



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

DIVISION OF  
CORPORATION FINANCE

December 27, 2013

Via E-mail

William G. Kachioff  
Chief Financial Officer  
Biocept, Inc.  
5810 Nancy Ridge Drive  
San Diego, CA 92121

**Re: Biocept, Inc.  
Amended Registration Statement on Form S-1  
Filed December 17, 2013  
File No. 333-191323**

Dear Mr. Kachioff:

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.

Liquidity and Capital Resources, page 53

1. Please revise to clarify your current cash and cash equivalents as of the most recent practicable date. Additionally, please revise here and where appropriate to disclose the steps you have taken to manage your ongoing liquidity shortfall. For example, please revise to clarify the extent to which you have cut back operations or received additional funding or concessions such that you could avoid curtailing operations. We note, in this regard, that prior amendments stated that without the net proceeds from this offering you believed your current cash resources would be insufficient, and that if you did not consummate this offering by November 2013, you expected that you would need to raise additional financing later in the fourth quarter of 2013. Please revise accordingly.

Description of the Business, page 57

Patents and Technology, page 79

2. We note that you have removed your disclosure relating to “30 pending U.S. and foreign patent applications.” With a view to clarifying disclosure in the prospectus, please advise us why you deleted the statement regarding 30 pending applications.

Billing and Billing Codes for Third-party Payor Reimbursement, page 83

3. We note you have removed your statement that there is no specific CPT code applicable to the specific CTC testing you perform. If true, please revise to add back this statement or advise.

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.

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 Myra Moosariparambil at (202) 551-3796 or Tia Jenkins at (202) 551-3871 if you have questions regarding comments on the financial statements and related matters. Please contact Erin Wilson at 202-551-6047 or Jim Lopez at (202) 551-3536 with any other questions.

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December 27, 2013  
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Sincerely,

/s/ James Lopez (for)

John Reynolds  
Assistant Director

cc: Hayden J. Trubitt, Esq.  
Stradling, Yocca, Carlson & Rauth