

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

May 11, 2011

Matthew W. Emmens Chief Executive Officer Vertex Pharmaceuticals Incorporated 130 Waverly Street Cambridge, Massachusetts 02139-4242

Re: Vertex Pharmaceuticals Incorporated

Form 10-K

Filed February 17, 2010 File No. 000-19319

Dear Mr. Emmens:

We have reviewed your response letter dated April 13, 2011 and have the following comments.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K, filed February 17, 2011

Corporate Collaborations, page 13

1. We note your response to prior comment 1 regarding your collaboration agreement with CFFT. We also note that in your disclosure in your 8-K (filed April 7, 2011) as provided in Exhibit A of your response letter, you state, "CFFT may terminate its funding obligations under the April 2011 Amendment in certain circumstances, in which case there will be a proportional adjustment to the royalty rates and *commercial milestones* for certain corrector compounds." Section 4.4 of the original agreement also states that CFFT will be obligated to pay Vertex "clinical trial commencement milestones." We note that VX-770 and VX-809 have already commenced clinical trials, and that VX-661 may potentially commence clinical trials in the future. Please provide proposed disclosure to be included in future filings regarding aggregate milestone payments you have received to date and future aggregate milestones you may receive under the collaboration agreement with CFFT. Please integrate this disclosure with the disclosure you provided in your Form 8-K filed April 7, 2011 which included the information we requested in our prior

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comment regarding the agreement with CFFT. Also, please confirm that you will include the entire disclosure in future filings including your next Form 10-K.

2. We note your response to prior comment 2 that in your Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, you will incorporate by reference as an exhibit the Research and Development Agreement (the "Lilly Agreement") between Eli Lilly and the Company. Please confirm that you will incorporate by reference the Lilly Agreement in your next Form 10-K as well.

Please contact Johnny Gharib at (202) 551-3170 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey Riedler Assistant Director