

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): June 25, 2008

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.

Beginning on June 25, 2008, representatives of MediciNova, Inc. (the "Registrant") will make presentations to various members of the financial and investment community, at which the slide presentation attached hereto as Exhibit 99.1 will be used.

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.

<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: June 25, 2008

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

EXHIBIT INDEX

<u>Exhibit</u>	<u>Description</u>
99.1	Slide presentation of the Registrant



MN-166 Reduces Conversion of New Lesions to Persistent Black Holes in Multiple Sclerosis Patients

**R. Gammar^{PhD}, F. Bark^{MD PhD}, H. Hu^{MD},
R. Landi^{PhD} for the
MN-166-CL-001 investigators**



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 forward-looking 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.



MN-166 CL-001 Investigators

- **Serbia**
 - Congor Nad, MD PhD
 - Slobodan Vojinovic, MD PhD
 - Evica Dincic, MD PhD
 - Jelena Drulovic, MD PhD
 - Branislava Mršulja, MD PhD
 - Vladimir Bojovic, MD PhD
 - Gordana Toncev, MD PhD
 - Jagoda Potic, MD
- **Romania**
 - Dan Minea, MD PhD
- **Byelorussia**
 - Ponomarev Vladimirovich, MD PhD
- **Ukraine**
 - Kostyantyn Loganovskyy Mykolayovich, DMN
- **Bulgaria**
 - Penko Shotekov, MD Dsci
 - Lyubomir Haralanov, MD PhD
 - Ivan G. Milanov MD PhD DSci
 - Ekaterina Titianova MD PhD
- **Study conduct**
 - Accelsiors, Budapest Hungry
 - Image Analysis Center, VU Medial Center, Amsterdam Netherlands
 - Institute for Laboratory Medicine, Clinical University of Leipzig, Germany
 - eRT Inc, Philadelphia PA USA
 - MDSL, Maidenhead UK
- **Sponsor**
 - MediciNova Inc, San Diego CA USA



MN-166 (ibudilast)

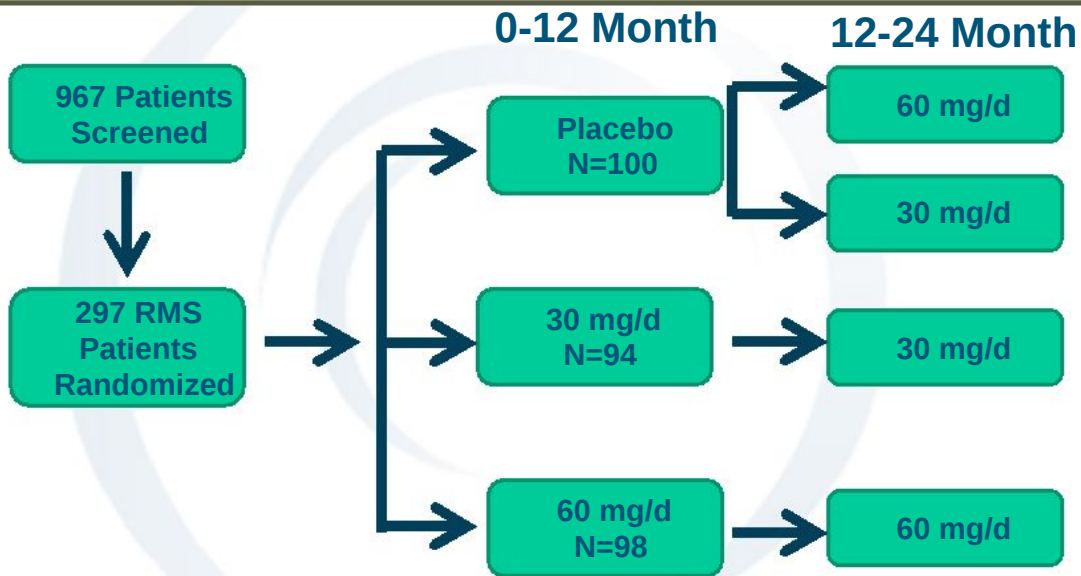
Mechanism(s) of Action

- **Anti-inflammatory**
 - Phosphodiesterase 3A, 4, 10, 11 inhibitor
 - Leukotriene inhibitor
 - Inhibits Th1 cytokine production (IFN γ , TNF α , IL- β , IL-6)
 - Stimulates Th2 cytokine production (IL-4, IL-10)
- **Neuroprotective**
 - Inhibits nitric oxide and reactive oxygen species production
 - Stimulates neurotrophic factor release (NGF, GDNF, NT-4)
 - Cerebrovasodilator (via α_2 PGI and/or adenosine receptors)



