



Gritstone bio Granted Two New U.S. Patents for Self-amplifying mRNA (samRNA)

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-- Patents support Gritstone's pioneering work in the application of next-generation samRNA vaccine technology in oncology and infectious disease --

EMERYVILLE, Calif., Dec. 13, 2022 (GLOBE NEWSWIRE) -- Gritstone bio, Inc. (Nasdaq: GRTS), a clinical-stage biotechnology company working to develop the world's most potent vaccines, today announced that the United States Patent and Trademark Office (USPTO) recently issued two new patents related to the company's novel self-amplifying mRNA (samRNA) vaccine platform technology.

U.S. Patent No. 11,504,421 includes claims covering Gritstone's individualized cancer vaccine candidates (GRANITE). U.S. Patent No. 11,510,973 includes claims covering antigen-encoding samRNA vectors and has broad applicability across Gritstone's candidates in oncology and infectious disease.

"Self-amplifying mRNA (samRNA) is increasingly being recognized for its benefits over first-generation mRNA, and our new patents reflect the leadership position we believe we have established in this rapidly growing space," said Andrew Allen, M.D., Ph.D., Co-founder, President, and Chief Executive Officer of Gritstone. "Gritstone's samRNA vectors enable extended duration and magnitude of antigen expression, in an immunostimulatory context, which together can drive more potent and durable induction of neutralizing antibodies and T cell immunity. In addition, Gritstone's samRNA vectors allow for large cassettes, providing substantial target antigen capacity and flexibility. The clinical data we have shared to date support the potential broad application and powerful impact of this technology, and we look forward to harnessing these inherent capabilities as we further advance and develop samRNA therapeutics and prophylactics for oncology and infectious diseases."

These new patents are part of an expanding IP portfolio for Gritstone including samRNA and EDGE™, the company's proprietary antigen identification platform (EDGE: Epitope Discovery for GENomes). Gritstone currently has eight applications granted or allowed in the United States, and approximately 300 patent applications pending in the United States and other jurisdictions.

"These patents demonstrate our commitment to developing samRNA vaccines, which have had a core role in our early oncology programs (GRANITE® and SLATE®) and more recently as we have expanded into infectious diseases, including our SARS-CoV-2 (CORAL) program," Andrew Allen, M.D., Ph.D. commented.

About Self-amplifying mRNA (samRNA)

Self-amplifying mRNA (samRNA) is a platform technology that has been demonstrated to be well-tolerated clinically, robustly immunogenic, scalable and widely applicable in early-stage clinical studies. Like traditional mRNA vaccines, samRNA vaccines use the host cell's transcription system to produce target antigens to stimulate adaptive immunity. Unlike traditional mRNA, samRNA replicates once in the cell, creating copies of the original strand of RNA. Potential benefits of samRNA include extended duration and magnitude of antigen expression, strong and durable induction of neutralizing antibody and T cell immunity (CD4+ and CD8+), dose sparing and the potential to develop a refrigerator stable product. Gritstone bio is evaluating its samRNA within its oncology and infectious disease programs.

About Gritstone EDGE™ Epitope Discovery for GENomes Platform

Gritstone EDGE™ is a proprietary epitope discovery platform used to discover and identify the epitopes to induce immune response for protective or therapeutic benefit. In oncology, Gritstone uses EDGE to identify those neoantigens most likely to present on a cell surface, thus making treatment visible to T cells. In infectious disease, Gritstone uses EDGE to identify fragments of viral proteins displayed on the cell surface. Once identified, Gritstone then delivers its novel vaccine candidates (self-amplifying mRNA) to these optimal targets to drive neutralizing antibody and T cell immune response. To date, Gritstone EDGE™ has been trained with millions of HLA-peptides and demonstrated positive predictive values of over 70%. Gritstone EDGE™ is patented, and results from early studies were published in Nature Biotechnology in 2018.

About Gritstone bio

Gritstone is working to create the world's most potent vaccines. We leverage our innovative vectors and payloads to train multiple arms of the immune system to attack critical disease targets and have programs in viral diseases and solid tumors. Independently and with our partners, we are advancing a portfolio of product candidates with the aim of improving patient outcomes and eliminating disease. www.gritstonebio.com

Gritstone Forward-Looking Statements

This press release contains forward-looking statements, including, but not limited to, statements related to the potential of Gritstone's therapeutic programs; the advancements in Gritstone's ongoing clinical trials; the timing of data announcements related to ongoing clinical trials and the initiation of future clinical trials. Such forward-looking statements involve substantial risks and uncertainties that could cause Gritstone's research and clinical development programs, future results, performance or achievements to differ significantly from those expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the uncertainties inherent in the drug development process, including Gritstone's programs' clinical stage of development, the process of designing and conducting preclinical and clinical trials, the regulatory approval processes, the timing of regulatory filings, the challenges associated with manufacturing drug products, Gritstone's ability to successfully establish, protect and defend its intellectual property and other matters that could affect the sufficiency of existing cash to fund operations. Gritstone undertakes no obligation to update or revise any forward-looking statements. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to the business of the company in general, see Gritstone's most recent Annual Report on Form 10-K filed on March 10, 2022, as well as Gritstone's Quarterly Reports on Form 10-Q filed on May 5, 2022 and August 4, 2022 and any current and periodic reports filed with the Securities and Exchange Commission.

Gritstone Contacts

Investors:

George E. MacDougall
Director, Investor Relations & Corporate Communications
Gritstone bio, Inc.
ir@gritstone.com

Media:

Dan Budwick
1AB
(973) 271-6085
dan@1abmedia.com

