

**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): September 26, 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))
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**Item 7.01 Regulation FD Disclosure.**

Representatives of MediciNova, Inc. (the "Registrant") are scheduled to make a presentation at the 2007 UBS Global Life Sciences Conference on September 26, 2007 at 2:00 p.m. Eastern 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.**

<u>Exhibit</u>	<u>Description</u>
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: September 26, 2007

By: /s/ Shintaro Asako

Shintaro Asako

Vice President and Chief Financial Officer

EXHIBIT INDEX

Exhibit  
99.1

Description  
Slide presentation of the Registrant

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*Accelerating  
the global development  
and commercialization of  
innovative pharmaceuticals*

*September 2007*



# Safe Harbor Statement

*This presentation contains forward-looking statements that involve risks and uncertainties. These forward-looking 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 forward-looking 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.*



# Corporate Overview: MediciNova, Inc.

## US-Based Pharmaceutical Development Company:

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

## New Approaches to Treat

### Serious Medical Conditions:

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

## Diverse Pipeline:

- Additional upside with six more compounds in development for various indications



**MediciNova Headquarters:  
San Diego, CA**



# Business Model: Return On Investment

## In-License:

- Product candidates ready to enter clinical or preclinical development



## Proof-of-Concept Trials:

- Conduct Phase I and Phase II trials to prove safety and efficacy of compound



## Two Pathways Towards ROI

### After Phase II:

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







# A Focused Development Plan

Compound	2007		2008		2009		2010		2011	
	1H	2H	1H	2H	1H	2H	1H	2H	1H	2H
<b>MN-221</b> (Status Asthmaticus)		Phase IIa**		Phase IIb**	Phase III**			NDA†		
			Ph IIa*							
<b>MN-166</b> (Multiple Sclerosis)		Phase II**		MTD**		Phase III (EU)**	Phase III (USA)**			

\* Extended Dosing (4 Hour Infusion)

\*\* Anticipated commencement and completion dates based on current projections

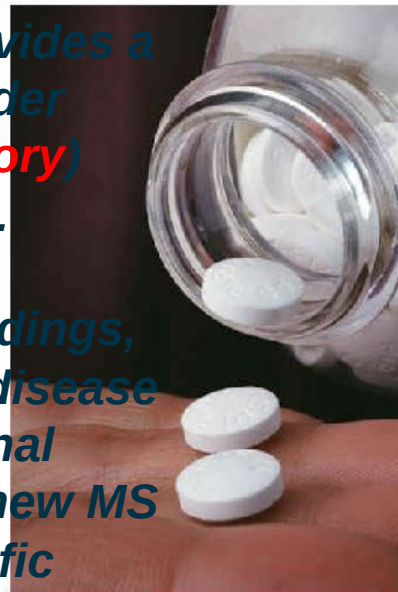
† Filing as early as 2H'10



## MN-166 is a Next Generation Treatment for Multiple Sclerosis

*In an oral delivery form, MN-166 provides a high degree of safety with a broader (neuroprotective + anti-inflammatory) efficacy profile than interferons.*

*Based on clinical and radiologic findings, 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.*





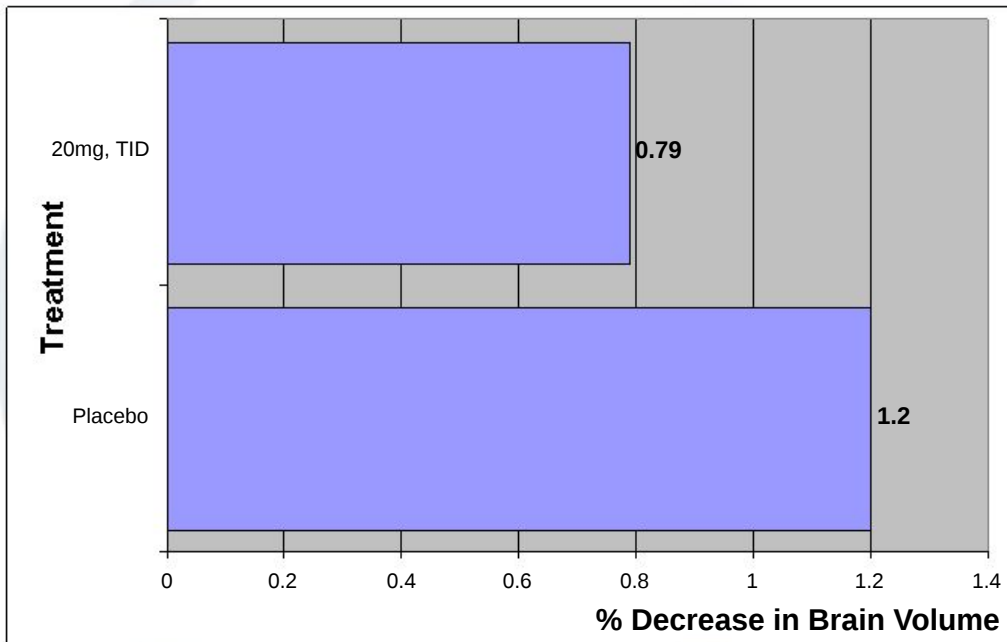
# MN-166 Targets Chronic and Acute Aspects of Multiple Sclerosis

