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 June 2024

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 June 4, 2024

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: June 4, 2024

/s/ André Choulika
André Choulika
Chief Executive Officer

Cellectis Receives Orphan Drug Designation for UCART22, its Allogeneic CAR T Product for Patients with Acute Lymphoblastic Leukemia

NEW YORK, June 04, 2024 (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, announced today that the European Commission (EC) has granted an Orphan Drug Designation (ODD) to its product candidate UCART22, for the treatment of Acute Lymphoblastic Leukemia (ALL).

UCART22 is an allogeneic CAR T-cell product candidate targeting CD22 and evaluated in BALLI-01, a Phase 1/2 open-label dose-escalation and dose-expansion study, designed to evaluate the safety, expansion, persistence and clinical activity of UCART22 in patients with relapse/refractory ALL.

ALL represents 12% of all leukemia cases, progresses rapidly, and is typically fatal within weeks or months if left untreated¹. In 2024, the 10-year prevalence is estimated at 1.9 in 100,000 persons in the European Union (EU). Based on the preliminary clinical data generated with UCART22 in heavily pretreated patients who were relapsed or refractory to approved medicinal products, the European Medicines Agency (EMA) considered that the significant benefit of UCART22 has been demonstrated.

"Patients with relapsed/refractory ALL have limited, if any, treatment options, especially for those who have failed prior CD19 directed CAR T-cell therapy and allogeneic stem cell transplant," said Mark Frattini, M.D., Ph.D., Chief Medical Officer at Cellectis. "The Orphan Drug Designation for UCART22 marks an important step towards developing allogeneic CAR T products that would be readily available for all patients."

The last clinical data presented by Cellectis at the American Society of Hematology in December 2023 were encouraging and suggested that UCART22-P2 (fully manufactured in-house) is more potent with a preliminary response rate of 67% at Dose Level 2, compared to a 50% response rate at Dose Level 3 with UCART22-P1 (manufactured by an external CDMO). Cellectis expects to provide updates on the progress of BALLI-01 by year-end 2024.

The Orphan Drug Designation in the EU is granted by the EC based on a positive opinion issued by the EMA Committee for Orphan Medicinal Products. Medicines intended for the treatment, diagnosis or prevention of seriously debilitating or life-threatening conditions that affect fewer than five in 10,000 people in the EU are eligible for the designation. The Orphan Drug Designation allows companies certain regulatory, financial, and commercial incentives to develop medicines for rare diseases where there are no satisfactory treatment options.

1 (Dong et al., 2020)

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 24 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 "expect," "would," and "suggest,", or the negative of these and similar expressions. These forward-looking statements are based on our management's current expectations and assumptions and on information currently available to management. Forward-looking statements include statements about the advancement, timing and progress of clinical trials, the timing of our presentation of clinical data, and the potential of our candidate products programs. 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, including the risk of losing the orphan drug designation if it is established that the product no longer meets the orphan drug criteria before market authorization is granted (if any). 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, 2023 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 forward-looking 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 forward-looking statements, even if new information becomes available in the future.

For further information on Cellectis, please contact:

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Attachment

PRESS RELEASE_ODD_UCART22(1) (https://ml.globenewswire.com/Resource/Download/b0d8c98e-ec73-467d-bf3e-d0774a270124)