October 19, 2022

Matinas BioPharma Announces Infectious Diseases Society of America (IDSA) has Selected the EnACT Phase 2 Trial Abstract of MAT2203 as its Outstanding Abstract and IDSA Awardee For IDWeek 2022

BEDMINSTER, N.J., Oct. 19, 2022 (GLOBE NEWSWIRE) -- Matinas BioPharma Holdings, Inc. (NYSE AMER: MTNB), a clinical-stage biopharmaceutical company focused on improving the intracellular delivery of nucleic acids and small molecules with its lipid nanocrystal (LNC) platform delivery technology, today announced that the Infectious Diseases Society of America (IDSA), one of the four sponsoring societies for IDWeek 2022, has selected the following abstract to be the IDSA Awardee as the outstanding abstract from a member in their specialty:

> ***Oral Encochleated Amphotericin B for Cryptococcal Meningitis: A Phase II Randomized Trial (EnACT)***;
> Presented by Dr. Mucunguzi Atukunda, MBChB, MPH – Infectious Disease Institute, Makarere University
> Co-Author: David R. Boulware, MD, MPH, CTropMed – University of Minnesota
> Antifungal Clinical Trials and PK/PD Studies; Friday, October 21, 2022
> Location 147 AB, 10:45 – 11:00am ET

In anticipation of IDWeek every year, each of the four sponsoring societies selects one abstract as its top submission from international investigators. Drs. Atukunda and Boulware will present the EnACT Phase 2 abstract on Friday, October 21st at the Walter E. Washington Convention Center, in Washington DC.

“IDSA’s selection of the EnACT Phase 2 trial abstract as its IDSA Awardee and Outstanding Abstract from amongst the hundreds of submissions and presentations at IDWeek 2022 is a tremendous honor and we believe it’s representative of the impact MAT2203 has had on patients to date, as well as the enthusiasm for the potential of MAT2203 to become a critical part of the treatment regimen for cryptococcal meningitis and other deadly fungal diseases,” commented Jerome D. Jabbour, Chief Executive Officer of Matinas “We look forward to each of our MAT2203 presentations at IDWeek 2022, as the data generated to date highlights both the potential for MAT2203 as well as the unique attributes of our lipid nanocrystal (LNC) delivery platform.”

About IDWeek

IDWeek is the joint annual meeting of the Infectious Diseases Society of America (IDSA),

Society for Healthcare Epidemiology of America (SHEA), the HIV Medicine Association (HIVMA), the Pediatric Infectious Diseases Society (PIDS) and the Society of Infectious Diseases Pharmacists (SIDP). IDWeek is a recognized forum for peer-reviewed presentations of new research on scientific advances and bench-to-bedside approaches in prevention, diagnosis, treatment and epidemiology of infectious diseases, including HIV, across the lifespan. For more information, visit www.idweek.org.

About Matinas BioPharma

Matinas BioPharma is a biopharmaceutical company focused on improving the intracellular delivery of nucleic acids and small molecules with its lipid nanocrystal (LNC) platform technology. The Company is developing its own internal portfolio of products as well as partnering with leading pharmaceutical companies to develop novel formulations that capitalize on the unique characteristics of the LNC platform.

Preclinical and clinical data have demonstrated that this novel technology can provide solutions to many of the challenges in achieving safe and effective intracellular delivery, for both small molecules and larger, more complex molecules, such as mRNA, DNA plasmids, antisense oligonucleotides, and vaccines. The combination of a unique mechanism of action and flexibility with formulation and route of administration (including oral), positions Matinas' LNC technology to potentially become the preferred next-generation intracellular drug delivery vehicle with distinct advantages over both lipid nanoparticles and viral vectors.

The Company is focused on developing an internal and external pipeline of drugs candidates based on the LNC platform. Internally, the Company has two clinical stage assets. MAT2203 is an oral, LNC formulation of the highly potent antifungal medicine amphotericin B, currently preparing to commence a Phase 3 registration trial in the first quarter of 2023; MAT2501 is an oral, LNC formulation of the broad-spectrum aminoglycoside, amikacin, primarily used to treat chronic and acute bacterial infections, and currently in Phase 1. Externally, the Company has established a broad set of relationships with multiple global pharmaceutical collaborators, including BioNTech (mRNA), the National Institutes of Health and Gilead Sciences (antivirals), and Genentech, a member of the Roche Group (small molecules, antisense oligonucleotides, and antibody fragments).

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 our business activities, our strategy and plans, our collaboration with BioNTech, the potential of our LNC platform delivery technology, and the future development of its product candidates, including MAT2203, MAT2501, 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; 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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Source: Matinas BioPharma Holdings, Inc.

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