

BrainStorm Cell Therapeutics

NASDAQ: BCLI



brainstorm
cell therapeutics

January 2020

Forward Looking Statement

Statements in this announcement other than historical data and information constitute "forward-looking statements" and involve risks and uncertainties that could cause BrainStorm Cell Therapeutics Inc.'s actual results to differ materially from those stated or implied by such forward-looking statements. Terms and phrases such as "may", "should", "would", "could", "will", "expect", "likely", "believe", "plan", "estimate", "predict", "potential", and similar terms and phrases are intended to identify these forward-looking statements. The potential risks and uncertainties include, without limitation, risks associated with BrainStorm's limited operating history, history of losses; minimal working capital, dependence on its license to Ramot's technology; ability to adequately protect the technology; dependence on key executives and on its scientific consultants; ability to obtain required regulatory approvals; and other factors detailed in BrainStorm's annual report on Form 10-K and quarterly reports on Form 10-Q available at <http://www.sec.gov>.

These factors should be considered carefully, and readers should not place undue reliance on BrainStorm's forward-looking statements. The forward-looking statements contained in this press release are based on the beliefs, expectations and opinions of management as of the date of this press release. We do not assume any obligation to update forward-looking statements to reflect actual results or assumptions if circumstances or management's beliefs, expectations or opinions should change, unless otherwise required by law. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements.

Brainstorm at a Glance

CLINICAL STAGE BIOTECHNOLOGY COMPANY	ADVANCED STAGE CLINICAL PROGRAMS	LARGE ADDRESSABLE MARKETS
Potential to be first-in-class autologous stem cell therapy for ALS and other neurodegenerative diseases	Repeat Dose Phase 3 ALS trial fully enrolled	ALS 30,000 patients (US) 450,000 (Worldwide)
Experienced US management team; R&D in Israel	Repeat Dose Phase 2 Progressive MS Trial actively enrolling	Progressive MS 500,000 patients (US) 1,250,000 (Worldwide)
Robust IP portfolio	Robust Phase 2 clinical data in ALS; promising preclinical data in other neurodegenerative disease	Neurodegenerative disease prevalence expected to increase as population ages

Brainstorm's Pipeline

ALS – Amyotrophic Lateral Sclerosis (Lou Gehrig's Disease)				
Preclinical	Phase 1	Phase 2	Phase 3	

Progressive MS – Multiple Sclerosis				
Preclinical	Phase 1		Phase 2	Phase 3

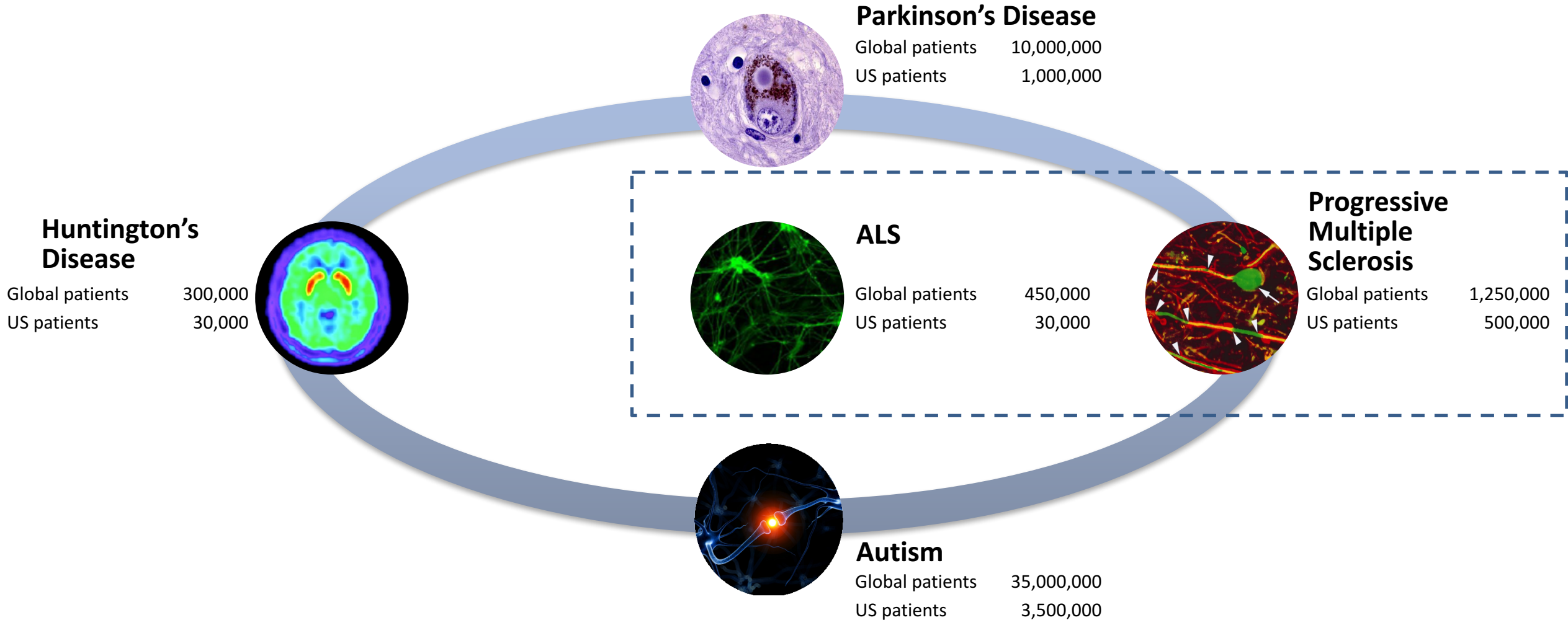
Parkinson's Disease				
Preclinical	Phase 1	Phase 2	Phase 3	

