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MediciNova Investor Presentation

March 2026

Redefining ALS Therapeutics

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 and MN-001. 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 and MN-001, 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, 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, 2025 and its subsequent periodic reports on Forms 10-Q and 8-K. MediciNova disclaims any intent or obligation to revise or update these forward-looking statements.

Who We Are

- Dual-listed TSE (4875) and Nasdaq (MNOV)-traded company dedicated to developing therapies to treat neurological, fibrotic, and other diseases with no or inadequate treatment options.

- Core Program – internally funded focus on ALS, with additional fully funded non-core programs across multiple indications, including metabolic disease, pulmonary, and other neurological conditions.

Investment Highlights

- ✓ **Core ALS Value Driver:** Late-stage ALS opportunity with enrollment completed in the registrational Phase 2b/3 COMBAT-ALS trial evaluating MN-166 (ibudilast; oral and IV), targeting a $3+ billion orphan market with limited effective treatment options
- ✓ Well-established safety and efficacy profile supported by **Orphan Drug Designation and Fast Track status**
- ✓ **Novel neuroinflammation modulator with potential to change ALS outcomes promotes neurotrophic factors, potentially reverses neuron damage**
- ✓ **Near term catalysts in ALS and Hypertriglyceridemia** and potential partnerships for our pipeline
- ✓ **Partnership-Ready Platform:** Multiple late-stage assets seeking commercial collaboration with additional *non-core* pipeline indications include neurological, fibrotic, and other diseases with no or inadequate treatment options
  - MN-166 completed Phase 2 trials for brain tumor, acute lung injury/severe pneumonia
  - MN-001 (tipelukast; oral) in Phase 2 for metabolic diseases (Atherosclerotic cardiovascular disease (ASCVD), Hyperlipidemia/T2DM, NAFLD/MAFLD)
  - Additional partnered research programs funded by government agencies and managed by academia, which, upon completion, provide potential for additional approved products that result in non-dilutive revenue opportunities
- ✓ **Capital efficient model preserves cash runway**
  - $30.8 M cash, operating cash burn ~ $12-13 M/year for core MN-166 and MN-001 programs
  - No debt
  - Cash runway to meet ALS and core programs data catalyst milestones
- ✓ **Experienced Leadership: Track record of R&D discipline and regulatory engagement**

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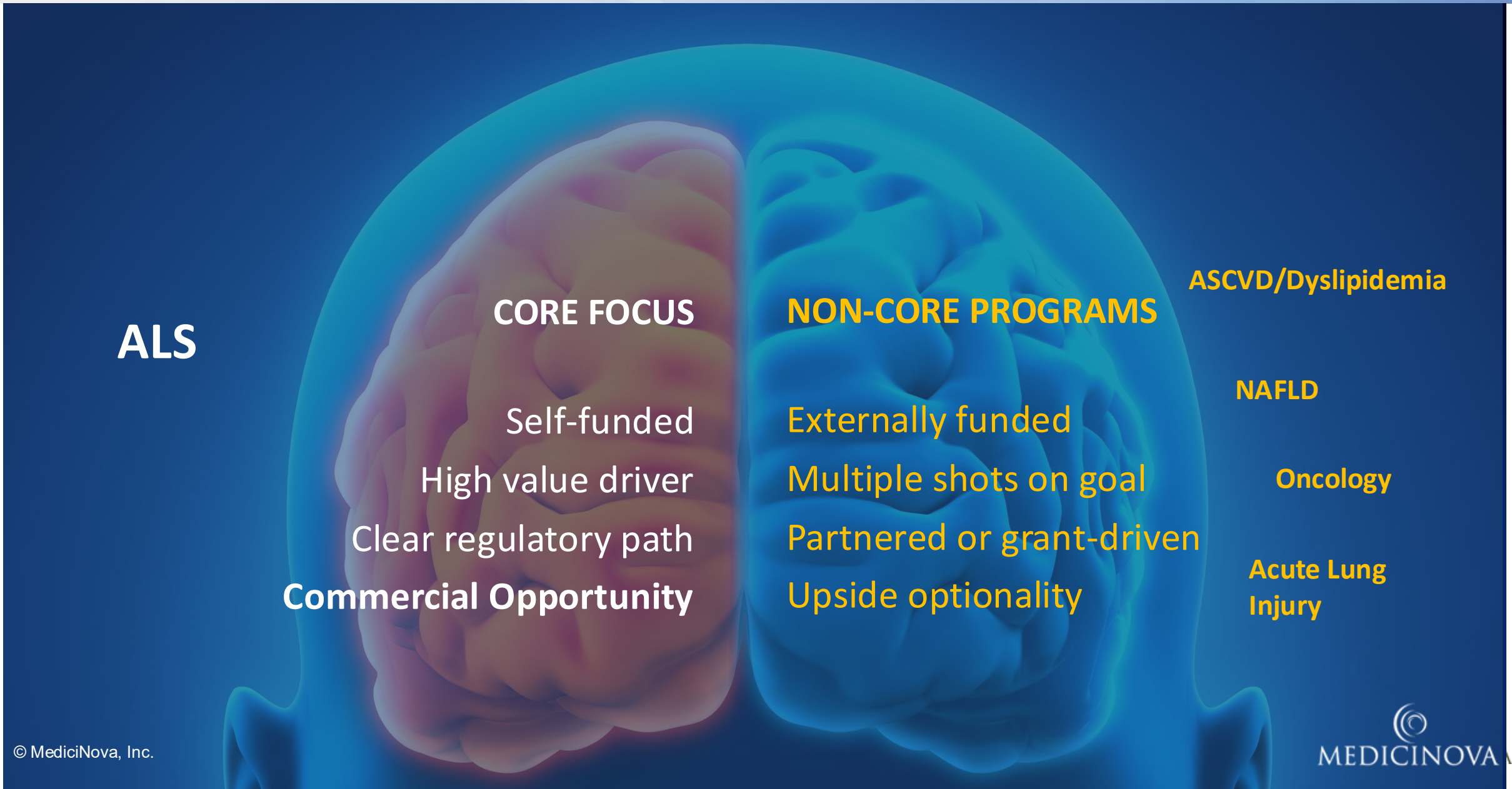
Our Unique Model – Focused, Capital Efficient, De-Risked