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

- **Neuroprotective Outcome:**
  - Attenuated % brain volume loss (- 0.79% vs. -1.2%)
  - *P-Value: 0.0352*
- **Potentially Slows Disease Progression via Neuroprotection**
  - Stimulates Th2 cytokine production (IL-4, IL-10)
  - Stimulates neurotrophic factor release (NGF, GDNF, NT-4)
  - Cerebrovasodilation (via  $PGI_2$  and/or adenosine receptors)



# Chronic Efficacy Demonstrated: Effects on Brain Volume



***Brain volume changes are linked to axonal loss***



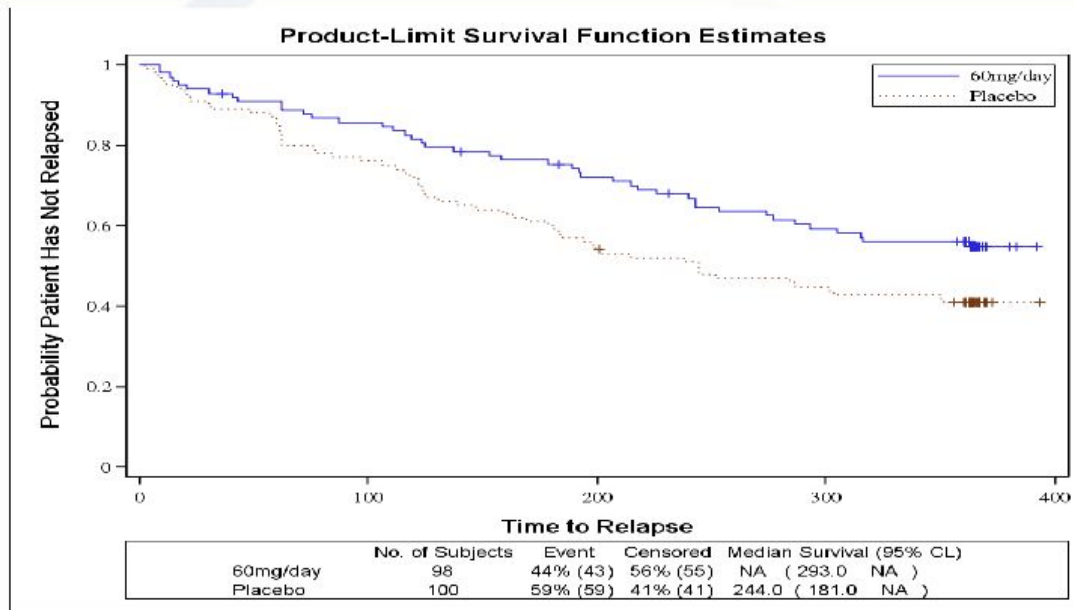
# MN-166 Targets Both Chronic and Acute Aspects of Multiple Sclerosis

