

ON BEHALF OF THE INSPIRE DUCHENNE STUDY TEAM

Update on the INSPIRE DUCHENNE Phase 1/2 Study of the Next-Generation Microdystrophin Gene Therapy Candidate SGT-003 for Duchenne Muscular Dystrophy

AUTHORS: Kevin M. Flanigan¹, Aravindhan Veerapandiyam², Eugenio M. Mercuri³, Craig M. McDonald⁴, Perry B. Shieh⁵, Hernan D. Gonorazky⁶, Crystal M. Proud⁷, Craig Zaidman⁸, Alicia Henriquez⁹, J. Patrick Gonzalez¹⁰, Matthew M. Harmelink¹⁰, Gabriel Brooks¹⁰

AFFILIATIONS: 1. Nationwide Children's Hospital, Columbus, OH, USA; 2. Arkansas Children's Hospital, Little Rock, AR, USA; 3. Policlinico Gemelli, Rome, Italy; University of California, Davis, Sacramento, CA, USA; 5. University of California, Los Angeles, Los Angeles, CA, USA; 6. The Hospital for Sick Children, Toronto, ON, Canada; 7. Children's Hospital of the King's Daughters, Norfolk, VA, USA; 8. Washington University of St. Louis, St. Louis, MO, USA; 9. Seattle Children's Hospital, Seattle, WA, USA; 10. Solid Biosciences Inc., Charlestown, MA, USA



DUCHENNE

Disclosures

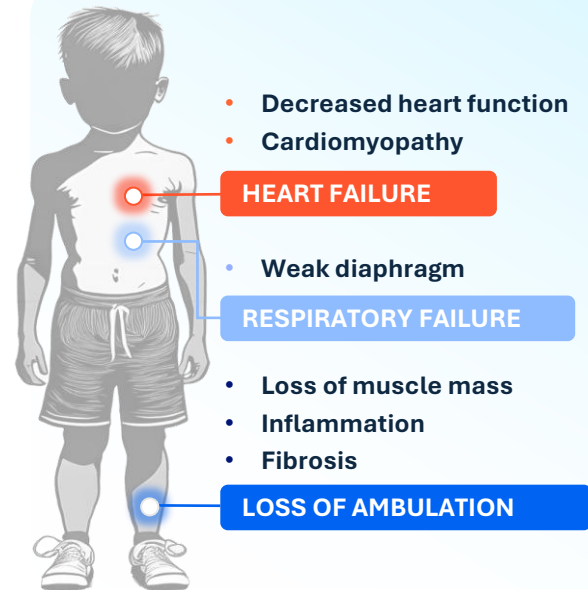
- Clinical Trial Support: Sarepta, Dyne, Avidity, Ultragenyx, Solid
- Advisory Boards: Armatus, Encoded, Insmmed, Dyne, Solid
- Past Royalties: Astellas

Duchenne Muscular Dystrophy (Duchenne): Background

Duchenne is an X-linked recessive neuromuscular disorder caused by a lack of functional dystrophin¹

- ✓ Dystrophin is required for maintaining muscle integrity and function²⁻⁴
 - Deterioration of muscle integrity leads to loss of essential membrane proteins and muscle fiber breakdown and leakage, resulting in progressive functional decline

- ✓ Shortened, functional “microdystrophin” transgenes can be packaged into AAVs to replace dystrophin⁵
 - Microdystrophins vary based on their unique compositions⁶



The impact of treatments on muscle integrity is key for patients with Duchenne⁷

AAV: adeno-associated virus.

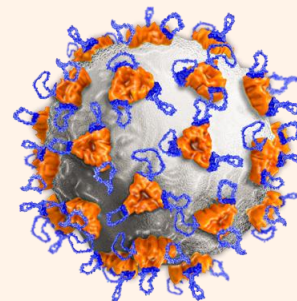
1. Duan D, et al. *Nat Rev Dis Primers*. 2021;7(1):13. 2. Sheybani A, et al. *Pediatr Res*. 2022;92(6):1613-1620. 3. Voleti S, et al. *Pediatr Cardiol*. 2020;41(6):1173-1179. 4. Wagner KR, et al. *Biomark Med*. 2021;15(15):1389-1396. 5. Crudele JM, et al. *Hum Mol Genet*. 2019;28(R1):R102-R107. 6. Ramos JN, et al. *Mol Ther*. 2019;27(3):623-635. 7. Escobar-Huertas JF, et al. *Cytoskeleton (Hoboken)*. 2024;81(6-7):269-286.


