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): February 26, 2021

Clene Inc.
(Exact name of registrant as specified in its charter)

Delaware	01-39834	85-2828339
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

6550 South Millrock Drive, Suite G50 Salt Lake City, Utah	84121
(Address of principal executive offices)	(Zip Code)

Tel: 801-676-9695
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communication 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-commencements communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value US$0.0001 per share	CLNN	The Nasdaq Stock Market LLC
Warrants, to acquire one-half of one share of Common Stock for $11.50 per share	CLNNW	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

☒ Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 2.02 Results of Operations and Financial Condition.

In connection with presentations to certain of its existing and potential shareholders (the "Shareholder Presentations"), Clene Inc. (the "Company"), will provide preliminary cash on hand information as of December 31, 2020. Cash on hand is the main component of cash and cash equivalents on the Company's consolidated balance sheets, and there is no material difference between the two numbers. Based on unaudited, preliminary financial information, the Company has found cash on hand as of December 31, 2020 to have been approximately $59 million.

This preliminary information is based on management's initial analysis of the Company's financial condition as of December 31, 2020. The company will issue its audited financial statements as part of its annual report on Form 10-K, which it expects to file in March 2021.

Forward Looking Statements: The financial information set forth in this Form 8-K reflects the company's current preliminary revenue estimates, is subject to the completion of its audit process, and is subject to change. The company's full fourth quarter and year 2020 results could differ materially from the preliminary estimates provided in this Form 8-K. You are cautioned not to place undue reliance on these forward-looking statements, which reflect management's analysis only as of the date of this Form 8-K. We undertake no obligation to publicly release the results of any revision or update of the forward-looking statements, except as required by law.

Item 7.01 Regulation FD Disclosure

In connection with presentations by Clene Nanomedicine, Inc. ("Clene"), a wholly owned subsidiary of the Company, at the Americas Committee for Treatment and Research in Multiple Sclerosis ("ACTRIMS") Forum 2021 given on February 26, 2021, Clene presented blinded interim data from its VISIONARY-MS study and updated interim data from its REPAIR-MS study. A copy of the slide presentations that accompanied Clene's presentations at the ACTRIMS Forum 2021 are attached as Exhibits 99.1 and 99.2 to this Form 8-K and are incorporated by reference herein.

In addition, attached as Exhibit 99.3 to this Form 8-K and incorporated into this Item 7.01 by reference is the slide presentation that the accompanied the Shareholder Presentations.

The information being furnished under this Item 7.01, including Exhibit 99.1, of this Current Report shall not be deemed to be "filed" 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, nor shall it be deemed incorporated by reference into any registration statement or other document filed by the Company under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Exhibit Description
99.1	Slide Presentation concerning VISIONARY-MS study
99.2	Slide Presentation concerning REPAIR-MS study
99.3	Slide Presentation provided to shareholders

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Clene Inc.

Date: February 26, 2021

By: /s/ Robert Etherington
Robert Etherington
President, Chief Executive Officer and Director

VISIONARY-MS

Update to a Phase 2 clinical trial of catalytic gold nanocrystals, CNM-Au8, for the treatment of chronic optic neuropathy

Robert Glanzman, MD FAAN
For the VISIONARY-MS Investigators

R. Glanzman, MD FAAN[1], H. Beadnall MBBS FRACP[2], A. Klistorner , M. Barnett, MBBS FRACP[2], R. Sergott MD[3], A. Rynders[1], K. Ho, PhD[1], M. Mortenson MS[1], M. Hotchkin[1]

[1] Holladay, UT/United States, [2] Camperdown, NSW/Australia,

[3] Philadelphia, PA/United States of America

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Disclosures

I am an employee of Clene Nanomedicine, Inc. and receive salary and stock options

Acknowledgements

Dr. Heidi Beadnall
MBBS, FRACP

Dr. Stefan Blum
MD, FRACP, PhD

Dr. Jeanette Lerchner-Scott
MD, PhD, FRACP

Dr. Bruce Taylor
Bmed sci, MBBS, MD, FRACP

Dr. Deborah Field
MBBS, FRACP

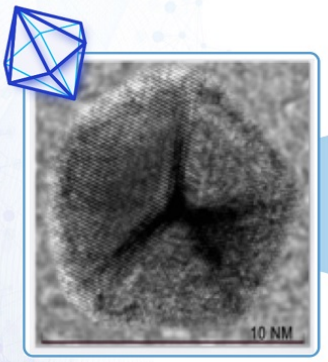
Dr. Steve Vucic
MBBS FRACP, PhD
Prof Neurology

Dr. Anneke Van der Walt
MBChB, PhD, FRACP
A/Prof Neurology

Dr. Richard Macdonell
MD, FRACP, FAFRM

CNM-Au8 | MoA: Nanocatalytic Electron Transfer

Catalytic Gold Nanocrystals



Bioenergetic Mechanism

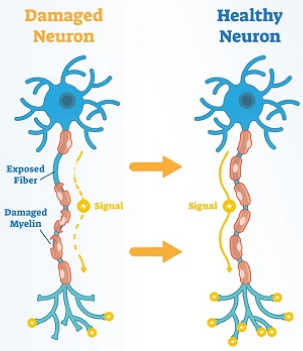
- Increased NAD
- Increased ATP
- Decreased reactive oxygen species
- Increased proteostasis

Enhanced Disease Response

- Increased energetic capacity

- Improved resistance to oxidative, mitochondrial, and excitotoxic stressors
- Reduction in levels of misfolded proteins

Remyelination



Neuro Repair

Background DMT Treatment & Demographics

13-January-2021 Blinded Data Update

Baseline Demographics

Baseline Values	Subjects n (%)	Age [yrs.] mean (SD)	EDSS mean (SD)	Time from MS Onset [yrs.] mean (SD)	ON History [%]
All	**52 (100%)**	**38.0 (8.9)**	**1.8 (1.5)**	**6.0 (3.8)**	**76%**
Female	37 (71%)	37.7 (8.3)	1.7 (1.6)	6.4 (3.8)	73%
Male	15 (29%)	40.1 (9.7)	2.0 (1.4)	5.1 (3.8)	80%

DMT Background Treatment

Monoclonal Antibody[1] n (%)	Oral Therapy[2] n (%)	Injectable *(Glatiramer acetate)* n (%)	No DMT n (%)
27 (52%)	**19 (36.5%)**	**2 (4%)**	**4 (8%)**
19 (51%)	14 (38%)	2 (5%)	2 (5%)
8 (53%)	5 (33%)	0 (0%)	2 (13%)

[1] Monoclonal antibody includes alemtuzumab, natalizumab, rituximab, ocrelizumab.

[2] Oral includes fingolimod, dimethyl fumarate, teriflunomide, thyroxine, and oral combinations.

VISIONARY-MS STUDY

Treatment of Visual Pathway Deficits In Chronic Optic Neuropathy for Assessment of Remyelination in Non-Active Relapsing MS

24-Week Blinded Fixed Treatment Period | **Up to 24-Week Blinded Extension Period** (Until LPLV 24Wk Visit)

Up to 48-Week Placebo-Control
2:1 Randomization (Active: Placebo)
15mg, 30mg, Placebo (n=150)

1° **Change in Low Contrast Letter Acuity (LCLA)**
At Week 24

2° **Change Composite Clinical Response**
9HPT / SDMT / T25FW / LCLA / EDSS

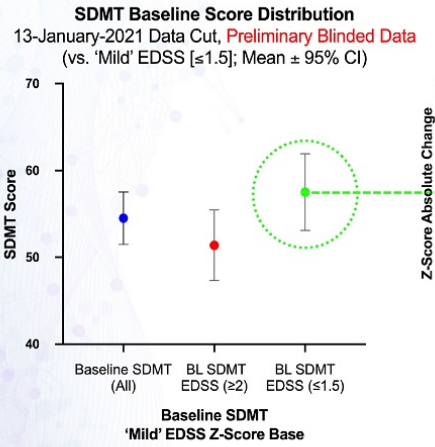
Exploratory Endpoints

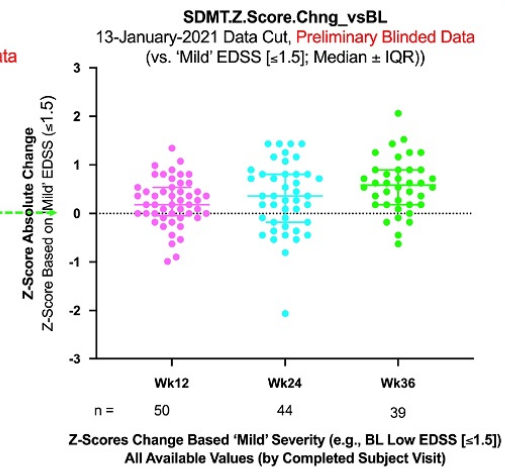
- Optical Coherence Tomography (OCT)
- Multi-focal VEP Amplitude & Latency
- Full field-VEP Amplitude & Latency
- MRI Endpoints
- Visual Function (High Contrast)
- PRO / QOL / EDSS

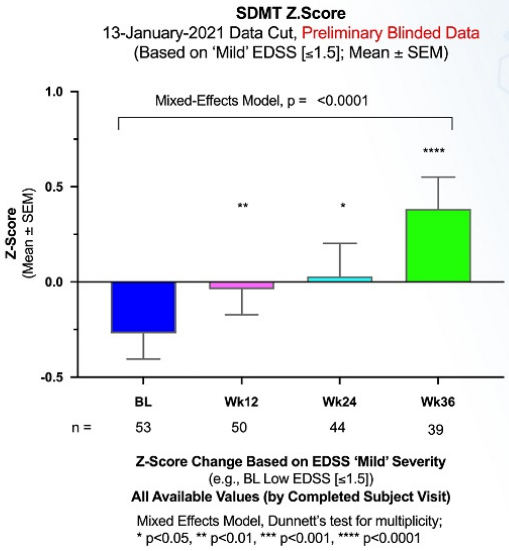
*Subject to ongoing COVID-19 related site research restrictions generally implemented to protect MS patients taking standard-of-care immunosuppressive therapies

SDMT Z-Score Change

Change in Enrolled Study Population Compared to Baseline (BL) 'Mild' EDSS (<=1.5)



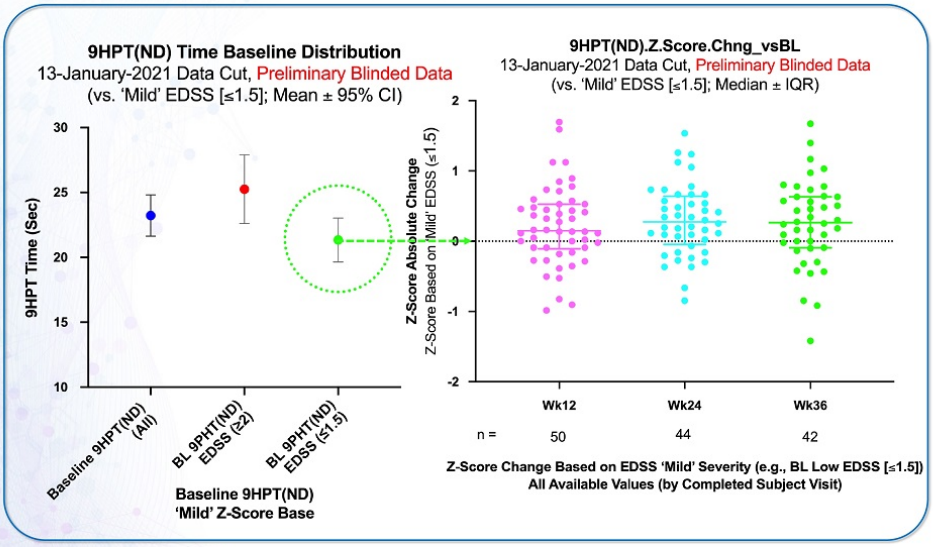


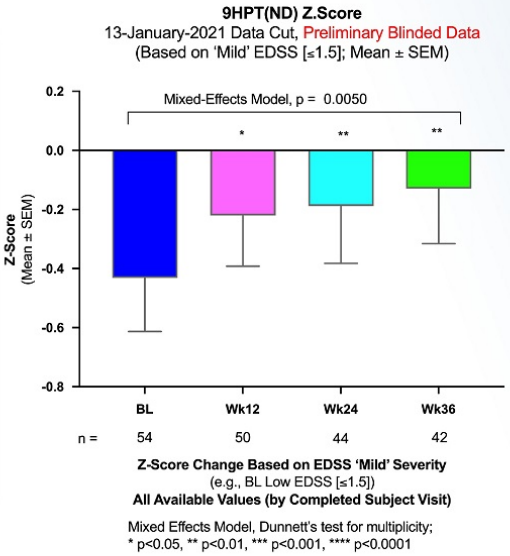


Mixed Effects Model, Dunnett's test for multiplicity;
* p<0.05, ** p<0.01, *** p<0.001, **** p<0.0001

