

January 3, 2014

Securities and Exchange Commission
Division of Corporation Finance
Washington, DC 20549

Attn: John Reynolds
James Lopez
Erin Wilson
Myra Moosariparambil
Tia Jenkins

**Re: Biocept, Inc.
Registration Statement (Form S-1)
Filed September 23, 2013; Amendment No. 5 filed December 17, 2013
Registration No. 333-191323**

Ladies and Gentlemen:

We have received and reviewed, and we thank you for, the Staff's comment letter dated December 27, 2013. In addition, we thank you for, and have considered, the Staff's comments as communicated to us in a January 2, 2014 telephone conversation with a Staff member about our response letter of December 30, 2013.

Our revised response to Comment 1 of the Staff's comment letter dated December 27, 2013 is set forth below. We precede this response by repeating the Staff's letter's Comment 1.

The responses in our response letter of December 30, 2013 to Comment 2 and Comment 3 of the Staff's comment letter dated December 27, 2013 are incorporated herein by reference.

Liquidity and Capital Resources, page 53

1. STAFF'S COMMENT: 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.

REGISTRANT'S RESPONSE: We would propose to add, in an Amendment No. 6, the following new sentences at the beginning of the fourth paragraph on page 56 (the second paragraph of "Capital Resources and Expenditure Requirements") and as a replacement of the first paragraph of the "We will need to raise additional capital" risk factor on page 13:

“As of December 31, 2013, our cash and cash equivalents totaled approximately \$60,000. To continue as a going concern through February 2014, it will be necessary for us to raise additional bridge financing in January 2014 from our major shareholder, members of our board of directors and their affiliates, other accredited current investors and/or accredited new investors. We believe (although no assurance can be given) that we will be able to raise such additional bridge financing, when and as needed; during 2013 we continuously were seeking and successfully raising such bridge financing, when and as needed, and the prospect of the impending receipt of proceeds from this offering is expected to facilitate our efforts to raise additional bridge financing in January 2014. In the fourth quarter of 2013 we raised \$675,000 of bridge financing and drew down approximately an additional \$500,000 under our revolving line of credit from UBS Bank USA. As a result of raising such bridge financing and bank borrowing in the fourth quarter of 2013, it was not necessary for us to curtail, and we did not curtail, our operations.”

In addition, we would propose to change the third sentence of the first paragraph on page 57 to read in full as follows:

“During 2012, 2013 and this year to date, we are experiencing net cash outflows at our current level of operations of approximately \$2 million per quarter.”

If you have any questions or if we can be assistance in your review, please contact me, or Hayden Trubitt (htrubitt@sycr.com; (858) 926-3006) or Michael Brown (mbrown@sycr.com; (858) 926-3007), who are both with our counsel Stradling Yocca Carlson & Rauth.

Sincerely,

/s/ William G. Kachioff

William G. Kachioff
Chief Financial Officer

cc: Michael W. Nall, Chief Executive Officer, Biocept, Inc.
Hayden Trubitt, Esq.
Michael J. Brown, Esq.