

FUNCTIONAL IMPROVEMENT

MOVING BEYOND
DYSTROPHIN IN DMD



Speakers



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Disclosures

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- Associate Editor – Muscle and Nerve

Susan Apkon

- Site PI for Dyne Therapeutics, Capricor, Sarepta Therapeutics, Satellos, Biohaven, ScholarRock, Biogen

Agenda

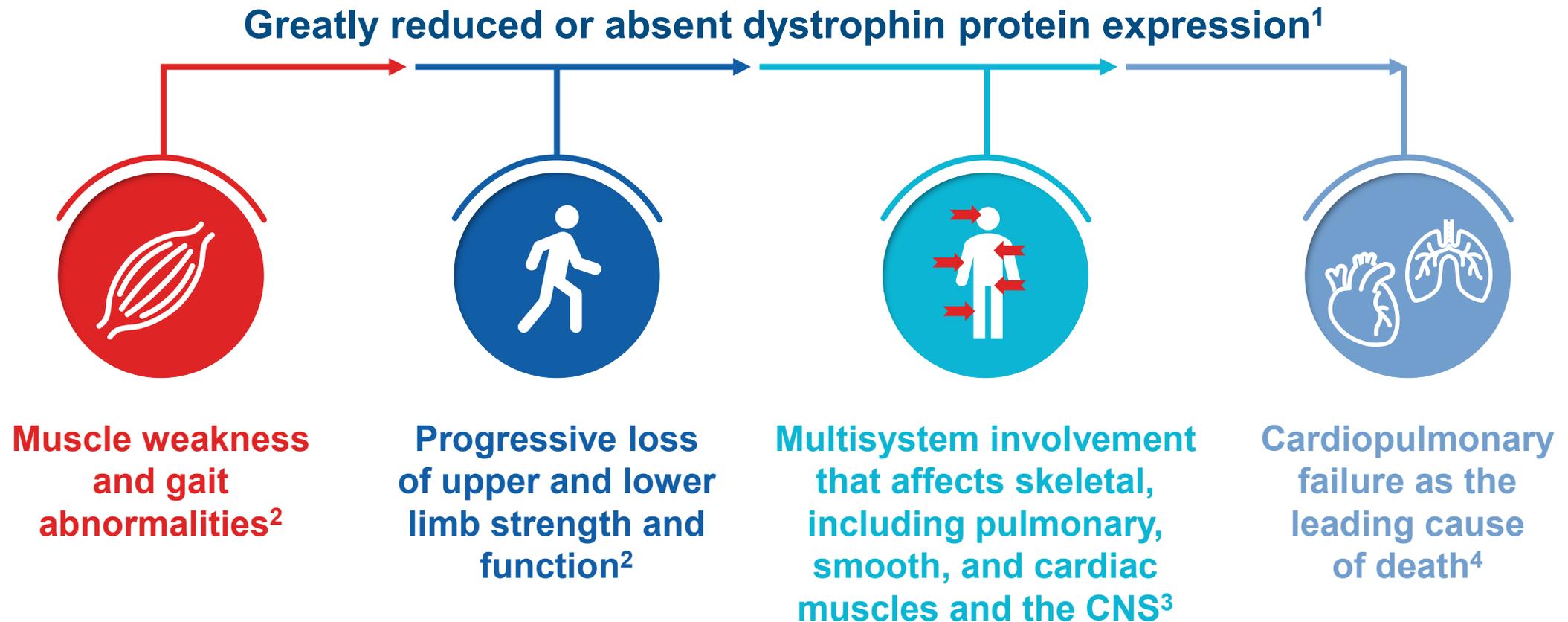
Session Title	Speaker
Unmet needs in DMD	Aravindhan Veerapandiyan 
Resetting expectations for functional improvement	
DELIVER trial data: functional outcomes in focus	Susan Apkon 
Moving the needle in DMD	
Audience Q&A and close	Aravindhan Veerapandiyan

Unmet needs in DMD

Aravindhan Veerapandiyan, MD



DMD is caused by dystrophin deficiency and manifests as a progressive multisystem disease, affecting muscle and the CNS



Therapeutic approaches in DMD have evolved from supportive care to targeted approaches

Supportive standard of care¹⁻³

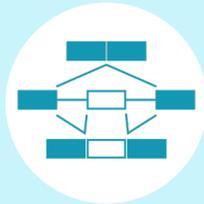
~1990s²



- Corticosteroid therapy^{1,2}
- Multidisciplinary management^{3,4}

Dystrophin-producing therapies^{1,2}

2016*



- Exon skipping therapy²
- RNA-level dystrophin restoration



- Gene therapy¹
- Micro-dystrophin protein replacement

HDAC inhibitors¹

2024¹



- Target inflammation, fibrosis, muscle degeneration⁵

DMD, Duchenne muscular dystrophy; HDAC, histone deacetylase.

*The first exon skipping therapy was approved in 2016²; the first gene therapy was approved in 2023¹.

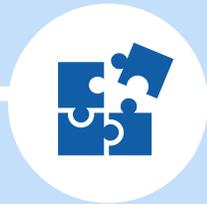
1. Komaki H. *Brain Dev.* 2025;47:104397; 2. D'Ambrosio ES, Mendell JR. *Neurotherapeutics.* 2023;20:1669-1681; 3. Bushby K, et al. *Lancet Neurol.* 2010;9:177-189; 4. Duan D, et al. *Nat Rev Dis Primers.* 2021;7:13; 5. Anjum AF, et al. *Curr Ther Res Clin Exp.* 2025;102:100787.

Despite progress, challenges remain with current treatments

Exon skipping and gene therapy

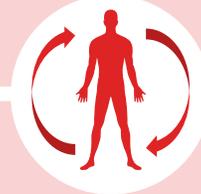
All modalities

Dystrophin quantity and quality



- Low dystrophin expression levels¹
 - <1% with approved exon 51 skipping therapy
- Micro-dystrophin functionality¹
 - Shorter micro-dystrophin protein lacks key functional domains believed to support muscle health^{2,3}

Effective distribution and durability of effect



- Limited delivery to muscle and the CNS^{1,4}
- Modest clinical benefits with exon skipping⁴
- Unknown durability of effect with gene therapy⁴

Treatment burden, safety, and access

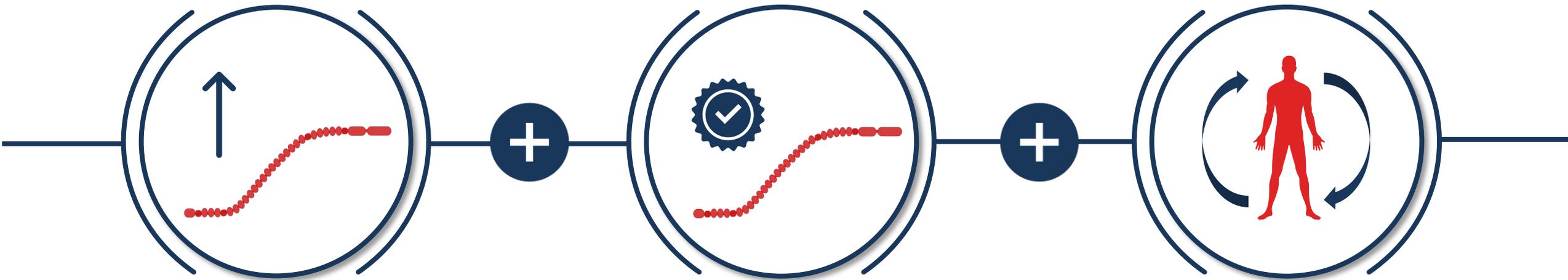


- Access/clinical eligibility restrictions with gene therapy⁴
- Adverse events^{1,5,6}
- Regular monitoring^{5,7}
- Dosing
 - Inability to safely and effectively re-dose with gene therapy^{1,8}
 - Frequent IV dosing with current exon skipping therapy⁸

CNS, central nervous system; IV, intravenous.

1. Chwalenia K, et al. *J Muscle Res Cell Motil.* 2025;46:293–300; 2. Harper S, et al. *Hum Mol Genet.* 2002;11:1807–1815; 3. Davies KE, Guiraud S. *Mol Ther.* 2019;27:486–488; 4. Gonzalez Castillo Z, et al. *J Transl Genet Genom.* 2025;9:338–351; 5. Montagna C, et al. *Int J Mol Sci.* 2025;26(6742); 6. D'Ambrosio ES, Mendell JR. *Neurotherapeutics.* 2023;20:1669–1681; 7. Das P, et al. *Pharmacology.* 2025;110:1–13; 8. Komaki H. *Brain Dev.* 2025;47:104397.

Functional improvement in DMD requires therapeutic approaches that improve the quantity, quality, and distribution of dystrophin



**Increased
dystrophin
production**

**Production of
high-quality
dystrophin**

**Broad and effective
distribution of dystrophin
restorative treatments to
affected muscles and the CNS**

Functional improvement



Resetting expectations for functional improvement

Aravindhan Veerapandiyan, MD

Dystrophin quantity, quality, and distribution underlies functional improvement in DMD



Beyond dystrophin: functional improvement in practice

- Preserving motor function and retaining independence are important to individuals with DMD and caregivers¹
- Dystrophin deficiency manifests in a multisystemic manner – individuals can experience CNS, GI, bladder, cardiac, and respiratory manifestations²



Dystrophin: quantity, quality, and distribution

- Increased dystrophin production
- Production of high-quality dystrophin
- Broad and effective distribution of dystrophin restorative treatments to affected muscles (skeletal, smooth, and cardiac) and the CNS



How is meaningful change in functional improvement defined?

In clinical trials...

MCID

Minimal clinically important difference

The smallest difference that reflects a change that is meaningful for an individual and would impact their healthcare management¹

May be measured as:



Velocity e.g. in 10MWR, 4SC, TTR, SV95C^{2,3}



Points/score e.g. in PUL, NSAA^{4,5}

By those affected by DMD...