Academic & Government Partnered Programs (MN-166 Non-Core)

- All partnered programs fully funded by government agencies and run by academic researchers from reputable institutions in US, UK, Australia, and Canada

- Upon trial completion, MediciNova has full rights to regulatory pathway and exclusive rights to commercialization

MAYO CLINIC

Cleveland Clinic

CONCORD CANCER CENTRE
Dedication | Compassion | Innovation

OREGON HEALTH & SCIENCE UNIVERSITY
OHSU

THE UNIVERSITY OF SYDNEY

UNIVERSITY OF CAMBRIDGE

ICanCME

CIHR IRSC Canadian Institutes of Health Research / Instituts de recherche en santé du Canada

UHN Canada's Hospital

NIH National Institute on Drug Abuse
Advancing Addiction Science

National Institute of Neurological Disorders and Stroke

NIHR | National Institute for Health and Care Research

NIH National Institute on Alcohol Abuse and Alcoholism

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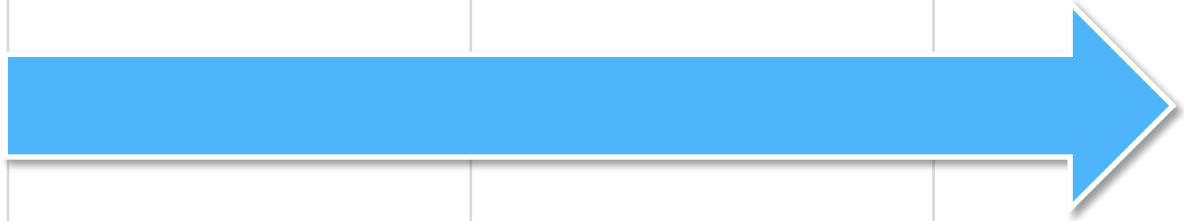
MediciNova's Core Program

Indication	Phase 1	Phase 2	Phase 3
ALS* (Amyotrophic Lateral Sclerosis) Phase 2b/3 study (COMBAT-ALS) ongoing Mayo Clinic Jacksonville and 16 sites in US and Canada			

* Orphan disease, Fast Track

MediciNova's CORE ALS Program

MN-166: ALS

Ibudilast

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ALS: Unmet Need & Market Opportunity

A large, underserved orphan market where existing therapies have failed to meaningfully alter disease progression, creating a significant opportunity for differentiated, durable treatments

