gross misconduct, resulting, in either case, in material harm to us unless such act, or failure to act, was believed by him, in good faith, to be in our best interests.

Change of Control Agreement

We have a change of control agreement with Mr. Arbuckle, which was entered into in August 2012. Under this agreement, if we terminate Mr. Arbuckle's employment without cause on a date within the 90 days prior to or the 12 months after a change of control or he terminates his employment within 30 days of an event giving rise to a right to terminate for good reason, subject to notice and cure provisions, and the event occurs on a date within the 90 days prior to or the 12 months after a change of control, he would be entitled to receive:

Severance Payment: A) The sum of his (i) base salary at the time of termination and (ii) target bonus for the year in which his employment is terminated

B) A pro rata portion of his target bonus for the year in which the termination occurs

Options: Full vesting of all outstanding options

Restricted Stock: Full vesting of all outstanding restricted stock awards

Employee Benefits: Continuation of certain employee benefits for up to 12 months

Severance payments to Mr. Arbuckle in connection with a change of control may be reduced to increase their value to Mr. Arbuckle if such payments would be subject to an excise tax under Section 4999 of the Code. Mr. Arbuckle's agreements do not provide for a so-called Section 4999 excise tax "gross-up."

Under the change of control agreement, Mr. Arbuckle would have the right to terminate his employment for good reason upon the occurrence of the following events without his consent:

he suffers a material reduction in the authorities, duties or job title and responsibilities associated with his position as of the date of the change of control agreement;

his base salary is decreased;

the office to which he is assigned is relocated to a place 35 or more miles away; or

following a change of control, our successor fails to assume our obligations under the change of control agreement.

Under the change of control agreement, cause means:

Mr. Arbuckle is convicted of a crime involving moral turpitude;

he willfully refuses or fails to follow a lawful directive or instruction of our board or the individual to whom he reports provided that he received prior written notice of the directive or instruction that he failed to follow and,

provided further, that we, in good faith, give him 30 days to correct such failure, and further provided if he corrects such failure any termination of his employment on account of such failure shall not be treated as a termination for cause;

he commits willful gross negligence, or willful gross misconduct, resulting in either case in material harm to us, unless such act, or failure to act, was believed by him, in good faith, to be in our best interests; or

he violates any of our policies made known to him regarding confidentiality, securities trading or inside information.

Under the change of control agreement, change of control means:

any person or group as such terms are used in Sections 13(d) and 14(d)(2) of the Exchange Act becomes the beneficial owner, as such term is used in Rule 13d-3 promulgated under the Exchange Act, of securities representing more than 50% of the combined voting power of our outstanding securities having the right to vote in the election of directors; or

EMPLOYMENT CONTRACTS AND CHANGE OF CONTROL ARRANGEMENTS (continued)

all or substantially all of our business or assets are sold or disposed of, or we or one of our subsidiaries combines with another company pursuant to a merger, consolidation, or other similar transaction, other than (i) a transaction solely for the purpose of reincorporating us or one of our subsidiaries in a different jurisdiction or recapitalizing or reclassifying our stock; or (ii) a merger or consolidation in which our shareholders immediately prior to such merger or consolidation continue to own at least a majority of the outstanding securities of the surviving entity immediately after the merger or consolidation.

Kenneth L. Horton

Employment Agreement

The terms and conditions of Mr. Horton's employment are governed by a written employment contract, which was entered into in June 2012. His employment agreement provides that he is entitled to receive compensation as determined by our board of directors and is eligible to receive the benefits generally made available to our executives. In addition, Mr. Horton has agreed not to engage in specified competitive activities for a period of one year after the termination of his employment with us.

Under his employment agreement, if (i) Mr. Horton's employment is terminated without cause or (ii) he terminates his employment with us for good reason within 30 days of the event giving rise to his right to terminate for good reason, subject to notice and cure provisions, he would be entitled to receive:

Severance Payment: The sum of his (i) base salary at the time of termination and (ii) target bonus for the year in which his employment is terminated

Employee Benefits: Continuation of certain employee benefits for up to 12 months

Under the employment agreement, Mr. Horton would have the right to terminate his employment for good reason upon the occurrence of the following events without his consent:

his base salary is decreased, unless such reduction is part of an across-the-board proportionate reduction in the salaries of our senior management team; or

the office to which he is assigned is relocated to a place 35 or more miles away and such relocation is not at his request or with his prior agreement (and other than in connection with a change in location of our principal executive offices).

Under the employment agreement, cause means:

Mr. Horton is convicted of a crime involving moral turpitude;

he commits a material breach of any provision of the agreement not involving the performance or nonperformance of duties; or

in carrying out his duties, Mr. Horton acts or fails to act in a manner that is determined, in the sole discretion of our board, after written notice of any such act or failure to act and a reasonable opportunity to cure the deficiency has been provided to Mr. Horton, to be (A) willful gross neglect or (B) willful gross misconduct resulting, in either case, in material harm to us unless such act, or failure to act, was believed by him, in good faith, to be in our best interests.

Change of Control Agreement

We have a change of control agreement with Mr. Horton, which was entered into in June 2012. Under this agreement, if we terminate Mr. Horton's employment without cause on a date within the 90 days prior to or the 12 months after a change of control or he terminates his employment within 30 days of an event giving rise to a right to terminate for good reason, subject to notice and cure provisions, and the event occurs on a date within the 90 days prior to or the 12 months after a change of control, he would be entitled to receive:

Severance Payment: A) The sum of his (i) base salary at the time of termination and (ii) target bonus for the year in which his employment is terminated

B) A pro rata portion of his target bonus for the year in which the termination occurs

Options: Full vesting of all outstanding options

Restricted Stock: Full vesting of all outstanding restricted stock awards

Employee Benefits: Continuation of certain employee benefits for up to 12 months





EMPLOYMENT CONTRACTS AND CHANGE OF CONTROL ARRANGEMENTS (continued)

Severance payments to Mr. Horton in connection with a change of control may be reduced to increase their value to Mr. Horton if such payments would be subject to an excise tax under Section 4999 of the Code. Mr. Horton's agreements do not provide for a so-called Section 4999 excise tax "gross-up."

Under the change of control agreement, Mr. Horton would have the right to terminate his employment for good reason upon the occurrence of the following events without his consent:

• he suffers a material reduction in the authorities, duties and responsibilities associated with his position as of the date of the change of control agreement;

• his base salary is decreased;

• the office to which he is assigned is relocated to a place 35 or more miles away; or

• following a change of control, our successor fails to assume our obligations under the change of control agreement.

Under the change of control agreement, cause means:

• Mr. Horton is convicted of a crime involving moral turpitude;

• he willfully refuses or fails to follow a lawful directive or instruction of our board or the individual to whom he reports provided that he received prior written notice of the directive or instruction that he failed to follow and,

• provided further, that we, in good faith, give him 30 days to correct such failure, and further provided if he corrects such failure any termination of his employment on account of such failure shall not be treated as a termination for cause;

• he commits willful gross negligence, or willful gross misconduct, resulting in either case in material harm to us, unless such act, or failure to act, was believed by him, in good faith, to be in our best interests; or

• he violates any of our policies made known to him regarding confidentiality, securities trading or inside information.

Under the change of control agreement, change of control means:

any person or group as such terms are used in Sections 13(d) and 14(d)(2) of the Exchange Act becomes the beneficial owner, as such term is used in Rule 13d-3 promulgated under the Exchange Act, of securities representing more than 50% of the combined voting power of our outstanding securities having the right to vote in the election of directors; or all or substantially all of our business or assets are sold or disposed of, or we or one of our subsidiaries combines with another company pursuant to a merger, consolidation, or other similar transaction, other than (i) a transaction solely for the purpose of reincorporating us or one of our subsidiaries in a different jurisdiction or recapitalizing or reclassifying our stock; or (ii) a merger or consolidation in which our shareholders immediately prior to such merger or consolidation continue to own at least a majority of the outstanding securities of the surviving entity immediately after the merger or consolidation.

