## **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): October 10, 2007

## 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 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 7.01 Regulation FD Disclosure.

Representatives of MediciNova, Inc. (the "Registrant") are scheduled to make a presentation at the 2007 BIO InvestorForum on October 10, 2007 at 11:15 a.m. Pacific time. A copy of the slide presentation to be used by the Registrant at this conference 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 any purpose, including 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 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 a filing.

#### Item 9.01 Financial Statements and Exhibits.

### (d) Exhibits.

**Exhibit** Description

99.1 Slide presentation of the Registrant

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.

MEDICINOVA, INC.

Dated: October 10, 2007

By: /s/ Shintaro Asako

Shintaro Asako Vice President and Chief Financial Officer

EXHIBIT INDEX

Exhibit Description

99.1 Slide presentation of the Registrant



# Accelerating the global development and commercialization of innovative pharmaceuticals

October 2007

This presentation contains forward-looking statements that involve risks and uncertainties. These forwardlooking statements include, but are not limited to, statements regarding our strategies and objectives, our plans for the development and commercialization of our product candidates, including development programs and clinical trials, our industry, our financial condition, liquidity and capital resources, the efficacy and potential benefits of our product candidates and other statements that are not historical facts. 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. Actual results or events may differ materially from those expressed or implied in any forwardlooking statements due to various factors, including, without limitation, the risks and uncertainties inherent in clinical trials and product development and commercialization, such as the uncertainty in results of clinical trials for our 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 approvals, our reliance on third parties and the timing, cost and design of future clinical trials and research activities, the timing of our expected filings with the FDA, the failure to execute strategic plans or strategies successfully, our collaborations with third parties, intellectual property and contract rights, and the other risks and uncertainties described in our filings with the Securities and Exchange Commission, including our annual report for the year ended December 31, 2006 and our subsequent periodic reports on Forms 10-Q and 8-K. You should not rely unduly on these forward-looking statements, which speak only as of the date hereof. We undertake no obligation to update publicly or revise any forward-looking statements discussed in this presentation.



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## **US-Based Pharmaceutical Development Company:**

 Unique access to differentiated, high-value assets primarily from Japanese alliances

## **New Approaches to Treat Serious Medical Conditions:**

- Easy intravenous formulation to treat
   Status Asthmatiquatients
- Safe and potential disease modifying (neuroprotection) therapy for Multiple Sclerosis



MediciNova Headquarters: San Diego, CA

## **Diverse Pipeline:**

 Additional upside with six more compounds in development for various indications



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## **In-License:**

- Product candidates ready to enter clinical or preclinical development



## **Proof-of-Concept Trials:**

— Conduct Phase I and Phase II trials to prove satellity Pharma Corporation and efficacy of compound

## **Two Pathways Towards ROI After Phase II:**

- Continue internal development of compound towards commercialization
- Seek partnership for compound

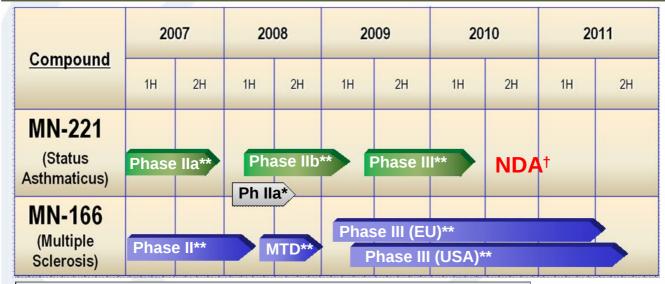




KISSEI



## **A Focused Development Plan**



- \* Extended Dosing (4 Hour Infusion)
- \*\* Anticipated commencement and completion dates based on current projections

<sup>†</sup> Filing as early as 2H'10

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### **Definition:**

Long-lasting and severe asthma episode that is not responsive to initial bronchodilator or corticosteroid therapy

## **Market Opportunity:**

- •~1.9 million emergency room visits in the U.S. each year\*
- •~500,000 hospitalizations & ~4,000 deaths annually in the U.S.