SGT-003 is a Next-Generation Candidate Optimized for Robust Function and Transduction in Skeletal and Cardiac Muscle


SGT-003 MICRODYSTROPHIN TRANSGENE



POLARIS-101™ CAPSID (AAV-SLB101)



 Unique inclusion of the nNOS-binding domain with the goal of preventing activity-induced ischemia and associated muscle injury¹

 nNOS is important for normalizing NO production, improving calcium homeostasis and enabling normal contraction-relaxation cycling in the heart^{2,3}



Rationally designed capsid engineered to include an RGD motif inserted into the VR-VIII loop of AAV9, resulting in up to 60 copies of the peptide displayed across the capsid surface^{4,5}



RGD-integrin-mediated uptake preferentially targets skeletal and cardiac muscle due to integrin upregulation, especially in diseased tissue, limiting off-target uptake

nNOS: neuronal nitric oxide synthase; NO: nitric oxide.

1. Data on file. Solid Biosciences. 2026. 2. Zhang YH, et al. *J Physiol.* 2014;592(Pt 15):3189-3200. 3. Ziolo MT, et al. *J Mol Cell Cardiol.* 2012;45(5):625-632. 4. DiMattia MA, et al. *J Virol.* 2012;86(12):6947-6958. 5. Drouin LM, Agbandje-McKenna M. *Future Virol.* 2013;8(12):1183-1199.

INSPIRE DUCHENNE: Study Overview



- Single-dose level (1.0E14 vg/kg), open-label, Phase 1/2 study
- Actively enrolling: US, Canada, Italy, and the UK
- Patients < 12 years of age with a confirmed diagnosis of Duchenne
- Potential for further enrollment of older and non-ambulatory patients (Cohorts 4 and 5)
- Prophylactic prednisone regimen alone used as immunomodulation

Primary Endpoints:

- Incidence of treatment-emergent adverse events through Day 360
- Change from baseline of microdystrophin protein levels at Day 90

Secondary Endpoints:

- Microdystrophin protein levels and distribution at Days 90 and 360
- TTR, 10MWR, 4SC, NSAA, 6MWT, SV95C at Days 360 and 540

Exploratory Endpoints:

- % predicted FVC, PEF, FEV1; Bayley-4; PODCI

KEY ELIGIBILITY CRITERIA

Age:	Cohort 1: Aged 4 to <7 years Cohort 2: Aged 7 to <12 years Cohort 3: Aged 0 to <4 years
DMD Genetic Variant Exclusions:	Any deletion in exons 1 to 11, 42 to 45, or 57-69, inclusive
Ambulation:	Cohorts 1, 2: Required Cohort 3: N/A
Additional Function:	Cohorts 1, 3: N/A Cohort 2: TTR and 10MWR criteria

Antibodies:	Negative for AAV9 antibodies
Prior Treatments:	No history of gene therapy ≥12-week washout from exon-skipping therapies, vamorolone, and/or givinostat
Steroid Regimen:	Cohorts 1, 2: On a stable dose of daily oral steroids (prednisone/deflazacort) for ≥12 weeks Cohort 3: N/A

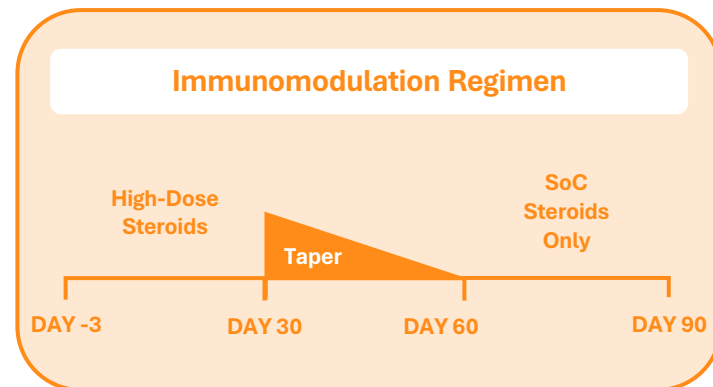
As of May 4, 2026

INSPIRE DUCHENNE Safety Data for 46 Participants

Cohorts	Eligible Age Range (years)	Ages at Enrollment (years)	Weights for Dosing (kg)	Participants Enrolled (n)
1-3	0 to <12	1 to 10	9.9 to 39.7	46

