Editas Medicine to Present Data Demonstrating Progress Towards Transformative Gene Editing Medicines for the Treatment of Hemoglobinopathies and Cancer at the ASH Annual Meeting and Exposition

November 4, 2021

EDIT-301 preclinical data support differentiated approach to develop a transformative medicine for people living with transfusion-dependent beta thalassemia

Preclinical data demonstrating proprietary CRISPR/Cas12a multiplexed editing of iPSCs enhances iNK tumor killing ability, supporting promise as a potential therapeutic approach for solid tumors

CAMBRIDGE, Mass., Nov. 04, 2021 (GLOBE NEWSWIRE) -- Editas Medicine, Inc. (Nasdaq: EDIT), a leading genome editing company, today announced that two scientific abstracts have been accepted for presentation at the 63rd Annual Meeting and Exposition of the American Society of Hematology (ASH), being held in Atlanta and virtually, December 11-14, 2021. The two abstracts outline preclinical data from the Company's hemoglobinopathy and oncology programs. An additional oncology program abstract was published in *Blood*, the flagship journal of the American Society of Hematology.

Editas Medicine presentations at ASH will include preclinical data demonstrating that:

- Edited peripheral blood CD34+ cells mobilized from transfusion-dependent beta thalassemia (TDT) patients demonstrated significantly improved red blood cell production and increased hemoglobin content, supporting the development of EDIT-301 for the treatment of TDT; and
- Induced pluripotent stem cells (iPSC)-derived natural killer cells (iNKs), edited with proprietary CRISPR/Cas12a to double knock-out (DKO) CISH and TGFβR2, demonstrated robust tumor reduction *in vivo* as compared to wild type iNKs, supporting the development of DKO iNKs as a potent allogeneic cell-based medicine for cancer.

"At ASH, we will present preclinical data from our EDIT-301 program that reinforces our belief that our differentiated therapeutic strategy leveraging our highly-specific engineered Cas12a enzyme with more physiologic targeting has great potential for transfusion-dependent beta thalassemia. We believe that EDIT-301 has the potential to be an efficacious autologous cell therapy for TDT, and we remain on track to file an IND by year-end," said Mark S. Shearman, Ph.D., Chief Scientific Officer, Editas Medicine. "We will also share early exciting preclinical data showcasing how we are using our proprietary gene editing tools to produce a customized iNK cell that we believe will have highly potent activity across multiple tumor cell killing mechanisms and superior persistence. These data reinforce our view that we have a unique and highly promising allogeneic approach with the potential to treat a wide range of solid tumors."

The complete list of Editas Medicine presentations is below. Abstracts can be accessed on the ASH website and the presentations will be posted on the Editas Medicine website during the conference.

Poster Presentations:

Title: Preclinical Development of EDIT301, an Autologous Cell Therapy Comprising AsCas12a-RNP Modified Mobilized Peripheral Blood-CD34$^+$ Cells for the Potential Treatment of Transfusion Dependent Beta Thalassemia
Date and Time: Saturday, December 11, 2021, 5:30 p.m. – 7:30 p.m. EST
Session Name: 801. Gene Therapies: Poster I
Location: Georgia World Congress Center, Hall B5

Title: Deletion of CISH and TGFβR2 in iPSC-Derived NK Cells Promotes High Cytotoxicity and Enhances *In Vivo* Tumor Killing
Date and Time: Sunday, December 12, 2021, 6:00 p.m. – 8:00 p.m. EST
Session Name: 703. Cellular Immunotherapies: Basic and Translational: Poster II
Location: Georgia World Congress Center, Hall B5

About EDIT-301
EDIT-301 is an experimental, autologous cell therapy medicine under investigation for the treatment of sickle cell disease (SCD) and transfusion-dependent beta thalassemia (TDT). EDIT-301 is comprised of sickle patient (for SCD) or normal donor (for TDT) CD34+ cells genetically modified using a highly specific and efficient CRISPR/Cas12a (also known as Cpf1) ribonucleoprotein (RNP) that targets the *HBG1* and *HBG2* promoters in the beta-globin locus where naturally occurring fetal hemoglobin (HbF) inducing mutations reside. Red blood cells derived from EDIT-301 CD34+ cells demonstrate a sustained increase in HbF production, which has the potential to provide a one-time, durable treatment benefit for people living with sickle cell disease and TDT.

About Editas Medicine
As a leading genome editing company, Editas Medicine is focused on translating the power and potential of the CRISPR/Cas9 and CRISPR/Cas12a (also known as Cpf1) genome editing systems into a robust pipeline of treatments for people living with serious diseases around the world. Editas Medicine aims to discover, develop, manufacture, and commercialize transformative, durable, precision genomic medicines for a broad class of diseases. For the latest information and scientific presentations, please visit www.editasmedicine.com.

Forward-Looking Statements

This press release contains forward-looking statements and information within the meaning of The Private Securities Litigation Reform Act of 1995. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "target," "should," "would," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. The Company may not actually achieve the plans, intentions, or expectations disclosed in these forward-looking statements, and you should not place undue reliance on these forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in these forward-looking statements as a result of various factors, including: uncertainties inherent in the initiation and completion of preclinical studies and clinical trials and clinical development of the Company's product candidates; availability and timing of results from preclinical studies and clinical trials; whether interim results from a clinical trial will be predictive of the final results of the trial or the results of future trials; expectations for regulatory approvals to conduct trials or to market products and availability of funding sufficient for the Company's foreseeable and unforeseeable operating expenses and capital expenditure requirements. These and other risks are described in greater detail under the caption "Risk Factors" included in the Company's most recent Annual Report on Form 10-K, which is on file with the Securities and Exchange Commission, as updated by the Company's subsequent filings with the Securities and Exchange Commission, and in other filings that the Company may make with the Securities and Exchange Commission in the future. Any forward-looking statements contained in this press release speak only as of the date hereof, and the Company expressly disclaims any obligation to update any forward-looking statements, whether because of new information, future events or otherwise.

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