### **Current Standard of Care:**

- •Betaagonistsnhaledrnebulize(allpatients)
- Corticosteroids, Vororal (66–77% of pts)

Phase Ila Study; Positive Results October 2007

\*Source: National Center for Health Statistics/CDC

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- 1. Proven mechanism of action ( $\beta_2$ -adrenergic agonist)
- 2. Rapid, reliable IV delivery (vs. inhaled/nebulized)
- 3. Safer (greater selectivity = fewer cardiovascular SE)

Human β-Adrenergic Receptor Selectivity					
Drug	Adrenoceptor (IC <sub>50</sub> , µM)		β <sub>2</sub> -Adrenoceptor Selectivity		
	β1	β <sub>2</sub>	$(IC_{50} \text{ for } \beta_1/IC_{50} \text{ for } \beta_2)$		
MN-221	1.39	0.0224	62.1		
Albuterol (Salbutamol)	5.63	1.56	3.61		

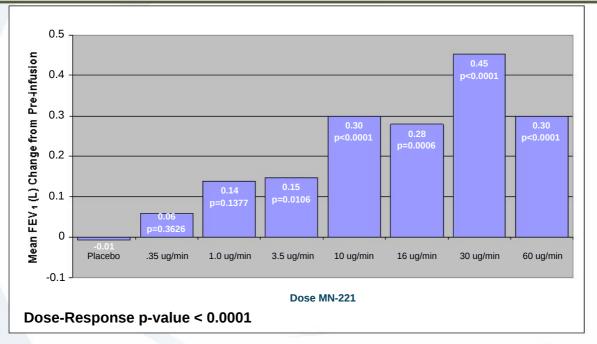
Displacement of [ $^3$ H]-cvanopindolol or [ $^3$ H]-CGP12177 binding in membrane preparations expressing human cloned  $\beta_1$ - and  $\beta_2$ -adrenoceptors, respectively



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## **Efficacy in Asthma Demonstrated: Effects on FEV1**





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- In the Phase staudy there were no clinically significant cardiovascular, electrocardiogram (ECG), or vital sign changes, nor were there any other safety concerns observed at any dose tested
- MN-22 hasbeentestedin over 300 subject in the US and Europe odate
- Subjects have had infusions of 16 micrograms/minute of up to 4-hours with MN-221 with no clinically significant adverse events reported
  - Subjects have had infusions at lower doses of up to 24-hours with no clinically significant adverse events reported
- MN-22 is a partial agonist or the  $\[mathbb{R}_1$  recept on the heart and a full agonist or the  $\[mathbb{R}_2$  recept on the lungs which naddition to its high selectivity nay explain why no clinically significant cardiac events are seen with this drug



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- Announced positive Phase IIa results in October 2007
- Commence Phase IIb study to test efficacy of MN-221 in Status Asthmaticus patients in the emergency room
  - Anticipated commencement date: Q2'08
  - Results expected as early as Q2'09
- Commence second Phase IIa study for Extended Dosing (4 Hour Infusion)
  - Anticipated commencement date: Q1'08
  - Results expected as early as Q3'08





In an oral delivery form, MN-166 proving high degree of safety with a broad (neuroprotectiventi-inflammatory) efficacy profile than interferons.

Based on clinical and radiofinglings,
MN-166 has the potential to modify disease
progression by mitigating neuronal
damage and to meet the need for a new MS
therapy sought by the MS scientific
community.





**CHRONIC:** (Current and Developing Treatments Are Not Neuroprotective)

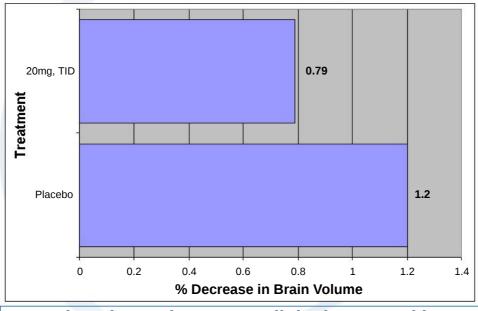
- Neuroprotecti@utcome:
  - Attenuated % brain volume loss (- 0.79% vs. -1.2%)
  - P-Value0.0352
- Potentially Slows Disease Progression via Neuroprotection
  - Stimulates Th2 cytokine production (IL-4, IL-10)
  - Stimulates neurotrofatritor release (NGF, GDNF, NT-4)
  - Cerebrovasodila(toiaPG½ and/oadenosinæceptors)



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## **Chronic Efficacy Demonstrated: Effects on Brain Volume**



Brain volume changes are linked to axonal loss



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**ACUTE:** 

(MN-166 Similar Acute Efficacy to Current and Developing Treatments)

