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): January 12, 2009

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 change ess, if changed since last report)

Check	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") will be attending the 27th Annual JPMorgan Healthcare Conference commencing January 12, 2009. A copy of the slide presentation to be used by the Registrant at investor meetings during this conference is attached hereto as Exhibit 99.1 to this Current Report.

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 filing to this Current Report.

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: January 12, 2009

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



Forward-Looking Statements

Statements in this presentation 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 forwardlooking 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 clinical trials and product development, strategies, future performance, 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," "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 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; 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 MediciNova's annual report on Form 10-K for the year ended December 31, 2007 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.





Corporate Overview: MediciNova, Inc.

Development Company Focused on Differentiated Product Candidates

 Unique access to differentiated, potentially high assets primarily from Japanese alliances

New Approaches to Treat Serious Medical Conditi

- MN-221: IV Acute Exacerbations of Asthma c
 - Potential \$500 M US opportunity for Media
- MN-166: Oral Multiple Sclerosis candidate

MNOV Headquarters: • In 2007, over \$8.2B in worldwide MS therapeutic San Diego, CA sales*

Key Financials:

- Dual listed company on Nasdand Wasaka Securities Exchalter
- ~\$19M Market Cap as of 12/31/08
- ~\$47.5M Cash, Cash Equivalents and Marketable Securities as of 9/30/08

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*Source: MedAdNews, July 2008

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In-License:

• Product candidates with significant clinical or preclinical dayarin

Conduct Proof-of-Concept Clinical Trials:

Conduct Phase I and Phase II clinical trials to demonstrate efficacy of compound

Mitsubishi Pharma Corporation

Two Pathways Towards ROI After Phase II:

Continue internal development of compound towards commercialization



2. Seek partnership for further development of compound



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MediciNovas focused its resources on its two prioritized product candidates, MN-221 and MN-160-ollowing ompletion of the Phase I trial of MN-160 MediciNova illnot pursue further significant clinical development of MN-166 until a partnership is secured. In addition, MediciNova pursua variety of initiatives to monetize its remaining product candidates.



Acute Exacerbations of Asthma

Definition:

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

Market Opportunity:

- Approximately 2 million emergency room visits in the US each year*
 - 500,000 hospitalizations in the US
- Approximately 4,000 deaths annually in the US*
- Potential \$500 M market opportunity for MediciNova

Current Standard of Care (SOC):

- Beta agonists (all patients) aled or nebulized
- Corticosteroids (66-77% of patients) oral

*Source: National Center for Health Statistics / CDC





MN-221: Aovelhighlyselectiv \$2-adrenergiæcepto agonist

ThreePotentia Advantages ercurrent the rapy

- 1.Better delivery system (IV) = Better Bioavailability
- 2. Greates electivit for β 2 receptor in the lungs (better binding)
- 3. Partial agonis for \$1 receptoin the heart



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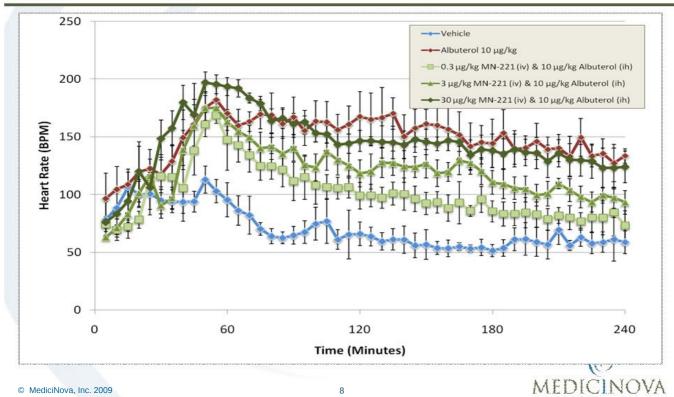