Peter Mueller

Employment Agreement

The terms and conditions of Dr. Mueller's employment are governed by a written employment contract, which was entered into in February 2008, amended and restated in February 2010 and amended and restated in November 2012.

His employment agreement provides that he is entitled to receive compensation as determined by our board of directors and is eligible to receive the benefits generally made available to our executives. In addition, Dr. Mueller has agreed not to engage in specified competitive activities for a period of one year after the termination of his employment with us.

Under his employment agreement, if (i) Dr. Mueller's employment is terminated without cause or (ii) he terminates his employment with us for good reason within 30 days of the event giving rise to his right to terminate for good reason, subject to notice and cure provisions, he would be entitled to receive:

Severance Payment: The sum of his (i) base salary at the time of termination and (ii) target bonus for the year in which his employment is terminated

Employee Benefits: Continuation of certain employee benefits for up to 12 months

Under the employment agreement, Dr. Mueller would have the right to terminate his employment for good reason upon the occurrence of the following events without his consent:



EMPLOYMENT CONTRACTS AND CHANGE OF CONTROL ARRANGEMENTS (continued)

his base salary is decreased, unless such reduction is part of an across-the-board proportionate reduction in the salaries of our senior management team; or  
the office to which he is assigned is relocated to a place 35 or more miles away and such relocation is not at his request or with his prior agreement (and other than in connection with a change in location of our principal executive offices).

Under the employment agreement, cause means:

he is convicted of a crime involving moral turpitude;

he commits a material breach of any provision of the agreement not involving the performance or nonperformance of duties; or

in carrying out his duties, Dr. Mueller acts or fails to act in a manner that is determined, in the sole discretion of our board, after written notice of any such act or failure to act and a reasonable opportunity to cure the deficiency has been provided to Dr. Mueller, to be (A) willful gross neglect or (B) willful gross misconduct resulting, in either case, in material harm to us unless such act, or failure to act, was believed by him, in good faith, to be in our best interests.

Change of Control Agreement

We have a change of control agreement with Dr. Mueller, which was entered into in March 2003, amended in February 2008 and December 2008, amended and restated in February 2010 and amended and restated in November 2012. Under this agreement, if we terminate Dr. Mueller's employment without cause on a date within the 90 days prior to or the 12 months after a change of control or he terminates his employment within 30 days of an event giving rise to a right to terminate for good reason, subject to notice and cure provisions, and the event occurs on a date within the 90 days prior to or the 12 months after a change of control, he would be entitled to receive:

Severance Payment: A) The sum of his (i) base salary at the time of termination and (ii) target bonus for the year in which his employment is terminated

B) A pro rata portion of his target bonus for the year in which the termination occurs

Options: Full vesting of all outstanding options

Restricted Stock: Full vesting of all outstanding restricted stock awards

Employee Benefits: Continuation of certain employee benefits for up to 18 months

Dr. Mueller's agreements do not provide for a so-called Section 4999 excise tax "gross-up."

Under the change of control agreement, Dr. Mueller would have the right to terminate his employment for good reason upon the occurrence of the following events without his consent:

he is assigned to material duties or responsibilities that are inconsistent, in any significant respect, with the scope of duties and responsibilities associated with his position and office immediately prior to the change of control, provided, that such reassignment of duties or responsibilities is not for cause, due to his disability or at his request;

he suffers a material reduction in the authorities, duties or job title and responsibilities associated with his position and office immediately prior to the change of control, on the basis of which he makes a good faith determination that he can no longer carry out his position or office in the manner contemplated before the change of control (provided that such reduction in authorities, duties, or job title and responsibilities is not for cause, due to his disability or at his request);

his base salary is decreased to a level below his base salary in effect immediately prior to the change of control; our principal offices, or the location of the office to which he is assigned at the time the agreement was entered into, is relocated to a place 35 or more miles away; or

following a change of control, our successor fails to assume our obligations under the change of control agreement.

Under the change of control agreement, cause means:

Dr. Mueller is convicted of a felony crime of moral turpitude;

he willfully refuses or fails to follow a lawful directive or instruction of our board or the individual to whom he reports provided that he received prior written notice of the directive or instruction that he failed to follow and, provided further,



EMPLOYMENT CONTRACTS AND CHANGE OF CONTROL ARRANGEMENTS (continued)

that we, in good faith, give him 30 days to correct any problems, and further provided if he corrects the problem he may not be terminated for cause in that instance;

he commits willful gross negligence, or willful gross misconduct, resulting in either case in material harm to us, unless such act, or failure to act, was believed by him, in good faith, to be in our best interests; or

he violates any of our policies made known to him regarding confidentiality, securities trading or inside information.

Under the change of control agreement, change of control means:

any person or group as such terms are used in Sections 13(d) and 14(d)(2) of the Exchange Act becomes the beneficial owner, as such term is used in Rule 13d-3 promulgated under the Exchange Act, of securities representing more than 50% of the combined voting power of our outstanding securities having the right to vote in the election of directors; or all or substantially all of our business or assets are sold or disposed of, or we or one of our subsidiaries combines with another company pursuant to a merger, consolidation, or other similar transaction, other than (i) a transaction solely for the purpose of reincorporating us or one of our subsidiaries in a different jurisdiction or recapitalizing or reclassifying our stock; or (ii) a merger or consolidation in which our shareholders immediately prior to such merger or consolidation continue to own at least a majority of the outstanding securities of the surviving entity immediately after the merger or consolidation.

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## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding beneficial ownership of our common stock as of March 10, 2014, by:

- each shareholder known by us to be the beneficial owner of more than 5% of our common stock on that date;
- each of our directors and our director nominee;
- each named executive officer; and
- all directors and executive officers as a group.

Name and Address	Shares	Percentage of Beneficially Owned (1)	Total (2)	
Capital World Investors (3) 333 South Hope Street Los Angeles, California 90071	25,516,877	10.8		%
Wellington Management Company, LLP 280 Congress Street Boston, Massachusetts 02210	16,541,986	7.0		%
BlackRock, Inc. 40 East 52nd Street New York, New York 10022	16,383,538	6.9		%
The Vanguard Group 100 Vanguard Blvd. Malvern, Pennsylvania 19355	15,731,911	6.7		%
Prudential Financial, Inc. (including investments managed by Jennison Associates LLC) (4) 751 Broad Street Newark, New Jersey 07102	13,762,985	5.8		%
David Altshuler (5)	53,125	*		
Joshua Boger (5)	2,414,369	1.0		%
Terrence C. Kearney (5)	80,625	*		
Yuchun Lee (5)	31,250	*		
Jeffrey M. Leiden (5)	638,850	*		
Margaret G. McGlynn (5)	81,625	*		
Wayne J. Riley (5)	78,325	*		
Bruce I. Sachs (5)	194,910	*		
Elaine S. Ullian (5)	110,265	*		
William D. Young	—	*		
Ian F. Smith (5)	161,625	*		
Stuart A. Arbuckle (5)	123,691	*		
Kenneth L. Horton (5)	103,623	*		
Peter Mueller (5)	937,845	*		
All directors and executive officers as a group (17 persons) (5)	5,411,533	2.3		%

\* Less than 1%

Beneficial ownership of shares for purposes of this proxy statement is determined in accordance with applicable SEC rules and includes shares of common stock as to which a person has or shares voting power and/or investment power, including dispositive power. The persons and entities named in the table have sole voting and investment power with respect to all shares shown as beneficially owned by them, except as noted below. Information with respect to persons other than directors and executive officers is based solely upon Schedules 13G and amendments thereto filed with the SEC in the first quarter of 2014.

