

VERTEX PHARMACEUTICALS INCORPORATED 130 WAVERLY STREET · CAMBRIDGE, MA 02139-4242 TEL. 617.444.6100 • FAX 617.444-6483

http://www.vrtx.com

October 23, 2007

Delivered by EDGAR

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Mail Stop 6010 Washington, DC 20549

Attn: Tim Buchmiller, Senior Attorney

Re: Vertex Pharmaceuticals Incorporated

Definitive Proxy Statement Filed April 12, 2007 File No. 000-19319

Ladies and Gentlemen:

This letter is intended to provide responses to comments from the staff of the Securities and Exchange Commission (the "Commission") to Vertex Pharmaceuticals Incorporated (the "Company") set forth in the staff's letter to Dr. Joshua Boger, dated August 21, 2007 (the "Comment Letter"), regarding the Company's Definitive Proxy Statement, which was filed with the Commission on April 12, 2007 (the "Proxy Statement").

For convenient reference, the Company has set forth below in italics each of the Staff's comments set forth in the Comment Letter and has keyed the Company's responses to the numbering of the comments and the headings used in the Comment Letter.

Compensation Discussion and Analysis, page 11

Comment 1. We see from your Summary Compensation Table that in 2006 your Chief Executive Officer received option awards that were significantly more valuable than those received by your other Named Executive Officers. Given this disparity, please include a more detailed discussion and analysis of how and why the awards granted to your Chief Executive Officer differed from the awards granted to the other named executive officers. If policies or decisions relating to a named executive officer are materially different than those applicable to the other officers, this should be discussed on an individualized basis. Refer to Section II.B.1 of Commission Release No. 33-8732A.

Response 1. The Company does not apply materially different policies in making equity grants to its Chief Executive Officer and President compared to equity grants to its other named executive officers. The stock-based compensation expense set forth in the Summary Compensation Table referenced in Comment 1, reflects the cumulative effect

of awards received by each of the named executive officers during the four preceding years and relates to a number of factors, including the changing roles of these executive officers during the four-year period. As noted in the tables on page 19 of the Proxy Statement under the caption "Annual Equity Awards," the Company's Chief Executive Officer and President did receive substantially larger equity awards related to 2006 performance than the Company's other named executive officers. This disparity resulted nonetheless, from the application of the same principles and programs that apply to all of the Company's named executive officers. These policies and programs are described in the Compensation Discussion and Analysis, as well as in the narrative accompanying the compensation tables. The basic underlying principle of all of the Company's programs is that they reflect both the level of responsibility of the executive within the Company and the executive's performance. The disparity between the Chief Executive Officer and President's award and those of the other named executive officers derives in this case from the difference in responsibility level of these positions. The Company anticipates in future filings under the Exchange Act that, if there is a disparity in the size of the equity awards granted to one or more of its executive officers, it will disclose that this disparity is the result of the structure of the Company's executive team, the differing levels of responsibility assumed by the Company's executives and, where applicable, different levels of performance.

Role of Compensation Consultant, page 12:

- Comment 2. With respect to the engagement of Hewitt Associates, please provide the full disclosure required by Item 407(e)(3)(iii) of Regulation S-K including a description of the nature and scope of the consultant's assignment or the material elements of the instructions or directions given to the consultant with respect to the performance of its duties under the engagement.
- Response 2: In its Proxy Statement, under the heading "Role of the Compensation Consultant," the Company disclosed that the MDCC has, on occasion, engaged Hewitt Associates to provide certain services. The MDCC engages Hewitt on an as-needed basis to provide information and data helpful to the MDCC in fulfilling its responsibilities with respect to executive compensation. These duties vary from year to year. Accordingly, the Company's disclosure about Hewitt's role for 2006 describes Hewitt's assignments from the MDCC during that period only. There were three such assignments, which each are described in the Proxy Statement. These three assignments were to (1) consult with the MDCC regarding the Company's approach to setting executive base salary levels; (2) provide a list of possible comparator companies using criteria established by the MDCC; and (3) collect and collate proxy statement data about executive compensation at comparator companies. Further information about the Company's criteria for choosing comparator companies and about the MDCC's rationale for changing the process for setting executive base

salary levels, both of which were informed by input from Hewitt, appears in the Compensation Discussion and Analysis under the captions "Analysis of Compensation Practices of Comparator Companies" and "Base Salary."

In future filings under the Exchange Act, the Company will expand its disclosure regarding the material elements of the MDCC's instructions to its compensation consultant in its discussion of the "Role of the Compensation Consultant" and will

2

include cross-references to other captions where the MDCC's use of the compensation consultant's work product is discussed.

