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Matinas BioPharma Announces a Research Collaboration with ViiV Healthcare to Evaluate Formulation of Antiviral Drug Candidates

BEDMINSTER, N.J., May 15, 2019 (GLOBE NEWSWIRE) --Matinas BioPharma Holdings, Inc. (NYSE AMER: MTNB), today announced that they have entered into a research collaboration with ViiV Healthcare, a global specialist HIV company established in November of 2009 by GlaxoSmithKline (LSE: GSK) and Pfizer (NYSE: PFE) dedicated to delivering advances in the treatment and care for people living with HIV and for people who are at risk of becoming infected with HIV, to evaluate the use of Matinas' lipid nano-crystal ("LNC") platform delivery technology.

Formulations of select antivirals will be developed using Matinas' LNC platform delivery technology, which enables the development of a wide range of difficult-to-deliver molecules. Promising formulations will be tested in *in vivo* preclinical studies to identify a lead LNC-antiviral formulation to take forward in development.

"This is the second collaboration announced this year where we have been asked to pair our LNC platform delivery technology with molecules which could have a significant impact on disease burden. In working closely with industry leading pharma companies like ViiV Healthcare, we are expanding the depth, breadth and utilization of our disruptive platform and positioning our technology to potentially solve complex issues related to intracellular delivery in the absence of undesirable toxicity," said Jerome D. Jabbour, Chief Executive Officer of Matinas. "We look forward to continuing to expand the application of our LNC technology to potentially transformative medicines for the benefit of patients in need."

Matinas' LNC platform delivery technology offers an intracellular drug delivery solution with potential advantages across a broad range of therapeutics. The Company has demonstrated in preclinical animal models the ability to formulate and thereby re-design a wide variety of molecules and drugs (including oligonucleotides, peptides, proteins, vaccines, and small molecules) which, (a) require delivery technology to improve the stability of molecules inside and outside of the body; (b) could benefit from efficient delivery and cellular uptake by target cells; (c) are currently only available in IV formulations or (d) otherwise experience significant toxicity-related adverse events.

About Matinas BioPharma

Matinas BioPharma is a clinical-stage biopharmaceutical company focused on creating value through the streamlined development of MAT9001 for the treatment of cardiovascular and metabolic conditions and the application of its lipid nano-crystal ("LNC") platform technology

to solve complex challenges relating to the safe and effective delivery of small molecules, gene therapies, proteins, peptides and vaccines.

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, apolipoprotein CIII and PCSK9 levels.

In addition, the Company's proprietary, disruptive technology utilizes lipid nano-crystal cochleates to encapsulate small molecules, nucleic acid polymers, vaccines and other medicines potentially making them safer, more tolerable, less toxic, and orally bioavailable.

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.

Investor Contact Matinas BioPharma
Jenene Thomas
Jenene Thomas Communications, LLC
Phone: +1 (833) 475-8247
Email: mtnb@jtcir.com

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