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Matinas BioPharma's MAT9001 Meets Primary and Secondary Endpoints in First Human Trial versus Vascepa(R)

- *MAT9001 demonstrates superiority versus Vascepa on bioavailability, triglyceride reduction and other lipid endpoints –*
- *MAT9001 is the first orally-administered dyslipidemia product reported to significantly reduce PCSK9 in patients –*

BEDMINSTER, N.J., June 1, 2015 (GLOBE NEWSWIRE) -- [Matinas BioPharma Holdings, Inc.](#) ("Matinas BioPharma" or the "Company") (OTCQB:MTNB), a clinical-stage biopharmaceutical company, today announced top-line results for its head-to-head comparative pharmacokinetic and pharmacodynamic study versus Vascepa® (icosapent ethyl). Data from this study demonstrated that its lead cardiovascular/metabolic disease drug candidate [MAT9001](#) met all primary and secondary endpoints in a head-to-head comparative pharmacokinetic and pharmacodynamic study versus Vascepa® (icosapent ethyl).

In addition to meeting the statistical non-inferiority test for all primary and secondary endpoints, further statistical analysis demonstrated superiority of MAT9001 over Vascepa for omega-3 bioavailability (baseline adjusted AUC and C_{max} , approximately 6-fold higher with MAT9001 on day 14, with very high statistical significance) and triglyceride reduction (median TG-reduction from baseline: -33.2% for MAT9001 versus -10.5% for Vascepa; $p < 0.0001$). MAT9001 also demonstrated a statistically significantly greater reduction in total-cholesterol, VLDL-cholesterol and non-HDL-cholesterol for MAT9001 versus Vascepa. Although both study drugs exhibited a reduction of LDL cholesterol, the difference between the two was not statistically significant. In addition, MAT9001 demonstrated a statistically significant reduction in PCSK9 versus Vascepa, which did not decrease PCSK9 levels.

[Christie M. Ballantyne M.D.](#), Professor of Medicine at Baylor College of Medicine and the Chief of the Sections of Cardiovascular Research and Cardiology, a noted cardiologist, principal investigator of many lipid and cardiovascular outcome studies and a member of the Matinas BioPharma Scientific Advisory Board, commented, "This was a very ambitious first-in-human head-to-head study and it is very exciting to see that MAT9001 achieved all endpoints in this study."

"These statistically significant results support the premise that the purposeful design of our MAT9001 omega-3 fatty acid composition and delivery system has the potential to be a best-in-class product for the treatment of dyslipidemia. The unique ability of MAT9001 in reducing PCSK9 underlines its differentiation potential. We believe the outcome of this study also underscores our ability to develop highly differentiated products with the potential to address areas of unmet need," remarked Roelof Rongen, President and Chief Executive

Officer of Matinas BioPharma.

The PK/PD cross-over clinical study, with administration of the study drugs with food to 42 patients with high triglycerides (200-400 mg/dL), was conducted in Canada under scientific guidance of a distinguished Steering Committee, comprised of Drs. Christie M. Ballantyne (Baylor College of Medicine), Kevin C. Maki (DePaul University) and William F. Keane (University of Minnesota, retired). Further analyses on additional clinical attributes from the study are continuing.

Jerome Jabbour, a co-founder of Matinas BioPharma and Chief Business Officer, stated, "We are very pleased by the outcome of this study and believe these data unlock compelling opportunities for the Company as we continue to explore the clinical and business development strategic pathways for this exciting product candidate."

The Company expects to present the full data from this study at upcoming scientific congresses and in peer-reviewed journals over the course of the year.

Vascepa is indicated for use with a lipid-lowering diet to reduce very high triglycerides in adult patients and is a trademark of Amarin Pharmaceuticals Ireland Ltd.

About MAT9001

[MAT9001](#) is a proprietary prescription-only omega-3 fatty acid-based composition, comprising docosapentaenoic acid (DPA) and other omega-3 fatty acids, which is under development for therapeutic applications with severe hypertriglyceridemia (TG>500 mg/dL) as the lead indication. Promising pre-clinical studies with DPA and MAT9001 indicate distinctive therapeutic response properties. In the fourth quarter of 2014, Matinas BioPharma filed an IND for MAT9001 with FDA. The Company believes that its development program and related clinical investigations may yield an improved therapeutic profile compared to existing therapies, based on MAT9001's differentiating mechanistic features associated with its unique composition.

About Matinas BioPharma

Matinas BioPharma is a clinical-stage biopharmaceutical company with a principal focus on identifying and developing novel and targeted pharmaceutical products for the treatment of various infectious diseases, with additional programs developing therapies to treat cardiovascular and metabolic conditions. Led by an experienced management team and a board of directors with a history of building pharmaceutical companies, Matinas BioPharma is focused on creating highly differentiated, safe and efficacious therapies utilizing its expertise in drug formulation and development in order to address significant unmet medical needs. The Company's lead anti-infective product candidates, MAT2203 and MAT2501, position Matinas BioPharma to become a leader in the safe and effective delivery of anti-infective therapies utilizing its proprietary lipid-crystal nano-particle cochleate formulations. For more information, please visit www.matinasbiopharma.com and connect with the Company on [Twitter](#), [LinkedIn](#), [Facebook](#), and [Google+](#).

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 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 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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