Test Drug	β ₁ IC ₅₀ (M)	β ₂ IC ₅₀ (M)	β_2 -Adrenoceptor Selectiv (IC ₅₀ for β_1 / IC ₅₀ for β_2)
Levalbuterol	7.40E-06	1.40E-06	5.3
Albuterol	9.40E-06	1.60E-06	5.9
Terbutaline	6.00E-05	6.50E-06	9.2
MN-221	5.90E-06	1.40E-07	42.4



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MN-221: Positive Phase Ila Data

MN-221-CL-004 Study Design

MN-221-CL-005 Study Design

- blind, dose escalation
- 23 subjects with mild-to-moderate stable asthma (F⊊¥60% predicted)
- Doses tested (all for 15 minutes):
 - 0.35μg /min
- 16 μg/min
- 1.0µg/min
- 30 µg/min
- 3.5µg /min
- 60 μg/min
- 10 μg /min

- Randomized, placebo-controlled, double Randomized, single-blind, placebo-controlled, dose rate escalation
 - 17 subjects with moderate-to-severe stable asthma (40%FEY $\leq 75\%$ predicted)
 - Two doses tested:
 - 16 μg/min for 15 minutes followed by 8 μg/min for 105 minutes (2-hour infusion with toadose of 1,080 μg) or placebo
 - 30µg/min for 15 minutes followed by 15 μg/min for 45 minutes (1-hour infusion with a total dose of 1,125 μ g) or placebo

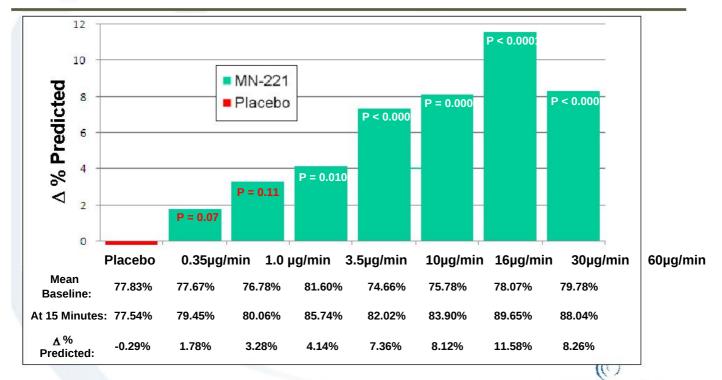
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MN-221-CL-004 and MN-221-CL-005 Safety Data:

No clinically significant cardiovascular, ECG or vital sign changes, or other safety concerns observed at any dose tested



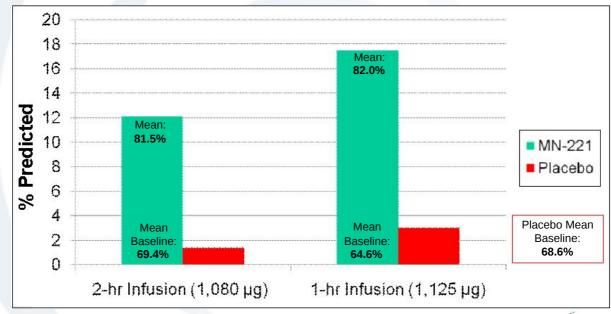
Mean Change in FEV ₁ Study: MN-221-CL-004



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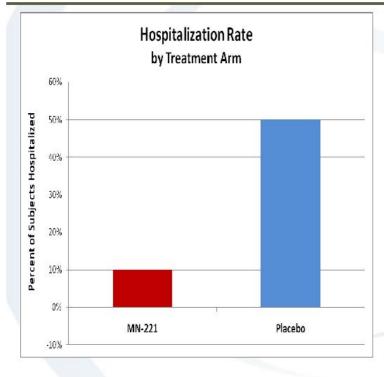




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Phase II Interim Data Study: MN-221-CL-006



