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

Date of Report: August 3, 2023

Commission File Number: 001-36891

Cellectis S.A. (Exact Name of registrant as specified in its charter)

8, rue de la Croix Jarry 75013 Paris, France +33 1 81 69 16 00 (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 [X] Form 40-F []

EXHIBIT INDEX

Exhibit Title

99.1 Press release, dated August 3, 2023

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.

Cellectis S.A. (Registrant)

Date: August 3, 2023

/s/ André Choulika André Choulika Chief Executive Officer

Cellectis Provides Business Updates and Preliminary Financial Results for Second Quarter 2023

- Updated clinical & translational data on BALLI-01 trial (evaluating UCART22 in r/r B-cell ALL) presented at the EHA annual meeting
 - Clinical trials ongoing: BALLI-01 (evaluating UCART22), NATHALI-01 (evaluating UCART20x22) and AMELI-01 (evaluating UCART123) studies for patients with r/r B-cell ALL, r/r B-cell NHL and r/r AML, respectively
 - Preclinical data presented on HBB gene correction of sickle cell mutation & TALE Base Editors (TALE-BE) at ISCT 2023 annual event
 - Appointment of Cécile Chartier, Ph.D., as Director to Cellectis' Board of Directors
 - Cash position of \$89 million as of June 30, 2023. Cash runway into Q3 2024
 - Full financial statements for the second quarter of 2023 will be released in the coming days
 - Conference call scheduled for 8AM ET/2PM CET on August 4, 2023

NEW YORK, Aug. 03, 2023 (GLOBE NEWSWIRE) -- Cellectis (the "Company") (Euronext Growth: ALCLS - NASDAQ: CLLS), a clinical-stage biotechnology company using its pioneering gene-editing platform to develop life-saving cell and gene therapies, today provided business updates and preliminary financial results for the six-month period ending June 30, 2023. Full report of the financial results for the second quarter of 2023 will be released in the coming days.

"We are proud of our team and the strong execution this quarter. Our clinical data presented for UCART22 at the European Hematology Association (EHA) were positive for patients with r/r B-ALL who have failed multiple lines of treatment including multi-agent chemoimmunotherapy, CD19 directed CAR T-cell therapy, and allogeneic stem cell transplant. We are looking forward to releasing new data later this year on our UCART22 product candidate manufactured in-house," said André Choulika, Ph.D., Chief Executive Officer at Cellectis.

"In addition, we have made progress with our pipeline in 2023 and continue to focus on our core clinical trials BALLI-01 (evaluating UCART22), NATHALI-01 (evaluating UCART20x22) and AMELI-01 (evaluating UCART123). This quarter, Cellectis presented an encore of the clinical data on the AMELI-01 clinical trial at the American Society of Gene and Cell Therapy (ASGCT) 2023 annual meeting. These preliminary data support the continued administration of UCART123 after FCA lymphodepletion in patients with r/r AML.

Cellectis' innovation team also presented preclinical data on a gene editing process to develop a *bona fide* HBB gene correction of sickle cell mutation, and a comprehensive analysis to better design efficient TALE Base Editors (TALE-BE) at the International Society for Cell and Gene Therapy (ISCT) 2023 annual meeting. These achievements showcase once more the power of our gene-editing platform and our TALEN®, the technology of choice for therapeutic gene editing, and that we are continuing to deliver constant breakthrough innovation to treat diseases with unmet medical needs.

Despite an unprecedented challenging market environment for cell and gene therapy companies, Cellectis remains focused in its mission to develop innovative cancer therapy product candidates."

Pipeline Highlights

UCART Clinical Development Programs

$BALLI-01 \ (evaluating \ UCART22) \ in \ relapsed \ or \ refractory \ B-cell \ acute \ lymphoblastic \ leukemia \ (r/r \ B-ALL)$

- UCART22 is an allogeneic CAR T-cell product candidate targeting CD22 and is being evaluated in patients with r/r B-ALL in the BALLI-01 Phase 1/2a clinical study.
- On June 9, Cellectis presented updated clinical and translational data at the European Hematology Association (EHA). These data support the preliminary safety and efficacy of UCART22 in a heavily pretreated r/r B-ALL population. UCART22 is currently the most advanced allogeneic CAR T-cell product in development for r/r B-ALL.
- In the poster presented at EHA, Cellectis included data from patients who received UCART22 after fludarabine, cyclophosphamide (FC) and FC with alemtuzumab (FCA) lymphodepletion (LD). Compared to the clinical update on BALLI-01 at ASH 2021, we have included data from six additional patients who received UCART22 at dose level 3 (DL3), as of the December 31, 2022 data cutoff.
- UCART22 administered after FC or FCA LD regimen was well tolerated. No dose limiting toxicities (DLTs) nor immune effector cell-associated neurotoxicity syndrome (ICANS) were observed.

- For FCA-dose level 3, 50% of the six patients responded. Host lymphocytes remained suppressed through Day 28 for all patients who received FCA LD. Peak ferritin levels correlated with UCART22 cell expansion and cytokine release syndrome (CRS). UCART22 continues to be well tolerated, with no treatment emergent serious adverse events (TESAEs) or DLTs reported. UCART22 cell expansion was detected in 9 of 13 patients in the FCA LD arm and associated with clinical activity.
- The BALLI-01 study is currently enrolling patients after FCA LD with Cellectis' in-house manufactured product. The next data set is expected to be released later this year.

