Update on the INSPIRE DUCHENNE Phase 1/2 Study of SGT-003 Microdystrophin Gene Therapy

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SOLID BIOSCIENCES

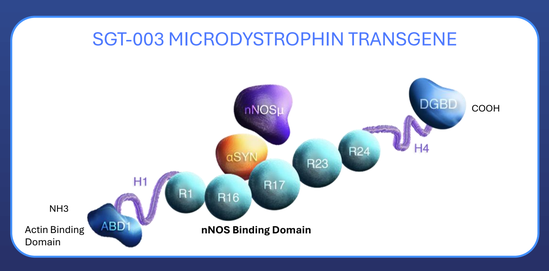
INTRODUCTION

Background

- Duchenne muscular dystrophy (Duchenne) is a chronic, progressive, and ultimately fatal X-linked recessive neuromuscular disorder caused by the lack of functional dystrophin protein[1]
  - Dystrophin is required for maintaining muscle integrity and function[2-4]
  - Deterioration of muscle integrity leads to muscle fiber breakdown, resulting in progressive functional decline
- Shortened, functional microdystrophin transgenes can be packaged into adeno-associated viruses (AAVs) to replace dystrophin[5]
  - Microdystrophins vary based on their unique compositions[6]

SGT-003 Overview

- SGT-003 is Solid's next-generation AAV-microdystrophin gene therapy with key features:
  - Microdystrophin transgene: unique inclusion of the R16/R17 neuronal nitric oxide synthase (nNOS)-binding domain with the goal of preventing activity-induced ischemia and associated muscle injury[7]



- POLARIS-101™ capsid: rationally designed muscle-tropic capsid that leads to higher levels in muscle and reduced levels in the liver[8]
- Full/empty capsid ratio: SGT-003 manufacturing uses a transient transfection process, focusing on maintaining high % full capsid ratios to improve purity

INSPIRE DUCHENNE (NCT06138639) Study Design

- Phase 1/2, open-label study evaluating the safety, tolerability, and efficacy of a single intravenous (IV) infusion of SGT-003 at 1E14 vg/kg
- Actively enrolling participants 0 to < 12 years of age with a confirmed diagnosis of Duchenne
- Uses a steroid-only regimen for prophylactic immunomodulation
- Primary safety endpoint: incidence of treatment-emergent adverse events (TEAEs) through Day 360
- Primary efficacy endpoint: change from baseline of microdystrophin protein levels at Day 90
- Secondary endpoints include:
  - Microdystrophin expression: Protein levels at Day 360 and distribution at Day 90 and Day 360
  - Motor function: Time-to-Rise, 10-Meter Walk/Run, North Star Ambulatory Assessment, 4-Stair Climb, 6-Minute Walk Test, Stride Velocity 95th Centile

RESULTS

SGT-003 HAS BEEN GENERALLY WELL TOLERATED

- No drug-induced liver injury, thrombotic microangiopathy, atypical hemolytic uremic syndrome, or myocarditis have been observed to date

Table 1. INSPIRE DUCHENNE Enrollment as of June 22, 2026[9]

Cohorts	Eligible Age Range (Years)	Ages at Enrollment	Weights for Dosing(kg)	Participants Enrolled (n)
1 to 3	0 to < 12	6 mo - 10 years	6.5 to 39.7	53

Table 2. INSPIRE DUCHENNE Safety Data[10]

SGT-003 Participant With Treatment-Related Aes *Data cutoff May 29, 2026 (n=50 total participants)*		n (%)
Serious Adverse Events (SAEs)		2 (4.0)*
Most Common Adverse Events (AEs)	Vomiting	32 (64.0)
	Nausea	27 (54.0)
	Decreased appetite	15 (30.0)
	Thrombocytopenia	13 (26.0)
	Abdominal Pain	9 (18.0)

*One (n=1) participant with a transient adverse event of inflammation treated with two doses of antibiotics. One (n=1) previously reported immune-mediated myositis. The myositis was not associated with muscle pain or weakness. Both events have resolved.