- ~30,000 people in the U.S. living with ALS with an average life expectancy ~2-5 years from diagnosis
- Limited treatments:
  - Relyviro withdrawal as evidence that the FDA is prioritizing meaningful clinical benefit and that the competitive landscape has reset in favor of differentiated therapies
  - Radicava only modest efficacy
- Global ALS market projected to exceed $3 billion
- FDA supportive of innovative approaches

A successful Phase 2b/3 COMBAT-ALS readout would position MN-166 as a potentially meaningful therapeutic option in ALS and represents a clear opportunity for significant value creation relative to MediciNova's current market capitalization

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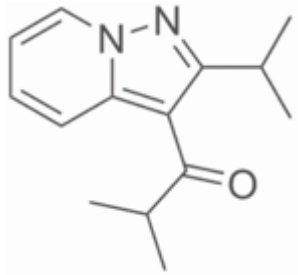
MN-166 Overview

CODE	**MN-166**
Description	**Small Molecule**
Chemical Name	**Ibudilast**
Administrate Route	**Oral** **I.V. injection**
Mechanism of Action	**CNS-penetrant compound (Exhibits robust CNS bioavailability)** **Multiple MOAs** MIF (macrophage inhibitory factor) inhibitor PDE (phosphodiesterase) 3, 4, 10 and 11 inhibitor TLR4 (Toll-Like-Receptor 4) inhibitor **Clinical effect** Reduce neuroinflammation Neuro-protection Tumor microenvironment modification



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Positive outcome from first Phase 2a ALS study (MN-166-ALS-1201)

Study Summary

- Single-center (PI: Dr. Brooks, Carolina Neuromuscular ALS MDA Center), R(1:2), PCT, DB followed by OLE
- Target ALS patients (ALS history ~ 5 years), on Riluzole treatment
- Treatment: 60 mg/day MN-166 or Placebo X 6 months followed by 6-mo OLE
- Total 51 patients enrolled

R=Randomized , PCT=placebo-control , DB=double-blind, OLE=Open-Label-Extension

Responder Analysis			
Outcome	**Responder Category**	**Placebo (n=16) +Riluzole**	**MN-166 (n=33) +Riluzole**
ALSFRS-R	Stable or improved from baseline	2/16 (12.5%)	7/33 (21.2%)
ALSAQ-5 (QOL)		4/16 (25%)	17/33 (51.5%)
MMT (muscle strength)		4/16 (25%)	11/33 (33.3%)

Results:

More responders in MN-166 treatment group

Ref: Oskarsson B, et al. *Neurodegener Dis Manag*. 2021 Dec;11(6)

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MN-166's Unique Mechanism in ALS

Neuroinflammation Reduction:

- MIF inhibition, PDEs inhibition, and TLR4 inhibition reduce pro-inflammatory signaling.
- Attenuate glial cell activation, which is a major contributor to neurodegeneration in ALS.

Neuroprotection:

- By reducing neuroinflammation and enhancing protein clearance, it supports motor neuron survival.

Autophagy Enhancement:

- Promotes the clearance of TDP-43 protein aggregates, a hallmark of ALS pathology
- Suggests it may act as an autophagy enhancer, helping cells remove toxic proteins more efficiently.

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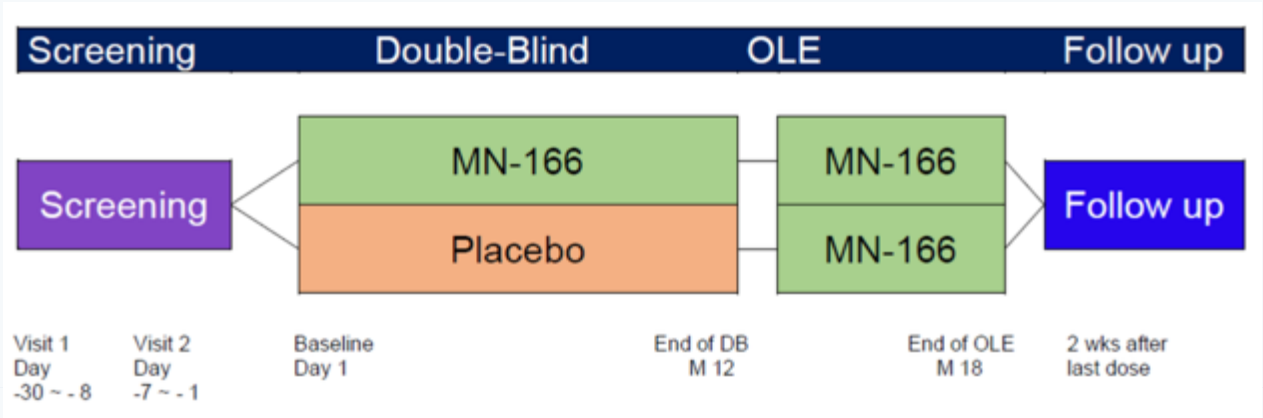
Ongoing Phase 2b/3 ALS study (COMBAT-ALS / MN-166-ALS-2301)

