PRESS RELEASE

UCART19: First in Man Proof of Concept to be Presented at 2015 ASH Annual Meeting

New York, November 5, 2015 – Cellectis (Alternext: ALCLS – Nasdaq: CLLS) today announced that Great Ormond Street Hospital (GOSH) and University College London (UCL) will present encouraging data from a first in man clinical use of UCART19, at the 57th American Society of Hematology (ASH) Annual Meeting in Orlando during the poster session.

GOSH has treated in June 2015 a young leukemia patient under a special license from the Medicines & Healthcare products Regulatory Agency (MHRA) with Cellectis' TALEN® gene edited allogeneic UCART19 product candidate because no other therapies were available for refractory relapsed Acute Lymphoblastic Leukemia (ALL) following mismatched allogeneic stem cell transplantation.

In response to an unsolicited request from Professor Waseem Qasim, Consultant Immunologist at GOSH and Professor of Cell and Gene Therapy at University College London (UCL) Institute of Child Health, Cellectis gave its approval for the use of its UCART19 product candidate and technologies under GOSH's "Specials" license and responsibility, for the particular clinical needs of that individual patient.

Professor Qasim says: "The successful treatment of a patient with UCART19 cells represents a landmark in the use of new gene engineering technology. If replicated in other patients, it could represent a huge step forward in treating leukaemia and other cancers."

"We are very glad for this young patient to have benefited from our highly innovative TALEN® gene edited allogeneic CAR T therapy UCART19. We expect to accelerate our clinical development of TALEN® gene-edited allogeneic CAR-T therapies to further confirm this encouraging clinical proof of concept," said Doctor Mathieu Simon, MD, Executive Vice President, Chief Operating Officer at Cellectis.

"Our team aims to provide to patients, with unmet medical needs, access to the first allogeneic CAR-T therapy, UCART19 made with Cellectis' TALEN® gene-editing technologies," said Doctor André Choulika, Founder, Chairman and Chief Executive Officer of Cellectis. "Cellectis had, is and will invest significant amounts of energy and creativity to provide cancer patients with an accessible, cost-effective, off-the-shelf allogeneic CAR-T therapies across all geographies. UCART19 has been provided for to a patient who could not undergo an autologous CAR-T therapy. Our goal is to make our product candidates accessible to anyone."

About UCART19

UCART19 is a potential best-in-class allogeneic engineered T-cell product for treatment of CD19 expressing hematologic malignancies, initially developed in Chronic lymphocytic leukemia (CLL) and Acute lymphoblastic leukemia (ALL). Servier has an option under the collaboration agreement to acquire the exclusive rights to further develop and commercialize UCART19. Engineered allogeneic CD19 T-cells currently stand out as a real therapeutic innovation for treating various types of leukemia and lymphoma. Cellectis' approach with

UCART19 is based on the preliminary positive results from clinical trials using products based on the CAR technology and has the potential to overcome the limitation of the autologous current approach by providing an allogeneic frozen, “off the shelf” T-cell based medicinal product.

About Great Ormond Street Hospital (GOSH)
Great Ormond Street Hospital for Children NHS Trust is the country’s leading centre for treating sick children, with the widest range of specialists under one roof. With the UCL Institute of Child Health, they are the largest centre for paediatric research outside the US and play a key role in training children’s health specialists for the future.

About the UCL department of hematology
The UCL department of hematology is the major tertiary referral center in the UK for all types of hematological malignancies. They have assumed a global leadership position in stem cell transplantation and adoptive cell therapy for leukemia patients.

About Cellectis
Cellectis is a biopharmaceutical company focused on developing immunotherapies based on gene edited CAR-T cells (UCART). The company’s mission is to develop a new generation of cancer therapies based on engineered T-cells. Cellectis capitalizes on its 15 years of expertise in genome engineering - based on its flagship TALEN® products and meganucleases and pioneering electroporation PulseAgile technology - to create a new generation of immunotherapies. CAR technologies are designed to target surface antigens expressed on 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 the NYSE Alternext market (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 the Cellectis Group.

For further information, please contact:

Cellectis
Jennifer Moore, VP Communications
Phone: 917-580-1088
email: media@cellectis.com

Caitlin Kasunich / Dixon Moretz
KCSA Strategic Communications
212.896.1241 / 212.896.1251
ckasunich@kcsa.com / dmoretz@kcsa.com

Simon Harnest, VP Finance and Investor Relations
Phone: 646-385-9008
email: simon.harnest@cellectis.com

Great Ormond Street Hospital
Rachel Twinn, Senior Press Officer
Phone: +44 020 7239 3039
Email: Rachel.Twinn@GOSH.ORG

Disclaimer

This press release contains “forward-looking” statements that are based on our management’s beliefs and assumptions and on information currently available to management. Forward-looking statements include, without limitation, information regarding the potential efficacy and safety of UCART19 product candidate and other Cellectis’ UCART product candidates, our possible or assumed future results of operations, and our competitive position.

It should be noted that data related to UCART19 product candidate contained in this press release and the data that will be presented at the American Society of Hematology Annual Meeting are preliminary in nature and need to be further confirmed in controlled clinical trials.

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. The risks and uncertainties include, but are not limited to, the risks that the preliminary results from UCART19 as mentioned in this press release will not continue or be repeated in other potential compassionate uses or in planned clinical trials on UCART19 or other Cellectis’ UCART product candidates, the risk of not obtaining regulatory approval to commence clinical trials on our UCART product candidates, including UCART19, the risk that our collaboration with Servier will not continue or will not be successful, and the risk that any one or more product candidates will not be successfully developed and commercialized.

You should read the Company’s Prospectus, including the Risk Factors set forth therein and the exhibits thereto, completely and with the understanding that our actual future results may be materially different from what we expect. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.