(1) Percentage ownership is based on 236,112,597 shares of our common stock outstanding on March 10, 2014.

(3) Capital World Investors is a division of Capital Research and Management Company.

(4) Prudential Financial, Inc. may be deemed to be the beneficial owner of the shares that are held for its own benefit or for the benefit of its clients by its separate accounts, externally managed accounts, registered investment companies, subsidiaries, including its indirectly wholly-owned subsidiary Jennison Associates LLC, and/or other affiliates. Jennison Associates LLC provides investment

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## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT (continued)

advice to several investment companies, insurance separate accounts and institutional clients. In its role as an investment advisor to these companies, Jennison Associates LLC may be deemed to be the beneficial owner of 13,474,878 shares.

(5) Includes shares that may be acquired upon the exercise of options exercisable within 60 days after March 10, 2014 and unvested shares of restricted stock as of March 10, 2014, as follows:

	Stock Options Exercisable Within 60 Days of March 10, 2014	Unvested Shares of Restricted Stock as of March 10, 2014
David Altshuler	53,125	—
Joshua Boger	1,762,188	—
Terrence C. Kearney	80,625	—
Yuchun Lee	31,250	—
Jeffrey M. Leiden	426,929	200,873
Margaret G. McGlynn	80,625	—
Wayne J. Riley	78,125	—
Bruce I. Sachs	165,000	—
Elaine S. Ullian	105,000	—
Ian F. Smith	111,451	38,826
Stuart A. Arbuckle	66,133	53,992
Kenneth L. Horton	69,383	30,542
Peter Mueller	768,757	37,793
All directors and executive officers as a group (17 persons)	4,101,737	441,295

## SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires directors, officers and persons who are beneficial owners of more than 10% of our common stock to file with the SEC reports of their ownership of our securities and of changes in that ownership. To our knowledge, based upon a review of copies of reports filed with the SEC with respect to the fiscal year ended December 31, 2013 and written representations by our directors and officers that no other reports were required with respect to their transactions, all reports required to be filed under Section 16(a) by our directors and officers and persons who were beneficial owners of more than 10% of our common stock were timely filed.



## OTHER INFORMATION

### OTHER MATTERS

The 2014 annual meeting of shareholders is called for the purposes set forth in the notice. Our board of directors does not know of any other matters to be considered by the shareholders at the 2014 annual meeting other than the matters described in the notice. However, the enclosed proxy confers discretionary authority on the persons named in the proxy card with respect to matters that may properly come before the annual meeting and that are not known to our board at the date this proxy statement was printed. It is the intention of the persons named in the proxy card to vote in accordance with their best judgment on any such matter.

### SHAREHOLDER PROPOSALS FOR THE 2015 ANNUAL MEETING AND NOMINATIONS FOR DIRECTOR

In order to be considered for inclusion in the proxy statement for our 2015 annual meeting of shareholders, shareholder proposals must be received by us no later than December 3, 2014. If we do not receive notice of a matter to be considered for presentation at the 2015 annual meeting of shareholders by February 16, 2015, our proxy holders will have the right to exercise discretionary voting authority with respect to the proposal without including information regarding the proposal in our proxy materials. Proposals should be sent to the attention of our corporate secretary at our offices at 50 Northern Avenue, Boston, Massachusetts 02210.

Shareholder nominations for election to our board of directors at the 2015 annual meeting of shareholders may be submitted to our corporate secretary no later than February 6, 2015, and must include:

- the name and address of the shareholder who intends to make the nomination and of the person or persons to be nominated;
- a representation that the shareholder is a holder of record of our stock entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice;
- a description of all arrangements or understandings between the shareholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the shareholder;
- the other information regarding each nominee proposed by the shareholder that would be required to be included in a proxy statement filed pursuant to the proxy rules of the SEC; and

• the consent of each nominee to serve on our board of directors if so elected.

### SHAREHOLDER COMMUNICATIONS TO THE BOARD

Generally, shareholders who have questions or concerns should contact our investor relations department at (617) 341-6100. However, any shareholder who wishes to address questions regarding our business directly with our board of directors, or any individual director, should direct his or her questions, in writing, in care of our corporate secretary, to our offices at 50 Northern Avenue, Boston, Massachusetts 02210. Under procedures approved by our board, including a majority of our independent directors, all substantive communications shall be reviewed by our corporate secretary and forwarded or reported to the chair of the corporate governance and nominating committee, the independent directors and/or our full board, as deemed appropriate, with the exception of those communications relating to ordinary or routine business affairs, personal grievances or matters as to which we tend to receive repetitive or duplicative communications.

### HOUSEHOLDING OF ANNUAL MEETING MATERIALS

Some banks, brokers and other nominee record holders may be participating in the practice of “householding” proxy statements and annual reports. This means that only one copy of our proxy statement and annual report may have been sent to multiple shareholders in your household. We will promptly deliver a separate copy of these documents to you if you write or call our corporate secretary at the following address or phone number: 50 Northern Avenue, Boston, Massachusetts 02210, telephone (617) 341-6100. If you want to receive separate copies of the annual report and proxy statement in the future, or if you are receiving multiple copies and would like to receive only one copy for your household, you should contact your bank, broker, or other nominee record holder, or you may contact us at the above address and phone number.

### SOLICITATION

We will bear the cost of soliciting proxies, including expenses in connection with preparing and mailing this proxy statement. We have retained D. F. King & Co., Inc. to assist in the solicitation of proxies at an estimated cost of

approximately \$10,000. Proxies also may be solicited by our directors and employees by mail, by telephone, in person or otherwise. Employees will not receive additional compensation for solicitation efforts. In addition, we will request banks, brokers and other

OTHER INFORMATION (continued)

custodians, nominees and fiduciaries to forward proxy material to the beneficial owners of common stock and to obtain voting instructions from the beneficial owners. We will reimburse those firms for their reasonable expenses in forwarding proxy materials and obtaining voting instructions.

AVAILABILITY OF MATERIALS

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2013 has been filed with the SEC and provides additional information about us. It is available on the internet at [www.vrtx.com](http://www.vrtx.com) and is available in paper form (other than exhibits thereto) to beneficial owners of our common stock without charge upon written request to Investor Relations, 50 Northern Avenue, Boston, Massachusetts 02210. In addition, it is available to holders of record of our common stock at [www.envisionreports.com/vrtx](http://www.envisionreports.com/vrtx) and to beneficial holders of our common stock at [www.edocumentview.com/vrtx](http://www.edocumentview.com/vrtx).

APPENDIX A - 2013 STOCK AND OPTION PLAN

VERTEX PHARMACEUTICALS INCORPORATED

2013 STOCK AND OPTION PLAN

1. DEFINITIONS

Unless otherwise specified or unless the context otherwise requires, the following terms, as used in this Vertex Pharmaceuticals Incorporated 2013 Stock and Option Plan, have the following meanings:

Accrued Dividends means any dividends (whether paid in cash, stock or property) declared and paid by the Company with respect to Shares subject to a Stock Grant during any period in which such Shares are subject to restrictions on transferability or forfeitability under this Plan or the applicable Stock Agreement.

Administrator means the Board of Directors and/or a committee of the Board of Directors to which the Board of Directors has delegated power to act on its behalf in administering this Plan in whole or in part.

Affiliate means a corporation that, for purposes of Section 424 of the Code, is a parent or subsidiary of the Company, direct or indirect.

Board of Directors means the Board of Directors of the Company.

