June 8, 2016

Matinas BioPharma Announces Acceptance of Abstract on Efficacy and Tolerability of Encochleated Ibuprofen in Rat Carrageenan-Induced Paw Inflammation Model for EULAR 2016

- Study demonstrates higher potency and better safety/tolerability of ibuprofen in lipid-crystal nano-particle formulation -

- EULAR Scientific Congress being held June 8-11, 2016 -

BEDMINSTER, N.J., June 08, 2016 (GLOBE NEWSWIRE) -- Matinas BioPharma Holdings, Inc. (OTCQB:MTNB), a clinical-stage biopharmaceutical company focused on identifying and developing safe and effective broad spectrum therapeutics for the treatment of serious and life-threatening infections, announced today that its abstract has been accepted for presentation at the European League Against Rheumatism (EULAR) Scientific Congress being held June 8-11, 2016 in London England.

EULAR accepted and published Matinas BioPharma's abstract entitled, *"Formulation of Ibuprofen in Lipid-Crystal Nano-Particles Enhances Efficacy and Reduces Gastric Mucosal Erosions in a Rat Carrageenan-induced Paw Inflammation Model."* This acute inflammation animal model study conducted with ibuprofen demonstrated a higher potency with orally administered lipid-crystal nano-particles containing ibuprofen (ED_{50} was 6-7 mg/kg) as compared to an orally administered commercial ibuprofen suspension (ED_{50} was 30mg/kg). At the highest tested ibuprofen dose (50mg/kg), 90% of animals (9 out of 10) had a significant number of GI lesions (avg. 4.1 lesions per animal) of substantial size (avg. 7.2mm/lesion) when dosed with the commercial ibuprofen suspension, whereas with the same dose of ibuprofen in geodate lipid-crystal nano-particles no GI lesions were observed in the treated animals.

The Company's "cochleate" lipid-crystal nano-particle encapsulation technology was developed under the leadership of co-inventor, Dr. Raphael J. Mannino, Matinas BioPharma's Chief Technology Officer, in collaboration with Rutgers University, The State University of New Jersey, which has granted the Company exclusive worldwide licenses under applicable patents and offers a drug delivery solution with three differentiation and disruptive features: oral availability, multi-organ protection and enhanced safety, and targeted delivery to the site of the infection and inflammation with the ability to effectively penetrate tissues.

These results reported with ibuprofen demonstrate that the improved tolerability and targeting benefits, as repeatedly seen with anti-infectives, also extend to anti-inflammatory medications.

About EULAR 2016

The European League Against Rheumatism (EULAR) is the organization which represents the patient, health professional and scientific societies of rheumatology of all the European nations. EULAR endeavors to stimulate, promote, and support the research, prevention, treatment and rehabilitation of rheumatic diseases. In line with UEMS, EULAR defines rheumatology as including rheumatic diseases of the connective tissue, locomotor and musculoskeletal systems.

The aim of the 2016 scientific congress is to provide a forum of the highest standard for scientific (both clinical and basic), educational and social exchange between professionals involved in rheumatology, liaising with patient organizations, in order to achieve progress in the clinical care of people with RMDs.

About Matinas BioPharma

Matinas BioPharma is a clinical-stage biopharmaceutical company focused on identifying and developing safe and effective broad spectrum therapeutics for the treatment of serious and life-threatening infections. The Company's proprietary, disruptive technology utilizes lipid-crystal nano-particle cochleates to nano-encapsulate existing drugs, making them safer, more tolerable, less toxic and orally bioavailable. The Company's lead drug candidate is MAT2203, an orally-administered, encochleated formulation of amphotericin B (a broad spectrum fungicidal agent). The Company has an open Investigational New Drug (IND) application for MAT2501, which is an orally-administered, encochleated formulation of amikacin (a broad spectrum aminoglycoside antibiotic agent) for acute bacterial infections, including non-tuberculous mycobacterium (NTM) and multi-drug resistant gram negative bacterial infections. In addition, the Company is exploring development and partnership options for MAT9001, a prescription-only omega-3 fatty acid-based composition 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.

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 formulation technology. 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, including MAT2203 and MAT2501, the anticipated timing of regulatory submissions, the anticipated timing of clinical studies, 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; 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 and MAT2501, 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.