



MediciNova Announces Positive Results in Study of MN-001 in Mouse Model of Pulmonary Fibrosis

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SAN DIEGO, June 11, 2014 (GLOBE NEWSWIRE) -- MediciNova, Inc., a biopharmaceutical company traded on the NASDAQ Global Market (Nasdaq:MNOV) and the JASDAQ Market of the Tokyo Stock Exchange (Code Number: 4875), today announced positive results from a study that examined the potential clinical efficacy of MN-001 (tipelukast) for the treatment of pulmonary fibrosis.

MN-001, which was administered orally once daily (30, 100 and 300 mg/kg) for 2 weeks, was evaluated in a mouse model of bleomycin-induced pulmonary fibrosis (PF) as measured by CT evaluation of lung density, degree of pulmonary fibrosis using the Ashcroft score based on histopathological staining, and hydroxyproline content, which is an indicator of fibrosis or storage of collagen in tissue.

MN-001 significantly decreased ($p < 0.05$) the Ashcroft score compared to Vehicle group after 2 weeks of treatment and MN-001 reduced lung density when compared to the Vehicle-treated group. Moreover, lung hydroxyproline content was significantly reduced compared to the Vehicle group ($p < 0.01$). These results show that treatment with MN-001 has significant anti-fibrogenic effects in bleomycin-induced pulmonary fibrosis in mice.

Earlier this year (January 14, 2014), MediciNova reported that MN-001 significantly reduced fibrosis area in the liver compared with vehicle ($p < 0.01$) in the mouse model of nonalcoholic steatohepatitis (NASH), as demonstrated by a reduction in liver hydroxyproline content, and MN-001 significantly improved NAFLD activity score (NAS) ($p < 0.01$). Together with today's reported results, MN-001 has demonstrated anti-fibrotic properties in multiple models of fibrosis.

MediciNova previously opened an Investigational New Drug (IND) application with the Division of Pulmonary, Allergy, and Rheumatology Products (DPARP) for MN-001 and will consult with the Division regarding proceeding with Phase 2 clinical development for the treatment of pulmonary fibrosis.

About MN-001

MN-001 is a novel, orally bioavailable small molecule compound thought to exert its effects through several mechanisms to produce its anti-inflammatory activity in preclinical models, including leukotriene (LT) receptor antagonism, inhibition of phosphodiesterases (PDE) 3 and 4, and inhibition of 5-lipoxygenase (5-LO). It is postulated that inhibition of the 5-LO pathway exerts anti-inflammatory actions, which has implications in various inflammatory diseases such as arthritis, osteoarthritis, and allergy. Recently, 5-LO has been postulated as a pathogenic factor in fibrotic changes. MN-001's inhibitory effect on 5-LO and the 5-LO/LT pathway is considered to be a novel approach to treat fibrosis.

Previously, MediciNova evaluated MN-001 for its potential clinical efficacy in asthma and had positive Phase 2 results. MN-001 has been exposed to more than 600 subjects and considered generally safe and well-tolerated.

About Bleomycin-induced Pulmonary Fibrosis Model

Bleomycin is an anti-cancer drug used for treatment of different types of malignant tumors. One of the known side effects of bleomycin treatment is pulmonary fibrosis. Bleomycin-induced pulmonary fibrosis in the mouse is widely used as animal model of pulmonary fibrosis.

About Pulmonary Fibrosis

Pulmonary fibrosis (PF) is a progressive disease characterized by scarring of the lungs that thickens the lining, causing an irreversible loss of the tissue's ability to transport oxygen. The causes of PF are variable such as anti-cancer drug therapy or exposure to chemicals. Idiopathic Pulmonary Fibrosis (IPF) is one type of PF without a clear cause. According to the Coalition for Pulmonary Fibrosis, IPF affects approximately 128,000 individuals in the U.S., with about 48,000 new cases diagnosed annually. The prognosis for IPF is poor and about two-thirds of patients die within 5 years of diagnosis. There are no pharmaceutical treatments approved for IPF in the U.S.

About MediciNova

MediciNova, Inc. is a publicly-traded biopharmaceutical company founded upon acquiring and developing novel, small-molecule therapeutics for the treatment of diseases with unmet medical needs with a commercial focus on the U.S. market. MediciNova's current strategy is to focus on MN-166 (ibudilast) for neurological disorders, MN-221 for the treatment of acute exacerbations of asthma, and MN-001 for NASH and IPF. MN-166 is being developed in multiple indications, largely through investigator-sponsored

trials and outside funding. MediciNova is engaged in strategic partnering and consortium funding discussions to support further development of its programs. For more information on MediciNova, Inc., please visit www.medicinova.com.

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-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-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, 2013 and its subsequent periodic reports on Forms 10-Q and 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.

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