SGT-003 Participants With Treatment-Related SAEs	n (%)
Serious Adverse Events (SAEs)	1 (2.2) ¹

SGT-003 Participants With Treatment-Related AEs	n (%)	
Most Common Treatment-Related Adverse Events (AEs)	Vomiting	31 (67.4)
	Nausea	27 (58.7)
	Decreased appetite	15 (32.6)
	Thrombocytopenia	13 (28.3)
	Abdominal Pain	8 (17.4)



SGT-003 uses a steroid-only prophylactic immunomodulatory regimen supported by rigorous safety monitoring

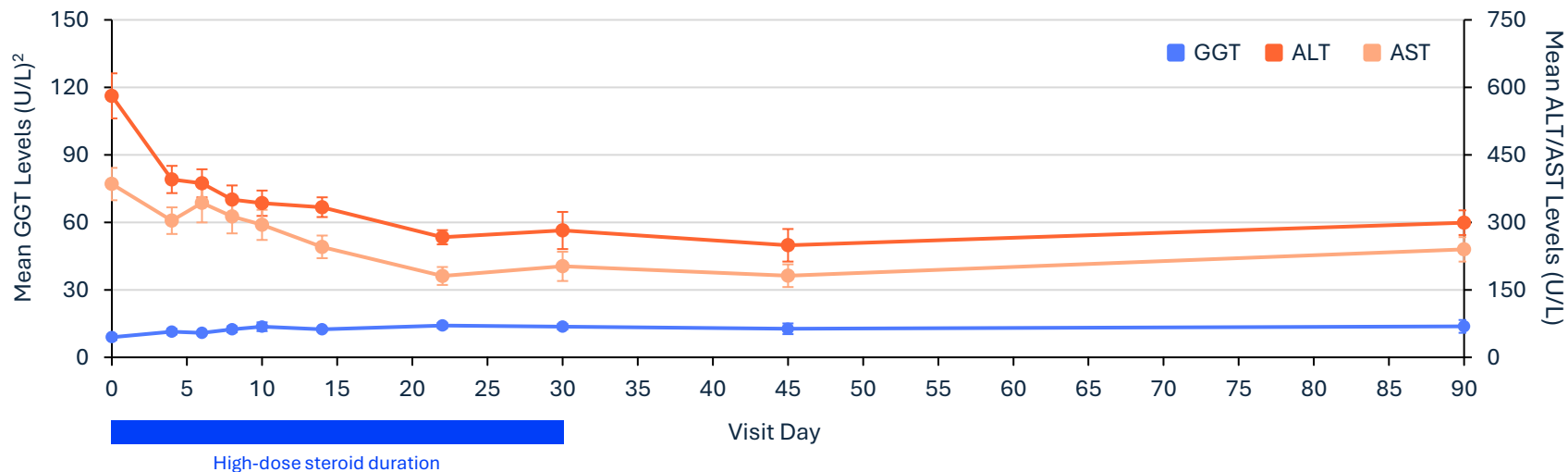
AE: adverse event; SAE: serious adverse event

1. One (n=1) previously reported Common Terminology Criteria for Adverse Events Grade 3 SAE of immune-mediated myositis. The myositis was not associated with muscle pain or weakness and has resolved. Data on file as of May 4, 2026. Solid Biosciences, 2026.

As of February 23, 2026

Liver Enzymes Declined or Remained Stable Following SGT-003 Administration

SGT-003 Clinical Trial Liver Biomarkers¹
(n=24 [includes only participants with data to Day 90])



Stable GGT with declining ALT/AST suggests preserved liver function and improving muscle integrity

ALT: alanine aminotransferase; AST; aspartate aminotransferase; GGT: gamma-glutamyltransferase

1. Values are means ± standard error of the mean. 2. Error bars for GGT data are present but obscured by their associated data points due to the small range for standard error.

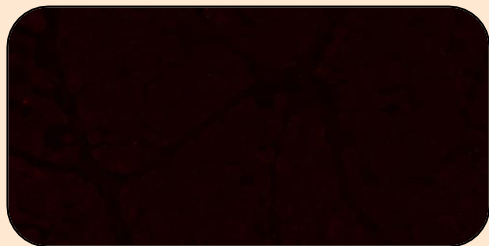
Data on file. Data cutoff February 23, 2026. Solid Biosciences, 2026.