## **ACUTE:** (MN-166 Similar Acute Efficacy to Current and Developing Treatments)

- **Anti-inflammatory Outcomes:**
  - Pilot studies found reduced relapse rate and Th1 cytokine shift
  - Prolong time to relapse ( $> 1y$ ) **Value: 0.0438**
  - Increased % relapse-free (56%) **Value: 0.033**
  - Decreased T1-Gd lesion volume
- **Reduces Relapses via Inhibiting Inflammation**
  - Phosphodiesterase IV and Leukotriene inhibitor
  - Inhibits nitric oxide and reactive oxygen species production
  - Inhibits Th1 cytokine production (IFN-g, TNF-a, IL-1b, IL-6)



# Acute Efficacy Demonstrated: Time to First Relapse



***Phase III endpoint for certain FDA-approved MS products***



# MN-166 : Next Steps

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- **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



# MN-221: A New Approach to Treating Status Asthmaticus

## 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:

- Beta agonists, inhaled or nebulized (all patients)
- Corticosteroids, IV or oral (66– 77% of pts)



**Phase IIa Study Ongoing; Results Expected in October 2007**

\*Source: National Center for Health Statistics/CDC





# Competitive Advantages of MN-221

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 $\beta$ -Adrenergic Receptor Selectivity			
Drug	Adrenoceptor ( $IC_{50}$ , $\mu M$ )		$\beta_2$ -Adrenoceptor Selectivity
	$\beta_1$	$\beta_2$	( $IC_{50}$ for $\beta_1$ / $IC_{50}$ for $\beta_2$ )
MN-221	1.39	0.0224	62.1
Albuterol (Salbutamol)	5.63	1.56	3.61

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

# MN-221 : Next Steps

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- Announce 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
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- Commence second Phase IIa study for Extended Dosing (4 Hour Infusion)
    - Anticipated commencement date: Q1'08
    - Results expected as early as Q3'08



# Commercially-Attractive Diversified Portfolio

Product Candidate (indication)	Pre-Clinical	Phase 1	Phase 2			Phase 3		
			Preparation	Undergoing	Complete	Preparation	Undergoing	Complete
<b>MN-001</b> Bronchial Asthma	[Progress bar spanning Pre-Clinical, Phase 1, and Phase 2 Preparation]							
<b>MN-305</b> Anxiety Disorders/Insomnia	[Progress bar spanning Pre-Clinical and Phase 1]							
<b>MN-001</b> Interstitial Cystitis	[Progress bar spanning Pre-Clinical, Phase 1, and Phase 2 Preparation]							
<b>MN-221</b> Preterm Labor	[Progress bar spanning Pre-Clinical and Phase 1]							
<b>MN-029</b> Solid Tumors	[Progress bar spanning Pre-Clinical and Phase 1]							
<b>MN-246</b> Urinary Incontinence	[Progress bar spanning Pre-Clinical]							
<b>MN-447 &amp; MN-462</b> Thrombosis	[Progress bar spanning Pre-Clinical]							

# Near-Term Clinical Milestones

**MN-221**

- Phase II Status Asthmaticus results expected October 2007

**MN-305**

- Phase II Insomnia results expected October 2007

**MN-166**

- Two-Year Phase II results expected March 2008

# Near-Term Licensing Opportunities

- **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





# Financials

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- **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 9/20/07: ~\$84.4M**
- **Shares outstanding: 11.6M**



# Management Team with Global Experience



Leadership	Years Experience	Background
Yuichi Iwaki, MD, PhD CEO & President	31	Prof. USC, Pitt; Advisor to JAFCO, Tanabe Director, Avigen, Inc.
Richard Gammans, PhD, MBA Chief Development Officer	30	Incara, Indevus, BMS
Kenneth W. Locke, PhD Chief Scientific Officer	23	Tanabe Research Laboratories USA, Indevus, Hoechst
Shintaro Asako, CPA Chief Financial Officer	8	KPMG USA (Audit), Arthur Andersen USA
Masatsune Okajima, CMA VP, Head of Japanese Office	15	Daiwa Securities SMBC, Sumitomo Capital Securities, Sumitomo Bank



# Investment Highlights

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- **Unique In-Licensing Approach**
  - Access to Differentiated, High-Value, Assets from Primarily Japanese Alliances
- **Focused Internal Development Plan**
  - **MN-166: Neuroprotective Treatment for Multiple Sclerosis**
  - **MN-221: IV Formulation for Status Asthmaticus**
- **Broad Pipeline**
  - Multiple Opportunities for Value Creation through Establishment of Partnerships