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): November 10, 2016

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 (I.R.S. Employer Identification No.)

4275 EXECUTIVE SQUARE, SUITE 650, LA JOLLA, CA (Address of principal executive offices)

92037 (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 (see General Instruction A.2. below):

□ 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)

Dere-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.

On November 10, 2016, 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 or the Securities Exchange Act of 1934, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit

No. Description

99.1 Slide presentation of the Company.

SIGNATURE

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.

By: /s/ Yuichi Iwaki Yuichi Iwaki, M.D., Ph.D. Chief Executive Officer

Date: November 10, 2016

EXHIBIT INDEX

Exhibit No. Description

99.1 Slide presentation of the Company.



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Corporate Presentation

November 2016

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 statements regarding MediciNova's clinical trials supporting the safety and efficacy of its 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, expectations, assumptions, financial condition, liquidity and capital resources. These forward-looking statements include, without limitation, statements regarding the future development and efficacy of MN-166, MN-221, MN-001, and MN-029. 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," "considering," "planning" or similar expressions. These forward-looking statements involve a number of risks and uncertainties that may cause actual results or events to differ materially from those expressed or implied by such forward-looking statements. Factors that may cause actual results or events to differ materially from those expressed or implied by these forward-looking statements include, but are not limited to, risks of obtaining future partner or grant funding for development of MN-166, MN-221, MN-001, and MN-029 and risks of raising sufficient capital when needed to fund MediciNova's operations and contribution to clinical development, risks and uncertainties inherent in clinical trials, including the potential cost, expected timing and risks associated with clinical trials designed to meet FDA guidance and the viability of further development considering these factors, product development and commercialization risks (including reliance on a joint venture entity in China to develop and commercialize MediciNova's product candidates in China), risks related to MediciNova's reliance on the success of its MN-166 and MN-001 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, risks associated with the reliance on third parties to sponsor and fund clinical trials, risks regarding intellectual property rights in product candidates and the ability to defend and enforce such intellectual property rights, 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 of expected filings with the regulatory authorities, MediciNova's collaborations with third parties, the availability of funds to complete product development plans and MediciNova's ability to obtain third party funding for programs and raise sufficient capital when needed, and the other risks and uncertainties described in MediciNova's filings with the Securities and Exchange Commission, including its annual report on Form 10-K for the year ended December 31, 2015 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 November 10, 2016. MediciNova disclaims any intent or obligation to revise or update these forward-looking statements.

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MediciNova Overview

MediciNova, Inc. is a publicly-traded, development-stage biopharmaceutical company focused on acquiring and developing novel, small-molecule therapeutics for the treatment of diseases with unmet medical needs.

Headquarters	Dual-Listed	No. of Employees
La Jolla, California	Listed in both the U.S. and Japan NASDAQ: MNOV TSE - JASDAQ: 4875	10 • 7 in US • 3 in Japan

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Investment Highlights

Novel pro	oduct candidates clinical development with encouraging efficacy and safety data
MN-166 (ibudilast)	 Treatment of <u>Neurological Diseases</u> i.e. Progressive MS, ALS, and Substance Dependence Approved in Japan in 1989 post-stroke dizziness and asthma Large safety database
MN-001 (tipelukast)	Treatment of <u>Fibrotic Diseases</u> i.e. IPF (idiopathic pulmonary fibrosis) Treatment of <u>Hyperlipidemia and Fibrotic Disease</u> i.e. NASH (nonalcoholic steatohepatitis) and NAFLD (nonalcoholic fatty liver disease)
Well capi	talized
Experien	ced management team
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Programs in Clinical Development