Study Sites : Multi-centers in US and Canada

Study Design : R (1:1), PCT, DB study followed by OLE



Target Patients: ALS (ALS history within 18 mo)

Dose : 100mg/day or placebo **Treatment Duration** : 12-mo DB, 6-mo OLE **Size**: N=230 (randomize)

Primary Endpoint :	CAFS (Combined Assessment of Function and Survival) Change from baseline in ALSFRS-R score at Month 12 and survival time (global rank test)
Secondary Endpoint:	Muscle strength (HHD), Quality of Life (ALSAQ-5) Responder Analysis (ALSFRS-R) Survival time, Safety and tolerability
Study status :	**The study has achieved the milestone of patient enrollment (n=234)**

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Ongoing Phase 2b/3 ALS study - Baseline Characteristics (n=234)

	Male	Female	Total (# /%)
Gender	148 (63.2%)	86 (36.8%)	234 (100%)
Mean Age (y.o.)	60.41	60.98	60.62
Race / Ethnicity			
• **Caucasian**	130 (87.8%)	81 (94.2%)	211 (90.2%)
• **African American**	2 (1.4%)	1 (1.2%)	3 (1.3%)
• **Asian**	10 (6.8%)	2 (2.3%)	12 (5.1%)
• **Other**	5 (3.4%)	1 (1.2%)	6 (2.6%)
• **American Indian or Alaskan Native**	1 (0.7%)	0 (0%)	1 (0.4%)
• **Native Hawaiian or Other Pacific Islander**	0 (0%)	1 (1.2%)	1 (0.4%)

	Male	Female	Total (# /%)
ALS Diagnosis			
• **Bulbar**	27 (18.2%)	22 (25.6%)	49 (20.9%)
• **Lower limb (Leg)**	46 (31.1%)	30 (34.9%)	76 (32.5%)
• **Upper limb (Arm)**	74 (50.0%)	34 (39.5%)	108 (46.2%)
• **Respiratory**	0 (0%)	0 (0%)	0 (0%)
• **Unknown / Other**	1 (0.7%)	0 (0%)	1 (0.4%)
Mean ALSFRS-score at screening	40.63	40.41	40.55
Mean ALSFRS progression rate at screening	0.58	0.60	0.59
Mean ALS Hx (months from first symptom) at screening	12.46	12.52	12.48
On edaravone at Baseline	79 (53.4%)	47 (54.7%)	126 (53.8%)

Major Inclusion Criteria

- Male or female subjects ages 18 to 80 years, inclusive;
- Diagnosis of familial or sporadic ALS as defined by the El Escorial-Revised (2000) research diagnostic criteria for ALS [clinically definite, clinically probable, probable-laboratory-supported];
- ALS onset of ≤ 18 months from first clinical symptoms of weakness prior to screening;
- If currently using edaravone, subject should have completed the first 14 days of their initial treatment cycle prior to initiating study drug;
- A total ALSFRS-R score of at least 35 overall at screening and:
  - No more than one of the 12 ALSFRS-R individual component items has a score of 1 or less at screening;
  - For limb onset subjects, ALSFRS-R score of ≥ 3 on item #1 (speech), #2 (salivation) and #3 (swallowing);
- ALSFRS-R progression rate from onset of first symptom of weakness to the ALSFRS-R score at Screening of ≥ 0.3 points and ≤ 1 point per month calculated as: a. ALSFRS-R score at onset of first symptom of weakness (assume 48) minus ALSFRS-R score at Screening divided by number of months since onset of first symptom of weakness.
- Documented pulmonary function test (PFT) result within the last 6 months (i.e., slow vital capacity or forced vital capacity) must be ≥70% of predicted.

