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): July 24, 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)

- written communications pursuant to Rule 425 under the Securities Act (17 GFR 250.425)
- $\hfill \square$ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- $\label{eq:pre-communications} \square \qquad \text{Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))}$
- □ 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") will be presenting a slide presentation to various investors as part of the Registrant's road show, which begins on July 24, 2007. A copy of the slide presentation to be used by the Registrant at such meetings 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
 Investor 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.

Dated: July 24, 2007

MEDICINOVA, INC.

By: /s/ Shintaro Asako

Shintaro Asako

Vice President and Chief Financial Officer

EXHIBIT INDEX

Exhibit No. 99.1

<u>Description</u>
Investor presentation of the Registrant



Accelerating
the global development
and commercialization of
innovative pharmaceutical
products





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 that regulatory authorities may find our filings incomplete or insufficient or otherwise unacceptable or that approval may be delayed or denied, 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, 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 forwardlooking statements discussed in this presentation.

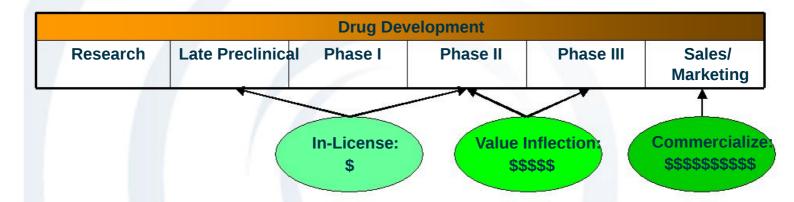


Corporate Overview

- U.S.-based pharmaceutical company developing and commercializing small molecule therapeutics sourced primarily from Japan
- Special relationships provide unique access to "untapped" source of novel therapeutics
- Broad, deep and advanced development pipeline with key market advantages
- Multiple opportunities for asset realization
- Lead commercial candidates MN-221 (Phase II) and MN-166 (Phase II) targeted
- Seasoned management team with global pharmaceutical experience



Innovative Business Model



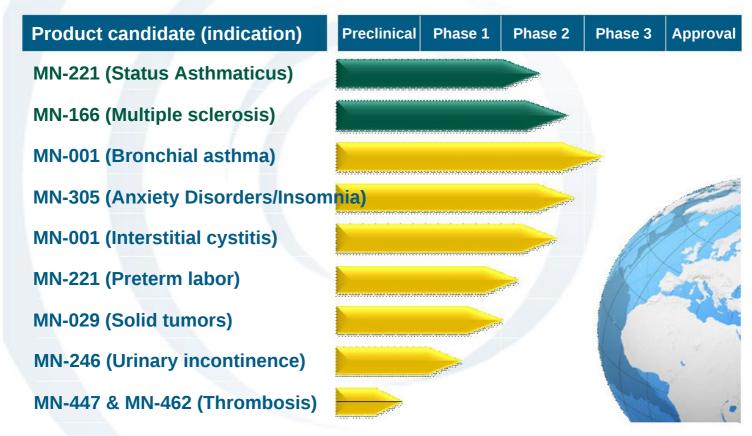
- IN-LICENSE high-value, differentiated small molecule product candidates from mid-sized Japanese pharmaceutical companies
- ADVANCE through proof-of-concept Phase II/III clinical trials
- MONETIZE assets at key value inflection points
- COMMERCIALIZE certain product candidates for maximum ROI



IN-LICENSE

- Seek Differentiated small molecules (NCEs) in late preclinical to early Phase II stage that:
 - Fill unmet medical needs
 - Offer competitive market advantages
 - Possess significant market potential
- Source Mid-sized Japanese pharma (e.g., Kyorin, Kissei, Mitsubishi, Meiji)
 - Special relationships provide unique access to "untapped" source
 - Long history of successful small molecule products
 - Large, detailed data packages
 - Strong IP

MEDICINOVA Commercially-Attractive Pipeline





ADVANCE

- Advance to next value inflection point (usually Phase II/III proof-of-concept)
- Cost-effective development through tightly–managed CROs
- Experience and expertise in U.S. and European drug development
- Successful advancement has brought new candidates into the portfolio and facilitates future in-licensing (renewable business model)



At value inflection point:

- Take selected assets forward to commercialization* (e.g., MN-221)
- Out-license to global or regional partner
- Form joint venture to develop asset(s)
- Royalty-based financing

Multiple Opportunities to Realize Asset Value

8

*pending FDA approval

MEDICINOVA MN-001: Opportunity to Monetize

- Novel, oral control medication for asthma
- Positive Phase II proof-of-concept data
 - Significant improvement in FEV1
 - Excellent safety profile
- Once-a-day formulation in development (expected 08Q2)
- New composition of matter patent (expiry 2023)



COMMERCIALIZE

Commercialize selected product candidates in the U.S. (*e.g.*, MN-166, MN-221)*.