Core programs/ Indications	Status	Preclinical	Phase 1	Phase 2	Phase 3
MN-166, Oral Anti-Inflammatory / Neuroprotective Therapeutic					
NEURODEGENERATIVE DISEASES					
Progressive Multiple Sclerosis NeuroNEXT / Cleveland Clinic (Funded by NINDS)	FAST TRACK	Ongoing: Fully	Enrolled in Q2	-2015	
ALS (Amyotrophic Lateral Sclerosis) Carolinas Neuromuscular / ALS-MDA Center	FACT TRACK	Ongoing			
ALS / Biomarker Massachusetts General Hospital (MGH)	FAST TRACK	Ongoing			
SUBSTANCE DEPENDENCE					
Methamphetamine Dependence UCLA (Funded by NIDA)	FAST TRACK	Ongoing			
Opioid Dependence Columbia University (Funded by NIDA)		Completed Ph	ase 2 trial		
Alcohol Dependence UCLA (Funded by NIAAA)		Completed Ph	ase 2 trial		
MN-001, Oral Anti-Inflammatory / Anti-Fibrotic The	rapeutic				
NASH (Nonalcoholic Steatohepatitis)	FAST TRACK	Ongoing			
IPF (Idiopathic Pulmonary Fibrosis)	FAST TRACK	Ongoing			

★ Orphan Drug

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Developing Novel Therapeutics...



How does MN-166 work?



MIF Inhibition

Linked to attenuated disease progression • in animal models of MS

PDE 4 Inhibition

- Increases cAMP .
- Reduces pro-inflammatory cytokines • (i.e. IL-1, TNF-α, IL-6)
- Neuroprotection •

GLIAL CELL ATTENUATION

- Role of Glia:
 - Type of macrophage
 - Activated during brain damage
 - Glial activation leads to neurodegeneration

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MN-166 Ibudilast





Progressive Multiple Sclerosis (MS)



Progressive Multiple Sclerosis (MS)









were >\$19B in 2015. We believe Progressive MS market is at least as large as RRMS market.)



1. Source: National Multiple Sclerosis Society

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MN-166 Phase 2 Relapsing MS Trial Completed



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	Trial Design and Results
Tria	I Design:
	N = 297 subjects with relapsing multiple sclerosis (MS)
	Multi-arm (30 mg/day, 60 mg/day, placebo) randomized 1:1:1, 12-months of double-blind treatment, followed by 12 months of extension during which placebo subjects were switched to MN-166
	Multicenter, 24-month study, with interim 12-month efficacy analyses
Res	sults:
	SAFETY: 82% completed the full 24 month study; AEs related to mild, self-limiting GI
	 EFFICACY: Did not meet efficacy endpoint of MRI lesion count*, which reflects markers of RRMS Hit important neuroprotective endpoints related to disease progression Sustained disability progression was significantly less likely Significant reduction of brain volume loss Significant reduction of conversion of acute lesions to persistent black holes

* Cumulative number of active (gadolinium (Gd)-enhancing (T1) and nonenhancing new/enlarging (T2) cranial Magnetic Resonance Imagining (MRI) lesions

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MN-166 Phase 2 Relapsing MS Trial Disability Progression Data: 24 Months



* Proportion of subjects with disability progression (sustained change in EDSS ≥1 point higher than baseline over a period of at least four consecutive months)

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MN-166 Ibudilast

MN-166 Phase 2 Relapsing MS Trial Brain Volume Data: 12 Months



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MN-166 Phase 2b Progressive MS Trial

SPRINT-MS: Phase 2b Trial in Progressive MS (Ongoing)				
FUNDING	Funded by NIH grant through NINDS			
PRIORITY	Ibudilast was the first drug chosen by NINDS for an interventional clinical trial in the NeuroNEXT program			
PRINCIPAL INVESTIGATOR	Robert Fox, M.D. Cleveland Clinic			
CLINICAL COORDINATING CENTER	Massachusetts General Hospital			
DATA COORDINATING CENTER	University of Iowa			
SITES	28 academic medical centers in the NeuroNEXT network			
ADDITIONAL FUNDING	National Multiple Sclerosis Society provides patient advocate input and trial enrollment awareness and has provided additional funding			