ADLs

Activities of daily living

Ability to perform ADLs, maintain independence, and participate in hobbies⁶

In qualitative evaluation of meaningful change on functional assessments:*



Patients interpret change by tasks⁶



A single point may reflect real functional loss⁶

*The study utilized a non-interventional, descriptive, cross-sectional qualitative design consisting of 69 semi-structured interviews with individuals with DMD and their caregivers, as well as two interviews with neuromuscular expert physiotherapists. NSAA and PUL were used to measure motor performance in ambulatory and non-ambulatory individuals, respectively.

10MWR, 10-meter walk/run; 4SC, 4 stair climb; ADL, activities of daily living; MCID, minimal clinically important difference; NSAA, North Star Ambulatory Assessment; PUL, performance upper limb; SV95C, stride velocity 95th centile; TTR, time to rise.

1. Cook CE, et al. *J Man Manip Ther.* 2008;16:E82-83; 2. Duong T, et al. *J Neuromuscul Dis.* 2021;8:939-48; 3. EMA Qualification Opinion. July 2023. Accessed February 16, 2026.

https://www.ema.europa.eu/en/documents/scientificguideline/qualification-opinion-stride-velocity-95th-centile-primary-endpoint-studies-ambulatory-duchenne-muscular-dystrophy-studies_en.pdf; 4. Naarding KJ, et al. *J Neuromuscul Dis.* 2022;9:555-569;

5. Ayyar Gupta V, et al. *PLoS One.* 2023;18:e0283669; 6. Gillman A, et al. *Front Neurol.* 2025;16:1509174.

Clinical measures can translate into meaningful outcomes for individuals with DMD

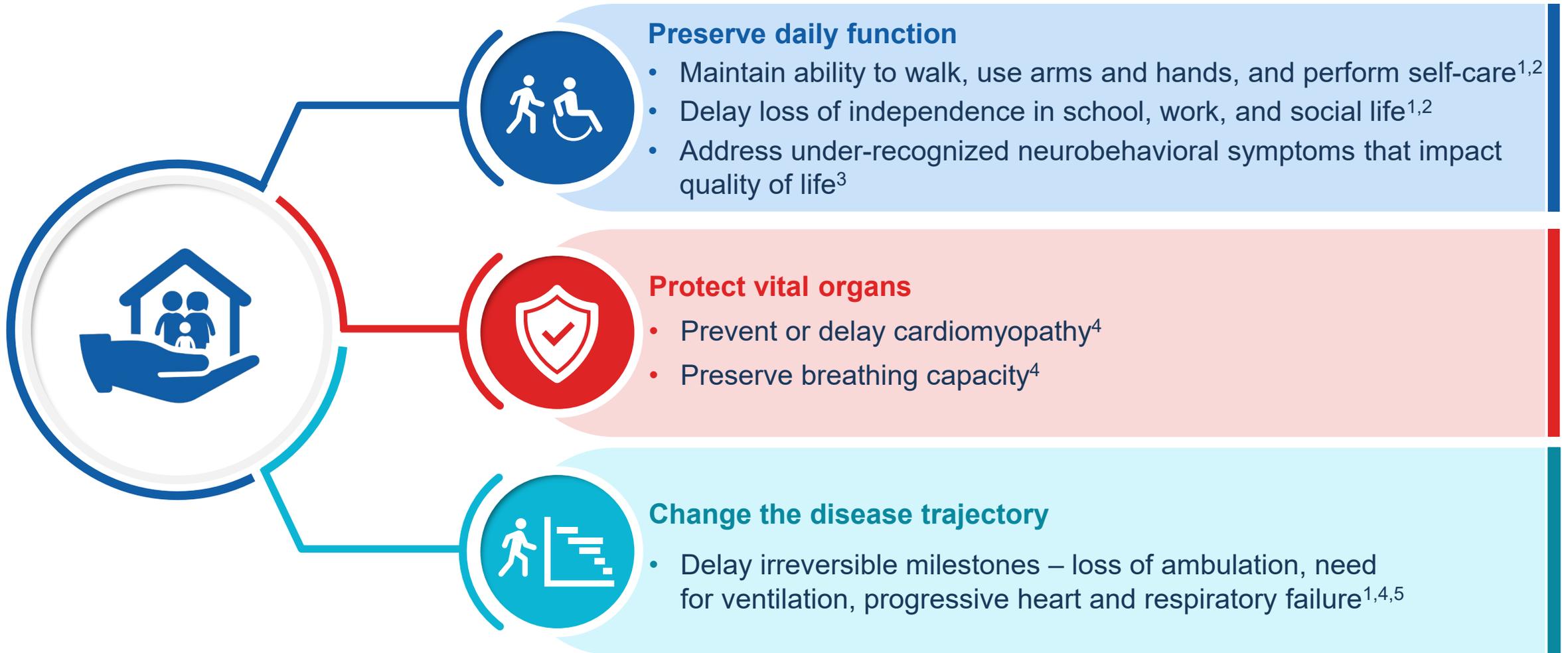


10MWR, 10-meter walk/run; 4SC, 4 stair climb; DMD, Duchenne muscular dystrophy; FVC%p, forced vital capacity percent predicted; LVEF, left ventricular ejection fraction; NSAA, North Star Ambulatory Assessment; PUL, performance upper limb; SV95C, stride velocity 95th centile; TTR, time to rise.

1. Arora H, et al. *Muscle Nerve*. 2018;58:631–638; 2. Servais L, et al. *Nat Med*. 2023;29:2391–2392; 3. McDonald CM, et al. *Lancet*. 2018;391:451–461; 4. Gillman A, et al. *Front Neurol*. 2025;16:1509174;

5. Lechner A, et al. *ERJ Open Res*. 2023;9:00176–2023; 6. Phillips MF, et al. *Am J Respir Crit Care Med*. 2001;164:2191–2194.

What are the treatment goals for individuals with DMD and their families?

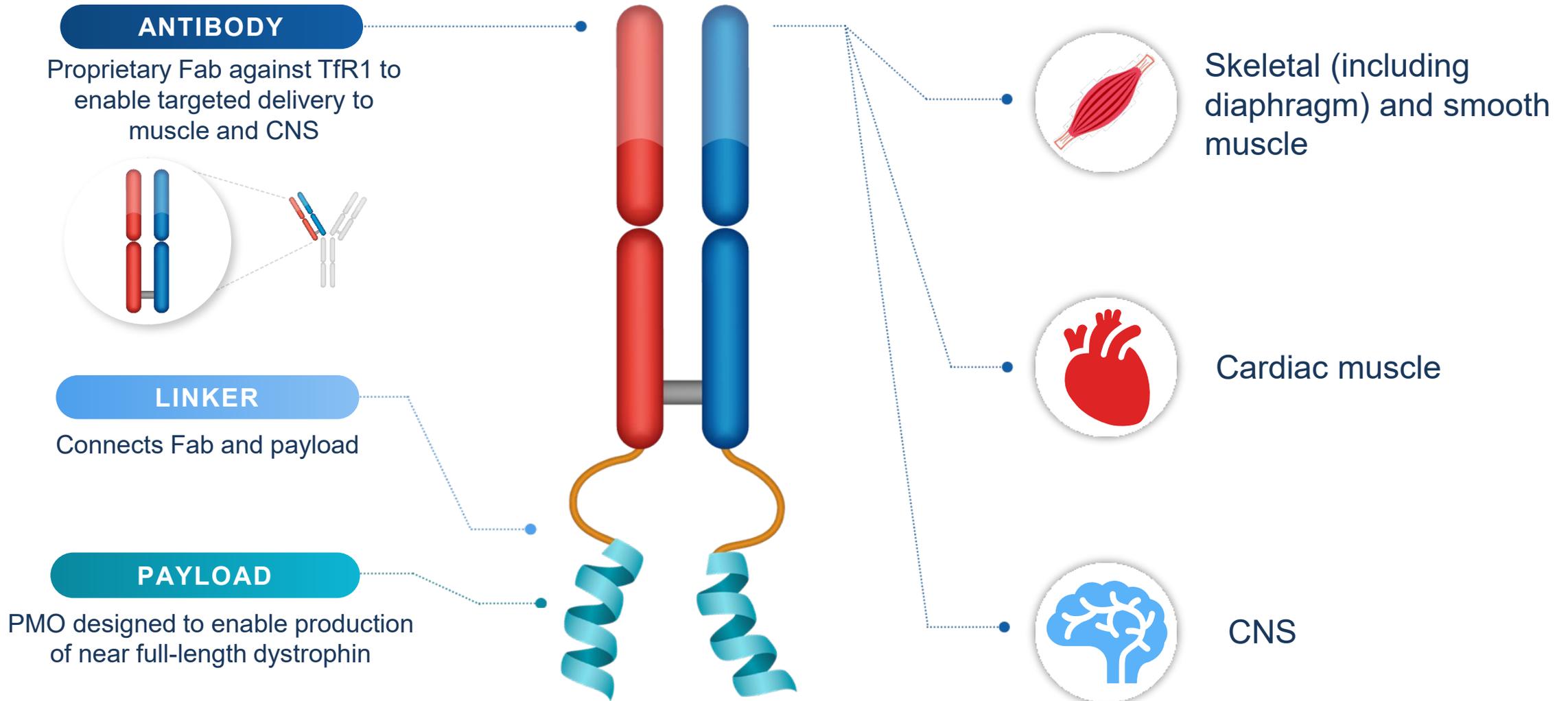


A detailed line drawing illustration of two hands tying the laces of a pair of sneakers. The sneakers are shown from a top-down perspective, with the laces being pulled through the eyelets and tied into a knot. The drawing is rendered in a light gray tone against a white background.

DELIVER trial data: Functional outcomes in focus

Susan Apkon, MD

Zeleciment rostudirsen (z-rostudirsen or DYNE-251) leverages the FORCE™ platform for broad delivery of an exon 51-skipping PMO to tissues impacted by DMD



Zeleciment rostudirsen (z-rostudirsen, also known as DYNE-251) is an investigational medicine or otherwise in development and has not been approved as safe or effective by the US FDA, EMA, or any other regulatory authority. Note: Figure depicts oligonucleotide payload. CNS, central nervous system; DMD, Duchenne muscular dystrophy; Fab, fragment antibody-binding; PMO, phosphorodiamidate morpholino oligomer; TfR1, transferrin receptor 1.