NATHALI-01 (evaluating UCART20x22) in relapsed or refractory B-cell non-Hodgkin lymphoma (r/r B-NHL)

- UCART20x22 is Cellectis' first dual allogeneic CAR T-cell product candidate targeting both CD20 and CD22 and is being evaluated in patients with r/r B-NHL in the NATHALI-01 Phase 1/2a clinical study².
- The NATHALI-01 clinical study is ongoing. Cellectis expects to provide first-in-human data later this year. **AMELI-01** (evaluating UCART123) in relapsed or refractory acute myeloid leukemia (r/r AML)
- UCART123 is an allogeneic CAR T-cell product candidate targeting CD123 and is being evaluated in patients with r/r AML in the AMELI-01 Phase 1 dose-escalation clinical study.
- On May 17, Cellectis presented an encore of the clinical data on the AMELI-01 clinical trial that were unveiled at the ASH 2022 annual meeting, at the American Society of Gene and Cell Therapy (ASGCT) 2023 annual meeting. These preliminary data support the continued administration of UCART123 after FCA lymphodepletion in patients with r/r AML.
- The oral presentation reviewed preliminary data from patients who received UCART123 at one of the following dose levels: dose level 1 (DL1) 2.5x10⁵ cells/kg; dose level 2 (DL2) 6.25x10⁵ cells/kg; intermediate dose level 2 (DL2i) 1.5x10⁶ cells/kg; or dose level 3 (DL3) 3.30x10⁶ cells/kg after lymphodepletion with FC ([n=8], DL1 DL3) or FCA ([n=9], DL2 & DL2i).
- The data presented showed that adding alemtuzumab to the FC LD regimen was associated with sustained host lymphodepletion and significantly higher UCART123 cell expansion, that correlated with improved anti-tumor activity.
- 25% (n=2) of patients at DL2 in the FCA arm achieved meaningful response; one patient who failed five prior lines of therapy including allogeneic stem cell transplant experienced a durable minimal residual disease (MRD)-negative complete response that continued beyond 12 months, as of December 2022.
- The AMELI-01 study is currently enrolling patients after FCA lymphodepletion in a two-dose regimen arm.

Research Data & Preclinical Programs

UCART20x22

- On June 5, 2023, Cellectis presented preclinical data on its product candidate UCART20x22, at the International Society for Cell & Gene Therapy (ISCT) 2023 annual event.
- Cellectis provided pre-clinical proof-of-concept data for UCART20x22 to overcome current mechanisms of resistance to CAR T-cell therapies in B-NHL, while providing a potential therapeutic alternative to CD19 targeting and allowing a reduction in the time from treatment decision to infusion.
- Cellectis demonstrated that UCART20x22 displays robust activity *in vitro* and *in vivo*, against targets expressing heterogeneous levels of CD22 and CD20. We have used *in vitro* cytotoxicity assays against different tumor cell lines, showing strong activity whether these cells express a single antigen (CD20 or CD22) or both antigens simultaneously, as well as IFNg release in response to antigen specific stimulation.

Article published in Cancer Immunology Research

- On May 31, 2023, Cellectis published an article in Cancer Immunology Research demonstrating pre-clinical proof-of-concept data of UCART20x22 product candidate, to overcome current mechanisms of resistance to CAR T-cell therapies in B-NHL.
- In this study, we demonstrated that allogeneic CD20x22 CAR T-cells exhibit robust, sustained and dose-dependent activity *in vitro* and *in vivo*, while efficiently targeting primary Non-Hodgkin Lymphoma samples with heterogeneous levels of CD20 and CD22.

HBB gene correction of sickle cell mutation

• Encouraging preclinical data on gene editing process using Cellectis TALEN® technology to develop highly efficient HBB gene correction of sickle cell mutation, were presented in a poster presentation at the ISCT 2023 annual event.

- These results showed that non-viral DNA delivery associated with TALEN® gene editing reduces the toxicity usually
 observed with viral DNA delivery and allows high levels of HBB gene correction in long-term repopulating hematopoietic
 stem cells.
- Cellectis leveraged TALEN® technology to develop a gene editing process leading to highly efficient HBB gene correction via homology directed repair, while mitigating potential risks associated to HBB gene knock-out. Furthermore, we compared viral (TALEN-V) and non-viral (TALEN-NV) DNA template delivery strategies in mobilized healthy donor (HD) or non-mobilized homozygous sickle patient (HbSS) hematopoietic stem and progenitor cells (HSPCs).
- Both strategies led to high and comparable efficiencies of HBB gene correction *in vitro* in HD and HbSS, without affecting viability, purity or clonogenic potential of corrected HSPCs.

The poster presentation highlighted the following data:

- TALEN®-mediated engineering efficiently corrects the mutated HBB gene in clinically relevant HSPCs and promote phenotype correction in fully mature RBCs.
- Cellectis optimized TALEN® gene editing process mitigates potential safety challenges by reducing the frequency of HBB gene inactivation (<10% β-thal cells).
- Non-viral DNA template-mediated HBB repair mitigates p53 DNA damage response activation, preserves edited LT-HSCs fitness and enables their efficient engraftment in vivo using an immunodeficient murine model.