Code means the United States Internal Revenue Code of 1986, as amended.

Common Stock means shares of the Company's common stock, \$.01 par value.

Company means Vertex Pharmaceuticals Incorporated, a Massachusetts corporation.

Employee means an employee of the Company or of an Affiliate (including, without limitation, an employee who is also serving as an officer or director of the Company or of an Affiliate), designated by the Administrator to be eligible to be granted one or more Stock Rights under the Plan.

Exchange Act means the Securities Exchange Act of 1934, as amended.

Fair Market Value of a share of Common Stock on a particular date shall be the mean between the highest and lowest quoted selling prices on such date (the "valuation date") on the securities market where the Common Stock is traded, or if there were no sales on the valuation date, on the next preceding date within a reasonable period (as determined in the sole discretion of the Administrator) on which there were sales. If there were no sales in such a market within a reasonable period, the Fair Market Value shall be as determined in good faith by the Administrator in its sole discretion. The Fair Market Value as determined in this paragraph shall be rounded down to the next lower whole cent if the foregoing calculation results in fractional cents.

Full Value Award means any Stock Grant or Stock-Based Award with a purchase price per Share that is less than the Fair Market Value of a share of Common Stock on the date of grant.

ISO means an option intended to qualify as an incentive stock option under Code Section 422.

Non-Employee Director means a member of the Board of Directors who is not an employee of the Company or any Affiliate.

Non-Qualified Option means an option that is not intended to qualify as an ISO.

Option means an ISO or Non-Qualified Option granted under the Plan.

Participant means an Employee, Non-Employee Director, consultant or advisor of the Company or an Affiliate to whom one or more Stock Rights are granted under the Plan. As used herein, "Participant" shall include "Participant's Survivors" and a Participant's permitted transferees where the context requires.

Participant's Survivors means a deceased Participant's legal representatives and/or any person or persons who acquires the Participant's rights to a Stock Right by will or by the laws of descent and distribution.

Plan means this Vertex Pharmaceuticals Incorporated 2013 Stock and Option Plan, as amended from time to time.

Shares means shares of the Common Stock as to which Stock Rights have been or may be granted under the Plan or any shares of capital stock into which the Shares are changed or for which they are exchanged within the provisions of Section 3 of the Plan.

APPENDIX A - 2013 STOCK AND OPTION PLAN (continued)

Stock Agreement means an agreement between the Company and a Participant delivered pursuant to the Plan with respect to a Stock Right, in such form as the Administrator shall approve.

Stock-Based Award means a grant by the Company under the Plan of an equity award or equity-based award that is not an Option or Stock Grant.

Stock Grant means a grant by the Company of Shares under the Plan.

Stock Right means a right to Shares or the value of Shares of the Company granted pursuant to the Plan as an ISO, a Non-Qualified Option, a Stock Grant or a Stock-Based Award.

Termination of Service means that a Participant ceases to be an Employee, Non-Employee Director, consultant or advisor with the Company and its Affiliates (for any reason other than death). A change in a Participant's form of service (e.g., from Employee to Non-Employee Director, consultant or advisor) shall not be a Termination of Service hereunder.

## 2. PURPOSES OF THE PLAN

The Plan is intended to encourage ownership of Shares by Employees, Non-Employee Directors and certain consultants and advisors to the Company in order to attract such persons, to induce them to work for the benefit of the Company or of an Affiliate and to provide additional incentive for them to promote the success of the Company or of an Affiliate. The Plan provides for the granting of Stock Rights to Employees, Non-Employee Directors, consultants and advisors of the Company.

## 3. SHARES SUBJECT TO THE PLAN

The number of Shares subject to this Plan as to which Stock Rights may be granted from time to time shall be 3,300,000 or the equivalent of such number of Shares after the Administrator, in its sole discretion, has interpreted the effect of any stock split, stock dividend, combination, recapitalization or similar transaction in accordance with Section 17 of this Plan. Subject to Section 17 of this Plan, and the provisions of the second paragraph of this Section 3, the number of Shares remaining subject to this Plan shall be reduced by (i) one Share for each Share subject to a Stock Right granted under this Plan that is not a Full Value Award and (ii) 1.66 Shares for each Share (each, a "Full-Value Award Share") subject to a Stock Right granted under this Plan that is a Full Value Award.

If an Option granted hereunder ceases to be outstanding, in whole or in part (other than by exercise), or if the Company shall reacquire (at no more than its original issuance price) any Shares issued pursuant to a Stock Grant, or if any Stock Right expires or is forfeited, cancelled or otherwise terminated or results in any Shares not being issued, the unissued Shares that were subject to such Stock Right shall again be available for issuance from time to time pursuant to this Plan; provided that, the following Shares may not again be made available for issuance under the Plan: (i) Shares that are not issued or delivered as a result of the net settlement of an outstanding Stock-Based Award or Option and (ii) Shares that the Company acquires from a Participant for a price that is more than the original issuance price of the Share, including any Share acquired by the Company to fund employee payroll tax withholding obligations on a Stock Grant, or Shares applied to payment of the exercise price for an Option. To the extent that a Full Value Award Share is returned to the Plan pursuant to this Section 3, 1.66 Shares of Common Stock shall again be available for issuance from time to time pursuant to this Plan.

## 4. ADMINISTRATION OF THE PLAN

The Administrator shall administer the Plan. Subject to the provisions of the Plan, the Administrator is authorized to:

- a. Interpret the provisions of the Plan and of any Stock Right or Stock Agreement and to make all rules and determinations that it deems necessary or advisable for the administration of the Plan;
- b. Determine which Employees, Non-Employee Directors, consultants and advisors of the Company and its Affiliates shall be granted Stock Rights;
- c. Determine the number of Shares and exercise price for which a Stock Right shall be granted;
- d. Specify the terms and conditions upon which a Stock Right or Stock Rights may be granted;
- e. In its discretion, accelerate:

the date of exercise of any installment of any Option; provided that, other than as provided in Section 17 of the (i) Plan, the Administrator shall not, without the consent of the Option holder accelerate the exercise date of any installment of any Option granted to any Employee as an ISO (and not previously converted into a Non-



APPENDIX A - 2013 STOCK AND OPTION PLAN (continued)

Qualified Option pursuant to Section 20) if such acceleration would violate the annual vesting limitation contained in Section 422(d) of the Code, as described in Section 6.2.3; or

(ii) the date or dates of vesting of Shares, or lapsing of Company repurchase rights with respect to any Shares, under any Stock Rights; and

f. In its discretion, extend the exercise date for any Option (subject to all term limits for Options set forth in this Plan); provided, however, that all such interpretations, rules, determinations, terms and conditions shall be made and prescribed in the context of preserving the tax status under Code Section 422 of those Options which are designated as ISOs (unless the holder of any such Option otherwise agrees). Subject to the foregoing, the interpretation and construction by the Administrator of any provisions of the Plan or of any Stock Right granted under it shall be final. The Administrator may employ attorneys, consultants, accountants or other persons, and the Administrator, the Company and its officers and directors shall be entitled to rely upon the advice, opinions or valuations of such persons. All actions taken and all interpretations and determinations made by the Administrator in good faith shall be final and binding upon the Company, all Participants, and all other interested persons. No member or agent of the Administrator shall be personally liable for any action, determination, or interpretation made in good faith with respect to this Plan or grants hereunder. Each member of the Administrator shall be indemnified and held harmless by the Company against any cost or expense (including counsel fees) reasonably incurred by him or her or any liability (including any sum paid in settlement of a claim with the approval of the Company) arising out of any act or omission to act in connection with this Plan unless arising out of such member's own fraud or bad faith. Such indemnification shall be in addition to any rights of indemnification the members of the Administrator may have as directors or otherwise under the by-laws of the Company, or any agreement, vote of shareholders or disinterested directors, or otherwise.