DELIVER study design

 DELIVER (N=86)

Multiple ascending dose (MAD)

N=54
2:1 or 3:1 randomization

Registrational expansion cohort (REC)

N=32
3:1 randomization

6 months

Z-rostudirsen¹ ascending doses

Placebo

Z-rostudirsen 20 mg/kg Q4W

Placebo

Open-label (OLE) / long-term (LTE) extensions

Z-rostudirsen 20 mg/kg²

Select inclusion/exclusion criteria

Inclusion criteria

- Ambulatory or non-ambulatory
- Age 4 to 16 years inclusive
- Stable dosage of glucocorticoids for at least 12 weeks

Exclusion criteria

- Exon-skipping/dystrophin-modifying therapy or givinostat within 12 weeks of randomization
- Gene therapy at any time

Endpoints

Primary endpoints

- Change from baseline in dystrophin protein levels by Western Blot
- Safety and tolerability

Key functional endpoints

- TTR velocity, 10MWR velocity, NSAA, SV95C, PUL2.0, FVC%p

Zelemcent rostudirsen (z-rostudirsen, also known as DYNE-251) is an investigational medicine or otherwise in development and has not been approved as safe or effective by the US FDA, EMA, or any other regulatory authority.

1. Z-rostudirsen doses in the MAD cohorts ranged from 0.7 mg/kg to 40 mg/kg every 4 or 8 weeks. 2. Transition to 20 mg/kg dose occurred at non-uniform times during OLE or LTE; for participants initiated at 40 mg/kg, transition started either in the placebo-controlled period or OLE. 10MWR, 10-meter walk/run; FVC%p, forced vital capacity percent predicted; NSAA, North Star Ambulatory Assessment; PUL2.0, performance upper limb v2.0; Q4W, every 4 weeks; SV95C, stride velocity 95th centile; TTR, time to rise.

Dyne Therapeutics. Positive Topline Results from Phase 1/2 DELIVER Trial of Zelemcent Rostudirsen (DYNE-251) in DMD to Support Potential U.S. Accelerated Approval. Available from: <https://investors.dyne-tx.com/static-files/2e54fea2-98b4-44a4-acaf-6277e0ce965e>.

DELIVER baseline participant characteristics were generally well balanced across cohorts

	Placebo (MAD+REC) N=24 ⁵ Mean (SD) or n (%)	Z-rostudirsen			
		20 mg/kg Q4W (REC) N=24 Mean (SD) or n (%)	10 → 20 mg/kg ⁶ Q4W (MAD) N=6 Mean (SD) or n (%)	20 mg/kg Q4W (MAD) N=6 Mean (SD) or n (%)	Overall (MAD+REC) N=86 Mean (SD) or n (%)
Age (years)	8.2 (2.5)	7.8 (3.6)	6.8 (2.5)	7.7 (2.5)	8.3 (3.3)
BMI (kg/m ²)	19.8 (4.7)	17.6 (4.5)	17.9 (3.7)	17.5 (2.9)	18.7 (4.3)
Age of symptom onset (years)	3.4 (1.8)	2.5 (1.7)	3.0 (1.8)	2.0 (0.9)	2.8 (1.7)
Most recent corticosteroid dosing regimen, n (%) ¹					
Daily	20 (83.3)	20 (83.3)	6 (100)	6 (100)	73 (84.9)
Other	4 (16.7)	4 (16.7)	0	0	13 (15.1)
Duration of corticosteroid treatment (years) ²	2.1 (2.4)	2.4 (2.5)	1.5 (2.0)	2.4 (2.2)	2.6 (2.6)
Prior DMD therapy, n (%)					
Eteplirsen	4 (16.7)	2 (8.3)	0	0	15 (17.4)
Other	2 (8.3)	5 (20.8)	0	2 (33.3)	15 (17.4)
PUL2.0 total score ³	36.3 (4.0)	36.3 (5.0)	37.2 (5.9)	33.8 (3.5)	36.4 (4.2)
FVC%p	92.7 (17.6)	90.0 (22.2)	89.8 (22.7)	90.7 (11.2)	87.5 (19.2)
Ambulant (%)	19 (79.2)	21 (87.5)	5 (83.3)	6 (100)	75 (87.2)
TTR velocity (rise/sec) ⁴	0.20 (0.10)	0.22 (0.12)	0.23 (0.06)	0.17 (0.14)	0.20 (0.1)
10MWR velocity (m/sec) ⁴	2.0 (0.5)	1.8 (0.5)	2.5 (0.7)	1.5 (0.6)	1.9 (0.6)
NSAA total score ⁴	21.6 (6.3)	20.6 (5.0)	26.6 (5.4)	15.0 (5.3)	20.6 (7.0)
SV95C (m/sec) ⁴	1.7 (0.5)	1.5 (0.4)	2.0 (0.3)	1.4 (0.5)	1.6 (0.5)

Zeleciment rostudirsen (z-rostudirsen, also known as DYNE-251) is an investigational medicine or otherwise in development and has not been approved as safe or effective by the US FDA, EMA, or any other regulatory authority.

1. Most recent corticosteroid regimen refers to corticosteroid at time of randomization. 2. Cumulative duration of previous and most recent corticosteroid treatment at the time of randomization. 3. Missing values imputed.

4. Ambulant participants; out-of-threshold and/or missing values imputed. 5. All placebo participants pooled from MAD and REC. 6. Participants transitioned from 10 mg/kg Q4W to 20 mg/kg Q4W after 6 months.

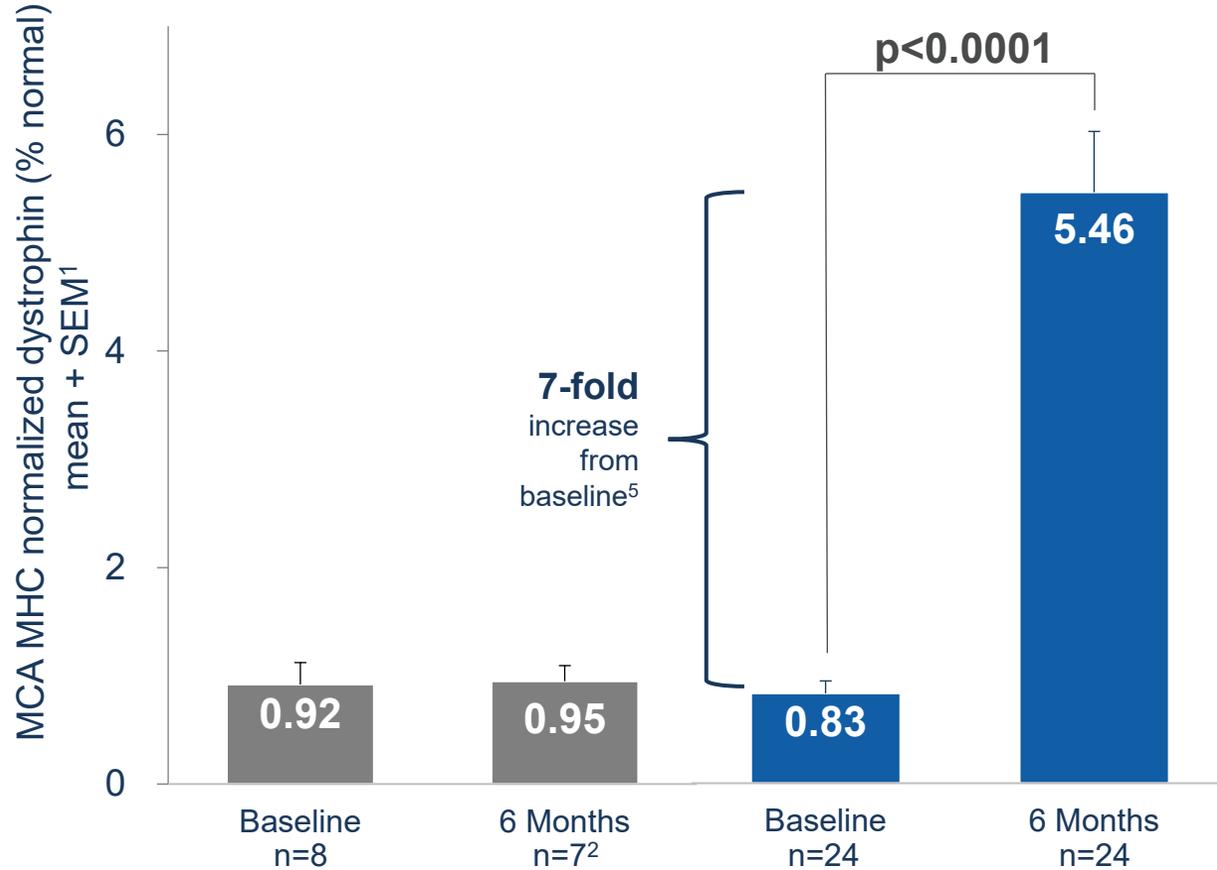
10MWR, 10-meter walk/run; BMI, body mass index; DMD, Duchenne muscular dystrophy; FVC%p, forced vital capacity percent predicted; kg, kilogram; m, meter; MAD, multiple ascending dose; NSAA, north star ambulatory assessment;

PUL2.0, performance upper limb v2.0; Q4W, every 4 weeks; REC, registrational expansion cohort; SD, standard deviation; SV95C, stride velocity 95th centile; TTR, time to rise.

