UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): March 27, 2007

MEDICINOVA, INC.

(Exact name of registrant as specified in its charter)

Delaware	**001-33185**	**33-0927979**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

4350 La Jolla Village Drive, Suite 950
San Diego, CA 92122
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (858) 373-1500

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01. Other Events.

On March 27, 2007, MediciNova, Inc. (the "Company") announced results from its Phase II clinical trial of MN-166 for the treatment of multiple sclerosis.

Attached as Exhibit 99.1 hereto and incorporated herein by reference in its entirety is the press release issued by the Company on March 27, 2007.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit	Description
99.1	Press Release dated March 27, 2007

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: March 28, 2007

MEDICINOVA, INC.

By: /s/ Shintaro Asako
Shintaro Asako
Vice President and Chief Financial Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release dated March 27, 2007

Exhibit 99.1

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FOR IMMEDIATE RELEASE

MediciNova Announces Positive Clinical Results from MN-166 Phase II Multiple Sclerosis Trial

Conference Call to Discuss Results on Thursday, March 29, 2007, at 2:00 p.m. Pacific Time

SAN DIEGO, Calif. – March 27, 2007 – 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 12-month core period of a Phase II clinical trial of MN-166 that measures both surrogate (radiological) and clinical outcomes over two years of treatment in 297 patients with relapsing multiple sclerosis (MS).

The randomized, double-blind, placebo-controlled trial showed a significant increase in the proportion of patients who remained relapse-free over the first 12 months of treatment with 60 mg per day of MN-166 compared to placebo (p=0.03). The time to first relapse was also significantly increased in patients treated with 60 mg of MN-166 per day compared to placebo (p=0.04). Positive trends were also observed in the annualized relapse rate (p=0.08) and number of relapses (p=0.10) among patients who completed the full first 12 months of treatment with 60 mg of MN-166 per day compared to those patients completing the first 12 months of treatment on placebo.

A significant reduction in brain volume loss (p=0.04), as measured by cranial magnetic resonance imaging (MRI) scans, was observed in patients treated with 60 mg per day of MN-166 compared to placebo. Loss of brain volume on MRI has been shown to correlate with clinical progression and disability in MS patients. Positive trends were also observed in several other radiological outcome measures, including the volume of gadolinium-enhancing (T1) lesions (p=0.09) in patients treated with 60 mg of MN-166 per day compared with placebo. However, no reduction in the cumulative number of active (gadolinium-enhancing (T1) and non-enhancing new/enlarging (T2)) lesions on cranial MRI scans over 12 months of treatment was observed in patients treated with MN-166 compared to placebo, which was the protocol-defined primary endpoint of the study. No clinical or radiological benefit was observed in patients treated with 30 mg per day of MN-166. MN-166 was well tolerated at all doses in this trial. Eighty-nine percent of patients completed the first 12 months of the trial with only mild gastrointestinal side effects observed with MN-166 compared to placebo (3-6% vs. 1-3%, respectively).

The independent Data Safety Monitoring Board (DSMB) has recommended that the trial continue beyond the first year of treatment without modification and was supportive of further clinical evaluation of MN-166 in MS patients.

“We are pleased with the benefit of MN-166 observed in MS patients in this trial; they confirm the results of previous pilot trials of MN-166 in MS patients conducted by Japanese academic investigators,” said Yuichi Iwaki, M.D., Ph.D., Executive Chairman and CEO of MediciNova, Inc. “The divergence of clinical benefit and radiological findings suggest that MN-166 may be acting by a different mode of action than current treatments. We will carefully analyze the clinical data with our independent advisors to determine next steps in the development program and to advance this compound into Phase III clinical testing.”

In July 2005, MediciNova initiated a randomized, double-blind, placebo-controlled multi-center Phase II clinical trial of MN-166 in MS patients in five Eastern European countries. A total of 297 patients with at least one gadolinium-enhancing lesion on a screening visit MRI scan were randomized to receive placebo or one of two doses of MN-166 (30 or 60 mg per day) in this trial. Safety and efficacy assessments were performed at months 1, 2, 4, 6, 8, 10 and 12 of the trial.

Efficacy assessments were based on the evaluation of the cumulative number of active (gadolinium-enhancing (T1) and non-enhancing new/enlarging (T2)) cranial MRI lesions (the primary endpoint of the trial) and other MRI-related, exacerbation and disability-related endpoints (relapse rate and Expanded Disability Status Scale (EDSS) score) after 12 months of treatment. Eligible patients who elected to continue their participation in the trial after 12 months of treatment will continue to receive treatment and will be assessed at months 13, 14, 16, 18, 20, 22 and 24 of the trial; patients who received placebo during the first 12 months of the trial were randomized to receive either 30 or 60 mg of MN-166 per day (double-blind maintained) during the second 12 months of the trial.

About Multiple Sclerosis and MN-166

Multiple sclerosis (MS) is an inflammatory demyelinating disease of the central nervous system (CNS), affecting approximately 250,000 – 350,000 people in the U.S. The most obvious effect of MS is the progressive loss of muscle control, but multiple brain and CNS functions are also affected. There is no cure for the disease. Relapsing-remitting MS (RRMS), which is the most common type of the disease, affects approximately 65% of MS patients according to a Cognos study published by Decision Resources, Inc. Most patients with RRMS eventually progress to the secondary progressive (SPMS) form of the disease.

MN-166 is a novel, orally administered compound being evaluated for the treatment of MS. MN-166 inhibits leukotriene activity, phosphodiesterases and nitric oxide synthase, all inflammatory mechanisms known to be involved in MS. MN-166 may also suppress the production of pro-inflammatory cytokines (IL-1ß, TNF-a) and may enhance the production of the anti-inflammatory cytokines (IL-4, IL-10). In two pilot clinical trials sponsored by academic investigators in Japan, MN-166 was found to have certain beneficial effects with respect to the treatment of MS.

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 17 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.

Conference Call

Management will discuss the results in a conference call on March 29, 2007 at 2:00 p.m. Pacific Time. The dial-in numbers for the conference call are as follows: 800-479-9001 (Domestic); 719-457-2618 (International).

About MediciNova

MediciNova, Inc. is a publicly-traded biopharmaceutical company that acquires well characterized small-molecule drugs through strategic alliances with Japanese and other international pharmaceutical companies and accelerates their development in a diversified portfolio of therapeutic product candidates targeting significant disease markets. MediciNova's pipeline, which includes six compounds in clinical testing, targets a variety of prevalent medical conditions, including asthma, multiple sclerosis, status asthmaticus, interstitial cystitis, cancer, Generalized Anxiety Disorder, insomnia, preterm labor, urinary incontinence and thrombotic disorders. 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 MediciNova's clinical trials supporting efficacy of a product candidate and the potential novelty of such product candidate as a treatment for disease, plans and objectives for present and future clinical trials, and plans and objectives for product development. 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, including the results of clinical trials, the uncertainty of whether the results of clinical trials will be predictive of results in later stages of product development, and the timing, cost and design of future clinical trials and research activities, 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, 2006 and its 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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