

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 30, 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 J.M. Dutton Health Science Small Cap Conference on May 30, 2007 at 10:10 a.m. Pacific time and at the Friedman Billings Ramsey Growth Conference on May 31, 2007 at 2:20 p.m. Eastern time. A copy of the slide presentation to be used by the Registrant at these conferences is attached hereto as Exhibit 99.1.

The information in this Item 7.01, including Exhibit 99.1 furnished herewith, is furnished pursuant to Item 7.01 and shall not be deemed "filed" for any purpose, including for the 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 Item 7.01 of this Current Report on Form 8-K shall not be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, regardless of any general incorporation language in any such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

<u>Number</u>	<u>Description</u>
99.1	Slide presentation dated May 30, 2007

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: May 30, 2007

By: /s/ Shintaro Asako
Shintaro Asako
Vice President and Chief Financial Officer

EXHIBIT INDEX

Number

Description

99.1

Slide presentation dated May 30, 2007



MEDICINOVA

**Accelerating
the global development
and commercialization of
innovative pharmaceutical
products**



Safe Harbor Statement

This presentation may contain “forward looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include statements regarding the expected progress of the development of the Company’s product candidates and potential licensing, collaboration and partnering plans. These statements are based on certain assumptions made by the Company’s management that are believed to be reasonable at the time. Such statements are subject to a number of assumptions, risks and uncertainties, many of which are beyond the control of the Company, including results of clinical studies, interest of potential collaborators in the market and other risks and uncertainties, including those described in the Company’s filings with the Securities and Exchange Commission. These assumptions, risks and uncertainties could cause the Company’s actual results to differ materially from those implied or expressed by the forward-looking statements.

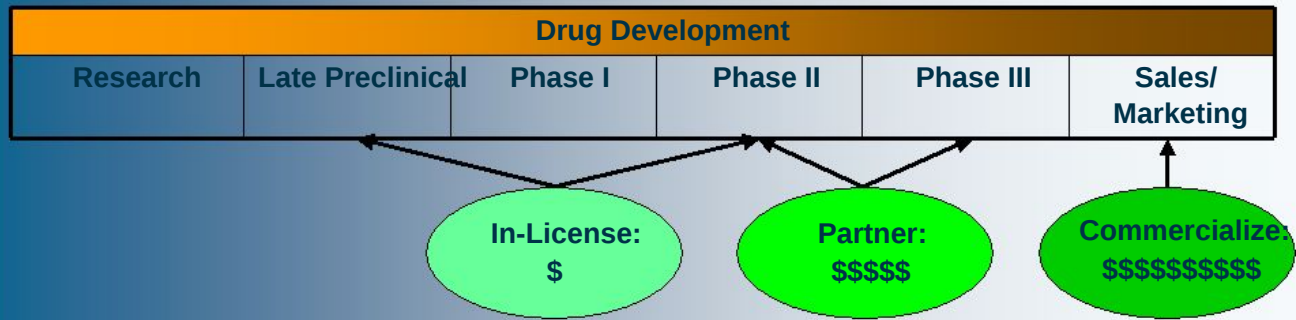


Corporate Overview

- **US-based pharmaceutical development company:**
 - Unique access to differentiated, high-value, lower-risk in-licensed assets from Japanese alliances
 - Focused on mid-to-late stage clinical development
 - Management team has global development/commercialization experience
- **Commercially-attractive clinical pipeline:**
 - 8 compounds in 10 different therapeutic indications; 7 programs in Phase II or later
 - Key market advantages for each unique molecule
 - Multi-billion dollar collective market potential
- **Well-capitalized:**
 - \$212M raised from inception; \$98M cash, equiv. & mkt securities as of 3/31/07
 - Successful IPO (\$122.5 M gross) on Osaka Securities Exchange (OSE; code: 4875) in February 2005
 - NASDAQ listing December 2006 (MNOV); recent NASDAQ offering of 1 M shares @ \$12 in February 2007 to introduce MNOV to new US shareholders



Business Model



- In-license high-value, differentiated small molecule product candidates at the late preclinical-early Phase II clinical development stage at attractive terms from mid-sized Japanese pharmaceutical companies
- Add significant value through rapid advancement of product candidates through proof-of-concept Phase II/III clinical trials
- Secure strategic alliances at key value inflection points
- Selectively retain and commercialize certain product candidates for maximum ROI