MN-166 CL-001 Scheme

(MRI and Clinical evaluations bi-monthly)



Primary endpoint : cumulative active lesions by MRI
Secondary endpoints: clinical relapses and other MRI measures



Main Year 1 Study Findings

(ECTRIMS 2007)

- MN-166 was well tolerated at doses up to 60 mg/d
- MN-166 treatment at a dose of 60 mg/d did not significantly reduce Cumulative Lesion Count (-18%, NS), the Primary Study Endpoint
- MN-166 treatment at a dose 60 mg/d significantly prolonged time-to-first relapse (median =401) by 157 d vs. placebo (median =401, p=0.04)
- MN-166 treatment at a dose 60 mg/d significantly attenuated brain volume shrinkage (-34%, p=0.03)
- Sustained disability progression (EDSS increase ≥ 1 for ≥ 4 mo) on MN-166 60mg/d was less (4%) than on Placebo (8%, NS)



Hypothesis and Objective

- **Hypothesis**: Based on its modest effect on inflammatory lesion count, its pharmacology, attenuating brain volume loss, and early trend to reduce sustained disability progression we hypothesized that MN-166's clinical benefit at 60 mg/d may result primarily from protecting neurons from damage rather than reducing occurrence of inflammatory lesions
- **Objective**: To measure the effect of MN-166 on evolution of inflammatory lesions to recovered lesions or persistent black holes, MRI measures of neuroprotection, in formal retrospective study of MRIs collected during year 1 of the MN-166-CL-001 study



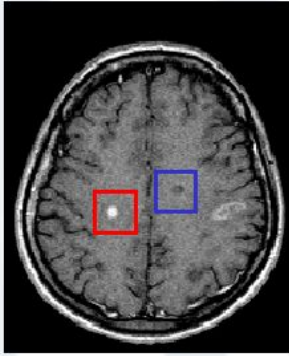
Methods

Evolution of new lesions to Persistent Black Holes (PBH) or Recovered Lesions (RL)

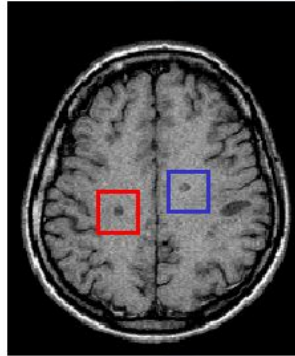
- Blinded MRI data from year 1 was evaluated by a new rater not previously involved in the study
- New T1 gadolinium-enhancing or new T2 lesions were identified as NL (new lesions) in the first on-study drug MRI at month 2
- These lesions were then followed in the month 4 and 10 MRI, and classified as PBH or RL by pre-defined criteria:
 - PBH = Lesions that were hypointense at month 10
 - RL= Hypointense lesions at month 2 or 4 that were isointense at month 10
- The relative risk of NL in month 2 evolving to RL or PBH per patient was analyzed (Note: lesions within a patient are assumed not to be independent)



Example of RL (red box)

