UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 17, 2014

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.)

4275 Executive Square, Suite 650 La Jolla, CA 92037

(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))

Item 7.01 Regulation FD.

On October 17, 2014, MediciNova Inc. (the "Company") updated the slide presentation to be used by the Company at investor meetings. A copy of the revised slide presentation is furnished as Exhibit 99.1 and is incorporated herein by reference. The Company does not undertake to update this presentation.

The information in Item 7.01 of this Current Report on Form 8-K, including Exhibit 99.1, is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities under that Section, nor be deemed to be incorporated by reference into the filings of the registrant under the Securities Act of 1933.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit

No. <u>Description</u>

99.1 Slide presentation of the Company.

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: October 17, 2014

By: /s/ Yuichi Iwaki Yuichi Iwaki, M.D., Ph.D. President and Chief Executive Officer EXHIBIT INDEX

Exhibit

No. <u>Description</u>

99.1 Slide presentation of the Company







Developing Novel Therapeutics for the Treatment of Serious Diseases with Unmet Medical Needs







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MediciNova Highlights

- Novel product candidates inical development with encouraging efficacy and safety data
 - MN-166 (ibudilast) the treatment of Progressive MS, ALS, and Drug Dependence
 - Two large Phase 2b studies ongoing (Progressive MS and methamphetamine)
 - Initiated clinical development in ALS in 2014
 - Patents cover Progressive MS and addiction
 - MN-001 orthetreatment fNASH (nonal coholiste at ohe patitis) ind IPF (idiopathipul monar fibrosis)
 - MN-221 or the treatment of acute exacerbations of asthma
- Well-capitalized
- Experienced management team



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Active Programs as of September 2013

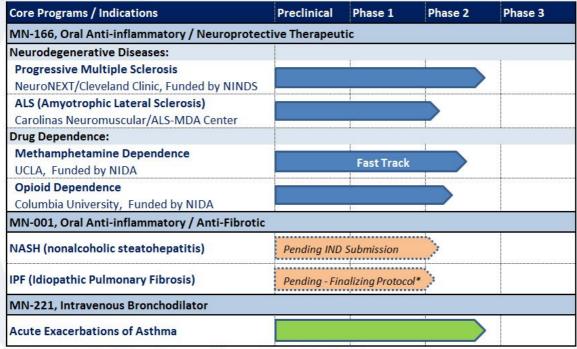
Core Programs / Indications	Preclinical	Phase 1	Phase 2	Phase 3
MN-166, Oral Anti-inflammatory / Neuropr	otective Therapeu	tic		
Drug Dependence:			· .	
Methamphetamine Dependence UCLA, Funded by NIDA		Fast Track		
Opioid Dependence Columbia University, Funded by NIDA			\rightarrow	
MN-221, Intravenous Bronchodilator				
Acute Exacerbations of Asthma				



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MediciNova: Active Programs in Clinical Development in Oct. 2014

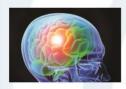


^{*} IND is open at FDA's Division of Pulmonary, Allergy, and Rheumatology Products

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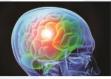






Progressive Multiple Sclerosis "Progressive MS"

- MS affects more than 400,000 people in the U.S. and 2.3 million worldwide ¹
- Patients experience a diminished quality of life (e.g. fatigue, walking difficulties, weakness, pain, cognitive changes, depression)¹
- Market opportunity: Total sales of RRMS drugs were \$16 billion worldwide in 2013. We believe Progressive MS market is at least as large as RRMS market.
- Approved Drugs: NONE APPROVED for long-term treatment of Progressive MS



Amyotrophic Lateral Sclerosis (ALS) "Lou Gehrig's Disease"

- 1. Source: National Multiple Sclerosis Society
- 2. Source: ALS Association
- 3. Source: Cowen & Co. estimate
- 4. Cochrane Database of Systematic Reviews
- "Lou Gehrig's Disease"
- Fatal: ALS Life expectancy is 2-5 years ²
- ALS affects up to 30,000 people in the U.S.² (Orphan indication)
- Market opportunity: an effective new drug for ALS could generate sales >\$1 billion per year³
- Approved Drugs: RILUZOLE increases survival by only 2-3 months⁴

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Nonalcoholic Steatohepatitis "NASH"

- NASH prevalence in the U.S. is 2-5% 1
- Additional 10-20% have "fatty liver" due to being overweight or obese 1
- NASH Market forecast: \$1.6 billion by 2020²
- Approved Drugs: NO TREATMENT APPROVED



Idiopathic **Pulmonary Fibrosis** "IPF"

- IPF prevalence about 128,000 in the U.S.³ (Orphan indication)
- Two-thirds of IPF patients die within 5 years 3
- IPF Market forecast: >\$1 Billion in 20174
- Approved Drugs: Esbriet (pirfenidone) approved in October 2014; Esbriet Phase 3 studies enrolled mild to moderate IPF; No survival benefit shown 5
- National Digestive Diseases Information Clearinghouse (NDDIC)
- Allied Market Research
- Coalition for Pulmonary Fibrosis Research and Markets
- Esbriet prescribing information





Developing Novel Therapeutics...