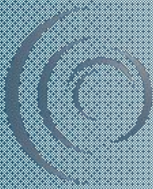
Proven Global Success of Drugs In-Licensed from Japan

Drugs discovered in Japan are being snapped up by Western companies:

Drug (Date Launched)	Treatment	Japanese Discoverer	Partner in U.S.	Peak World-Wide Sales
Pravachol (1991)	High cholesterol	Sankyo	Bristol-Myers Squibb	\$3.3 billion
Prevacid (1995)	Heartburn	Takeda	Abbott	\$4.3 billion
Aricept (1997)	Alzheimer's	Eisai	Pfizer	\$1.1 billion
Abilify (2002)	Schizophrenia	Otsuka	Bristol-Myers Squibb	\$2 billion (a)
Crestor (2003)	High cholesterol	Shionogi	AstraZeneca	\$4 billion (a)

(a) Analyst estimate
Source: the companies

Others: Pepcid (Merck), Cardizem (Aventis), Lupron (TAP), Atacand (AstraZeneca), Biaxin (Abbott), Levaquin (J&J), Noroxin (Merck), Tequin (BMS)MORE



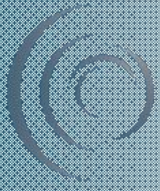
Japanese Pharma Alliances

- Unique access to mid-sized Japanese pharmaceutical companies with no U.S. and/or European development capabilities
- Acquire rights to select, high quality compounds in U.S. and select ex-U.S. markets
- Favorable deal terms:
 - Modest milestone payments (e.g., no more than \$1M upfront)
 - Reasonable royalties (e.g., 14% maximum on U.S. sales > \$500M)
 - No stacking royalties (i.e., ~65/35% split with originator on out-licensing)
- Proven track record: 8 compounds acquired in 6 years
- Self-renewing model

Japanese Pharmaceutical Company	2005 Sales (\$M)
Takeda	10,208
Daiichi-Sankyo	8,330
Astellas	7,836
Eisai	4,845
Sumitomo	2,874
Chugai	2,863
Taisho	2,540
Mitsubishi	2,129
Shionogi	1,812
Tanabe	1,563
Ono	1,320
Kyowa-Hakko	1,422
Meiji	995
Santen	842
Hisamitsu	759
Tsumura	741
Kaken	681
Mochida	618
Kyorin	602
Kissei	553

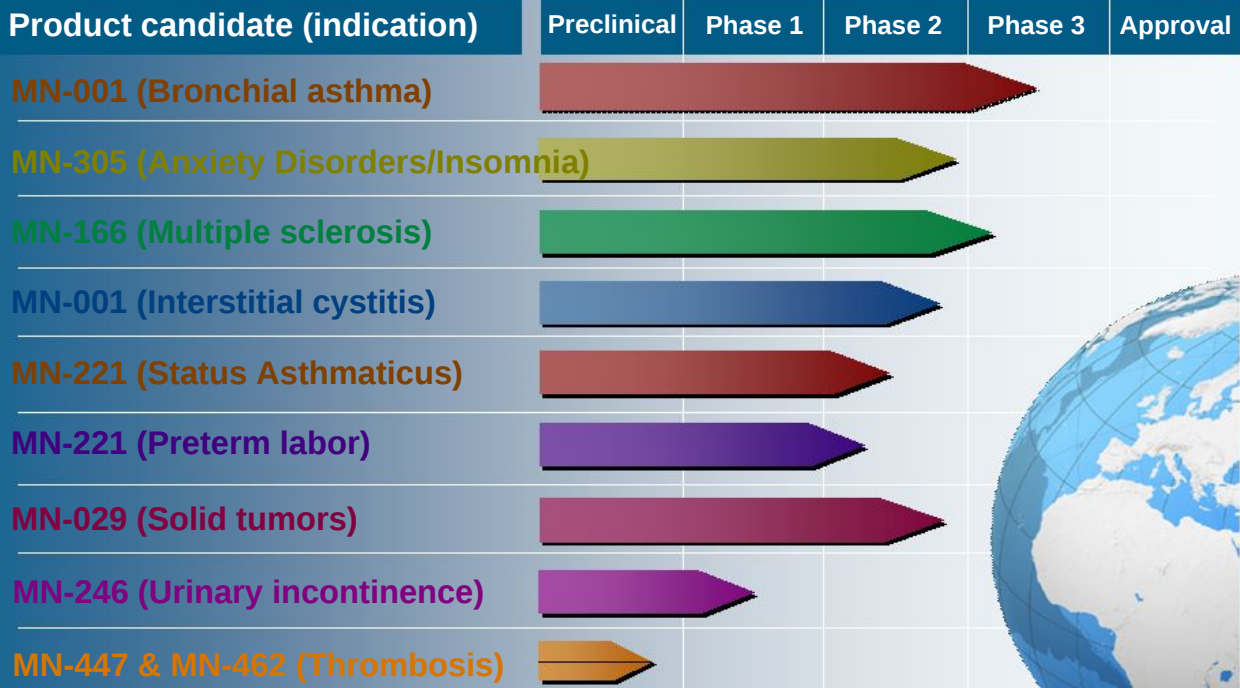
MedicNova partner
Conduct US trials directly

