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 22, 2018
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 ☑ 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): ☐

EXHIBIT INDEX

Exhibit	Title
99.1	Press release, dated May 22, 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.

CELLECTIS S.A.
(Registrant)

May 22, 2018

By: /s/ André Choulika
André Choulika
Chief Executive Officer

Exhibit 99.1

Cellectis: Approval of UCART123 Amendment in AML to Accelerate Clinical Development

Increase of current tested dose levels from 6.25x10^4/kg to 2.5x10^5/kg

Treatment interval shortens between patients from 42 days to 28 days, then to 14 days for subsequent patients

MD Anderson Cancer Center added as new clinical site for the AML study

NEW YORK--(BUSINESS WIRE)--May 22, 2018--Regulatory News:

Cellectis (Paris:ALCLS) (NASDAQ:CLLS) (Euronext Growth: ALCLS - Nasdaq: CLLS), a clinical-stage biopharmaceutical company focused on developing immunotherapies based on gene-edited allogeneic CAR T-cells (UCART), announced today the approval of an amendment to the protocol for the Phase 1 clinical trial of Cellectis' UCART123 product candidate in patients with acute myeloid leukemia (AML).

The main changes to the protocol include:

- Dose levels to be administered increase 400 percent from 6.25x10^4 to 2.5x10^5 UCART123 cells per kilogram, with a capping at 80kg equivalent. The product's safety and tolerability profile allowed Cellectis to increase the dose level.
- The dose limiting toxicities (DLT) observation period decreases from 42 to 28 days post-UCART123 infusion, except for patients with aplastic bone marrow at Day 28 for whom the DLT observation period remains 42 days.
- The time interval between the first and the second patient for UCART123 infusion at each new dose level tested shortens from 42 days to 28 days (42 days in case of aplastic anemia) then to 14 days for subsequent patients.
- A potential second UCART123 infusion is implemented.

In addition, a new AML clinical center has been opened at MD Anderson Cancer Center in Houston, Texas, aiming at increasing the patient enrollment pace. The study is led by Prof. Hagop Kantarjian, MD, Department Chair, Department of Leukemia, Division of Cancer Medicine, and Dr. Naveen Pemmaraju, MD, Assistant Professor, being Principal Investigator.

"This amendment approval for Cellectis' UCART123 protocol is an important step in the progression of our study, and opening another clinical site at MD Anderson – one of the world's most premier cancer centers – puts the Company on solid ground to help as many AML patients as possible with this innovative new therapy," said Prof. Stéphane Depil, Senior Vice President, R&D, and Chief Medical Officer at Cellectis. "Off-the-shelf gene editing immunotherapy is continuing to revolutionize the landscape of modern medicine, and we hope that this approach leads to a lifesaving treatment for AML patients in the near future."

“As Cellectis has been working very closely with the concerned parties to review the details of UCART123 study to date, we are eager to hit the ground running with the new protocol in an effort to find a truly effective treatment for AML patients with high unmet medical needs,” added Stéphan Reynier, Chief Regulatory and Compliance Officer at Cellectis. “We look forward to obtaining additional data so that we can address such a rare and devastating disease.”

The FDA review period for this protocol amendment has passed and Cellectis obtained IRB’s approval.

More information about this trial is available at ClinicalTrials.gov.

About UCART123 clinical trial

Our first wholly controlled product candidate, UCART123, is a gene edited T-cell investigational drug that targets CD123, an antigen expressed at the surface of leukemic cells in AML. Cellectis received in February 2017 an Investigational New Drug (IND) approval from the U.S. Food and Drug Administration (FDA) to conduct Phase 1 clinical trial with UCART123 in patients with AML. This marks the first allogeneic, “off-the-shelf” gene-edited CAR T-cell product candidate that the FDA has approved for clinical trial.
UCART123 clinical trial in AML is a Phase 1, open label dose-escalation and dose-expansion study to evaluate the safety, expansion, persistence and clinical activity of UCART123 (allogeneic engineered T-cells expressing anti-CD123 chimeric antigen receptor), administered in patients with relapsed/refractory AML, and patients with newly diagnosed high-risk AML.
The clinical research is coordinated by principal investigator Prof. Gail J. Roboz, MD, at Weill Cornell, Professor of Medicine at Weill Cornell Medicine and Director of the Clinical and Translational Leukemia Programs at Weill Cornell Medicine and New York-Presbyterian.

AML is a devastating clonal hematopoietic stem cell neoplasm that is characterized by uncontrolled proliferation and accumulation of leukemic blasts in bone marrow, peripheral blood and, occasionally, in other tissues. These cells disrupt normal hematopoiesis and rapidly cause bone marrow failure and death. In the U.S. alone, there are in 2017 an estimated 21,000 new AML cases per year, with 10,000 estimated deaths per year.[1]

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 18 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 market (ticker: CLLS) and on Euronext Growth (ticker: ALCLS). To find out more about us, visit our website: www.cellectis.com

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, 2017 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] National Cancer Institute (NCI), https://seer.cancer.gov

CONTACT:
For further information, please contact:
Media contacts:
Jennifer Moore, 917-580-1088
VP of Communications
media@cellectis.com
or
Caitlin Kasunich, 212-896-1241
KCSA Strategic Communications
ckasunich@kcsa.com
or
IR contact:
Simon Harnest, 646-385-9008
VP of Corporate Strategy and Finance
simon.harnest@cellectis.com