

CELLECT BIOTECHNOLOGY LTD.  
23 Hata'as Street  
Kfar Saba, Israel 44425

July 27, 2016

Suzanne Hayes, Assistant Director  
Division of Corporation Finance  
United States Securities and Exchange Commission  
100 F Street, N.E.  
Washington, DC 20549-6010

Re: **Cellect Biotechnology Ltd. (the "Company")**  
**Amendments Nos. 1, 2 and 3 to Registration Statement on Form F-1**  
**Filed July 22, 2016, July 25, 2016 and July 26, 2016**  
**File No. 333-212432**

Dear Ms. Hayes:

The purpose of this letter is to respond to your letter of July 27, 2016, with respect to the above-captioned filing. Concurrently with this letter the Company is submitting an amendment to its Registration Statement on Form F-1 (the "Filing"). For ease of reference, the Company's responses are keyed to your comments (inserted in italicized font).

Amendment No. 1 filed July 22, 2016

Business  
Apotainer Selection Kit, page 66

1. *We note your response to comment 1 from our letter dated July 12, 2016 and the revisions made in response to our comment. Additionally, we note that the BIRD Foundation's website, the BIRD model calls for repayments of 5% of each dollar reported as sales revenue from sales of the product or subsequent products based on the technology developed in the project; 30% from extending licensing rights; or 50% of the revenue earned from the sale of the technology to a third party. Additionally, the website states that BIRD is entitled to repayments of up to 150% of the conditional grant. Please revise your disclosure to provide this additional information or tell us the basis of your belief that the BIRD Foundation will revise its program with respect to your grant.*

**Response to Comment 1:**

The Company has amended the disclosure on page 66 of the Filing with respect to the BIRD Foundation grant to provide the terms of the typical BIRD Foundation model.

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Amendment No. 2 filed July 25, 2016  
Dilution, page 43

2. *Please provide us your computation of \$3.90 pro forma net tangible book value per ADS, as adjusted to give effect to this offering.*

**Response to Comment 2:**

The Company has revised the pro forma net tangible book value per ADS, as adjusted to give effect to this offering, from \$3.90 to \$2.32 and has revised the disclosures contained on page 43 of the Filing.

Amendment No. 3 filed July 26, 2016  
Exhibit 5.1

3. *Please revise your legal opinion to provide an opinion with respect to the warrants.*

**Response to Comment 3:**

The Company has revised the legal opinion contained in Exhibit 5.1 to provide an opinion with respect to the warrants being included in the offering.

Please contact the undersigned at (+972) (9) 974-1444, or Oded Har-Even at (212) 660-5002 or Shy S. Baranov at (617) 338-2932, attorneys at Zysman, Aharoni, Gayer and Sullivan & Worcester LLP, the Company's U.S. counsel, if you have any questions or require additional information.

Respectfully,

**Collect Biotechnology Ltd.**

By: /s/ Dr. Shai Yarkoni  
Dr. Shai Yarkoni  
Chief Executive Officer

cc: Oded Har-Even, Esq.  
Shy S. Baranov, Esq.

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