As of February 23, 2026

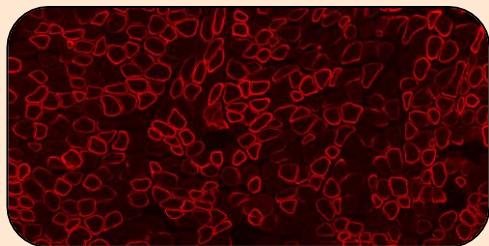
SGT-003 Demonstrated Robust Microdystrophin Transduction & Expression

EXAMPLE SGT-003 MUSCLE BIOPSY MICRODYSTROPHIN STAINING

Baseline



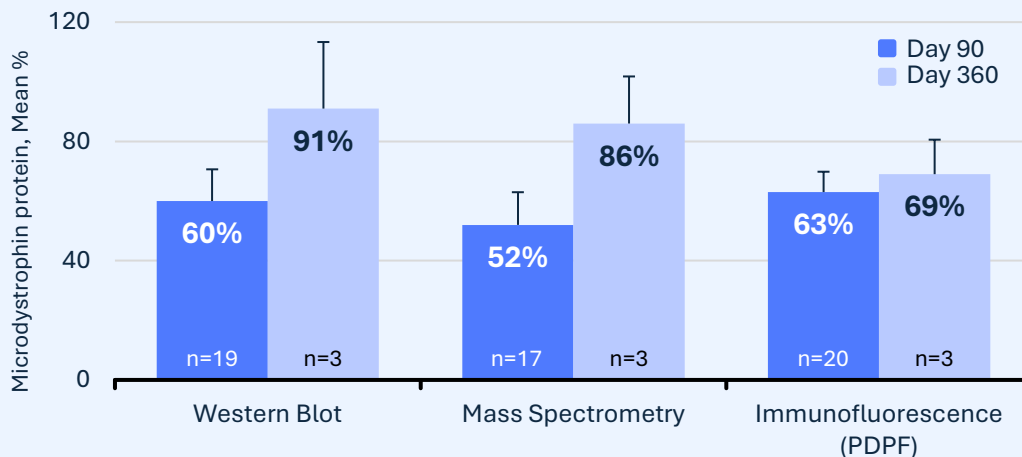
Day 90



VECTOR GENOME COPIES/NUCLEUS (MEAN)

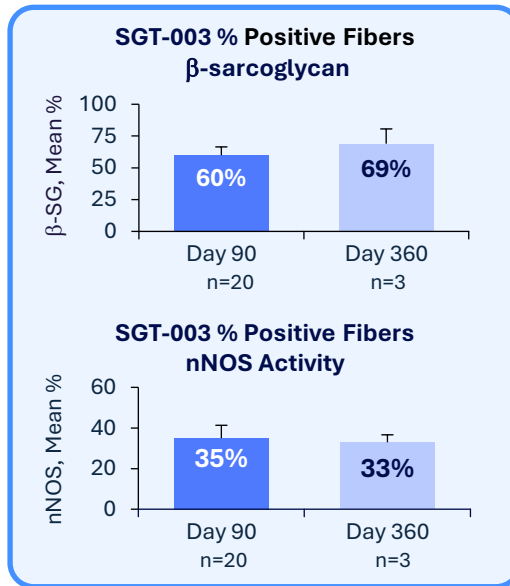
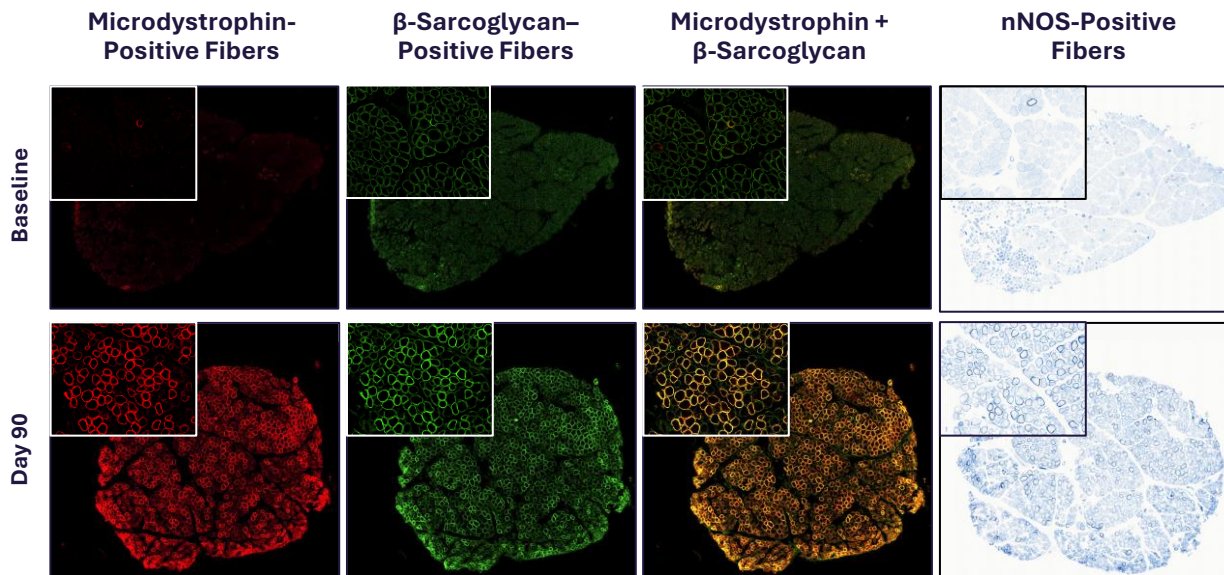
Day 90 (N=20)	Day 360 (N=3)
11	12