Elements of Compensation, page 12:

- Given that the management development and compensation committee used a "tally sheet" of all components of the named executive officers' compensation in reviewing and establishing each named executive officer's compensation for 2006, please include disclosure addressing the extent to which the information in the tally sheet comprised information in addition to or different from the information presented in your Summary Compensation Table and how and why the MDCC found the tally sheet useful in determining the various elements of compensation for the named executive officers. The MDCC's analysis of the tally sheet and how it resulted in specific awards should be described in complete detail
- The tally sheet tool used by the MDCC contains categories of information similar to that provided in the Summary Compensation Table and other tables set forth in the Proxy Statement. However, because the tally sheets are used by the MDCC to make forward-looking compensation decisions, different values are sometimes used in the tally sheets than are used in the proxy statement tables. In particular, the tally sheets use market prices for the Company's common stock that are more current than the prices used to calculate values for the proxy statement tables. For example, detailed information about possible severance payouts is determined for the tally sheets by assuming that any change-in-control termination would take place at least three months in the future and that a buyer would pay a premium over the market price of the Company's common stock. This permits the MDCC to anticipate the potential payouts under these contract provisions, should they be triggered during the year.

In general, the review of the tally sheets does not "result in specific rewards." There is a formal action item on the MDCC's agenda, when setting compensation levels for the upcoming year, to make a determination, using the tally sheets, among other resources, that the proposed aggregate compensation for each executive is reasonable and not excessive. Otherwise, the MDCC uses the tally sheets to provide background information in considering action on one or more components of pay. Each committee member uses the tally sheets as he or she determines best when making compensation decisions.

The Company anticipates that, in future filings under the Exchange Act, the Company will include information in its disclosure regarding the content of the tally sheets and the manner in which they are used.

<u>Performance-Based Elements of Compensation..., page 15:</u>

You disclose that the amount of the annual cash bonus and equity awards awarded to each named executive are determined on the basis of annual company performance goals. Although we note that you have described these goals as "very ambitious" and "very unlikely" to achieve, please expand your disclosure to provide a specific quantitative or qualitative discussion of the actual company-wide goals to be achieved in

3

order for named executive officers to earn their respective annual cash bonus and equity awards. Please disclose the specific company-wide goals that were required in order for the executive officers to earn their respective annual cash bonus and equity awards. To the extent you believe that disclosure of the information would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b), please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. Refer also to Question 3.04 of the Item 402 of Regulation S-K Interpretations available on our website at www.sec.gov. In discussing how difficult or likely it will be for the registrant to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm.

Response 4: The Company believes that disclosure of the specific annual company-wide goals against which the Board of Directors measures performance would result in competitive harm, and that such information can be excluded under Instruction 4 to Item 402(b). As disclosed in the Proxy Statement on page 15, "key corporate performance factors for the year include achievement of specific financial objectives, research productivity, development progression with respect to both internal development efforts and collaborative development, the pace and success of our internal growth, and other aspects of company performance that we believe drive stockholder value." For each category of high level goals, as characterized above, the Board and the Company agree on detailed, specific, measurable subgoals that are integral to execution of the Company's long-term strategic plan. For example, the Company's 2006 performance goals included several goals addressing the advancement of the Company's lead drug candidate, telaprevir, including the initiation or completion of specified clinical studies of the drug candidate, manufacture of specific quantities of drug material by a specified date, completion of research about specified potential markets for the drug candidate, and specific goals relating to drug formulation and manufacturing processes. The Company's competitors could use this information to alter the design and timing of their own development programs and to assess the Company's likelihood of success in achieving the Company's goals on a timeline competitive with their own timelines. The majority of the Company's performance goals are confidential trade secrets, comprising commercial or financial information about the Company. While a small subset of the performance goals are not confidential trade secrets, the Company believes that disclosure of those goals alone would be misleading and would give undue prominence to those goals that happen to fall outside the disclosure exception for trade secrets.

The Company's performance goals for any given year, which include both long and short term goals, are designed to be aspirational and to reflect superior achievement. Thus, those performance goals that do in fact overlap in type or character with the Company's financial and other public forecasts are usually more aggressive than the quantifiable and qualitative expectations for the year that are communicated to the

their disclosure could be construed to violate FDA regulations governing statements that can be made about drug candidates before market approval.

Company's investors. The Company believes disclosure of the Company's performance goals, to the extent that they are different from the Company's stated expectations, is likely to confuse investors. The Company is also concerned that, in some cases, the goals are stated in ways

The Company also believes that if disclosure of its performance goals as currently constituted were required, the Company would be forced to consider changing its current performance management program, due to the competitive risk of disclosing its goals. This would cause competitive harm of a different nature. The Company believes that its current performance management tools are a very effective means of aligning the management's priorities and activities with the Company's long-range strategic plan. The Company's goals are appropriate and meaningful to a company at the Company's stage of development in the pharmaceutical industry. The Company believes that "watering down" the goals so that they are suitable for public disclosure would undermine the program's effectiveness and perhaps harm the Company's execution of its plan.