Autism Spectrum Disorder				
Preclinical	Phase 1	Phase 2	Phase 3	

Huntington's Disease				
Preclinical	Phase 1	Phase 2	Phase 3	

Peripheral Nerve Injury				
Preclinical	Phase 1	Phase 2	Phase 3	

NurOwn® - A Platform Technology Across CNS



NurOwn® is successfully evaluated in preclinical models of various neurodegenerative disease

NurOwn® Technology Process

1

Manufacturing process begins with a bone marrow aspiration to harvest adult MSCs from the patient

2

Isolation 12 Days

Expansion

Intermediate MSC product is cryopreserved

Cryopreservation

Transplantation

The proprietary culture medium induces the cells to secrete additional key neurotrophic factors (MSC-NTF cells)

Expansion

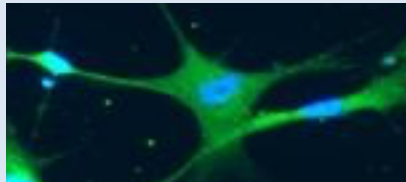
7 Days

NurOwn®
Differentiation

7 days from thawing to injection

4

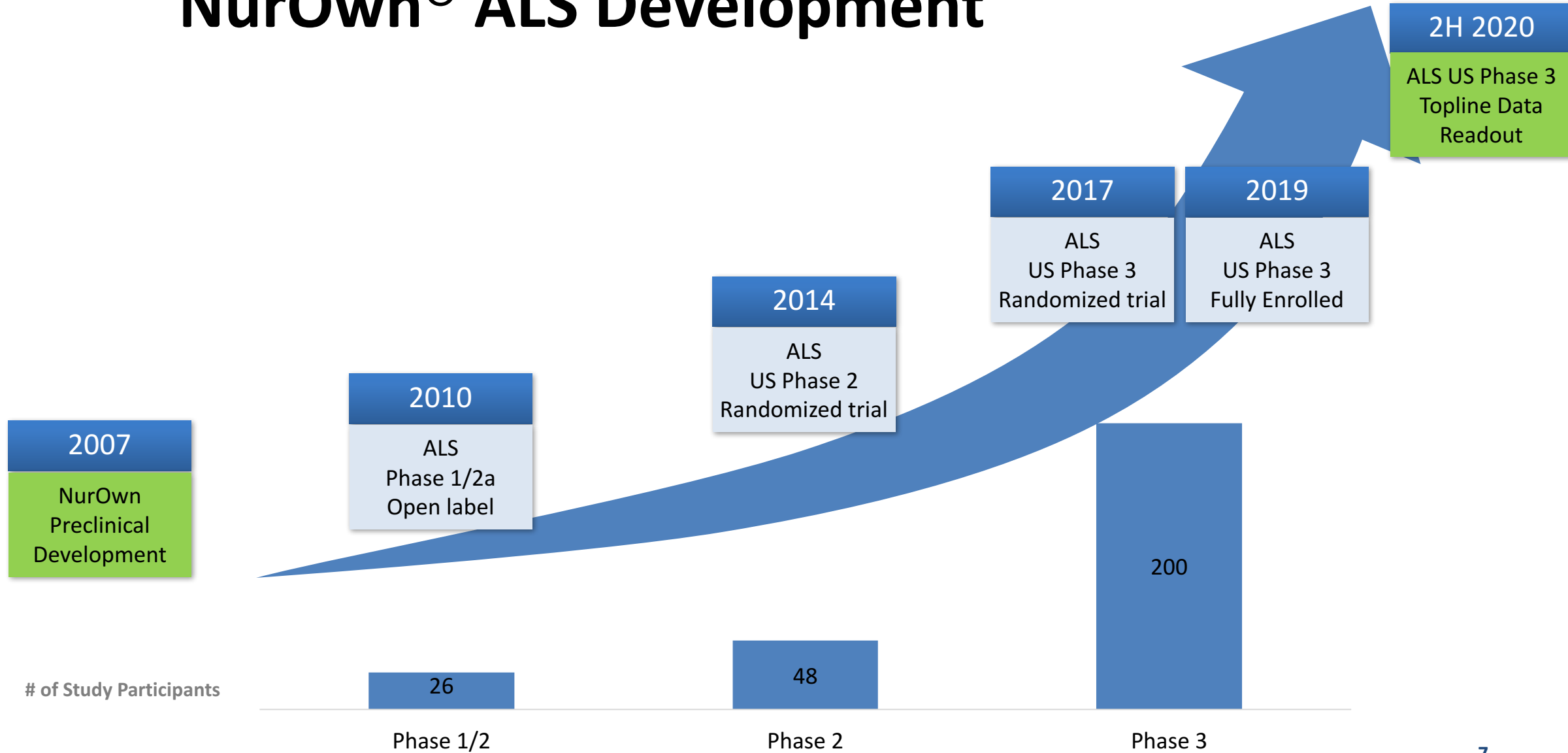
The cells are injected into the cerebrospinal fluid (CSF) of patients