9HPT (Non-Dominant) **Z-Score Change**

Change in Enrolled Study Population Compared to Baseline (BL) 'Mild' EDSS (<=1.5)

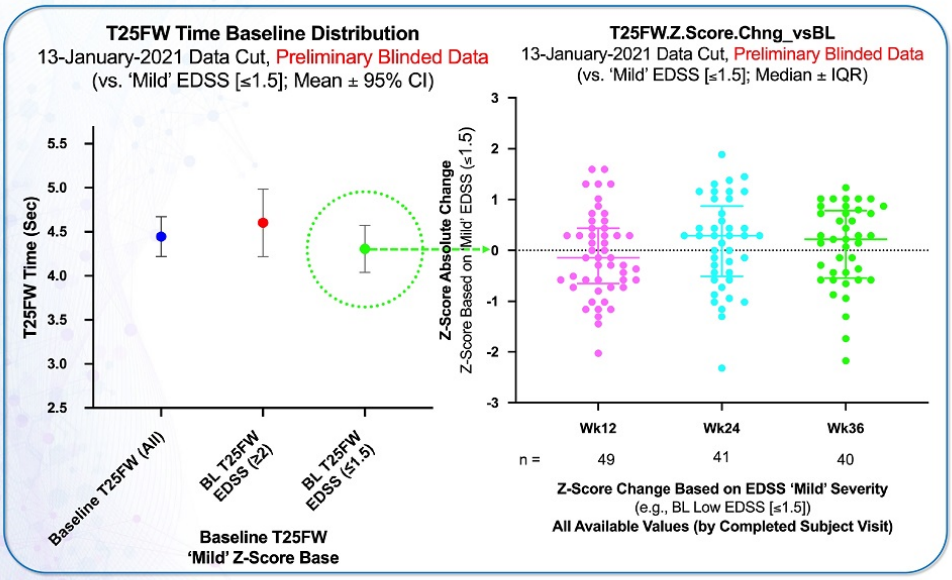


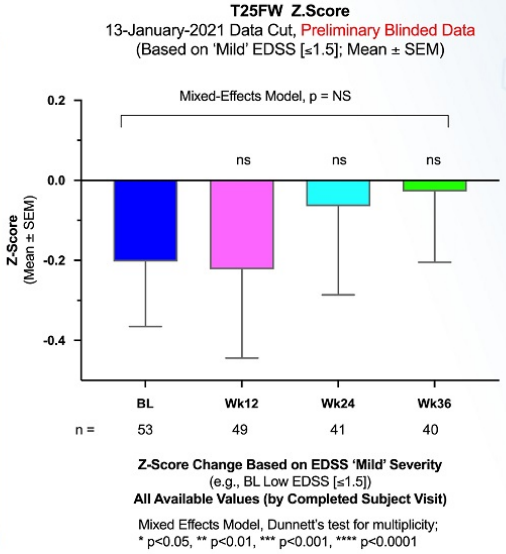


Mixed Effects Model, Dunnett's test for multiplicity;
* p<0.05, ** p<0.01, *** p<0.001, **** p<0.0001

T25FW Z-Score Change

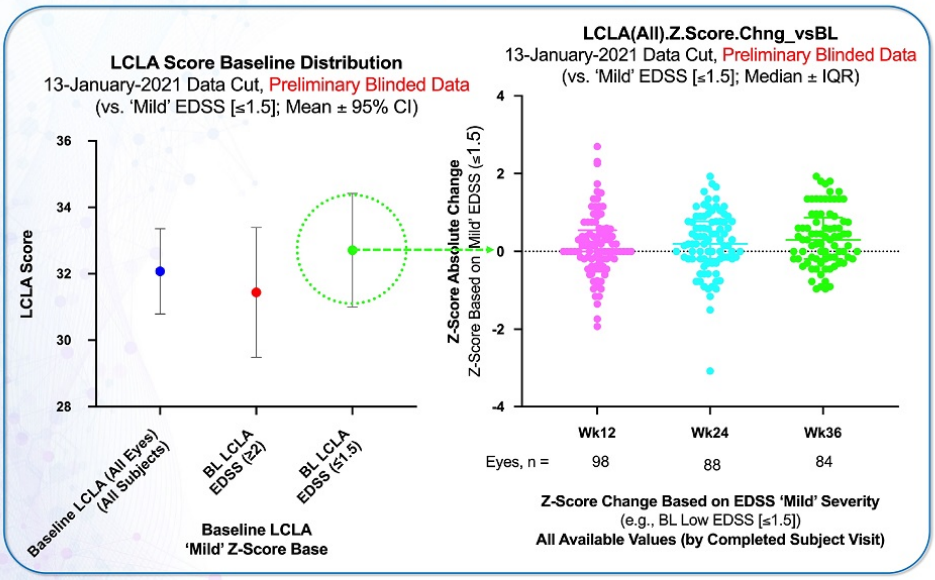
Change in Enrolled Study Population Compared to Baseline (BL) 'Mild' EDSS (<=1.5)

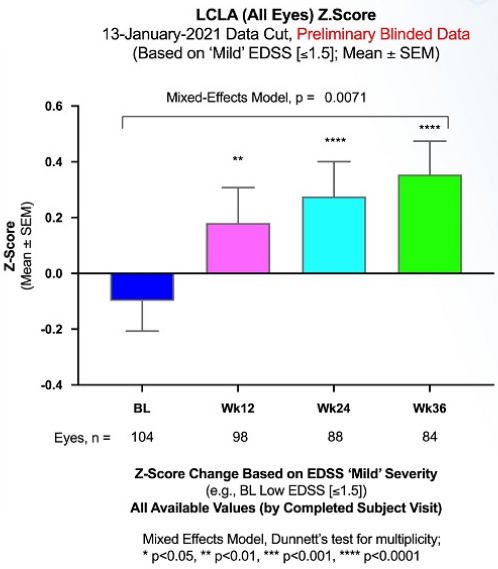




LCLA (Best-Corrected) Z-Score Change

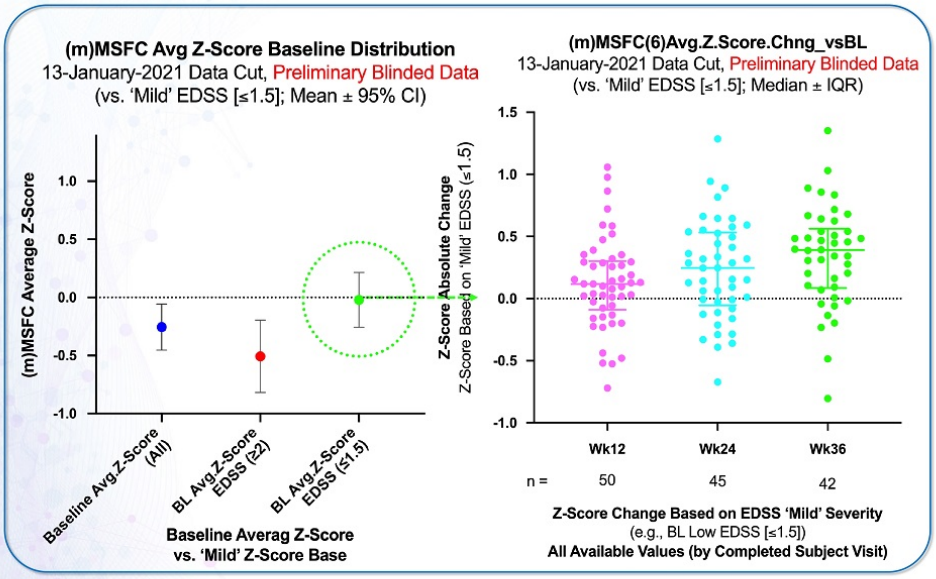
Change in Enrolled Study Population Compared to Baseline (BL) 'Mild' EDSS (<=1.5)

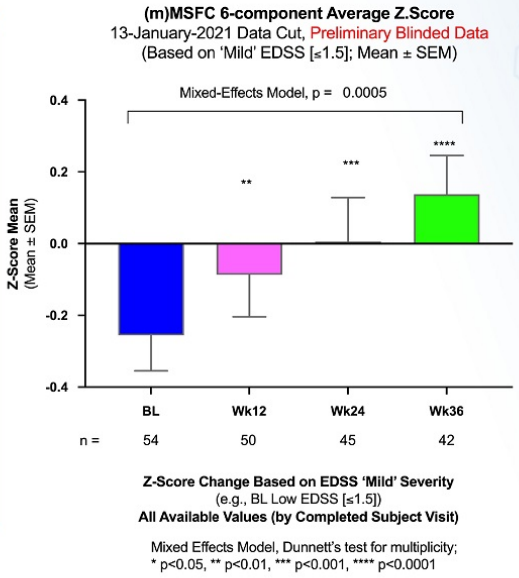




(m)MSFC Mean Z-Score Change

6-component (SDMT, LCLA [L/R], 9HPT [D/ND], T25FW)





Conclusions

VISIONARY-MS STUDY

- VISIONARY-MS is an innovative Phase 2 study examining the potential for CNM-Au8 to promote neurological improvement in a stable RMS population with chronic visual impairment, as an adjunct to approved DMTs

- CNM-Au8 is a novel, nanocatalytic therapy shown to promote remyelination and neuroprotection via increasing bioenergetic capacity, enhancing protein homeostasis, and reducing harmful ROS

- These interim, blinded data support the potential for CNM-Au8 therapy to demonstrate meaningful neurological improvement in patients with MS

RepairMS

Effects of Nanocatalysis on CNS Bioenergetic Markers in Patients Treated with CNM-Au8: Interim Results from a Phase 2 ^{31}Phosphorous Magnetic Resonance Imaging Study in Relapsing MS

Robert Glanzman, MD FAAN
On behalf of REPAIR-MS Investigators

Jimin Ren[1], Austin Rynders[2], Benjamin Greenberg[1], Karen S. Ho[2], Robert Glanzman[2], Michael T. Hotchkin[2]

[1] University of Texas Southwestern Medical Center

[2] Clene Nanomedicine, Inc.