Asset selection is based on:

- Development time and costs
- Ability to sell with small, focused sales force (50-100 reps)
- Market potential



MN-166 (Multiple Sclerosis)



Source Kyorin Pharmaceutical (2004)

Mechanism Neuroprotective + Anti-inflammatory

Advantages - Oral treatment for MS

- 17 year safety history in Japan

(asthma, stroke)

- New U.S. use patent

Clinical Status - Positive Phase II results from

one year treatment

Full Phase II results anticipated **Milestones**

- Initiate Phase III as early as

08Q2

Commercial Strategy

MNOV to commercialize in U.S.*

*pending FDA approval



MN-166: Next Generation Treatment for Multiple Sclerosis

In an oral delivery form, MN-166 provides a high degree of safety with a broader (neuroprotection + 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 meeting the need for newer MS therapies sought by the MS scientific community.

Proof of concept has been established and Phase III is targeted to begin in 08Q2

Definition of next generation of MS treatment MEDICINOVA (abstracted from Neurology 68 (S3), 2007)

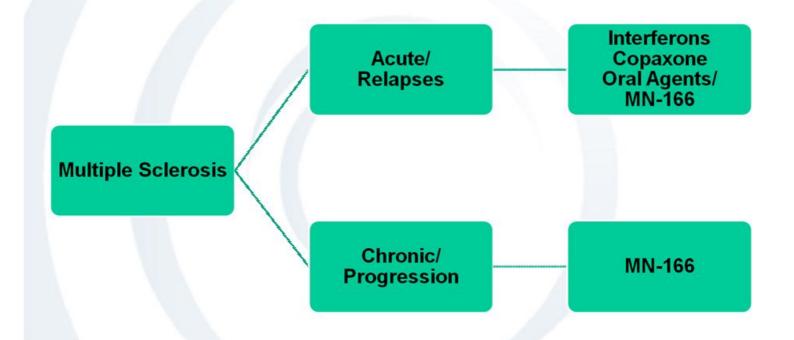
- Controlling inflammation is no longer sufficient
- Neuroprotection is a very important issue in MS and drugs that may provide neuroprotection are going to be very well received by the Neurology community
- The MRI metric of number of "active" lesions is not the most relevant to long term disability progression
- There are newer MRI metrics (e.g., brain atrophy measures) that will better correlate with neuroprotection and disability progression. By its early (within the first year) demonstrated decrease in brain volume loss, MN-166 may be providing such neuroprotection
- Currently available drugs have minimal effect on disability progression
- ".... A therapeutic approach that modulates inflammation, enhances neuron repair....and prevents neuron degeneration would be the most beneficial to patients over the long term." Douglas L. Arnold, MD



- Orally administered with new controlledrelease dosage form in development
- Neuroprotective and Anti-inflammatory in replicated pre-clinical studies
- Safe
 - 17 years of clinical use with over 3 million exposures has not revealed rare, concerning safety issues
 - Toxicology package supporting Japanese registration
 - No safety concerns identified in PhII study



Neuroprotection + Anti-inflammatory



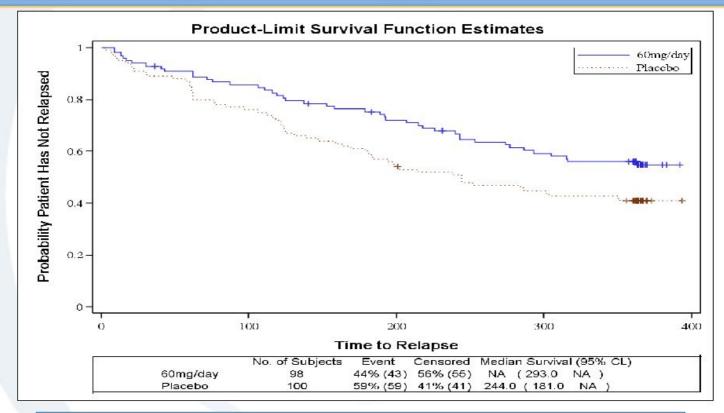
MN-166 may reduce both relapses (via anti-inflammatory effects) and disease progression (via neuroprotection)



MN-166: Clinical Efficacy

- Demonstrated neuroprotective and antiinflammatory effects in patients with relapsing MS
- Neuroprotective outcome:
 - Attenuated % brain volume loss (-.8% vs. -1.2%)
- Anti-inflammatory outcomes:
 - Pilot studies found reduced relapse rate and Th1 →Th2 cytokine shift
 - Prolonged time to relapse (>1 yr)
 - Increased % relapse-free (56%)
 - Decreased T1-Gd lesion volume