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Commercially-Attractive Diversified Portfolio

6 Years
8 Compounds
10 Indications





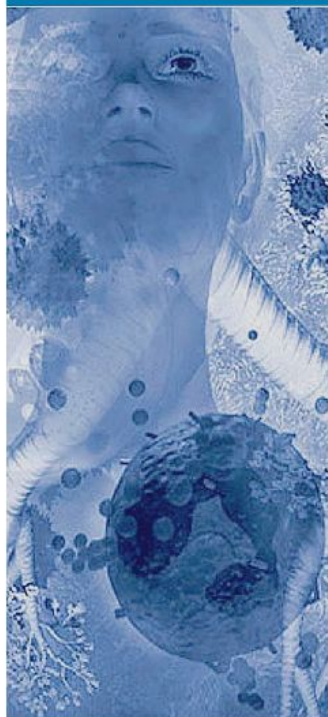
MN-221 (Status Asthmaticus)

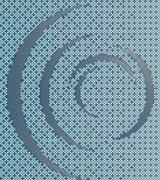
Source Kissei Pharmaceutical (2004)

Market Potential 5th yr sales ~ \$500 M

- Advantages**
- Clinically-proven mechanism of action (highly selective β_2 adrenergic receptor agonist)
 - Greater cardiovascular safety (less adrenergic receptor stimulation)
 - More reliable, effective and rapid route of administration (i.v. vs. inhaled)

Milestones US Phase II Results 3Q07



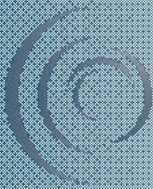


Trends in Asthma

	1980	2000	2002
Outpatient visits	7,137,000	1,036,000	1,225,000
Emergency room visits		1,835,000	1,898,000
Physician office visits		9,332,000	12,692,000
Hospitalizations	408,000	465,000	484,000
Deaths	2,891	4,487	4,261