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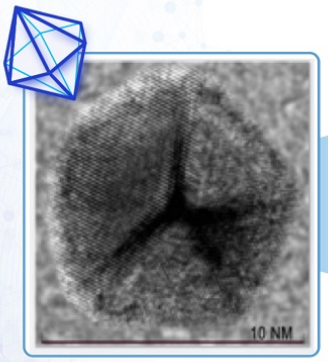
Disclosures

I am an employee of Clene Nanomedicine, Inc. and receive salary and stock options

CNM-Au8 | MoA: Nanocatalytic Electron Transfer

Catalytic Gold Nanocrystals



Bioenergetic Mechanism

- Increased NAD
- Increased ATP
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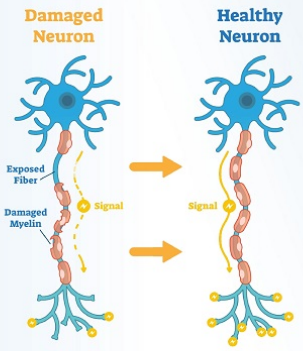
- Increased proteostasis

Enhanced Disease Response

- Increased energetic capacity

- Improved resistance to oxidative, mitochondrial, and excitotoxic stressors
- Reduction in levels of misfolded proteins

Remyelination



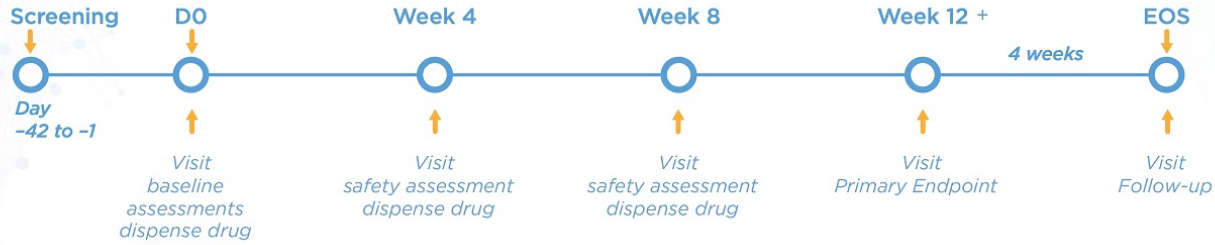
Neuro Repair

RepairMS

RepairMS

REPAIR: Phase 2 ^{31}P-MRS Imaging

A Phase 2, Open Label, Sequential Group, Investigator Blinded Study of Magnetic Resonance Spectroscopy (^{31}P-MRS) to Assess the Effects of CNM-Au8 for the Bioenergetic Improvement of Impaired Neuronal Redox State in Relapsing MS



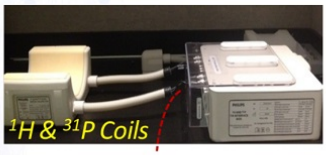
1° **Change in Brain Bioenergetic Potential (NAD+/NADH) vs. Baseline**

2°

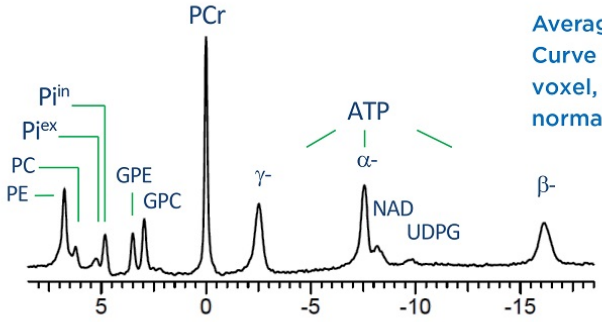
- Difference in average metabolites (e.g., NAD+, NADH) concentration at Week 12-16
- Difference in average brain membrane markers (PCr, PME, PE, etc.) at Week 12-16
- Pharmacodynamic biomarkers at Week 12-16

REPAIR-MS | ^{31}P MRS Imaging Modality

Partial Volume Coil



Full Volume Coil



Average change in Area Under Curve by 31P peak (per 2 cm^3 voxel, ~600 voxels per subject); normalized by PCr

- ATP-***α***, ATP-***β***, ATP-***γ***
- NAD+/NADH (partial coil only)
- NAD Pool (Full coil)
- UDPG – uridine diphosphate glucose
- PCr – phosphocreatine (normalization factor)
- Pi^{in} - intracellular inorganic phosphate
- Pi^{ex} - extracellular inorganic phosphate
- PC - phosphocholine
- PE - phosphoethanolamine
- GPE - glycerophosphoethanolamine
- GPC - glycerophosphocholine

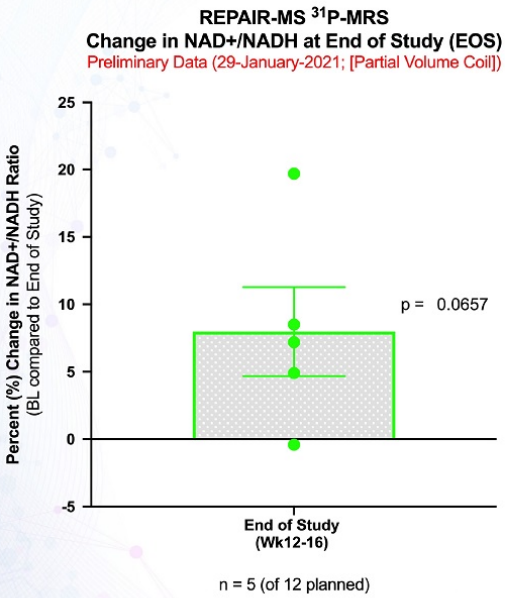
REPAIR-MS Baseline Demographics

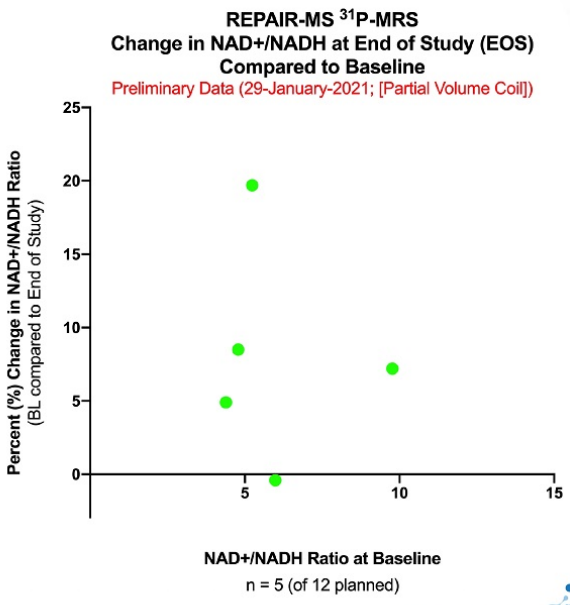
27–January–2021 Data Update

Baseline Values	Subjects n (%)	Age [yrs.] mean (SD)	EDSS mean (SD)	Time from MS Onset [yrs.] mean (SD)	Natalizumab Treatment (%)
All	**9** (100%)	**46.5** (10.8)	**3.6** (2.3)	**7.2** (5.0)	**100%**
Female	7 (78%)	39.7 (11.6)	3.0 (2.2)	6.5 (3.7)	100%
Male	2 (22%)	48.5 (10.6)	3.8 (3.9)	11.3 (2.9)	100%

CNM-Au8 Increases Brain NAD⁺/NADH Ratio

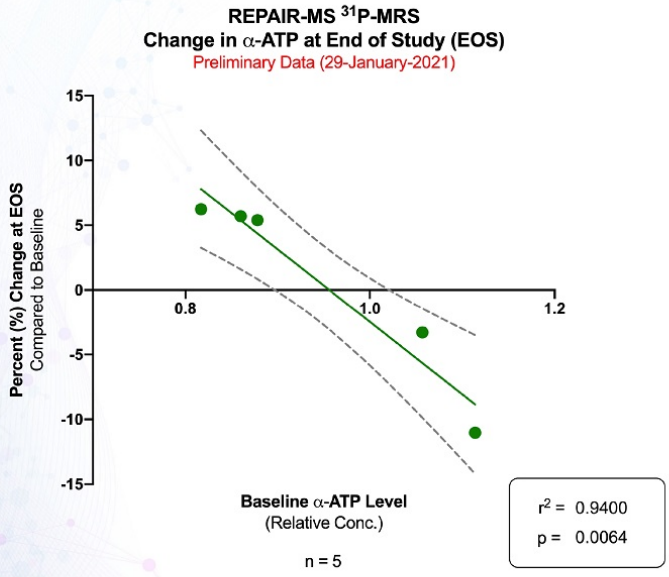
REPAIR-MS | Percent Change in NAD⁺/NADH [Partial Volume Coil]

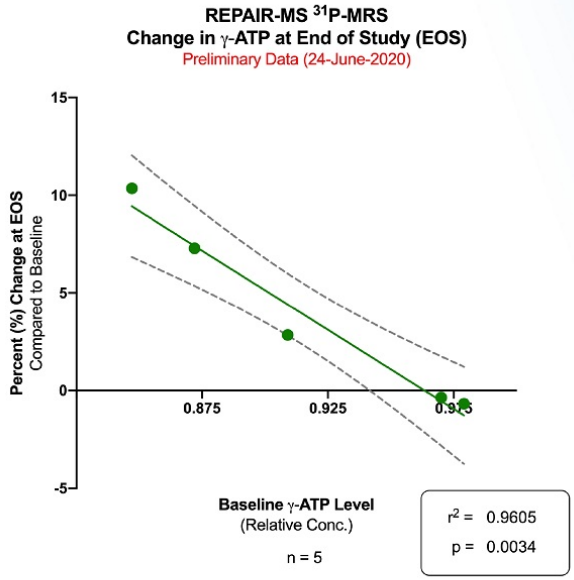




CNM-Au8 Normalizes Brain ATP Levels

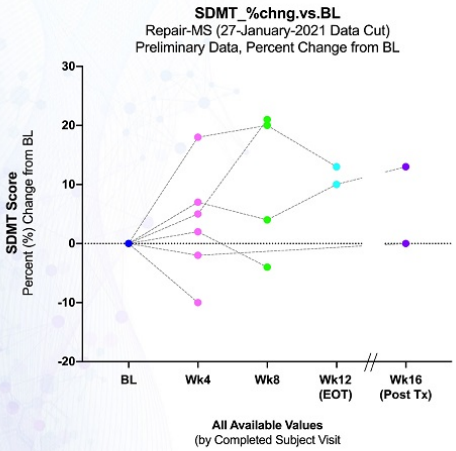
Correlation of % Change versus BL value by Subject for □–ATP & γ–ATP [Full Volume Coil]

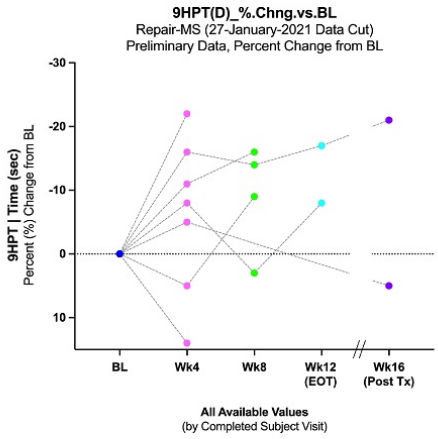


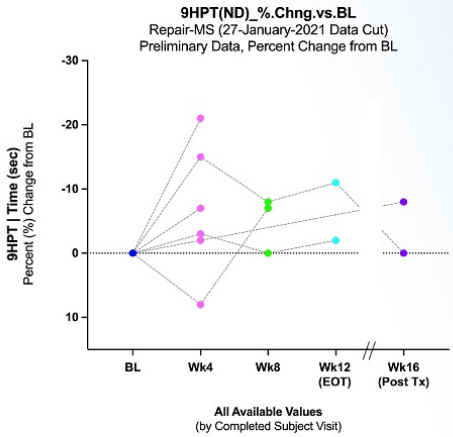


CNM-Au8 Open Label (m)MSFC Clinical Data

SDMT & 9HPT







Conclusions

- Data demonstrate CNM-Au8 target engagement in brains of MS patients

- Catalytic bioenergetic improvements demonstrated across key CNS metabolic markers
  - NAD+/NADH ratio
  - ATP (α, γ)