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MN-166 Competitive Differentiation in the ALS Treatment Landscape

	Target Population	Administration	Safety	Efficacy	Regulatory Status	Price per Year	Differentiation	
MEDICINOVA **MN-166**	Broad	Oral	30+ years commercial activity outside the US	2026 data readout	Phase 3	-	Multi-target therapy; NIH EAP program	
sanofi **Riluzole**	Broad	Oral	_	Modest	Commercial	$2K - $8K	Standard of care; baseline therapy; generic	COMMERCIAL
Tanabe Pharma **Edaravone**	Early-stage ALS	IV/Oral	_	Modest	Commercial	$145K - $169K	Acquired for $2.5B by Shionogi in Dec 2025	COMMERCIAL
Biogen **Tofersen**	SOD1-ALS (~2% of cases)	Intrathecal	Intrathecal procedure risks	Biomarker+	Commercial	$199K	First genetic therapy; precision	COMMERCIAL
CLENE NANOMEDICINE **CNM-Au8**	Broad	Oral	Novel platform	_	Pre-NDA	-	Crosses BBB to enhance cell energy production	IN DEVELOPMENT
AB SCIENCE **Masitnib**	Normal progressors	Oral	30% serious adverse events	+27%	Rejected by European Medical Agency	_	Long survival data	IN DEVELOPMENT
CORESTEMCHEMON **Lenzumestrocel**	Slow progressors	Intrathecal	no SAE	Subgroup+	to file BLA, target accelerated approval in 2026	_	First stem cell therapy	IN DEVELOPMENT
Eisai **Mecobalamin**	Early-stage ALS	Intramuscular	safe and well tolerated	JETALS trial demonstrated superiority	Commercial (Japan only)	JPY 1M	not FDA approved	IN DEVELOPMENT

COMBAT-ALS PHASE 2b/3 STATUS

Enrollment: 234 patients randomized
Design: 12-mo DB + 6-mo OLE (EAP)
Primary: ALSFRS-R change at 12 months
Results: Expected 2026

MARKET OPPORTUNITY

- **Only 3 approved DMTs** (Relyvrio withdrawn 2024)
- **~30,000** US patients; ~5,000 new Dx/year
- Gene therapies limited to <3% of patients
- **High unmet need** for broad-spectrum oral therapy

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Ongoing NIH funding Expand Access ALS study (SEA-NOBI-ALS)

Sponsor : NIH NINDS (National Institute of Neurological Disorders and Strokes)

Funding Amount : $ 22M

Lead PI : Mayo Clinic Dr. Oskarsson

Study Sites : Multi-centers in US (approx. 20 sites)

Study Design: Open-Label study

Target Patients: Late-stage ALS patients (ALS history > 36 months) or VC (respiratory function) < 50 %

Dose : 60 mg/day

Treatment Duration : 6 month

Size : N=200

Primary Endpoint :	Plasma NfL (Neurofilament Light) Concentration ALSFRS-R score
Secondary Endpoint:	ALSAQ-5 (QOL), Neuro QOL, inflammatory cytokines assay
Study status :	Enrolled first patient in 2Q 2025; 50% enrolled as of January 2026

Non-Core Pipeline: Multiple Shots on Goal

Multiple external-funding non-core programs offer significant upside with minimal internal investment

Non-core (MediciNova program)

ASCVD / Dyslipidemia (MN-001)

NAFLD / NASH (MN-001)

GBM/Brain metastasis (MN-166)

Acute Lung Injury (MN-166)

Non-Core (External Funding)

Degenerative Cervical Myelopathy (MN-166)

Chemotherapy-Induced-Peripheral Neuropathy (MN-166)

Methamphetamine Addiction (MN-166)

Expanded-Access-Program ALS (MN-166)

External-funding non-core assets:

- **All in external trials or supported by grants**
- **Upside preserved → optionality for future monetization**

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MN-166, Glioblastoma and Acute Lung Injury/Severe Pneumonia

