MediciNova Compounds Demonstrate Novel Therapeutic Approach for Atherosclerosis in Peer-Reviewed Publication

October 30, 2025

Study published in the Journal of Atherosclerosis and Thrombosis demonstrates tipelukast (MN-001 and its metabolite MN-002) has influence on cholesterol metabolism in patients

LA JOLLA, Calif., Oct. 30, 2025 (GLOBE NEWSWIRE) -- MediciNova, Inc., a biopharmaceutical company traded on the NASDAQ Global Market (NASDAQ:MNOV) and the Standard Market of the Tokyo Stock Exchange (Code Number: 4875), announces the publication of a new research article in the peer-reviewed *Journal of Atherosclerosis and Thrombosis*, the official journal of the Japan Atherosclerosis Society and the Asian Pacific Society of Atherosclerosis and Vascular Disease.

The study, titled, "Enhancement of ABCA1 and ABCG1 Expression and Cholesterol Efflux by a Metabolite of Tipelukast: A Potential Therapeutic Strategy for Atherosclerosis," is the result of a collaboration effort between MediciNova and a leading Japanese academic research group specializing in lipid and cholesterol metabolism. The research demonstrated that MN-002, the major metabolite of Company's investigational compound MN-001 (tipelukast), significantly enhanced cholesterol efflux in macrophages by upregulating key transport proteins ABCA1 and ABCG. These findings suggest a novel mechanism of action and potential therapeutic strategy for atherosclerosis and other metabolic disorders.

"This collaborative research provides the mechanistic insight into how MN-001 and its metabolite MN-002 may influence cholesterol and lipid metabolism. We are pleased to see these findings published in a prestigious journal and remain committed to exploring the full therapeutic potential of MN-001, an orally available small molecule with anti-inflammatory and anti-fibrotic properties. We look forward to further clinical investigation in metabolic disease, including dyslipidemia and Type 2 diabetes," said Yuichi Iwaki, M.D., Ph.D., MediciNova President and Chief Executive Officer.

Previous clinical studies have shown that MN-001 improved serum lipid profiles in patients with Non-alcoholic fatty liver disease (NAFLD) and hypertriglyceridemia, with particularly notable effects in patients with type 2 diabetes (DM). MediciNova is currently conducting a randomized, placebo-control, double-blind Phase 2 study in hypertriglyceridemia, Type 2 DM and NAFLD patients, with enrollment nearing completion.

About MediciNova

MediciNova, Inc. is a clinical-stage biopharmaceutical company developing a broad late-stage pipeline of novel small molecule therapies for inflammatory, fibrotic, and neurodegenerative diseases. Based on two compounds, MN-166 (ibudilast) and MN-001 (tipelukast), with multiple mechanisms of action and strong safety profiles, MediciNova has 11 programs in clinical development. MediciNova's lead asset, MN-166 (ibudilast), is currently in Phase 3 for amyotrophic lateral sclerosis (ALS) and degenerative cervical myelopathy (DCM) and is Phase 3-ready for progressive multiple sclerosis (MS). MN-166 (ibudilast) is also being evaluated in Phase 2 trials in Long COVID and substance dependence. MN-001 (tipelukast) was evaluated in a Phase 2 trial in idiopathic pulmonary fibrosis (IPF) and a second Phase 2 trial in non-alcoholic fatty liver disease (NAFLD) is ongoing. MediciNova has a strong track record of securing investigator-sponsored clinical trials funded through government grants.

Forward-Looking Statements

Statements in this press release that are not historical in nature constitute forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, without limitation, statements regarding the future development and efficacy of MN-166 and MN-001. These forward-looking statements may be preceded by, followed by, or otherwise include the words "believes," "expects," "anticipates," "intends," "estimates," "projects," "can," "could," "may," "will," "would," "considering," "planning" or similar expressions. These forward-looking statements involve a number of risks and uncertainties that may cause actual results or events to differ materially from those expressed or implied by such forward-looking statements. Factors that may cause actual results or events to differ materially from those expressed or implied by these forward-looking statements include, but are not limited to, risks of obtaining future partner or grant funding for development of MN-166 and MN-001, and risks of raising sufficient capital when needed to fund MediciNova's operations and contribution to clinical development, risks and uncertainties inherent in clinical trials, including the potential cost, expected timing and risks associated with clinical trials designed to meet FDA guidance and the viability of further development considering these factors, product development and commercialization risks, the uncertainty of whether the results of clinical trials will be predictive of results in later stages of product development, the risk of delays or failure to obtain or maintain regulatory approval, risks associated with the reliance on third parties to sponsor and fund clinical trials, risks regarding intellectual property rights in product candidates and the ability to defend and enforce such intellectual property rights, the risk of failure of the third parties upon whom MediciNova relies to conduct its clinical trials and manufacture its product candidates to perform as expected, the risk of increased cost and delays due to delays in the commencement, enrollment, completion or analysis of clinical trials or significant issues regarding the adequacy of clinical trial designs or the execution of clinical trials, and the timing of expected filings with the regulatory authorities, MediciNova's collaborations with third parties, the availability of funds to complete product development plans and MediciNova's ability to obtain third party funding for programs and raise sufficient capital when needed, and the other risks and uncertainties described in MediciNova's filings with the Securities and Exchange Commission, including its annual report on Form 10-K for the year ended December 31, 2024 and its subsequent periodic reports on Form 10-Q and current reports on Form 8-K. Undue reliance should not be placed on these forward-looking statements, which speak only as of the date hereof. MediciNova disclaims any intent or obligation to revise or update these forward-looking statements.

INVESTOR CONTACT:

David H. Crean, Ph.D.
Chief Business Officer
MediciNova, Inc
info@medicinova.com

Source: MediciNova, Inc.