Total cost in 2004: \$11.5 billion direct and \$4.6 billion indirect expenses

source: National Center for Health Statistics/CDC



MN-221 Competitive Advantages

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



Human β -Adrenergic Receptor Selectivity

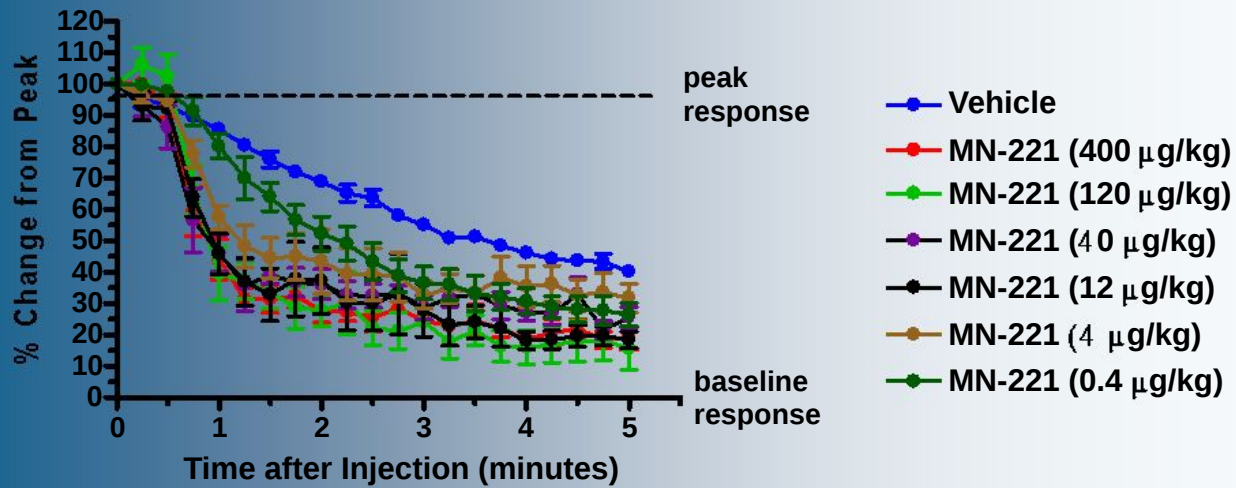
Drug	Adrenoceptor (IC_{50} , μ M)		β_2 -Adrenoceptor Selectivity
	β_1	β_2	(IC_{50} for β_1/IC_{50} for β_2)
MN-221	1.39	0.0224	62.1
Albuterol (Salbutamol)	5.63	1.56	3.61
S(-)-Propranolol	0.00127	0.00094	1.35

Displacement of [3 H]-cyanopindolol or [3 H]-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.

Reduction in Bronchoconstriction

Recovery from Ragweed-induced Bronchoconstriction in Dogs





Phase IIa Study Outline

- **Study Objectives:**
 - To determine the efficacy of a single 15-minutes treatment with intravenous MN-221 in subjects with mild-to-moderate asthma.
 - To determine the efficacy of two sequential 15-minutes infusion of MN-221 separated by 20 minutes in subjects with mild-to-moderate asthma.
- **Study Design:**
 - Randomized, double-blind, placebo-controlled multi-center trial
- **Study Population:**
 - Up to 28 subjects will be randomized in order to complete all dosing approximately 20-28 subjects.
- **Primary Outcome Measure:**
 - The primary efficacy analysis of change from baseline in FEV1 will utilize ANCOVA, adjusting for treatment, site and baseline FEV1. The primary comparison will be between each MN-221 treatment group and placebo.



MN-221 Value-Added/Next Steps

At Acquisition

- Large preclinical and early clinical database (in preterm labor)

Value-Added

- Initiated cGMP Product manufacturing
- Changed clinical dosing paradigm
- Determined safety of new dosing paradigm (through Phase I testing)
- New indication Status Asthmaticus

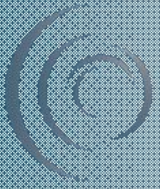
Next Steps

- Phase II proof-of-concept testing (in progress)
- Phase IIb status asthmaticus



MN-221 Summary

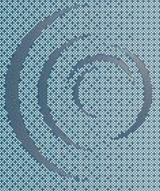
- Significant market opportunity (to \$500M peak sales)
- Improved selectivity for β_2 adrenergic receptor over older agents
- Improved safety (fewer cardiovascular side effects) compared to older β -agonists
- I.V. formulation (reliable and rapid delivery)
- Recent composition and use patents issued in the US, Europe & Japan
- Well-tolerated in Phase I; little effect on heart rate
- Phase II (asthma) initiated 4Q06; Results 3Q07
- Ability to push rapidly to market and sell with a small focused sales force



MN-166 (Multiple Sclerosis)

Source	Kyorin Pharmaceutical (2004)
Market Potential	5 th yr sales ~ \$1 B
Advantages	<ul style="list-style-type: none">– Oral treatment for MS– 16 years proven clinical safety and efficacy in inflammatory disorders (asthma, stroke) in Japan– Large preclinical and clinical database (3.2M patients treated; >15,000 in formal clinical safety database)– New US use patent
Milestones	Positive Phase II results 1Q07; Phase III to start 4Q08