Under these circumstances, the Company believes that it has provided as much detail as possible without disclosing information that poses a reasonable risk of competitive harm. As described above, the Company has provided a qualitative summary of the categories into which the goals fall. The Company also provided more qualitative information about the goals with respect to 2006, under the caption "Cash Bonus Awards to Named Executive Officers for 2006 Performance." In that discussion, the Company describes a number of goals that were accomplished in 2006. Specifically, the Company disclosed that "[w]e met or exceeded a very high proportion of our annual goals for 2006 across all significant aspects of our business, including advancement of our telaprevir clinical development program to position that investigational compound to initiate a Phase 3 clinical trial in 2007 and securing a key collaborative relationship with Janssen Pharmaceutica for development and potential commercialization of telaprevir; achievement of key development milestones for earlier stage compounds, including the completion of a Phase 2 clinical trial for VX-702 and a Phase 1 clinical trial for VX-770, and the advancement of VX-680 into a pivotal Phase 2 clinical trial; and accomplishment of certain financial objectives, including the completion of a \$330 million common stock offering and reduction of our outstanding convertible indebtedness to approximately \$100 million." In many cases, such as the ones listed above, the risk of competitive harm passes once the Company accomplishes a goal. It is also possible, after completion of a performance year, to disclose that the Company failed to accomplish a goal in connection with a material setback disclosed to the Company's stockholders. For example, the Company made such disclosure with respect to 2003 performance on page 16 of its 2004 Proxy Statement and on page 21 of its 2005 Proxy Statement. The Company believes that its disclosures appropriately strike the balance between protecting the Company's trade secrets, commercial and financial information and providing enough detail to allow investors to understand the performance management program and the reason for the Company rating assigned by the Board.

The Company will, in future filings, provide greater detail about the difficulty of achieving the annual performance goals, (i) by providing additional clarity regarding the level of performance required to achieve performance ratings as described in response to Comment 6 and (ii) by providing historical information about the Company's performance ratings and demonstrating which types of achievements and setbacks had an impact on the accomplishment of the performance goals and the ultimate rating assigned

5

by the board of directors for those years. In recent prior years, the Company ratings and the underlying rationale for each rating, were:

- A "Leading" company rating, with a 140% company performance factor for our executive officers, for 2006 because we achieved a very high proportion of our annual goals for 2006 across all significant aspects of our business, including advancement of our telaprevir clinical development program and securing a key collaborative relationship with Janssen Pharmaceutica for development and potential commercialization of telaprevir; achievement of key development milestones for earlier stage compounds; and accomplishment of certain financial objectives, including the completion of a \$330 million common stock offering and reduction of our outstanding convertible indebtedness to approximately \$100 million.
- A rating of "Distinguished" for 2005, which was the highest possible rating under our predecessor rating system which had seven possible company ratings, as we made progress in every significant aspect of our business in 2005, including advancing our development stage products, including VX-950 and VX-702; supporting our key collaborative relationships, including our relationships with GlaxoSmithKline, Merck, Mitsubishi Pharma, Kissei Pharmaceuticals and Novartis Pharma; entering into key new collaborative relationships including a worldwide collaboration with GlaxoSmithKline for development of VX-409 for the treatment of pain; improving our financial performance; and advancing a number of compounds, including a cystic fibrosis potentiator compound, from the discovery phase to preclinical development.
- A rating of "Superior" for 2004, which was the second highest possible rating under our predecessor rating system, as we
 made notable progress in every significant aspect of our business in 2004, including advancing our development stage
 products; supporting our key collaborative relationships; improving our financial performance; and advancing a number of
 compounds from the discovery phase to pre-clinical development.
- A rating of "Needs Improvement" for 2003, which was the second lowest possible rating under our predecessor rating system, as we suffered a number of setbacks in 2003, including the suspension of a clinical trial related to our leading drug candidate at that time and failure to substantially strengthen our financial position.

analysis of how the applicable elements of your compensation packages are structured and implemented to reflect your named executive officer's individual performance. Describe the elements of individual performance that are taken into account in determining the various forms of compensation. Refer to Item 402(b)(2)(vii) of Regulation S-K.

Response 5:

In its 2006 Proxy Statement, under the heading "Performance-Based Elements of Compensation - Annual Cash Bonus and Equity Awards," on page 15, the Company disclosed that "[a]t the beginning of each calendar year, our board of directors, in consultation with our chief executive officer, establishes company-wide goals for that year Similarly, we establish individual performance goals for each executive near the beginning of each calendar year. Our executives' goals establish expectations for their performance relative to achievement of the company goals. At year-end, each executive is assigned a performance rating on the basis of his performance for the year Each . . . named executive officer[] is evaluated on a 'results-based, values-tempered' basis, which takes into account not only 'what' was accomplished, but 'how.' . . . We . . . expect that our executives will be exemplars 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, values-based behavior. Each executive's performance rating is applied, along with other factors as described below, to determine the size of awards made to the executive under our annual cash bonus and stock and option plans." The Proxy Statement then goes on to describe in detail the formula for determining annual cash bonuses, which factors in both the company performance factor and the individual performance factor assigned to each executive.