CLNN (NASDAQ)
clene.com
clene
NANOMEDICINE

Forward Looking Statements

This presentation contains "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Clene's actual results may differ from its expectations, estimates, and projections and consequently, you should not rely on these forward-looking statements as predictions of future events. Words such as "expect," "estimate," "project," "budget," "forecast," "anticipate," "intend," "plan," "may," "will," "could," "should," "believes," "predicts," "potential," "might" and "continues," and similar expressions are intended to identify such forward-looking statements. These forward-looking statements involve significant known and unknown risks and uncertainties, many of which are beyond Clene's control and could cause actual results to differ materially and adversely from expected results. Factors that may cause such differences include Clene's ability to demonstrate the efficacy and safety of its drug candidates; the clinical results for its drug candidates, which may not support further development or marketing approval; actions of regulatory agencies, which may affect the initiation, timing and progress of clinical trials and marketing approval; Clene's ability to achieve commercial success for its marketed products and drug candidates, if approved; Clene's ability to obtain and maintain protection of intellectual property for its technology and drugs; Clene's reliance on third parties to conduct drug development, manufacturing and other services; Clene's limited operating history and its ability to obtain additional funding for operations and to complete the licensing or development and commercialization of its drug candidates; the impact of the COVID-19 pandemic on Clene's clinical development, commercial and other operations, as well as those risks more fully discussed in the section entitled "Risk Factors" in Clene's recently filed registration statement on Form S-4/A as well as discussions of potential risks, uncertainties, and other important factors in Clene's subsequent filings with the U.S. Securities and Exchange Commission. Clene undertakes no obligation to release publicly any updates or revisions to any forward-looking statements to reflect any change in its expectations or any change in events, conditions or circumstances on which any such statement is based, subject to applicable law. All information in this presentation is as of the date of presented or the date made publicly available. The information contained in any website referenced herein is not, and shall not be deemed to be, part of or incorporated into this presentation.

CLENE | Investment Highlights

Lead Asset: CNM-Au8 for Neuro Repair

- Nanocatalyst of Intracellular Biological Reactions
- Robust Preclinical Remyelination & Neuroprotection Data Across Multiple Animal Models in:
  - MS,
  - ALS, and
  - Parkinson's Disease
- NOAEL Findings From All Toxicity Studies
- Acceptable Phase 1 Safety Profile
- Up to 48-weeks Exposure in Clinical Trials

Unmet Medical Need & Market Opportunity

- No Effective Disease-Modifying Drugs for ALS or PD
- No MS Therapies Clinically Impact Remyelination & Neurorepair
- Remyelination and Neurorepair Sales Could Exceed $10B per annum[1]
  - ALS is a Lethal Motor Neuron Disease With Suboptimal Therapies
  - PD is Highly Prevalent With No Disease Modifying Treatments

Clinical Development Pipeline

- Two Phase 2 Brain Target Engagement Studies in PD and MS with Top Line Results anticipated in 2021
- Three Phase 2 POC Studies in ALS, MS, and COVID with Results Anticipated in the next 12-18 Months
- Phase 3 ALS Registrational Trial in with Full Results Anticipated in 1H 2022
- Ongoing ALS Early Access Program
- USA FDA Granted ALS Orphan Drug Designation

CNM-ZnAg for COVID-19

- Zinc-Silver Antiviral + Immune Support
- Phase 2 trial in Brazil to treat acutely symptomatic non-hospitalized COVID patients planned for 1H 2021
  - 1st Endpoint: Prevention of Hospitalization
  - 2nd Endpoint: Time to Symptomatic Improvement (Up to 28 Days)

Strong IP Portfolio

- 100+ Issued Patents Worldwide; 30+ Pending Patent Applications
- State of Matter Claims Cover Myelin Protection Mechanisms, Remyelination, and Neuroprotection to 2035 (with Patent Restoration Term)
- Manufacturing Device and Process Patents to 2030 and Beyond

Financials

- **CLNN** (NASDAQ)
- $31.9M USD (Gross) Raised via SPAC merger + PIPE
- Cash on Hand at end of 2020 of $59.3M USD (Unaudited)
- Anticipated Cash Runway into mid-2022
- $114M USD Raised Privately (Series A-D)
- +$18M in Additional Grant and Indirect Financial Support for ALS and MS Phase 2 & 3 Clinical Programs

[1] Data on file, Clene Nanomedicine, Inc.

clene NANOMEDICINE

CLENE | Management Team

BOARD CHAIR

Shalom Jacobovitz

- CIVIBIOPHARMA
- ACTELION
- Abbott
- Roche
- SANOFI

CEO

Rob Etherington

- ACTELION
- Pfizer
- PARKE-DAVIS

CMO

Robert Glanzman, MD, FAAN

- geneuro
- NEKTAR
- PURDUE
- Roche
- NOVARTIS
- Pfizer

CSO, FOUNDER

Mark Mortenson

- DUPONT
- ALCAN

Lanxide Corporation

Dupont Lanxide Composites

Lanxide Armor Company

Lanxide Performance Materials

Lanxide Electronic Components

CDO

Michael Hotchkin

- ACTELION
- Pfizer
- PARKE-DAVIS
- AVantureBio

CFO

Ted Jeong, DM

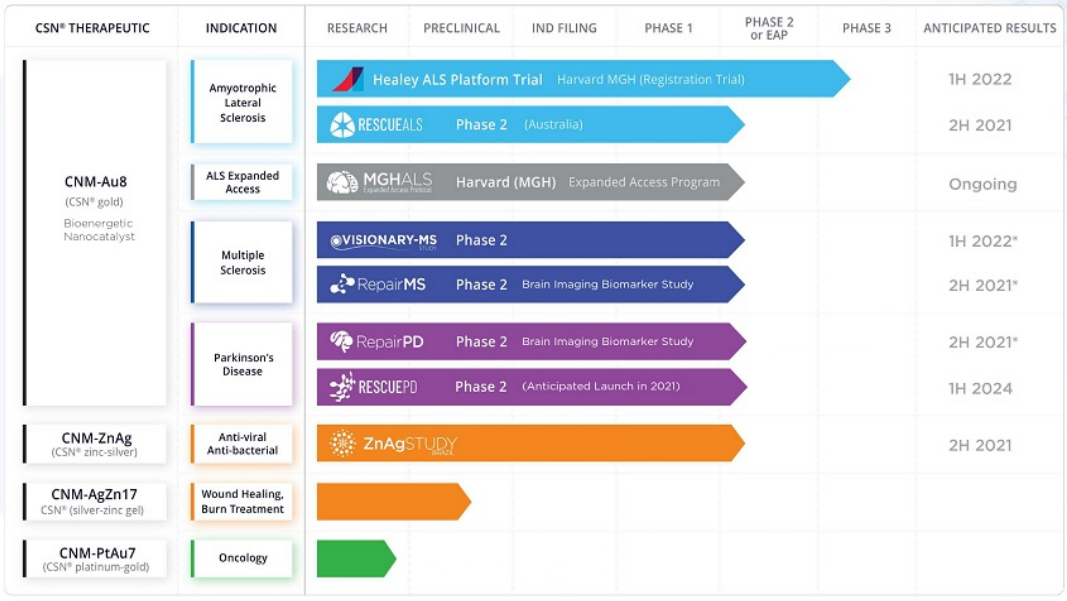
- NeuroBo PHARMACEUTICALS
- rexahn PHARMACEUTICALS
- HVIC
- KSV | KENSINGTON-SV GLOBAL

CLENE | Platform & Pipeline

Clean Surface Nanocrystal Therapeutics (CSN®)

CSN® PLATFORM — 100+ Granted Patents

Novel electro-chemistry platform produces catalytic Clean Surface Nanocrystal drugs designed to avoid toxicities associated with synthetic chemistry



*Subject to ongoing COVID-19 related site research restrictions generally implemented to protect MS patients taking standard-of-care immunosuppressive therapies

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Evolution of Gold
as a Therapeutic Modality

Chinese & Ayurvedic Gold Preparations
(China, Arabia, India)

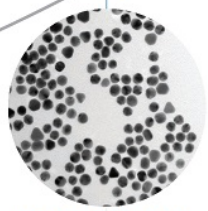
2500–1000 BC

1930–1980s

Monoatomic Gold Salts for Rheumatoid Arthritis
(IM Sodium Aurothiomalate;
IM Aurothioglucose;
Oral Auranofin)

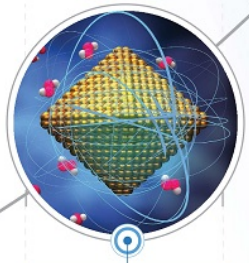
gold 3,4,5-triacetyloxy-6-(acetyloxymethyl oxane-2-thiolate; triethylphosphanium

1950s–2000s



Surface Modified and Functionalized Colloidal Gold Particles
Drug Carriers;
Photothermal Therapy

Clene's Patented Breakthrough



2020+

Catalytic Clean Surfaced Faceted Gold Nanocrystals

Pioneering Bioenergetic Nanocatalysis

CLENE NANOMEDICINE

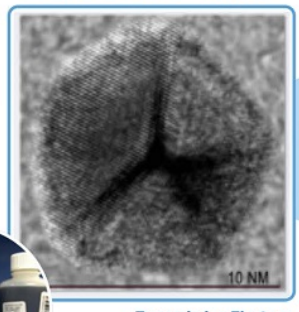
CNM-Au8 | Bioenergetic Nanocatalyst

Lead Asset

Novel mechanism of action to address a range of CNS diseases

- **Clean Surfaced Faceted Gold Nanocrystal**
- **13 nm Median Diameter** (Ribosome = 20-30 nm)
- **>1 Quadrillion Nanocrystals per 60 mL Dose** (At 30 mg)
- **Oral Suspension; Once Daily**

CNM-Au8



Transmission Electron Micrograph

Improved Cellular Bioenergetics

Remyelination Failure In MS

Parkinson's Disease

Amyotrophic Lateral Sclerosis

CLENE NANOMEDICINE

CNM-Au8 | Integrating Physics With Biology

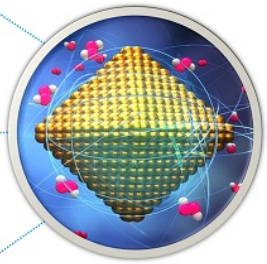
Nanocatalytic Electron Transfer

Surface Based Catalytic Activity

Electrons (e-) Move Freely Across Nanocrystal Surface

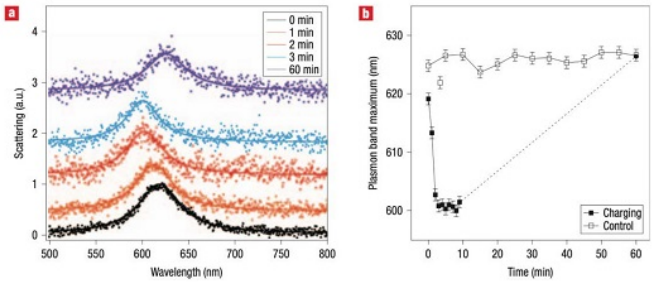
Vertices, Edges, & Faces Key to Catalytic Activity

Clean-Surfaced Nanocrystals



Up to 4,600 e^- per second per nanocrystal[1]

AuNP Catalyzed Oxidation of Ascorbic Acid[1]



a. Rayleigh scattering measured by dark field microscopy of surface plasmon resonance of scattering spectra of the AuNP decahedron before and at 1, 2, 3 and 60 min after electron injection by ascorbate ions.

b. Spectral shift as a function of time for the catalysis reaction and for the control experiment..

