
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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 17, 2010

MEDICINOVA, INC.

(Exact name of Registrant as Specified in Its Charter)

DELAWARE
**(State or Other Jurisdiction
of Incorporation)**

001-33185
(Commission File Number)

33-0927979
**(IRS Employer
Identification No.)**

**4350 LA JOLLA VILLAGE DRIVE, SUITE 950,
SAN DIEGO, CA**
(Address of Principal Executive Offices)

92122
(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 (see General Instruction A.2. below):

- 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))
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Item 7.01. Regulation FD Disclosure.

On March 17, 2010, MediciNova, Inc. issued a press release (the "Press Release") announcing positive preliminary results from a Phase Ib clinical trial to evaluate the safety and efficacy of MN-221 in patients with stable, moderate to severe chronic obstructive pulmonary disease (COPD). A copy of the Press Release is attached hereto as Exhibit 99.1.

The information in this Current Report on Form 8-K being provided under this Item 7.01, including Exhibit 99.1 furnished herewith, is being furnished and shall not be deemed "filed" for any purpose of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of such Section. The information in this current report on Form 8-K shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits.

(d) *Exhibits.*

99.1 Press Release dated March 17, 2010.

SIGNATURES

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

MEDICINOVA, INC.

Date: March 17, 2010

By: _____ /s/ SHINTARO ASAKO
Name: Shintaro Asako
Title: Chief Financial Officer



**MediciNova Reports Positive Preliminary Results from a Phase Ib Clinical Trial
of MN-221 in Moderate to Severe COPD Patients**

SAN DIEGO, Calif. – March 17, 2010 – 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 reported positive preliminary results from a Phase Ib clinical trial to evaluate the safety and efficacy of MN-221 in patients with stable, moderate to severe chronic obstructive pulmonary disease (COPD). There were no clinically significant safety concerns noted. Preliminary results demonstrated clinically significant improvements in percent change in forced expiratory volume in one second (FEV₁).

This randomized, double-blind, placebo-controlled Phase Ib study involved 48 moderate-to-severe COPD patients who received a one (1) hour intravenous infusion of MN-221 at three different escalating dose levels (300 µg, 600 µg, or 1200 µg) or placebo. Based on preliminary findings, all doses of MN-221 produced a clinically significant improvement in FEV_{1(L)} as compared to the baseline and placebo. At the end of the one hour infusion, FEV_{1(L)} increased as compared to baseline by an average of 21.5% (p=0.0025) for the 1200 µg dose, 16.2% (p=0.020) for the 600 µg dose, and 9.2% (p=NS) for the 300 µg dose compared to a decrease of 4.0% for the placebo. MN-221 at doses of 600 µg and 1200 µg appeared to have an effect for at least six (6) hours as compared to placebo; hence MN-221 may be considered a “medium-acting beta agonist (MABA)”. MN-221 was well tolerated by all patients who received infusions of MN-221.

“We believe there remains an unmet medical need for a safe and effective treatment for COPD exacerbations. The intravenous formulation of MN-221 may be effective in bypassing the constricted airways to deliver effective concentrations of the drug to patients. Inhaled beta₂-adrenergic agonists, which are the current standard of care, are often inadequate to control the symptoms of COPD exacerbations,” said Yuichi Iwaki, M.D., Ph.D., President and Chief Executive Officer of MediciNova, Inc. “Additionally, we are very excited about the potential use of MN-221 in exacerbations of COPD which could provide a significant expansion of this drug’s market potential”.

About MN-221

MN-221 is a highly-selective beta₂-adrenergic receptor agonist. Preclinical testing *in vitro* and *in vivo* shows MN-221 to be more selective for the beta₂-adrenergic receptor than other beta₂-adrenergic receptor agonists commonly used for these asthma attacks. This improved selectivity, coupled with its partial agonist activity at beta₁-adrenergic receptors, may result in fewer cardiovascular side effects than are commonly observed with these other agents. MediciNova has developed an intravenous formulation of MN-221 that bypasses the constricted airways to deliver the drug to the lungs. In addition to the data described above MN-221 has been shown to produce significant improvements in mean change in post-infusion (15 minute) FEV₁ from baseline (objective measure of lung function) at doses of 3.5 micrograms/min (p=0.011), and at 10, 16, 30 and 60 micrograms/min (p less than or equal to 0.0001), compared to placebo in stable mild-to-moderate asthma patients (MN-221-CL-004). Administration of MN-221 at a dose of approximately 1,100 micrograms over intervals of one or two hours also produced marked improvement in FEV₁ in patients with moderate-to-severe stable asthma (MN-221-CL-005). Based on an analysis of the data from the recently completed Phase II clinical trial (MN-221-CL-006), doses of 240 micrograms to over 1,100 micrograms of MN-221 administered to subjects with an acute exacerbation of asthma in combination with standard care was associated with improvement in FEV₁ compared to standard care alone and was well tolerated. In addition, a recently completed drug interaction study in dogs found that adding MN-221 by intravenous administration in combination with inhaled albuterol does not add to the heart rate increase associated with inhaled albuterol alone.

MediciNova acquired an exclusive, worldwide (excluding Japan), sublicensable license to MN-221 from Kissei Pharmaceutical Co., Ltd. The intellectual property acquired from Kissei included extensive preclinical and clinical safety data.

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 acute exacerbations of asthma, COPD exacerbations, multiple sclerosis and other neurologic conditions, 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 its two prioritized product candidates, MN-221 for the treatment of acute exacerbations of asthma and chronic obstructive pulmonary disease exacerbations and MN-166 for the treatment of multiple sclerosis and other central nervous system disorders, and either pursue development independently in the United States, in the case of MN-221, or establish a strategic collaboration to support further development, in the case of MN-166. MediciNova will seek to monetize its other product candidates. 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 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," "will," "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, MediciNova's ability to realize the anticipated strategic and financial benefits from its acquisition of Avigen, Inc., to integrate the two ibudilast development programs and to pursue discussions with potential partners to secure a strategic collaboration to advance the clinical development of the combined development program, 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, 2008 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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