In future filings under the Exchange Act, the Company anticipates it will expand this disclosure about its performance management system to be specific about (a) the possible rating levels that can be achieved ("not building," "building," "strong" or "leading"), (see the response to Comment 6 below, for a description of these ratings) (b) the possible values-based modifiers to those ratings ("not living the values," "living the values" or "exemplary demonstration of the values") and (c) the ratings assigned by the Board of Directors to the Company and to each individual executive officer, at the recommendation of the MDCC, and the reasons therefore.

Comment 6.

You disclose that your board conducts a year-end evaluation of performance against the pre-determined goals and assigns a company-wide performance rating. Please describe in more detail how your rating system is designed, including, for example, the various levels that can be achieved, and discuss and analyze how the board determined that your rating for 2006 was "leading."

Response 6:

The Company disclosed in its 2007 Proxy Statement that the range of company performance factors for the Company's executives in 2006 was from 0% to 150% and that "at the completion of each calendar year, our board conducts a year-end evaluation of performance against the predetermined goals and assigns us a company-wide performance rating."

There are four possible company ratings under the Company's system: "not building," "building," "strong" and "leading." While the Company's performance against the goals established at the beginning of the year is an important factor considered by the board in

7

assessing the Company's level of performance, the board has discretion to consider other factors that it considers relevant to the company's performance when it assigns a performance rating for the year. In general, however, the ratings are intended to reflect performance at one of the levels set forth in the table below:

Performance Rating Not Building	Level of Performance Unacceptable and disappointing performance. Significant improvement required and expected	
Building	Failure to successfully implement the approved business goals or to meet a substantial portion of the annual	
Dunding	performance goals for any reason, including a failure of management to execute our business plan, or due to events outside our control that nonetheless had a meaningful negative impact on our performance	
Strong	A high level of performance, in which a substantial majority of performance goals were met, and accomplishment of our business plan for the year	
Leading	Exceptional performance across our business, including successful execution of our business plan, achievement of a very high proportion of our original goals, significant additional accomplishments exceeding our original goals, and the absence of significant business setbacks	

In January 2007, the Company's board of directors determined that the company rating for 2006 was "leading." As disclosed in the Company's Proxy Statement, in making this determination, the board of directors determined that "we met or exceeded a very high proportion of our annual goals for 2006 across all significant aspects of our business, including advancement of our telaprevir clinical development program to position that investigational compound to initiate a Phase 3 clinical trial in 2007 and securing a key collaborative relationship with Janssen Pharmaceutica for development and potential commercialization of telaprevir; achievement of key development milestones for earlier stage compounds, including the completion of a Phase 2 clinical trial for VX-702 and a Phase 1 clinical trial for VX-770, and the advancement of VX-680 into a pivotal Phase 2 clinical trial; and accomplishment of certain financial objectives, including the completion of a \$330 million common stock offering and reduction of our outstanding convertible indebtedness to approximately \$100 million." The board of directors exercises broad discretion in assigning the Company's performance rating. Although the directors discuss and analyze the Company's performance as a group, each director makes his or her own judgment about which factors are important, and how to weight those factors in reaching a conclusion. It is possible, and likely, under the Company's system, that different directors may reach the same conclusion about the rating for different reasons.

In future filings under the Exchange Act, the Company anticipates it will include in its disclosure information about how the rating system is designed, including the information

in the discussion and table above, and how the Board determines the company rating factor, consistent with the limitations on disclosure of the Company's and executives' performance goals due to the risk of competitive harm, as discussed in the response to Comment 4, above.

- Comment 7. Your disclosure indicates that you set individual performance goals for each executive, and company-wide performance goals, at or near the beginning of each calendar year. Please expand your Compensation Discussion and Analysis to include a discussion of the goals you have set for the current year and provide an analysis of how such goals will affect the calculation of amounts awarded to your named executive officers under the various elements of your compensation program. Refer to the text of Securities Act Release 33-8732A marked by footnote 86.
- Response 7: The Company anticipates that in future filings, it will include additional discussion of its corporate and individual performance goals for the current year. As discussed in the Company's response to Comment 4, the Company believes that disclosure of the performance goals in detail would result in competitive harm. Accordingly, the Company's discussion and analysis of the current year performance goals will be similarly limited to a characterization of the goals, and difficulty of achieving the goals, as discussed in the response to Comment 4.