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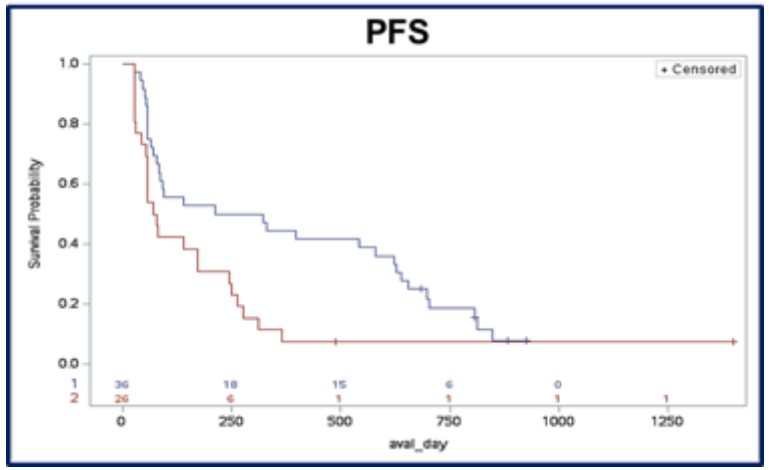
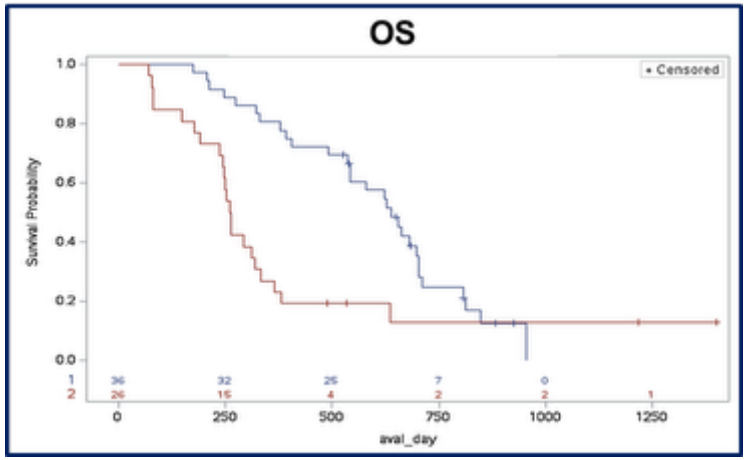
Positive outcome from first Phase 1/2 GBM study (MN-166-GBM-1201)

Study Summary

- Single-center (PI: Dr. Wen, Dana-Farber Cancer Institute), Open-Label study
- GBM patients on Standard of Care (TMZ chemo-therapy)
- Treatment : 100 mg/day MN-166 with up to TMZ chemo-therapy 12 cycles
- Total 62 patients (26 recurrent, 36 newly Dx)

	nGBM (N = 36)	rGBM (N =26)
Progression-Free Survival		
PFS6 rate	16 (44.4%)	8 (30.8%)
Median PFS (95% CI)	8.7 months (2.6, 20.5)	2.4 months (1.8, 5.7)
Overall Survival		
OS-6 months	35 (97.2%)	21 (80.8%)
OS-12 months	29 (80.6%)	7 (26.9%)
Median OS (95% CI)	21 months (17.7, 23.0)	8.6 months (7.8, 10.5)





Results:

MN-166 was safe and well tolerated with TMZ treatment

PFS rate at 6 mo was **higher in the recurrent GBM** cohort than historical control.

Gilbert Youssef at 2024 ASCO

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Positive outcome from first Phase 2 COVID-19 ARDS risk study (MN-166-COVID19-201)

Study Summary

- Multi-center (PI: Dr. Wyler Dr. Sauler), R(1:1), RCT, DB
- Severe hospitalized COVID 19 pneumonia patients with ARDS risk factor (i.e., Age, Medical History, Obesity)
- Treatment : 100 mg/day or placebo 7 days
- Total 34 patients randomized

Outcome	MN-166 (n=17)	Placebo (n=17)	Difference
Recovered from Respiratory Failure by Day 7	12/17 (70.6%)	6/17 (35.3%)	35.3% (p=0.0196)
Improved NIAID8-point score by Day 7	12/17 (70.6%)	8/17 (47.1%)	23.5% (p=0.0817)
Discharged from hospital by Day 7	11/17 (64.7%)	5/17 (29.4%)	35.3 % (p=0.0196)
All cause mortality	0 /17 (0%)	2/17 (11.8%)	

Results:

More MN-166 treatment group recovered from respiratory failure and discharged from hospital by Day 7

No death from MN-166 group, 2 death s form placebo group

Ref: MN-166-CODIV19-201 CSR

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MN-001, ASCVD/Dyslipidemia and NAFLD/MAFLD

