December 6, 2018

Matinas BioPharma Assembles World Class Scientific Advisory Board to Guide Clinical Development Strategy of Potential Best-in-Class Prescription-Only Omega-3, MAT9001

Christie M. Ballantyne, M.D., John J.P. Kastelein, M.D., Ph.D., FESC, and Kevin C. Maki, Ph.D. represent three of the world's leading lipid specialists and cardiovascular health experts

BEDMINSTER, N.J., Dec. 06, 2018 (GLOBE NEWSWIRE) -- Matinas BioPharma Holdings, Inc. (NYSE AMER: MTNB), a clinical stage biopharmaceutical company, today announced that it has established a new Scientific Advisory Board to guide the development of its proprietary, prescription-only omega-3 fatty acid composition, MAT9001, and appointed three internationally renowned experts in Christie M. Ballantyne, M.D., John J.P. Kastelein, M.D., Ph.D., FESC and Kevin C. Maki, Ph.D. as its first members.

"One of our first priorities in advancing the development of MAT9001 is to surround and support this potential best-in-class drug with world class experts who possess unparalleled knowledge and experience in cardiovascular drug development as well as a clear understanding of and appreciation for the potentially superior profile of our drug as demonstrated in both pre-clinical and head-to-head clinical data," commented Jerome D. Jabbour, President and Chief Executive Officer of Matinas. "Having played integral roles with major clinical trials evaluating omega-3 prescription products as well as other notable cardiovascular therapies, Dr. Ballantyne, Dr. Kastelein and Dr. Maki are uniquely positioned to understand how a thoughtfully designed composition like MAT9001 should be navigated through a clinical development program to effectively demonstrate a differentiated profile, which we believe could result in establishing MAT9001 as the omega-3 drug of choice for physicians and patients in the battle against cardiovascular disease and risk. We are honored that they have chosen to work with us."

Dr. Ballantyne is a leading cardiovascular specialist, lipidology expert and atherosclerotic vascular disease researcher. He is currently a Professor of Medicine at Baylor College of Medicine and the Chief of the Sections of Cardiovascular Research and Cardiology. Additionally, Dr. Ballantyne is the Director of The Maria and Alando J. Ballantyne, M.D., Atherosclerosis Clinical Research Laboratory and the Director of the Center for Cardiovascular Disease Prevention at the Methodist DeBakey Heart and Vascular Center as well as the Co-Director of the Lipid Metabolism and Atherosclerosis Clinic at Houston Methodist Hospital.

Dr. Ballantyne stated, “I am very excited by the potential for MAT9001 in light of recent developments in the cardiovascular space surrounding omega-3 fatty acid compositions. The data I have reviewed in detail seem to indicate that a purposefully-designed omega-3 fatty acid composition like MAT9001 could be well differentiated from any other approved omega-3 prescription products and potentially become a very important therapy for patients and physicians.”

Dr. John Kastelein is Professor of Medicine and Chairman of the Department of Vascular Medicine at the Academic Medical Center (AMC) of the University of Amsterdam, where he holds the Strategic Chair of Genetics of Cardiovascular Disease. Dr. Kastelein is a recognized world leader in studies focused on the significance of lipoprotein metabolism in the development of atherosclerotic vascular disease. Dr. Kastelein’s current research interests focus on the etiology, diagnosis, prevention, and treatment of hypertriglyceridemia, hypercholesterolemia, and low HDL cholesterol, all conditions associated with atherosclerosis and cardiovascular disease. He has published more than 850 research papers in peer-reviewed journals, including *Nature Genetics*, *Lancet*, *New England Journal of Medicine*, *JAMA*, and *Circulation*. His Hirsch index is 114 as of March 2018; and his total citations are approaching more than 60,000.

“For more than thirty years, I have been intimately involved with the development of some of the most important drugs being used to treat and prevent different aspects of cardiovascular disease,” commented Dr. Kastelein. “In light of the recently announced REDUCE-IT data, it is critical that we thoughtfully evaluate and develop a drug like MAT9001, which exhibits a differentiated profile and mechanism of action and could potentially deliver even more robust results than what we have seen to date in this category.”