MS Demographics and Market

- Multiple sclerosis, an inflammatory disease of the central nervous system, affects 250,000 to 350,000 people in the U.S. and 2.5 million worldwide.
- Relapsing-remitting MS is the most common type of the disease, affecting 65-85% of patients, and most patients with RRMS will eventually progress to the secondary progressive form of the disease.
- In 2006, the global market for MS therapies was \$5.8 billion.
 - Avonex \$1.7B
 - Rebif \$1.5B
 - Copaxone \$1.4B
 - Betaseron \$1.2B



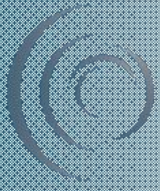
MN-166 Competitive Advantages

Unmet Need	MN-166	Interferon Products
More convenient dosing	Oral	Intravenous or subcutaneous injection <i>(Injection site pain, swelling and itching)</i>
Greater efficacy	At least comparable efficacy observed in early trials	Current relapse reduction rate is ~33%
Longer duration of effect	No neutralizing antibodies formed; no loss of effect	Relative benefit gained from existing drugs may decline over time - possibly due to presence of neutralizing antibodies
Halt disease progression	At least comparable early trends in Phase II	Avonex reduced the risk of disease progression by ~37% in patients treated for 2 years compared to placebo
Better safety profile	Only mild, transient GI side effects noted in Phase II	Common side effects include injection site reactions, flu-like symptoms, depression, liver problems and blood abnormalities



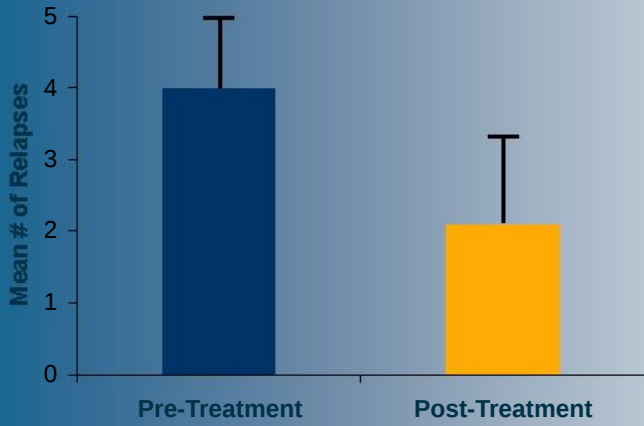
Mechanism(s) of Action

- **Anti-inflammatory**
 - Phosphodiesterase inhibitor
 - Leukotriene inhibitor
 - Inhibits nitric oxide and reactive oxygen species production
 - Inhibits Th1 cytokine production (γ , TNF α , IL- β , IL-6)
- **Neuroprotective**
 - Stimulates Th2 cytokine production (IL-4, IL-10)
 - Stimulates neurotrophin release (NGF, GDNF, NT-4)
 - Cerebrovasodilation (via P G_2 and/or adenosine receptors)



MN-166 Key Pilot Clinical Data

Reduction of Relapse Rate in 6 MS Patients



Normalization of Serum Cytokine Levels in 11 MS Patients

Cytokine		% Change
Th1	IFN- γ	-28
	TNF- α	-35
Th2	IL-4	+119
	IL-10	+64



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Phase II Clinical Protocol

- Phase II placebo-controlled, randomized, double-blind (monotherapy) study
year 1 - 0 (placebo), 10 mg tid, 20 mg tid
year 2 - 10 mg tid, 20 mg tid
- n ~ 100 MS patients/group @ 25 sites in Serbia, Ukraine, Belarus, Bulgaria and Romania
- Key Inclusion Criteria:
 - Males or females aged 18 to 55 years, with relapsing remitting (RR) and/or secondary progressive (SP) Multiple Sclerosis with continued relapses;
 - A definite diagnosis of relapsing MS using the new International Committee recommendations (MacDonald Criteria);
 - One MRI scan taken two weeks prior to treatment start using a standardized MRI protocol with at least one Gd-enhancing lesion;
 - An EDSS score of 5.5 or less at the screening and baseline visits.



