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**FOR IMMEDIATE RELEASE**

**MediciNova Reports Clinical Results from  
Two-Year Phase II Clinical Trial of MN-166 in Multiple Sclerosis**

**- MN-166 Slows Disability Progression; Significant Neuroprotective  
Effects Observed by MRI -**

SAN DIEGO, Calif. – April 7, 2008 – MediciNova, Inc., a biopharmaceutical company that is publicly traded on the Nasdaq Global Market (Trading Symbol: MNOV) and the Hercules Market of the Osaka Securities Exchange (Code Number: 4875), today announced positive clinical findings from the completed two-year Phase II clinical trial of orally administered MN-166 for the treatment of multiple sclerosis (MS). The second year findings expand upon the results from the first year of this study reported previously.

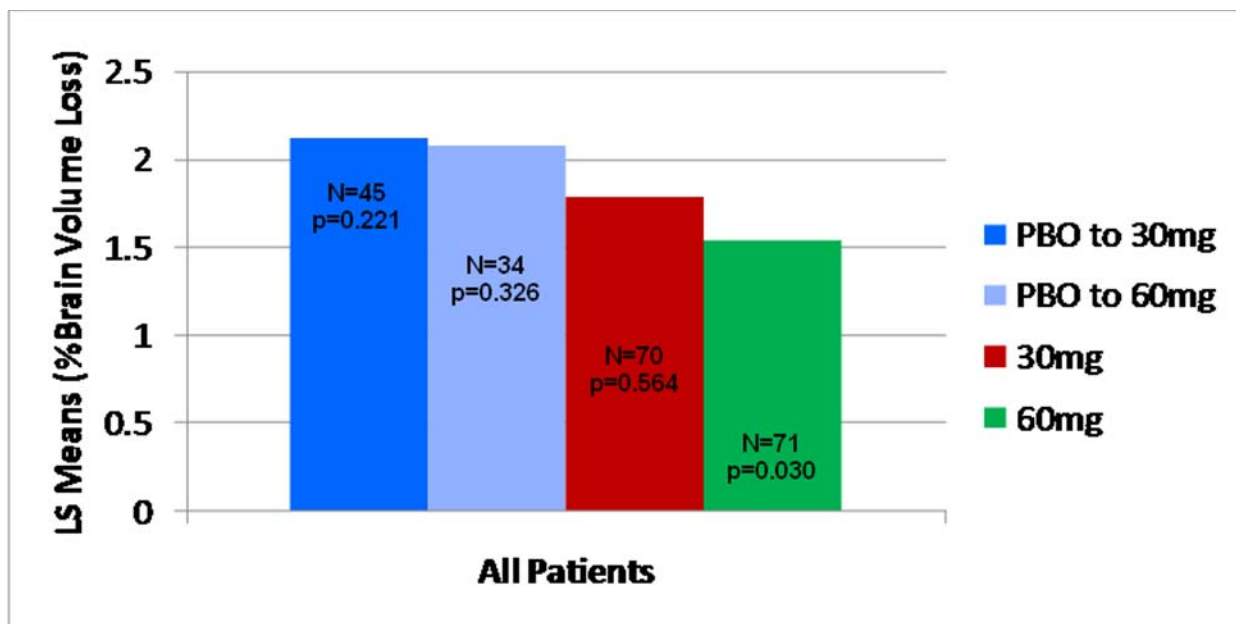
MN-166 treatment resulted in positive findings on three independent measures indicative of a potential disease-progression modifying effect. The findings include:

- Sustained disability progression was significantly less likely (by approximately 50 percent) in those patients receiving MN-166 at either 30 or 60 mg per day for 24 months than in those patients receiving the drug for 12 months ( $p=0.026$ ). Sustained disability progression was measured as a greater than or equal to 1.0

point increase from baseline in the Expanded Disability Status Scale (EDSS) score for four consecutive months. This positive clinical finding was corroborated by positive findings on two separate radiologic measures.

- The clinical trial demonstrated that the significant reduction in brain volume loss ( $p=0.035$ ), as measured by cranial magnetic resonance imaging (MRI) scans, observed after 12 months in patients treated with 60 mg per day of MN-166 compared to placebo was again demonstrated in year two of the study. Brain volume loss was significantly less ( $p=0.030$ ) in patients receiving 60 mg per day of MN-166 for 24 months compared to the other treatment groups, for more information on Percent Brain Volume loss for each of the treatment groups in year two of the study, see graph:

### Percent Brain Volume Loss at 24 Months



- MN-166 treatment at 60 mg per day significantly reduced the relative risk for conversion of new inflammatory lesions identified at month two to Persistent Black Holes (PBH), an MRI indicator of neuronal loss, eight months later at month ten by 37 percent ( $p=0.011$ ); such lesions that remain unchanged for eight months are considered PBHs as compared to transient inflammatory lesions that

are more closely associated with relapses. MN-166 treatment at 30 mg per day resulted in a trend toward reducing evolution to PBH ( $p=0.074$ ). Loss of brain volume and development of PBHs on MRI have been shown to correlate with clinical progression and disability in MS patients.