TALE Base Editors (TALE-BE)

- A comprehensive analysis to better design efficient TALE Base Editors (TALE-BE) using Cellectis' TALEN® technology was presented in a poster at ISCT annual meeting.
- Cellectis developed a strategy that allowed to comprehensively characterize editing efficiencies in function of the TC position within the TALE-BE editing windows. This method is specifically taking advantage of the highly precise and efficient TALEN® mediated ssODN knock-in in primary T cells, allowing to focus on how target composition and spacer variations can affect TALE-BE activity/efficiency.

The poster presentation highlighted the following data:

- Determined optimal spacer length (13/15 bp) for highly efficient TALE-BE for both C40/C40 and C11/C11 scaffolds.
- Determined optimal common sequence context for high editing rates.
- Determined that editing efficiency of the C11/C11 scaffold is highly dependent on Cytosine position requirements, resulting in more stringent activity in a context of 15 bp spacer size and decreasing the effects of bystander editing.

We believe that the knowledge obtained will allow to better design efficient TALE-BE while improving the specificity profiles of this innovative editing platform.

Novel treatment paradigm for successful CAR T immunotherapy against stroma-rich solid tumors

- On May 12, 2023, Cellectis published an article in Frontiers Bioengineering demonstrating the efficacy of its TALEN® engineered FAP UCART-cells in cancer-associated fibroblast (CAF) depletion, reduction of desmoplasia and tumor infiltration.
- Over 90% of epithelial cancers including breast, colorectal, pancreatic and lung adenocarcinomas express the CAF-specific surface marker, fibroblast activation protein α (FAP), which makes it a promising CAR T-cell target. In this study, Cellectis proposed a novel and versatile approach of combination CAR T-cell therapy that can be extended to most stroma-rich cold tumors with relevant tumor-antigen targeting CAR T-cells which otherwise are recalcitrant to cell therapy.

Preclinical data showed that:

- In a mouse xenograft model, successful implantation of injected CAFs in the tumors was confirmed by positive staining of spindle-like cells with human-specific FAP antibody, recapitulating a physiologically relevant TNBC tumor with tumor and stromal compartments.
- FAP UCART-cells alone significantly reduced tumor growth.
- In vitro and in vivo results show that FAP UCART-cells enable the reprogramming of the cold, stroma-rich triple negative breast cancer (TNBC) TME, making the tumor susceptible to subsequent Meso UCART infiltration and cytotoxicity and improving the overall antitumor activity of the treatment.
- In the context of combination therapy with anti-PD1 checkpoint inhibitor, maximal anti-tumor activity and survival benefits were observed upon FAP UCART-cell treatment followed by Meso UCART-cell treatment.

Licensed Allogeneic CAR T-cell Development Programs

Servier and Allogene: anti-CD19 programs

- Allogene announced that it is enrolling patients "in the industry's first potentially pivotal Phase 2 allogeneic CAR T clinical trial with ALLO-501A across sites in the United States and Canada". The European Medicines Agency (EMA) recently approved the ALPHA2 Clinical Trial Application (CTA).
- Allogene's single-arm ALPHA2 trial in relapsed/refractory (R/R) large B cell lymphoma (LBCL) will enroll approximately
 100 patients who have received at least two prior lines of therapy and have not received prior anti-CD19 therapy. Allogene
 has announced that it expects to complete enrollment in 1H 2024 with the first data readout by the end of 2024.
- Long-term follow up data from the Phase 1 of Allogene's ALPHA/ALPHA2 trials in LBCL was presented at both the American Society of Clinical Oncology (ASCO) Annual Meeting with an encore presentation at the European Hematology Association Congress and International Conference on Malignant Lymphoma (ICML) Lugano in June 2023. The Phase 1 trials enrolled heavily pre-treated patients with a median of three prior lines of therapy. Data from 33 CAR T-naïve LBCL patients receiving Alloy™ cell product including 12 patients treated with the Phase 2 regimen, are the first to demonstrate the potential for an allogeneic CAR T product to induce complete responses at rates and durability similar to approved autologous therapies.

Allogene: anti-BCMA and anti-CD70 program

- The ongoing Phase 1 dose escalation of Allogene's TRAVERSE study is enrolling patients with advanced or metastatic renal cell carcinoma (RCC) who have progressed on standard therapies including an immune checkpoint inhibitor and a VEGF-targeting therapy.
- Allogene's TRAVERSE trial is now deploying an investigational *in vitro* companion diagnostic (IVD) assay designed to prospectively assess CD70 expression levels in patients. Allogene has announced that dose escalation in the TRAVERSE trial is expected to be completed in 2023.