Tipelukast

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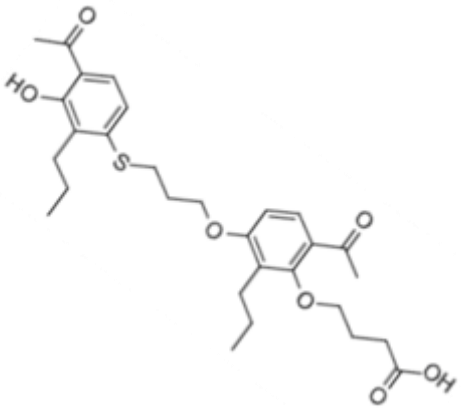
MN-001 Overview

CODE	**MN-001**
Description	**Small Molecule**
Chemical Name	**Tipelukast**
Administrate Route	**Oral**
Mechanism of Action	**Multiple MOA** Leukotriene & 5-lipoxygenase (5-LO) pathway inhibitor PDE (phosphodiesterase) 3,4 inhibitor leukotriene receptor antagonism **Clinical effect** Anti-inflammation, anti-fibrotic Lipid-lowering properties Reduce serum triglyceride Reduce CD36 expression and inhibits the uptake of arachidonic acid into hepatocytes



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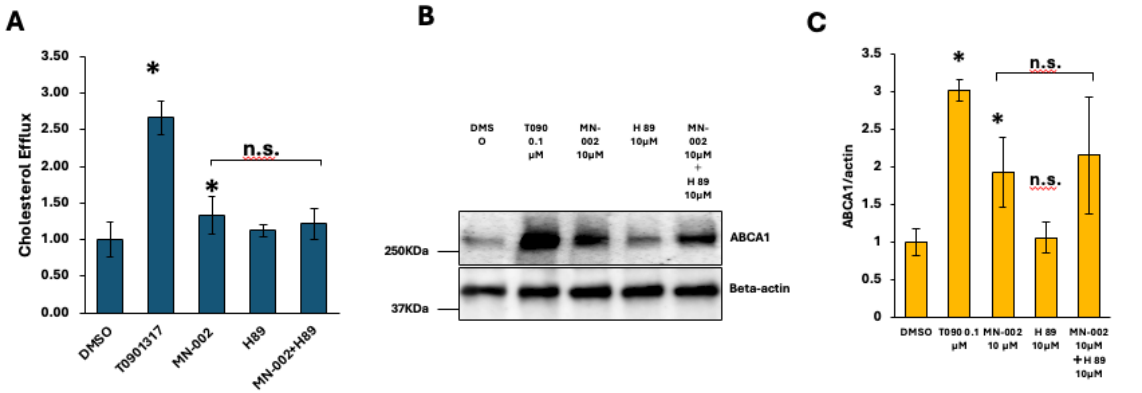
Collaborative Research with Japan Academia Group (Juntendo University)

Potential Therapeutic Strategy for Atherosclerosis (MN-001 and MN-002)

Study Summary

- Collaborated Research with Juntendo University
- MN-001 and MN-002 suggested to influence cholesterol metabolism. MN-002 is the active metabolite of MN-001
- Cholesterol efflux via ABCA1 and ABCG1, thereby reducing foam cell formation, investigated



- MN-002 enhances ABCA1-mediated cholesterol efflux and protein expression independently of PKA signaling.
- This suggests a novel, PKA-independent mechanism regulating cholesterol homeostasis in macrophages.

MN-002 enhances ABCA1-mediated cholesterol efflux independently of PKA signaling.

Summary of Key Findings

- MN-002 improves ApoA-I-mediated cholesterol efflux
- Upregulates ABCA1/ABCG1 protein and mRNA
- Strong PPAR-αbinding and gene activation
- Functions independently of PKA
- Demonstrates clinically relevant lipid profile improvement
- Promising for ASCVD, dyslipidemia, NAFLD/NASH indications

Results

MN-002 offers a novel therapeutic approach for atherosclerosis by upregulating ABCA1 and ABCG1 expression and enhancing ApoA-I-mediated cholesterol efflux.