#### 5. ELIGIBILITY FOR PARTICIPATION

The Administrator shall, in its sole discretion, name the Participants in the Plan, provided, however, that each Participant must be a Employee, Non-Employee Director, consultant or advisor of the Company or of an Affiliate at the time a Stock Right is granted. Notwithstanding the foregoing, the Administrator may authorize the grant of a Stock Right to a person not then an Employee, Non-Employee Director, consultant or advisor of the Company or of an Affiliate; provided, however, that the actual grant of such Stock Right shall be conditioned upon such person becoming eligible to become a Participant at or prior to the time of execution of the Stock Agreement evidencing such Stock Right. ISOs may be granted only to Employees. The granting of any Stock Right to any individual shall neither entitle that individual to, nor disqualify him or her from, participation in other grants of Stock Rights.

#### 6. TERMS AND CONDITIONS OF OPTIONS

6.1 General. Each Option shall be set forth in writing in a Stock Agreement, duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Administrator may provide that Options be granted subject to such terms and conditions, consistent with the terms and conditions specifically required under this Plan, as the Administrator may deem appropriate including, without limitation, subsequent approval by the shareholders of the Company of this Plan or any amendments thereto. Each Stock Agreement shall state the option price (per share) of the Shares covered by each Option, the number of Shares to which it pertains, the date or dates on which it first is exercisable and the date after which it may no longer be exercised (subject to Sections 11 and 12 of this Plan). Option rights may accrue or become exercisable in installments over a period of time, or upon the achievement of certain conditions or the attainment of stated goals or events. The Option Price per share of Shares covered by an Option (including both ISOs and Non-Qualified Options) shall not be less than one hundred percent (100%) of the Fair Market Value per share of the Common Stock on the date of grant.

6.2 ISOs. Each Option intended to be an ISO shall be issued only to an Employee. In addition to the minimum standards set forth in Section 6.1, ISOs shall be subject to the following terms and conditions, with such additional restrictions or changes as the Administrator determines are appropriate but not in conflict with Code Section 422 and relevant regulations and rulings of the Internal Revenue Service:

6.2.1 ISO Option Price. In addition to the limitation set forth in Section 6.1, the Option price per share of the Shares covered by each ISO granted to a Participant who owns, directly or by reason of the applicable attribution





APPENDIX A - 2013 STOCK AND OPTION PLAN (continued)

rules in Code Section 424(d), more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or an Affiliate shall not be less than one hundred ten percent (110%) of the Fair Market Value on the date of grant.

6.2.2 Term of ISO. Each ISO shall expire not more than ten (10) years from the date of grant; provided, however, that an ISO granted to a Participant who owns, directly or by reason of the applicable attribution rules in Code Section 424(d), more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or an Affiliate shall expire not more than five (5) years from the date of grant.

6.2.3 Annual Limit on Incentive Stock Options. To the extent required for "incentive stock option" treatment under Section 422 of the Code, the aggregate Fair Market Value (determined as of the time of grant) of the Shares with respect to which ISOs granted under this Plan and any other plan of the Company or its Affiliate become exercisable for the first time by a Participant during any calendar year shall not exceed the aggregate threshold for ISOs established by the Code (\$100,000 as of January 1, 2013). To the extent that any Option exceeds this limit, it shall constitute a Non-Qualified Option.

6.3 Non-Employee Directors' Options. Each Non-Employee Director, upon first being elected or appointed to the Board of Directors, shall be granted a Non-Qualified Option to purchase that number of Shares as shall be established for such Option grants from time to time by the Board of Directors. Each such Option shall (i) have an exercise price equal to the Fair Market Value (per share) on the date of grant of the Option, (ii) have a term of ten (10) years, and (iii) shall become cumulatively exercisable in sixteen (16) equal quarterly installments, upon completion of each full quarter of service on the Board of Directors after the date of grant. In addition, on June 1 of each year, each Non-Employee Director shall be granted a Non-Qualified Option to purchase that number of Shares as shall be established for such Option grants from time to time by the Board of Directors. Each such Option shall (i) have an exercise price equal to the Fair Market Value (per share) on the date of grant of such Option, (ii) have a term of ten (10) years, and (iii) be exercisable in full immediately on the date of grant. Any director entitled to receive an Option grant under this Section may elect to decline the Option. If a Non-Employee Director ceases to be any of an Employee, Non-Employee Director, consultant or advisor of the Company, Options granted under this Section 6.3 shall remain exercisable to the extent such Options are exercisable on the date of such Termination of Service, for their full term, and the provisions of Sections 11 and 12 below shall not apply to any such Options.

#### 7. TERMS AND CONDITIONS OF STOCK GRANTS

Each Stock Grant shall be set forth in a Stock Agreement, duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Stock Agreement shall be in the form approved by the Administrator, with such changes and modifications to such form as the Administrator, in its discretion, shall approve with respect to any particular Participant or Participants. The Stock Agreement shall contain terms and conditions that the Administrator determines to be appropriate and in the best interest of the Company; provided, however, that the purchase price per share of the Shares covered by each Stock Grant shall not be less than the par value per Share. Each Stock Agreement shall state the number of Shares to which the Stock Grant pertains and the terms of any right of the Company to reacquire the Shares subject to the Stock Grant, including the time and events upon which such rights shall accrue and the purchase price therefor, and any restrictions on the transferability of such Shares.

Unless otherwise provided in the applicable Stock Agreement, any Accrued Dividends shall be paid to the Participant only if and when such Shares become free from the restrictions on transferability and forfeitability that apply to such Shares. Upon the lapse of such restrictions, the payment of Accrued Dividends shall be made promptly.

#### 8. TERMS AND CONDITIONS OF STOCK-BASED AWARDS

The Administrator shall have the right to grant Stock-Based Awards having such terms and conditions as the Administrator may determine, including, without limitation, the grant of Shares based upon certain conditions, the grant of securities convertible into Shares and the grant of stock appreciation rights, phantom stock awards or restricted stock units. The principal terms of each Stock-Based Award shall be set forth in a Stock Agreement, duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Stock Agreement shall be in a form approved by the Administrator and shall contain terms and conditions that the Administrator determines to be appropriate.



APPENDIX A - 2013 STOCK AND OPTION PLAN (continued)

9. EXERCISE OF OPTIONS AND ISSUANCE OF SHARES

An Option (or any part or installment thereof) shall be exercised by delivery to the Company, or its designee, of a notice of exercise in any form (which may be electronic) approved by the Company, together with provision for payment of the full purchase price in accordance with this Section for the Shares as to which the Option is being exercised, and upon compliance with any other condition(s) set forth in the Stock Agreement.

Payment of the purchase price for the Shares as to which such Option is being exercised shall be made (a) in cash or by check acceptable to the Administrator, or (b) at the discretion of the Administrator, (i) through delivery of shares of Common Stock not subject to any restriction under any plan and having a Fair Market Value equal as of the date of exercise to the cash exercise price of the Option, (ii) in accordance with a cashless exercise program established with a securities brokerage firm, and approved by the Company, (iii) by any other means (excluding, however, delivery of a promissory note of the Participant) that the Administrator determines to be consistent with the purpose of this Plan and applicable law, or (iv) by any combination of the foregoing. Notwithstanding the foregoing, the Administrator shall accept only such payment on exercise of an ISO as is permitted by Section 422 of the Code.

The Company shall then as soon as is reasonably practicable deliver the Shares as to which such Option was exercised to the Participant (or to the Participant's Survivors, as the case may be). It is expressly understood that the Company may delay the delivery of the Shares in order to comply with any law or regulation that requires the Company to take any action with respect to the Shares prior to their issuance. The Shares shall, upon delivery, be fully paid, non-assessable Shares.

