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 2, 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 2, 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 2, 2018

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

Cellectis Files IND for UCART22 in Acute Lymphoblastic Leukemia (B-ALL)

This is the 3rd IND filing for a TALEN®-based Gene Edited Allogeneic UCART Product Candidate

NEW YORK--(BUSINESS WIRE)--May 2, 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 that the Company has submitted an Investigational New Drug (IND) application to the U.S. Food and Drug Administration (FDA) requesting approval to initiate a Phase 1 clinical trial for UCART22, Cellectis' second wholly controlled TALEN® gene-edited product candidate, for the treatment of B-cell acute lymphoblastic leukemia (B-ALL) in adult patients.

Pending regulatory clearance, Cellectis plans to initiate a Phase I clinical trial in the third quarter of 2018. The clinical research will be led by Dr. Nitin Jain, Assistant Professor, and Prof. Hagop Kantarjian, Chairman in the Department of Leukemia and University Chair in Cancer Medicine at The University of Texas MD Anderson Cancer Center in Houston.

"This IND application for UCART22 is an important regulatory milestone for the Company," said Stephan Reynier, Chief Regulatory and Compliance Officer, Cellectis. "The first ever FDA approval for a CAR T-cell therapy, directed against CD19, for pediatric and young patients with R/R B-ALL occurred in 2017. However, further CART approaches are needed, as some limitations of the CD19-CART treatment appear to be due to the expansion of CD19-negative leukemia clones.[1] The UCART22 product candidate will be evaluated in relapsed or refractory CD22 B-ALL, including relapses after CD19 CAR-T administration."

Acute lymphoblastic leukemia (ALL) is a rapidly progressing form of leukemia that is characterized by the presence of a large number of immature white blood cells in the blood and bone marrow. In 2016, an estimated 6,590 new cases were diagnosed in the U.S., with over 1,400 deaths due to ALL.[2] Approximately 85 percent of ALL cases involve precursor B-cells (B-ALL).

UCART22 is an allogeneic, off-the-shelf gene-edited T-cell product candidate designed for the treatment of B-ALL. Like CD19, CD22 is a cell surface antigen expressed from the pre B-cell stage of development through mature B-cells and CD22 expression occurs in more than 90 percent of patients with B-ALL.[3]

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[1] Ruella and Maus, 2016

[2] American Cancer Society

[3] Shah et al., 2015

“Given the high unmet medical need for patients who suffer from B-ALL, filing the IND is the first vital step to potentially creating a treatment to be manufactured on an industrial scale, allowing these patients to get the help that they need much faster,” added Prof. Stéphane Depil, Senior Vice President Research & Development and Chief Medical Officer. “We are dedicated to making this a reality as soon as possible and look forward to hitting the ground running with the clinical trial once we obtain regulatory clearance.”

The manufacturing process of Cellectis’ allogeneic CAR T-cell product line, Universal CARTs or UCARTs, yields frozen, off-the-shelf, non-alloreactive engineered CAR T-cells. UCARTs are meant to be readily available CAR T-cells for a large patient population. Their production is industrialized with defined pharmaceutical release criteria.

Information about ongoing clinical trials is publicly available on dedicated websites such as:
www.clinicaltrials.gov in the U.S.
www.clinicaltrialsregister.eu in Europe

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

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, 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.

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