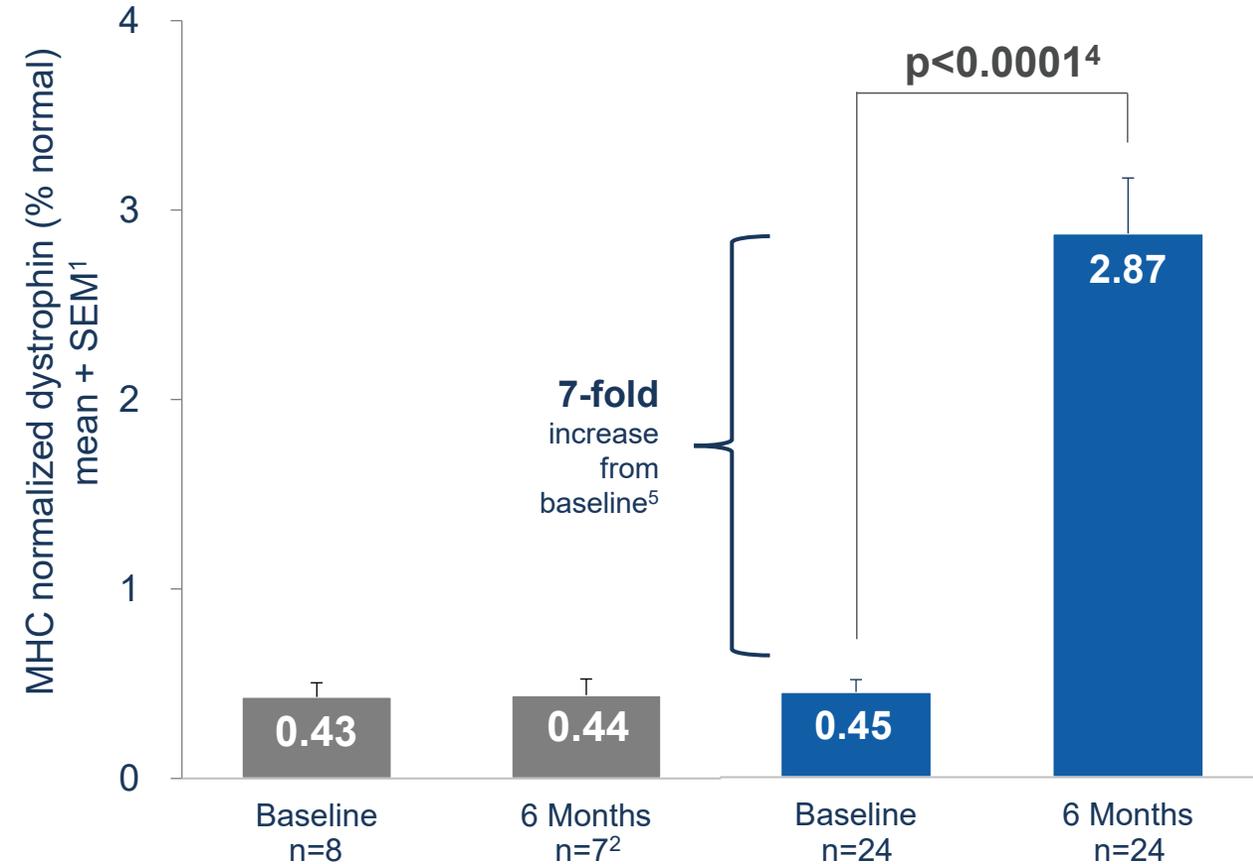
Dyne Therapeutics. Positive Topline Results from Phase 1/2 DELIVER Trial of Zeleciment Rostudirsen (DYNE-251) in DMD to Support Potential U.S. Accelerated Approval. Available from: <https://investors.dyne-tx.com/static-files/2e54fea2-98b4-44a4-acaf-6277e0ce965e>.

Dystrophin expression with z-rostudirsen relative to baseline at 6 months

Muscle content-adjusted dystrophin³ (REC)



Unadjusted dystrophin (REC)



■ Placebo ■ Z-rostudirsen 20 mg/kg Q4W (REC)

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1. Biopsies taken approximately 28 days after most recent dose. 2. One REC placebo participant sample could not be analyzed at Week 25. 3. Muscle content-adjusted dystrophin = MHC normalized dystrophin / % muscle content.

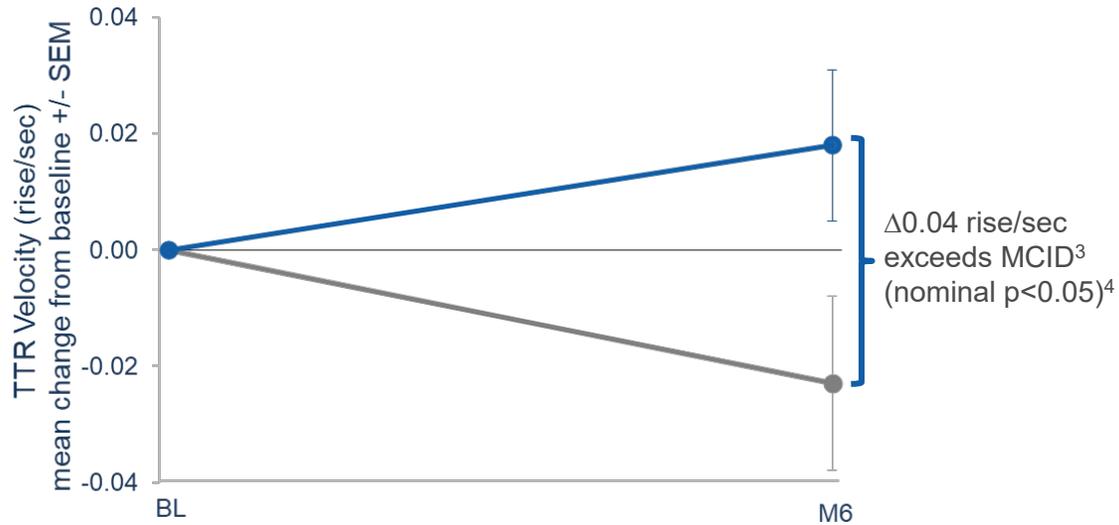
4. Prespecified nominal p-value with no adjustment for multiplicity. 5. Based on geometric mean.

6 months = Week 25 for DELIVER. MCA, muscle content-adjusted; MHC, myosin heavy chain; Q4W, every 4 weeks; REC, registrational expansion cohort; SEM, standard error of the mean.

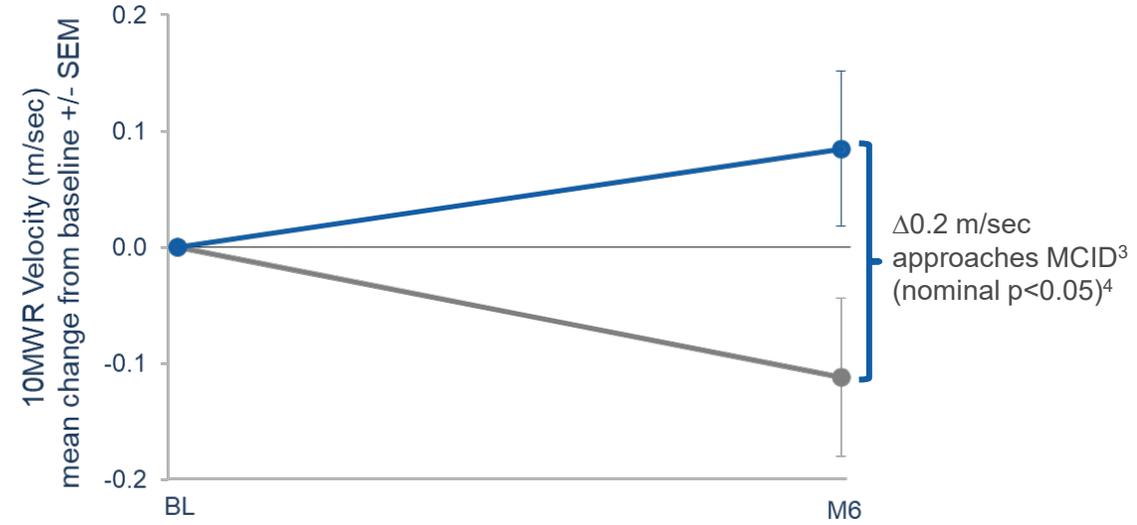
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Increase in TTR velocity and 10MWR velocity at 6 months

Time to rise¹ (TTR) velocity²



10-meter walk/run (10MWR) velocity²



● Placebo (REC+MAD) (n=18)

● Z-rostudirsen 20 mg/kg Q4W (REC) (n=21)

● Placebo (REC+MAD) (n=18)

● Z-rostudirsen 20 mg/kg Q4W (REC) (n=21)

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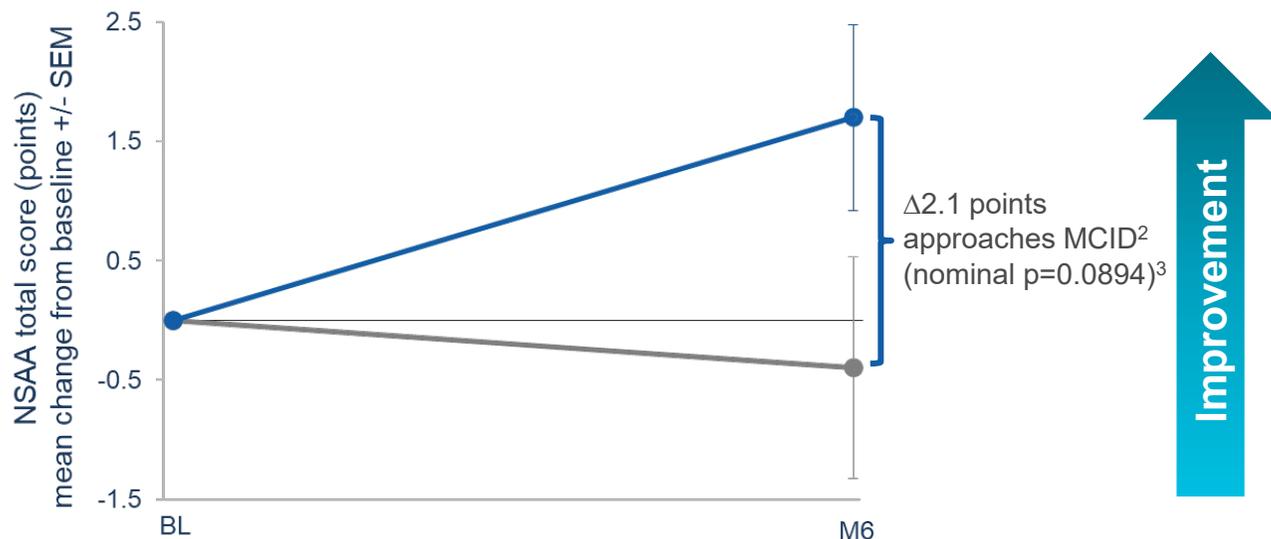
1. Also referred to as rise from floor (RFF). 2. Ambulant participants; out-of-threshold or missing values imputed. 3. Duong T et al. *J Neuromusc Dis.* 2021; 8(6):939-948; RFF velocity MCID = 0.023 rise/sec; 10MWR velocity MCID = 0.212 m/sec. 4. Post-hoc analysis; prespecified statistical analysis plan did not include formal hypothesis testing for any functional endpoint.