SGT-003 MICRODYSTROPHIN EXPRESSION^{1,2,3}



PDPF: percent dystrophin positive fibers. 1. Values are means \pm standard error of the mean. 2. Western blot and mass spectrometry baselines were 0% mean normal dystrophin, immunofluorescence is based on a manual count. 3. Western blot, mass spectrometry and immunofluorescence assays are conducted by multiple external vendors; at the time of this analysis, complete results from one western blot sample (from participant 20) and three mass spectrometry samples (from participants 15, 16 and 20) had not been received. Data on file. Data cutoff February 23, 2026. Solid Biosciences. 2026.

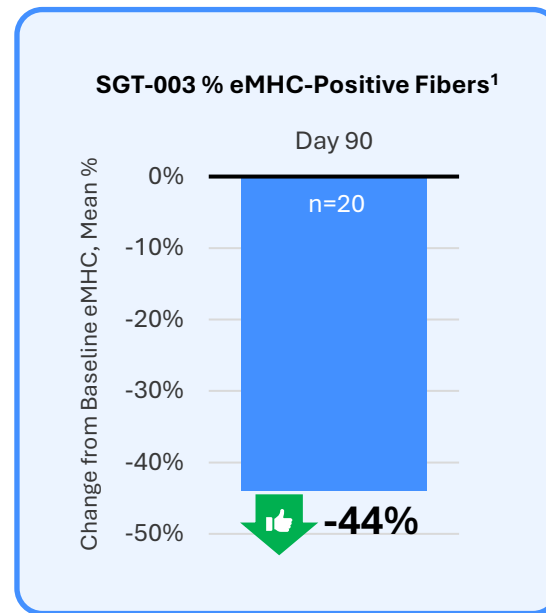
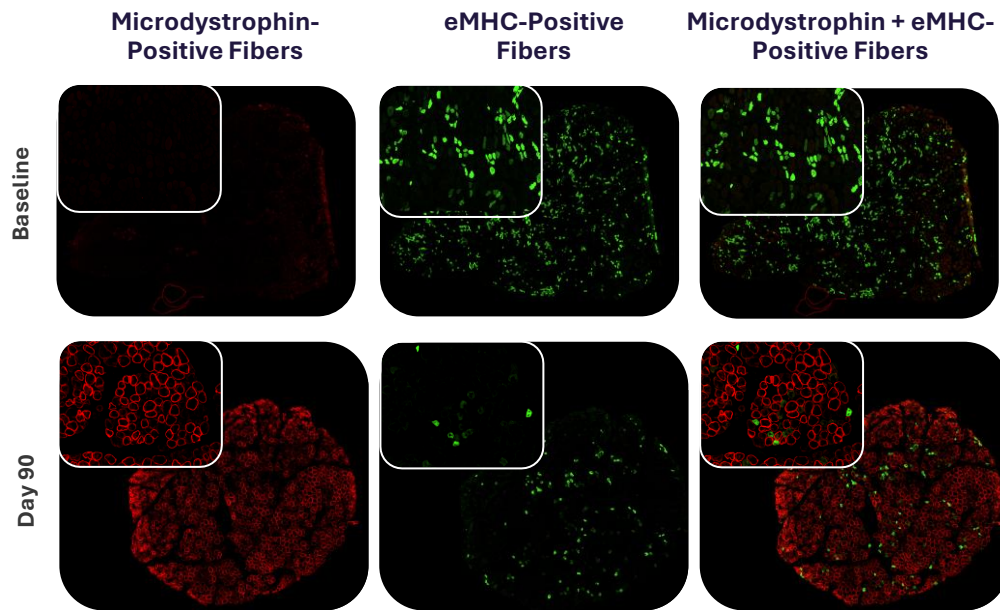
Restoration of Key Elements of the DAPC Observed After Treatment with SGT-003