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ACKNOWLEDGMENTS

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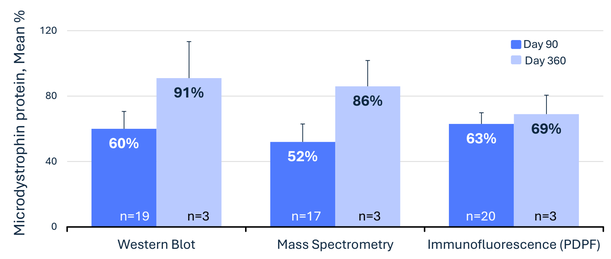
RESULTS Cont'd

SGT-003 DEMONSTRATED ROBUST TRANSDUCTION & MICRODYSTROPHIN EXPRESSION

Table 3. Vector Genome Copies / Nucleus (Mean)[11]

Day 90 (N=20)	Day 360 (N=3)
11	12

Figure 1. SGT-003 Microdystrophin Expression in INSPIRE DUCHENNE Muscle Biopsy Samples[11]



PDPF: percent dystrophin positive fibers

Figure 1. Values are means ± standard error of the mean. Western blot and mass spectrometry baselines were 0% mean normal dystrophin, immunofluorescence is based on a manual count. Western blot, mass spectrometry and immunofluorescence assays are conducted by multiple external vendors; at the time of this analysis, one western blot sample (from participant 20) and three mass spectrometry samples (from participants 15,16 and 20) had not been received

SGT-003 RESTORES KEY ELEMENTS OF THE DAPC

Figure 2. Immunofluorescence Evaluation of Dystrophin Associated Protein Complex (DAPC) Restoration in INSPIRE DUCHENNE Muscle Biopsy Samples[12]

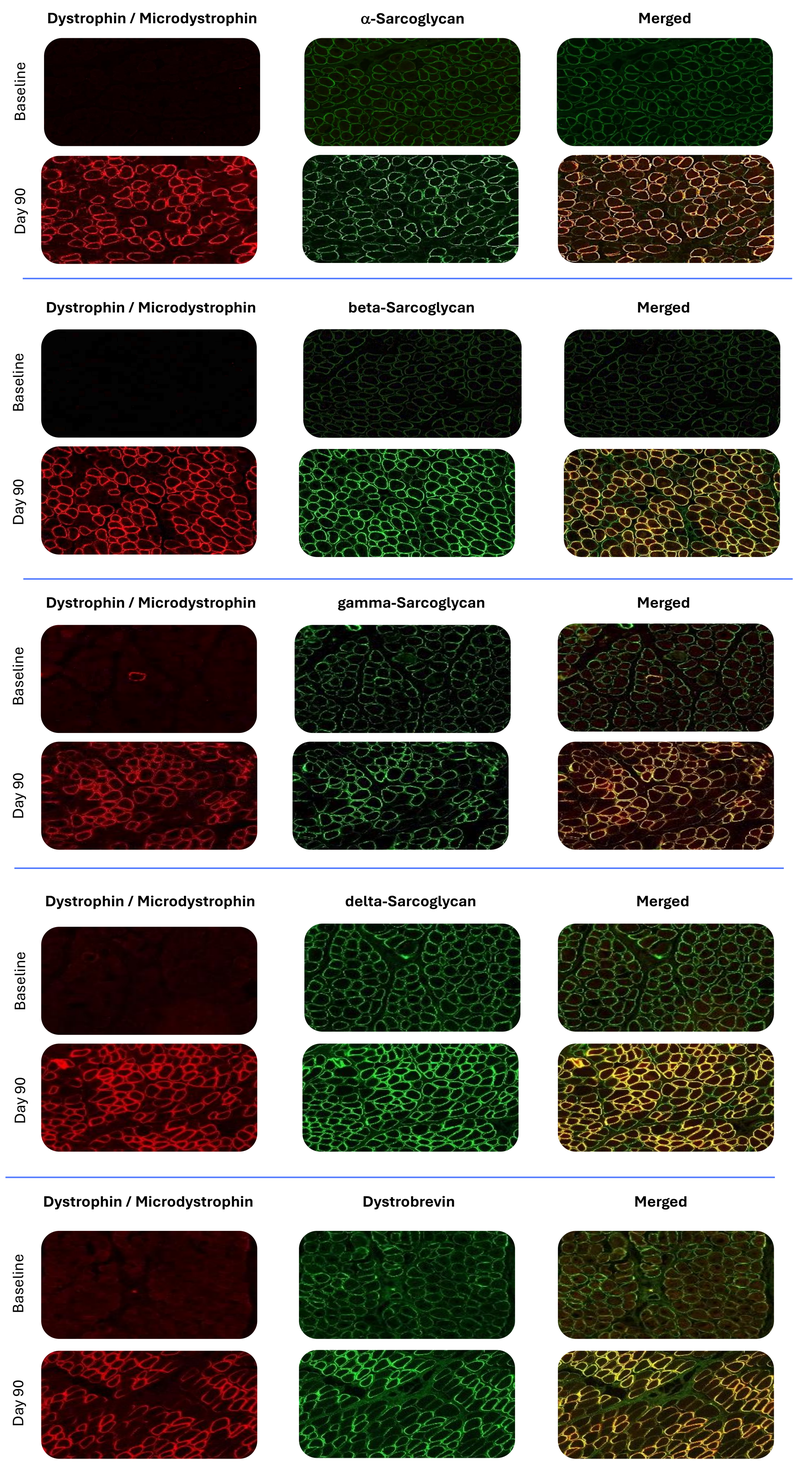
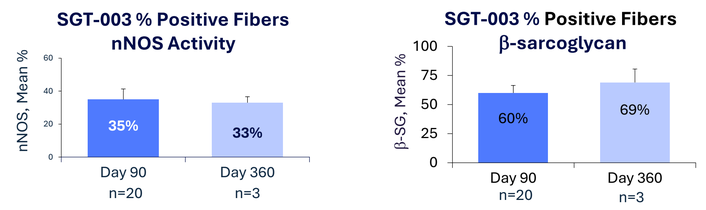


