PRESS RELEASE

Cellectis Presents Epigenetic Editing Platform to Turn Genes Off Without Altering DNA at the ASGCT Annual Meeting

New York, NY – April 27, 2026 - 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 presents new research on a TALE-based epigenetic editing approach, that does not cut or permanently modify the DNA sequence, making it a potentially safer alternative for genome editing, at the American Society of Gene and Cell Therapy (ASGCT) annual meeting, that will be held on May 11-15, in Boston (MA).

The data will be presented in a poster:

Title: TALE-based epigenetic modulators show sustained knock-down of target genes in T-cells and HEPG2 via a high-throughput multiplex screening platform

Transcription activator-like effector-based epigenetic modulators (TALEM) are engineered fusion proteins consisting of a TALE DNA-binding domain with functional domains that mediate epigenetic modifications. These proteins can be precisely guided to a target location in the genome to switch genes on or off through a process known as epigenetic editing.

Unlike traditional gene editing tools, this approach does not induce DNA breaks and DNA sequence modifications, making it a potentially safer alternative for genome editing.

In this work, Cellectis developed a high-throughput screening system capable of rapidly assembling and testing hundreds of these TALEM, identifying which combinations are most effective at regulating a given gene.

The results:

This strategy was used for two distinct genes: one highly expressed in hepatocytes (active in liver cells) and another implicated in T-cell dysfunction and exhaustion, a key challenge in cancer immunotherapy. In both cases, the approach achieved >90% reduction in gene activity, which remained stable throughout the study.

"We are excited to present these results at ASGCT, which demonstrate Cellectis' ability to apply its gene editing platform into the emerging field of epigenetic editing" said Louisa Mayer, Ph.D., Scientist II and Supervisor - Innovation & Gene Editing at Cellectis. "This work shows our ability to design and identify highly potent epigenetic editors across different cell types, thereby enriching our gene-editing toolbox."

The abstract is published on the ASGCT website. The poster will be available on Cellectis' website on the presentation day, Wednesday May 13, 2026 at 5 pm ET.

About Cellectis
Cellectis is a clinical-stage biotechnology company using its pioneering gene-editing platform to develop life-saving cell and gene therapies. The company 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 develop gene therapies in other therapeutic indications. With its in-house manufacturing capabilities, Cellectis is one of the few end-to-end gene editing companies that controls the cell and gene therapy value chain from start to finish.

Cellectis' headquarters are in Paris, France, with locations in New York and Raleigh, NC. Cellectis is listed on the Nasdaq Global Market (ticker: CLLS) and on Euronext Growth (ticker: ALCLS). To find out more, visit www.cellectis.com and follow Cellectis on LinkedIn and X.

Cautionary Statement
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 "can," or "potentially," 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 potential of our innovation programs. These forward-looking statements are subject to significant risks and uncertainties, including those described in our Annual Report on Form 20-F as amended and in our annual financial report (including the management report) for the year ended December 31, 2025 and subsequent filings Cellectis makes with the Securities Exchange Commission from time to time, which are available on the SEC's website at www.sec.gov, 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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