Corporate Updates

• On June 28, 2023, Cellectis reported results from the annual shareholders' general meeting held on June 27, 2023, at the Company's Paris headquarters. At the meeting, during which more than 72% of shares were exercised, Resolutions 1 through 28 were adopted and resolution 29 was rejected, according to the management recommendations. The detailed results of the vote and the resolutions are available on the company's website: https://www.cellectis.com/en/investors/general-meetings/

At the end of the meeting, the terms of office of Ms. Annick Schwebig and Mr. Hervé Hoppenot ended and Ms. Annick Schwebig and Mr. Hervé Hoppenot departed the board of directors as of such date.

During the annual shareholders meeting, Cécile Chartier, Ph.D., was appointed as a director of the Cellectis' Board of Directors, with immediate effect.

Cécile Chartier currently serves as Chief Scientific Officer at NextVivo, Inc. Prior to her tenure at NextVivo, Dr. Chartier was Vice President of Research at Iovance Biotherapeutics, Inc. where she led the development of next generation tumor-infiltrating lymphocytes (TIL) therapies through research to early-stage clinical trials. Cécile's extensive experience in the development of next generation cell and gene therapies coupled with her deep knowledge of the U.S. biotechnology industry will be a huge asset to Cellectis.

Financial Results

The interim condensed consolidated financial statements of Cellectis, have been prepared in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board ("IFRS").

We present certain financial metrics broken out between our two reportable segments – Therapeutics and Plants – in the appendices of this Q2 2023 financial results press release.

On January 13, 2023, Calyxt, Cibus Global LLC (Cibus) and certain other parties named therein, entered into an Agreement and Plan of Merger (the "Merger Agreement"), pursuant to which, subject to the terms and conditions thereof, Calyxt and Cibus will merge in an all-stock transaction (the "Calyxt Merger"). As a consequence of the foregoing, Calyxt met the "held-for-sale" criteria specified in IFRS 5 and was classified as a discontinued operation until May 31, 2023.

On June 1, 2023, Calyxt and Cibus closed the merger transaction and now operate under the name Cibus, Inc. Consequently, Calyxt was deconsolidated and Calyxt's cash, cash equivalent and restricted cash are no longer included in the Group's cash, cash equivalent and restricted cash since June 1, 2023.

Cash: As of June 30, 2023, Cellectis, had \$89 million in consolidated cash, cash equivalents, and restricted cash. This compares to \$95 million in consolidated cash, cash equivalents and restricted cash as of December 31, 2022. This \$6 million difference mainly reflects \$55 million of cash out, which include \$15 million for R&D suppliers, \$7 million for SG&A suppliers, \$23

million for staff costs, \$7 million for rents and taxes, \$3 millions of reimbursement of the "PGE" loan, and a \$1 million unfavorable impact on Forex partially offset by a \$23 million net cash inflow from the capital raise closed in February, a \$21 million net cash inflow from EIB loan, a \$1 million cash inflow related to the grant and refundable advance from BPI, \$2 millions of financial investments' capital gain and interests, a \$1 million reimbursement of social charges paid on stock options, and a \$2 million net cash inflow from licenses and other cash receipts.

Based on the current operating plan, Cellectis anticipates that the cash, cash equivalents, and restricted cash as of June 30, 2023 will fund Cellectis' operations into the third quarter of 2024.

Revenues and Other Income: Consolidated revenues and other income were \$5.6 million for the six months ended June 30, 2023 compared to \$6.5 million for the six months ended June 30, 2022. The decrease of \$1.0 million reflects the recognition of two milestones related to Cellectis' agreement with Cytovia for \$1.5 million in 2022 and a milestone of \$1.0 million with another partner while recognition of revenues in 2023 is not material, and partially offset by the increase of the research tax credit for \$0.8 million and the partial recognition of a grant signed with "BPI" of \$0.8 million.

R&D Expenses: Consolidated R&D expenses were \$43.2 million for the six months ended June 30, 2023, compared to \$52.2 million for the six months ended June 30, 2022. The \$9.0 million decrease was primarily attributable to (i) a \$3.4 million decrease in personal expenses due to departures not replaced (ii) a \$4.7 million decrease in purchases, external expenses and other (from \$28.0 million in 2022 to \$23.2 million in 2023) mainly explained by internalization of our manufacturing and quality activities to support our R&D pipeline and (iii) a \$0.8 million decrease of non-cash stock-based compensation expenses (from \$3.1 million to \$2.3 million).

SG&A Expenses: Consolidated SG&A expenses were \$8.9 million for the six months ended June 30, 2023, compared to \$10.9 million for the six months ended June 30, 2022. The \$2.0 million decrease primarily reflects (i) a \$1.6 million decrease in purchases, external expenses and other (from \$6.4 million in 2022 to \$4.9 million in 2023) mainly explained by the implementation of our ERP in 2022 (ii) a \$0.2 million decrease in personal expenses and non-cash stock-based compensation expenses.

Net financial gain (loss): Consolidated net financial gain was \$11.6 million for the six months ended June 30, 2023, compared to \$9.2 million for the six months ended June 30, 2022. The \$2.4 million increase primarily reflects (i) a \$20.8 million increase of financial income, mainly attributable to the profit from Calyxt's deconsolidation, partially offset by (ii) the loss in fair value on our retained investment in Calyxt since deconsolidation for \$10.2 million, (iii) a \$6.8 million decrease in the fair value of Cytovia's note receivable.

