NEWS RELEASE

GRO Biosciences Presents Preclinical Data on Two ProGly™ Programs for Non-Standard Amino Acid Therapies

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- Data represent promising new modalities for reversing autoimmune disease without immunosuppression and for eliminating anti-drug antibodies against immunogenic therapies

BOSTON--(BUSINESS WIRE)-- **GRO Biosciences Inc.** (“GRObio”), an emerging biotechnology company leveraging synthetic biology to expand the amino acid alphabet and deliver on the promise of protein therapeutics, presented successful proof of concept results in two pre-clinical programs representing potential breakthroughs in autoimmune disease and immunogenicity at this week’s Discovery On Target conference.

The Company’s genomically recoded organism (GRO) platform enables precise placement of non-standard amino acids (NSAAs) within a protein to realize previously unattainable therapeutic capabilities. ProGly™ NSAAs enable the first programmatic control over protein-immune function. ProGly NSAAs contain glycans that can elicit a defined immune response to the underlying protein.

The ProGly approach to immunotolerization enables reversal of autoimmune disease without systemic immune suppression. Each ProGly NSAA carries a glycan-based tolerance signal that reeducates the immune system to recognize the underlying protein as “self” rather than “foreign”. GRObio’s first indication for autoimmune therapy is myasthenia gravis (MG), a rare disease that causes progressive muscle weakness. The Company presented data showing that ProGly produced a profound improvement in experimental autoimmune myasthenia gravis, a highly translatable animal model of MG. The Company further showed that the therapeutic effects were driven by clinically meaningful induction of antigen-specific T regulatory cells.

GRObio also presented data showing that ProGly can prevent immunogenic responses to protein therapeutics. The Company began with a marketed enzyme replacement therapy for a serious metabolic disease. While initially effective, the enzyme rapidly becomes ineffective in most patients due to the emergence of anti-drug antibodies (ADA) against the enzyme. GRObio utilized its computational protein design tools and high-throughput robotics to engineer enzyme variants that contain many ProGly NSAAs while maintaining full activity in human blood. When tested in animals the ProGly enzyme showed a dramatic reduction in ADA compared to the marketed enzyme.

“Getting patients off immunosuppressive therapies and preventing immunogenic responses to therapeutics are two of the greatest needs in our field,” said Tracey Lodie, PhD, Chief Scientific Officer of Quell Therapeutics and Scientific Advisor to GRObio. “The data presented by GRObio represent a step-change in both applications that, if born out in the clinic, will revolutionize treatment for patients.”

“We are greatly encouraged by the results of these studies that clearly demonstrate both the therapeutic potential and the underlying mechanism of our ProGly NSAAs,” said Daniel J. Mandell, PhD, Chief Executive Officer of GRO Biosciences. “With a clear development plan and a defined path to the clinic, we are closer to bringing these highly sought therapeutic capabilities to the patients who need them.”

About GRO Biosciences

GRO Biosciences (“GRObio”) is leveraging groundbreaking science to expand the amino acid alphabet and deliver on the promise of protein therapeutics. The Company is transforming treatments in diverse areas including autoimmune and metabolic diseases to improve the lives of patients. GRObio is applying its platform to advance partnered and collaborative programs, as well as its own pipeline of protein therapeutics bearing unique non-standard amino acid (NSAA) chemistries. The Company’s NSAA therapeutics feature previously unattainable capabilities including precise regulation of the immune system and unprecedented duration of action. GRObio is headquartered in Cambridge, MA.

Find GRObio on **LinkedIn**, **Twitter**, **Instagram**, **Facebook** and the web at **grobio.com**.

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