Cash Bonus Awards to Named Executive Officers for 2006 Performance, page 17

- Comment 8. Your disclosure indicates that the range of performance factors for executives is from 0% to 150%, and, that in January 2007, your board determined that the company performance factor for executives under the annual cash bonus program for 2006 should be 140%. Please discuss and analyze how the board determined where to set the performance factor within the range and how it determined that 140% was appropriate for 2006. In this regard we note your earlier disclosure indicating that your rating for 2006 was "leading" which is the highest level achievable under your rating system. Please discuss and analyze the factors that the board considered in reducing the company performance factor to 140%, out of a possible 150%, given that the highest level under the performance rating system was achieved in 2006.
- **Response 8:** When the Company's board of directors assigns a performance rating for the completed year, it also assigns a company performance factor reflecting the board members' judgment of the Company's overall performance for the year. The possible company ratings and the corresponding range of company performance factors for the Company's executive officers is set forth in the table below:

Company Rating	Company Performance Factor
Not Building	0%-25%
Building	0%-80%
Strong	80% - 120%
Leading	120%-150%
	9

In future filings, the Company anticipates that it will describe the company performance rating program, including the possible ratings, the range of performance factors for each of the possible ratings, and the specific performance factor assigned by the board of directors in the exercise of its discretion for that year. This disclosure would clarify that any performance factor in the range between 120% and 150%, including the 140% achieved with respect to 2006, is within the discretion and judgment of the board of directors when it assigns a company performance rating of "leading."

Annual Equity Awards, page 17

- You disclose that all restricted stock awards made under your annual program vest on the fourth anniversary of the grant date, subject to accelerated vesting for certain performance based factors which you consider to be confidential information. Please disclose the specific price target and related target index that factor into the accelerated vesting of the awards. To the extent you believe that disclosure of the information would result in competitive harm such that information could be excluded under Instruction 4 to Item 402(b), please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. Refer also to Question 3.04 of Item 402 of Regulation S-K Interpretations available on our website at www.sec.gov. In discussing how difficult or likely it will be for the registrant to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm.
- As the staff of the Commission noted, for certain awards of restricted stock issued to the Company's executive officers (referred to as "performance-accelerated restricted stock" or PARS) that would otherwise vest on the fourth anniversary of the grant date, 50% of the shares will vest if the Company's common stock outperforms a specified share index, based on the performance of certain competing companies, for two consecutive years and 50% of the shares will vest if the Company's common stock price achieves and maintains a pre-determined level (each, a "Target Price"). The stock price target that must be achieved in order to accelerate the vesting of 50% of the PARS shares varies from grant to grant, and reflects a substantial premium over the stock price on the date of grant. The Company notes that the expectation is that these awards ultimately will vest on the fourth anniversary of the grant date even if the performance-based factors are not achieved. Therefore, the expectation is that these target levels only affect the timing of the receipt of the shares, not the number of shares the executive ultimately will receive.

In future filings, the Company anticipates that it will disclose that 50% of the shares under the current outstanding PARS grants will vest if the Company's stock price outperforms the Biotech Index for two consecutive years. The Company also anticipates it will disclose that the Target Prices represent a significant premium over the market value on the date of grant. However, the Company does not believe that disclosure of the specific Target Prices in the Proxy Statement would be material to an investor's understanding of the level of executive compensation, because the Target Prices are only expected to affect the timing of the receipt of the stock. In addition, the Company is concerned that there is a risk that the Target Prices would be perceived by investors to

Comment 10. Given that you generally target approximately the median of the comparator group in determining the number of shares underlying each stock option award and restricted stock grant, please specify how these elements of your compensation packages related to the data you analyzed from the comparator companies and include a discussion of where your actual stock option awards and restricted stock grants actually fell in relation to the companies in the comparator group. Also include the supplemental grants of equity compensation described on page 20 of your analysis. For example, indicate whether the aggregate of the stock options and restricted stock awards described in the tables on page 19 and the supplemental grants described on page 20 put this element of your compensation package below, at or above the medial as compared to the similar grants made by your comparator group. If the aggregate of such grants were significantly above or below the median, please provide discussion and analysis as to why you departed from your general strategy of targeting such grants at the median of your comparator group.

Response 10: The MDCC uses the comparator group to set the baseline number of shares available for option and restricted stock awards, but the Company does not target the median of the comparator group for the actual equity grants that are made to executives. As described below, determining the baseline number of shares involves a subjective analysis of the comparator company data. In addition, the number of awarded shares reflects significant additional adjustments made from the baseline on the basis of performance ratings. In future filings, the Company will make clear that the ultimate awards made under the equity compensation program are the result of the exercise of judgment and discretion by the MDCC, using the information and data about comparator groups available to it to set baseline targets, which are subsequently adjusted to reflect performance. The application of the performance factors to the equity awards will result, more often than not, in equity grants for each year that may be significantly different than that reported for the comparator group companies. The Company's anticipated disclosure also will make clear that the MDCC does not consider comparator group data when considering whether or not to make a supplemental equity grant.

The Company does not believe that it would be helpful to investors to provide information about where the equity grants made to its named executive officers, including any supplemental grants, fall in relation to the amounts reported by the comparator companies in prior years. In some years it will be lower, and in others, it may be higher. The MDCC does not consider this information, or make this type of comparison, in its deliberations about equity grants made under the executive compensation programs it has established. The Company believes that by providing the additional disclosure described above, it will eliminate confusion about the MDCC's use of comparator group data.

