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 of the Securities Exchange Act of 1934

Date of Report: May 7, 2019 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 \square Form 40-F \square

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): □

EXHIBIT INDEX

Exhibit <u>Title</u>

99.1 Press release, dated May 7, 2019.

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)

May 7, 2019 By: /s/ André Choulika

André Choulika

Chief Executive Officer

Cellectis Reports Financial Results for First Quarter 2019

- Started construction of in-house manufacturing facilities IMPACT and SMART
- FDA approved IND for UCARTCS1A product candidate in Multiple Myeloma
- Published novel manufacturing methods to improve allogeneic CAR T-cell safety and purity
 - Cash position of \$425 million as of March 31, 2019

NEW YORK--(BUSINESS WIRE)--May 7, 2019--Regulatory News:

Cellectis (Paris:ALCLS) (NASDAQ:CLLS) (Euronext Growth: ALCLS; Nasdaq: CLLS), a clinical stage biopharmaceutical company focused on developing immunotherapies based on allogeneic gene-edited CAR T-cells (UCART), today announced its results for the three-month period ended March 31, 2019.

"We have been executing against our 2019 plans, securing premises for our in-house manufacturing facilities in the United States and in France as well as receiving IND approval by the FDA for UCARTCS1A, our fourth UCART product candidate," said Dr. André Choulika, Chairman and CEO of Cellectis. "This year, Cellectis is planning to enroll patients in three separate Phase 1 clinical trials covering three major hematologic diseases, Acute Myeloid Leukemia, Acute Lymphoblastic Leukemia and Multiple Myeloma, with our proprietary allogeneic CAR T-cell product candidates. In 2019, Cellectis and its partners will continue to extend their first-mover advantage in the field of gene editing and allogeneic, off-the-shelf CAR-T, with the goal of accelerating our ability to bring our pioneering cell therapies to patients."

Q1 Corporate Highlights

Scientific Publication

In February 2019, we announced the publication of a study in *The Journal of Biological Chemistry*, identifying Granulocyte Macrophage Colony Stimulating Factor (GMCSF) secreted by Chimeric Antigen Receptor (CAR) T-cells as a key factor promoting cytokine release syndrome (CRS). The report leverages these findings to elaborate an innovative engineering strategy that potentially paves the way for developing safer UCART products.

This publication was significant because Cellectis' engineering strategy could circumvent toxic side effects such as CRS and neurotoxicity, thereby aiming to the development of safer, yet equally potent, UCART product candidates in an effort to improve patients' quality of life during treatment.

Manufacturing

In March 2019, we entered into a lease agreement for an 82,000 square foot commercial-scale manufacturing facility, called IMPACT, which stands for "Innovative Manufacturing Plant for Allogeneic Cellular Therapies". This new site, located in Raleigh, North Carolina, is being designed to provide GMP manufacturing for clinical supplies and commercial manufacturing upon potential regulatory approval. The facility is planned to be operational by 2021.

In addition to IMPACT, Cellectis started building a 14,000 square foot manufacturing facility in Paris, France, named SMART, which stands for "Starting Material Realization for CAR-T products". This facility is designed to produce Cellectis' critical starting material supplies for UCART clinical studies and commercial products, and when combined with IMPACT, will allow Cellectis to gain autonomy in its manufacturing operations and consolidate its competitive leadership in the gene-editing field.

Regulatory

In April 2019, Cellectis announced that the U.S. Food and Drug Administration (FDA) approved the Company's Investigational New Drug (IND) application to initiate a Phase 1 clinical trial with UCARTCS1A in Multiple Myeloma (MM). Cellectis is the sponsor of the UCARTCS1A clinical study.

Conference

At the American Society of Gene & Cell Therapy (ASGCT) Annual Meeting, Cellectis presented data from its Universal CAR T-cell programs in an oral presentation and poster session.

The oral presentation presented data regarding the potential of UCARTCS1A as a treatment approach for patients with Multiple Myeloma, and followed the recent clearance of the UCARTCS1A IND by the FDA. The poster presentation showcased Cellectis' allogeneic CAR T-cell manufacturing expertise, with a focus on a novel, straightforward and efficient strategy to generate Universal CAR T-cells. This exemplifies opportunities for Cellectis' cutting-edge gene-editing and cell engineering capabilities to be leveraged to improve key features of our product candidates.