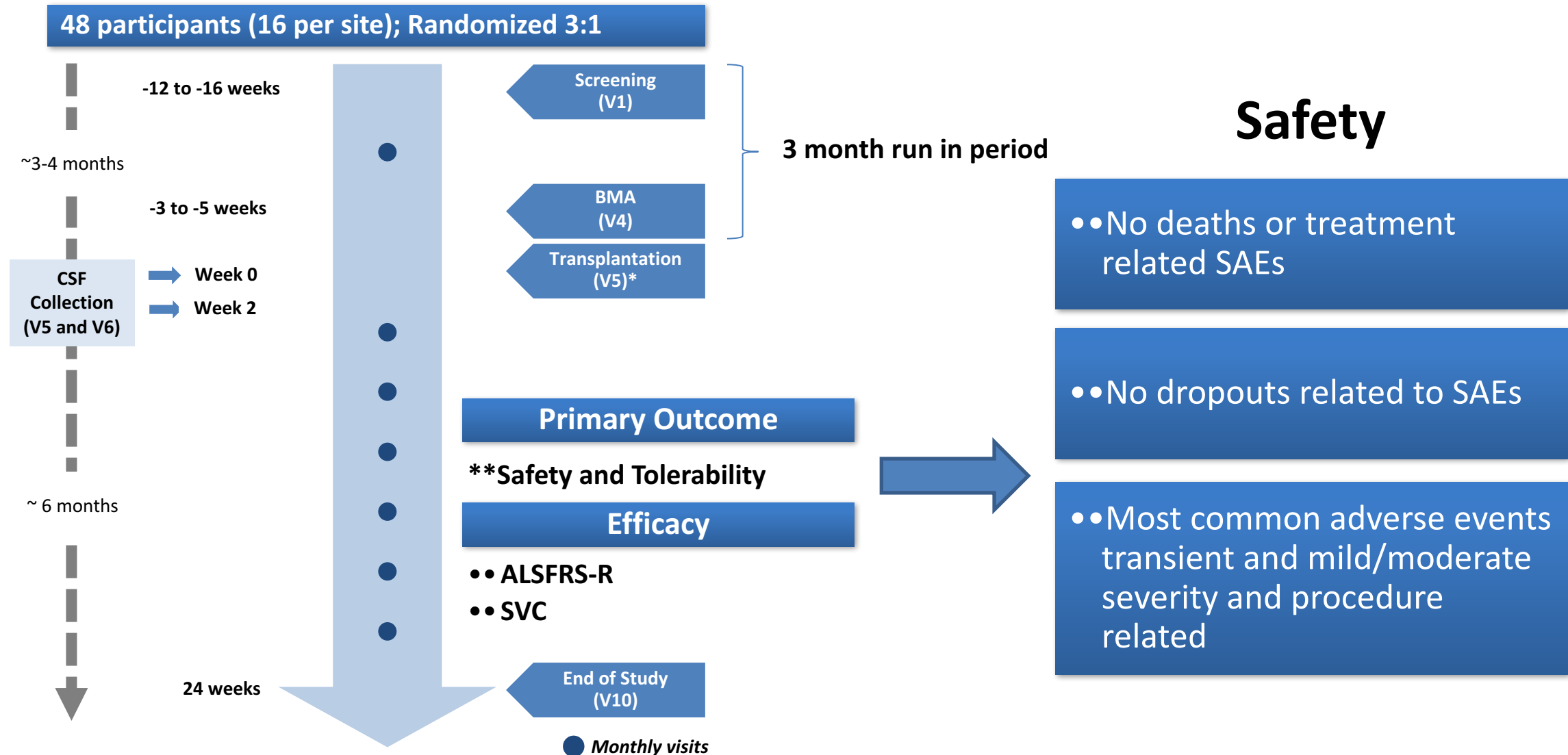
3

Cryopreserved intermediate product brings us very close to the convenience of allogeneic with the established safety of autologous