10. ASSIGNABILITY AND TRANSFERABILITY OF STOCK RIGHTS

By its terms, a Stock Right granted to a Participant shall not be transferable by the Participant other than by will or by the laws of descent and distribution or pursuant to a qualified domestic relations order as defined by the Code or Title I of the Employee Retirement Income Security Act or the rules thereunder or as approved by the Administrator in its discretion and set forth in the applicable Stock Agreement, provided, however, that the Administrator shall not approve any transfer of a Stock Right for consideration. Except as provided in the preceding sentence or as otherwise permitted under a Stock Agreement, a Stock Right shall be exercisable, during the Participant's lifetime only by such Participant (or by his or her legal representative) and shall not be assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to execution, attachment or similar process. Any attempted transfer, assignment, pledge, hypothecation or other disposition of any Stock Right or of any rights granted thereunder contrary to the provisions of this Plan, or the levy of any attachment or similar process upon a Stock Right, shall be null and void.

11. EFFECT ON STOCK RIGHTS OF TERMINATION OF SERVICE

11.1 Except as otherwise provided in the applicable Stock Agreement or as otherwise provided in Section 12, if a Participant experiences a Termination of Service before the Participant has exercised all Stock Rights, the Participant may exercise any Stock Right granted to him or her to the extent that the Stock Right is exercisable on the date of such Termination of Service. Any such Stock Right must be exercised within ninety (90) days after the date of the Participant's Termination of Service, unless otherwise provided in the applicable Stock Agreement, but in no event after the expiration of the term of the Stock Right.

11.2 The provisions of this Section, and not the provisions of Section 12, shall apply to a Participant who subsequently dies after the Termination of Service; provided, however, that in the case of a Participant's death within ninety (90) days after the Termination of Service, the Participant's Survivors may exercise the Stock Right within one (1) year after the date of the Participant's death, but in no event after the date of expiration of the term of the Stock Right.

11.3 Absence from work with the Company or an Affiliate because of temporary disability or a leave of absence for any purpose, shall not, during the period of any such absence in accordance with Company policies, be deemed, by virtue of such absence alone, a Termination of Service, except as the Administrator may otherwise expressly provide.

11.4 Except as required by law or as set forth in a Participant's Stock Agreement, Stock Rights granted under the Plan shall not be affected by any change of a Participant's status within or among the Company and any Affiliates, so long as the Participant continues to be an Employee, Non-Employee Director, consultant or advisor of the Company or any Affiliate.



APPENDIX A - 2013 STOCK AND OPTION PLAN (continued)

12. EFFECT ON STOCK RIGHTS OF DEATH WHILE AN EMPLOYEE, DIRECTOR, CONSULTANT OR ADVISOR

Except as otherwise provided in a Participant's Stock Agreement, in the event of death of a Participant while the Participant is an Employee, Non-Employee Director, consultant or advisor of the Company or of an Affiliate, any Stock Rights granted to such Participant may be exercised by the Participant's Survivors to the extent exercisable but not exercised on the date of death. Except as set forth in Section 6.3, any such Stock Right must be exercised within one (1) year after the date of death of the Participant but in no event after the date of expiration of the term of the Stock Right, notwithstanding that the decedent might have been able to exercise the Stock Right as to some or all of the Shares on a later date if he or she had not died and had continued to be an Employee, Non-Employee Director, consultant or advisor.

13. ANNUAL LIMITS ON AWARDS; PERFORMANCE AWARDS

13.1 Annual Limits. Notwithstanding anything in this Plan to the contrary, no Participant shall be granted Stock Rights under this Plan in any calendar year for more than an aggregate of 1,000,000 Shares (subject to adjustment pursuant to Section 17 to the extent consistent with Section 162(m) of the Code). For purposes of the foregoing limitation, each Share subject to a Stock Right shall be counted as one Share of Common Stock (including each Share subject to a Full-Value Award).

13.2 Performance Awards. Stock Grants and Stock-Based Awards may be made subject to the achievement of performance goals pursuant to this Section 13.2 ("Performance Awards"). Grants of Performance Awards intended to qualify as "performance-based compensation" under Section 162(m) of the Code ("Performance-Based Compensation") shall be made only by a "Committee" comprised solely of two or more directors eligible to serve on a committee making awards qualifying as "performance-based compensation" under Section 162(m) of the Code. For any Performance Award that is intended to qualify as Performance-Based Compensation, the Committee shall specify that the degree of granting, vesting and/or payout of the Performance Award shall be based on the relative or absolute attainment of one or any combination of the following objective performance measures: (i) revenue targets or revenue growth targets, (ii) achievement of specified milestones in the discovery, development or regulatory approval of one or more of the Company's drug candidates, (iii) achievement of specified milestones in the commercialization of one or more of the Company's products, (iv) achievement of specified milestones in the manufacturing of one or more of the Company's products, (v) cost reduction or other expense control targets, (vi) personal management objectives, (vii) stock price targets (including, but not limited to, growth measures), (viii) total shareholder return, (ix) income per share, (x) operating efficiency measures, (xi) operating margin, (xii) gross margin, (xiii) return measures (including, but not limited to, return on assets, capital, equity or sales), (xiv) net or total revenue levels, (xv) productivity ratios, (xvi) operating income, (xvii) net operating profit, (xviii) net earnings or net income (before or after taxes), (xix) cash flow (including, but not limited to, operating cash flow, free cash flow and cash flow return on capital), (xx) earnings or operating income before interest, taxes, depreciation, amortization and/or stock-based compensation expense, (xxi) mergers, acquisitions or divestitures objectives, (xxii) market share, (xxiii) customer satisfaction, (xxiv) working capital targets, (xxv) budget objectives and (xxvi) achievement of other balance sheet or statement of operations objectives.

Each financial measure may be determined pursuant to generally accepted accounting principles ("GAAP") or on a non-GAAP basis, as determined by the Committee. Such goals may reflect absolute entity or business unit performance or a relative comparison to the performance of a peer group of entities or other external measure of the selected performance criteria and may be absolute in their terms or measured against or in relationship to other companies comparably, similarly or otherwise situated.

The Committee may specify that such performance measures shall be adjusted to exclude or provide for appropriate adjustment for one or more of the following items: (A) asset impairments or write-downs; (B) litigation and governmental investigation expenses and judgments, verdicts or claim settlements; (C) the effect of changes in tax law, accounting principles or other laws, regulations or provisions affecting reported results; (D) the effect of exchange rates for non-U.S. dollar denominated net sales or goals based on operating profit, earnings or income; (E) accruals for reorganization and restructuring programs; (F) any non-GAAP adjustments as described in the Company's earnings releases or in the management's discussion and analysis of financial condition and results of

operations appearing in the Company's periodic reports; (G) items of income, gain, loss or expense attributable to the operations of any business acquired by the Company or any parent or subsidiary or of any joint venture established by the Company or any parent or subsidiary; (H) costs and expenses incurred in connection with mergers and acquisitions; (I) items of income, gain, loss or expense attributable to one or more business operations divested by the Company or any parent or subsidiary or the gain or loss realized upon the sale of

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APPENDIX A - 2013 STOCK AND OPTION PLAN (continued)

any such divested business or the assets thereof ; or (J) the effect of any change in the outstanding shares of Common Stock effected by reason of a stock split, stock dividend, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change or any distributions to the Company's shareholders other than regular cash dividends.

