UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 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 July 2018
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 office)

Indicate by check mark whether the registrant files or will file annual reports under cover of 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 Regulations S-T Rule 101(b)(1): ☐

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

This Form 6-K (other than Exhibit 99.1) is incorporated by reference into the registrant's Registration Statements on Form S-8 (Registration No. 333-214817 and 333-220015) and on Form F-3 (Registration No. 333-219614 and 333-212432).

On July 9, 2018, Cellect Biotherapeutics Ltd. (the “Company”), a wholly owned subsidiary of Cellect Biotechnology Ltd. (“Cellect”), entered into a Strategic Manufacturing and Supply Agreement (the “Agreement’) with Swiss Biotech Center SA (“SBC”). Under the Agreement, the Company retained SBC as manufacturer of the FasL protein – the main active ingredient in Cellect’s ApoGraft process and Apotainer selection kit.

According to the Agreement, SBC granted to the Company exclusivity to the FasL protein developed by SBC for a period of five years, subject to early termination of the exclusivity under certain conditions. The Agreement provides for the production of clinical batches of the FasL protein in quantity and quality as shall be set forth in separate terms. Under the Agreement, Cellect agreed to pay SBC an upfront payment of approximately $150,000 plus up to a further $300,000 upon the meeting of certain conditions.

The Agreement has a term of ten years and may be extended by mutual written agreement for an additional term. The Agreement contains customary early termination provisions and additionally may be early terminated by the Company if regulatory approval is not obtained or SBC is unable to establish the requisite manufacturing process under the Agreement. The Agreement contains representations, warranties and indemnification that are customary to commercial agreements of this nature.

Attached hereto as Exhibit 99.1 and incorporated by reference herein is a press release issued by the Registrant entitled “Cellect Signed Strategic Agreement with Swiss Biotech Center (SBC).”

Exhibit

99.1	Press Release, dated July 9, 2018

SIGNATURES

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.

Cellect Biotechnology Ltd.

By: /s/ Eyal Leibovitz
Name: Eyal Leibovitz
Title: Chief Financial Officer

Date: July 9, 2018

Exhibit 99.1

Cellect Signed Strategic Agreement
with Swiss Biotech Center (SBC)

Agreement secures exclusive clinical production capacity of the main active ingredient in Cellect's ApoGraft™

Dr. Shai Yarkoni, Cellect CEO commented:
"This partnership with SBC is a major achievement for Cellect in securing the production and flow of our key ingredient for US based clinical trials and collaborations with clinical centers."

Tel Aviv, Israel – July 9th, 2018 – Cellect Biotechnology Ltd. (Nasdaq: APOP), a developer of a novel stem cell production technology, announced that it has entered into a strategic manufacturing and supply agreement with Swiss Biotech Center (SBC) to secure production of FasL protein - Cellect's main active ingredient in ApoGraft™ and the line of Apotainer™.

According to the agreement, SBC grants to Cellect exclusivity to the FasL protein developed by SBC for a period of five years. The agreement further provides for the production of clinical batches of the FasL protein for Cellect's planned US clinical trials. Cellect and SBC contemplate expanding production capacity to meet future needs including marketing and collaborations with licensors of Cellect technology.

The FasL protein is a key active ingredient in Cellect's product line and technology for cell separation and functional selection of stem cells. As Cellect advances in its product development, it becomes essential to secure a consistent and reliable supply of pharma-grade FasL. Production of large quantities of clinical grade material is currently the gating item for initiating US based clinical trials.

Dr. Shai Yarkoni, Cellect CEO comments: "We are getting ready to support many clinical trials and collaborations using the Apograft containing FasL. This agreement supports Cellect's mission statement of enabling a multi-billion global market over the next 5 years while positioning Cellect towards potentially meeting commercial demand for millions of patients worldwide in need of stem cell therapy, as well as providing raw materials for stem cells research centers and the biobanking industry."

About Swiss Biotech Center (SBC)

Swiss Biotech Center (SBC) offers services and a dedicated environment for the development and manufacturing of innovative drugs such as biologics or Advanced Therapy Medicinal Products (ATMP) by gathering all the competences, internally or externally, infrastructures and technologies. Positioned as a solutions provider aiming at delivering high quality drugs for saving lifes, SBC is highly oriented towards boosting value creation by accelerating the path to clinical development.

About Regenerative Medicine and Cell Therapy

Regenerative medicine is a novel approach using cells and tissues to replace or regenerate human cells, tissues or organs in a wide variety of medical indications. This could be achieved by either stimulating the body to use its own repair mechanisms to heal tissues or organs, or by growing tissues and organs in the laboratory and transplanting them into the patient.

Stem cells play a major role in the achievement of the extraordinary potential results in regenerative medicine. In cell therapies they can be injected to reconstitute the entire blood system in bone marrow transplantations. Alternatively, their injection can supply the necessary biologically active molecules to induce the patients' own cells to regain normal function, as used in immunomodulation therapy. In tissue engineering, where entire organs like the retina, bone, cartilage or the skin may be replaced, stem cells are the starting material for the growth of such tissues in the laboratory. Moreover, in tissue engineering an artificial system might be created by inducing cells to perform certain biochemical functions lost due to disease (e.g., artificial pancreas or liver).

Regenerative medicine using cellular therapy in combination with new technologies like tissue engineering and gene transfer can be used in a virtually unlimited number of indications. The most frequently used cells are hematopoietic stem cells (HSC) due to their capability to reproduce the entire blood system in blood cancer and hematological disorders. Mesenchymal stem cells, which have the capability to differentiate to a large number of tissue types like bone, cartilage, fat, heart muscle and more, are of growing importance. Potential applications of cell therapies include treating cancers, autoimmune disease, urinary problems and infectious disease, rebuilding damaged cartilage in joints, repairing spinal cord injuries, improving a weakened immune system, and helping patients with neurological disorders.

About Cellect Biotechnology Ltd.

Cellect Biotechnology (NASDAQ: 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 research, hospitals 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.

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. For example, forward-looking statements are used in this press release when we discuss Cellect's intent regarding future production capacity. 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, 2017 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

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