



DIVISION OF  
CORPORATION FINANCE

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

August 23, 2013

Via E-mail

Lewis T. Williams, M.D., Ph.D.  
President and Chief Executive Officer  
Five Prime Therapeutics, Inc.  
Two Corporate Drive  
South San Francisco, CA 94080

**Re: Five Prime Therapeutics, Inc.  
Amendment No. 1 to Registration Statement on Form S-1  
Filed August 16, 2013  
File No. 333-190194**

Dear Dr. Williams:

We have reviewed your amended registration statement and correspondence dated August 16, 2013 and we have the following additional comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Management's Discussion and Analysis of Financial Condition and Results of Operations  
Critical Accounting Policies and Use of Estimates  
Stock-Based Compensation, page 47

1. We acknowledge your response to our prior comment 1 and your revised disclosure. As we continue to gain a better understanding regarding your determination of the fair market value of your common stock at each valuation date, please address the following:
  - As you consider a sample size of at least 10 companies to be an appropriate sample size for the peer group used in each valuation scenario, it does not appear necessary, based on the table provided in your response to the first bullet point, that the 107 companies with other therapeutic focus needed to be used. Please tell us your basis for using these "other companies" and tell us if the valuations at

each date would have generated a significant difference if these companies were not used.

- Please revise your disclosure to clarify that an adjustment was made to the enterprise value indicated from the peer group by discounting the valuation at a risk-adjusted rate of return as provided in your response to the third bullet point. Further, indicate the risk-adjusted rate used at each valuation date and how the rate was determined.
  - Please tell us why it is appropriate to include the value of the FP-1039 collaboration with GSK-HGS and retained rest of world rights in determining your enterprise value.
  - Regarding your April 15, 2013 valuation, tell us why you did not exclude the companies with unusually high pre-money valuations.
2. We acknowledge your response to our prior comment 2. With regards to your explanation of the difference between the estimated offering price and the fair value of the latest equity issuance, your basis appears to rely heavily on the current market environment. Please provide proposed revised disclosures to clarify your “continued progress” in your preclinical and clinical product portfolios since June 30, 2013 and include any other relevant information regarding your business operations that would substantiate the significant increase from the fair value of the latest equity valuation to the estimated offering price.
3. We may have additional comments on your accounting for stock compensation and related disclosure once you have disclosed your final offering price. Please continue to disclose any equity issuances subsequent to the latest amendment and prior to effectiveness.

Novel Technologies to Produce and Screen the Library in High Throughput, page 82

4. We note your response to our prior comment 5 and your updated disclosure on page 88 regarding non-exclusive license agreements with BioWa, Inc. and Lonza Sales AG, the National Research Council of Canada, and the Board of Trustees of the Leland Stanford Junior University. In this regard, we also note your disclosure in the risk factor on page 29 that a loss of licenses related to these agreements could materially adversely affect development of your product candidates. For each of these license agreements, please disclose the following information:
- the amount of material payments including initial fees, milestone payments, royalties or other payments made to date or that may be required in the future;
  - the duration and termination provisions of the agreements; and
  - any additional material provisions.

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 the information the Securities Act of 1933 and

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all applicable Securities Act rules require. 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Sasha Parikh at (202) 551-3627 or Mary Mast at (202) 551-3613 if you have questions regarding comments on the financial statements and related matters. Please contact Austin Stephenson at (202) 551-3192 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler  
Assistant Director

cc: Via E-mail  
Jaime Chase, Esq.  
Hogan Lovells US LLP