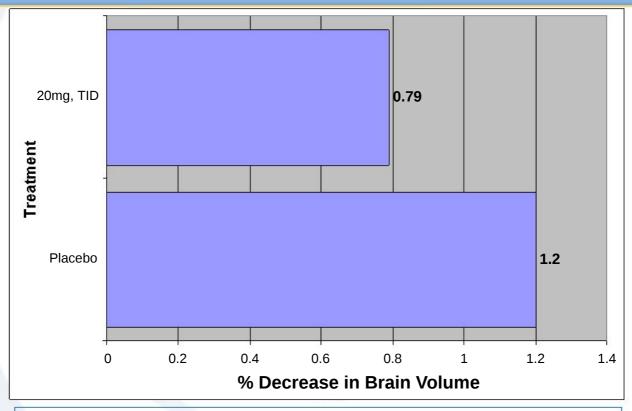
MEDICINOVA Effects on Time to First Relapse



Phase III endpoint for certain FDA-approved MS products



Effects on Brain Volume



Brain volume changes are linked to axonal loss



Benefits VS Interferons

Unmet Need

More convenient dosing

Greater efficacy

Longer duration of effect

Halt disease progression

Better safety profile

MN-166

Oral

At least comparable efficacy observed in early trials

No neutralizing antibodies formed; no loss of effect

At least comparable early trends in Phase II

Only mild, transient GI side effects noted in Phase II

Interferon Products

Intravenous or subcutaneous injection (Injection site pain, swelling and itching)

Current relapse reduction rate is ~33%

Relative benefit gained from existing drugs may decline over time - possibly due to presence of neutralizing antibodies

Avonex reduced the risk of disease progression by ~37% in patients treated for 2 years compared to placebo

Common side effects include injection site reactions, flu-like symptoms, depression, liver problems and blood abnormalities



Benefits VS Oral Agents

Feature	FTY 720	Cladribine	BG-12	Laquinimod	MN-166
Sponsor	Novartis	MerckSerono	BiogenIdec	Teva	MediciNova
Mechanism	sphingosine-1- receptor agonist	adenosine agonist, immunosuppressant	fumaric acid deriv; NF _k B inhibitor	immuno- modulator	inhibits PDE IV, leukotrienes and NO synthesis; increases neuro- trophic factors
Dose	0.5, 1.25 or 5 mg/day	"low dose" or "high dose"	120,360,720 mg/day	0.3 or 0.6 mg	60+ mg/day
Indication	Relapsing MS	Relapsing MS	Relapsing MS	Relapsing MS	Relapsing MS; delay disability progression?
Efficacy	Decrease MR lesions, no change in brain volume	Reduced relapse rate, fewer MR lesions	Decreased Gd- enhancing lesions at 720 mg	Fewer MR lesions, reduced relapse rate	Less brain volume loss, increase time to relapse
Side effects	↓ heart rate,↑blood pressure, dyspnea	Fever, nausea, vomiting	GI disorder, H/A, nasopharyngitis	↑ liver enzymes, arthralgia	Mild GI disorder



MN-221 (Status Asthmaticus)



Source Kissei Pharmaceutical (2004)

Mechanism Highly selective β_2 -adrenergic

receptor agonist

Advantages - Clinically-proven MOA

- Greater cardiovascular safety

- Reliable, rapid route of administration (i.v.)

Clinical Status - Well tolerated in Phase I

- Phase II started 10/06

Milestones Phase IIa Results – anticipated

07Q4

Commercial Strategy MNOV to commercialize in U.S.*

*pending FDA approval



MN-221: 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)

*source: National Center for Health Statistics/CDC



MN-221: New Treatment Paradigm

- Proven mechanism of action (β_2 -adrenergic receptor agonist)
- Rapid, reliable IV delivery (vs. inhaled/nebulized)
- Safer (greater selectivity = fewer cardiovascular side effects)



Human β-Adrenergic Receptor Selectivity

Drug	Adrenocepto	β ₂ -Adrenoceptor Selectivity	
	β_1	β ₂	(IC ₅₀ for β_1 /IC ₅₀ for β_2)
MN-221	1.39	0.0224	62.1
Albuterol (Salbutamol)	5.63	1.56	3.61
S(-)-Propranolol	0.00127	0.00094	1.35

Displacement of $[^3H]$ -cyanopindolol or $[^3H]$ -CGP12177 binding in membrane preparations expressing human cloned β_1 - and β_2 -adrenoceptors, respectively

MN-221 selectively binds to human β_2 -adrenergic receptors



MN-221 Phase IIa

Phase IIa Proof-of-Concept

- Randomized, double-blind, placebo-controlled, sequential dose-escalation study
- Objectives:
 - Determine the efficacy of a single 15-minute treatment
 - Determine the efficacy of two sequential 15-minute treatments
- 22 mild-to-moderate asthmatics at 4 centers in the U.S.
- Primary endpoint: change from baseline in mean FEV1 after a 15-minute infusion of MN-221
- Initiated December 2006; data anticipated 07Q4