[1] Novo et al. Nature Nanotech 3, 598–602 (2008).

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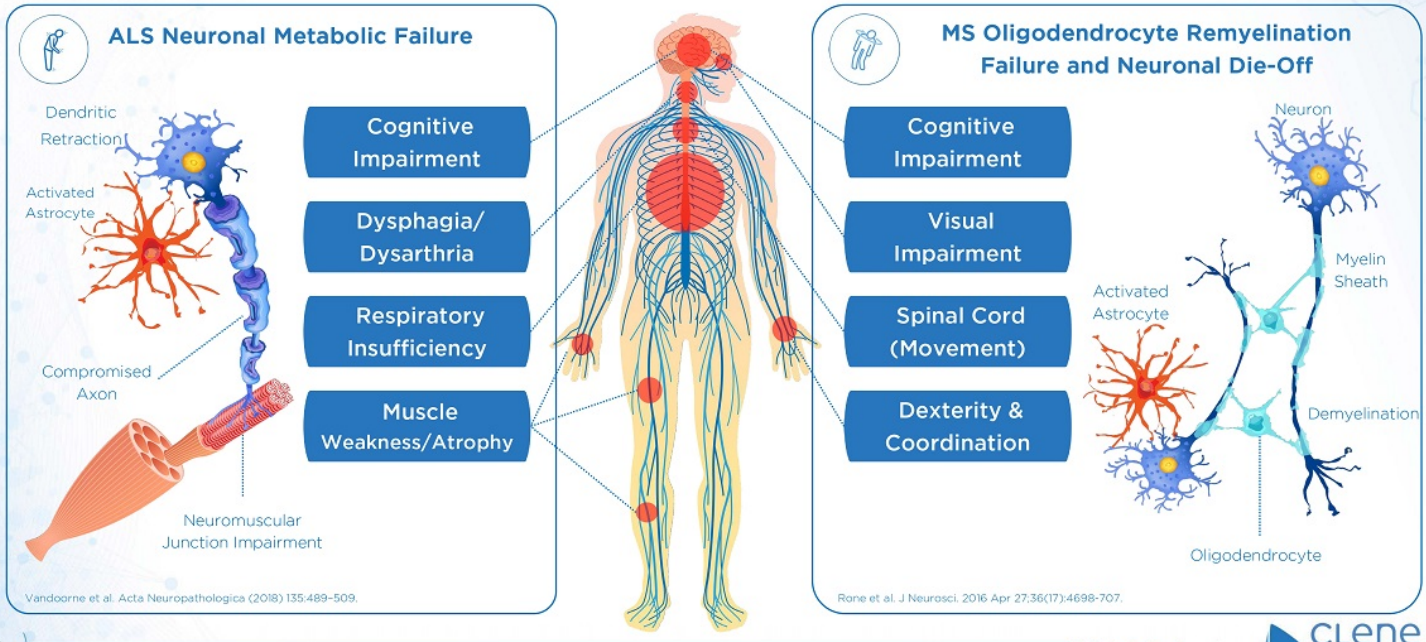
Treating Bioenergetic Failure | Common Pathological Mechanism In Neurodegenerative Disorders (MS, ALS, PD)



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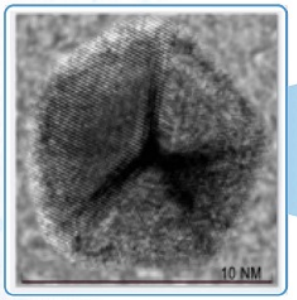
CNM-Au8 | MOA → Therapeutic Effects

Catalytic Gold Nanocrystals



Bioenergetic Mechanism

- Increased NAD [a]
- Increased ATP
- Decreased reactive oxygen species
- Increased proteostasis

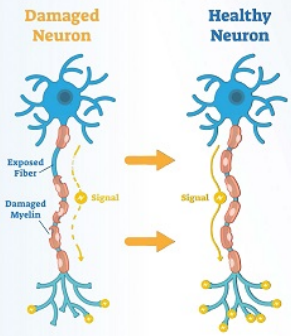
[a] Nicotinamide Adenine Dinucleotide

Enhanced Disease Response

- Increased energetic capacity

- Improved resistance to oxidative, mitochondrial, and excitotoxic stressors
- Reduction in levels of misfolded proteins

Remyelination



Neuro Repair

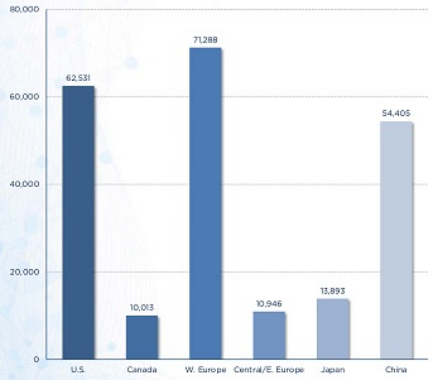
CLENE NANOMEDICINE

CNM-Au8 | Significant Global Opportunity

MOTOR NEURON DISEASE
(ALS, Other Orphan Disorders)

ALS sales >$1B globally by 2029[1]. Current drugs are largely ineffective, mostly generic.

Est. Diagnosed MND Patients by Region

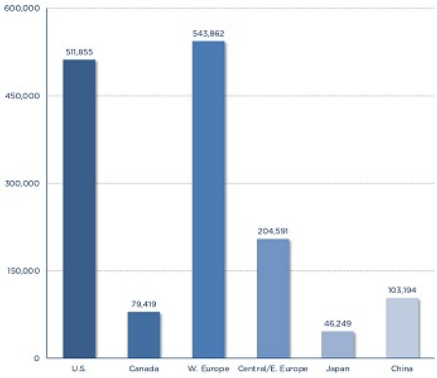


Source: Lancet Neurol. 2018 Dec;17(12):1083-1097.
MND includes amyotrophic lateral sclerosis, spinal muscular atrophy, hereditary spastic paraplegia, primary lateral sclerosis, progressive muscular atrophy, and pseudobulbar palsy

MULTIPLE SCLEROSIS
~2.5M pts globally; $23B market[2]

Only approved treatments are immunomodulators.

Est. Diagnosed MS Patients by Region

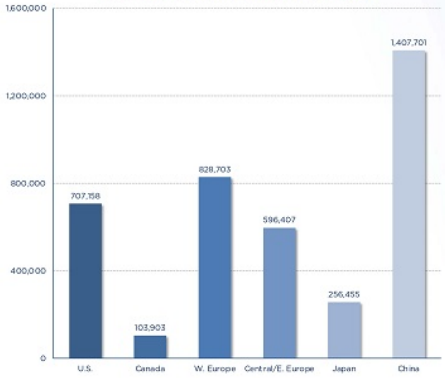


Source: Lancet Neurol. 2019 Mar;18(3):269-285

PARKINSON'S DISEASE
~7M pts globally; $6B projected by 2025[3]

2ND most common neurodegenerative disorder; only symptomatic treatments

Est. Diagnosed PD Patients by Region



Source: Lancet Neurol. 2018 Nov;17(11):939-953.

[1] Clarivate, DRG, ALS 2020 [2] Westad et al. 2017, doi:10.1038/nrd.2017.107. [3] Parkinson's Market Data Forecast, February 2020.

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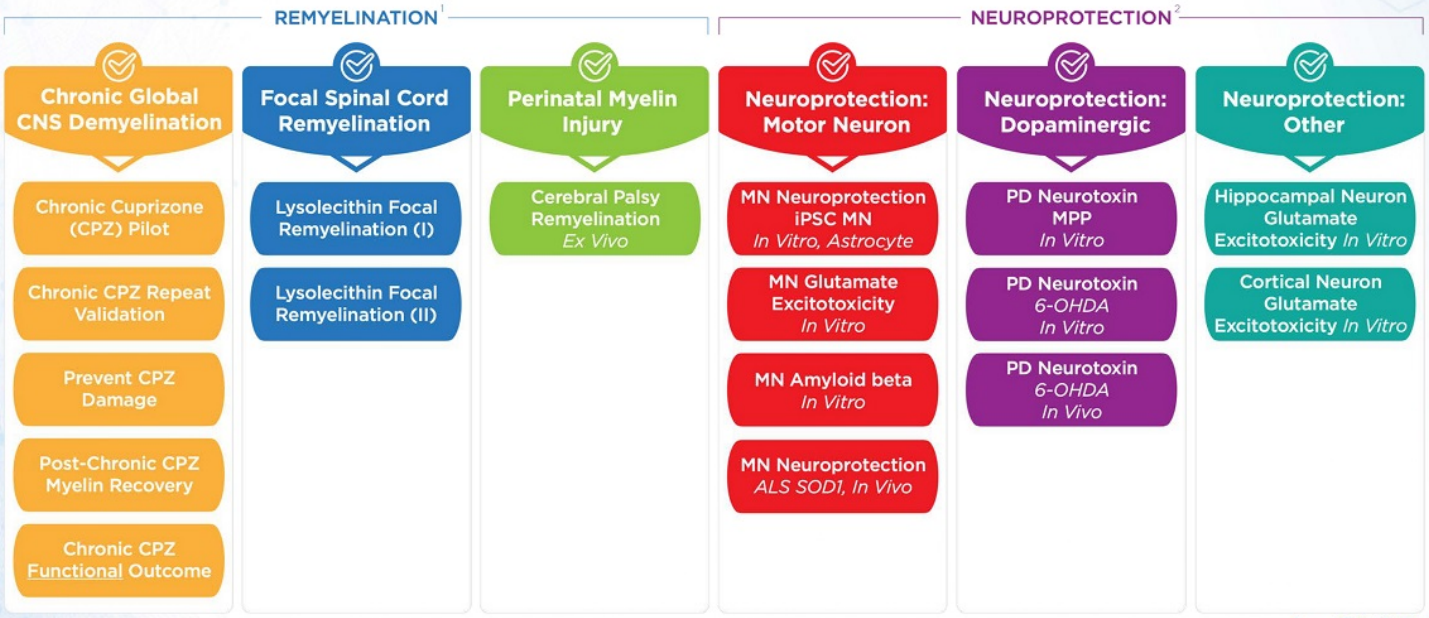
CNM-Au8 | Evidence for Bioenergetic Improvement

Therapeutic Activity Across Remyelination + Neuroprotection Models



[1] Robinson et al. Sci Rep. 2020. DOI: 10.1038/s41598-020-58709-w. [2] Ho et al. Society for Neuroscience Meeting, 2019. Ho et al. Motor Neuron Disease Associating Meeting, 2019. Data on File, Clene Nanomedicine, Inc.

