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): May 17, 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:

☐ 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 2.02. Results of Operations and Financial Condition.

On May 17, 2010, MediciNova, Inc. issued a press release announcing its financial results for the quarter ended March 31, 2010. A copy of this press release is attached hereto as Exhibit 99.1.

The information in this Current Report, including Exhibit 99.1 furnished herewith, is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that Section. The information in this Current Report shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing to this Current Report.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Number	Description
99.1	Press release dated May 17, 2010

SIGNATURE

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.

MEDICINOVA, INC.

Dated: May 17, 2010

By: /s/ SHINTARO ASAKO

Shintaro Asako
Vice President and Chief Financial Officer

EXHIBIT INDEX

Number	Description
99.1	Press release dated May 17, 2010

Exhibit 99.1

MediciNova Reports First Quarter 2010 Results

SAN DIEGO, Calif. – May 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 announced financial results for the first quarter ended March 31, 2010.

A detailed discussion of financial results and product development programs can be found in MediciNova's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, which was filed May 17, 2010 and is available through investors.medicinova.com.

Financial Results

For the quarter ended March 31, 2010, MediciNova reported a net loss of $5.2 million, or $0.42 per share, compared to a net loss of $5.0 million, or $0.41 per share, for the same period last year. There were no revenues for the quarter ended March 31, 2010 or March 31, 2009. Research and development expenses were $2.9 million for the quarter ended March 31, 2010, compared to $3.1 million for the quarter ended March 31, 2009. The decrease in research and development was due primarily to a decrease in spending on our clinical development programs, with the exception of MN-221 for the treatment of acute exacerbations of asthma for which the MN-221-CL-007 clinical trial is on-going and for the treatment of chronic obstructive pulmonary disorder ("COPD") for which the Phase Ib trial completed in the first quarter. General and administrative expenses were $2.3 million for the quarter ended March 31, 2010, compared to $2.2 million for the quarter ended March 31, 2009. The increase in general and administrative expenses was primarily due to an increase in fees paid to third-party consultants.

As of March 31, 2010, the carrying value of our cash, cash equivalents, investment securities – current and ARS Put, net of the ARS Loan, was $24.9 million, compared to $28.4 million at December 31, 2009. Restricted cash and letter of credit of $28.9 will be included in our capital resources upon conversion of the associated convertible notes into our common stock.

At March 31, 2010, $20.9 million of our Auction Rate Securities ("ARS") consisted primarily of government-guaranteed student loan securities and were classified as current investment securities. At March 31, 2010, $1.8 million of our ARS consisted of private placement securities and were classified as long-term investment securities. None of the underlying collateral for our ARS consisted of subprime mortgages or collateralized debt obligations.

In August 2008, UBS AG and its affiliates ("UBS"), the brokerage firm through which we purchased the majority of our ARS investments, entered into a settlement with the SEC, the New York Attorney General and other state agencies. Under the settlement, UBS issued to us the Auction Rate Security Rights, which would allow us to sell to UBS our ARS held in accounts with UBS ("ARS Rights Offer"). Pursuant to the ARS Rights Offer, we received the right to sell to UBS the ARS held in accounts with UBS at par value at any time during the period beginning June 30, 2010 and ending July 2, 2012 ("ARS Put.") As part of the settlement, UBS also offered to us a no net cost loan program ("ARS Loan"), whereby we would be able to borrow up to 75% of the market value, as determined by UBS at its sole discretion, of our ARS that have been pledged as collateral at an interest cost that would not exceed the interest being paid on the underlying ARS investments. Under the ARS Loan program, UBS may demand full or partial payment of the ARS Loan, at its sole option and without cause, at any time. In November 2008, we accepted the ARS Rights Offer. In January 2009, we were approved for the ARS Loan in the amount of $15.9 million and drew down the entire preapproved amount. In addition, in February 2009, we borrowed an additional $2.2 million under the ARS Loan, bringing the total amount outstanding under the ARS Loan to $18.1 million, following UBS' decision to increase our availability under the ARS Loan. All cash received under the ARS Loan was invested in money market accounts. Our ARS Loan balance at March 31, 2010 was $14.4 million, with an effective average interest rate of 1.36 percent charged, or approximately $44,000 of interest paid, on the no net cost loan.

Recent Highlights

- In February 2010, MediciNova announced that Kirk Johnson, Ph.D. joined MediciNova as its Chief Scientific Officer.
- In March 2010, MediciNova 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 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 (FEV(1)). 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 micrograms, 600 micrograms, or 1200 micrograms) 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 microgram dose, 16.2% (p=0.020) for the 600 microgram dose, and 9.2% (p=NS) for the 300 microgram dose compared to a decrease of 4.0% for the placebo.
- In the March 31, 2010 issue of *Neurology* two articles related to the potential clinical utility and unique pharmacological action of MN-166 in treating multiple sclerosis (MS) were published. The primary publication, authored by Frederik Barkhof, M.D., Ph.D., Vrije Universitiet Medical Center, Amsterdam, and collaborators, details the safety and efficacy profile of MN-166 in the two-year MN-166-CL-001 trial performed in Eastern Europe and completed in 2008. In the article, Dr. Barkhof et al. review ibudilast (MN-166) trial findings, previously summarized in MediciNova's press releases and a presentation at the 2008 WCTRIMS meeting, and poses that ibudilast's apparent clinical benefit may be related to a neuroprotective action. Also published was an editorial commentary by MS specialist, Robert Fox, M.D., Cleveland Clinic, entitled "Primary neuroprotection: The Holy Grail of multiple sclerosis therapy."
- On May 10, 2010, we entered into a loan and security agreement with Oxford Finance Corporation providing for a term loan of $15.0 million. This loan is secured by substantially all of our assets other than intellectual property. The proceeds from this financing will be used to satisfy working capital needs, including the continued clinical development of MN-221.