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MN-166 Ibudilast

MN-166 Phase 2b Progressive MS Trial Ongoing

	SPRINT-MS: Trial Design
TRIAL DESIGN	N = 255 subjects with Primary or Secondary Progressive MS (PPMS or SPMS) Interferon-beta or glatiramer acetate are allowed as concomitant medication
	Phase 2b randomized, double-blind trial; 96-weeks; 28 centers in the U.S. (NeuroNEXT sites)
	Dosing: up to 100 mg/day (50 mg BID) of MN-166 (ibudilast) or placebo (1:1 randomization)
	Primary: whole brain atrophy using brain parenchymal fraction (BPF); safety and tolerability
OBJECTIVES	Secondary: disability, imaging analyses of brain and retinal tissue integrity, cortical atrophy, cognitive impairment, quality-of-life, and neuropathic pain
STATUS	Enrollment completed; Interim Analysis in Q4 2016; Final results expected in 2017, assuming trial continues after Interim Analysis

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MN-166 Ibudilast

MN-166 Phase 2b Progressive MS Trial Sites Ongoing



Albert Einstein College of Medicine	University of California - Davis
Brigham and Women's Hospital	University of California - Los Angeles
Cleveland Clinic	University of Cincinnati
Columbia University Medical Center	University of Colorado – Denver
Emory University	University of Kansas Medical Center
Massachusetts General Hospital	University of Miami School of Medicine
Northwestern University	University of Pittsburgh
Ohio State University	University of Rochester
Oregon Health and Science University	University of Texas Southwestern
SUNY Buffalo	University of Utah
SUNY Stony Brook	University of Virginia – Charlottesville
SUNY Upstate	Vanderbilt University
Swedish Medical Center - Seattle	Washington University in St. Louis
University of Alabama at Birmingham	Weill Cornell Medical College

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Amyotrophic Lateral Sclerosis (ALS)



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





1. Source: ALS Association

2. Source: Cowen & Co. estimate

3. Cochrane Database of Systematic Reviews

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MN-166 Phase 2 ALS Trial Ongoing

	ALS Trial Design
	N = up to 120 ALS subjects with onset <10 years up to 60 without non-invasive ventilation (NIV) support up to 60 with NIV support
TRIAL DESIGN	Phase 2 randomized, double-blind trial at Carolinas Neuromuscular/ALS- MDA Center Principal Investigator: Dr. Benjamin Rix Brooks
	Duration: 6 months of double-blind treatment + open label extension (6 months)
	Dosing: 60 mg/day of MN-166 or placebo (2:1 randomization) with riluzole
OBJECTIVES	Safety and tolerability, functional activity (ALSFRS-R), respiratory function, muscle strength, quality of life, Clinical Global Impression of Change, serum creatinine as a biomarker, and pharmacokinetics
STATUS	Enrollment commenced in October 2014 Protocol amendment in September 2015 added advanced ALS subjects using non-invasive ventilation (NIV)



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MN-166 Ibudilast

MN-166 Phase 2 ALS Trial: Interim Data at AAN (April 2016)

- Interim analysis of 25 subjects without NIV support who completed the 6-month double-blind treatment period with complete respiratory function data.
- No cluster of adverse events was differentially present in MN-166 and placebo treatment subjects.

Interim ALS Data Presented at AAN in April 2016 in Vancouver				
	PLACEBO Mean Decline	MN-166 Mean Decline	IMPROVEMENT	
ALSFRS-R Total*	5.80 (0.97 per month)	4.55 (0.76 per month)	22%	
ALSFRS-R Bulbar	1.80 (0.30 per month)	0.90 (0.15 per month)	50%	
ALSFRS-R Arm	2.40 (0.40 per month)	1.50 (0.25 per month)	38%	
Slow Vital Capacity (SVC)	12.71% (2.12% per month)	10.93% (1.82% per month)	14%	

* A higher decline indicates a greater worsening of disability.

Note: As this is the first study of MN-166 in ALS, it was not powered to detect statistical significance.