MN-166 was well tolerated at all doses over the 24 months of this clinical trial. Of the 297 patients enrolled in the study, 82.5 percent, or 245 patients, completed the full 24 months of the study. The most common adverse events possibly related to MN-166 included mild, transient gastrointestinal disturbances and depression.

“After an extensive review of these data our Scientific Advisory Board recommended that MN-166 be advanced into pivotal-design studies with clinical and MRI evaluations of MS progression as the primary objectives,” said Yuichi Iwaki, M.D., Ph.D., President and Chief Executive Officer of MediciNova, Inc. “The significant favorable effects on measures of disability progression and reduced neuronal damage observed in this study are quite exciting and representative of the type of new treatment being sought by the MS scientific community according to our advisors. We are excited to be part of advancing MS treatment in a new direction and look forward to confirming these findings in future clinical trials with the assistance of a corporate partner.”

The two-year randomized, double-blind, placebo-controlled Phase II clinical trial included 297 patients with relapsing MS. In the second year of the study, all patients were on drug. Patients who received 30 or 60 mg of MN-166 per day during the first 12 months of the study remained on the assigned dose for the second 12 months of the study; patients who received placebo during the first 12 months of the study were randomized to receive either 30 or 60 mg of MN-166 per day (double-blind maintained) during the second 12 months of the study. Clinical and radiological outcomes were evaluated.

First-year efficacy results of this clinical trial were announced in March 2007 and described more completely at the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS) meeting in November 2007. Briefly, MN-166 at 60 mg

per day significantly reduced brain volume loss by 33 percent and median time to first relapse by 157 days compared to placebo. The median time to first on-study relapse was 244 days for placebo, 255 days on MN-166 at 30 mg per day and 401 days (which could only be calculated after the full study unblinding) on MN-166 at 60 mg per day. MN-166 did not significantly reduce cumulative brain lesion count on MRI in year one of this clinical trial, which was the protocol-defined primary endpoint of the study.

### **About MN-166**

MN-166 is a novel, orally administered compound being evaluated for the treatment of MS. MN-166 increases the release of neuronal growth factors and inhibits leukotriene activity, phosphodiesterases and nitric oxide synthase. MN-166 may also suppress the production of pro-inflammatory cytokines (IL-1 $\beta$ , TNF- $\alpha$ ) and may enhance the production of the anti-inflammatory cytokines (IL-4, IL-10).

MediciNova acquired an exclusive, worldwide (excluding Japan, China, Taiwan and South Korea), sublicensable license to MN-166 for the treatment of MS, excluding ophthalmic solution formulations, from Kyorin Pharmaceutical Co. Ltd. For the past 18 years, MN-166 has been marketed in Japan and South Korea as Ketas® for the treatment of asthma and cerebrovascular disorders. Data from the existing clinical trial and post-marketing surveillance databases, which includes treatment of an estimated 3.2 million patients with these disorders, indicate that Ketas® is well tolerated.

### **About MediciNova**

MediciNova, Inc. is a publicly-traded biopharmaceutical company focused on acquiring and developing novel, small-molecule therapeutics for the treatment of diseases with unmet need with a specific focus on the U.S. market. Through strategic alliances primarily with Japanese pharmaceutical companies, MediciNova holds rights to a diversified portfolio of clinical and preclinical product candidates, each of which MediciNova believes has a well-characterized and differentiated therapeutic profile,

attractive commercial potential and patent assets having claims of commercially adequate scope. MediciNova's pipeline includes six clinical-stage compounds for the treatment of status asthmaticus, multiple sclerosis, asthma, interstitial cystitis, solid tumor cancers, Generalized Anxiety Disorder, preterm labor and urinary incontinence and two preclinical-stage compounds for the treatment of thrombotic disorders. MediciNova's current strategy is to focus its resources on the development and commercialization of two prioritized assets in its development pipeline: MN-221 for the treatment of status asthmaticus, an acute, severe asthma attack, and MN-166 for the treatment of multiple sclerosis. MediciNova will seek to monetize its other product candidates at key value inflection points. For more information on MediciNova, Inc., please visit [www.medicinova.com](http://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 MediciNova's clinical trials supporting safety and efficacy of product candidates and the potential novelty of such product candidates as treatments for disease, plans and objectives for present and future clinical trials and product development, strategies, future performance, expectations, assumptions, financial condition, liquidity and capital resources. These forward-looking statements may be preceded by, followed by or otherwise include the words "believes," "expects," "anticipates," "intends," "estimates," "projects," "can," "could," "may," "would," 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, the risks and uncertainties inherent in clinical trials and product development and commercialization, such as the uncertainty in results of clinical trials for product candidates, 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, 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, cost and design of future clinical trials and research activities, the timing of expected filings with the FDA, MediciNova's failure to execute strategic plans or strategies successfully, MediciNova's collaborations with third parties, the availability of funds to complete product development plans and MediciNova's ability to raise sufficient capital when needed, intellectual property or contract rights, 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, 2007. 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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