CLENE NANOMEDICINE

CNM-Au8 | MOA & Remyelination Data Published

www.nature.com/scientificreports

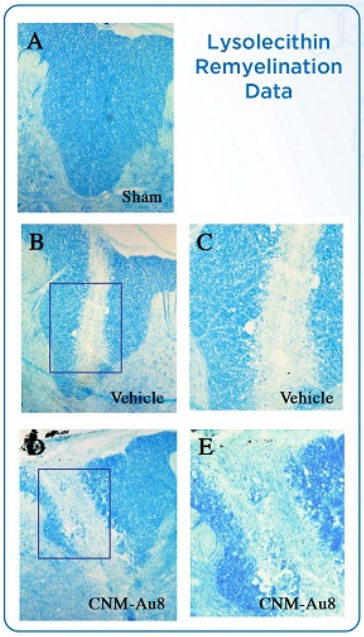
SCIENTIFIC REPORTS
nature research

OPEN

Nanocatalytic activity of clean-surfaced, faceted nanocrystalline gold enhances remyelination in animal models of multiple sclerosis

Andrew P. Robinson[1,9], Joanne Zhongyan Zhang[2,9], Haley E. Titus[1], Molly Karl[3], Mikhail Merzliakov[2], Adam R. Dorfman[2], Stephen Karlik[4], Michael G. Stewart[5], Richard K. Watt[5], Benjin D. Facer[6], Jon D. Facer[5], Noah D. Christian[7], Karen S. Ho[2,8*], Michael T. Hotchkin[2,9], Mark G. Mortenson[2,9], Robert H. Miller[3,9] & Stephen D. Miller[1,9]

Robinson et al. Sci Rep. 2020 Feb 11;10(1):1936. doi: 10.1038/s41598-020-58709-w



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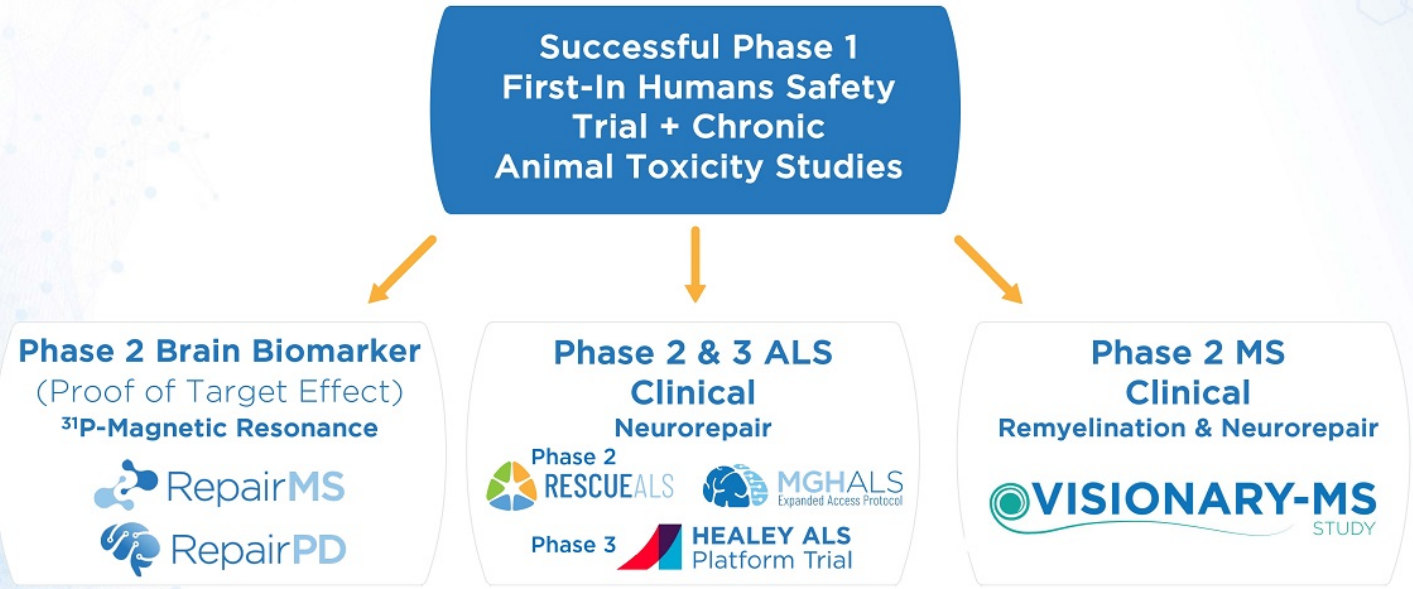
CNM-Au8 | Clinical Program Overview



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CNM-Au8 | Clean Toxicology Findings

All Studies Resulted in No Adverse Effect Level (NOAEL)[a]

Standard ICH M3(R2) Toxicology Program

Genotoxicity *In Vitro & In Vivo (Rodent)*	**Single Dose Toxicokinetics** *Canine*	**Max Feasible Toxicokinetics** *Rodent (1-Wk, SQ)*	**Chronic Toxicity Rodent** *Rodent (6-Month)*
Safety Pharmacology *CNS, CV, Renal*	**Multi-Dose Toxicokinetics** *Canine (7-Day)*	**Max Feasible Toxicokinetics** *Canine (3-Wk)*	**Chronic Toxicity Canine** *Canine (9-Month)*
Dose Range Finding *Rodent, Minipig*	**MTD Toxicokinetics** *Canine (4-Wk)*	**High Dose Toxicokinetics** *Rodent (3-Wk)*	

[a] NOAEL = No Dose Limiting Toxicities Observed

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CNM-Au8 | Well Tolerated With No Known Safety Issues

No Related SAEs or Related Study Discontinuations In Any Study

Phase 1 First In Human Study Completed (n=80)

- **Single-ascending dose**
  - 4 cohorts of 8 subjects plus one repeat (n=40)
  - 15, 30, 60, 90 mg
  - 3:1 randomized (active:control)
  - 1 dose; 17-day follow-up
- **Multi-ascending dose**
  - 4 cohorts of ~12 subjects (n=46)
  - 15, 30, 60, 90 mg
  - 3:1 randomized (active:control)
  - 21 days daily dosing + follow-up (Up to 50 days)

- **Most frequent TEAEs by System Organ Class: Nervous/GI**
  - Nearly all of the TEAEs were Grade 1 severity (mild)
- **No serious TEAEs, TEAEs leading to discontinuation of treatment, or TEAEs considered severe, life-threatening, or resulting in death**
- **No dose responsive TEAEs observed in SAD or MAD**

Phase 2 & 3 Clinical (>75 Years Exposure)

VISIONARY-MS STUDY + Long-Term Extension

RESCUEALS + Long-Term Extension

HEALEY ALS Platform Trial

MGHALS Expanded Access Protocol

RepairPD

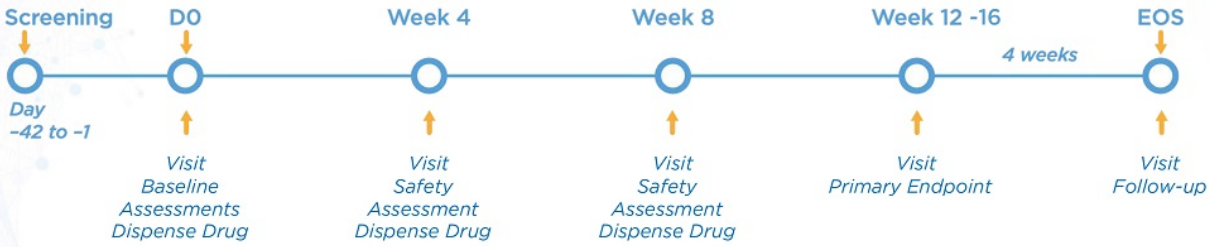
RepairMS

CLENE NANOMEDICINE

Phase 2
RepairPD
RepairMS

CNM-Au8 Effects on Brain Bioenergetic Metabolites

A Phase 2, Open Label, Sequential Group, Investigator Blinded Study of Magnetic Resonance Spectroscopy (^{31}P-MRS) to Assess the Effects of CNM-Au8 for the Bioenergetic Improvement of Impaired Neuronal Redox State



1° **Change in Brain Bioenergetic Potential (NAD+/NADH) vs. Baseline**

N = Up to 15 per dosing cohort

(7.5, 15, 30, or 60 mg)

2°
- Difference in bioenergetic metabolites (e.g., ATP, PCr, NAD) concentration at Week 12 – 16
- Difference in brain membrane markers (PE, PC, etc.) at Week 12 – 16

Anticipated Top-Line Results
(Cohort 1):
Repair-PD: 2H 2021
Repair-MS: 2H 2021*

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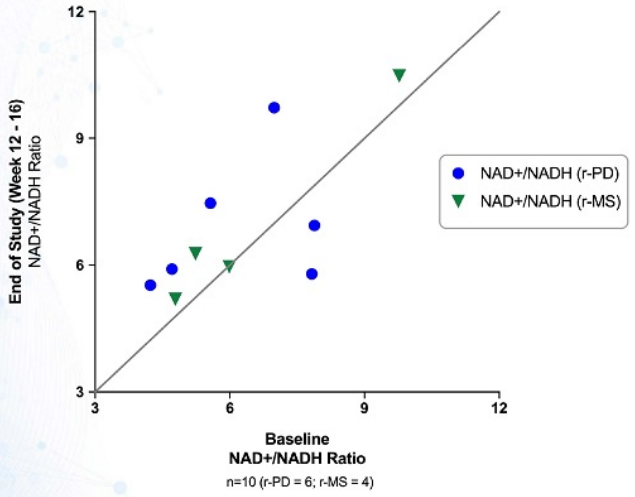
*Subject to ongoing COVID-19 related site research restrictions generally implemented to protect MS patients taking standard-of-care immunosuppressive therapies

RepairPD
RepairMS
Phase 2 Interim Data

CNM-Au8 Improved Brain Metabolic Markers

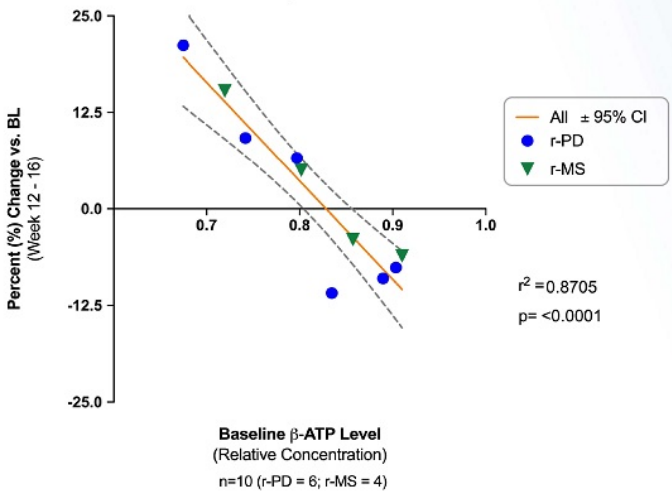
Elevated NAD+/NADH & Normalized ATP Levels in MS & PD

^{31}P-MRS Change in NAD+/NADH Ratio at End of Study
Partial Volume Coil; Preliminary Data (24-June-2020)
^{31}P Signal Area



n=10 (r-PD = 6; r-MS = 4)

^{31}P-MRS Change in β-ATP at End of Study
Full Volume Coil; Preliminary Data (24-June-2020)
^{31}P Signal Area



n=10 (r-PD = 6; r-MS = 4)

Glanzman, R., J. Ren, A. Rynders, B. Greenberg, R.B. Dewey, K. S. Ho, and M. T. Hotchkin. "Effects of Nanocatalysis on CNS Bioenergetic Markers in Patients Treated with CNM-Au8: Interim Results from Two Phase 2 31-Phosphorous Magnetic Resonance Imaging Studies." Presented at the MSVirtual 2020, September 11, 2020.