nNOS: neuronal nitric oxide synthase

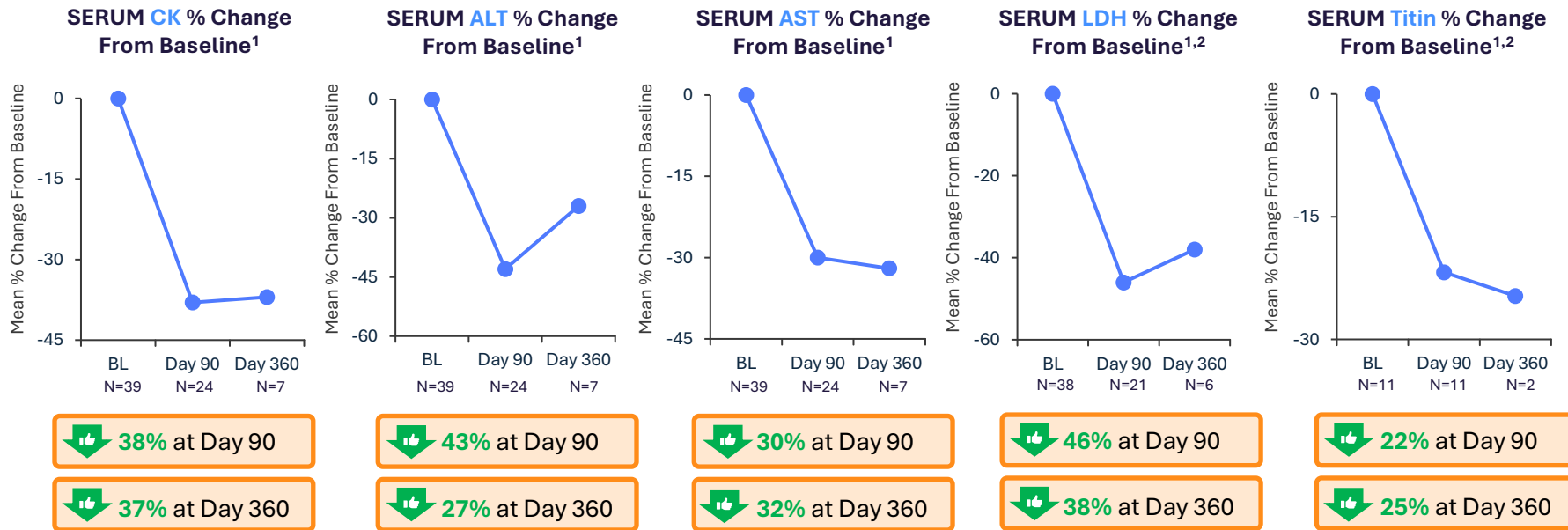
Beta-sarcoglycan and nNOS were based on a manual count; Data on file. Data cutoff February 23, 2026. Solid Biosciences, 2026. Representative images shown.

Improved Muscle Health Observed Post-SGT-003 Treatment



The reduction in eMHC positive fibers suggests reduced need for muscle repair and preservation of muscle architecture

