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 March 2021 (No. 2)

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):

On March 29, 2021, Cellect Biotechnology Ltd. (the "Company") issued a press release entitled "Cellect Biotechnology Reports Fourth Quarter and Full Year 2020 Financial and Operating Results."

The text appearing under the heading "Fourth Quarter and Full Year 2020 Financial Results" and the accompanying financial statements included in Exhibit 99.1 to this Form 6-K are 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 Nos. 333-219614 and 333-229083).

Exhibit No.	Description
99.1	Cellect Biotechnology Reports Fourth Quarter and Full Year 2020 Financial and Operating Results

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: March 29, 2021

CELLECT BIOTECHNOLOGY, LTD.

By: /s/ Eyal Leibovitz

Eyal Leibovitz Chief Financial Officer

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Cellect Biotechnology Reports Fourth Quarter and Full Year 2020 Financial and Operating Results

Tel Aviv, Israel March 28, 2021 – Cellect Biotechnology Ltd. (NASDAQ: "APOP"), a developer of innovative technology that enables the functional selection of stem cells, today reported financial and operating results for the fourth quarter and full year ended December 31, 2020 and provided a corporate update.

On March 24, the Company announced a strategic merger agreement with privately held Quoin Pharmaceuticals, a U.S. based specialty pharmaceutical company focused on rare and orphan diseases. Under the terms of the merger agreement, Quoin has secured \$25 million in committed funding from a highly regarded, institutional healthcare investor. Current Cellect shareholders will retain approximately 25% of the combined shares before investment. The merger is expected to close by the end of the second quarter of 2021. Cellect has also signed an agreement to sell its wholly-owned subsidiary company, Cellect Biotherapeutics, to EnCellX, Inc. - a newly founded biotechnology company based in San-Diego, CA. - to continue the development of Cellect's products.

Recent Clinical Highlights

- Due to the COVID-19 pandemic and the Company decision to shift attention and resources to the U.S. Phase I clinical trial, which is expected to enroll the first patient soon, the Company has elected to close the Phase 1/2 clinical trial being performed in Israel earlier than expected, since recruitment of the 12th and final patient was not assured in a timely manner.
- To date, Data from the open label Israel Phase 1/2 clinical trial supports the Company's optimism as it extends its clinical program to the U.S. The Company expects to publish the top line results of the Israel trial in Q2.

"Concurrent with our plans to seek strategic alternatives to maximize shareholder value, we also remained focus on advancing our clinical interests in the U.S." commented Dr. Shai Yarkoni, Chief Executive Officer. "We have signed a compelling business proposition with Quoin and a privately-held U.S. biotechnology company that allows our current shareholders to benefit from Quoin's promising technology and the fruits of continued progress of our clinical programs as they reach critical inflections points through the issuance of contingent value rights to our shareholders in connection with the sale of Cellect Biotherapeutics."

Fourth Quarter and Full Year 2020 Financial Results:

- Research and development (R&D) expenses for the fourth quarter and for the full year of 2020 were \$0.53 million and \$1.83 million respectively, compared to \$0.80 million in the fourth quarter of 2019 and \$3.77 million for the full year of 2019. The decrease in R&D expenses for the full year of 2020 as compared to the full year of 2019 resulted from the reduction in our research and development activities, as we decreased the number of our employees engaged in research and related activities.
- General and administrative (G&A) expenses for the fourth quarter and for the full year of 2020 were \$0.67 million and \$2.52 million respectively, compared to \$0.74 million in the fourth quarter of 2019 and \$3.18 million for the full year of 2019. The decrease in G&A expenses for the full year of 2020 as compared to the full year of 2019 resulted from the reduction in the company activities resulting from a decrease in the number of employees.

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- Finance expenses for the fourth quarter of 2020 were \$0.38 million, and financial expenses were \$1.27 million for the full year of 2020, compared to finance expenses of \$0.35 million in the fourth quarter of 2019 and financial income of \$1.72 million for the full year of 2019, respectively. The financial expenses in the full year of 2020 as compared to the financial income in the full year of 2019 is primarily due to the change in the fair value of the listed warrants granted in our U.S. initial public offering in 2016 and of the unregistered warrants granted in our registered direct offerings in 2019.
- Total Comprehensive loss for the fourth quarter and for the full year of 2020 was \$1.58 million and \$5.62 million respectively, or \$0.004 per share for the fourth quarter and \$0.015 per share for the full year of 2020, respectively, compared to \$1.89 million, or \$0.008 per share, in the fourth quarter of 2019 and \$5.23 million, or \$0.025 per share, for the full year of 2019.

* For the convenience of the reader, the amounts above have been translated from NIS into U.S. dollars, at the representative rate of exchange on December 31, 2020 (U.S. \$1 = NIS 3.215).

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 cell-based therapies.