BL, baseline; M6 = 169 days; M, month; sec, seconds; SEM, standard error of mean; MCID, minimal clinically important difference; REC, registrational expansion cohort; MAD, multiple ascending dose; Q4W, every 4 weeks.

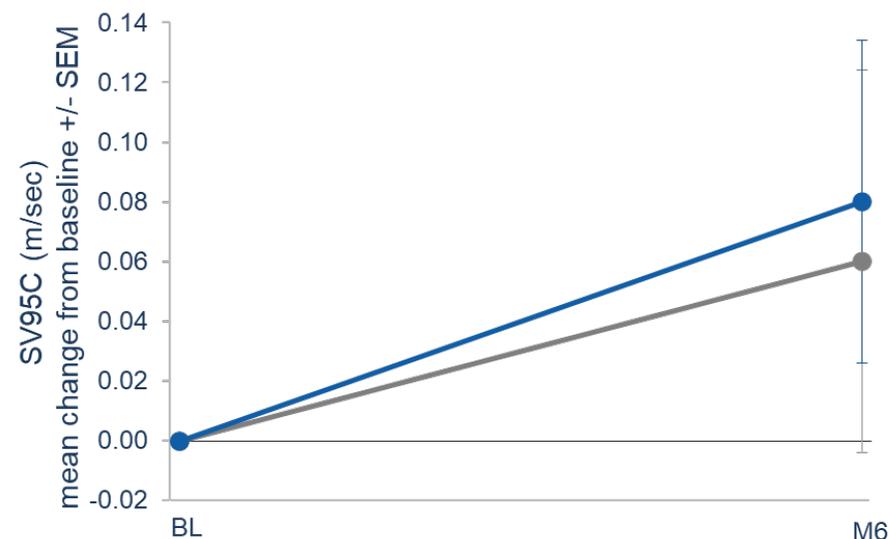
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Increase in NSAA and SV95C at 6 months

North Star Ambulatory Assessment (NSAA)¹



Stride Velocity 95th Centile (SV95C)¹



● Placebo (REC+MAD) (n=18)

● Z-rostudirsen 20 mg/kg Q4W (REC) (n=21)

● Placebo (REC+MAD)⁴ (n=12)

● Z-rostudirsen 20 mg/kg Q4W (REC) (n=20)

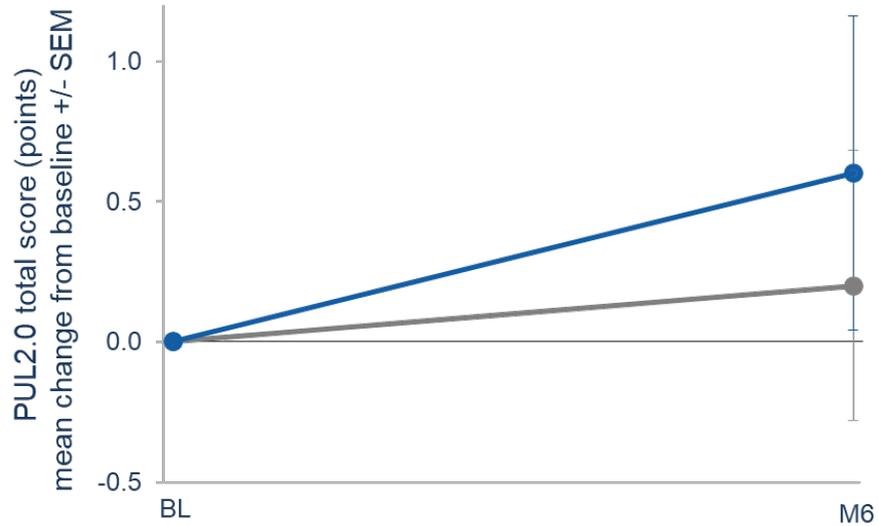
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1. Ambulant participants; missing values imputed. 2. Ayyar Gupta et al. *PLoS One*. 2023 Apr 26;18(4):e0283669; NSAA MCID ≥ 2.3 points. 3. Post-hoc analysis; prespecified statistical analysis plan did not include formal hypothesis testing for any functional endpoint. 4. Placebo impacted by single participant with change from baseline of 0.46 m/sec at 6M; if this participant were excluded, mean change from baseline at 6M for placebo would be approximately 0.02 m/sec. BL, baseline; M6 = 169 days; M, month; sec, seconds; SEM, standard error of mean; MCID, minimal clinically important difference; REC, registrational expansion cohort; MAD, multiple ascending dose; Q4W, every 4 weeks.

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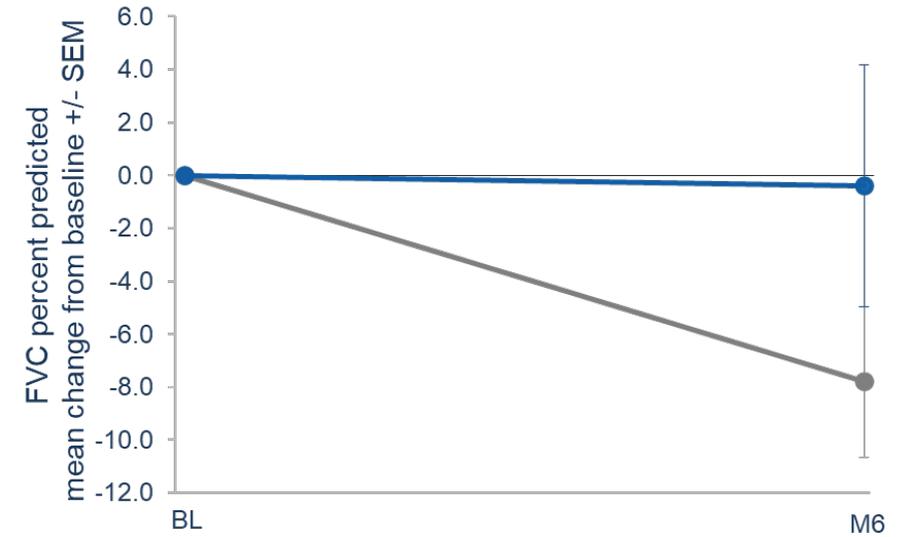
PUL2.0 and FVC%p at 6 months in ambulant and non-ambulant participants

Performance upper limb v2.0 (PUL2.0)¹



- Placebo (REC+MAD) (n=23)
- Z-rostudirsen 20 mg/kg Q4W (REC) (n=22)

Forced vital capacity percent predicted (FVC%p)¹



- Placebo (REC+MAD) (n=20)
- Z-rostudirsen 20 mg/kg Q4W (REC) (n=15)

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1. Ambulant and non-ambulant participants; missing values imputed for PUL2.0. BL, baseline; M6 = 169 days; M, month; sec, seconds; SEM, standard error of mean; REC, registrational expansion cohort; MAD, multiple ascending dose; Q4W, every 4 weeks.

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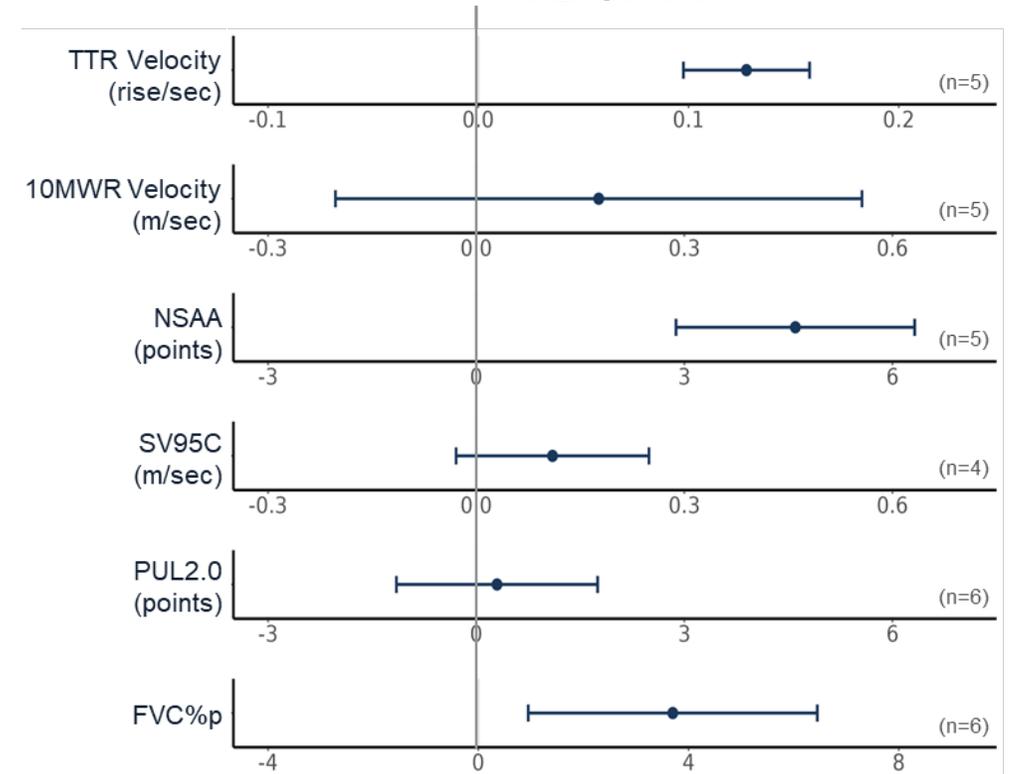
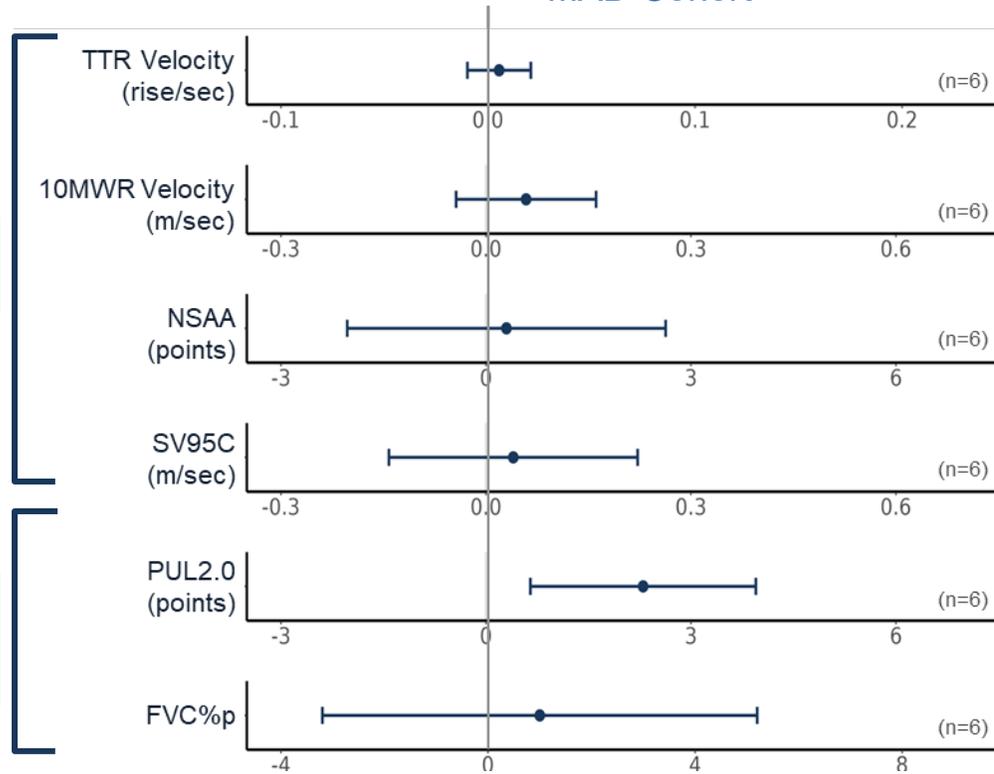
Functional improvement compared with baseline across all 6 measures up to 24 months in the OLE/LTE

