

Cellect Biotechnology Ltd.  
23 Hata'as Street  
Kfar Saba, 44425, Israel

February 6, 2019

VIA EDGAR

Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, DC 20549

RE: Cellect Biotechnology Ltd. (CIK: 0001671502)  
Registration Statement No. 333-229083  
on Form F-1 (the "Registration Statement")

Ladies and Gentlemen:

Cellect Biotechnology Ltd. (the "Registrant") hereby requests acceleration of the effectiveness of the above-referenced Registration Statement pursuant to Rule 461 under the Securities Act of 1933, as amended (the "Securities Act"), so that it may become effective on Thursday, February 7, 2019, at 5:00 PM, Eastern Time, or as soon thereafter as is practicable.

The Registrant understands that the Commission will consider this request for acceleration of the effective date of the Registration Statement as a confirmation of the fact that the Registrant is aware of its responsibilities under the Securities Act as they relate to the proposed public offering of the securities specified in the Registration Statement.

Very truly yours,

CELLECT BIOTECHNOLOGY LTD.

By: /s/ Shai Yarkoni  
Shai Yarkoni, Chief Executive Officer