NurOwn® ALS Development



NurOwn® ALS Phase 2 Double-Blind Placebo-Controlled Trial



ALSFRS-R Efficacy Outcomes

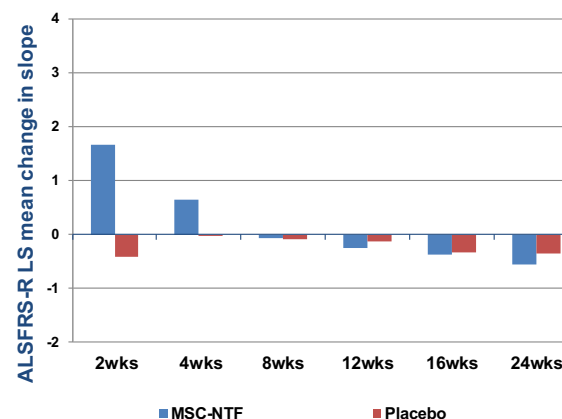
All n=46

Rapid Progressors n=21

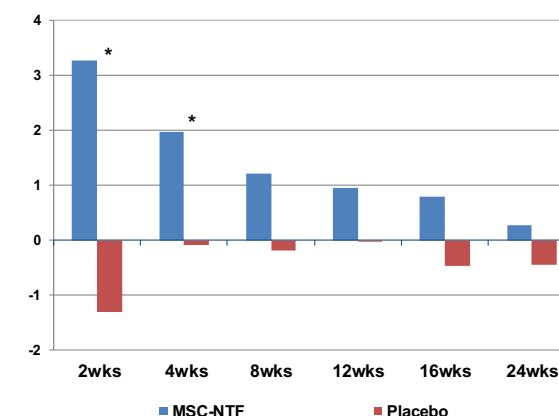
Mean ALSFRS-R
Post-pre slope change

Proportion of
Responders showing
≥1.5 points/month
ALSFRS-R slope
improvement

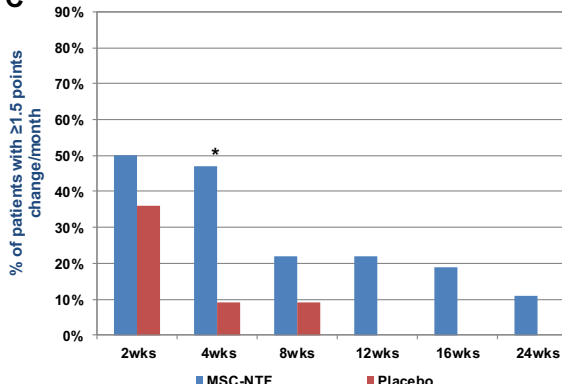
A Change from post-treatment to pre-treatment slope



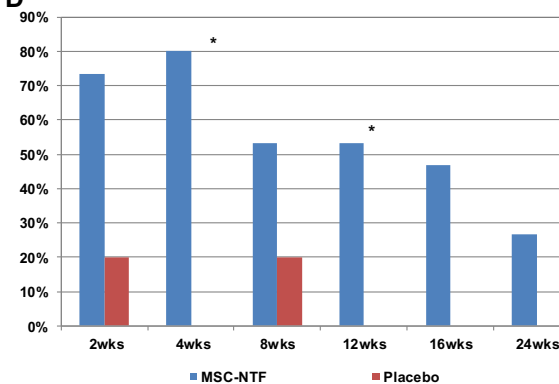
B Change from post-treatment to pre-treatment slope



