Lineage Cell Therapeutics Announces Early Exercise of Option with Cancer Research UK for Immuno-Oncology Cell Therapy Program

May 7, 2020

- **Immunogenicity Data from VAC2 Clinical Trial Supports Mechanism of Action**
- **Dendritic Cell Therapy Program Will Focus on Immuno-Oncology**
- **Platform Expansion to Include Coronavirus Vaccine Development; Seeking Non-Dilutive Funding**

CARLSBAD, Calif.--(BUSINESS WIRE)--May 7, 2020-- Lineage Cell Therapeutics, Inc. (NYSE American and TASE: LCTX), a clinical-stage biotechnology company developing novel cell therapies for unmet medical needs, announced today that Cancer Research UK's Commercial Partnerships has permitted Lineage to conduct an early exercise of its option to acquire data from Cancer Research UK's ongoing Phase 1 clinical trial of VAC2 in non-small cell lung cancer (NCT03371485), and develop an allogeneic dendritic cell therapy platform ("VAC"). Lineage will assume responsibility for further development of the VAC2 product candidate as well as future development opportunities derived from the VAC platform, while Cancer Research UK concludes the ongoing trial. This decision was based on an early review of the data collected by Cancer Research UK in the VAC2 trial under a clinical trial and option agreement. In addition, Cancer Research UK will provide input on the potential use of VAC in the infectious disease space to develop a vaccine against SARS-CoV-2, the virus which causes COVID-19. Cancer Research UK is the world's largest cancer charity dedicated to saving lives through research.

"Clinical data recently collected by Cancer Research UK in the ongoing trial of VAC2 has shown peripheral immunogenicity in patients with non-small cell lung cancer, providing validation of the underlying mechanism of using allogeneic dendritic cells to present antigens to the body's immune system. Evidence of immunogenicity was a key clinical signal which was necessary before we would consider taking over the program," stated Brian M. Culley, Lineage CEO. "This encouraging evidence builds upon earlier clinical studies of VAC which supported not only the safety of the VAC platform, but also evidence that patients developed antigen-specific T cell immune responses. We are excited to assume responsibility for advancing this promising program and move Lineage more aggressively into the field of cancer immunotherapy. Given the scientific evidence supporting our approach, the opportunity to also apply our VAC program to SARS-CoV-2 vaccine development was another positive consideration and we are pleased that Cancer Research UK facilitated this decision. Presenting a viral antigen will require transferring the program from Cancer Research UK's Centre for Drug Development to our cGMP facility, scaling the manufacturing process, and eventually submitting an IND for clinical testing. We also will be evaluating opportunities for non-dilutive funding for this new initiative."

Dr. Nigel Blackburn, Cancer Research UK's Director of the Centre for Drug Development, said: "We are pleased that our development efforts on the VAC2 program over the past several years have generated initial evidence of an immune response in cancer patients and have resulted in an early exercise of the option by Lineage. We are excited to transfer the next phase of development to our partners and to assist the expansion of those efforts into SARS-CoV-2 vaccine development and other areas with significant unmet need."

About VAC2

VAC2 is an allogeneic, or non-patient specific, cancer vaccine product candidate designed to stimulate patient immune responses to an antigen commonly expressed in cancerous cells but not in normal adult cells. VAC2, which is produced from a pluripotent cell technology using a directed differentiation method, is comprised of a population of nonproliferating mature dendritic cells. As the most potent type of antigen presenting cell in the body, dendritic cells instruct the body's immune system to attack and eliminate harmful pathogens and unwanted cells. Because the tumor antigen is loaded exogenously into the dendritic cells prior to administration, VAC2 is a platform technology that can be modified to carry any antigen, including patient-specific tumor neo-antigens or viral antigens. VAC2 is currently being tested in a Phase 1 study in adult patients with non-small cell lung cancer (NSCLC) in the advanced and adjuvant settings (NCT03371485), conducted by Cancer Research UK.

About Cancer Research UK's Centre for Drug Development

Cancer Research UK has an impressive record of developing novel treatments for cancer. The Cancer Research UK Centre for Drug Development has been pioneering the development of new cancer treatments for 25 years, taking over 140 potential new anti-cancer agents into clinical trials in patients. It currently has a portfolio of 21 new anti-cancer agents in preclinical development, Phase I or early Phase II clinical trials. Six of these new agents have made it to market including temozolomide for brain cancer, abiraterone for prostate cancer and rucaparib for ovarian cancer. Two other drugs are in late development Phase III trials.