18-month CFB¹
20 mg/kg Q4W
MAD Cohort

24-month CFB¹
10 → 20 mg/kg Q4W²
MAD Cohort

Ambulatory participants

Ambulatory & non-ambulatory participants



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1. Mean change from baseline +/- SEM; TTR velocity, 10MWR velocity, NSAA, and SV95C analyzed from ambulant participants; PUL2.0 and FVC%p analyzed from ambulant and non-ambulant participants; Out-of-threshold and/or missing values imputed except for FVC%p.

2. Participants transitioned from 10 mg/kg Q4W to 20 mg/kg Q4W after 6M; all participants treated with 20 mg/kg Q4W for at least 12M in the 24M assessment. 10MWR, 10-meter walk/run; CFB, change from baseline; FVC%p, forced vital capacity percent predicted; LTE, long-term extension; m, meters; MAD, multiple ascending dose; NSAA, North Star Ambulatory Assessment; OLE, open-label extension; PUL2.0, performance upper limb v2.0; Q4W, every 4 weeks; sec, second; SEM, standard error of the mean; SV95C, stride velocity 95th centile; TTR, time to rise. Dyne Therapeutics. Positive Topline Results from Phase 1/2 DELIVER Trial of Zeleciment Rostudirsen (DYNE-251) in DMD to Support Potential U.S. Accelerated Approval. Available from: <https://investors.dyne-tx.com/static-files/2e54fea2-98b4-44a4-acaf-6277e0ce965e>.

Summary of DELIVER data

Endpoint	Patient population	Muscle system	6-month functional improvement vs. placebo*	24-month functional improvement vs. baseline†
TTR velocity	Ambulatory	Trunk & lower limbs	✓	✓
10MWR velocity	Ambulatory	Lower limbs	✓	✓
NSAA	Ambulatory	Upper limbs, trunk & lower limbs	✓	✓
SV95C	Ambulatory	Lower limbs	✓	✓
PUL2.0	Ambulatory & non-ambulatory	Upper limbs	✓	✓
FVC%p	Ambulatory & non-ambulatory	Diaphragm & trunk	✓	✓

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*Reflects results from 6-month placebo-controlled Registrational Expansion Cohort of DELIVER trial with 20 mg/kg Q4W z-rostudirsen. Check mark represents numerically higher value relative to placebo. †Reflects 24-month results from the long-term portions of the DELIVER trial for participants who transitioned from 10 mg/kg Q4W to 20 mg/kg Q4W after 6M; all participants treated with 20 mg/kg Q4W for at least 12M in the 24M assessment. Check mark represents numerically higher value relative to baseline.

Considerations regarding dose escalation over time in a MAD study

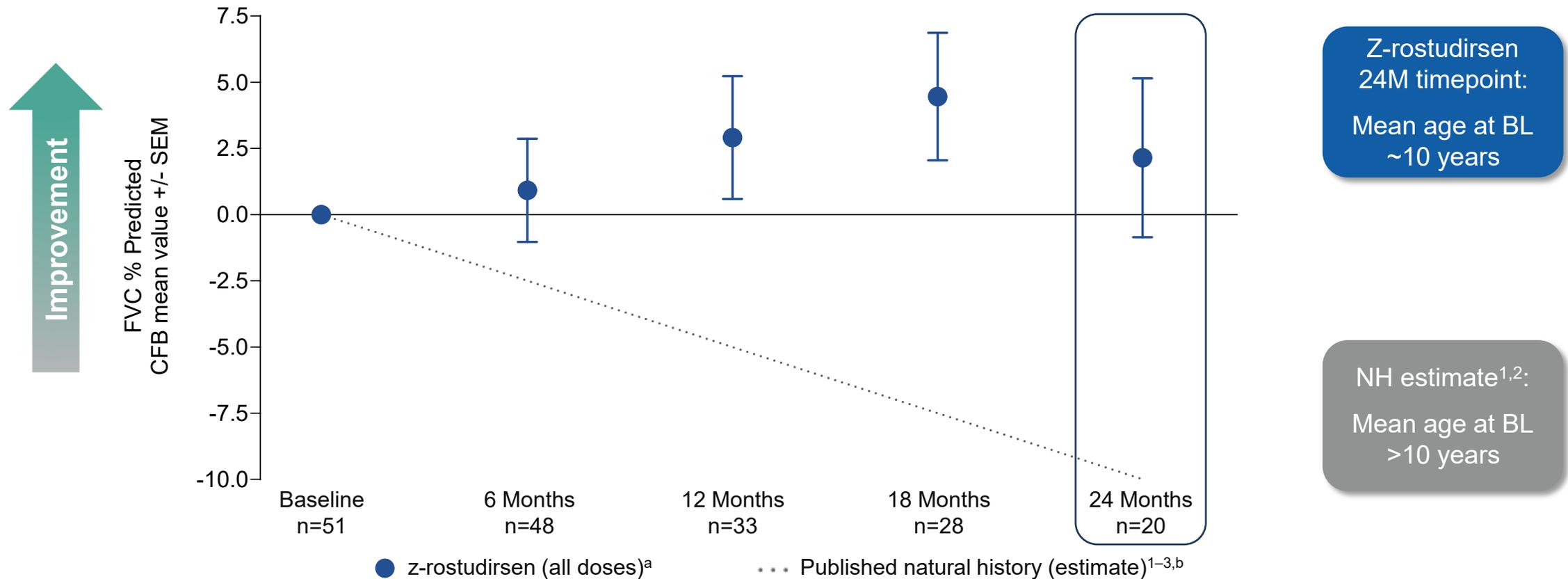
Each timepoint represents a group of participants at varied dose levels and duration

Dose levels	<ul style="list-style-type: none">• Doses were escalated sequentially• Later timepoints included participants starting at low doses and who may have dose escalated through multiple doses
Dose duration	<ul style="list-style-type: none">• Each timepoint reflects a group of participants with varying amounts of time on any specific dose

Considerations

- Most participants accrued substantial time on doses lower than 20 mg/kg Q4W prior to escalation
- The observed long-term efficacy may not reflect the effect of continuously maintaining 20 mg/kg Q4W
- There may be an underestimate of the true effect

Long-term lung function with z-rostudirsen compared to published natural history data



- The majority of participants at the 24M timepoint initiated treatment at the 0.7–2.8 mg/kg Q4W dose levels. One participant initiated treatment at 20 mg/kg Q4W
- All participants at the 24M timepoint received 20 mg/kg Q4W z-rostudirsen for ≥9 months

