

Matinas BioPharma Announces Collaboration with National Resilience to Explore and Evaluate Novel LNC Platform Delivery Technology for Certain Nucleic Acids

BEDMINSTER, N.J., Jan. 12, 2023 (GLOBE NEWSWIRE) -- Matinas BioPharma (NYSE AMER: MTNB), a clinical-stage biopharmaceutical company focused on redefining the intracellular delivery of nucleic acids and small molecules with its lipid nanocrystal (LNC) platform technology, today announced a strategic collaboration with National Resilience, Inc. (Resilience), a technology-focused manufacturing company dedicated to broadening access to complex medicines. The parties have entered into a Material Transfer and Evaluation Agreement focused on exploring the potential for oral delivery of identified nucleic acids. The parties will closely collaborate on a comprehensive research program comprising the design, formulation, optimization, and *in vitro* and *in vivo* testing of these nucleic acid formats in combination with Matinas' proprietary LNC platform. Terms of the collaboration were not otherwise disclosed.

"Our mission is dedicated to unlocking and delivering the full clinical potential of therapies that require intracellular delivery," said Jerome D. Jabbour, Chief Executive Officer and Cofounder of Matinas. "We are thrilled to collaborate with this world-class organization to further demonstrate the capabilities of our LNC platform. We view Resilience as an ideal platform partner and we are excited to work together with them in support of their mission to allow scientists to make their therapies quickly, safely and at scale, so patients around the world can have access to the medicines they need. Importantly, the nature of our collaboration and relationship with Resilience is distinct and different from our ongoing work with BioNTech, which allows us to pursue multiple potential applications for our LNC platform in the nucleic acid space simultaneously."

Matinas' LNC platform delivery technology offers the potential for next generation intracellular drug delivery beyond lipid nanoparticles and viral vectors with potential advantages across a broad range of therapeutics, including oral bioavailability. The primary component of the LNC technology facilitates preferential cellular uptake by certain phagocytes and cells enabling extra-hepatic targeting and delivery with no observed evidence of immunogenicity or cytotoxicity.

About Matinas BioPharma

Matinas BioPharma is a biopharmaceutical company focused on improving the intracellular delivery of nucleic acids and small molecules with its lipid nanocrystal (LNC) platform

technology. The Company is developing its own internal portfolio of products as well as partnering with leading pharmaceutical companies to develop novel formulations that capitalize on the unique characteristics of the LNC platform.

Preclinical and clinical data have demonstrated that this novel technology can provide solutions to many of the challenges in achieving safe and effective intracellular delivery, for both small molecules and larger, more complex molecules, such as mRNA, DNA plasmids, antisense oligonucleotides, and vaccines. The combination of a unique mechanism of action and flexibility with formulation and route of administration (including oral), positions Matinas' LNC technology to potentially become the preferred next-generation intracellular drug delivery vehicle with distinct advantages over both lipid nanoparticles and viral vectors.

For more information, please visit www.matinasbiopharma.com.

About Resilience

Resilience is a technology-focused biomanufacturing company dedicated to broadening access to complex medicines. Founded in 2020, the company is building a sustainable network of high-tech, end-to-end manufacturing solutions to ensure the treatments of today and tomorrow can be made quickly, safely, and at scale. Resilience seeks to free its partners to focus on the discoveries that improve patients' lives by continuously advancing the science of biopharmaceutical manufacturing and development. For more information, visit www.Resilience.com and follow us on social media: @IncResilience on Twitter and Resilience on LinkedIn.

Matinas Forward-looking Statements

This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including those relating to our business activities, our strategy and plans, our collaborations with Resilience and BioNTech SE, the potential of our LNC platform delivery technology, and the future development of its product candidates, the Company's ability to identify and pursue development, licensing and partnership opportunities for its products or platform delivery technology on favorable terms, if at all, and the ability to obtain required regulatory approval and other statements that are predictive in nature, that depend upon or refer to future events or conditions. All statements other than statements of historical fact are statements that could be forward-looking statements. Forward-looking statements include words such as "expects," "anticipates," "intends," "plans," "could," "believes," "estimates" and similar expressions. These statements involve known and unknown risks, uncertainties and other factors which may cause actual results to be materially different from any future results expressed or implied by the forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties, including, but not limited to, our ability to obtain additional capital to meet our liquidity needs on acceptable terms, or at all, including the additional capital which will be necessary to complete the clinical trials of our product candidates; our ability to successfully complete research and further development and commercialization of our product candidates; the uncertainties inherent in clinical testing; the timing, cost and uncertainty of obtaining regulatory approvals; our ability to protect the Company's intellectual property; the loss of any executive officers or key personnel or consultants; competition; changes in the regulatory landscape or the imposition of regulations that affect the Company's products; and the other factors listed under "Risk Factors" in our filings with the SEC, including Forms 10-K, 10-Q and 8-K. Investors are cautioned not to place undue reliance on such forwardlooking statements, which speak only as of the date of this release. Except as may be required by law, the Company does not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Matinas BioPharma's product candidates are all in a development stage and are not available for sale or use.

Source: Matinas BioPharma Holdings, Inc.

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Source: Matinas BioPharma Holdings, Inc.