Figure 2. Muscle biopsies showed restored membrane localization of the DAPC, corresponding with microdystrophin expression. Representative images are shown from the same participant.

Figure 3. Quantification of nNOS & β-sarcoglycan Sarcolemmal Restoration in INSPIRE DUCHENNE Muscle Biopsy Samples[11]



nNOS: neuronal nitric oxide synthase

Figure 3. Beta-sarcoglycan and nNOS values were based on a manual count.

SGT-003 IMPROVES MUSCLE HEALTH

Figure 4. Reduced Chronic Regenerative Demand Observed Post-SGT-003 Treatment[11]

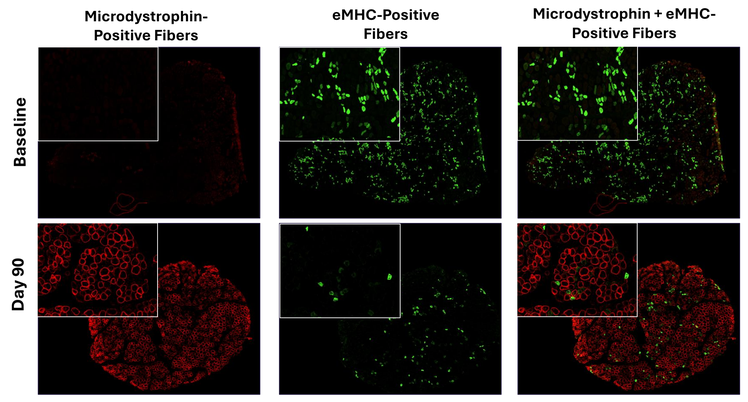


Figure 4. The reduction in eMHC suggests reduced need for muscle repair and preservation of muscle architecture.