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MN-166

MN-166: Addiction Study Summary

Summary of MN-166 Addiction Studies and Data **Opioid Withdrawal** MN-166 Reduced Subjective Opioid Withdrawal Scale (SOWS) & MN-166 significantly reduced perspiring (p<0.05) and hot flashes (p<0.05), Analgesia two components of SOWS Phase 1b/2a Trial MN-166 significantly decreased the craving for heroin (p<0.01), cocaine (p<0.01) tobacco (p<0.05) Opioid Self-Administration MN-166 significantly decreased the reinforcing effects of oxycodone Phase 2 Trial (p<0.05) MN-166 significantly enhanced the analgesic effects of oxycodone (p<0.05) MN-166 significantly reduced perseverations (p=0.01) and variability in Methamphetamine Dependence response times (p=0.006), suggesting a protective effect on sustained Phase Ib Trial attention Alcohol MN-166 significantly decreased basal, daily alcohol craving over the Dependence course of the study (p<0.05) Phase 2a Trial

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MN-166

Ibudilast

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How does MN-001 work?



Anti-fibrotic Activity

- Reduces mRNA expression of genes that are known to promote fibrosis (e.g. LOXL2, Collagen Type 1, TIMP-1)
- Inhibits 5-lipoxygenase (5-LO)

Anti-inflammatory Activity

- Inhibits leukotriene (LT) and phosphodiesterases (PDE)
- Reduces inflammatory gene expression (e.g. CCR2, MCP-1)

Reduces Triglycerides

 Reduced triglycerides in every clinical trial completed (asthma, interstitial cystitis)





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MN-001 Data NASH & NAFLD Animal Model Studies



- Animal model studies shows MN-001 significantly reduced fibrosis in a dose-dependent manner
 - Improved NAFLD Activity Score (NAS) via a reduction in hepatocyte ballooning
 - Reduced fibrosis area in every preclinical model tested (NASH, Advanced NASH)



MN-001 Tipelukast

MN-001 Data IPF Animal Model Study





Animal model study shows MN-001 significantly reduced the Ashcroft Score

 Ashcroft Score measures pulmonary fibrosis based on histopathological staining

MN-001 significantly reduced lung hydroxyproline content

 Hydroxyproline content is an indicator of fibrosis or storage of collagen in tissue

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Nonalcoholic Steatohepatitis (NASH) Nonalcoholic Fatty Liver Disease (NAFLD)



Nonalcoholic Steatohepatitis (NASH)



NO

TREATMENT

APPROVED



1. National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) 2. Allied Market Research

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NASH MARKET

FORECAST

By 2020²

6B



MN-001 Phase 2 NASH / NAFLD Trial Ongoing

NASH / NAFLD Trial Design N = 40 subjects with NASH with hypertriglyceridemia and NAFLD with hypertriglyceridemia Phase 2 multicenter, proof-of-principle, open-label study Principal Investigator: Dr. Paul J. Pockros TRIAL DESIGN Duration: 12 weeks of treatment Dosing: MN-001 250 mg once daily for 4 weeks, followed by MN-001 250 mg twice daily for 8 weeks Evaluate the effect of MN-001 on: 1) Serum triglyceride levels; cholesterol efflux capacity **OBJECTIVES** 2) Safety and tolerability; PK profile; HDL-C, LDL-C, and total cholesterol level; liver enzymes and percent fat in liver at Week 12 STATUS Enrolling

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Idiopathic Pulmonary Fibrosis (IPF)



Idiopathic Pulmonary Fibrosis (IPF)





1. Pulmonary Fibrosis Foundation

- 2. GlobalData
- 3. Esbriet prescribing information
- 4. OFEV prescribing information

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MN-001 Phase 2 IPF Trial Ongoing