Further presentations were given by Julianne Smith, Ph.D., Vice President of Translational Sciences and Philippe Duchateau, Ph.D., Chief Scientific Officer at Cellectis. Dr. Smith participated in a corporate review session at the Gene Editing Workshop prior to the official start of the conference, while also presenting a talk entitled "Allogeneic Gene-Edited CAR T-Cells: From Preclinical to Clinical Proof of Concept" during the Scientific Symposium "Towards the Holy Grail of Cancer Gene Therapies: Universal Cells, Targeted Vectors and Solid Tumor CART Efficacy". Dr. Duchateau participated in the Scientific Symposium "Innovation in First Time in Human Study Clinical Studies" with a presentation titled "Universal Gene-Edited CAR T-Cell Immunotherapy".

In April 2019, at ASGCT Annual Meeting, we presented a novel method of manufacturing ultrapure TCR-negative allogeneic CAR T-cells. With transient expression of an anti-CD3 CAR in addition to the stably expressed "therapeutic CAR" in the donor T-cells, we programed the cells to self-eliminate the TCR+ cell population and obtained an ultrapure TCR-negative population (99%-99.9%) at the end of CAR-T production. The fitness of the produced cells was not affected by the transient expression of the anti-CD3 CAR, nor did we see a significant impact in the CAR T-cell growth rate, T-cell differentiation or exhaustion level as compared to the non-CD3 CAR counterpart.

Both in vitro and in vivo T-cell killing assay results suggest that the CD3-CAR treatment did not affect the CAR T-cell killing function.

This novel procedure has the potential to remove a tedious purification step in TCR-negative CAR T-cell manufacturing.

Financial Results

The interim condensed consolidated financial statements of Cellectis, which consolidate the results of Calyxt, Inc. of which Cellectis is a 69.5% stockholder, have been prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board ("GAAP").

We present certain financial metrics broken out between our two reportable segments – Therapeutics and Plants – in the appendices of this Q1 2019 financial results press release.

First quarter 2019 Financial Results

Cash: As of March 31, 2019, Cellectis, including Calyxt had \$425 million in consolidated cash, cash equivalents, current financial assets and restricted cash of which \$340 million are attributable to Cellectis on a stand-alone basis. This compares to \$453 million in consolidated cash, cash equivalents, current financial assets and restricted cash as of December 31, 2018, of which \$358 million were attributable to Cellectis. This net decrease of \$28 million primarily reflects \$22 million in net cash flows used by operating activities in the first quarter of 2019, of which \$13 million are attributable to Cellectis. We believe that the consolidated cash, cash equivalents, current financial assets and restricted cash position as of March 31, 2019 will be sufficient to fund operations through 2021.

Revenues and Other Income: Consolidated revenues and other income were \$3 million for the three months ended March 31, 2019 compared to \$8 million for the three months ended March 31, 2018. 94% of consolidated revenues and other income was attributable to Cellectis in the first quarter of 2019. This decrease between 2019 and 2018 was mainly attributable to a decrease in recognition of upfront payments already received and R&D cost reimbursements in relation to the therapeutic collaborations.

R&D Expenses: Consolidated R&D expenses were \$14 million for the year ended March 31, 2019 compared to \$18 million for the year ended March 31, 2018. 86% of consolidated R&D expenses was attributed to Cellectis in the first quarter of 2019. The \$4 million decrease between 2019 and 2018 was primarily attributed to the reductions of non-cash stock-based compensation expenses by \$4 million and purchases and external and other expenses by \$1 million. This decrease was partially offset by higher employee expenses and other by \$1 million.

SG&A Expenses: Consolidated SG&A expenses were \$12 million for the three months ended March 31, 2019 compared to \$14 million for the three months ended March 31, 2018. 47% of consolidated SG&A expenses was attributed to Cellectis in the first quarter 2019. The \$2 million decrease was primarily attributable by decreased non-cash stock-based compensation expenses by \$3 million which was partially offset by an increase in purchases and external expenses and other by \$1 million.

Net Loss Attributable to Shareholders of Cellectis: The consolidated Net loss attributable to Shareholders of Cellectis was \$15 million (or \$0.36 per share) for the three months ended March 31, 2019, of which \$10 million was attributed to Cellectis, compared to \$25 million (or \$0.71 per share) for the three months ended March 31, 2018, of which \$20 million was attributed to Cellectis. This \$10 million decrease in net loss between 2019 and 2018 was primarily driven by a significant increase in net financial gains of \$8 million and by a decrease in operating losses of \$2 million which was attributed to Cellectis.