SGT-003 SHOWS IMPROVED MUSCLE INTEGRITY

Figure 5. Reductions in Markers of Disrupted Muscle Integrity After SGT-003[11]

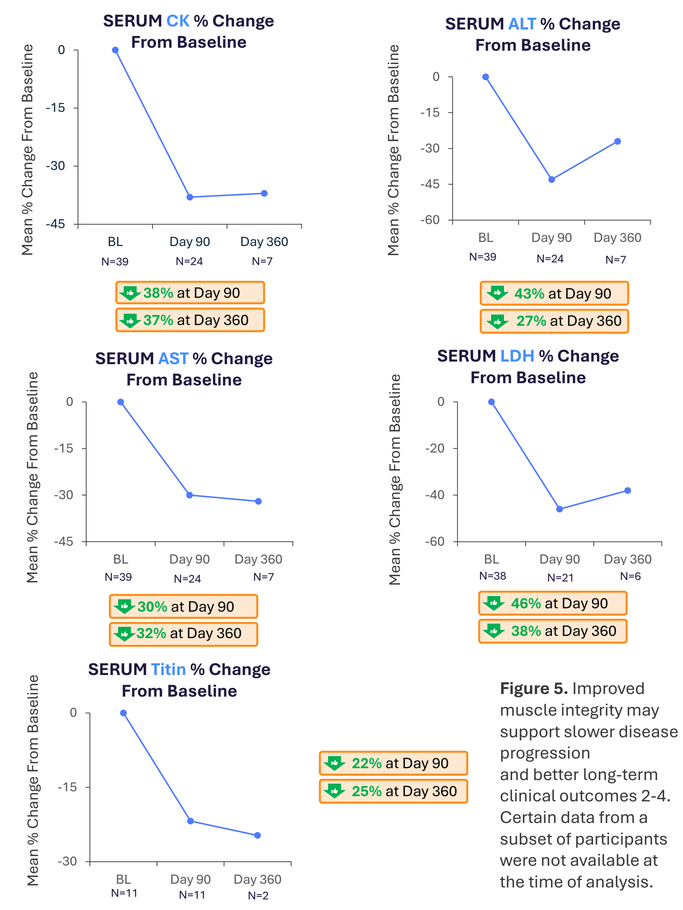
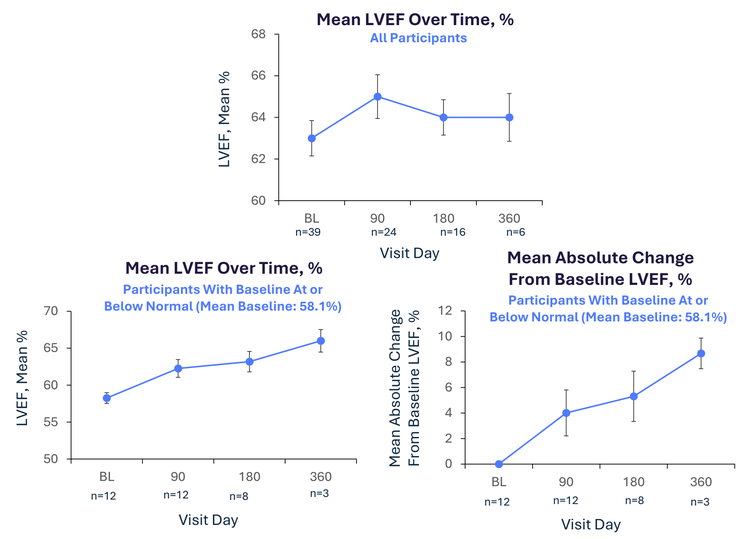


Figure 5. Improved muscle integrity may support slower disease progression and better long-term clinical outcomes 2-4. Certain data from a subset of participants were not available at the time of analysis.

STABLE TO IMPROVED CARDIAC FUNCTION OBSERVED AFTER SGT-003 TREATMENT

Figure 6. Observations of Improved Cardiac Function are Driven by Participants with Low-Normal Baseline LVEF[11]



CONCLUSIONS

- SGT-003 has been generally well tolerated in the 53 participants dosed in the INSPIRE DUCHENNE study as of June 22, 2026, using a steroid-only prophylactic immunomodulation regimen
- Robust transduction and microdystrophin expression have been observed in muscle biopsy samples collected at Day 90 and Day 360 after treatment with SGT-003
- Corresponding restoration of key elements of the DAPC has been observed in muscle biopsy samples
- Improvements in markers of muscle integrity have been evident as early as Day 90 and persist to at least Day 360 after treatment with SGT-003
- Stable-to-improved cardiac function has been observed post treatment with SGT-003 as measured by LVEF

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