Editas Medicine Extends CRISPR Genome Editing Leadership Through Licensing of New CRISPR Technologies

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-- Company to Receive Global Licenses for Novel CRISPR System Cpf1 and Advanced Forms of Cas9 --

CAMBRIDGE, Mass., Dec. 19, 2016 (GLOBE NEWSWIRE) -- Editas Medicine, Inc. (NASDAQ:EDIT), a leading genome editing company, today announced it has exclusively licensed intellectual property related to new CRISPR technologies for human therapeutics that will enhance and broaden the range of medicines the Company can develop. These global licensing agreements include intellectual property owned by the Broad Institute of MIT and Harvard (Broad Institute), Harvard University, Massachusetts Institute of Technology (MIT), Wageningen University, the University of Iowa, and the University of Tokyo for the new CRISPR genome editing system known as Cpf1, advanced forms of Cas9, and additional Cas9-based genome editing technologies. In addition, these licenses employ the inclusive innovation model developed by Broad Institute, Harvard University, and MIT, which is designed to maximize the opportunity for groundbreaking innovations to reach the largest number of patients.

“We are delighted to expand our global CRISPR genome editing leadership and to build on the groundbreaking work of these important academic institutions to develop both the new genome editing system Cpf1 and advanced forms of Cas9,” said Katrine Bosley, President and Chief Executive Officer of Editas Medicine. “With the addition of these significant advancements, we further develop the strongest and most differentiated platform in the fast-moving field of CRISPR, which enables us to design and develop unprecedented genome editing medicines.”

CRISPR genome editing has the potential to enable scientists and physicians to create medicines that may be able to treat serious diseases by making precise changes in DNA in the cells of a patient’s body. Cpf1 is a CRISPR genome editing system that has been recently characterized and engineered and which may be applied to make medicines for humans, among other applications. Cpf1 complements the Cas9 genome editing system as the Cpf1 protein is structurally distinct, has independent intellectual property, and has several potential benefits, including:

- Increasing the number of sites in the genome that can be edited, because it has distinct protospacer adjacent motifs (PAMs);
- Simpler manufacture and delivery, because the natural system requires only a short, single CRISPR guide RNA and does not include a tracrRNA; and
- Increased efficiency and accuracy for some forms of gene repair, because it makes staggered DNA cuts.

Work of Feng Zhang, Ph.D., and colleagues at the Broad Institute and the McGovern Institute for Brain Research at MIT, with co-authors Eugene Koonin, Ph.D., at the NIH, Aviv Regev, Ph.D., at the Broad Institute and the MIT Department of Biology, and John van der Oost, Ph.D., at Wageningen University, on Cpf1 was published in September 2015. Published data from multiple institutions demonstrate that certain Cpf1 proteins can be harnessed to edit genes with high efficiency and specificity.

These licenses also further expand Editas Medicine’s leadership position in Cas9-based genome editing, including advanced forms of Cas9 which can be more specific than the naturally occurring version of Cas9. The licenses announced today also include other aspects of Cas9-based genome editing, specific disease applications, as well as non-exclusive access to a range of supporting research technology.

Under the terms of the combined licenses for Cpf1, advanced forms of Cas9, and additional Cas9-based genome editing technologies from the Broad Institute, Harvard University, MIT, Wageningen University, the University of Iowa, and the University of Tokyo, Editas Medicine will make total upfront cash payments of $6.25 million and issue a promissory note totaling $10 million that can be settled in stock or cash over a predefined period. In the future, Editas Medicine may make additional payments, in cash or stock upon reaching goals and targets related to research and development, commercialization, and market capitalization, and will pay royalties on products based on these technologies.

The Inclusive Innovation Model

These licenses employ the inclusive innovation model, developed by Broad Institute, Harvard University, and MIT, which enables Editas Medicine to devote sufficient investment to develop CRISPR-based genome editing technology to treat human diseases, while enabling broad development of medicines against many diseases. Under this model, Editas Medicine has a right to exclusively use the technology on targets of its choosing for the development of genomic medicines. After an initial period, other companies may apply to license certain CRISPR intellectual property from the institutions for use against genes of interest that are not being pursued by Editas Medicine. The Company then has a pre-defined period to decide whether it intends to pursue the gene of interest and to commit to funding and launch a program. If Editas Medicine is not already working on the gene of interest and chooses not to pursue a new program of its own within this period, then the intellectual property may be made available by the institutions for license to a third party. The inclusive innovation model is aligned with the structure and principles established in the original license from the Broad Institute and Harvard University to Editas Medicine in 2014. In addition, the academic research institutions offer non-exclusive licenses for commercial uses unrelated to human therapeutics, and make CRISPR tools, knowledge, methods, and other intellectual property for genome editing freely available to the academic and non-profit community.

About Editas Medicine

Editas Medicine is a leading genome editing company dedicated to treating patients with genetically-defined diseases by correcting their disease-causing genes. The company was founded by world leaders in genome editing, and its mission is to translate the promise of genome editing science into a broad class of transformative genomic medicines to benefit the greatest number of patients.

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 Quarterly Report on Form 10-Q, which is on file 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 as a result of new information, future events or otherwise.

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