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Matinas BioPharma Announces a Research Evaluation with Top Global Pharma Company Based on Its Proprietary Drug Delivery Platform

- Matinas to formulate select oligonucleotides using its proprietary, lipid nano-crystal platform delivery technology -

BEDMINSTER, N.J., Jan. 10, 2019 (GLOBE NEWSWIRE) -- Matinas BioPharma Holdings, Inc. (NYSE AMER: MTNB), a clinical stage biopharmaceutical company, today announced they have signed an agreement with an undisclosed top global pharmaceutical company aimed to evaluate synergistic effects of Matinas' lipid-nano-crystal ("LNC") platform delivery technology with their partner's nucleic acid polymer technology. Formulations will be developed using Matinas' LNC delivery technology which enables the development of a wide range of difficult-to-deliver molecules. Promising formulations will be tested in *in vitro* and *in vivo* preclinical studies. For competitive reasons, the agreement stipulates certain confidential provisions, including the pharmaceutical company's identity, the therapeutic molecule(s), the intended targets and the financial terms of the agreement.

"We are delighted to announce this research agreement with a global pharmaceutical company," said Jerome D. Jabbour, CEO of Matinas BioPharma. "We believe our LNC technology platform has the potential to become an important delivery solution for a variety of treatment paradigms where inefficient or ineffective delivery mechanisms are currently tolerated because of the lack of an ideal alternative. This evaluation, focused on oligonucleotides, represents an important first step in our strategy of exploring how our LNC delivery technology can provide solutions for companies developing innovative nucleic acid polymers, small molecule drugs, vaccines, proteins and potentially even gene-editing technologies. We are thrilled to have been selected by a leading healthcare company to potentially help identify solutions to challenges related to drug delivery."

Matinas' LNC delivery platform has far greater flexibility than other lipid nanoparticle approaches and offers an intracellular drug delivery solution with potential advantages for a range of therapeutics. It has demonstrated preclinically the ability to formulate and thereby re-design a wide variety of molecules and drugs which, (i) require delivery technology to improve the stability of molecules inside and outside of the body, (ii) could benefit from efficient delivery and cellular uptake by target cells, and (iii) are currently only available in IV formulations or (iv) otherwise experience significant toxicity-related adverse events.

About Matinas BioPharma

Matinas BioPharma is a clinical-stage biopharmaceutical company focused on (i) the development of MAT9001 for abnormalities in blood lipids, referred to as dyslipidemia, and the treatment of cardiovascular and metabolic disease, and (ii) enabling the delivery of life-changing medicines using our unique and proprietary, lipid nano-crystal ("LNC") platform technology, including development of MAT2203, our lead antifungal platform drug candidate.

The Company's proprietary, disruptive technology utilizes lipid-crystal nano-particle cochleates to nano-encapsulate small molecules, nucleic acid polymers, vaccines and other medicines potentially making them safer, more tolerable, less toxic and orally bioavailable. The Company's lead anti-fungal product candidate, MAT2203, positions Matinas BioPharma to become a leader in the safe and effective delivery of anti-infective therapies utilizing its proprietary LNC formulation technology.

In addition, the Company is actively pursuing the development of MAT9001 with the support of a world-class team of clinical key opinion leaders and regulatory consultants. MAT9001 is a prescription-only omega-3 fatty acid-based composition, comprised primarily of EPA and DPA, under development for hypertriglyceridemia, which has shown superiority versus Vascepa® (icosapent ethyl) in reducing serum triglycerides, Total- and Non-HDL-Cholesterol, apolipoproteins and PCSK9 levels.

For more information, please visit www.matinasbiopharma.com and connect with the Company on Twitter, LinkedIn and Facebook.

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 the Company's strategic focus and the future development of its product candidates, the anticipated timing of regulatory submissions, the anticipated timing of clinical studies, the anticipated timing of regulatory interactions, the Company's ability to identify and pursue development 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, including MAT2203 and MAT9001; the uncertainties inherent in clinical testing; the timing, cost and uncertainty of obtaining regulatory approvals; our ability to maintain and derive benefit from the Qualified Infectious Disease Product (QIDP), Orphan and/or Fast Track designations for MAT2203, which does not change the standards for regulatory approval or guarantee regulatory approval on an expedited basis, or at all; 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 forward-looking 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.

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