MN-166







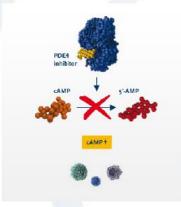
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How does MN-166 work?

MN-166





MICROGLIA STIMULATORS

GLIAL CELL ATTENUATION

- Role of Glia:
 - · Type of macrophage
 - Increases in number during brain damage
 - Glial activation leads to neurodegeneration

PDE Inhibition:

• Increases cAMP, reducing inflammation

MIF inhibition

· Linked to attenuated disease progression in animal models of MS

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dead cells/debris CNS toxins



damaged neurons



MN-166 Phase 2 RRMS Data

MN-166

- Significant attenuation of brain volume loss (p=0.035)
- Significant attenuation of conversion of acute lesions to persistent black holes (p=0.004)
- Sustained disability progression was significantly less likely (p=0.026)
- Significant improvement in time to first relapse (p=0.04)

MN-166 Ongoing NIH-funded Phase 2b study

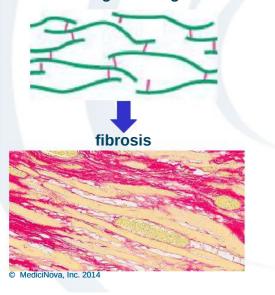
- PPMS and SPMS study
- Results expected early 2017



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Cross-linking of collagen and elastin



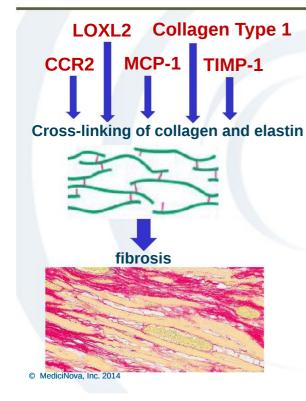
Fibrosis

- Fibrosis is the development of excess fibrous connective tissue in an organ
- Fibrosis is a result of inflammation, irritation, or healing (e.g. scar)
- Cross-linking of collagen and elastin is the final step in fibrosis





How does Fibrosis Develop?



Genes Promoting Fibrosis

- LOXL2
- Collagen Type 1
- CCR2
- MCP-1
- TIMP-1

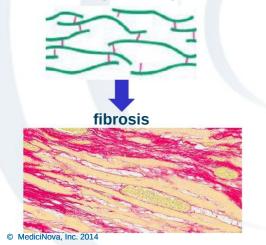




MN-001



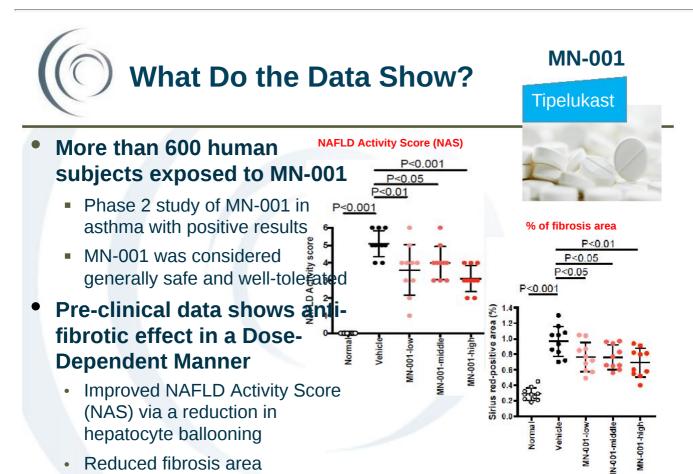
Cross-linking of collagen and elastin



MN-001 Reduces Gene Expression

- LOXL2
- Collagen Type 1
- CCR2
- MCP-1
- TIMP-1





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Next Steps – Progressive MS

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Progressive Multiple Sclerosis "Progressive MS"



✓ Q2 2013: Submit New IND Amendment and New Ph2 Protocol

✓ Q3 2013: FDA approval & Study Ibudilast Initiation

√ Q3 2013: Screening begins



✓ Q4 2013: First Patient In



Q1 2015: Last Patient In





☐ 1H 2017: Results available





MN-166

Ibudilast

Amyotrophic Lateral Sclerosis (ALS) "Lou Gehrig's Disease"



- √ Q3 2014: Submit New ALS Protocol as IND Amendment
- ✓ Q3 2014: FDA Approval to Start Study
- ✓ Q3 2014: IRB Submission & Site Activation
- ✓ Q3 2014: Study Start-up & Database Build
- ✓ Q4 2014: Began Enrollmentarolinas HealthCare System
- ☐ TBD: Last Patient In





MN-001

Tipelukast



✓ Q1 2014: Positive preclinical data in NASH



- ✓ Q3 2014: Positive preclinical data in Advanced NASH
- ✓ Q3 2014: Prepare IND submission
- Q4 2014: Present NASH data at JDDW
- ☐ ASAP: Submit IND and Protocol





Timeline Summary	MN-166 Ibudilast	MN-001 Tipelukast
2014	 ALS: New Protocol Submitted ALS: FDA Approval to Start Study ALS: Begin Enrollment 	NASH: Positive Preclinical Data NASH: Present at JDDW 2014
2015	Progressive MS: Last Patient Enrolled	NASH: Announce Next Steps IPF: Announce Next Steps
2016		
2017	Progressive MS: Study Results	