

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

Mail Stop 4720

May 6, 2016

Via E-mail
Dr. Shai Yarkoni
Chief Executive Officer
Cellect Biomed Ltd.
23 Hata'as Street
Kfar Saba, Israel 44425

Re: Cellect Biomed Ltd.

Draft Registration Statement on Form F-1

Submitted April 8, 2016 CIK No. 0001671502

Dear Dr. Yarkoni:

We have reviewed your draft 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Prospectus Summary Business Overview, page 1

- 1. Please briefly define the term "combination product" as it applies to your Apotainer selection kits.
- 2. Please summarize the ApoGraft process where you introduce it on page 2, including the use of FasL to induce apoptosis and the use of apheresis, i.e. blood transfusions, to obtain donor cells.

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Our Strategy, page 2

3. We note your statement that your strategy includes achieving a "relatively quick validation" of your technology platform. Please explain what you mean by "relatively quick" by explaining your estimated timeframe and what you are comparing the validation process to when you are expecting it to be relatively quick.

Use of Proceeds, page 37

4. We note your statement that your offering proceeds will be used for "working capital expenditures and other general corporate purposes." Given your disclosures indicating that you do not generate any revenues and will need substantial additional financing to achieve your goals, it appears that your use of proceeds discussion should be expanded to quantify the proceeds from this offering that you intend to use to develop and commercialize your Cellect Inside technology platform and Apotainer collection kits including, but not limited to, research and development, manufacturing, preclinical experiments and preclinical trials. To the extent you expect the estimated funds will not be sufficient to complete one or more of the indicated uses, please explain your expected level of completion.

Business

Apotainer Selection Kit, page 62

- 5. In your disclosure, on the planned Phase I/II clinical trial please explain the "routine myeloablative procedures" to be used in cell transference.
- 6. Please state the material terms of the Joint Product Development Agreement with Entegris Inc., including duration, payment and termination provisions.

Raw Materials and Suppliers, page 65

7. Please identify your sole source supplier for FasL.

Other Comments

- 8. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.
- 9. Please confirm that the graphics included in your registration statement are the only graphics you will use in your prospectus. If those are not the only graphics, please provide any additional graphics prior to their use for our review.

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You may contact Keira Nakada at (202) 551-3659 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Scot Foley at (202) 551-383 or me at (202) 551-3675 with any other questions.

Sincerely,

/s/ Suzanne Hayes

Suzanne Hayes Assistant Director

cc: Oded Har-Even, Esq.

Zysman, Aharoni, Gayer and Sullivan & Worcester LLP

November 2015