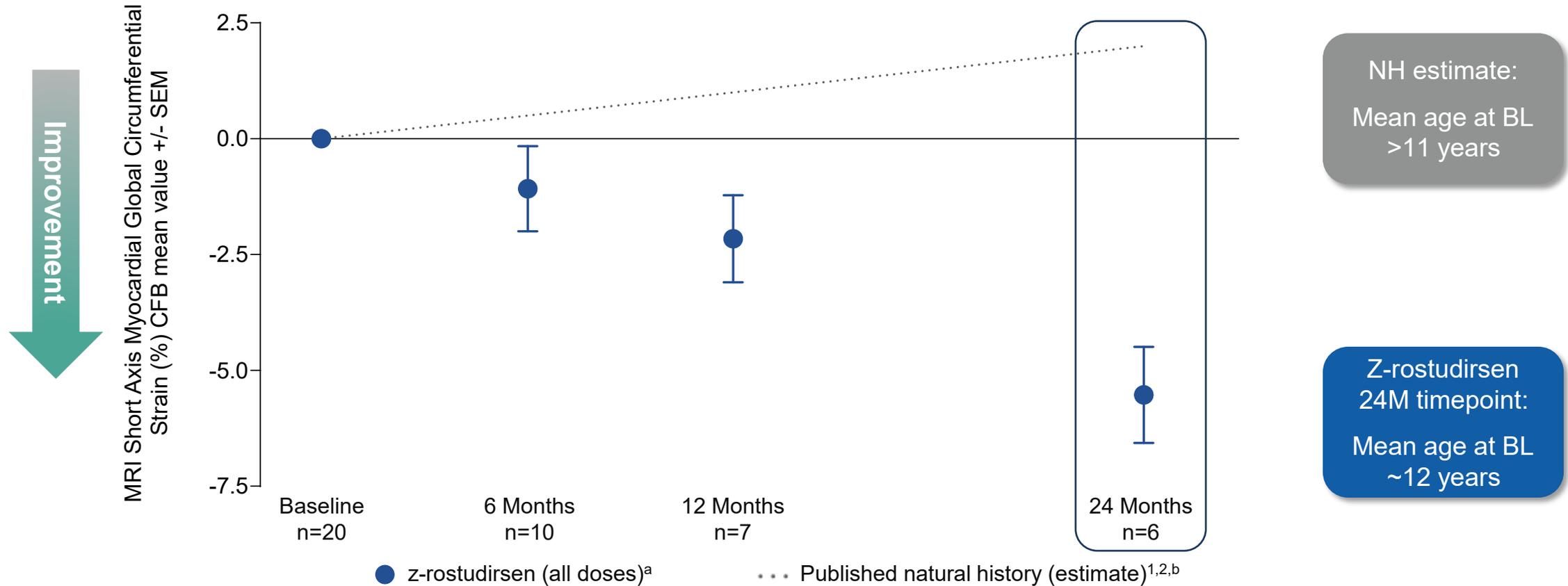
Results are reported as mean CFB through 24 months and presented with SEM.

a. Shown are all DELIVER participants (REC + MAD) randomized to z-rostudirsen treatment at baseline (any dose, including dose escalation[s] or de-escalation) and for whom FVC%p data were available. b. Based on 2-year published natural history data; assumes ~5%/year decline in FVC%p.

BL, baseline; CFB, change from baseline; FVC%p, forced vital capacity percent predicted; MAD, multiple ascending dose; NH, natural history; REC, registrational expansion cohort; SEM, standard error of the mean.

1. Mayer OH, et al. *Pediatr Pulmonol.* 2015;50:487–494; 2. McDonald CM, et al. *Neuromuscul Disord.* 2018;28:897–909; 3. Meier T, et al. *Neuromuscul Disord.* 2017;27:307–314.

CMR-based circumferential strain in z-rostudirsen-treated participants compared to published natural history data



- The majority of participants at the 24M timepoint initiated treatment at the 0.7–2.8 mg/kg Q4W dose levels. One participant initiated treatment at 20 mg/kg Q4W
- All participants at the 24M timepoint received 20 mg/kg Q4W z-rostudirsen for ≥6 months

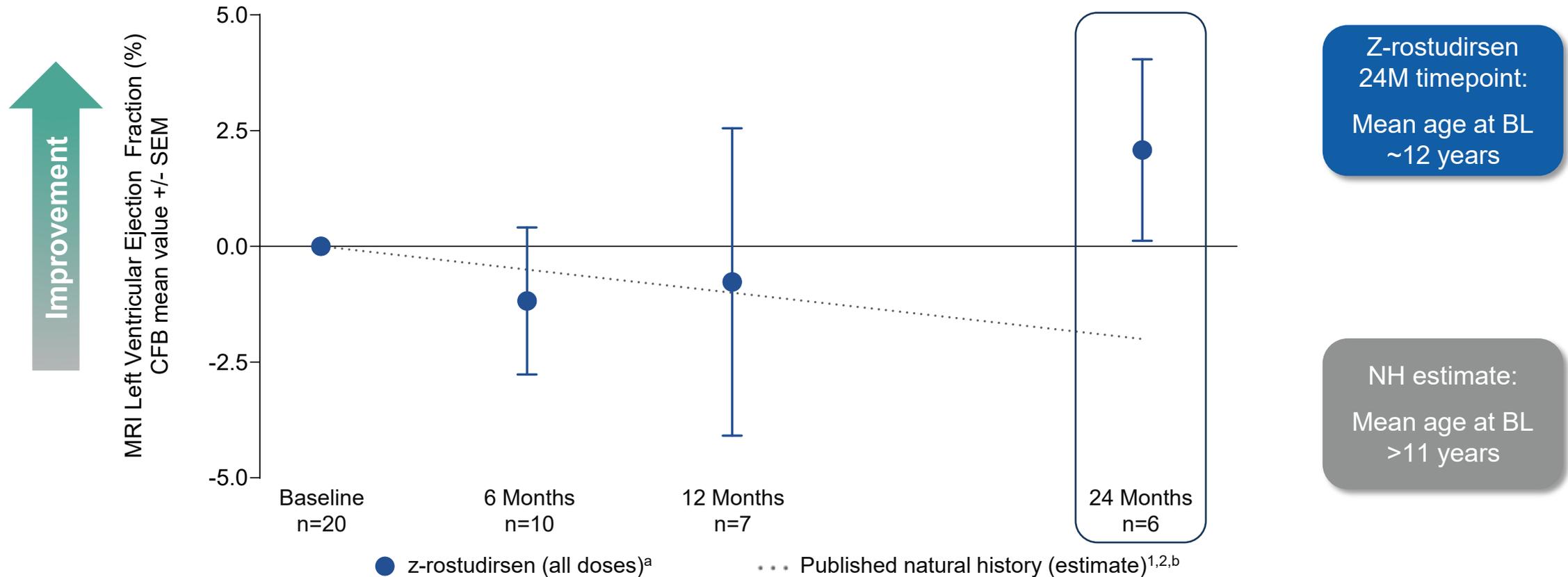
Results are reported as mean CFB through 24 months and presented with SEM.

a. Shown are all DELIVER participants (REC + MAD) randomized to z-rostudirsen treatment at baseline (any dose, including dose escalation[s] or de-escalation) and for whom circumferential strain data were available. b. Based on 2-year published natural history data; assumes ~1%/year decline in strain.

BL, baseline; CFB, change from baseline; CMR, cardiac magnetic resonance; MAD, multiple ascending dose; MRI, magnetic resonance imaging; NH, natural history; REC, registrational expansion cohort; SEM, standard error of the mean.

1. Batra A, et al. *BMC Cardiovasc Disord.* 2022;22:260. 2. Hagenbuch SC, et al. *Am J Cardiol.* 2010;105:1451–1455.

CMR-based left ventricular ejection fraction in z-rostudirsen-treated participants compared to published natural history data



- The majority of participants at the 24M timepoint initiated treatment at the 0.7–2.8 mg/kg Q4W dose levels. One participant initiated treatment at 20 mg/kg Q4W
- All participants at the 24M timepoint received 20 mg/kg Q4W z-rostudirsen for ≥6 months

Results are reported as mean CFB through 24 months and presented with SEM.

a. Shown are all DELIVER participants (REC + MAD) randomized to z-rostudirsen treatment at baseline (any dose, including dose escalation[s] or de-escalation) and for whom left ventricular ejection fraction data were available.

b. Based on 2-year published natural history data; assumes ~1%/year decline in LVEF.

BL, baseline; CFB, change from baseline; CMR, cardiac magnetic resonance; LVEF, left ventricular ejection fraction; MAD, multiple ascending dose; MRI, magnetic resonance imaging; NH, natural history; REC, registrational expansion cohort; SEM, standard error of the mean.

1. Batra A, et al. *BMC Cardiovasc Disord.* 2022;22:260. 2. Hagenbuch SC, et al. *Am J Cardiol.* 2010;105:1451–1455.

Safety profile of z-rostudirsen 20 mg/kg Q4W

Summary of treatment-emergent adverse events (TEAEs)¹

Study period	Placebo-controlled (PC) period (0 to 6M)	
	Placebo (MAD+REC) N=24 ²	Z-rostudirsen 20 mg/kg Q4W (MAD+REC) N=30 ³
Participants with ≥1 TEAE – n (%)		
Any TEAE	22 (91.7)	29 (96.7)
Any related TEAE	3 (12.5)	10 (33.3)
Any serious TEAE	1 (4.2)	2 (6.7)
Any serious related TEAE	0	0
Any TEAE leading to withdrawal from study	0	0
Any TEAE leading to death	0	0

All study periods (0 to ≤36M)
Z-rostudirsen Pooled doses ⁴ (MAD+REC) N=85 ⁵
80 (94.1)
41 (48.2)
10 (11.8)
4 (4.7)
0
0

Most related TEAEs were mild or moderate

Potentially related serious TEAEs

- 2 participants at 20 mg/kg Q4W (registrational dose)
 - Pyrexia (fever) and malaise⁶
- 2 participants at 40 mg/kg Q4W
 - Acute kidney injury; thrombocytopenia⁷
 - Pancytopenia⁸

Most frequent related TEAEs ≥10%⁹

- Pyrexia (fever) (18%)
- Headache (13%)

Additional safety data at 20 mg/kg Q4W

- No participants have persistent related anemia¹⁰ or thrombocytopenia

1,441 doses of z-rostudirsen administered to date representing 113 patient-years of follow-up (up to 36 months)¹
1,062 doses of z-rostudirsen at 20 mg/kg dose level administered to date¹

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1. Data as of August 19, 2025; all participants, placebo-controlled period, OLE, and LTE. 2. All placebo participants pooled from MAD and REC. 3. All participants randomized to z-rostudirsen 20 mg/kg Q4W in MAD and REC cohorts.

4. All doses of z-rostudirsen from MAD and REC at doses ranging from 0.7 mg/kg to 40 mg/kg every 4 or 8 weeks. 5. One participant randomized to placebo in REC not yet dosed with z-rostudirsen as of August 19, 2025. 6. One participant with same day onset of pyrexia and malaise in OLE and separate single event of pyrexia in LTE; one participant with single event of pyrexia in LTE; both participants fully recovered and have continued to receive z-rostudirsen without interruption. 7. Events had same day of onset in a single participant with a non-serious related TEAE of anemia in the context of fever, hemolysis, diarrhea, and positive blood in stool; together these events were consistent with hemolytic uremic syndrome with a possible infectious etiology. 8. Participant has a history of hemolytic anemia of unidentified etiology; presented with fever and tonsillitis; symptoms resolved without therapeutic intervention. 9. All cohorts combined; preferred terms reported. 10. No participants have persistent related anemia with Hgb levels <11.2 g/dL (threshold for anemia in children [ref: Powers JM. Approach to the child with anemia. UpToDate, Connor RF (Ed), Wolters Kluwer. Accessed December 2, 2025]).