“Already in 2010 we have made significant progress as a company. The clinical development of MN-221 has been very promising and significant. We have shown positive data from our MN-221-CL-010 trial in COPD patients, which could greatly expand this drug’s potential market opportunity,” said Yuichi Iwaki, M.D., Ph.D., President and Chief Executive Officer of MediciNova, Inc. “We were pleased to announce that Kirk Johnson, Ph.D., of Avigen has decided to continue his work on the ibudilast program (MN-166) by joining MediciNova as our Chief Scientific Officer, in addition the two published articles on MN-166 in *Neurology* has attracted great attention from both the scientific and business communities.”

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 COPD exacerbations and MN-166 for the treatment of multiple sclerosis and other central nervous system disorders, and either pursue development independently in select markets, 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, 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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MEDICINOVA, INC.

CONSOLIDATED BALANCE SHEETS

	March 31, 2010 (Unaudited)	December 31, 2009
Assets		
Current assets:		
Cash and cash equivalents	$ 15,597,457	$ 19,241,581
Investment securities – current	20,913,658	24,254,987
ARS put – current	2,785,978	2,557,007
Prepaid expenses and other current assets	1,048,259	869,649
Total current assets	40,345,352	46,923,224
Restricted cash	28,351,198	30,045,965
Restricted investment	648,542	676,499
Restricted letter of credit	500,166	500,042
In-process research and development	4,800,000	4,800,000
Goodwill	9,142,205	9,142,205
Property and equipment, net	117,595	153,547
Long-term investments	1,796,113	2,085,425
Total assets	$ 85,701,171	$ 94,326,907
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 1,041,856	$ 1,300,271
ARS loan payable	14,443,366	17,605,485
Escrow holdback	951,559	1,094,045
Accrued expenses	1,672,585	1,276,036
Accrued compensation and related expenses	284,823	1,146,960
Total current liabilities	18,394,189	22,422,797
Management transition plan liability	648,542	676,499
Deferred tax liability	1,956,000	1,956,000
Convertible notes	27,594,664	29,258,137
Total liabilities	48,593,395	54,313,433
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.01 par value; 500,000 shares authorized at March 31, 2010 and December 31, 2009; no shares outstanding at March 31, 2010 and December 31, 2009	—	—
Common stock, $0.001 par value; 30,000,000 shares authorized at March 31, 2010 and December 31, 2009; 12,421,801 and 12,172,510 shares issued at March 31, 2010 and December 31, 2009, respectively, and 12,375,994 and 12,122,217 shares outstanding at March 31, 2010 and December 31, 2009, respectively	12,422	12,170
Additional paid-in capital	290,886,127	288,652,712
Accumulated other comprehensive loss	(66,136)	(64,914)
Treasury stock, at cost; 45,807 shares at March 31, 2010 and 50,293 shares at December 31, 2009	(1,212,288)	(1,235,395)
Deficit accumulated during the development stage	(252,512,349)	(247,351,099)
Total stockholders' equity	37,107,776	40,013,474
Total liabilities and stockholders' equity	$ 85,701,171	$ 94,326,907

MEDICINOVA, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three months ended March 31,		Period from September 26, 2000 (inception) to March 31, 2010
	2010	2009	
Revenues	$ —	$ —	$ 1,558,227
Operating expenses:			
Cost of revenues	—	—	1,258,421
Research and development	2,949,456	3,100,901	147,495,323
General and administrative	2,286,952	2,164,194	91,313,950
Total operating expenses	5,236,408	5,265,095	240,067,694
Operating loss	(5,236,408)	(5,265,095)	(238,509,467)
(Impairment charge)/gain on investment securities	(7,479)	26,671	(957,213)
Foreign exchange (loss)/gain	(3,746)	27,088	(105,527)
Other income, net	85,632	217,950	18,462,795
Income taxes	751	(5)	(39,815)
Net loss	(5,161,250)	(4,993,391)	(221,149,227)
Accretion to redemption value of redeemable convertible preferred stock	—	—	(98,445)
Deemed dividend resulting from beneficial conversion feature on Series C redeemable convertible preferred stock	—	—	(31,264,677)
Net loss applicable to common stockholders	$ (5,161,250)	$ (4,993,391)	$(252,512,349)
Basic and diluted net loss per common share	$ (0.42)	$ (0.41)	
Shares used to compute basic and diluted net loss per common share	12,269,102	12,072,027	