Improved Muscle Integrity Observed After SGT-003 Treatment

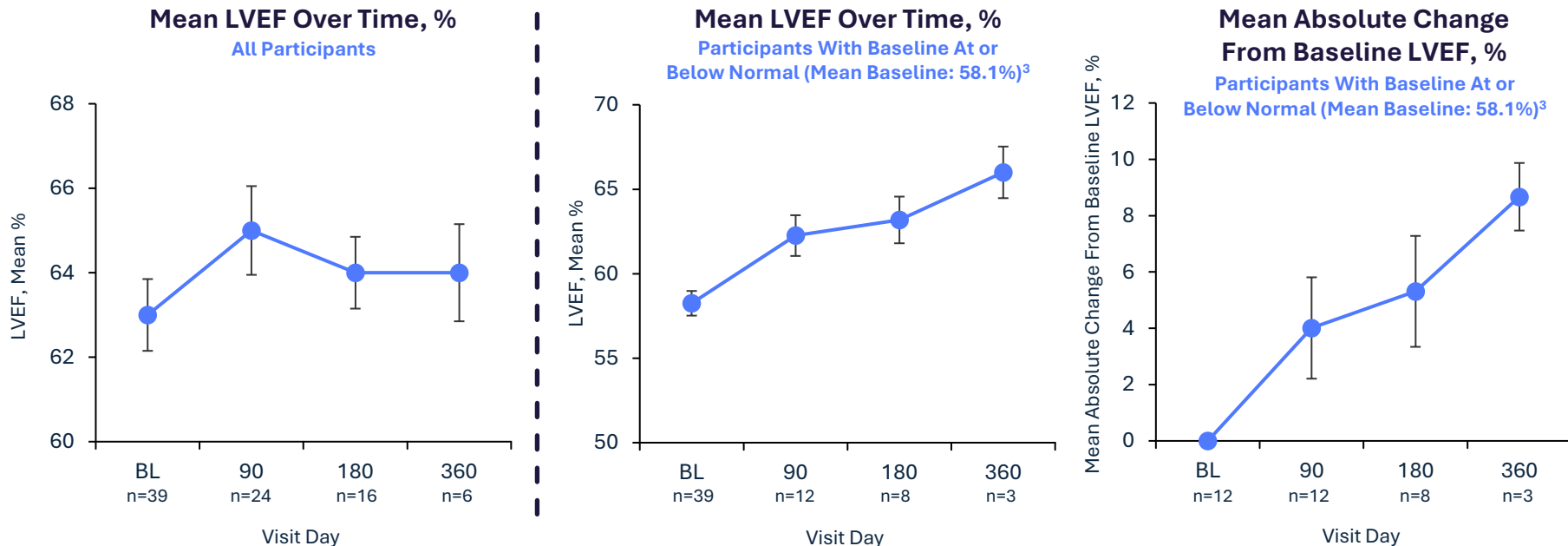


Improved muscle integrity may support slower disease progression and better long-term clinical outcomes²⁻⁴

1. Data on file and available at time of analysis. Data cutoff February 23, 2026. Solid Biosciences, 2026. 2. Siddique Ahmed Khan M, et al. *Int J Sci Res.* 2016;5(11):156-157. 3. Voleti S, et al. *Pediatr Cardiol.* 2020;41(6):1173-1179. 4. Oshida N, et al. *Sci Rep.* 2019;9(1):19498. 2. Certain data from a subset of participants were not available at the time of analysis.

Stable-to-Improved Cardiac Function Observed Post-Treatment

Observations of improved cardiac function are driven by participants with low-normal baseline LVEF^{1,2}



1. Data on file. Data cutoff February 23, 2026. Solid Biosciences. 2026. 2. For participants with low-normal baseline LVEF, increases in LVEF are beneficial and decreases unfavorable.^{4,5} 3. "Baseline at or below normal" was defined as LVEF ≤60 at baseline.

Participant A: Example of Home-Based Activity Monitoring Analysis to Provide Initial Assessments of Changes in Motor Function



**Baseline to Day 360
After SGT-003 Dosing:
Getting Into A Car
(Choice Activity)**

*Functional Assessments Will be Analyzed Following
Guidance From Regulators*



Baseline



Day 360

Participant B: Example of Home-Based Activity Monitoring Analysis to Provide Initial Assessments of Changes in Motor Function