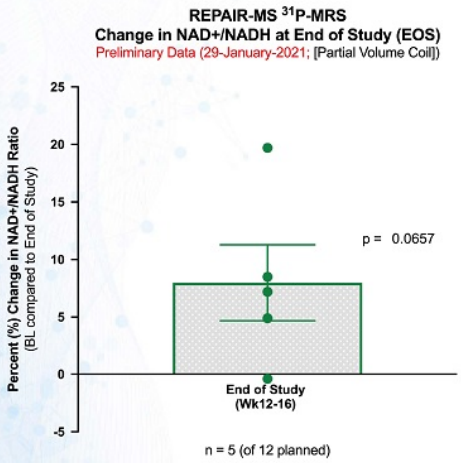
CLENE NANOMEDICINE

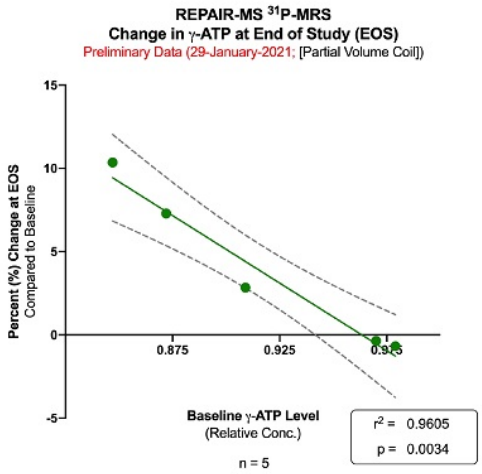
RepairMS

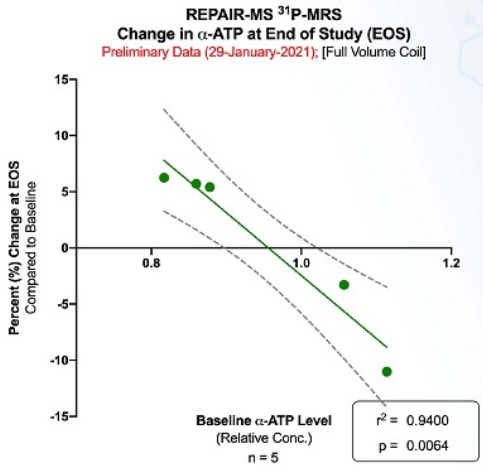
Phase 2 Interim Data

CNM-Au8 Improved Brain Metabolic Markers

Elevated NAD+/NADH & Normalized ATP Levels in MS







Glanzman, R., J. Ren, A. Rynders, B. Greenberg, R.B. Dewey, K. S. Ho, and M. T. Hotchkin. "Effects of Nanocatalysis on CNS Bioenergetic Markers in Patients Treated with CNM-Au8: Interim Results from a Phase 2 31Phosphorous Magnetic Resonance Imaging Study in Relapsing MS." Presented at the ACTRIMS Forum 2021, February 26th, 2021.

CLENE NANOMEDICINE

Phase 2
RESCUEALS

Randomized, Double-Blind, Placebo-Controlled Study in Early Symptomatic Amyotrophic Lateral Sclerosis Patients on Stable Background Therapy to Assess Bioenergetic Catalysis with CNM-Au8 to Slow Disease Progression in ALS

36-Week Treatment Period (n=42) 30mg, Placebo

SCREENING (January 2020); FPFV 16-Jan-2020; 42 of 42 enrolled (7-Sep-2020)

Week 6 | Week 12 | Week 18 | Week 24 | Week 30 | Week 36 | Week 42 | Week 48 | Week 54 | Week 60 | Week 66 | Week 72 | Week 76

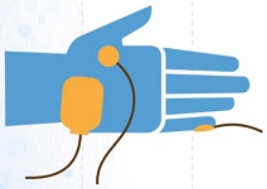
Day -28 to -1

6 WEEKS

EOS

Open Label Extension

Phone calls at Weeks 3, 6, 18, 30



1° **Change in Electromyography (Motor Unit Index)**
Abductor Digiti Minimi, Abductor Pollicis Brevis, Biceps Brachii, Tibialis Anterior

2°
- MScanFit MUNE
- Motor Unit Size Index
- Neurophysiological Index
- Split Hand Index

Exploratory Endpoints
- ALSFRS-R
- Combined Joint-Rank (Survival + ALSFRS-R)
- FVC
- Change in Rate of ALSFRS-R progression
- QOL

Anticipated full unblinded data readout: 2H 2021

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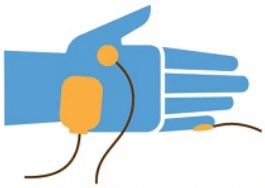
Measuring ALS Disease Progression

Electromyography Predicts Clinical Progression

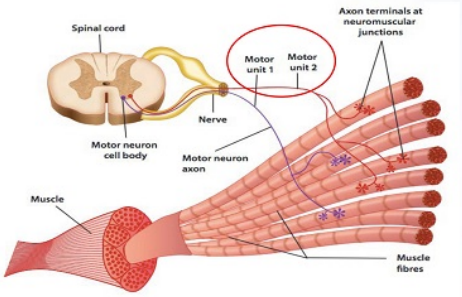
Predictive Endpoints of Disease Progression

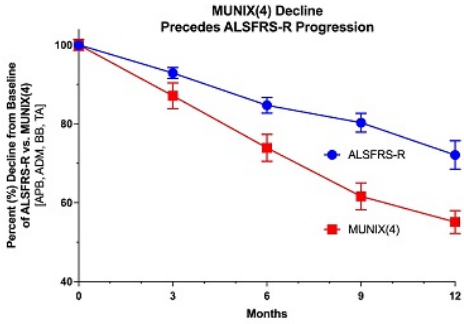
- **Loss of Motor Units**
  Motor Unit Index (MUNIX)



Clinical Endpoints

- **ALSFRS-R**
- **Pulmonary Function**
  (Vital Capacity)
- **Mortality**





Neuwirth et al. JNNP 2015 Nov;86(11):1172-9.

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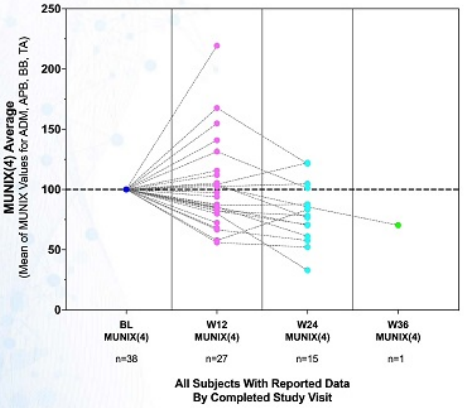
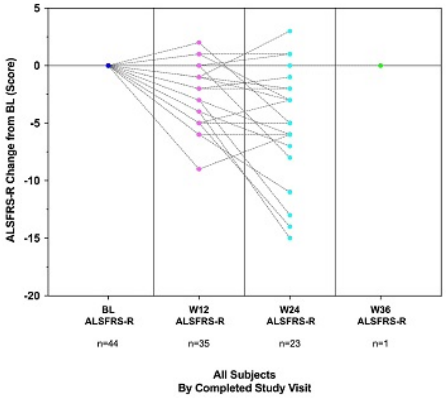
Phase 2 RESCUEALS

Emerging Evidence of Primary Endpoint MUNIX(4) and Clinical Improvement

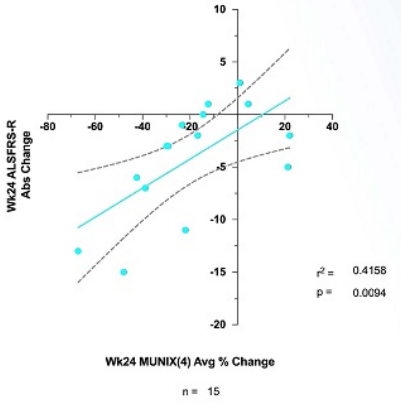
Blinded Data: MUNIX(4) Change from BL
27-October-2020 Data Cut; Preliminary Data
(All Participants Values By Completed Visits; BL Indexed to 100)



Blinded Data: ALSFRS-R Score Change from BL
27-October-2020 Data Cut; Preliminary Data
(All Participant Scores By Completed Visits)



Blinded Data: MUNIX(4) Change vs. ALSFRS-R Abs Change
27-October-2020 Data Cut; Preliminary Data
(Week 24 Participant Values)



Robert Glanzman MD FAAN, et al. "Design, Objectives, and Preliminary Blinded Data from the Ongoing RESCUE-ALS Trial of CNM-Au8 to Slow Disease Progression in Amyotrophic Lateral Sclerosis Patients" Presented at 31st International Symposium on ALS/MND (Virtual 2020),, December 10th, 2020.

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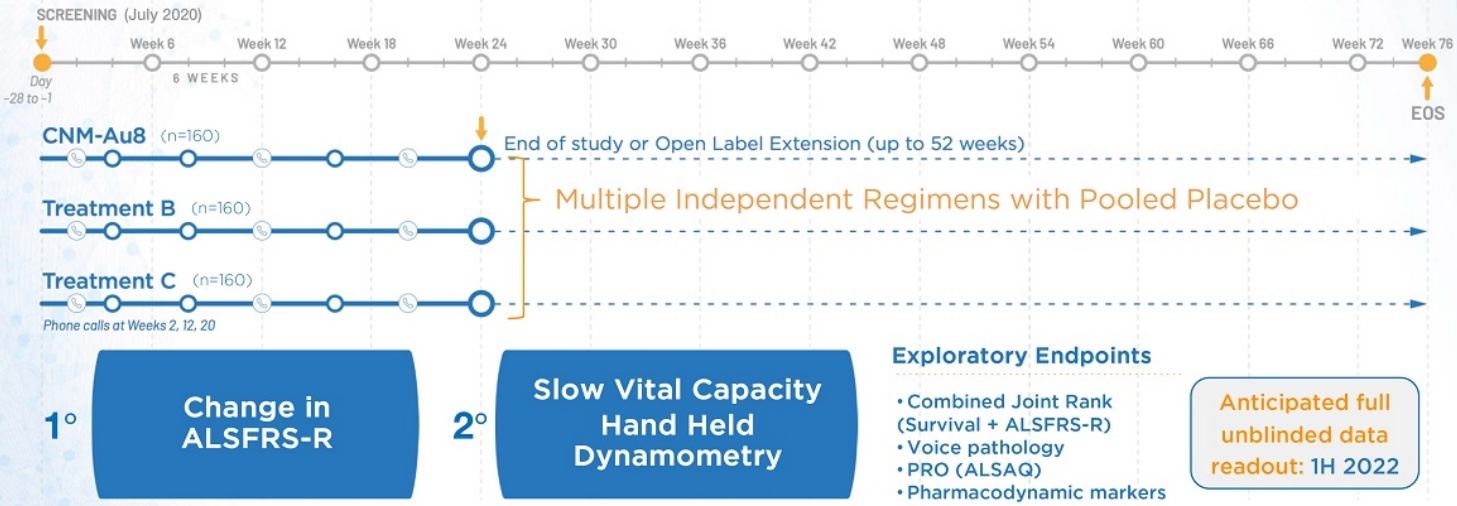
Phase 3
HEALEY ALS Platform Trial

A Multi-center, Randomized Double-Blind, Placebo-Controlled Clinical Trial Assessing the Efficacy, Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of CNM-Au8 in Participants with Amyotrophic Lateral Sclerosis

Registration Study: 24-Week Treatment Period (3:1 randomization, 120 active [30mg, 60mg]: 40 placebo)



1° **Change in ALSFRS-R**

2° **Slow Vital Capacity Hand Held Dynamometry**

Exploratory Endpoints

- Combined Joint Rank (Survival + ALSFRS-R)
- Voice pathology
- PRO (ALSAQ)
- Pharmacodynamic markers

Anticipated full unblinded data readout: 1H 2022

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Phase 2

VISIONARY-MS STUDY

Treatment of Visual Pathway Deficits In Chronic Optic Neuropathy for Assessment of Remyelination in Non-Active Relapsing MS

24-Week Blinded Fixed Treatment Period | **Up to 24-Week Blinded Extension Period** (Until LPLV 24Wk Visit)

Up to 48-Week Placebo-Control
2:1 Randomization (Active: Placebo)
15mg, 30mg, Placebo (n=150)