Such performance measures: (1) may vary by Participant and may be different for different awards; (2) may be particular to a Participant or the department, branch, line of business, subsidiary or other unit in which the Participant works and may cover such period as may be specified by the Committee; and (3) shall be set by the Committee within the time period prescribed by, and shall otherwise comply with the requirements of, Section 162(m) of the Code. Notwithstanding any provision of the Plan, with respect to any Performance Award that is intended to qualify as Performance-Based Compensation, the Committee may adjust downwards, but not upwards, the number of shares payable pursuant to such Performance Award, and the Committee may not waive the achievement of the applicable performance measures except in the case of the death or disability of the Participant or a change in control of the Company.

The Committee shall have the power to impose such other restrictions on Performance Awards as it may deem necessary or appropriate to ensure that such Performance Awards satisfy all requirements for Performance-Based Compensation.

#### 14. RIGHTS AS A SHAREHOLDER

No Participant to whom a Stock Right (other than a Stock Grant) has been granted shall have rights as a shareholder with respect to any Shares covered by such Stock Right, except after due exercise thereof and/or tender of the full purchase price for the Shares being purchased pursuant to such exercise. The provisions of this Section 14 shall not be applicable to Shares issued pursuant to Stock Grants, provided that the Participant shall have tendered the purchase price therefore, notwithstanding the existence of stock transfer restrictions on or a Company repurchase right with respect to such Shares.

#### 15. EMPLOYMENT OR OTHER RELATIONSHIP

Nothing in this Plan or any Stock Agreement shall be deemed to prevent the Company or an Affiliate from terminating the employment, consultancy or director status of a Participant, or to prevent a Participant from terminating his or her own employment, consultancy or director status or to give any Participant a right to be retained in employment or other service by the Company or any Affiliate for any period of time.

#### 16. DISSOLUTION OR LIQUIDATION OF THE COMPANY

Upon the dissolution or liquidation of the Company (other than in connection with a transaction subject to the provisions of Section 17.2), all Stock Rights granted under this Plan which as of such date shall not have been exercised will terminate and become null and void; provided, however, that if the rights of a Participant or a Participant's Survivors have not otherwise terminated and expired, the Participant or Participant's Survivors will have the right immediately prior to such dissolution or liquidation to exercise any Stock Right to the extent that such Stock Right is exercisable as of the date immediately prior to such dissolution or liquidation. Upon the dissolution or liquidation of the Company, any outstanding Stock-Based Awards shall immediately terminate unless otherwise determined by the Administrator or specifically provided in the applicable Stock Agreement.

#### 17. ADJUSTMENTS

Upon the occurrence of any of the following events, a Participant's rights with respect to any Stock Right granted to him or her hereunder that have not previously been exercised in full shall be adjusted as hereinafter provided, unless otherwise specifically provided in the Stock Agreement or in any employment agreement between a Participant and the Company or an Affiliate:

17.1 Stock Dividends and Stock Splits. If the shares of Common Stock shall be subdivided or combined into a greater or smaller number of shares or if the Company shall issue any shares of Common Stock as a stock dividend on its outstanding Common Stock, the number of shares of Common Stock subject to or deliverable upon the exercise of a Stock Right shall be appropriately increased or decreased, and appropriate adjustments shall be made in the purchase price per Share to reflect such event. The number of Shares subject to the limitation in Section 13.1 shall also be adjusted upon the occurrence of such events.





APPENDIX A - 2013 STOCK AND OPTION PLAN (continued)

17.2 Consolidations or Mergers. In the event of a consolidation or merger in which the Company is not the surviving corporation or which results in the acquisition of substantially all the Company's outstanding stock by a single person or entity or by a group of persons and/or entities acting in concert, or in the event of the sale or transfer of substantially all the Company's assets (any of the foregoing, an "Acquisition"), all then outstanding Stock Rights (excluding any Shares subject to Stock Grants as to which all Company repurchase rights shall have lapsed) shall terminate unless assumed pursuant to clause (i) below; provided that either (i) the Administrator shall provide for the surviving or acquiring entity or an affiliate thereof to assume the outstanding Stock Rights or grant replacement stock rights in lieu thereof, any such replacement to be upon an equitable basis as determined by the Administrator, or (ii) if there is no such assumption or substitution, all outstanding Stock Rights shall become immediately and fully exercisable and all Company repurchase rights with respect to Stock Rights shall lapse, in each case immediately prior to the Acquisition, notwithstanding any restrictions or vesting conditions set forth therein.

17.3 Recapitalization or Reorganization. In the event of a recapitalization or reorganization of the Company (other than a transaction described in Section 17.2 above) pursuant to which securities of the Company or of another corporation are issued with respect to the outstanding shares of Common Stock, a Participant upon exercising a Stock Right shall be entitled to receive for the purchase price paid upon such exercise the securities he or she would have received if he or she had exercised such Stock Right immediately prior to such recapitalization or reorganization.

17.4 Adjustments to Stock Grants and Stock-Based Awards. Upon the happening of any of the events described in Sections 17.1, 17.2 or 17.3, any outstanding Stock-Based Award and the Shares subject to any Stock Grant, vested or unvested, shall be appropriately adjusted to reflect the events described in such Sections. The Administrator shall determine the specific adjustments to be made under this Section 17.4.

17.5 Modification of ISOs. Notwithstanding the foregoing, any adjustments made pursuant to Section 17.1, 17.2 or 17.3 with respect to ISOs shall be made only after the Administrator determines whether such adjustments would constitute a "modification" of such ISOs (as that term is defined in Section 424(h) of the Code) or would cause any adverse tax consequences for the holders of such ISOs. If the Administrator determines that such adjustments made with respect to ISOs would constitute a modification of such ISOs, it may refrain from making such adjustments, unless the holder of an ISO specifically requests in writing that such adjustment be made and such writing indicates that the holder has full knowledge of the consequences of such "modification" on his or her income tax treatment with respect to the ISO.

#### 18. ISSUANCES OF SECURITIES

Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of Shares subject to Stock Rights. Except as expressly provided herein, no adjustments shall be made for dividends paid in cash or in property (including without limitation, securities) of the Company.

#### 19. FRACTIONAL SHARES

No fractional share shall be issued under the Plan and the person exercising any Stock Right shall receive from the Company cash in lieu of any such fractional share equal to the Fair Market Value thereof.

#### 20. CONVERSION OF ISOs INTO NON-QUALIFIED OPTIONS; TERMINATION OF ISOs

Any Options granted under this Plan that do not meet the requirements of the Code for ISOs shall automatically be deemed to be Non-Qualified Options without further action on the part of the Administrator. The Administrator, at the written request of any Participant, may in its discretion take such actions as may be necessary to convert such Participant's ISOs (or any portion thereof) that have not been exercised on the date of conversion into Non-Qualified Options at any time prior to the expiration of such ISOs, regardless of whether the Participant is an employee of the Company or an Affiliate at the time of such conversion. At the time of such conversion, the Administrator (with the consent of the Participant) may impose such conditions on the exercise of the resulting Non-Qualified Options as the Administrator in its discretion may determine, provided that such conditions shall not be inconsistent with this Plan. Nothing in the Plan shall be deemed to give any Participant the right to have such Participant's ISOs converted into Non-Qualified Options, and no such conversion shall occur until and unless the Administrator takes appropriate action. The Administrator, with the consent of the Participant, may also terminate any portion of any ISO that has not been exercised at the time of such termination.