C



D

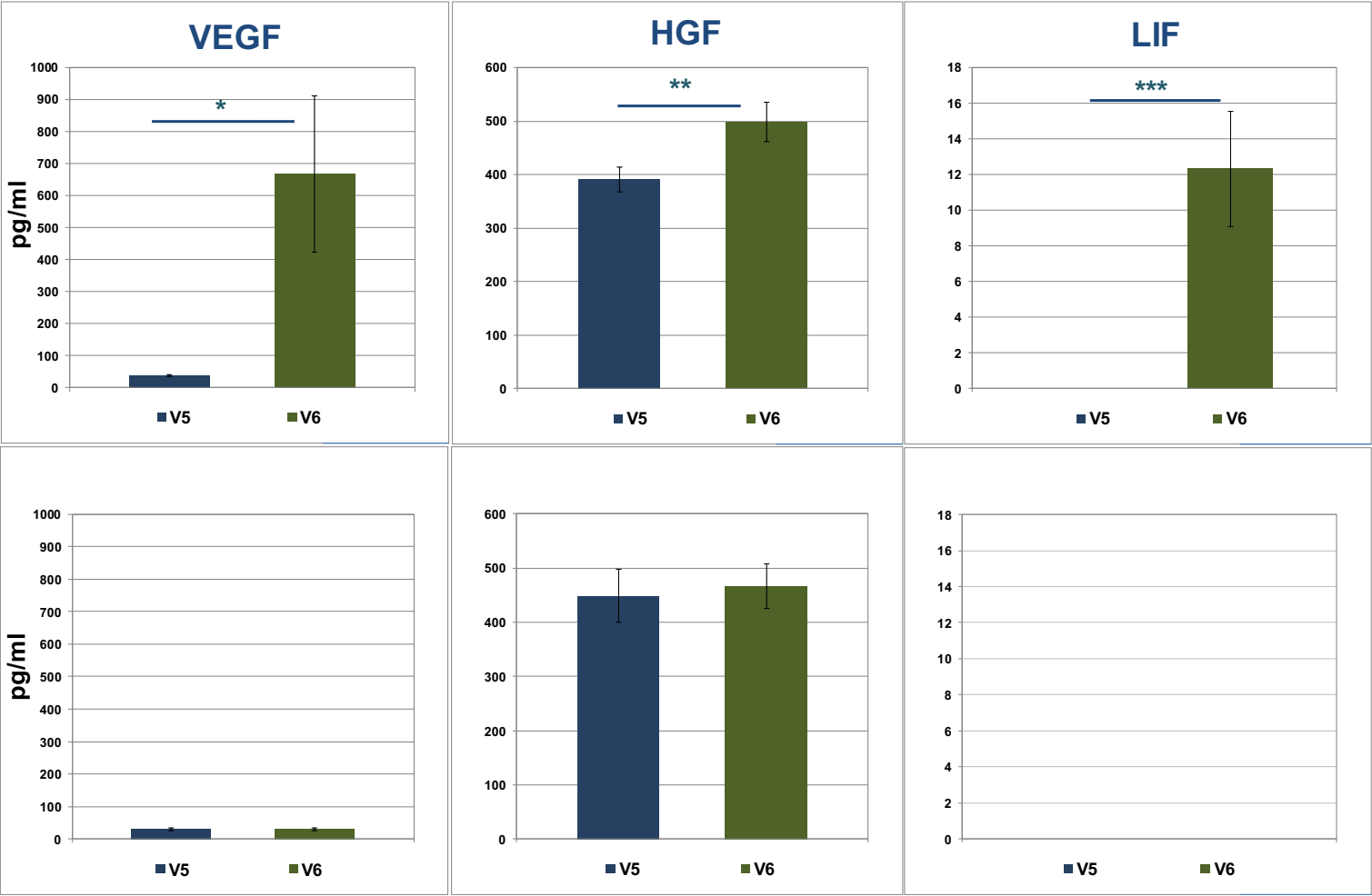


MSC-NTF
Placebo

Phase 2 CSF Biomarker Analyses

CSF Neurotrophic Factors Increased Post-Treatment

NurOwn®