Adjusted Net Loss Attributable to Shareholders of Cellectis: The consolidated Adjusted net loss attributable to Shareholders of Cellectis was \$11 million (or \$0.26 per share) for the three months ended March 31, 2019, of which \$7 million is attributed to Cellectis, compared to \$14 million (or \$0.39 per share) for the three months ended March 31, 2018, of which \$11 million was attributed to Cellectis. Please see "Note Regarding Use of Non-GAAP 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 on our cash spending on Cellectis for 2019 in the following areas:

- Supporting the development of our deep pipeline of product candidates, including the manufacturing and clinical trials expenses of UCART123, UCART22 and UCARTCS1A;
- Building our state-of-the-art manufacturing capabilities (IMPACT and SMART); and
- Strengthening our manufacturing and clinical departments, including hiring talented personnel.

Calyxt plans to focus its cash spending for the remainder of 2019 in the following areas:

- Continuing to drive the commercialization of its High-Oleic Soybean products, including Calyno™ High-Oleic Soybean Oil and High-Oleic Soybean Meal;
- Supporting its innovative products pipeline; and
- Strengthening its commercial and general and administrative support.

CELLECTIS S.A. STATEMENT OF CONSOLIDATED FINANCIAL POSITION (\$ in thousands, except per share data)

As of

	As	0I
	December 31, 2018 Audited	March 31, 2019 Non Audited (*)
ASSETS		
Non-current assets		
Intangible assets	1 268	1 222
Property, plant, and equipment	10 041	9 689
Right-of-use assets	0	36 788
Other non-current financial assets	1 891	4 684
Total non-current assets	13 199	52 382
Current assets		
Inventories	275	1 054
Trade receivables	2 971	2 801
Subsidies receivables	17 173	19 327
Other current assets	15 333	14 534
Cash and cash equivalent and Current financial assets	451 889	421 839
Total current assets	487 641	459 555
TOTAL ASSETS	500 840	511 938
LIABILITIES		
Shareholders' equity		
Share capital	2 765	2 765
Premiums related to the share capital	828 525	831 282
Treasury share reserve	0	0
Currency translation adjustment	(16 668)	(22 385)
Retained earnings	(326 628)	(405 264)
Net income (loss)	(78 693)	(15 248)
Total shareholders' equity - Group Share	409 301	391 150
Non-controlling interests	40 970	41 156
Total shareholders' equity	450 272	432 307
Non-current liabilities		
Non-current lease debts	1 018	30 263
Non-current provisions	2 681	2 314
Total non-current liabilities	3 699	32 577
Current liabilities		
Current lease debts	333	5 385
Trade payables	15 883	15 698
Deferred revenues and deferred income	20 754	20 280
Current provisions	1 530	1 134
Other current liabilities	8 369	4 557
Total current liabilities	46 869	47 054
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	500 840	511 938
(*) The 2019 Interim Condensed Consolidated Financial Statements have been prepared according to the new IFRS 16 "Leases" standard with a new "right-of-use assets" category and an implied significant increase of "lease debts" compared to the previous period (see note 2.2 for discussion of the application of IFRS 16 "Lease" at January 1, 2019).CELLECTIS S.A.		

STATEMENT OF CONSOLIDATED OPERATIONS – (unaudited)
(\$\\$ in thousands, except per share data)

For the three-month period ended

	March 31	March 31,		
	2018	2019		
Revenues and other income				
Revenues	6 040	1 036		
Other income	2 025	2 395		
Total revenues and other income	8 065	3 431		
Operating expenses				
Cost of revenue	(579)	(586)		
Research and development expenses	(18 395)	(14 508)		
Selling, general and administrative expenses	(14 013)	(11 488)		
Other operating income (expenses)	21	33		
Total operating expenses	(32 967)	(26 550)		
Operating income (loss)	(24 902)	(23 119)		
Financial gain (loss)	(2 137)	5 396		
Net income (loss)	(27 038)	(17 723)		
Attributable to shareholders of Cellectis	(25 438)	(15 248)		
Attributable to non-controlling interests	(1 600)	(2 476)		
Basic net income (loss) attributable to shareholders of Cellectis per				
share (\$/share)	(0.71)	(0.36)		
Diluted net income (loss) attributable to shareholders of Cellectis per				
share (\$/share)	(0.71)	(0.36)		

CELLECTIS S.A. DETAILS OF KEY PERFORMANCE INDICATORS BY REPORTABLE SEGMENTS – First Quarter (unaudited) - (\$ in thousands)