Employment Contracts and Change of Control Arrangements, page 30

Comment 11. You disclose that the various severance payments are payable to your named executive officers upon termination "without cause" or for "good reason" and before and after a

11

"change of control." Please briefly indicate the definitions of these terms. In your discussion of the definition of "change of control," please indicate the basis for selecting particular events as triggering payments. Refer to Item 402(b)(2)(xi) of Regulation S-K.

Response 11: In future filings under the Securities Exchange Act of 1934, as amended, the Company proposes to expand its disclosure the change of control provisions with its executive officers as follows. The Company anticipates that its expanded disclosure would be substantially as follows:

"Post-Termination Compensation and Benefits

We have entered into agreements and maintain plans that will require us to provide to our named executive officers under specified circumstances cash compensation, benefits and/or acceleration of the vesting of equity awards in the event of termination of employment. The terms of these agreements vary from executive to executive with respect to the amount of severance payments, provisions for accelerated equity award vesting, continuation of benefits and other terms, as a result of negotiations with each executive generally at the time the executive was recruited. A further discussion of the terms and projected payments under each of these contracts is set forth below under the heading Employment Contracts and Change of Control Arrangements.

We use a "double trigger" with respect to benefits that are to be provided in connection with a change of control. In other words, the 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 the change of control. We believe a "double trigger" benefit maximizes shareholder value because it prevents a windfall to executives in the event of change of control in which the executive retains significant responsibility as defined in his or her individual agreements, while still providing them appropriate incentives to cooperate in negotiating any change of control in which company executives believe they may lose their jobs.

In addition to the benefits that only accrue in connection with a change of control, our agreements with certain of 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."

As described in further detail in the Company's response to Comment 12, each of the employment agreements and change of control agreements were negotiated with the executives, usually when the Company was seeking to recruit them. As a result, the definitions of "cause," "change of control" and "good reason" differ from agreement to agreement. The Company does not believe that it is necessary for these terms to be identical under all circumstances. The Company evaluated whether or not to provide the specific definitions for each of these terms for each of its executive employment agreement in the Proxy Statement, and determined that in general it would detract from the overall clarity of the Company's disclosure by focusing investors on the technical

12

aspects of the legal definitions as opposed to benefits that the executives would receive under various termination scenarios. In connection with this determination, the Company notes that each of the agreements with the Company's executive officers is filed with the Commission and available to any investor interested in the exact definitions of those terms.

In addition, the Company provided more specific information regarding these terms in specific cases to provide clear disclosure. For example, on page 31 of the Proxy Statement, there appears an explanation of the circumstances under which the Company's Chief Executive Officer could terminate his employment for good reason. Similarly, the Company specified the time periods before or after a change of control during which the "double trigger" provisions were exercisable for each executive. In connection with future filings under the Exchange Act, the Company acknowledges the Commission's request that it define these terms, but requests that the Commission permit the Company to exclude these definitions to the extent that the Company determines that the disclosure would detract from the overall clarity of its disclosure. For the staff's reference, the Company has attached as Exhibit A to this letter, the definitions of "Good Reason," "Cause" and "Change of Control" in each of the named executive officers' employment and/or change of control agreements.

- Comment 12. We note that the employment contracts and change-in-control agreements with each of the named executive officers contain terms that vary with respect to the amount of severance payments, provisions for accelerated equity award vesting, continuation of benefits and other terms. Please discuss and analyze how these varying terms were negotiated and how and why the most significant terms were agreed to by the company and why there was material variation among the terms agreed to with the different named executive officers.
- Response 12: In general, the Company enters into employment contracts with executives at the time they are recruited to the Company. The Company believes that it is very important to build the best possible executive team at this critical period of high growth and opportunity for the Company, while ensuring that any employment arrangements are fair and reasonable. While the employment contracts usually have general topics in common, such as severance amounts for voluntary and involuntary terminations, under a variety of circumstances, including in connection with a change of control of the Company, it is the Company's policy that each employment contract be separately negotiated, taking into account the interests of both the Company and the executive under the circumstances at the time of negotiation. There are a number of factors that influence the outcome of these negotiations with each potential executive. For example, the Company's executives differ significantly from each other in terms of their seniority, experience, talents, motivations, areas of expertise and other individual circumstances. In addition, the high performing individuals recruited by the Company typically have existing job interests, and the Company takes those interests into account in the negotiations. For example, when the Company recruits individuals from lucrative private practices, the Company finds that they are unlikely to join the Company without assurances of enough pay and severance benefits to compensate them for leaving their practices. Executives who join the Company from other companies may sacrifice potential bonuses and/or equity payouts, and may seek assurances of compensation elements of similar value. More experienced

13

individuals may seek higher compensation than individuals who are still establishing their careers. The Company is also mindful that candidates compare their proposed compensation levels with those of their potential peers on the executive team.

