Prime Medicine Receives Up to $15 Million from Cystic Fibrosis Foundation to Advance Hotspot and PASSIGE™ Prime Editors for Cystic Fibrosis

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CAMBRIDGE, Mass., Jan. 25, 2024 (GLOBE NEWSWIRE) -- Prime Medicine, Inc. (Nasdaq: PRME), a biotechnology company committed to delivering a new class of differentiated one-time curative genetic therapies, today announced that the Cystic Fibrosis Foundation (CF Foundation) has agreed to provide the Company with up to $15 million to support the development of Prime Editors for the treatment of Cystic Fibrosis (CF).

CF is an inherited genetic disease, which can be caused by more than 1,700 different mutations in the gene that produces the CF transmembrane conductance regulator (CFTR) protein. These mutations, including nonsense and rare mutations, cause the CFTR protein to malfunction or not be made at all; this leads to a buildup of thick mucus, which in turn leads to persistent lung infections, destruction of the pancreas, and complications in other organs. CF affects close to 40,000 people in the United States and, while significant progress in the last decade has created therapeutic options for many patients, there is no cure and approximately 15 percent of patients cannot clinically benefit from or tolerate existing treatments.

Prime Medicine is uniquely positioned to develop potentially curative therapies for CF by using Prime Editing to correct CFTR mutations at the natural genetic locus. Funding from the CF Foundation will allow Prime Medicine to progress two distinct strategies for applying Prime Editing to treat CF: hotspot editing and PASSIGE™ (Prime Assisted Site Specific Integrase Gene Editing). Through hotspot editing, the Company aims to address multiple mutations at mutational hotspots with a small number of Prime Editors. Preclinical data generated by Prime Medicine suggest that using only eight hotspot Prime Editors could benefit more than 98 percent of all people with CF, including those living with nonsense and rare mutations whose disease is not amenable to treatment with currently approved therapies, as well as those who do not tolerate existing therapies. Prime Medicine has begun preclinical research to use hotspot Prime Editors to correct the G542X nonsense CFTR mutation, and plans to extend this work to develop hotspot Prime Editors for other clusters of CFTR mutations.

In parallel, using PASSIGE, Prime Medicine aims to address nearly all people with CF with a single superexon insertion strategy. This has the potential to restore CFTR expression in individuals' lung cells under native expression conditions, regardless of the underlying CFTR mutation.

"Leveraging our Prime Editing technology, we hope to create a one-time, non-viral therapy, which can precisely correct the underlying genetic mutation that causes CF and potentially offer the first cure for this progressive, devastating disease," said Keith Gottesdiener, M.D., President and Chief Executive Officer of Prime Medicine. "We are pleased to advance this work together with the CF Foundation, an organization devoted to delivering transformative therapies - and one day a cure - that will allow all people with CF to live longer, healthier lives, with tremendous reach across the clinical, academic and patient communities. We believe their many resources and learnings will allow us to accelerate our ongoing efforts, investing in delivery optimizations and early research that could, if successful, allow many more people to achieve normal, healthy lung function."

The CF Foundation will provide Prime Medicine $6 million upfront. Prime Medicine is eligible for an additional $6 million upon achieving certain preclinical milestones, with up to $3 million in supplementary funding upon mutual agreement.

About Prime Medicine
Prime Medicine is a leading biotechnology company dedicated to creating and delivering the next generation of gene editing therapies to patients. The Company is leveraging its proprietary Prime Editing platform, a versatile, precise and efficient gene editing technology, to develop a new class of differentiated, one-time, potentially curative genetic therapies. Designed to make only the right edit at the right position within a gene while minimizing unwanted DNA modifications, Prime Editors have the potential to repair almost all types of genetic mutations and work in many different tissues, organs and cell types.

Prime Medicine is currently progressing a diversified portfolio of eighteen programs initially focused on genetic diseases with a fast, direct path to treating patients or with a high unmet need because they cannot be treated using other gene-editing approaches. Over time, the Company intends to maximize Prime Editing's therapeutic potential and advance potentially curative therapeutic options to patients for a broad spectrum of diseases. For more information, please visit www.primemedicine.com.

Forward Looking Statements
This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, implied and express statements about Prime Medicine's beliefs and expectations regarding: the Company's position to develop potentially curative therapies for CF by using Prime Editing to correct CFTR mutations at the natural genetic locus; the use of up to $15 million from the CF Foundation to advance hotspot and PASSIGE Prime Editors for CF, including the Company's distinct strategies for applying Prime Editing to treat CF and its plans relating to these strategies; the goals of the work with the CF Foundation, including the potential to allow all people with CF to live longer, healthier lives and the Company's acceleration of ongoing efforts, investing in delivery optimizations and early research that could, if successful, allow many more people to achieve normal, healthy lung function; and the economics of the transaction. The words "may," "might," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "expect," "estimate," "seek," "predict," "future," "project," "potential," "continue," "target" and similar words or expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including: uncertainties related to the authorization, initiation, and conduct of preclinical and other development requirements for potential product candidates, including uncertainties related to regulatory approvals; risks related to the development

and optimization of new technologies, the results of preclinical studies, or clinical studies not being predictive of future results in connection with future studies, including the work with CF; the scope of protection Prime Medicine is able to establish and maintain for intellectual property rights covering its Prime Editing technology; Prime Medicine's ability to identify and enter into future license agreements and collaborations; and general economic, industry and market conditions. These and other risks and uncertainties are described in greater detail in the section entitled "Risk Factors" in Prime Medicine's most recent Annual Report on Form 10-K, as well as any subsequent filings with the Securities and Exchange Commission. In addition, any forward-looking statements represent Prime Medicine's views only as of today and should not be relied upon as representing its views as of any subsequent date. Prime Medicine explicitly disclaims any obligation to update any forward-looking statements subject to any obligations under applicable law. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

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