Hgb, hemoglobin; LTE, long-term extension; M, months; MAD, multiple ascending dose; OLE, open-label extension; Q4W, every 4 weeks; REC, registrational expansion cohort; TEAE, treatment-emergent adverse event.

Dyne Therapeutics. Positive Topline Results from Phase 1/2 DELIVER Trial of Zeleciment Rostudirsen (DYNE-251) in DMD to Support Potential U.S. Accelerated Approval. Available from: <https://investors.dyne-tx.com/static-files/2e54fea2-98b4-44a4-acaf-6277e0ce965e>.

Summary



Investigational z-rostudirsen appears to show broad multisystem functional improvement in clinical measures across muscles of the upper and lower limb, the trunk, and cardiac and pulmonary muscles



The DELIVER REC met the primary endpoint, demonstrating a statistically significant increase in mean muscle content-adjusted dystrophin at 6 months compared with baseline



At 6 months, functional improvement was observed across multiple measures of muscle strength and function relative to baseline and placebo, including TTR velocity, 10MWR velocity, NSAA, and PUL2.0

Functional improvement was also seen over the longer term (up to 24 months) across these clinical measures, including measures of cardiac and pulmonary function



Z-rostudirsen demonstrated a favorable safety and tolerability profile based on data from 86 participants enrolled in DELIVER and followed for up to 36 months¹



Data from the DELIVER trial support the potential of z-rostudirsen to address the unmet needs of individuals with DMD pathogenic variants amenable to exon 51 skipping

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1. Data as of August 19, 2025.

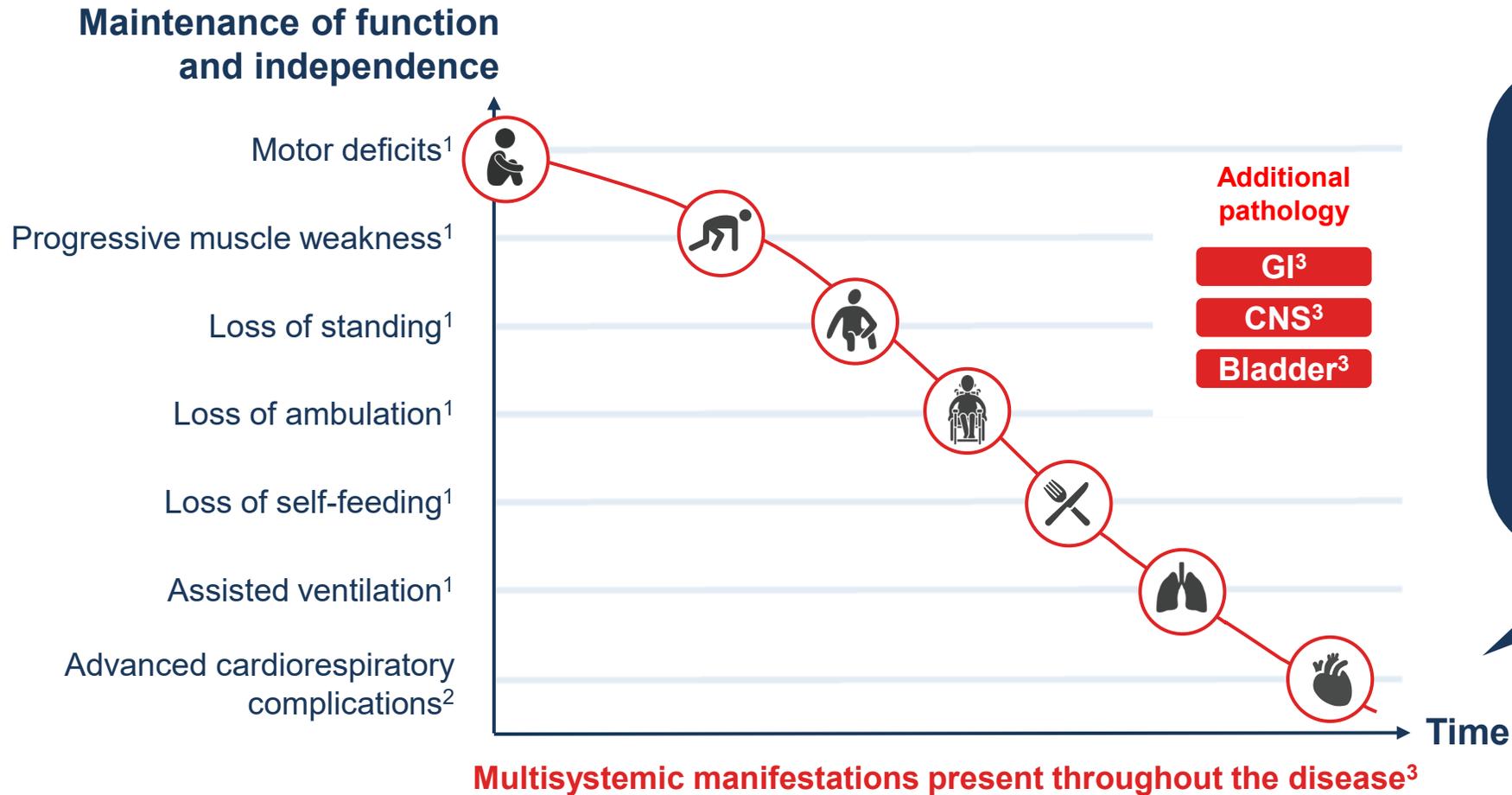
10MWR, 10-meter walk/run; DMD, Duchenne muscular dystrophy; NSAA, North Star Ambulatory Assessment; PUL, performance upper limb; REC, registrational expansion cohort; TTR, time to rise.

A detailed line drawing illustration of a pair of hands tying the laces of a pair of sneakers. The drawing is rendered in a light gray tone, serving as a background for the text. The hands are positioned at the top, with fingers looping the laces to form a knot. The sneakers are shown from a top-down perspective, with the laces crisscrossing across the eyelets.

Moving the needle in DMD

Susan Apkon, MD

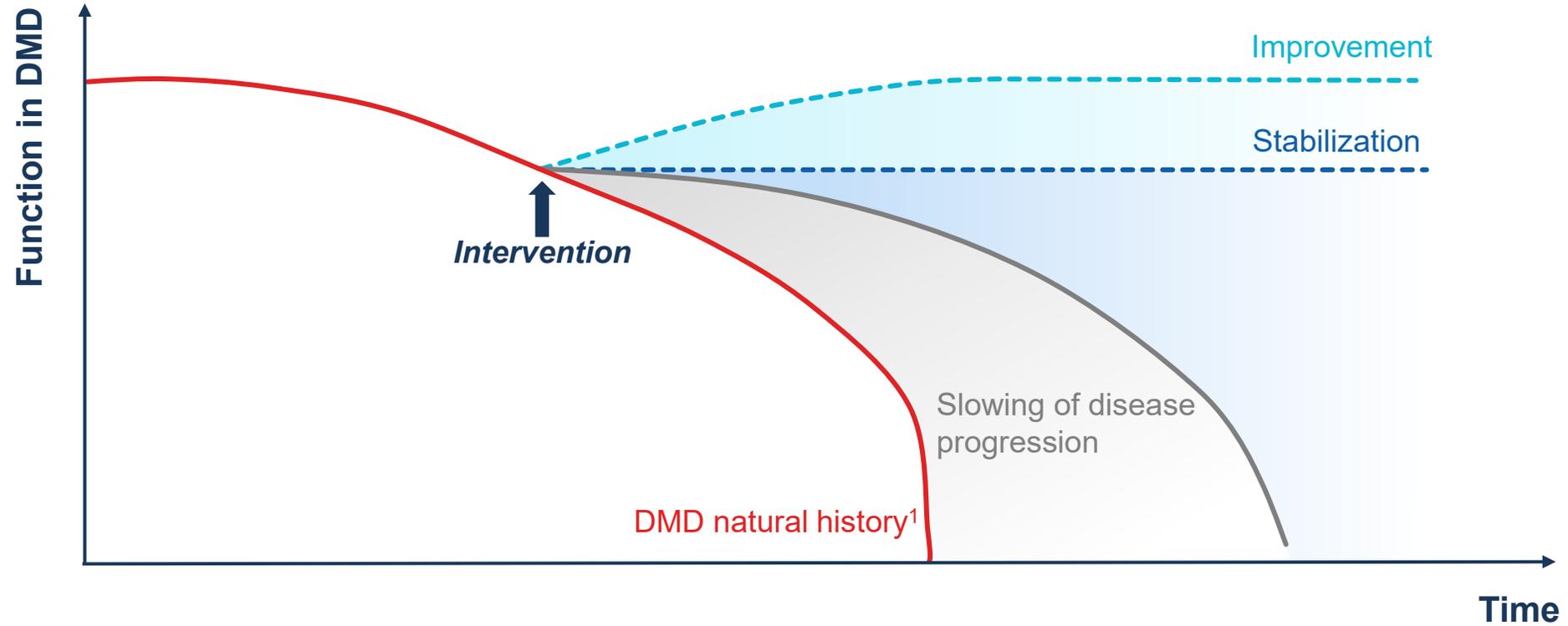
DMD is a multisystemic disease of progressive losses



"With Duchenne, there's just so many losses and they are constant, it's like losing a game over and over again but still having to play. This disease has robbed our son of so much – and to be honest it's not even those big things I'm thinking of, like sports, and running around with friends. It's more like losing the things that make a person feel dignified."

Caregiver

Moving away from progressive decline to a modifiable disease trajectory in DMD



A stylized illustration of a person's hands in a blue shirt tying the laces of a pair of red sneakers with white soles. The drawing uses bold lines and a limited color palette of red, blue, and white.

THANK YOU