- These reviews included data from a total of 18 of 36 planned patients with severe, acute exacerbations of asthma treated in emergency departments.
- Decrease in the hospitalization rate from 50% to 10% with the addition of MN-221 (in10 subjects) to standardized care (in 8 subjects)
- Improvement in FEMues generally appeared to be greater for patients receiving MN-221 in addition to standardized treatment
- No safety concerns with adding MN-221 to standardized care were identified in these reviews

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MN-221-CL-007:

A randomized, double-blind, placebo-controlled Phase II clinical trial designed to evaluate the safety and efficacy of MN-221 in patients with severe, acute exacerbations of asthma

- Approximately 35 clinical sites in North America, Australia and New Zealand
- Enroll approximately 200 patients
- Enrollment anticipated to begin in March 2009 for Northinacesites (enrollment expected to complete after nine to twelve months)
- Doses: 1.2mg of MN-221 over one hour + Standardized Care
 Placebo + Standardized Care
- Primary efficacy endpoint will be improvement (ff/cinpfetellicted) at 5 hours





MN-221 Development Plan

MN-221	2008		2009		2010	
WIN-ZZ I	1H	2H	1H	2H	1H	2H
Plla Prolonged Infusion		—				
PIIb Single-Blind			—			
Pllb Double-Blind'r'					—	

^{*}Anticipated commencement and completion dates based on current projections

If we are success full completing the double-blind has all bolinicatrial, we plan to conduct a Phase II program, we would hen plan to file an NDA with the FDA to seek regulators approvator MN-221.

Note: Development plans / timelines for MN-221 are subject to change









Definition:

Multiple sclerosis (MS) is an inflammatory demodistrating the central nervous system (CNS), affecting approximately 500,000 people in the United States and 2 million people worldwide.

There is no cure for the disease.

Multiple Sclerosis Market:

Over \$8.2 B worldwide sales in 2007*

Current Standard of Care:

- Beta interfero(Bebif, Avonex, Betaserone), Copaxysabri
- Administered either by intramuscular or subcutaneous injection or infusion

*Source: MedAdNews, July 2008

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MN-166: A New Approach to Treating Multiple Sclerosis

MN-166:

- Anti-inflammatory and neuroproterctiperties in vitand in vivo
- Demonstrated effects on brain volume and lesion evolution to axonal damage
- Targets primarily chronic aspects of multiple sclerosis
- Oral administration

Mechanisms of Action:

- ✓ Stimulates Neurotrop rowth Factor Release
- ✓ Inhibits nitric oxide and reactive oxygen species production
- ✓ InhibitsTh1cytokin@roductio(1FNy, TNFα, IL-1β, IL-6)
- ✓ Pilot studies found reduced relapse rate ♣nd file tytokine shift
- ✓ Phosphodiesteraseand Leukotrieineibitor





Current Clinical Studies: MN-166-CL-001

Placebo-controlled, randomized, double-blind Phase II study:

- Year 1 0, 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 Incomatitited 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.





MN-166 Targets Primarily Chronic Aspects of MS

MN-166 Effects Outcomes Related to Disease Progression in RRMS Patients Clinical and MRI Outcomes:

Indicative of Potential Neuroprofefftive

- 1. Reduced Brain Volume Loss
- 2. Reduced Conversion of Acute Lesions to Persistent Black Pholague: 0.011
- 3. Sustained disability progression was significantly less likely- Value; 0.026

Acute Clinical Benefit:

Prolong time to relapse (by 127 days.)

