PRESS RELEASE

Cellectis Announces Dosing of the First Patient in Europe with its In-house Manufactured Product Candidate UCART22

- *UCART22 is currently the most advanced allogeneic CAR T-cell product in development for relapsed or refractory B-cell acute lymphoblastic leukemia*

- *The BALLI-01 study (evaluating UCART22) is actively enrolling patients with relapsed or refractory B-cell ALL after FCA lymphodepletion*

New York, NY – April 11, 2023 - 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 announced that the first patient in Europe has been dosed in France with its in-house manufactured product candidate UCART22 and completed the 28-day Dose Limiting Toxicity period.

"Our team has worked tirelessly to expand our BALLI-01 clinical study (evaluating UCART22) to Europe. Dosing our first patient in France with our UCART22 product candidate manufactured in-house is an important advancement for Cellectis" said Mark Frattini, M.D., Ph.D., Chief Medical Officer at Cellectis. "By targeting the CD22 antigen, we aim at offering a novel therapeutic alternative to patients living with relapsed/refractory B-cell ALL, including those patients who have relapsed or did not respond to CD19-directed therapy. "

UCART22 is an allogeneic CAR T-cell product candidate that targets CD22 and is evaluated in the BALLI-01 clinical study, a Phase 1/2a open-label study designed to evaluate the safety and clinical activity of the product candidate in patients with r/r B-cell ALL. UCART22 is currently the most advanced allogeneic CAR T-cell product in development for r/r B-cell ALL.

With its proprietary GMP manufacturing facilities in both Raleigh (North Carolina) and Paris (France), Cellectis has taken full control of UCART production and manufacturing timelines. Cellectis believes that its off-the-shelf treatment approach, coupled with its ability to manufacture UCART product candidates completely in-house, gives the Company a main advantage on the market: it potentially maximizes the chances for eligible patients to be treated without delay.

In December 2022, Cellectis presented positive preliminary clinical data for UCART22 in a Live Webcast, that support the continued administration of UCART22 after fludarabine, cyclophosphamide and alemtuzumab (FCA) lymphodepletion in patients with r/r B-cell ALL. The BALLI-01 study (evaluating UCART22) is actively enrolling patients with r/r B-cell ALL after FCA lymphodepletion. For more information, eligibility criteria and trial locations, please visit www.clinicaltrials.gov (NCT04150497) or contact clinicaltrials@cellectis.com

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," "believe," "intend", "expect," "plan," "scheduled," "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. Forward-looking statements include statements about advancement, timing and progress of clinical trials (including with respect to patient enrollment and follow-up), the timing of our presentation of data and submission of regulatory filings, the operational capabilities at our manufacturing facilities, the potential of our preclinical programs, and the sufficiency of cash to fund operations. 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 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.

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