	IPF Trial Design	
	N = 15 subjects with moderate to severe IPF	
	Phase 2 randomized, placebo-controlled, double-blind trial at Penn State Milton S. Hershey Medical Center	
TRIAL DESIGN	Principal Investigator: Dr. Rebecca Bascom	
	Duration: 26 weeks of double-blind treatment + open label extension (26 weeks)	
	Dosing: MN-001 750 mg or placebo twice daily (2:1 randomization)	
	 Change from baseline of forced vital capacity (FVC) and FVC % predicted up to 26 weeks, and Semiannual rate of decline of disease activity based on FVC 	
OBJECTIVES	Others: Safety and tolerability; 6-minute walk test (6MWT); Modified Medical Research Council Dyspnea Score (MMRC); quality of life (ATAQ-IPF); frequency of worsening IPF; time to first worsening IPF	
STATUS	Enrolling	
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MN-001 Tipelukast

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MN-001 (tipelukast): 6 New Patents

MN-001 Tipelukast

6 New Patents cover MN-001 (tipelukast) and MN-002 (a major metabolite of MN-001):

NASH	Treatment of nonalcoholic steatohepatitis (NASH); expires no earlier than Dec 2032
Advanced NASH	Treatment of advanced NASH with fibrosis; expires no earlier than Sep 2034
NAFLD	Treatment of nonalcoholic fatty liver disease (NAFLD); expires no earlier than Dec 2032
Liver Disorders	Treatment of <u>steatosis</u> , lobular inflammation, hepatic ballooning, hepatic scarring, and elevated liver hydroxyproline levels; expires no earlier than Dec 2032
Lipid Disorders	Treatment of hypertriglyceridemia, hypercholesterolemia, and hyperlipoproteinemia; expires no earlier than July 2034
Fibrosis	Treatment of fibrosis in a broad range of organs; expires no earlier than June 2035
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Financial Summary

CASH POSITION
\$25
Million
(9/30/2016)
2015 OPERATING CASH BURN
\$7.2
Million

Consolidated Statements Of Operations And Comprehensive Loss				
	2015*	2014*		
Operating Expenses (\$)				
Research, development and patent	\$ 3,017,169	\$ 3,259,694		
General and administrative	5,805,217	5,963,317		
Total operating expenses	8,822,386	9,223,011		
Operating loss	(8,822,386)	(9,223,011)		
Other expenses	(54,206)	(12,518)		
Interest expense	(514)	(628)		
Other income	39,386	36,893		
Loss before income taxes	(8,837,720)	(9,199,264))		
Income tax (expense) benefit	(7,359)	3,972		
Net loss applicable to common stockholders	\$ (8,845,079)	\$ (9,195,292)		
Basic and diluted net loss per common share	\$ (0.33)	\$ (0.38)		
Shares used to compute basic and diluted net loss per share	26,578,770	24,067,781		

* Year ended December 31

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Timeline Summary

			2014	2015	2016	2017
MN-166	Ibudilast	Progressive Multiple Sclerosis		Presentation at AAN Completed Enrollment	 Fast Track Q4: Interim Analysis (NIH) 	Final Results
		ALS	 New Protocol Submitted FDA Approval to Start Study Began Enrollment 	 Presentation at AAN Amended Protocol (Advanced ALS) Fast Track 	 New Patent covers ALS Initiated ALS Biomarker Study Interim Data Presented at AAN Orphan Drug Designation - U.S. EMA Recommends Orphan Drug Designation - Europe 	 6-month double-blind data
		Substance Dependence	Positive Interim Data: Opioid	Final Results: Alcohol	Final Results: Opioid	
MN-001	Tipelukast	NASH	 Positive Preclinical Data Presented at AASLD and JDDW New Patents - NAFLD, steatosis / liver disorders 	 Opened IND FDA Approved Protocol New Patent covers NASH Fast Track Initiated Phase 2 Clinical Trial 	 New Patent covers Advanced NASH Lipid Disorders: New Patent covers hypertriglyceridemia, hypercholesterolemia, and hyperlipoproteinemia 	
		IPF	 Positive Preclinical Data Orphan Drug Designation Granted 	 FDA Approved Protocol Fast Track Initiated Phase 2 Clinical Trial 		
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Investment Highlights



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