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): December 13, 2010

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 (*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))

Item 7.01. Regulation FD Disclosure.

On December 13, 2010, MediciNova, Inc. (the "Company") issued a press release (the "Press Release") announcing positive preliminary results from reported preliminary results of the Company's neurological drug candidate, ibudilast (MN-166/AV411), in a Phase 1b/2a trial in opioid addicts. 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 December 13, 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: December 16, 2010

By: /s/ Shintaro Asako
Name: Shintaro Asako
Title: Chief Financial Officer

Exhibit 99.1

Columbia University/New York State Psychiatric Institute and MediciNova Report Preliminary Safety and Efficacy of Ibudilast in Heroin-dependent Volunteers

First Trial of a Glial Cell Modulator in Drug Addicts

San Diego, CA – December 13, 2010 –Drug addiction investigators with joint appointments at Columbia University Medical Center and the New York State Psychiatric Institute (NYSPI) along with MediciNova Inc, a biopharmaceutical company publicly traded on the Nasdaq Global Market (Trading Symbol: MNOV) and the Jasdaq Market of the Osaka Securities Exchange (Code Number: 4875), today reported preliminary results of the company's neurological drug candidate, ibudilast (MN-166/AV411), in a Phase 1b/2a trial in opioid addicts. The study was largely funded by the National Institute on Drug Abuse (NIDA) with MediciNova supplementation.

The trial was led by Sandra Comer, Ph.D., Professor of Clinical Neurobiology, and colleagues, including Ziva Cooper, Ph.D., Assistant Professor of Clinical Neurobiology; established clinical research investigators in the treatment of drug addiction. For this 21-day, inpatient, double-blind, placebo-controlled study, 30 heroin-dependent volunteers were enrolled and maintained on oral morphine for the first 14 days. In the first week, all subjects received Placebo and on Day 8, participants were randomized to continue placebo (P), low dose (L; 20 mg twice daily (40 mg/day)), or high dose (H; 40 mg twice daily (80 mg/day)) ibudilast. Data were analyzed from 10 subjects completing each treatment arm. In the third week, morphine was no longer administered such that withdrawal phenomena during detoxification could be monitored. Primary endpoints were safety/tolerability and changes in total subjective opioid withdrawal scale (SOWS) score. Secondary endpoints included other withdrawal scales and analgesia and physiological measurements. Indicators of altered analgesia or tolerance (reduced opioid effects with repeat morphine exposure) were assessed in laboratory sessions with oxycodone administration and cold water immersion of the hand followed by objective and subjective pain endpoints.

Preliminary data analyses by Drs. Comer and Cooper indicated that ibudilast was safe and well-tolerated in all subjects and that certain endpoints revealed ibudilast efficacy. Ratings on the Subjective Opioid Withdrawal Scale, the trial's primary endpoint, were higher during the third week (days 15-21) relative to the first two weeks in the P and L groups ($p \leq 0.05$), but not in the H group. Oxycodone-induced decreases in subjective pain ratings, a measure of analgesia, were lower during the second week relative to the first week in the H group ($p \leq 0.01$). Similarly, tolerance was observed to the physiological effects of oxycodone in the P group with decreased oxycodone-induced miosis during the second week relative to the first week, and increased oxycodone-induced miosis in the L and H groups during the second week ($p \leq 0.05$). Dr. Comer concluded "ibudilast treatment appeared to dose-dependently decrease the subjective symptoms of opioid withdrawal and appears to reverse tolerance to opioid-elicited analgesic, physiological, and subjective effects."

"We are pleased with the completion of this landmark trial and we are excited with the preliminary results and their implications for broader utility of ibudilast," said Yuichi Iwaki, M.D. Ph.D., MediciNova's Chief Executive Officer. Kirk Johnson, Ph.D, MediciNova's Chief Scientific Officer added "these findings from a well-controlled trial are the first to demonstrate the potential utility of a glial modulator like ibudilast, with macrophage migration inhibitory factor (MIF) and phosphodiesterase (PDE)-inhibiting actions, for potentially treating opioid dependence and pain in humans. Moreover, the positive outcome of our collaboration with Columbia/NYSPI and NIDA paired with company-sponsored trials wherein ibudilast has been safety dosed up to 100 mg/day bodes well for ongoing exploratory drug development".

Ibudilast has been used in asthma and post-stroke disorders in Japan for nearly 20 years and has also been utilized at higher doses with encouraging outcomes in MediciNova-sponsored clinical trials in multiple sclerosis and neuropathic pain. Collaborative trial planning between drug addiction research experts at organizations like Columbia/NYSPI and UCLA have led to NIDA-supported pre-clinical and clinical investigations for both opioid and methamphetamine addiction. Abuse of these drugs continues to be a significant public health concern and pharmacological treatment is an unmet clinical need. As there are no non-opioid drugs approved for treatment of dependence to opioids or methamphetamine, ibudilast is one of the few known new-approach treatments being investigated clinically.

About MediciNova

MediciNova, Inc. is a publicly-traded biopharmaceutical company founded upon acquiring and developing novel, small-molecule therapeutics for the treatment of serious diseases with a commercial 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, chronic obstructive pulmonary disease 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 on its two prioritized product candidates, MN-221 for the treatment of acute exacerbations of asthma and chronic obstructive pulmonary disease exacerbations and ibudilast (MN-166/AV411) for the treatment of multiple sclerosis, chronic pain, spinal cord injury, or drug addiction. Each drug candidate is involved in clinical trials under U.S. and Investigator INDs and MediciNova is engaged in strategic partnering discussions to support further development of the MN-221 and ibudilast programs. Additionally, MediciNova will seek to monetize its other pipeline 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, 2009 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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