December 7, 2020

Matinas BioPharma Files Preliminary Proxy for Special Meeting of Stockholders

- Special Meeting of Stockholders Scheduled for January 26, 2021 Seeking Authorization to Potentially Effectuate a Discretionary Reverse Stock Split Prior to January 26, 2022 -

- Company's Proposal to Stockholders Intended to Enhance Appeal of Common Stock to Institutional Investors, Position its Common Stock for Potential Eligibility for Inclusion in Certain Biotechnology and Pharmaceutical Trading Indices and for Potential Inclusion on the NYSE "Big Board" or NASDAQ Global Market -

BEDMINSTER, N.J., Dec. 07, 2020 (GLOBE NEWSWIRE) -- Matinas BioPharma Holdings, Inc. (NYSE AMER: MTNB), a clinical-stage biopharmaceutical company focused on developing next generation therapeutics to advance standards of care in areas of significant unmet medical need, today announced that its Board of Directors has approved a proposal, to be submitted to stockholders for approval at a Special Meeting of Stockholders anticipated to be held on January 26, 2021, to authorize the Board of Directors to potentially effect a reverse split of the Company's common stock. The reverse stock split proposal includes a proposed range between 1-for-2 and 1-for-15 shares of outstanding common stock. The final ratio will be determined, if at all, by Matinas' Board of Directors following stockholder approval at the Special Meeting.

"We believe the filing of this preliminary proxy statement to authorize a potential reverse split of stock is an important proactive and strategic step to position Matinas for long term success and to potentially be able to capitalize on some of the important milestones and catalysts we have in front of us during 2021," said Jerome D. Jabbour, Chief Executive Officer of Matinas. "We believe that there are many potential benefits to increasing the price per common share, including making the Company's stock more attractive to institutional investors, potentially position us for eligibility and inclusion in certain biotechnology and pharmaceutical trading indices and exchange traded funds, and even potentially position Matinas for an "uplisting" to the NYSE "Big Board" or NASDAQ Global Market. However, we only intend to make a reverse split effective if we believe that doing so would be in the best interests of the Company and our stockholders."

Matinas filed a preliminary proxy statement with the U.S. Securities and Exchange Commission as required by SEC rules. The proposal requires the affirmative vote of a majority of the Company's outstanding shares. Stockholders may obtain a free copy of the preliminary proxy statement or the definitive proxy statement (once available), as well as other documents that the Company files with the SEC at the SEC's website at www.sec.gov. The Company will file with the SEC and distribute to its stockholders a definitive proxy statement regarding the special meeting and the reverse stock split proposal.

About Matinas BioPharma

Matinas BioPharma is a clinical-stage biopharmaceutical company focused on developing next generation therapeutics to advance standards of care for patients in areas of significant unmet medical need. Company leadership has a deep history and knowledge of drug development and is supported by a world-class team of scientific advisors.

MAT9001, the Company's lead product candidate for the treatment of cardiovascular and metabolic conditions, is a prescription-only omega-3 fatty acid-based composition, comprised primarily of EPA and DPA, under development for hypertriglyceridemia. MAT9001 is currently in a second head-to-head comparative study against Vascepa® (ENHANCE-IT), with topline data expected in the first quarter of 2021.

In addition, Matinas is developing a portfolio of products based upon its proprietary lipid nanocrystal (LNC) drug delivery platform, which can solve complex challenges relating to the safe and effective delivery of potent medicines, making them orally bioavailable, less toxic and targeted to cells and tissues.

MAT2203, is an oral, encochleated formulation of the well-known, but highly toxic, antifungal medicine amphotericin B, primarily used to treat serious invasive fungal infections. MAT2203 is currently in a Phase 2 open-label, sequential cohort study (EnACT) in HIV-infected patients with cryptococcal meningitis. EnACT is preparing to enroll patients in its second cohort, with the next DSMB evaluation of safety and efficacy data anticipated to occur in the middle of 2021.

MAT2501 is an oral, encochleated formulation of the broad-spectrum aminoglycoside antibiotic medicine amikacin, primarily used to treat chronic and acute bacterial infections. The Company recently announced that it has been awarded up to $3.75 million from the Cystic Fibrosis Foundation (CFF) to support development of MAT2501 toward an indication to treat nontuberculous mycobacterial (NTM) lung disease, including infections in patients with cystic fibrosis (CF).

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 reverse stock split proposal, the Company's anticipated capital and liquidity needs, strategic focus and the future development of its product candidates, including MAT9001, MAT2203 and 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.

Investor and Media Contacts

Peter Vozzo
Westwicke
443-213-0505
peter.vozzo@westwicke.com

Ian Cooney
Director – Investor Relations & Corporate Development
Matinas Biopharma, Inc.
(415) 722-4563
icooney@matinasbiopharma.com

Source: Matinas BioPharma Holdings, Inc.