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

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of April 2020 (No. 4)

Commission File Number 001-37846

CELLECT BIOTECHNOLOGY LTD. (Translation of registrant's name into English)

23 Hata'as Street Kfar Saba, Israel 44425 (Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F ⊠ Form 40-F □

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): _____

The press release attached hereto as Exhibit 99.1 entitled "Cellect Biotechnology Continues to Achieve Milestones; Receives New Patent Allowance in Canada" is hereby incorporated by reference into the Registrant's Registration Statements on Form S-8 (Registration Nos. 333-214817, 333-220015, 333-225003 and 333-232230) and on Form F-3 (Registration No. 333-219614).

Exhibit No.	Description
99.1	Cellect Biotechnology Continues to Achieve Milestones; Receives New Patent Allowance in Canada

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: April 27, 2020

CELLECT BIOTECHNOLOGY, LTD.

By: /s/ Eyal Leibovitz

Eyal Leibovitz Chief Financial Officer

2



Cellect Biotechnology Continues to Achieve Milestones; Receives New Patent Allowance in Canada

Tel Aviv, Israel - April 27, 2020 – Cellect Biotechnology Ltd. (NASDAQ: "APOP"), a developer of innovative technology which enables the functional selection of stem cells, received an official communication from the Canadian Intellectual Property Office regarding its intention to grant Canadian Patent Application No. 2,866,358 for Apograft. Including this latest notification, the Company has 67 patent applications worldwide, of which 33 are issued/allowed patents.

"The Canada patent complements those we recently received in Australia and Israel, for the same claim," commented Dr. Shai Yarkoni, Chief Executive Officer. "I believe our level of success in the first few months of 2020 demonstrates our continued commitment to protect our innovation, plus the significance of today's achievement cannot be underestimated since we now have global coverage for our main patent, following the allowances in the other key markets, such as the US, EU and China. The global coverage allows us to continue building our strong portfolio where we continue protecting the methods of use, manufacturing and specific applications of our technology."

The Company has previously published third-party data demonstrating improved "stemness" of stem cells through use of the Company's technology. Specifically, the data shows that the Company's technology significantly improves both proliferation and functional capabilities of hematopoietic (HSC) and mesenchymal (MSC) stem cells originating from bone marrow, peripheral blood, umbilical cord and adipose tissue.

The patent covers a device and a kit adapted for selection of cells that are resistant to receptor-mediated apoptosis and a method for using the device and kit. The device enables simultaneous positive selection for both stem-cells and immune cells which support engraftment and negative selection for immune cells which induce graft versus host disease (GvHD). The device is designed as a closed compartment for cell selection in a simplified setting resulting in a safer, more efficacious and affordable solution that currently do not exist. The Company's patent applications for this technology discloses additional uses for the device.

The Company is also assessing implementation of the Apograft process in approved medical devices. Upon completion of the comparability assessment, we intend to move into strategic collaborations with companies already selling these devices.

About Cellect Biotechnology Ltd.

Cellect Biotechnology (APOP) has developed a breakthrough technology, for the selection of stem cells from any given tissue, that aims to improve a variety of stem cell-based therapies.

The Company's technology is expected to provide researchers, clinical community and pharma companies with the tools to rapidly isolate stem cells in quantity and quality allowing stem cell-based treatments and procedures in a wide variety of applications in regenerative medicine. The Company's current clinical trial is aimed at bone marrow transplantations in cancer treatment.

WWW.CELLECTBIO.COM

ENABLING STEM CELLS



Forward Looking Statements

This press release contains forward-looking statements about the Company's expectations, beliefs and intentions. Forward-looking statements can be identified by the use of forward-looking words such as "believe", "expect", "intend", "plan", "may", "should", "could", "might", "seek", "target", "will", "project", "forecast", "continue" or "anticipate" or their negatives or variations of these words or other comparable words or by the fact that these statements do not relate strictly to historical matters. These forward-looking statements and their implications are based on the current expectations of the management of the Company only and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. In addition, historical results or conclusions from scientific research and clinical studies do not guarantee that future results would suggest similar conclusions or that historical results referred to herein would be interpreted similarly in light of additional research or otherwise. The following factors, among others, could cause actual results to differ materially from those described in the forward-looking statements: the Company's history of losses and needs for additional capital to fund its operations and its inability to obtain additional capital on acceptable terms, or at all; the Company's ability to continue as a going concern; uncertainties of cash flows and inability to meet working capital needs; the Company's ability to obtain regulatory approvals; the Company's ability to obtain favorable pre-clinical and clinical trial results; the Company's technology may not be validated and its methods may not be accepted by the scientific community; difficulties enrolling patients in the Company's clinical trials; the ability to timely source adequate supply of FasL; risks resulting from unforeseen side effects; the Company's ability to establish and maintain strategic partnerships and other corporate collaborations; the scope of protection the Company is able to establish and maintain for intellectual property rights and its ability to operate its business without infringing the intellectual property rights of others; competitive companies, technologies and the Company's industry; unforeseen scientific difficulties may develop with the Company's technology; and the Company's ability to retain or attract key employees whose knowledge is essential to the development of its products. Any forward-looking statement in this press release speaks only as of the date of this press release. The Company undertakes no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by any applicable securities laws. More detailed information about the risks and uncertainties affecting the Company is contained under the heading "Risk Factors" in Cellect Biotechnology Ltd.'s Annual Report on Form 20-F for the fiscal year ended December 31, 2019 filed with the U.S. Securities and Exchange Commission, or SEC, which is available on the SEC's website, www.sec.gov, and in the Company's periodic filings with the SEC.

Contact

Cellect Biotechnology Ltd. Eyal Leibovitz, Chief Financial Officer www.cellect.co +972-9-974-1444

Or

EVC Group LLC Michael Polyviou (732) 933-2754 mpolyviou@evcgroup.com

WWW.CELLECTBIO.COM

ENABLING STEM CELLS