**Baseline to Day 180
After SGT-003 Dosing:
Home-Based Stair
Climb**

*Functional Assessments Will be Analyzed Following
Guidance From Regulators*



Baseline



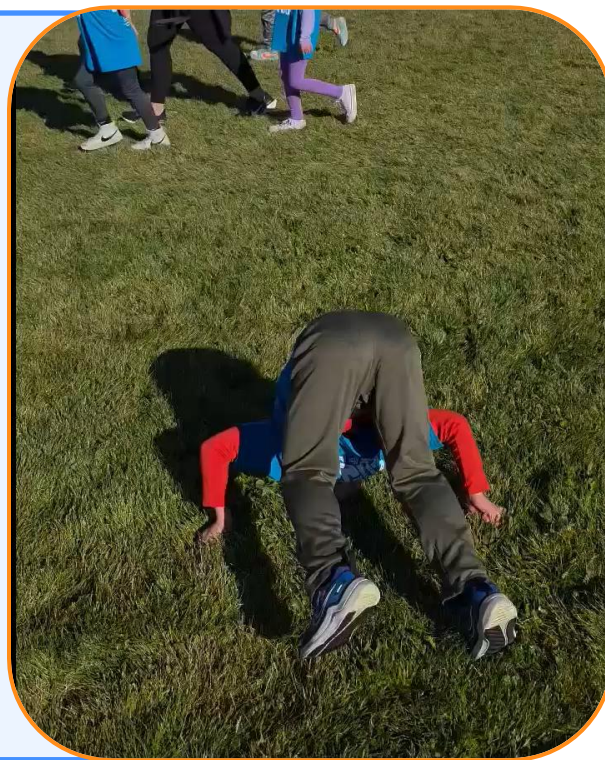
Day 180

Participant B: Example of Patient-Chosen Activity to Provide Initial Assessments of Changes in Motor Function



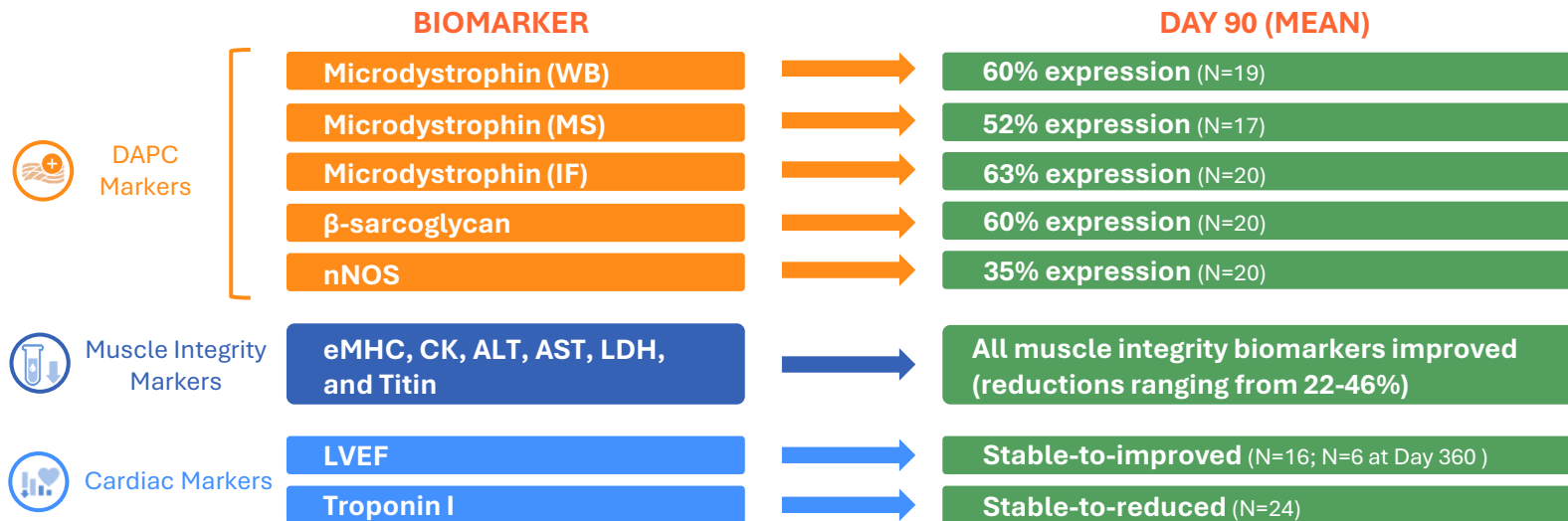
**Head Stand –
Day 180 After
SGT-003 Dosing**

*Functional Assessments Will be Analyzed Following
Guidance From Regulators*



Day 180

SGT-003: Encouraging Clinical and Safety Profile



- SGT-003 is administered at a 1.0E14 vg/kg dose
- Robust microdystrophin expression observed after treatment with SGT-003
- SGT-003 uses a lower-burden, steroid-only immunomodulation regimen and has been generally well tolerated in 46 participants dosed to date¹

Acknowledgments

Thank you to the study participants and families!
Thank you to clinical site investigative teams and study partners!



Scan the QR code to
navigate
to the study posting
(NCT06138639)

Nationwide Children's Hospital (Columbus, OH)

- Kevin Flanigan, MD

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University of California, Davis (Sacramento, CA)

- Craig McDonald, MD

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