(n = 26)



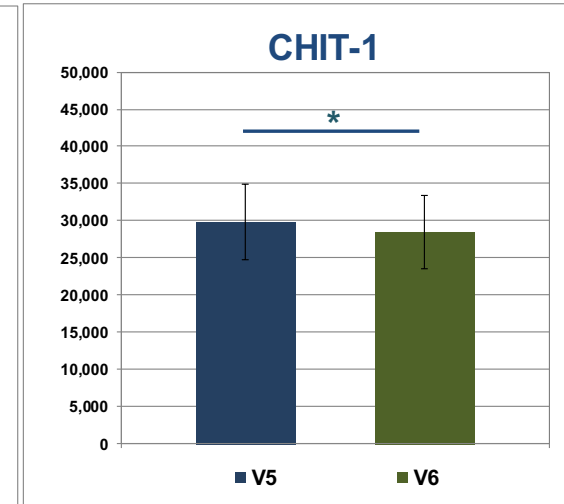
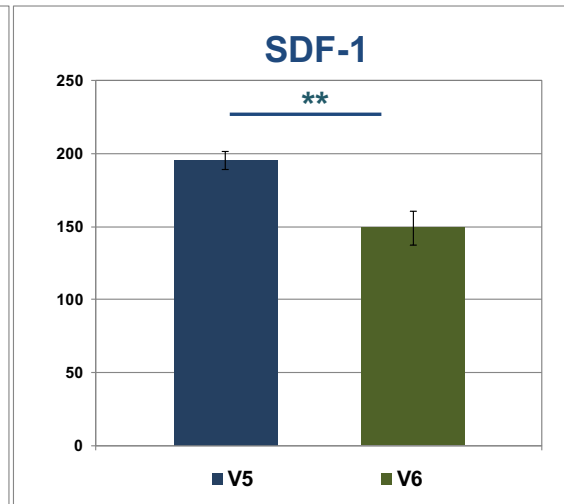
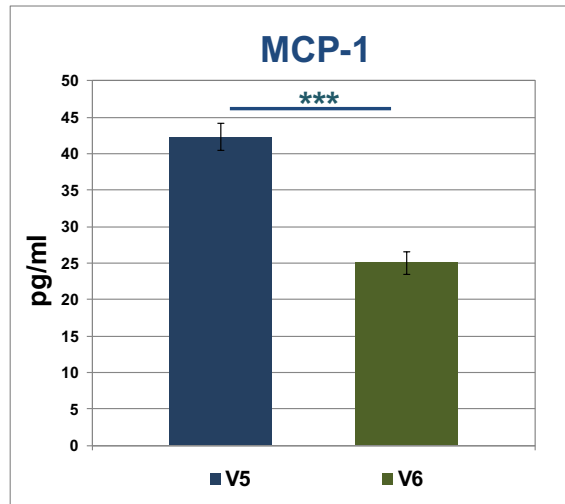
Placebo
(n = 9)

