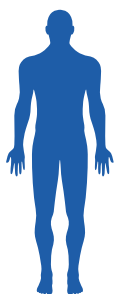


DM1 IS A MULTI-SYSTEM NEUROMUSCULAR DISEASE WITH BROAD FUNCTIONAL IMPACT^{a1,2}



Skeletal muscle: Muscle weakness, myotonia, balance issues, muscle pain, atrophy³



CNS: Cognitive, emotional and behavioral/personality impact, sleep, fatigue, excessive daytime sleepiness^{2,4}



Cardiac: Conduction disturbances, arrhythmia, cardiomyopathy, sudden death^{1,5,6}



Respiratory: Diaphragm weakness, shortness of breath, respiratory failure^{1,3,5}



Gastrointestinal: Dysphagia, constipation, heartburn, regurgitation^{1,5}



Endocrine: Thyroid disorders, diabetes, male hypogonadism, vitamin D deficiency¹



Ocular: Cataracts, ptosis¹

ESTABLISHING A FRAMEWORK FOR PRIMARY ENDPOINT SELECTION IN LATE-STAGE DM1 CLINICAL TRIALS

Considerations for clinical endpoint selection in DM1



Reliable



Responsive



Functionally meaningful



Applicable to activities of daily living

5xSTS MAY PROVIDE A POTENTIAL MEASURE FOR FUNCTIONAL IMPROVEMENT IN DM1

5xSTS is a comprehensive measure of multiple functional attributes⁷



Lower extremity function



Trunk muscle engagement



Balance/postural control



Functional mobility

5xSTS assesses fall risk⁷

8x↑

fall frequency in DM1 vs healthy controls⁸

~40%

of falls result in ≥1 injury, including fractures^{8,9}

5xSTS requires engagement of trunk muscles⁷

Fat infiltration of trunk muscles in DM1¹⁰



Muscle strength¹⁰
Mobility and balance^{10,11}
Respiratory function¹⁰

5xSTS measures ability to perform activities of daily living⁷

Individuals with myotonic dystrophy show impairment in 5xSTS vs healthy controls, with the test ranking among the top 5 muscle tests for distinguishing between the two groups^{5,12}

The 5xSTS test measures the total amount of time taken to move from sitting to standing 5 times, without using arms or assistive devices¹³

THE 5xSTS TEST MAY PROVIDE A COMPREHENSIVE MEASURE OF FUNCTIONAL IMPROVEMENT IN DM1 CLINICAL TRIALS

Footnotes: ^aImage does not represent an exhaustive list of symptoms; ^bStudy included 58 individuals with myotonic dystrophy (49 with DM1, 9 with myotonic dystrophy type 2 [DM2]). Image adapted from Cicirelli G & D'Orazio T, 2022, licensed under a CC-BY 4.0 Creative Commons license.

Abbreviations: 5xSTS, 5-times sit-to-stand; CNS, central nervous system; DM1, myotonic dystrophy type 1.

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