For the three-month period ended March 31, 2018 For the three-month period ended March 31, 2019 Total reportable Total reportable **Plants** Therapeutics **Plants** Therapeutics segments segments 6 030 6 040 878 1 036 External revenues 11 158 2 025 2 025 2 332 2 395 External other income 63 External revenues and other income 11 8 054 8 065 220 3 211 3 431 Cost of revenue (575) (579) (34) (553) (586) (5) Research and development expenses (16 842) (18395)(2 024) (12 485) (14 508) (1553)Selling, general and administrative expenses $(8\ 361)$ (14013)(6.059)(5429)(11488)(5652)Other operating income and expenses (43) 65 21 29 33 **Total operating expenses** (7 253) (25 713) (32 966) (8 113) (18 437) (26 550) (24 901) Operating income (loss) before tax (15 226) (17 659) (7 893) (7243)(23 119) Financial gain (loss) 151 (2287) $(2\ 137)$ 214 5 182 5 396 Net income (loss) (7 092) (19 946) (27 038) (7 679) (10 044) (17 723) Non controlling interests 1 600 1 600 2 4 7 6 2476Net income (loss) attributable to (5 492) (19 946) (25 438) (5 203) $(10\ 044)$ (15 248) shareholders of Cellectis R&D non-cash stock-based expense attributable to shareholder of Cellectis 354 4 278 4 632 64 1 057 1 120 SG&A non-cash stock-based expense 2 191 4 453 6 644 1 558 1 701 3 259 attributable to shareholder of Cellectis Adjustment of share-based compensation attributable to shareholders of Cellectis 2 546 8 730 11 276 1 622 2 758 4 379 Adjusted net income (loss) attributable to shareholders of Cellectis (2946)(11 216) $(14\ 162)$ (3582)(7 286) $(10\ 868)$

(473)

555

(13 414)

(629)

(19 979)

677

(371)

347

(9 335)

 $(1\ 155)$

(13 063)

1 305

(1 527)

(22 398)

1 652

(156)

(6 565)

123

Depreciation and amortization

Additions to tangible and intangible assets

Net cash used in operating activities

Note Regarding Use of Non-GAAP 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 GAAP TO NON-GAAP NET INCOME – First quarter (unaudited) (\$ in thousands, except per share data)

For t	the	three-mo	nth	period	ended

	March 31,	
	2018	2019
Net income (loss) attributable to shareholders of Cellectis	(25 438)	(15 248)
Adjustment: Non-cash stock-based compensation expense attributable to shareholders of Cellectis	11 276	4 379
Adjusted net income (loss) attributable to shareholders of Cellectis	(14 162)	(10 868)
Basic Adjusted net income (loss) attributable to shareholders of Cellectis (\$/share)	(0.39)	(0.26)
Weighted average number of outstanding shares, basic (units) (1)	36 034 181	42 430 069
Diluted Adjusted net income (loss) attributable to shareholders of Cellectis (\$/share) (1)	(0.39)	(0.26)
Weighted average number of outstanding shares, diluted (units) (1)	36 586 720	42 457 133

(1) When we have adjusted net loss, in accordance with IFRS, we use the Weighted average number of outstanding shares, basic to compute the Diluted adjusted net income (loss) attributable to shareholders of Cellectis (\$/share). When we have adjusted net income, in accordance with IFRS, we use the Weighted average number of outstanding shares, diluted to compute the Diluted adjusted net income (loss) attributable to shareholders of Cellectis (\$/share)

About Cellectis

Cellectis is a clinical-stage biopharmaceutical company focused on developing a new generation of cancer immunotherapies based on gene-edited T-cells (UCART). By capitalizing on its 19 years of expertise in gene editing – built on its flagship TALEN® technology and pioneering electroporation system PulseAgile – Cellectis uses the power of the immune system to target and eradicate cancer cells.

Using its life-science-focused, pioneering genome engineering technologies, Cellectis' goal is to create innovative products in multiple fields and with various target markets.

Cellectis is listed on the Nasdaq (ticker: CLLS) and on Euronext Growth (ticker: ALCLS). To find out more about us, visit our website: www.cellectis.com

Talking about gene editing? We do it. TALEN® is a registered trademark owned by Cellectis.

Disclaimer

This press release contains "forward-looking" statements that are based on our management's current expectations and assumptions and on information currently available to management. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Further information on the risk factors that may affect company business and financial performance is included in Cellectis' Annual Report on Form 20-F and the financial report (including the management report) for the year ended December 31, 2018 and subsequent filings Cellectis makes with the Securities Exchange Commission from time to time. 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 forward-looking statements, even if new information becomes available in the future.

¹ Cash position includes cash, cash equivalent, current financial assets and restricted cash

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