The Company's technology is expected to provide researchers, clinicians and pharmaceutical companies with the tools to rapidly isolate specific cells in quantity and quality, allowing 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. 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; or maintain its current operations; uncertainties involving any strategic transaction the Company may decide to enter into as the result of its current efforts to explore new strategic alternatives; 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, 2020 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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Or

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Cellect Biotechnology Ltd Consolidated Statement of Operation

	Convenience translation Twelve months ended December 31,	Twelve months ended December 31,		Three months ended December 31,	
	2020	2020	2019	2020	2019
	Unaudited U.S. dollars	Audited	Audited	Unaudited	Unaudited
	U.S. donars	(In thousands, e	xcept share and p	-	
		(III tilousuilus, c.	seept shure and p	er shure dutu)	
Research and development expenses	1,830	5,883	12,122	1,693	2,571
Conversional a desiration and a second	0.500	0.111	10 010	0.465	0.050
General and administrative expenses	2,523	8,111	10,210	2,167	2,378
Operating loss	4,353	13,994	22,332	3,860	4,949
Financial expenses (income) due to warrants exercisable into ADS	846	2,721	(7,022)	4	998
AD3	040	2,721	(7,022)	4	990
Other financial expenses (income), net	424	1,362	1,498	1,224	129
Total comprehensive loss	5,623	18,077	16,808	5,088	6,076
Loss per share:					
Basic and diluted loss per share	0.015	0.049	0.079	0.013	0.027
Weighted average number of shares outstanding used to					
compute basic and diluted loss per share	368,078,786	368,078,786	212,642,505	390,949,079	224,087,799
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Cellect Biotechnology Ltd Consolidated Balance Sheet Data

	Convenience translation December 31, 2020	December 31, 2020 Audited	December 31, 2019 Audited	
	Unudited			
	U.S. dollars	N		
	(In thousa	ands, except share	e and per	
ASSETS		share data)		
CURRENT ASSETS: Cash and cash equivalents	5,277	16,964	18,106	
Other receivables	88	284	469	
		204	409	
	5,365	17,248	18,575	
NON-CURRENT ASSETS:				
Restricted cash	100	322	328	
Right of use - Assets under operating lease	219	705	1,035	
Other long-term assets	22	72	94	
Property, plant and equipment, net	384	1,232	1,288	
	725	2,331	2,745	
	720	2,001	2,740	
	6,090	19,579	21,320	
LIABILITIES AND				
SHAREHOLDERS' EQUITY				
CURRENT LIABILITIES:	101	200	150	
Trade payables Leases liabilities	121 115	389 369	158	
			396	
Other payables	693 929	2,228 2,986	3,080	
	929	2,986	3,634	
NON-CURRENT LIABILITIES:	200	1 000	0.170	
Warrants to ADS	380	1,222	2,172	
Leases liabilities	122	391	677	
	502	1,613	2,849	
EQUITY:				
Ordinary shares of no par value: Authorized: 500,000,000 shares at December 31, 2019 and December 31 2020; Issued and outstanding: 224,087,799*) and 390,949,079*) shares as of December 31, 2019 and December				
31, 2020, respectively.	-	-	-	
Additional Paid In Capital	39,452	126,838	108,598	
Share-based payments	5,135	16,508	16,528	
Treasury shares Accumulated deficit	(2,932)	(9,425)	(9,425)	
	(36,996)	(118,941)	(100,864)	
	4,659	14,980	14,837	
	6,090	19,579	21,320	

*) Net of 2,641,693 treasury shares of the Company held by the Company.

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Cellect Biotechnology Ltd Consolidated Cash Flow Data

	Convenience translation Twelve months ended December 31,	Twelve months ended December 31,		Three months ended December 31,	
	2020	2020	2019	2020	2019
	Unaudited	Audited	Audited	Unaudited	Unaudited
	U.S. dollars		NIS		
	eto: donaro		(In thous		
Cash flows from operating activities:			(in thous	undo)	
Total comprehensive loss	(5,623)	(18,077)	(16,808)	(5,088)	(6,076)
Adjustments to reconcile net loss to net cash used in operating activities:					
Exchange rate difference	(412)	(1,326)	1,036	(1,115)	(50)
Loss (gain) from revaluation of financial assets presented at fair value through profit and loss	-	-	-	-	(8)
Depreciation of Right of use - Assets under operating lease	115	369	433	97	(24)
Depreciation	109	350	373	94	88
Finance expenses	27	88	128	40	128
Issuance expenses	-	-	1,621	-	1,621
Changes in fair value of traded and non traded warrants to ADS	847	2,722	(8,643)	4	708
Share-based payment	229	738	2,708	262	807
Decrease (increase) in other receivables	65	207	385	417	239
Increase (decrease) in other payables	(193)	(621)	(1,663)	528	192
Interest received	20	64	93	8	168
Net cash used in operating activities	(4,816)	(15,486)	(20,337)	(4,753)	(2,207)
Cash flows from investing activities:					
Restricted deposit, net	2	6	9	7	9
Proceeds received from the sale of fixed assets	11	35	6	-	6
(Purchase) Sales of marketable securities measured at fair					
value through profit and loss	-	-	-	-	-
Purchase of property, plant and equipment	(103)	(329)	(123)	(170)	(3)
Net cash provided by investing activities	(90)	(288)	(108)	(163)	12
Cash flows from financing activities:					
Exercise of warrants and stock options into shares	1,435	4,615	-	-	-
Repayment on account of lease liabilities	(137)	(441)	(522)	(117)	(101)
Issue of share capital and warrants, net of issue costs	2,860	9,194	22,393	-	(1,330)
Net cash provided (used) by financing activities	4,158	13,368	21,871	(117)	(1,431)
Exchange differences on balances of cash and cash					
equivalents	393	1,264	(1,129)	1,108	(117)
Increase (decrease) in cash and cash equivalents	(355)	(1,142)	297	(3,925)	(3,743)
Balance of cash and cash equivalents at the beginning of the period	5,632	18,106	17,809	20,889	21,849
Balance of cash and cash equivalents at the end of the					
period	5,277	16,964	18,106	16,964	18,106
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