Cellectis Announces First Dosing of a Patient with its In-house Manufactured Product Candidate UCART22 for the treatment of r/r B-cell ALL

- *The first patient completed the 28-day Dose Limiting Toxicity (DLT) observation period without complication*

New York, NY – December 22, 2022 - 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 for the first time, a patient was dosed in the United States with its in-house manufactured product candidate UCART22, and completed the 28 day DLT period on December 14th, 2022, without complication.

"First dosing of a patient with a product candidate manufactured in-house is a major milestone for Cellectis. UCART22 has been developed to potentially offer a therapeutic alternative for patients with r/r B-ALL, including patients that have relapsed from or unable to receive CD19-directed therapy. The ability to have our manufacturing completely in-house maximizes the chances that eligible patients can be treated without delay." said Mark Frattini, M.D., Ph.D., Chief Medical Officer at Cellectis.

"This is a transformational step forward for Cellectis: our in-house manufacturing capabilities would allow us to move product candidates like UCART22 from R&D to development to a finished UCART product on a timeline that would not have been possible working with a contract manufacturer," said Steven Doares, Senior Vice President, US Manufacturing & Raleigh Site Head. "We believe that having this capability in-house is a great competitive advantage as it would give us the ability to swiftly version our product candidates as we monitor clinical responses, resulting in what we expect to be the best product possible."

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 dose-escalation study designed to evaluate the safety and clinical activity of the product candidate in patients with relapsed or refractory B-cell acute lymphoblastic leukemia (r/r B-ALL).

Three years ago, Cellectis made the decision to build its proprietary GMP manufacturing facilities in both Raleigh (North Carolina) and Paris to take control of its production and manufacturing timelines. Cellectis' facilities are fully operational, showcasing the Company's transformation into an end-to-end cell and gene therapy company, from discovery & product development, transfer, and cGMP manufacturing to clinical development.

As of now, Cellectis is one of the few end-to-end gene editing, allogeneic CAR T-cell companies that control its gene and cell therapy process from start to finish.

BALLI-01 is actively enrolling patients with relapsed or refractory B-ALL.

For more information, eligibility criteria and trial locations, please visit www.clinicaltrials.gov (NCT04150497) or contact clinicaltrials@cellectis.com

About Acute Lymphoblastic Leukemia

Acute lymphoblastic leukemia (ALL) is a cancer of the lymphoid line of blood cells characterized by the development of large numbers of immature lymphocytes. ALL accounts for 0.3% of all new cancer cases, and 0.3% of all cancer deaths. It is estimated that 6,660 new cases of ALL and 1,560 deaths related to the disease occurred in the US in 2022. ALL represents 12% of all leukemia cases, progresses rapidly, and is typically fatal within weeks or months if left untreated[1].

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 22 years of 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. As part of its commitment to a cure, Cellectis remains dedicated to its goal of providing lifesaving UCART product candidates for multiple cancers including acute myeloid leukemia (AML), B-cell acute lymphoblastic leukemia (B-ALL) and multiple myeloma (MM). .HEAL is a new platform focusing on hemopoietic stem cells to treat blood disorders, immunodeficiencies and lysosomal storage diseases. 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).

For more information, visit www.cellectis.com

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[1] SEER reference

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,” “potentially” “scheduled,” “could,” “may,” “would” 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 potential of our preclinical programs and product candidates, the operational capabilities at our manufacturing facilities 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, 2021 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.