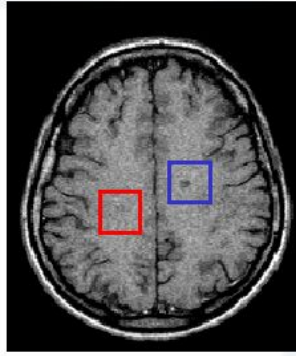


T1 with gadolinium
Visit 4



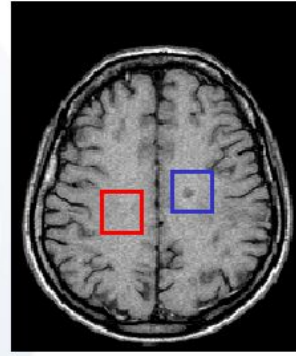
T1 without gadolinium
Visit 4

Month 2



T1 without gadolinium
Visit 5

Month 4



T1 without gadolinium
Visit 8

Month 10



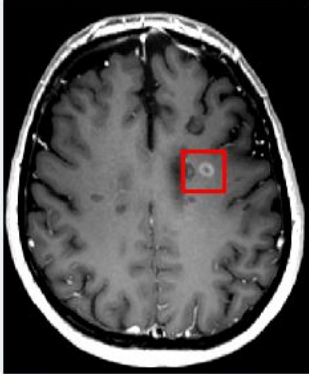
Assessment of Recovering Lesions

Parameter	Treatment Groups		
	Placebo	30 mg/day	60 mg/day
# Patients w. New Lesions at Month 2	72	64	56
# Patients with 1 Recovering Lesion	42 (58.3%)	40 (62.5%)	34 (60.7%)
Mean Proportion of Recovering Lesions	0.24	0.28	0.26
Median Proportion of Recovering Lesions	0.20	0.23	0.22
Relative Risk (for Recovering Lesion Rates) vs. placebo -	-	1.135	0.970
p Value	-	0.376	0.836

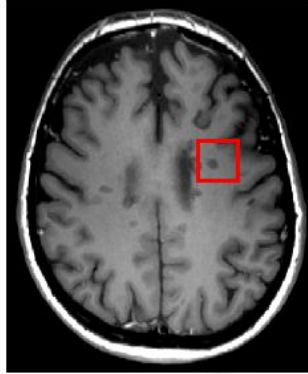
- **New T1 gadolinium-enhancing or new T2 lesions were defined as NL in the first on-study MRI at month 2**
- **Hypointense lesions at month 2 or 4 that were isointense at month 10 were RL**
- **Relative Risk (RR) of NL evolution to PBH and RL per patient was analyzed using a general linear model with the error term from the Poisson distribution**



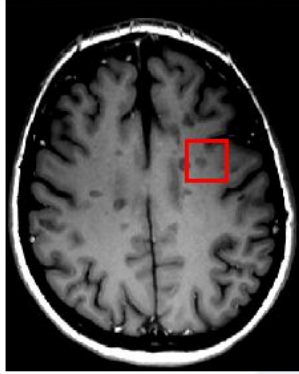
Persistent Black Hole – Axonal Loss



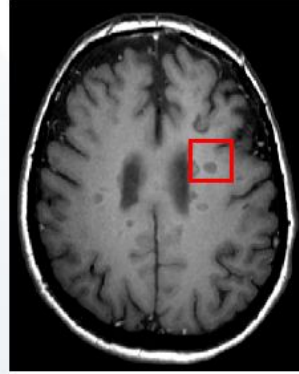
T1 with gadolinium
Visit 4



T1 without
gadolinium
Visit 4



T1 without
gadolinium
Visit 5



T1 without
gadolinium
Visit 8

Month 2

Month 4

Month 10



Reduction of Persistent Black Hole (PBH) Formation

Parameter	Treatment Groups		
	Placebo	30 mg/day	60 mg/day
# Patients w. New Lesions at Month 2	72	64	56
# Patients w. = 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



Summary

- **MN-166 had no effect on RL lesion evolution as defined in this study**
- **MN-166 treatment reduced the Relative Risk that a new inflammatory lesion would evolve to a PBH**
 - At 60 mg/d the RR was reduced to 0.63, a 37% reduction, $p=0.011$
 - At 30 mg/d the RR was reduced to 0.74, a 26% reduction, $p=0.074$



Conclusions

- **The findings of this investigation suggest that the main effect of MN-166 treatment in Relapsing MS patients is to protect neurons from the persistent damage that results from inflammatory lesions**
- **Further study of the effect of MN-166 on sustained disability progression including markers of neuroprotection is warranted**