About Cancer Research UK's Commercial Partnerships Team

Cancer Research UK is the world's leading cancer charity dedicated to saving lives through research. Cancer Research UK's specialist Commercial Partnerships Team works closely with leading international cancer scientists and their institutes to protect intellectual property arising from their research and to establish links with commercial partners. Cancer Research UK's commercial activity operates through Cancer Research Technology Ltd., a wholly owned subsidiary of Cancer Research UK. It is the legal entity which pursues drug discovery research in themed alliance partnerships and delivers varied commercial partnering arrangements.

About Cancer Research UK

- Cancer Research UK is the world's leading cancer charity dedicated to saving lives through research.
- Cancer Research UK's pioneering work into the prevention, diagnosis and treatment of cancer has helped save millions of lives.

- Cancer Research UK receives no funding from the UK government for its life-saving research. Every step it makes towards beating cancer relies on vital donations from the public.
- Cancer Research UK has been at the heart of the progress that has already seen survival in the UK double in the last 40 years.
- Today, 2 in 4 people survive their cancer for at least 10 years. Cancer Research UK's ambition is to accelerate progress so that by 2034, 3 in 4 people will survive their cancer for at least 10 years.
- Cancer Research UK supports research into all aspects of cancer through the work of over 4,000 scientists, doctors and nurses.
- Together with its partners and supporters, Cancer Research UK's vision is to bring forward the day when all cancers are cured.

For further information about Cancer Research UK's work or to find out how to support the charity, please call 0300 123 1022 or visit www.cancerresearchuk.org. Follow us on Twitter and Facebook.

About Lineage Cell Therapeutics, Inc.

Lineage Cell Therapeutics is a clinical-stage biotechnology company developing novel cell therapies for unmet medical needs. Lineage's programs are based on its robust proprietary cell-based therapy platform and associated in-house development and manufacturing capabilities. With this platform Lineage develops and manufactures specialized, terminally differentiated human cells from its pluripotent and progenitor cell starting materials. These differentiated cells are developed to either replace or support cells that are dysfunctional or absent due to degenerative disease or traumatic injury or administered as a means of helping the body mount an effective immune response to cancer. Lineage's clinical programs are in markets with billion dollar opportunities and include three allogeneic ("off-the-shelf") product candidates: (i) OpRegen ®, a retinal pigment epithelium transplant therapy in Phase 1/2a development for the treatment of dry age-related macular degeneration, a leading cause of blindness in the developed world; (ii) OPC1, an oligodendrocyte progenitor cell therapy in Phase 1/2a development for the treatment of acute spinal cord injuries; and (iii) VAC2, a cancer immunotherapy of antigen-presenting dendritic cells in Phase 1 development for the treatment of non-small cell lung cancer. For more information, please visit www.lineagecell.com or follow the Company on Twitter @LineageCell.

Forward Looking Statements

Lineage cautions you that all statements, other than statements of historical facts, contained in this press release, are forward-looking statements. Forward-looking statements, in some cases, can be identified by terms such as "believe," "may," "will," "estimate," "continue," "anticipate," "design," "intend," "expect," "could," "plan," "potential," "predict," "seek," "should," "would," "contemplate," project," "target," "tend to," or the negative version of these words and similar expressions. Such statements include, but are not limited to, statements relating to Lineage's plans to develop the VAC platform and the potential of the VAC platform to address COVID-19. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause Lineage's actual results, performance or achievements to be materially different from future results, performance or achievements expressed or implied by the forward-looking statements in this press release, including risks and uncertainties inherent in Lineage's business and other risks in Lineage's filings with the Securities and Exchange Commission (the SEC). Lineage's forward-looking statements are based upon its current expectations and involve assumptions that may never materialize or may prove to be incorrect. All forward-looking statements are expressly qualified in their entirety by these cautionary statements. Further information regarding these and other risks is included under the heading "Risk Factors" in Lineage's periodic reports with the SEC, including Lineage's Annual Report on Form 10-K filed with the SEC on March 12, 2020 and its other reports, which are available from the SEC's website. You are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date on which they were made. Lineage undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made, except as required by law.

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