Phase II Clinical Protocol

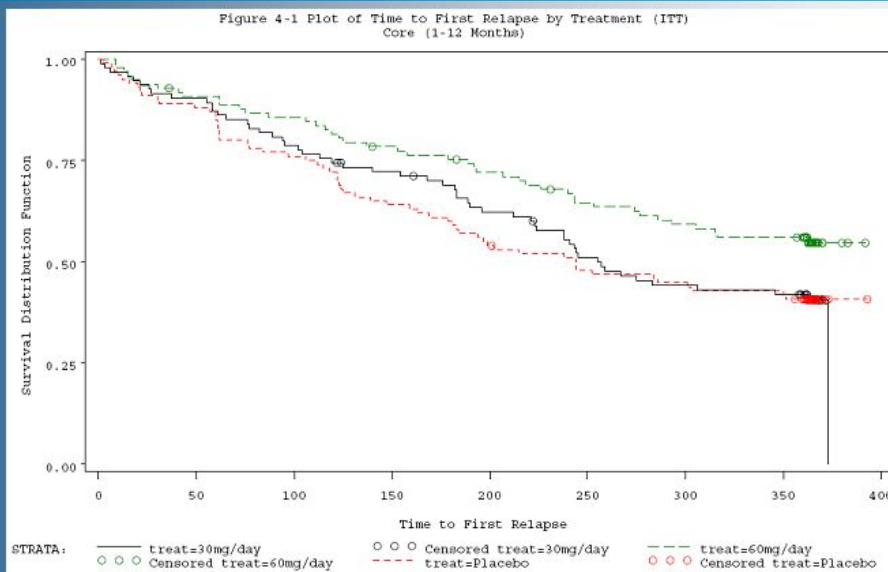
- **Key Exclusion Criteria:**
 - Treatment with systemic immunosuppressants (including investigational treatments), such as infliximab, natalizumab, cyclophosphamide, toxa, interferon-beta, azathioprine, methotrexate, sirolimus, cyclosporine or deoxyspergualin within 6 months of the Week 2 cranial MRI scan;
 - Treatment with total lymphoid irradiation or cladribine at any time;
 - Treatment with interferon-beta within 45 days of the Week -2 cranial MRI scan;
 - History of recent relapse and treatment with corticosteroids or ACTH within 45 days of the Week -2 cranial MRI scan.
- **Assessments** During the core period, patients will return to the study center for assessments at month 1, 2, 4, 6, 8, 10 and 12 (Visits 3-9) following study drug administration. Patients who continue to be eligible for the study and who wish to continue study treatment, will continue to the extension period and will return to the study center after 13, 14, 16, 18, 20, 22 and 24 months (Visits 10-16).
- **1^o endpoint** cumulative number of active (Gd-enhancing (T1) and non-enhancing new/enlarging (T2)) lesions on cranial MRI scans over 12 months of treatment
- **2^o endpoints** annualized relapse rate after 12 months; baseline-adjusted cumulative volume of Gd-enhancing lesions over 12 months of treatment + a number of additional exploratory endpoints



Key Phase II Clinical Outcome Data

Outcome Measure	p-value (pbo vs. 60 mg/day)
Annualized relapse rate*: pbo 0.8, 60 mg 0.6 (completers) pbo 0.9, 60 mg 0.7 (ITT)	0.0752 0.1106
Time to first relapse (ITT)*: Median for 60 mg > 1 year Median for pbo 244 days	0.0438
% of subjects exacerbation-free for 1 year (ITT)*: pbo 41%, 60 mg 56.1%	0.033
EDSS (% worsened)(ITT): pbo 30%, 60 mg 21.4%	0.1771
IDSS (AUC of change from baseline EDSS): pbo: -0.05, 60 mg: -0.24 (completers) pbo: -0.05, 60 mg: -0.16 (ITT)	0.0365 0.1761
Disability progression (worsened 1.0 on EDSS for 4 mo)(ITT): pbo 8%, 60 mg 4%	0.334

Effects on Time to First Relapse



Time to first relapse (ITT): Median for pbo - 244 days, Median for 60 mg > 1 year, $p=0.0438$

