

Mail Stop 6010

August 21, 2007

Joshua S. Boger, Ph.D.
Chief Executive Officer
Vertex Pharmaceuticals Incorporated
130 Waverly Street
Cambridge, Massachusetts 02139

**Re: Vertex Pharmaceuticals Incorporated
Definitive Proxy Statement
Filed April 12, 2007
File No. 000-19319**

Dear Dr. Boger:

We have limited our review of your definitive proxy statement to your executive compensation and other related disclosure and have the following comments. Our review of your filing is part of the Division's focused review of executive compensation disclosure.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call me at the telephone number listed at the end of this letter.

In some comments we have asked you to provide us with additional information so we may better understand your disclosure. Please do so within the time frame set forth below. You should comply with the remaining comments in all future filings, as applicable. Please confirm in writing that you will do so and also explain to us how you intend to comply. Please understand that after our review of all of your responses, we may raise additional comments.

If you disagree with any of these comments, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation.

Compensation Discussion and Analysis, page 11

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.

Role of Compensation Consultant, page 12

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.

Elements of Compensation, page 12

3. 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.

Performance-Based Elements of Compensation..., page 15

4. 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 disclose to provide a specific quantitative or qualitative discussion of the actual company-wide goals to be achieved in 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.

5. Your disclosure indicates that the annual cash bonuses and equity awards are determined, in part, on the basis of executive performance. Please expand your Compensation Discussion and Analysis to provide a more specific discussion and 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.
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."
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.

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

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.

Annual Equity Awards, page 17

9. 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 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.
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 in 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 median 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.

Employment Contracts and Change of Control Arrangements, page 30

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 "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.
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.

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

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).

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Please respond to our comments by September 21, 2007, or tell us by that time when you will provide us with a response.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

When you respond to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;

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

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to comments.

Please contact me at (202) 551-3635 with any questions.

Sincerely,

Tim Buchmiller
Senior Attorney