Clear Development Path

- Clinical Plan: Phase IIa results anticipated 07Q4 → Phase IIb results as early as 09Q1 → Phase III (2 trials) results as early as 10Q2
- Modest development costs (~\$45M to NDA)
- Well-defined regulatory path
 - Acute dosing = short trials
 - Modest number of patients required for NDA (potentially life-threatening condition)
 - Possible fast-track review
- NDA filing targeted for as early as 10Q4



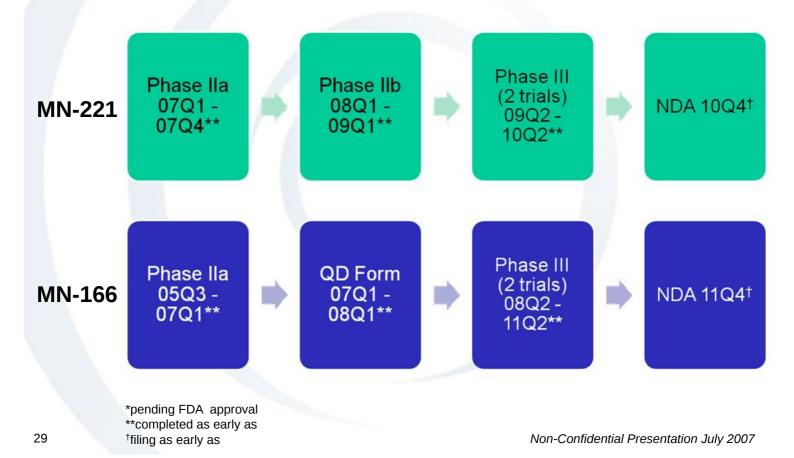
Favorable Commercial Metrics

- Market addressable through focused sales force (50-100 reps)
- Significant market opportunity (~\$500M)
- Rapid market penetration (could become new standard of care)
- High payer acceptance (due to potential reduction in hospitalizations)

MEDICINOVA MN-221 Competitive Advantages

Compound	Dosing	Proven Mechanism	Rapid Action	Reliable Delivery	Safety Issues
β-Agonists	Inhaled; Nebulized	Yes	Yes	No	Cardiovascular (palpitations)
Singulair	IV (Ph III)	No	?	Yes	No
Zyflo	IV (Ph I)	No	?	Yes	Liver Toxicity
MN-221	IV (Ph II)	Yes	Yes	Yes	No

MEDICINOVA Targeted Path to Commercialization*





2007 Milestones

Clinical

- ✓ MN-166 Positive Phase II (yr 1) results announced 3/07
- MN-305 Proof-of-concept Phase II results anticipated 07Q3
- MN-221 Proof-of-concept Phase II results anticipated 07Q4

Scientific

- MN-029 Positive Phase I DCE-MRI results to be presented at ECCO (Barcelona, September 23-27)
- MN-166 Positive Phase II results to be presented at ECTRIMS (Prague, October 11-14)

Corporate

- Prioritization of development pipeline
- Monetization efforts ongoing (out-licensing, etc.)



Financials

- Dual Listing:
 - MNOV (Nasdaq)
 - 4875 (Osaka (Hercules))
- Cash: \$98.1M as of 3/31/07
- Sufficient cash through at least 12/31/08
- Shares outstanding: 11.6M
- Market cap as of 7/20/07: ~\$100M



Management Team with Global Experience



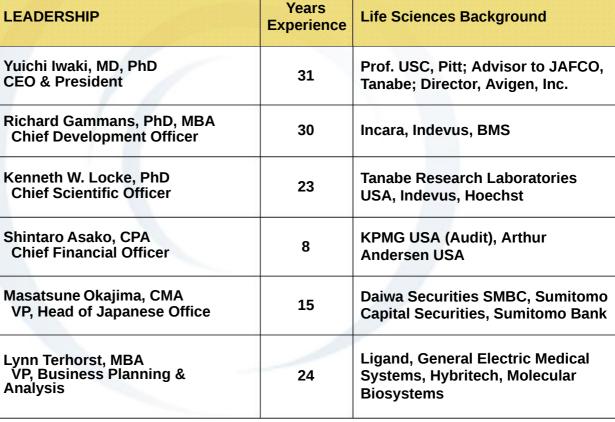
















Investment Highlights

- IN-LICENSE: Innovative business model
- ADVANCE: Rich mid- to late-stage clinical development pipeline with clear market advantages
- MONETIZE: Near-, mid- and longer-term realization of asset potential
- COMMERCIALIZE: MN-221 and MN-166 targeted for commercialization* by MediciNova
- Near-term milestones as key value drivers

33 *pending FDA approval