In future filings under the Securities Exchange Act of 1934, as amended, the Company proposes to include the information set forth above in its disclosure regarding the negotiation and rationale for the varying terms included in its arrangements with its named executive officers.

Approval of Related Person Transactions and Transactions with Related Persons, page 38

- **Comment 13.** Provide the information required by Item 404(b) of Regulation S-K. For example, describe your policies and procedures for the review, approval, or ratification of any transaction required to be reported under Item 404(a), including, to the extent applicable, the material features described in Item 404(b)(1).
- Response 13: In future filings under the Exchange Act, the Company will expand the disclosure regarding its policies and procedures for the review, approval or ratification of related party transactions, which was set forth on page 38 of the Proxy Statement. The Company anticipates, subject to changes occurring prior to such filing, that its expanded disclosure would be substantially as follows:

"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, other than our employment arrangements with Kenneth S. Boger, which are reviewed and approved by our management development and compensation committee as described in our Compensation Discussion and Analysis. 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% stockholders 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."

In connection with the Company's submission of this letter, the Company hereby acknowledges and confirms:

• the Company is responsible for the adequacy and accuracy of the disclosure in the Proxy Statement;

14

- staff comments or changes to disclosure in staff comments do not foreclose the Commission from taking any action with respect to the Proxy Statement;
 and
- the Company may not assert staff comments as a defense in any proceeding imitated by the Commission or any person under federal securities laws of the United States.

In addition, the Company hereby confirms that in future filings, the Company will enhance its overall disclosure by complying with the comments provided by the Commission in the manner set forth in the responses above, subject to any changes with respect to the policies, programs, agreements and other facts underlying the Company's disclosures.

Please contact me at 617-444-6417 in the event that you have any questions or concerns with respect to this matter. In the event that I am not available, please contact my colleague, Valerie Andrews, at 617-444-6227.

Very truly yours,

/s/ Kenneth S. Boger

Kenneth S. Boger Senior Vice President and General Counsel

15

Exhibit A

Dr. Joshua Boger, Chief Executive Officer and President:

- A. Under Dr. Boger's employment agreement:
 - 1) "Cause" means (i) the willful and continued failure by the executive to substantially perform his duties (subject to specified exceptions) after a written demand for substantial performance is delivered to the executive by our board, which demand specifically identifies the manner in which our board believes that the executive has not substantially performed his duties, or (ii) the willful engaging by the executive in conduct with is demonstrably and materially injurious to us, monetarily or otherwise.
 - 2) The definition of "Good Reason" can be found on the bottom of page 31 and top of page 32 of the Proxy Statement.
 - 3) A "Change of Control" shall be deemed to have occurred if:
 - a change of control of the nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A;
 - a person, together with its affiliates and associates (as such terms are defined in the employment agreement), shall become the beneficial owner of 20% or more of our voting shares then outstanding (excluding certain specified securities), unless the acquisition of such shares was an approved transaction (as such term is defined in the employment agreement);
 - during any period of 24 months, individuals who at the beginning or such period constitute our board and individuals whose nomination for election by our stockholders was approved by a vote of at least two-thirds of such directors (subject to certain limitations) cease for any reason to constitute a majority of our board;
 - our stockholders approve our merger or consolidation with any other corporation, other than (a) a merger or consolidation which would result in the our voting shares outstanding immediately prior thereto continuing to represent at least 50% of the combined voting shares of the surviving entity immediately after such merger or consolidation or (b) a merger or consolidation effected to implement a recapitalization in which no person becomes an acquiring person (as such term is defined in the employment agreement).
- A. Under Dr. Boger's restricted stock agreement:
 - 1) "Cause" means:
 - conviction of the executive of a felony crime of moral turpitude;
 - the executive's willful refusal or failure to follow a lawful directive or instruction of our board or the individual to whom the
 executive reports provided that the executive received prior written notice of the directive(s) or instruction(s) that the executive
 failed to follow and

16

- provided further that the executive did not correct any such problems within 30 days after receiving notice in good faith from us;
- the executive commits (i) willful gross negligence, or (ii) willful gross misconduct in carrying out the executive's duties, resulting in either case in material harm to us, unless such act, or failure to act, was believed by the executive, in good faith, to be in our best interests; or
- the executive's violation of our policies made known to the executive regarding confidentiality, securities trading or inside information.
- 2) "Change of Control" means that:
 - 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 stockholders 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.

