



DIVISION OF  
CORPORATION FINANCE

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

May 22, 2013

Via E-Mail

Jason Rhodes  
Executive Vice President and Chief Financial Officer  
Epizyme, Inc.  
400 Technology Square  
Cambridge, MA 02139

**Re: Epizyme, Inc.  
Amendment No. 3 to Registration Statement on Form S-1  
Filed May 21, 2013  
File No. 333-187982**

Dear Mr. Rhodes:

We have reviewed your amended registration statement and have the following 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.

1. Please refer to your response to our comment six. In order for us to further evaluate your response please address the following:
  - You state “For these reasons, the Company believes Celgene would not exercise an option to license an available target until the earlier of IND effectiveness or the end of the option period in order to mitigate, to the fullest extent possible in the circumstances, the risk associated with the available target.” However this appears to contradict your disclosure in the first paragraph on page F-22 which indicates that during the option period, Celgene has the right to exercise its option to non-U.S. rights to available targets until the effectiveness of an investigational new drug application. Please advise.
  - In the third paragraph on page F-22 you state that for the available targets, you must conduct and fully fund research and development activities through the option.

Please tell us what exactly your obligation is related to this statement and tell us why this is not a separate deliverable. In addition tell us how revenue is being recognized for these services.

- Confirm to us that the revenue related to the \$81.4 million allocated to the available target licenses and related research services is not be recognized until an option is exercised.

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 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.

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 Tabatha Akins at (202) 551-3658 or Joel Parker at (202) 551-3651 if you have questions regarding comments on the financial statements and related matters. Please contact Amy Reischauer at (202) 551-3793, Bryan Pitko at (202) 551-3203, or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Bryan J. Pitko for

Jeffrey P. Riedler  
Assistant Director

cc: Via E-Mail  
Rosemary Reilly  
Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, MA 02109