MN-166 was very well tolerated in Phase II study:

- > 89% (264 of 297) of subjects completed the first 12 months of the study
- 82.5% (245 of 297) of subjects completed the full 24threathelyof
- GI adverse effects as a group and depression were the only adverse events to occur more frequently in MN-166-treated than in placebo-treated subjects



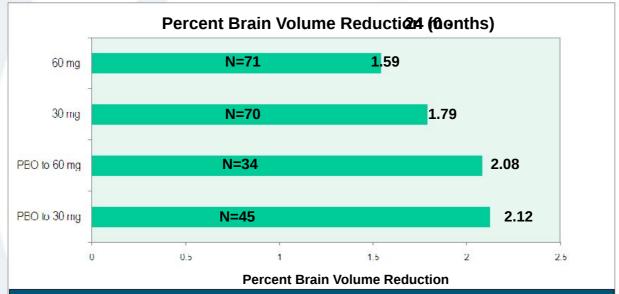
P-Value: 0.030

Palatura: 0.044

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Chronic Efficacy Demonstrated: Effects on Brain Volume



Brain volume loss was significantly less (p=0.030) in patients recepted ay of MN-166 for 24 months compared to the other treatme



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Parameter	Treatment Groups			
Farameter	Placebo	30 mg/day	60 mg/day	
Number Patients w. New Lesions at Month 2	72	64	56	
Total Number New Lesions in all Patients	426	338	315	
Total Number of Persistent Black Holes	98	58	47	
Proportion of Lesions Evolving to PBH	0.23	0.17	0.14	
p Value	-	0.036	0.004	

- New T1 gadolinium-enhancing or new T2 lesions were defined as NL in the first on-study MRI at month 2
- Lesions that were hypointense and inactive at month 10 were PBH
- Relative Risk (RR) of NL evolution to PBH was analyzed using a general linear model with the error term from the Poisson distribution



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Sustained Disability Progression

	TREATMENT				
Time Period Placebo to Active (N=100)		Active Drug [30 mg (N=94), 60 mg (N=98)]			
2 Years	21/100 (21%)	20/194 (10.4%) P-Value: 0.026			

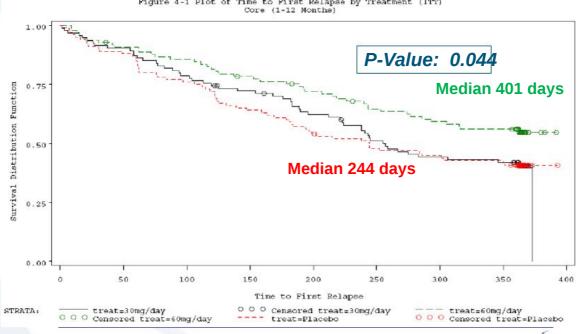
Disability Progression is defined as a sustained increase in (increase in EDSS maintained for four consecutive month



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Acute Efficacy Demonstrated: Time to First Relapse



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Seek Partnership for Further Development:

MediciNovastrategic objective for MN-166 is to secure a partner to advance the clinical development of MN-166, and Medicitvelya pursuing that objective



Core Candidates	Preclinical	Phase I	Phase II	Phase III
MN-166 (Multiple Sclerosis)				
MN-221 (Acute Exacerbations of Asthma)				
Non-Core Candidates	Preclinical	Phase I	Phase II	Phase III
MN-001 (Bronchial Asthma)				
MN-305 (Anxiety Disorders)				
MN-001 (Interstitial Cystitis)				
MN-029 (Solid Tumors)	*******************************			
MN-221 (Preterm Labor)				
MN-246 (Urinary Incontinence)				
MN-447/462 (Thrombosis)				
MediciNova, Inc. 2009		24		MEDICINO



Dual Listing:

- MNOV (NasdaqGM), December 2006
- 4875 (OsakaHercules), February 2005

Cash, Cash Equivalents and Marketable Securities as of 6/30/08:

~\$47.5 M as of 9/30/08

Market cap as of 12/31/08:

~\$19M

Shares outstanding:

11.9 M





Management Team with Global Experience



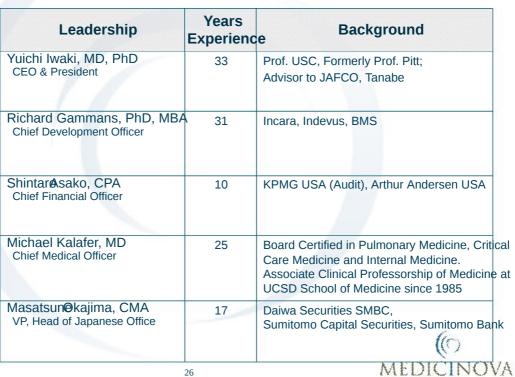














MN-221 (Acute Exacerbations of Asthma):