Net income (loss) from discontinued operations: Pursuant to Calyxt deconsolidation income from discontinued operation for the six-month period ended June 30, 2023, 2023 only include five months of activity. The \$3.5 million increase of net loss from discontinued operations between the six-month period ended June 30, 2022 and 2023 is primarily driven by (i) the increase of \$9.2 million of net financial loss and (ii) the increase of \$1.5 million of other operating expenses partially offset by (i) the decrease of \$2.8 million of R&D expenses (from \$6.3 million in 2022 to \$3.5 in 2023) and (ii) the decrease of \$4.5 million of SG&A expenses (from \$6.8 million in 2022 to \$2.3 million in 2023).

Net Income (loss) Attributable to Shareholders of Cellectis: The consolidated net loss attributable to shareholders of Cellectis was \$40.7 million (or \$0.76 per share) for the six months ended June 30, 2023, of which \$35.7 million was attributed to Cellectis continuing operations, compared to \$50.9 million (or \$1.12 per share) for the six months ended June 30, 2022, of which \$47.3 million was attributed to Cellectis continuing operations. This \$10.1 million decrease in net loss between the first six months of 2023 and 2022 was primarily driven by (i) a \$9.0 million decrease of R&D expenses, (ii) a \$2.0 million decrease of SG&A expenses and (iii) an increase of \$2.4 million of the financial gain due to the deconsolidation of Calyxt compensated in part by the decrease of fair value of Cytovia's note receivable. These downward impacts on the net loss were partially offset by (i) a decrease of \$1.0 million of revenues and other income, (ii) an increase of \$1.5 million of loss from discontinued operations attributable to Shareholders of Cellectis.

Adjusted Net Income (Loss) Attributable to Shareholders of Cellectis: The consolidated adjusted net loss attributable to shareholders of Cellectis was \$36.7 million (or \$0.68 per share) for the six months ended June 30, 2023, compared to a net loss of \$45.5 million (or \$1.00 per share) for the six months ended June 30, 2022.

Please see "Note Regarding Use of Non-IFRS Financial Measures" for reconciliation of GAAP net income (loss) attributable to shareholders of Cellectis to adjusted net income (loss) attributable to shareholders of Cellectis.

We currently foresee focusing our cash spending at Cellectis for 2023 in the following areas:

- Supporting the development of our pipeline of product candidates, including the manufacturing and clinical trial expenses of UCART123, UCART 20x22 and potential new product candidates;
- Operating our state-of-the-art manufacturing capabilities in Paris (France), and Raleigh (North Carolina, USA); and
- Continuing to strengthen our manufacturing and clinical departments.

The selected, preliminary financial information set forth above are unaudited and should be considered preliminary and subject to change. We have provided such selected, preliminary results above as our final results remain subject to the completion of our

normal closing procedures, final adjustments, developments that may arise between now and the time the financial results are finalized, and management's and the audit and finances committee's final reviews. Accordingly, you should not place undue reliance on this preliminary information, which may differ materially from our actual final results. These preliminary results should not be viewed as a substitute for our full quarterly financial statements prepared in accordance with IFRS. In addition, they are not necessarily indicative of the results to be achieved in any future period. These preliminary results have been prepared by and are the responsibility of management. Our independent registered public accounting firm has not audited, compiled, performed any procedures on or revised the preliminary financial information, and accordingly does not express an opinion or any other form of assurance with respect of the preliminary information. We plan to report our full results for the second quarter in the coming days.

CELLECTIS S.A. STATEMENT OF CONSOLIDATED FINANCIAL POSITION (unaudited)

(\$ in thousands)

	As of		
	December 31, 2022	June 30, 2023	
ASSETS			
Non-current assets			
Intangible assets	718	695	
Property, plant, and equipment	63,621	59,231	
Right-of-use assets	44,275	41,457	
Non-current financial assets	8,791	13,006	
Total non-current assets	117,406	114,389	
Current assets			
Trade receivables	772	422	
Subsidies receivables	14,496	19,488	
Other current assets	9,078	7,869	
Cash and cash equivalent and Current financial assets	97,697	85,505	
Total current assets	122,043	113,285	
Total assets held for sale	21,768	0	
TOTAL ASSETS	261,216	227,674	
LIABILITIES			
Shareholders' equity	2.055	2.404	
Share capital	2,955	3,491	
Premiums related to the share capital	583,122	476,224	
Currency translation adjustment	(28,605)	(37,050)	
Retained earnings	(333,365) (106,139)	(305,392)	
Net income (loss)		(40,715)	
Total shareholders' equity - Group Share	117,968	96,558	
Non-controlling interests Total shareholders' equity	7,973 125,941	96,558	
NT			
Non-current liabilities Non-current financial liabilities	20 521	40.270	
Non-current lease debts	20,531 49,358	40,270	
	2,390	46,157 2,641	
Non-current provisions Total non-current liabilities			
Total non-current natmues	72,279	89,068	
Current liabilities	- 000	- 10-	
Current financial liabilities	5,088	5,185	
Current lease debts	7,872	8,270	
Trade payables	21,456	19,229	
Deferred revenues and deferred income	59 477	241	
Current provisions	477 12.170	1,029	
Other current liabilities	13,179	8,093	

