



DIVISION OF  
CORPORATION FINANCE

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

December 9, 2014

Via E-mail

Mr. Geoffrey M. Parker  
Executive Vice President and  
Chief Financial Officer  
Anacor Pharmaceuticals, Inc.  
1020 East Meadow Circle  
Palo Alto, CA 94303-4230

**Re: Anacor Pharmaceuticals, Inc.  
Form 10-K for the Fiscal Year Ended December 31, 2013  
Filed March 17, 2014  
File No. 001-34973**

Dear Mr. Parker:

We have reviewed your filing and have the following comments. In some of our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within 10 business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your response to our comments.

After reviewing the information you provide, we may have additional comments and/or request that you amend your filing.

Business

Intellectual Property, page 12

1. Please expand your disclosure regarding the material patents that relate to your product and product candidates to indicate when the most material patents with respect to each separate product or product candidate are expected to expire. Likewise, for the outstanding patent applications that relate to your product and product candidates, please provide the expected expiration dates of your U.S. and foreign patents if the applications are granted and identify the product or products to which they relate.

Notes to Financial Statements

Note 9. Redeemable Common Stock and Stockholders' Equity  
Potentially Redeemable Common Stock, page 118

2. Please provide us proposed disclosure to be included in future periodic reports indicating on the face of your balance sheet the potential redemption value at each balance sheet date. Refer to Rule 5-02.27(b) of Regulation S-X.

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 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 comments, 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 the 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 Senior Staff Accountants Sasha Parikh at (202) 551-3627 or Keira Nakada at (202) 551-3659 if you have any questions regarding the processing of your response as well as any questions regarding comment 2. You may contact Johnny Gharib, Staff Attorney, at (202) 551-3170 or Bryan Pitko, Special Counsel, at (202) 551-3203 if you have any questions regarding comment 1. 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