- Proven mechanism of action
 - · Highly selective with improved safety profile vs. standard of care
- Positive Phase efficacy data
- Phase IIbtudy initiated by holding an Investigator's meeting in January 2009

MN-166 (Multiple Sclerosis):

- Both chronic and acute efficacy have been demonstrated in clinical studies completed to date
- MediciNovseeking a partner to advance the clinical development of MN-166

Minimized Burn Rate:

- Annual burn rate reduced compared to previous years as a result of focus on MN-166 and MN-221 development programs
- ~\$47.5M Cash, Cash Equivalents and Marketable Securities as of 9/30/08





Addendum:Additional Data



MN-221-Study 6 Design

- Randomized, modified single-blind, dose escalation, placebo-controlled Phase II Study in acute asthma patients in EDs
- Approx. 36 patients in 3 dose cohorts at 8 ED clinical sites

Doses: 16μg/min x15 (240μg)

30μg/min x15 (450μg)

16μg/min x15;8μg/min x105 (1,080μg)

- Patients will receive Standard of Care (SOC) treatment in addition to adjunctive treatment with MN-221 or placebo
- Safety and efficacy (FEV1 and other) data will be summarized
- No inferential statistical analysis
- Help inform design of future, larger Phase III clinical trials





Phase IIStudy Safety Findings:

- No clinically significant cardiovascular, ECG, or vital sign changes, or other safety concerns, observed at doses up to 30 micrograms/minute for 15 minutes or any time point thereafter
- 60 micrograms/minute infusion improved FEV1 significantly (*p*< 0.0001) without clinically significant cardiovascular, ECG or vital sign changes

Safety Database:

- MN-221 has been tested in over 300 subjects in the US and afterrope to
- Subjects have had infusions with no clinically significant adverse events at:
 - 16 micrograms/minute for up to 4 hours and at lower dos 24 foo ups





There are substantial unmet needs in MS

Description

Efficacy (relapse rate)

- Current agents offer only 30-50% relapse reduction
- Neutralizing antibodies can diminish efficacy over time
- Progression (RRMS) –neurodegeneration leads to permanent functional disability
- No approved treatment for PPMS, SPMS

Safety/ tolerability

- AEs—including flu-like symptoms
- SAEs –Rare, fatal PML and heptotoxicity with Tysabri
- Reports of significant FTY side effects (e.g. hepatotoxicity), serious or fatal opportunistic infections, skin cancer
- Injections daily up to weekly
 - Infusions -- monthly

Combination

Administration

- Increasing interest in combination therapies given incomplete efficacy with current "core" agents
- Black box on combination with Tysabri, REMS program

Neuroprotection

- Historically, anti-inflammatory agents have shown little impact on disease progression
- Demonstrated neuroprotection, that is, reduction in disease progression, would be groundbreaking

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Multiple Sclerosis Market*

Approx. Sales 2007**	Compound	Sponsor	Side Effects
\$3.3 Billion	Copaxone®	Teva& Sanofi-Aventis	Pain, redness, swelling, itching, chest pain weakness, infection, nausea, anxiety are most common, also heart palpitations and trouble breathing after injection
\$1.9 Billion	Avonex®	Biogen-Idec	Depression and Flu-like symptoms most common, also liver injury, severe allergic reactions, drop in red/white blood cell cour
\$1.7 Billion	Rebif®	Serono& Pfizer	Depression and Flu-like symptoms most common, also liver problems, injection site problems, severe allergic reactions, trouble breathing/loss of consciousness
\$1.4 Billion	Betaseron®	Bayer	Lymphopenia, injection site reaction, asthenia, flu-like symptoms are most common, also necrosis at injection site
\$343 Million	Tysabri®	Biogen-Idec	Infections, depression, pneumonia, acute hypersensitivity reactions, appendicitis mos common, also liver damage, PML