■ V5 -Pre transplantation
■ V6 - Post transplantation

*p<0.05, **p<0.01, ***p<0.001

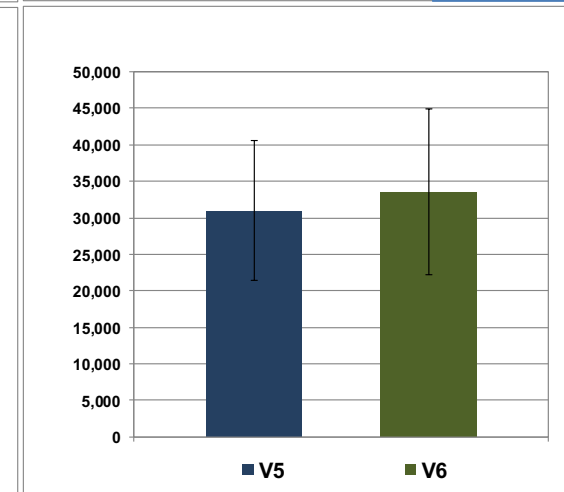
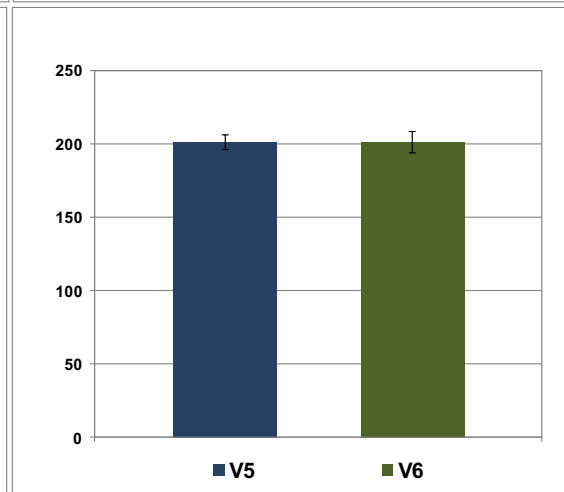
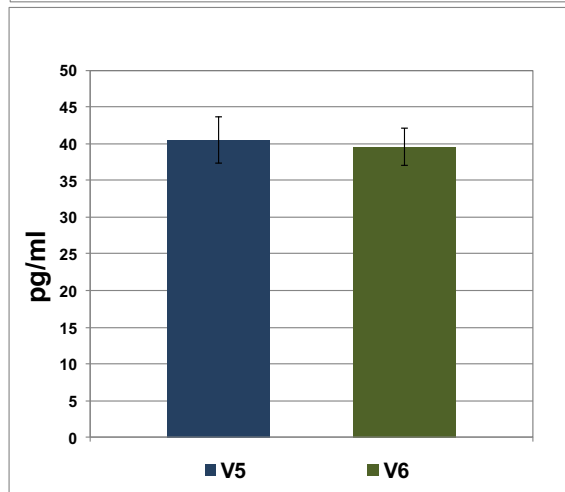
CSF Inflammatory Biomarkers Reduced Post-Treatment

NurOwn®
(n = 26)

