



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 4720

May 16, 2016

Via E-mail

Mr. Marc L. Belsky  
Senior Vice President and Chief Financial Officer  
Five Prime Therapeutics Inc.  
Two Corporate Drive  
South San Francisco, CA 94080

**Re: Five Prime Therapeutics Inc.  
Form 10-K for the Year Ended December 31, 2015  
Filed March 11, 2016  
File No. 001-36070**

Dear Mr. Belsky:

We have limited our review of your filing to the financial statements and related disclosures and have the following comment. In our comment, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment within 10 business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments.

Notes to Financial Statements

9. Collaborative Research and Development Agreements

License and Collaboration Agreement, page F-18

1. Please provide us a full accounting analysis with reference to authoritative literature of the October 14, 2015 FPA008 collaboration agreement with BMS. Include in your analysis:
  - The basis for your accounting treatment of the November 21, 2014 superseded clinical trial collaboration agreement including your treatment of the \$30 million payment received in December 2014 upon entering into the October 14, 2015 FPA008 collaboration agreement.
  - Your consideration as to allocating arrangement consideration related to the October 14, 2015 agreement to the deliverables of the superseded clinical trial collaboration agreement that have an estimated performance period ending in 2019 and that appear to be included as part of the October 14, 2015 FPA008 collaboration agreement.

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- Your basis for apparently concluding that amounts of up to \$1.05 billion in development and regulatory milestone payments per anti-CSF1R product for oncology indications and up to \$340 million in development and regulatory milestone payments per anti-CSF1R product for non-oncology indications will not, when triggered, be subject to allocation of arrangement consideration.

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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comment, please provide a written 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 staff 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.

You may contact Jacob Luxenburg, Staff Accountant, at (202) 551-2339 if you have any questions regarding this comment. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg  
Senior Assistant Chief Accountant  
Office of Healthcare and Insurance