## Anti-inflammatory Outcomes:

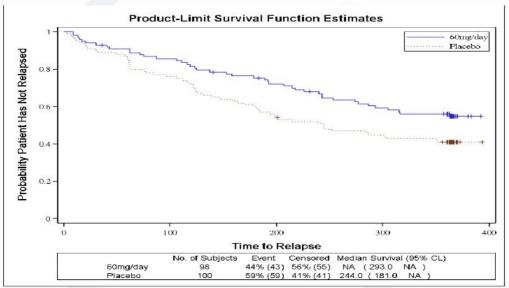
- Pilot studies found reduced relapse rate and reduced relapse rate and reduced relapse rate.
- Prolongimetorelapsé>1yr.) P-Value0.0438
- Increased % relapse-free (5p/4)/alue0.033
- Decreased T1-Gd lesion volume

## Reduces Relapses via Inhibiting Inflammation

- Phosphodiesteral@and Leukotrienbibitor
- Inhibits nitric oxide and reactive oxygen species production
- Inhibits Th1 cytokine production (IFN-g, TNF-a, IL-1b, IL-6)

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Phase III endpoint for certain FDA-approved MS products



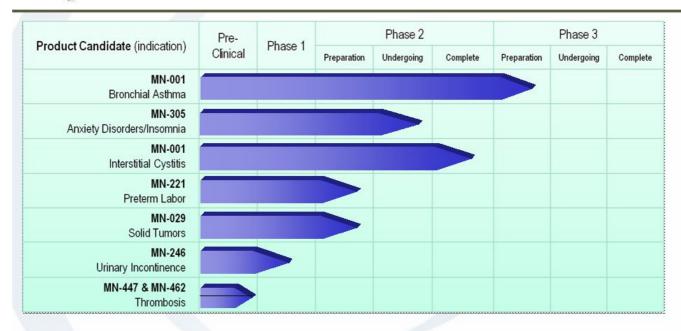


- Complete Formulation Work on Once-Daily Dosing
  - Anticipated completion date: November 2007
- Commence Relative Bioavailability Study (Ex-US)
  - Anticipated commencement date: Q1'08
- Announce Two-Year Phase II Results
  - Results expected: March 2008
- Submit US IND
  - Submission anticipated as early as March 2008
- Commence MTD Study
  - Anticipated commencement date: Q2'08
  - Results expected as early as Q4'08





## **Commercially-Attractive Diversified Portfolio**





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## Near-Term Clinical Milestones

MN-221

 Positive Phase IIa Status Asthmaticus results announced October 2007

MN-305

 Phase II Insomnia results expected October 2007

MN-166

Two-Year Phase II results expected March 2008





- MN-305: For Insomnia
  - Phase II results expected October 2007
- MN-166: For Multiple Sclerosis
  - Positive one-year Phase II results
     announced March 2007
- MN-001: For Asthma
  - Once-daily formulation work ongoing; completion of new formulation expected as early as Q2'08
  - New composition of matter patent granted; patent protection through 2023





- Dual Listing:
  - MNOV (NasdaqGM), December 2006
  - 4875 (Osaka (Hercules), February 2005
- Cash: \$85.9M as of 6/30/07
- Expected Cash Balance: ~\$65M as of 12/31/07
- Market cap as of 10/09/07: ~\$101.27M
- Shares outstanding: 11.9M





## **Management Team with Global Experience**

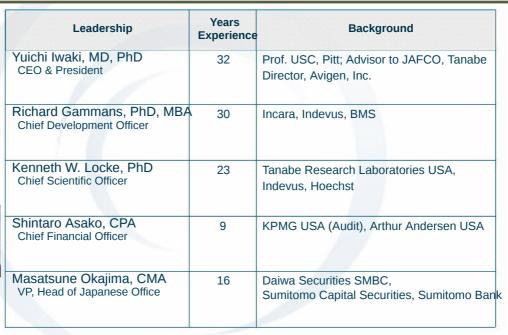
















## Unique In-Licensing Approach

 Access to Differentiated, High-Value, Assets from Primarily Japanese Alliances

## Focused Internal Development Plan

- MN-221: IV Formulation for Status Asthmaticus
- MN-166: Neuroprotective Treatment for Multiple Sclerosis

## Broad Pipeline

 Multiple Opportunities for Value Creation through Establishment of Partnerships