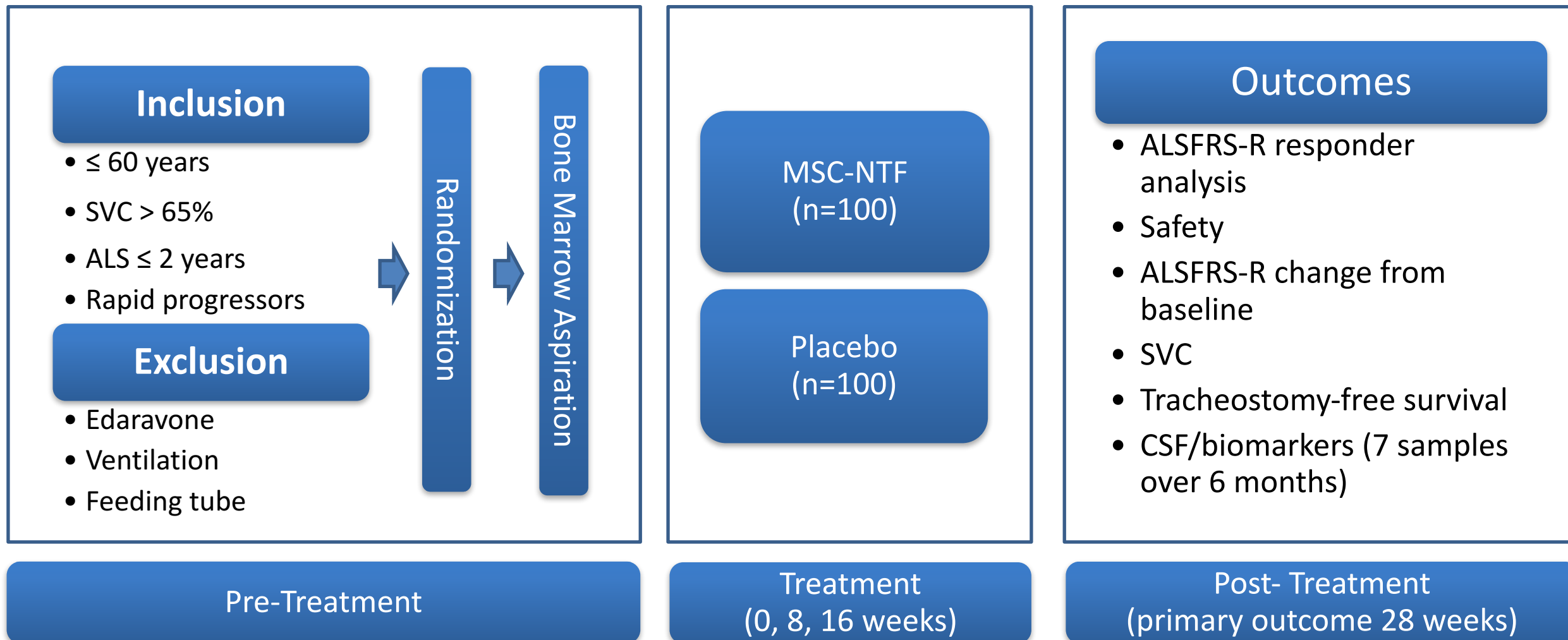


 V5 -Pre transplantation
 V6 - Post transplantation

Placebo
(n = 9)



NurOwn® ALS Phase 3 Study



Phase 3 ALS Status



- **Phase 3 enrollment completed in October 2019**
- **DSMB safety review October 2019**
 - Trial to continue
 - No protocol changes
- **Top line data Q4, 2020**

Phase 2 Progressive MS Clinical Trial Status



- **IND granted December 2018**
- **Repeat intrathecal dosing MSC-NTF cells every 2 months**
- **Validated clinical endpoints and biomarkers**
- **5 clinical trial sites in US**
- **First subjects enrolled March 2019**
- **DSMB first review completed Dec 2019**
- **Top Line data Q4, 2020**

Brainstorm Senior Leadership Team

**Chaim Lebovits,
President &
Chief Executive
Officer**

**Arturo Araya,
MBA
Chief Commercial
Officer**

**Ralph Kern,
MD, MHSc
Chief Operating
Officer & Chief
Medical Officer**

**Preetam Shah,
PhD, MBA
EVP & Chief
Financial Officer**

**Uri Yablonka
EVP & Chief
Business Officer**

**Revital Aricha,
PhD
VP Research &
Development**

**Yael Gothelf,
PhD
VP Scientific &
Regulatory
Affairs**

**Yossef Levy,
PhD
VP Cell
Production**

**Mary Kay Turner
VP Patient
Advocacy &
Government
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**Susan Ward, PhD
Head of Clinical
Operations**

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Thank You