Total current liabilities	48,131	42,047
Total liabilities related to asset held for sale	14,864	0
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	261,216	227,674

Cellectis S.A. UNAUDITED STATEMENTS OF CONSOLIDATED OPERATIONS For the three-month period ended June 30, 2023 \$ in thousands, except per share amounts

		For the three-month period ended June 30,		
	2022 *	2023		
Revenues and other income				
Revenues	1,307	178		
Other income	1,416	1,823		
Total revenues and other income	2,723	2,001		
Operating expenses				
Cost of revenue	(329)	(55)		
Research and development expenses	(25,630)	(22,144)		
Selling, general and administrative expenses	(4,830)	(3,950)		
Other operating income (expenses)	753	490		
Total operating expenses	(30,036)	(25,660)		
Operating income (loss)	(27,313)	(23,659)		
Financial gain (loss)	8,301	15,982		
Income tax	0	(258)		
Income (loss) from continuing operations	(19,012)	(7,935)		
Income (loss) from discontinued operations	(442)	(5,647)		
Net income (loss)	(19,454)	(13,583)		
Attributable to shareholders of Cellectis	(18,946)	(10,648)		
Attributable to non-controlling interests	(506)	(2,935)		
Basic net income (loss) attributable to shareholders of Cellectis per share (\$/share)	(0.42)	(0.19)		
Diluted net income (loss) attributable to shareholders of Cellectis per share (\$/share)	(0.42)	(0.19)		
Basic net income (loss) attributable to shareholders of Cellectis per share (\$/share) from discontinued operations	0.00	(0.05)		
Diluted net income (loss) attributable to shareholders of Cellectis per share (\$/share) from discontinued operations	0.00	(0.05)		

^{*} These amounts reflect adjustments made in connection with the presentation of the discontinued operation

CELLECTIS S.A. UNAUDITED STATEMENTS OF CONSOLIDATED OPERATIONS For the six-month period ended June 30, 2023 \$ in thousands, except per share amounts

For the six-month period ended June 30, 2022 * 2023 Revenues and other income 2,972 317 Revenues 3,551 5,242 Other income 6,523 Total revenues and other income 5,560 **Operating expenses** Cost of revenue (389)(714)

Research and development expenses	(52,231)	(43,225)
Selling, general and administrative expenses	(10,893)	(8,914)
Other operating income (expenses)	774	(83)
Total operating expenses	(63,064)	(52,612)
Operating income (loss)	(56,541)	(47,053)
Financial gain (loss)	9,213	11,580
Income tax	0	(258)
Income (loss) from continuing operations	(47,328)	(35,731)
Income (loss) from discontinued operations	(6,883)	(10,377)
Net income (loss)	(54,211)	(46.108)
Attributable to shareholders of Cellectis	(50,858)	(40,715)
Attributable to non-controlling interests	(3,352)	(5,393)
Basic net income (loss) attributable to shareholders of Cellectis per share (\$/share)	(1.12)	(0.76)
Diluted net income (loss) attributable to shareholders of Cellectis per share (\$/share)	(1.12)	(0.76)
Basic net income (loss) attributable to shareholders of Cellectis per share (\$ /share) from discontinued operations	(0.08)	(0.09)
Diluted net income (loss) attributable to shareholders of Cellectis per share (\$ /share) from discontinued operations	(0.08)	(0.09)

^{*} These amounts reflect adjustments made in connection with the presentation of the discontinued operation

CELLECTIS S.A. DETAILS OF KEY PERFORMANCE INDICATORS BY REPORTABLE SEGMENTS – For the three-month period ended June 30, 2023 (unaudited) - (\$ in thousands)

	For the three-month period ended June 30, 2022			For the three-month period ended June 30, 2023			
	Plants		Total	Plants		Total	
\$ in thousands	(discontinued T	herapeutics	_	(discontinued T	herapeutics	-	
	operations)		segments	operations)		segments	
External revenues	42	1,307	1,348	1	178	179	
External other income	-	1,416	1,416	-	1,823	1,823	
External revenues and other income	42	2,723	2,765	1	2,001	2,002	
Cost of revenue	0	(329)	(329)	(63)	(55)	(118)	
Research and development expenses	(3,419)	(25,630)	(29,048)	(1,322)	(22,144)	(23,467)	
Selling, general and administrative expenses	(3,585)	(4,830)	(8,415)	(976)	(3,950)	(4,927)	
Other operating income and expenses	198	753	951	(1,074)	490	(584)	
Total operating expenses	(6,806)	(30,036)	(36,842)	(3,435)	(25,660)	(29,095)	
Operating income (loss) before tax	(6,764)	(27,313)	(34,077)	(3,434)	(23,659)	(27,093)	
Financial gain (loss)	6,322	8,301	14,623	(2,213)	15,982	13,769	
Income tax	-	-	_	-	(258)	(258)	
Net income (loss) from discontinued operations	(442)		(442)	(5,647)		(5,647)	
Net income (loss)	(442)	(19,012)	(19,454)	(5,647)	(7,935)	(13,583)	
Non controlling interests	506	-	506	(2,935)	-	(2,935)	
Net income (loss) attributable to shareholders of Cellectis	64	(19,012)	(18,946)	(2,712)	(7,935)	(10,648)	
R&D non-cash stock-based expense attributable to shareholder of Cellectis	226	1,454	1,681	103	797	900	
SG&A non-cash stock-based expense attributable to shareholder of Cellectis	447	557	1,003	326	849	1,174	
Adjustment of share-based compensation attributable to shareholders of Cellectis	673	2,011	2,684	428	1,646	2,074	