Statistically Significant, Approvable Phase 3 endpoint



Key Phase II Radiological Data*

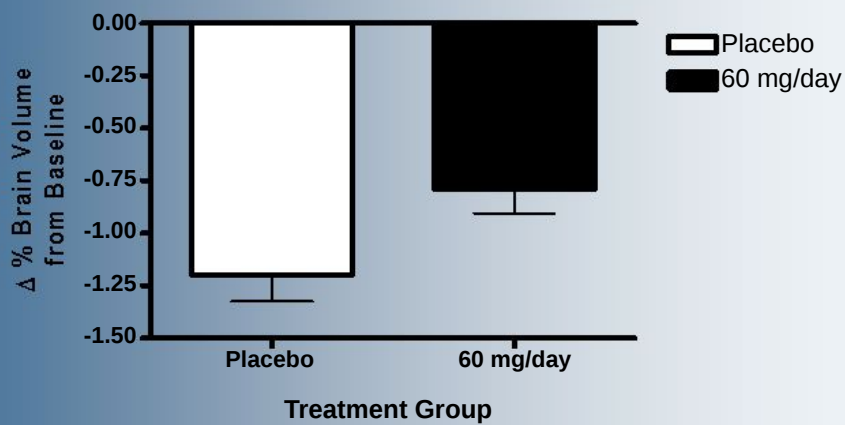
Outcome Measure (ITT)	p-value (pbovs. 60 mg/day)
% brain volume change: pbo: -1.2%, 60 mg: -0.79%	0.0352
Cumulative volume of Gd-enhancing T1 lesions: pbo- 2355 mm ³ , 60 mg 1927 mm ³	0.087
Cumulative number of active (Gd-enhancing (T1) and non-enhancing new/enlarging (T2)) lesions: study 1 outcome: pbo- 26.2, 30 mg 24.6, 60 mg 21.1 (means)	0.735

*Surrogates of clinical activity

Reductions in lesion volume and % brain volume change, coupled with significant improvements in clinical outcome, suggest that MN-166 may have antiinflammatory and neuroprotective effects (e.g., reduction in demyelination and axonal injury)

Effects on Brain Volume

Effects of MN-166 on Change in Brain Volume (ITT)



% brain volume change: pbo: -1.2%, 60 mg: -0.79%, p=0.0352

Brain volume loss is linked to disease progression

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Key Phase II Safety Data

- MN-166 was very well tolerated; 89% of subjects completed the first 12 months (core) of the study
- Side effects were generally mild and self-limiting
- No statistically significant adverse effects were observed
- No laboratory or ECG findings
- Mild, self-limiting GI side effects were the only adverse events to occur at ~2-fold that of the placebo rate (pbo 7.8%, 30 mg/d 14.7%, 60 mg/d 22.2%); tolerance to the GI side effects occurred rapidly (2-4 days)
- Superior safety profile to interferons and other oral MS treatments in development



MN-166 Summary

- Marketed product for bronchial asthma and cerebrovascular disorders in Asia since 1989
- Extensive preclinical and clinical database:
 - Data from ~15,000 patients in clinical trial and post-marketing database
 - Extensive toxicology package, including carcinogenicity testing in one species
- Antiinflammatory and neuroprotective properties *in vitro* and *in vivo*
- Newly-issued (2002) use patent in U.S.
- Oral formulation (no injections!)
- Efficacy and safety confirmed in 297-patient Phase II clinical study in relapsing MS patients
- Comparable efficacy to interferon and other oral MS agents in development with a superior safety profile
- Potential effects on disability/disease progression

Management Team with Global Experience



LEADERSHIP	Years Experience	Life Sciences 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
Masatsunokajima, CMA VP, Head of Japanese Office	15	Daiwa Securities SMBC, Sumitomo Capital Securities, Sumitomo Bank
Lynn Terhorst, MBA VP, Business Planning & Analysis	24	Ligand, General Electric Medical Systems, Hybritech, Molecular Biosystems
Bonnie Feldman, DDS, MBA VP, Investor Relations & Corporate Communications	24	Clinical Advisors, D3 Capital, Lippert/Heilshorn, SunCo

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MediciNova, Inc. Today

- **Market-driven, commercially-focused mid-stage pharma**
- **Innovative business model:**
 - Steady inflow of high-quality molecules, primarily from mid-size Japanese pharma
 - Focus on large, lucrative, underserved markets
 - Therapeutic & molecular diversity lowers risk & optimizes reward
- **Rich mid to late-stage clinical development pipeline:**
 - 6 years, 8 compounds, 10 indications
 - Small molecules with clear market advantages & strong IP
 - Multi-billion dollar market potential
- **Portfolio growth strategy: build to profitability through out-licensing & retained commercial rights**
- **Well-capitalized: poised for success**