1° **Change in Low Contrast Letter Acuity (LCLA)**
At Week 24

2° **Change Composite Clinical Response**
9HPT / SDMT / T25FW / LCLA / EDSS

Exploratory Endpoints

- Optical Coherence Tomography (OCT)
- Multi-focal VEP Amplitude & Latency
- Full field-VEP Amplitude & Latency
- MRI Endpoints
- Visual Function (High Contrast)
- QOL / EDSS

Anticipated top-line unblinded data:
1H 2022*

*Subject to ongoing COVID-19 related site research restrictions generally implemented to protect MS patients taking standard-of-care immunosuppressive therapies

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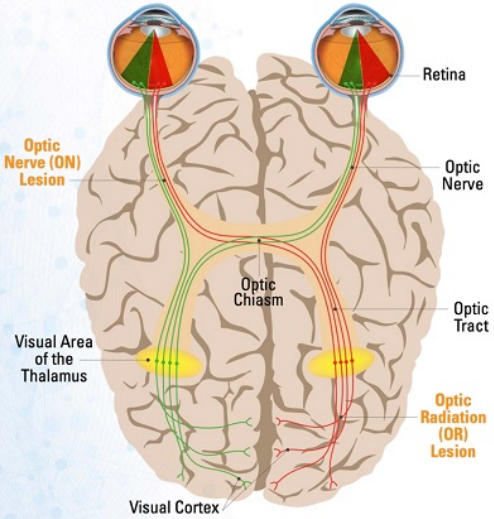
Measuring MS Functional Improvement

The Visual System is a Window into the Brain



LCLA

Phase 2 Primary:
Functional Visual Improvement

LCLA Correlates with clinically meaningful deficits in QOL, EDSS and MSFC, MRI, and OCT

MS Functional Endpoints

Phase 2 Exploratory:
Neuroprotection/Remyelination Endpoints

9-Hole Peg Test

Symbol Digit Modalities

Timed 25-Ft Walk

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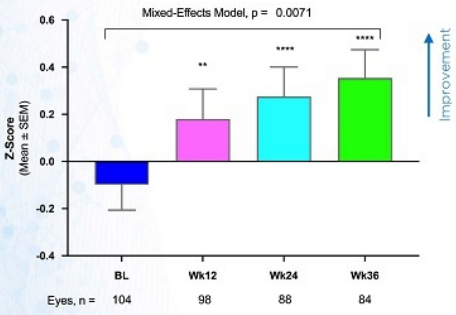
Phase 2 VISIONARY-MS STUDY

Emerging Evidence of Clinical Improvement

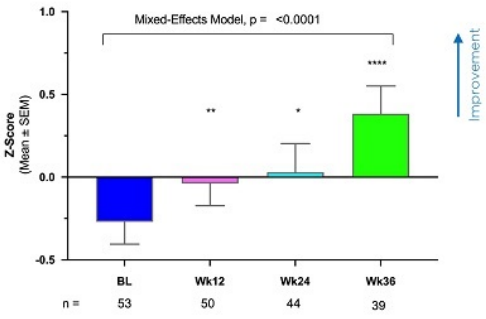
LCLA (Best-Corrected)

LCLA (All Eyes) Z.Score
13-January-2021 Data Cut, Preliminary Blinded Data
(Based on 'Mild' EDSS [≤1.5]; Mean ± SEM)



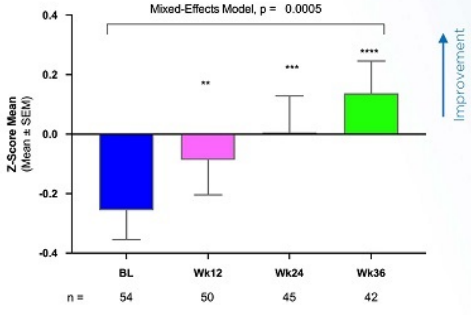
SDMT

SDMT Z.Score
13-January-2021 Data Cut, Preliminary Blinded Data
(Based on 'Mild' EDSS [≤1.5]; Mean ± SEM)



6-Component Integrated (m)MSFC

(m)MSFC 6-component Average Z.Score
13-January-2021 Data Cut, Preliminary Blinded Data
(Based on 'Mild' EDSS [≤1.5]; Mean ± SEM)



Z-Score change compared to the least-affected patients at Baseline (with EDSS <= 1.5)

All Available Values (by Completed Subject Visit)
Mixed Effects Model, Dunnett's test for multiplicity;
* p<0.05, ** p<0.01, *** p<0.001, **** p<0.0001

Glanzman, R., H. Beadnall, M. T. Hotchkin, A. Klistorner, M. Barnett, R. Sergott, A. Rynders, K. S. Ho, and Mark G. Mortenson. "Update to a Phase 2 clinical trial of catalytic gold nanocrystals, CNM-Au8, for the treatment of chronic optic neuropathy." Presented at the ACTRIMS Forum 2021, February 26, 2021.

CLENE NANOMEDICINE

Strong Intellectual Property

Extensive Patent Portfolio With Protection Through 2035[a] & Proprietary Trade Secrets; Plus 7-year Orphan Drug Designation

CSN®
Clean surface nanocrystal (CSN) therapeutics

Patent Status	Patent Description	Trade Secrets
Issued & Allowed Patents 100+	Process And Method/Device (Clean Surface; Gold CSN)	Plasma Conditioning
Pending Applications >30	State of Matter (CNM-Au8)	Electrode Design & Cycling
Total Patents/ Applications >130	Method of Use (Prevent Demyelination & MoA)	Trough Flow, Temp, Pressure
	Method of Use (Bi-Metallic Au/Pt; Antimicrobial)	Concentration & Filtration

[a] With Patent Restoration Term (assuming 5-year extension).

CLene NANOMEDICINE

Clene | Proprietary Nanocrystal Manufacturing

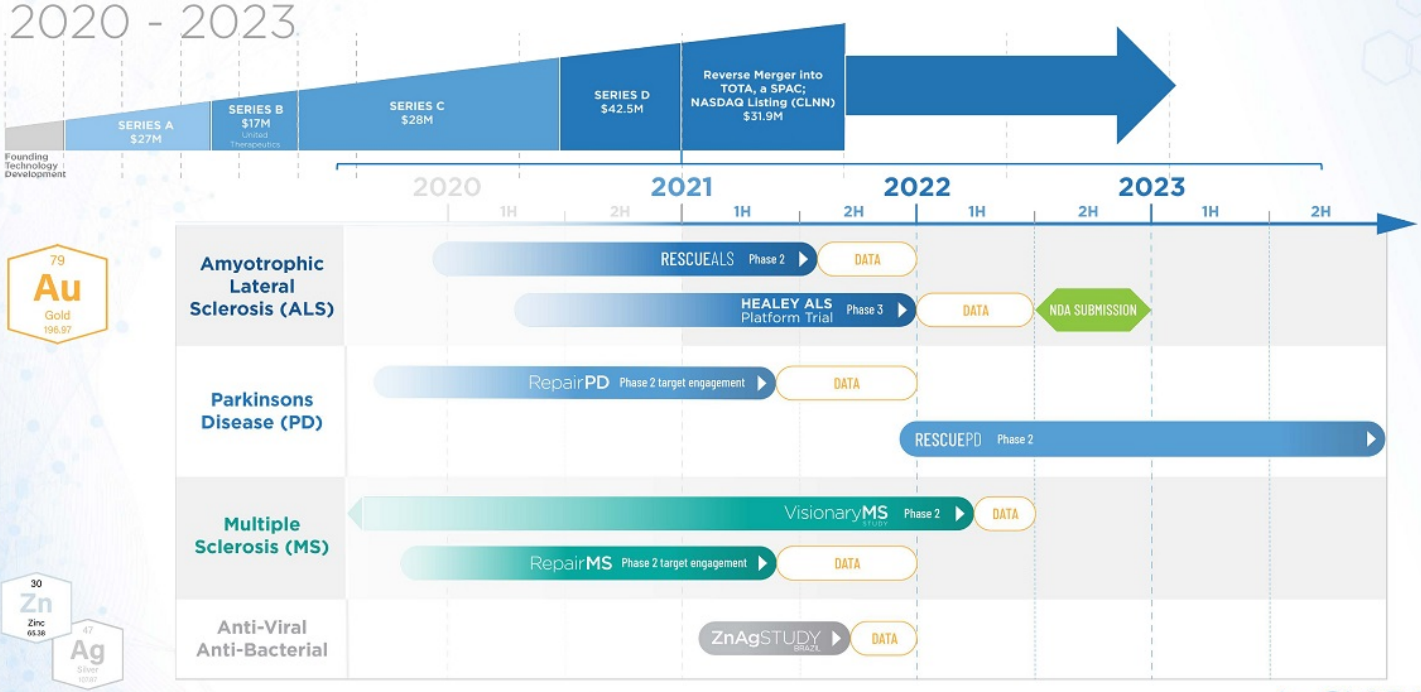
In-House ISO8 Clean Room Clinical Production in North East, MD

Designed to be Scalable to Commercialization

- Patented Hydro-electro-Crystallization
- Proprietary Trade Secrets
- Validated CMC Processes

Anticipated Timeline & Investor Catalysts

2020 - 2023



CLENE | Investment Highlights

Lead Asset: CNM-Au8 for Neuro Repair

- Nanocatalyst of Intracellular Biological Reactions
- Robust Preclinical Remyelination & Neuroprotection Data Across Multiple Animal Models in:
  - MS,
  - ALS, and
  - Parkinson's Disease
- NOAEL Findings From Toxicity Studies, Including Chronic
- Acceptable Phase 1 Safety Profile
- Up to 48-weeks Exposure in Clinical Trials

Unmet Medical Need & Market Opportunity

- No Effective Disease-Modifying Drugs for ALS or PD
- No MS Therapies Clinically Impact Remyelination & Neurorepair
- Remyelination and Neurorepair Sales Could Exceed $10B per annum[1]
  - ALS is a Lethal Motor Neuron Disease With Suboptimal Therapies
  - PD is Highly Prevalent With No Disease Modifying Treatments

Clinical Development Pipeline

- Two Phase 2 Brain Target Engagement Studies in PD and MS with Top Line Results anticipated in 2021
- Three Phase 2 POC Studies in ALS, MS, and COVID with Results Anticipated in the next 12-18 Months
- Phase 3 ALS Registrational Trial in with Full Results Anticipated in 1H 2022
- Ongoing ALS Early Access Program
- USA FDA Granted ALS Orphan Drug Designation

CNM-ZnAg for COVID-19

- Zinc-Silver Antiviral + Immune Support
- Phase 2 trial in Brazil to treat acutely symptomatic non-hospitalized COVID patients planned for 1H 2021
  - 1st Endpoint: Prevention of Hospitalization
  - 2nd Endpoint: Time to Symptomatic Improvement (Up to 28 Days)

Strong IP Portfolio

- 100+ Issued Patents Worldwide; 30+ Pending Patent Applications
- State of Matter Claims Cover Myelin Protection Mechanisms, Remyelination, and Neuroprotection to 2035 (with Patent Restoration Term)
- Manufacturing Device and Process Patents to 2030 and Beyond

Financials

- **CLNN** (NASDAQ)
- $31.9M USD (Gross) Raised via SPAC merger + PIPE
- Cash on Hand at end of 2020 of $59.3M USD (Unaudited)
- Anticipated Cash Runway into mid-2022
- $114M USD Raised Privately (Series A-D)
- +$18M in Additional Grant and Indirect Financial Support for ALS and MS Phase 2 & 3 Clinical Programs

[1] Data on file, Clene Nanomedicine, Inc.

clene NANOMEDICINE

Clene NANOMEDICINE

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