Adjusted net income (loss) attributable to shareholders of Cellectis	737	(17,001)	(16,264)	(2,284)	(6,289)	(8,573)
Depreciation and amortization	(608)	(4,500)	(5,108)	(12)	(4,419)	(4,431)
Additions to tangible and intangible assets	308	870	1,178	21	311	332

CELLECTIS S.A. DETAILS OF KEY PERFORMANCE INDICATORS BY REPORTABLE SEGMENTS – For the six-month period ended June 30, 2023 (unaudited) - (\$ in thousands)

	For the six-month period ended June 30, 2022			For the six-month period ended June 30, 2023		
	Plants		Total	Plants		Total
\$ in thousands	(discontinued T operations)	herapeutics	reportable segments	(discontinued T operations)	herapeutics	reportable segments
External revenues	73	2,972	3,045	43	317	360
External other income	-	3,551	3,551	-	5,242	5,242
External revenues and other income	73	6,523	6,596	43	5,560	5,602
Cost of revenue	(0)	(714)	(714)	(63)	(389)	(451)
Research and development expenses	(6,297)	(52,231)	(58,527)	(3,487)	(43,225)	(46,712)
Selling, general and administrative expenses	(6,801)	(10,893)	(17,695)	(2,313)	(8,914)	(11,227)
Other operating income and expenses	242	774	1,016	(1,251)	(83)	(1,334)
Total operating expenses	(12,856)	(63,064)	(75,920)	(7,113)	(52,612)	(59,725)
Operating income (loss) before tax	(12,783)	(56,541)	(69,324)	(7,070)	(47,053)	(54,123)
Net financial gain (loss)	5,900	9,213	15,113	(3,307)	11,580	8,273
Income tax	-	-	-	-	(258)	(258)
Net income (loss) from discontinued operations	(6,883)		(6,883)	(10,377)	, ,	(10,377)
Net income (loss)	(6,883)	(47,328)	(54,211)	(10,377)	(35,731)	(46,108)
Non-controlling interests	3,352	-	3,352	5,393	-	5,393
Net income (loss) attributable to shareholders of Cellectis	(3,531)	(47,328)	(50,858)	(4,984)	(35,731)	(40,715)
R&D non-cash stock-based expense attributable to shareholder of Cellectis	216	3,134	3,349	188	1,900	2,088
SG&A non-cash stock-based expense attributable to shareholder of Cellectis	789	1,193	1,982	599	1,366	1,965
Adjustment of share-based compensation attributable to	1,005	4,327	5,331	788	3,265	4,053
shareholders of Cellectis	•	•	-		•	-
Adjusted net income (loss) attributable to shareholders of Cellectis	(2,526)	(43,001)	(45,527)	(4,196)	(32,465)	(36,663)
Depreciation and amortization	(1,316)	(9,434)	(10,749)	(7)	(8,875)	(8,882)
Additions to tangible and intangible assets	671	1,452	2,123	21	536	556

Note Regarding Use of Non-IFRS Financial Measures

Cellectis S.A. presents adjusted net income (loss) attributable to shareholders of Cellectis in this press release. Adjusted net income (loss) attributable to shareholders of Cellectis is not a measure calculated in accordance with IFRS. We have included in this press release a reconciliation of this figure to net income (loss) attributable to shareholders of Cellectis, which is the most directly comparable financial measure calculated in accordance with IFRS. Because adjusted net income (loss) attributable to shareholders of Cellectis excludes Non-cash stock-based compensation expense—a non-cash expense, we believe that this financial measure, when considered together with our IFRS financial statements, can enhance an overall understanding of Cellectis' financial performance. Moreover, our management views the Company's operations, and manages its business, based, in part, on this financial measure. In particular, we believe that the elimination of Non-cash stock-based expenses from Net income (loss) attributable to shareholders of Cellectis can provide a useful measure for period-to-period comparisons of our core businesses. Our use of adjusted net income (loss) attributable to shareholders of Cellectis has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our financial results as reported under IFRS. Some of these limitations are: (a) other companies, including companies in our industry which use similar stock-based compensation, may address the impact of Non-cash stock-based compensation expense differently; and (b) other companies may report adjusted net

income (loss) attributable to shareholders or similarly titled measures but calculate them differently, which reduces their usefulness as a comparative measure. Because of these and other limitations, you should consider adjusted net income (loss) attributable to shareholders of Cellectis alongside our IFRS financial results, including Net income (loss) attributable to shareholders of Cellectis.