## APPENDIX A - 2013 STOCK AND OPTION PLAN (continued)

## 21. WITHHOLDING

If any federal, state, or local income taxes, employment taxes, Federal Insurance Contributions Act (“FICA”) withholdings or other amounts are required by applicable law or governmental regulation to be withheld from the Participant’s salary, wages or other remuneration in connection with the exercise of a Stock Right, the lapsing of a Company repurchase right or a Disqualifying Disposition (as defined in Section 22), the Company may withhold from the Participant’s compensation, if any, or may require that the Participant advance in cash to the Company, or to any Affiliate of the Company which employs or employed the Participant, the amount of such withholdings unless a different withholding arrangement, including the use of shares of the Company’s Common Stock, is authorized by the Administrator (and permitted by law). For purposes hereof, the Fair Market Value of any shares withheld for purposes of payroll withholding shall be determined in the manner provided in Section 1 above, as of the most recent practicable date prior to the date of exercise. If the Fair Market Value of the shares withheld is less than the amount of payroll withholdings required, the Participant may be required to advance the difference in cash to the Company or the Affiliate employer. The Administrator in its discretion may condition the exercise of an Option for less than the then Fair Market Value on the Participant’s payment of such additional withholding. In no event shall shares be withheld from any award in satisfaction of tax withholding requirements in an amount that exceeds the statutory minimum amount of tax withholding required.

## 22. NOTICE TO COMPANY OF DISQUALIFYING DISPOSITION

Each Employee who receives an ISO must agree to notify the Company in writing immediately after the Employee makes a “Disqualifying Disposition” of any Shares acquired pursuant to the exercise of an ISO. A Disqualifying Disposition is any disposition (as defined in Section 424(c) of the Code) of such Shares before the later of (a) two years from the date the Employee was granted the ISO, or (b) one year after the date the Employee acquired Shares by exercising the ISO. If the Employee has died before such Shares are sold, the notice provisions of this Section 22 shall not apply.

## 23. EFFECTIVE DATE; TERMINATION OF THE PLAN

This Plan shall be effective on May 8, 2013, the date of its approval by the shareholders of the Company. The Plan will terminate on May 7, 2023. The Plan also may be terminated at an earlier date by vote of the Board of Directors. Termination of this Plan will not affect any Stock Rights granted or Stock Agreements executed prior to the effective date of such termination.

## 24. AMENDMENT OF THE PLAN; AMENDMENT OF STOCK RIGHTS

The Plan may be amended by the shareholders of the Company, with the approval of the Board of Directors, by affirmative vote of a majority of the votes cast at a meeting of the shareholders at which a quorum is present. The Plan also may be amended by the Board of Directors or the Administrator, including, without limitation, to the extent necessary to qualify any or all outstanding Stock Rights granted under the Plan or Stock Rights to be granted under the Plan for favorable federal income tax treatment (including deferral of taxation upon exercise) as may be afforded incentive stock options under Section 422 of the Code, and to the extent necessary to qualify the shares issuable upon exercise of any outstanding Stock Rights granted, or Stock Rights to be granted, under the Plan for listing on any national securities exchange or quotation in any national automated quotation system of securities dealers. Any amendment approved by the Administrator that the Administrator determines is of a scope that requires shareholder approval shall be subject to shareholder approval. No modification or amendment of the Plan shall adversely affect a Participant’s rights under a Stock Right previously granted to the Participant, without such Participant’s consent. In its discretion, the Administrator may amend any term or condition of any outstanding Stock Right, provided: (i) such term or condition is not prohibited by the Plan; (ii) if the amendment is adverse to the Participant, such amendment shall be made only with the consent of the Participant or the Participant’s Survivors, as the case may be; and (iii) any such amendment of any ISO shall be made only after the Administrator determines whether such amendment would constitute a “modification” of any Stock Right which is an ISO (as that term is defined in Section 424(h) of the Code) or would cause any adverse tax consequences for the holder of such ISO (in which case, the Participant’s or Participant’s Survivors’ consent to such amendment shall be required). Notwithstanding the foregoing, unless such action is approved by the Company’s shareholders, the Company may not (except for adjustments permitted under Section 17 of this Plan) (1) amend any outstanding Option or stock appreciation right

granted under the Plan to provide an exercise price per share that is lower than the then-current exercise price per share of such outstanding Option or stock appreciation right; (2) cancel any outstanding option or stock appreciation right (whether or not granted under the Plan) and grant in substitution therefor new Stock Rights

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APPENDIX A - 2013 STOCK AND OPTION PLAN (continued)

under the Plan covering the same or a different number of shares of Common Stock and having an exercise price per share lower than the then-current exercise price per share of the cancelled option or stock appreciation right; or (3) cancel in exchange for a cash payment any outstanding Option with an exercise price per share above the then-current Fair Market Value.

**25. COMPLIANCE WITH SECTION 409A OF THE CODE**

Except as provided in individual Stock Agreements initially or by amendment, if and to the extent (i) any portion of any payment, compensation or other benefit provided to a Participant pursuant to the Plan in connection with his or her employment termination constitutes “nonqualified deferred compensation” within the meaning of Section 409A of the Code and (ii) the Participant is a specified employee as defined in Section 409A(a)(2)(B)(i) of the Code, in each case as determined by the Company in accordance with its procedures, by which determinations the Participant (through accepting the Stock Right) agrees that he or she is bound, such portion of the payment, compensation or other benefit shall not be paid before the day that is six months plus one day after the date of “separation from service” (as determined under Section 409A of the Code) (the “New Payment Date”), except as Section 409A of the Code may then permit. The aggregate of any payments that otherwise would have been paid to the Participant during the period between the date of separation from service and the New Payment Date shall be paid to the Participant in a lump sum on such New Payment Date, and any remaining payments will be paid on their original schedule.

**26. AUTHORIZATION OF SUB-PLANS**

The Board of Directors may from time to time establish one or more sub-plans under the Plan for purposes of satisfying applicable securities, tax or other laws of various jurisdictions. The Board of Directors shall establish such sub-plans by adopting supplements to the Plan containing (i) such limitations on the Board of Director’s discretion under the Plan as the Board of Directors deems necessary or desirable or (ii) such additional terms and conditions not otherwise inconsistent with the Plan as the Board of Directors shall deem necessary or desirable. All supplements adopted by the Board of Directors shall be deemed to be part of the Plan, but each supplement shall apply only to Participants within the affected jurisdiction and the Company shall not be required to provide copies of any supplement to Participants in any jurisdiction that is not the subject of such supplement.

**27. GOVERNING LAW**

This Plan shall be construed and enforced in accordance with the law of The Commonwealth of Massachusetts.

APPENDIX A - 2013 STOCK AND OPTION PLAN (continued)

AMENDMENT NO. 1  
TO THE  
VERTEX PHARMACEUTICALS INCORPORATED  
2013 STOCK AND OPTION PLAN

Effective March 28, 2014, the Vertex Pharmaceuticals Incorporated 2013 Stock and Option Plan (the “Plan”) is hereby amended as follows:

A new Section 6.4 is added to the Plan as follows:

6.4 Term of Options. No Option will be granted with a term in excess of ten (10) years.

A new sentence is added to the end of Section 8 of the Plan as follows:

No stock appreciation right will be granted with a term in excess of ten (10) years.

APPENDIX A - 2013 STOCK AND OPTION PLAN (continued)

AMENDMENT NO. 2  
TO THE  
VERTEX PHARMACEUTICALS INCORPORATED  
2013 STOCK AND OPTION PLAN

Effective May 7, 2014, the Vertex Pharmaceuticals Incorporated 2013 Stock and Option Plan (the “Plan”) is hereby amended as follows:

The first sentence of the first paragraph of Section 3 of the Plan is deleted in its entirety and the following is substituted therefor:

The number of Shares subject to this Plan as to which Stock Rights may be granted from time to time shall be 12,800,000 or the equivalent of such number of Shares after the Administrator, in its sole discretion, has interpreted the effect of any stock split, stock dividend, combination, recapitalization or similar transaction in accordance with Section 17 of this Plan.

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