Dr. Kevin Maki is a leading clinical lipid specialist with extensive experience in the design and conduct of clinical trials in human nutrition, metabolism and chronic disease management. He has participated in more than 250 clinical trials and observational studies as an investigator, consultant or statistician. Dr. Maki is the Founder and Chief Scientist for the Midwest Biomedical Research Center for Metabolic and Cardiovascular Health and Adjunct Faculty in Biostatistics and Applied Epidemiology at DePaul University in Chicago. He is a certified Clinical Lipid Specialist and a Fellow of the National Lipid Association, The Obesity Society and the American College of Nutrition, as well as a Vice President of the Board of Governors of the Accreditation Council for Clinical Lipidology.

“I am very enthusiastic about the prospects for MAT9001 in light of the REDUCE-IT results,” stated Dr. Maki. “I believe that the DPA element makes it especially interesting, since DPA appears to be quite biologically active without raising LDL-C. I look forward to playing an active role as we move MAT9001 through its clinical development program.”

Dr. Ballantyne has conducted extensive research on the pathophysiology of atherosclerosis, with an emphasis on monocyte activation and adhesion, and led numerous clinical research programs on the prevention of atherosclerotic vascular disease. Dr. Ballantyne earned his degree in medicine from Baylor College of Medicine and performed both his internal medicine residency and postgraduate training at The University of Texas Southwestern Medical School. He completed a cardiology fellowship at Baylor College of Medicine and an American Heart Association/Bugher Foundation Fellowship at the Howard Hughes Medical Institute and Institute for Molecular Genetics at Baylor. Dr. Ballantyne is published

extensively, speaks nationally and internationally on lipids, atherosclerosis and inflammation, and serves as an Editorial Director for www.lipidsonline.org. In 2014, he was recognized by Thomson Reuters as one of The World's Most Influential Scientific Minds.

Dr. Kastelein founded the Lipid Research Clinic at the Academic Medical Centre in Amsterdam in 1989, which is currently serving as a tertiary referral center for over 5000 patients each year and has become part of the Department of Vascular Medicine. Dr. Kastelein was President of the Dutch Atherosclerosis Society (DAS) and chairs the National Scientific Committee on Familial Hypercholesterolemia (EHC). He also is a member of the Royal Dutch Society for Medicine & Physics, the Council for Basic Science of the American Heart Association and the European Atherosclerosis Society, and a Fellow of the European Society of Cardiology. He also is a board member of the International Task Force for CHD Prevention and was recently appointed to the Executive Board of the International Atherosclerosis Society (IAS). In addition to the scientific programs aimed at the etiology of atherogenesis, Dr. Kastelein also served on a number of executive and steering committees of large cardiovascular intervention studies, including the SPIRE, ORION, GLAGOV, REALIZE, IDEAL, TNT, CAPTIVATE, ENHANCE, ILLUMINATE, JUPITER, RADIANCE and numerous others of which TNT (2005), RADIANCE 1 (2007), ENHANCE (2008), JUPITER (2008), SPIRE and ORION (2017) are published in the *New England Journal of Medicine,* IDEAL (2006) and GLAGOV (2017) in *JAMA* and RADIANCE 2 (2007) and REALIZE (2016) in *Lancet*.

Dr. Maki's research has been extensively published in more than 200 peer reviewed scientific papers and he has authored or co-authored several books, including *Practical Lipid Management: Concepts and Controversies* and *Therapeutic Lipidology*. He also served as a member of the Expert Panel and Writing Group that developed the National Lipid Association's Recommendations for Patient-Centered Management of Dyslipidemia: Parts 1 and 2.

About MAT9001

MAT9001 is comprised of eicosapentaenoic acid (EPA), docosapentaenoic acid (DPA), a highly potent but less prevalent omega-3 fatty acid with very unique properties, and other omega-3 fatty acids. MAT9001 was developed based on the newest scientific advancements in the field, incorporating and building upon the knowledge of almost 40 years of scientific research in the omega-3 discipline. Matinas BioPharma is developing MAT9001 for therapeutic applications in the cardiovascular and metabolic fields.

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 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-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.

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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Source: Matinas BioPharma Holdings, Inc.