- 3) "Good Reason" means:
 - The executive is assigned to any duties or responsibilities that are inconsistent, in any significant respect, with the scope of duties and responsibilities performed by the executive's positions and offices on the date of the agreement, provided that such reassignment of duties or responsibilities is not due to the executive's disability or the executive's performance, nor is at the executive's request;
 - The executive suffers a reduction in the authorities, duties and responsibilities associated with the executive's positions and
 offices on the date of the agreement on the basis of which the executive makes a determination in good faith that the executive
 can no longer carry out such positions or offices in the manner contemplated on the date hereof, provided that such
 reassignment of duties or responsibilities is not due to the executive's disability or the executive's performance, no is it at the
 executive's request;
 - the executive's base salary is decreased below the level on the date of the agreement;
 - our principal office, or the location of the office to which the executive is assigned on the date of the agreement, is relocated to a place 35 or more miles away; or
 - · following a change of control, our successor fails to assume the obligations under the restricted stock agreement.

17

Ian Smith, Executive Vice President and Chief Financial Officer

- A. Under Mr. Smith's employment agreement:
 - 1) "Cause" means (i) the executive is convicted of a crime involving moral turpitude, or (ii) the executive commits a material breach of any provision of the employment agreement, or (iii) the executive, in carry out his duties, acts or fails to act in a manner whish 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 the executive in good faith, to be in our best interests.
 - 2) "Good Reason" means that without the Executive's consent, one or more of the following events occurs, and the Executive of his own initiative, terminates his employment:
 - The executive is assigned to any duties or responsibilities that are inconsistent, in any significant respect, with the scope of duties and responsibilities performed by the executive's positions and offices on the date of the agreement, provided that such reassignment of duties or responsibilities is not due to the executive's disability or the executive's performance, nor is at the executive's request;
 - The executive suffers a reduction in the authorities, duties and responsibilities associated with the executive's positions and offices on the date of the agreement on the basis of which the executive makes a determination in good faith that the executive can no longer carry out such positions or offices in the manner contemplated on the date the agreement was entered into, provided that such reassignment of duties or responsibilities is not due to the executive's disability or the executive's performance, no is it at the executive's request;
 - the executive's base salary is decreased;
 - the executive's office location as assigned to him by us is relocated 35 or more miles from Cambridge, Massachusetts; or
 - failure of any entity in the event of a change of control to assume the obligations and liabilities of the employment agreement.
 - 3) 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 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 stockholder's 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 (other than a merger, consolidation or other transaction with a company of which 50% or more of the combined

18

- voting power of the outstanding securities having a right to vote at the election of directors is owned, directly or indirectly, by us both before and immediately after the merger, consolidation or other transaction) in which the Company is not the surviving corporation or is materially or completely liquidated; or
- we combine with another company and are the surviving corporation (other than a merger, consolidation or other transaction with a company of which 50% or more of the combined voting power of the outstanding securities having a right to vote at the election of directors is owned, directly or indirectly, by us both before and immediately after the merger consolidation or other transaction) but, immediately after the combination, our stockholders 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.
- B. Under Mr. Smith's restricted stock agreement, the definitions of cause, good reason and change of control are the same as the definitions of those terms in Dr. Boger's restricted stock agreement.

John J. Alam, Executive Vice President, Medicines Development, and Chief Medical Officer and Peter Mueller, Executive Vice President, Drug Realization, and Chief Scientific Officer

A. Under the change of control agreements with Dr. Alam and Dr. Mueller:

- 1) "Cause" means
 - conviction of the executive of a felony crime of moral turpitude;
 - the executive's willful refusal or failure to follow a lawful directive or instruction of our board or the individual to whom the executive reports provided that the executive received prior written notice of the directive(s) or instruction(s) that the executive failed to follow and provided further that we, in good faith, give the executive 30 days to correct any problems, and further provided if the executive corrects the problem(s) the executive may not be terminated for cause in that instance;
 - the executive commits (i) willful gross negligence, or (ii) willful gross misconduct, resulting in either case in material harm to us, unless such act, or failure to act, was believed by the executive, in good faith, to be in our best interests; or
 - the executive's violation of our policies made known to the executive regarding confidentiality, securities trading or inside
 information.
- 2) "Good Reason" means that without the Executive's consent, one or more of the following events occurs:
 - The executive is assigned to material duties or responsibilities that are inconsistent, in any significant respect, with the scope of
 duties and responsibilities associated with the executive's position and office immediately prior to the change of control,
 provided that such

19

- reassignment of duties or responsibilities is not for Cause, due to the executive's disability or at the executive's request;
- The executive suffers a material reduction in the authorities, duties or job title and responsibilities associated with the executive's position and office immediately prior to the change of control, on the basis of which the executive makes a good faith determination that the executive 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 the executive's disability or at the executive's request);
- the executive's base salary is decreased to a level below the executive's base salary in effect immediately prior to the change in control;
- our principal offices, or the location of the office to which the executive 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.
- 2) "Change of Control" means that:
 - 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 stockholders 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.
- B. Under Dr. Alam and Dr. Mueller's restricted stock agreements, the definitions of "cause," "good reason" and "change of control" are the same as the definitions of those terms in Dr. Boger's restricted stock agreement.