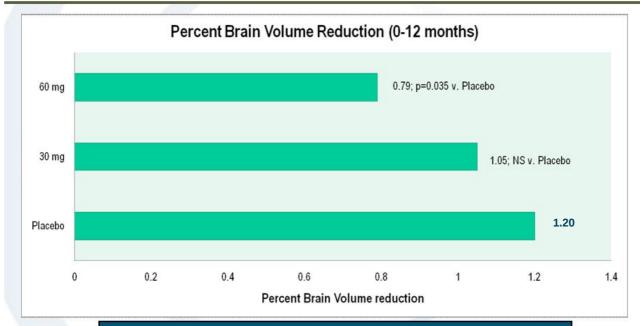
^{*}All these top selling drugs for MS are immunomodulators



^{**}Source: MedAdNews, July 2008 and BIIB annual report 2007



Chronic Efficacy Demonstrated: Effects on Brain Volume



Brain volume changes are linked to axonal le



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Reduction of Persistent Black Hole (PBH) Formation, a Sign of Axonal Loss

Parameter	Treatment Groups		
raidilietei	Placebo	30 mg/day	60 mg/day
# Patients w. New Lesions at Month 2	72	64	56
# Patients w. \geq 1 PBH (% of Pts. w. New Lesions)	41 (56.9%)	33 (51.6%)	28 (50%)
Mean Proportion of Lesions Evolving to PBH	0.24	0.20	0.16
Median Proportion of Lesions Evolving to PBH	0.17	0.08	0.04
Relative Risk (for Evolution to PBH) vs. placebo	-	0.74	0.63
p Value	-	0.074	0.011

- New T1 gadolinium-enhancing or new T2 lesions were defined as NL in the first on-study MRI at month 2
- Lesions that were hypointense and inactive at month 10 were PBH
- Relative Risk (RR) of NL evolution to PBH was analyzed using a general linear model with the error term from the Poisson distribution



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- •MN-166 was very well tolerated in Phase II study:
 - >89%(264 of 297) of subjects completed the first 12 months of the study >82.5% (245 of 297) of subjects completed the full 24 months of the study
- •Discontinuatidueto adverseffects was infrequent 5.1% in 60 mg/day for 24 months, 2.0% in placebo to 60 mg/day, 1.9% in placebo to 30 mg/day)
- Adverse effects were generally mild and self-limiting
- •GI adverse effects as a group and depression were the only adverse events to occur more frequently in MN-166-treated than in placebo-treated subjects
- •Tolerance to the GI side effects occurred rapidly (2-4 days) and tended to occur early in treatment whether MN-166 treatment was initiated in Year 1 or Year 2
- •Mild-to-moderate depression was reported in 8 subjects; depression is common in MS patients and was reported only towards the end of the study
- •No significant increase in adverse laboratory or ECG findings was observed
- •20 serious adverse events were reported; all overelikety be attributable to treatment
- No deaths occurred in the study





Safety Comparison with Other Oral Agents

Compound	Sponsor	Current Phase	Safety Profile from Phase II trials		
MN-166	MediciNova	Phase II	Mild, transient GI upset		
FTY 720	Novartis	Phase III	↑ Blood pressure ↓ Heart rate	e Dyspnea	↑Liver enzymes Lymphopenia
Cladribine	Merck Serono	Phase III	Fever	Nausea, Vomiting	Leucopenia
BG-12	Biogen-Idec	Phase III	H/A, Nasopharyngitis	GI disorders	↑Liver enzymes
Laquinimod	l Teva	Phase III	↑ Liver enzymes	Arthralgia	↑Fibrinogen ↓Hemoglobin



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