



MediciNova Receives Notice of Allowance for New Patent Covering MN-001 and MN-002 for the Treatment of Liver Disorders

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LA JOLLA, Calif., Dec. 9, 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 that it has received a Notice of Allowance from the U.S. Patent and Trademark Office for a pending patent application which covers MN-001 (tipelukast) and MN-002 (a major metabolite of MN-001) for the treatment of certain liver disorders.

Once issued, the patent maturing from this allowed patent application is expected to expire no earlier than December 2032. The allowed claims cover a method of inhibiting steatosis, a method of inhibiting lobular inflammation, a method of inhibiting hepatic ballooning, a method of inhibiting hepatic scarring, and a method of reducing or inhibiting elevated liver hydroxyproline levels using MN-001 or MN-002. The allowed claims cover oral administration, including tablets and capsules, as well as liquid dosage forms.

"We are very pleased that this new patent will be granted as the claims are broad enough to cover MN-001 for the treatment of all types of steatosis and related liver damage, not limited to NAFLD or NASH," commented Yuichi Iwaki, MD, PhD, President and CEO of MediciNova, Inc.

About Steatosis

Steatosis, also known as fatty liver disease, is an accumulation of fat in the liver. Fatty liver is commonly associated with [alcohol](#) or [metabolic syndrome](#) ([diabetes](#), [hypertension](#), [obesity](#), and [dyslipidemia](#)) but can also be due to many other causes such as infection, drug or chemical induced, malnutrition and congenital liver disease. Fatty liver disease can be divided into (1) steatohepatitis in which there is fat in the liver along with inflammation and damage to liver cells, and (2) isolated "[fatty liver](#)," a condition in which there is accumulation of fat in the liver, but no inflammation or liver damage.

Nonalcoholic steatohepatitis (NASH) is a common liver disease that resembles alcoholic liver disease but occurs in people who drink little or no alcohol. According to the U.S. National Digestive Diseases Information Clearinghouse (NDDIC), NASH prevalence in the U.S. is 2-5%, and an additional 10-20% of Americans have "fatty liver." The underlying cause of NASH is unclear, but it most often occurs in persons who are middle-aged and overweight or obese. Many patients with NASH have elevated serum lipids, diabetes or pre-diabetes. Progression of NASH can lead to liver cirrhosis. Liver transplantation is the only treatment for advanced cirrhosis with liver failure. At this time, there is no treatment for NASH.

About MN-001

MN-001 (tipelukast) is a novel, orally bioavailable small molecule compound which exerts its effects through several mechanisms to produce its anti-fibrotic and anti-inflammatory activity in preclinical models, including leukotriene (LT) receptor antagonism, inhibition of phosphodiesterases (PDE) (mainly 3 and 4), and inhibition of 5-lipoxygenase (5-LO). The 5-LO/LT pathway has been postulated as a pathogenic factor in fibrosis development and MN-001's inhibitory effect on 5-LO and the 5-LO/LT pathway is considered to be a novel approach to treat fibrosis. MN-001 has been shown to down-regulate expression of genes that promote fibrosis including LOXL2, Collagen Type 1 and TIMP-1. MN-001 has also been shown to down-regulate expression of genes that promote inflammation including CCR2 and MCP-1. In addition, histopathological data shows that MN-001 reduces fibrosis in multiple animal models.

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. In August 2014, MediciNova announced that it received a notice of allowance for a new patent which covers MN-001 and MN-002 for the treatment of nonalcoholic fatty liver disease.

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 such as progressive MS, ALS and substance dependence (e.g., methamphetamine dependence, opioid dependence) and MN-001 (tipelukast) for nonalcoholic steatohepatitis (NASH) and idiopathic pulmonary fibrosis (IPF) and other fibrotic disease. MediciNova's pipeline also includes MN-221 (bedoradrine) for the treatment of acute exacerbations of asthma and MN-029 (denibulin) for solid tumor cancers. MediciNova is engaged in strategic partnering and other potential 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-166, MN-221, MN-001, and MN-029. 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, MN-221, MN-001, and MN-029 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, 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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