RECONCILIATION OF IFRS TO NON-IFRS NET INCOME

For the three-month period ended June 30, 2023 (unaudited) - (\$ in thousands except per share data)

For the three-month period ended June 30, 2023 2022 * Net income (loss) attributable to shareholders of Cellectis (18,946)(10,648)Adjustment: Non-cash stock-based compensation expense attributable to shareholders of 2,684 2,074 Cellectis Adjusted net income (loss) attributable to shareholders of Cellectis (16,263)(8,574)Basic Adjusted net income (loss) attributable to shareholders of Cellectis (\$/share) (0.36)(0.15)Basic adjusted earnings from discontinued operations attributable to shareholders 0.00 (0.05)of Cellectis (\$ /share) Weighted average number of outstanding shares, basic (units) 45,497,127 55,583,768 Diluted Adjusted net income (loss) attributable to shareholders of Cellectis (0.36)(0.15)(\$/share) (1) Diluted Adjusted net income (loss) attributable to shareholders of Cellectis 0.02 (0.04)(\$/share) from discontinued operations Weighted average number of outstanding shares, diluted (units) 45,497,127 55,583,768

RECONCILIATION OF IFRS TO NON-IFRS NET INCOME (unaudited) First six months

(\$ in thousands, except per share data)

	For the six-month period ended June 30,		
	2022 *	2023	
Net income (loss) attributable to shareholders of Cellectis Adjustment:	(50,858)	(40,715)	
Non-cash stock-based compensation expense attributable to shareholders of Cellectis	5,331	4,053	
Adjusted net income (loss) attributable to shareholders of Cellectis	(45,527)	(36,662)	
Basic Adjusted net income (loss) attributable to shareholders of Cellectis (\$/share)	(1.00)	(0.68)	
Basic adjusted earnings from discontinued operations attributable to shareholders of Cellectis (\$ /share)	(0.95)	(0.71)	
Weighted average number of outstanding shares, basic (units)	45,497,127	53,541,010	
Diluted Adjusted net income (loss) attributable to shareholders of Cellectis (\$/share)	(1.00)	(0.68)	
Diluted Adjusted net income (loss) attributable to shareholders of Cellectis (\$/share) from discontinued operations	(0.95)	(0.71)	

^{*}These amounts reflect adjustments made in connection with the presentation of the discontinued operation

45,497,127

53,541,010

*These amounts reflect adjustments made in connection with the presentation of the discontinued operation

About Cellectis

Cellectis is a clinical-stage biotechnology company using its pioneering gene-editing platform to develop life-saving cell and gene therapies. Cellectis utilizes an allogeneic approach for CAR-T immunotherapies in oncology, pioneering the concept of off-the-shelf and ready-to-use gene-edited CAR T-cells to treat cancer patients, and a platform to make therapeutic gene editing in hemopoietic stem cells for various diseases. As a clinical-stage biopharmaceutical company with over 23 years of experience and expertise in gene editing, Cellectis is developing life-changing product candidates utilizing TALEN®, its gene editing technology, and PulseAgile, its pioneering electroporation system to harness the power of the immune system in order to treat diseases with unmet medical needs. Cellectis' headquarters are in Paris, France, with locations in New York, New York and Raleigh, North Carolina. Cellectis is listed on the Nasdaq Global Market (ticker: CLLS) and on Euronext Growth (ticker: ALCLS).

Forward-looking Statements

This press release contains "forward-looking" statements within the meaning of applicable securities laws, including the Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by words such as "anticipate", "expect", "plan", "could" and "will," or the negative of these and similar expressions. These forward-looking statements, which are based on our management's current expectations and assumptions and on information currently available to management, including information provided or otherwise publicly reported by our licensed partners. Forward-looking statements include statements about advancement, timing and progress of clinical trials and preclinical studies, the timing of our presentation of data, and the sufficiency of cash to fund operation. These forward-looking statements are made in light of information currently available to us and are subject to numerous risks and uncertainties, including with respect to the numerous risks associated with biopharmaceutical product candidate development. With respect to our cash runway, our operating plans, including product development plans, may change as a result of various factors, including factors currently unknown to us. Furthermore, many other important factors, including those described in our Annual Report on Form 20-F and the financial report (including the management report) for the year ended December 31, 2022 and subsequent filings Cellectis makes with the Securities Exchange Commission from time to time, as well as other known and unknown risks and uncertainties may adversely affect such forwardlooking statements and cause our actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons why actual results could differ materially from those anticipated in the forwardlooking statements, even if new information becomes available in the future.

For further information on Cellectis, please contact:

Media contact:

Pascalyne Wilson, Director, Communications, +33 (0)7 76 99 14 33, media@cellectis.com

Investor Relations contacts:

Arthur Stril, Chief Business Officer, +1 (347) 809 5980, investors@cellectis.com

Ashley R. Robinson, LifeSci Advisors, +1 617 430 7577

Attachment

 Press release earnings Q22023 (https://ml.globenewswire.com/Resource/Download/87ede59d-26cd-45e2-bd93-29914acf67cb)

¹ Cash position includes cash, cash equivalents and restricted cash. Restricted cash was \$5 million as of June 30, 2023.

² This project is partially funded by the French government, as part of Plan France 2030. On March 8, 2023, BPIfrance and Cellectis entered into a grant and refundable advance agreement to partially support research and development program related to UCART20x22.