Ref: Qui, et al. J Atheroscler Trhomb, 2025; 32. http://doi.org/10.5551/jat.65669

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Positive outcome from first Phase 2 NAFLD/ NASH + HyperTG study (MN-001-NATG-201)

Study Summary

- Multi-center , Open-Label study in US
- NAFLD/NASH patients with Hyper TG
- Treatment : 250 mg/day x 4 weeks followed by 500 mg/day x 8 weeks
- Total 19 patients enrolled

	Serum TG level (mg/dL)			Serum HDL-C level (mg/dL)		
Timepoints	All subjects (n=19)	**With T2DM (n=10)**	w/o T2DM (n=9)	All subjects (n=19)	**With T2DM (n=10)**	w/o T2DM (n=9)
Baseline	345.7	444.7	235.7	38.7	36	41.8
Week 8	206.9	218.8	193.8	41.9	41.7	42.2
Mean % change from Baseline (p-value)	- 40.2%	-50.8% (p=0.098)	-17.8%	+ 8.3%	+15.8% (p<0.0002)	+0.9%

Results:

The subjects with T2DM had a remarkable reduction in serum TG levels (- 50.82%, p=0.098) and significant increase (+ 15.8%, p<0.0002) in HDL-C levels at Week 8

Ref: MN-001-NATG-201 CSR; CSR T2DM= Type 2 Diabetes Mellitus

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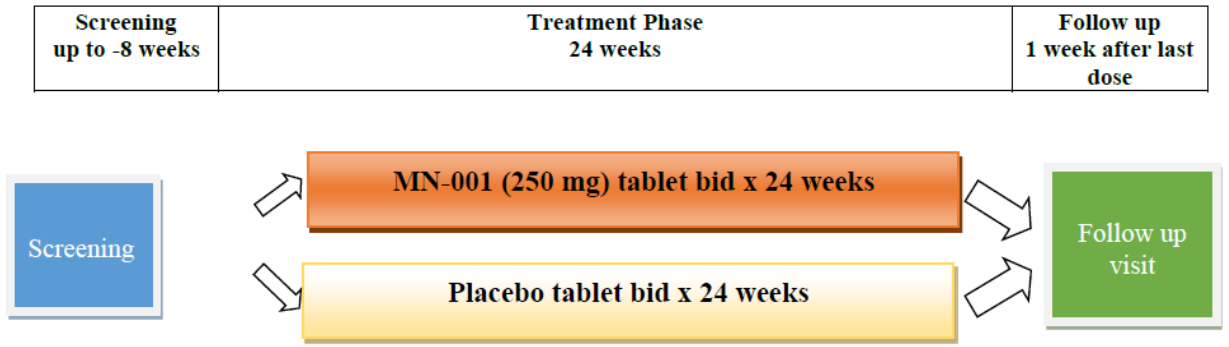
Ongoing Phase 2 HyperTG + T2DM + NAFLD study (MN-001-NATG-202)

Study Sites : 2 centers in US

- Jubilee Clinical Research Center
  - PI: Dr. Shin
- South Texas Research Institute
  - PI: Dr. Patil

Study Design : R (1:1), PCT, DB study



Target Patients : HyperTG + T2DM+ NAFLD

Dose : 500mg/day or placebo **Treatment Duration** : 24 Weeks **Size : N=40** (randomized)

Primary Endpoint : Change from baseline in Controlled Attenuation Parameter score by Fibroscan at Week 24
Change from baseline in fasting serum TG level at Week 24

Secondary Endpoint : Evaluate the safety and tolerability of MN-001
Evaluate the effect of MN-001 on lipid profile (i.e., HDL-C, LDL-C, total cholesterol level)

Study status : Target patient enrollment completed. Topline data expected Mid-2026.

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Financial Strength & Discipline

Annual burn

~US$12-13M

No

Debt

Dual-listed (NASDAQ & Tokyo Stock Exchange)

$30.8 M Cash position sufficient to reach ALS milestones

Future partnership deals could further extend runway

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Near-Term Catalysts

- Achieved patient enrollment goal (n=234) with COMBAT ALS in Sep 2025→ expect top line data by end of 2026; Orphan Drug Designation and Fast Track
- Planning discussions with FDA
- Participation in ALS awareness initiatives
- Achieved target patient enrollment with MN-001-NATG-202 → expect top line data mid-2026
- Advancing partnering discussions for core and non-core assets
- Active external funding for non-core studies

Why Invest in MediciNova?

MediciNova is redefining ALS therapeutics with a uniquely capital-efficient model and multiple paths to value. We're committed to delivering breakthroughs for patients — and significant returns for investors.

- ALS core program with Orphan Drug Designation and Fast Track status
- Multiple shots on goal from non-core
- Lean, de-risked model preserves cash
- Key milestones on the near horizon in 2026
- Current cash runway extends through key ALS readouts and partnership milestones

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Thank you!

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