

# Imaging DMD Data Dictionary

## Demographics

Field Name	Description	Data Type	Precision / Possible Values
<b>height_cm</b>	Height	Integer	XXX cm
<b>weight_kg</b>	Weight	Decimal	XX.X kg
<b>race</b>	Self-reported race	Character	Various
<b>ethnicity</b>	Self-reported ethnicity	Character	Various: Hispanic/Latino, Not Hispanic/Latino
<b>tanner_stage</b>	Self-reported Tanner stage	Character	Various: Score from 1-5
<b>steroid_status</b>	Self-reported corticosteroid status	Character	On, Off, Unknown
<b>ambulatory_status</b>	ambulatory status at a given visit (based on 10m walk/run qualitative grade OR Brooke score OR functional evaluator's assessment of ambulatory status, in that order)	Character	Ambulatory, Nonambulatory
<b>corticosteroid_initiation_age</b>	Patient-reported age at the time of corticosteroid treatment initiation	Integer	XX years
<b>steroid_name</b>	Name of corticosteroid medication reported.	Character	Various, including <empty> if <b>steroid_status</b> is Unknown or Off
<b>mutation_type_general</b>	Type of genetic mutation	Character	Various
<b>mutation_designation</b>	Designation of genetic mutation	Character	Various
<b>PSC_MIS_intron</b>	PSC / MIS Intron information	Character	Various
<b>LTBP4_genotype</b>	Genotypes for LTBP4 rs2302729, rs1131620, rs1051303, and rs10880.	Character	Various
<b>SPP1_genotype</b>	Genotype for SPP1 rs28357094	Character	Various: TT, TG, or GG

## MRI T2 Measures

Field Name	Description	Data Type	Precision / Possible Values
<b>MRI_T2_mean_MG</b>	Medial gastrocnemius global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_PER</b>	Peroneal global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_SOL</b>	Soleus global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_TA</b>	Tibialis anterior global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_TP</b>	Tibialis posterior global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_BFLH</b>	Biceps femoris long head global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_GRA</b>	Gracilis global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_VL</b>	Vastus lateralis global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_DEL</b>	Deltoid global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_BB</b>	Biceps brachii global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_TB</b>	Triceps brachii global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_AF</b>	Anterior forearm global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds
<b>MRI_T2_mean_PF</b>	Posterior forearm global T <sub>2</sub> by MR Imaging	Decimal	X.X milliseconds

## Dixon FF Measures

Field Name	Description	Data Type	Precision / Possible Values
<b>Dixon_FF_MG</b>	Medial gastrocnemius FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_PER</b>	Peroneal FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_SOL</b>	Soleus FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_TA</b>	Tibialis anterior FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_TP</b>	Tibialis posterior FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_BFLH</b>	Biceps femoris long head FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_GRA</b>	Gracilis FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_VL</b>	Vastus lateralis FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_DEL</b>	Deltoid FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_BB</b>	Biceps brachii FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_TB</b>	Triceps brachii FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_AF</b>	Anterior forearm FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)
<b>Dixon_FF_PF</b>	Posterior forearm FF by 8-pt Dixon MR Imaging	Decimal	0.XX (fat/fat+water)

## MRS Measures

Field Name	Description	Data Type	Precision / Possible Values
<b>MRS_FF_SOL</b>	Soleus fat fraction by <sup>1</sup> H Spectroscopy	Decimal	0.XX (fat/fat+water)
<b>MRS_T2_SOL</b>	Soleus water T <sub>2</sub> by <sup>1</sup> H Spectroscopy	Decimal	X.X milliseconds
<b>MRS_FF_VL</b>	Vastus Lateralis fat fraction by <sup>1</sup> H Spectroscopy	Decimal	0.XX (fat/fat+water)
<b>MRS_T2_VL</b>	Vastus Lateralis water T <sub>2</sub> by <sup>1</sup> H Spectroscopy	Decimal	X.X milliseconds
<b>MRS_FF_DEL</b>	Deltoid fat fraction by <sup>1</sup> H Spectroscopy	Decimal	0.XX (fat/fat+water)
<b>MRS_T2_DEL</b>	Deltoid water T <sub>2</sub> by <sup>1</sup> H Spectroscopy	Decimal	X.X milliseconds
<b>MRS_FF_BB</b>	Biceps brachii fat fraction by <sup>1</sup> H Spectroscopy	Decimal	0.XX (fat/fat+water)
<b>MRS_T2_BB</b>	Biceps brachii water T <sub>2</sub> by <sup>1</sup> H Spectroscopy	Decimal	X.X milliseconds

## Strength, Function, and Range of Motion Measures

Field Name	Description	Data Type	Precision / Possible Values
<b>CFS_fastest_sec</b>	Fastest time to climb 4 stairs.	Decimal	X.X seconds
<b>SMWT_distance_total</b>	6 minute walk total distance	Integer	XXX meters
<b>STS_fastest_sec</b>	Fastest time to rise from supine	Decimal	X.X seconds
<b>TMW_fastest_sec</b>	Fastest time to walk 10 meters	Decimal	X.X seconds
<b>fsc_grade</b>	Four stair climb qualitative grade	Character	Various: grade from 1-6
<b>fsd_grade</b>	Four stair decent qualitative grade	Character	Various: grade from 1-6
<b>sts_grades</b>	Supine to stand qualitative grade	Character	Various: grade from 1-6
<b>tmw_grades</b>	10 meter walk qualitative grade	Character	Various: grade from 1-6
<b>brooke_score_LE</b>	Modified Brooke lower extremity scale score	Character	Various: score from 1-10
<b>brooke_score_UE</b>	Brooke Upper Extremity Scale	Character	Various: score from 1-6
<b>ke_peak_torque</b>	Knee Exterior calculated peak torque from isometric dynamometry	Decimal	XX.X numeric value
<b>pf_peak_torque</b>	Plantar Flexor calculated peak torque from isometric dynamometry	Decimal	XX.X numeric value
<b>ankle_rom</b>	Ankle dorsiflexion passive range of motion	Integer	XX degrees
<b>hip_rom</b>	Hip extension passive range of motion	Integer	XX degrees
<b>knee_rom</b>	Knee extension passive range of motion	Integer	XX degrees
<b>rom_elbow_extension</b>	Elbow extension passive range of motion	Integer	XX degrees
<b>rom_wrist_extension</b>	Wrist extension passive range of motion	Integer	XX degrees
<b>rom_wrist_supination</b>	Wrist supination passive range of motion	Integer	XX degrees
<b>hhm_extension</b>	Elbow extension force by handheld myometry (best trial)	Decimal	X.X kg
<b>hhm_flexion</b>	Elbow flexion force by handheld myometry (best trial)	Decimal	X.X kg
<b>hhm_shoulder</b>	Shoulder abduction force by handheld myometry (best trial)	Decimal	X.X kg
<b>myogrip</b>	Grip strength by Myogrip myotool (best trial)	Decimal	XX.XX kg
<b>myopinch</b>	Pinch strength by Myopinch myotool (best trial)	Decimal	XX.XXX kg
<b>nsaa_1_stand</b>	NSAA item 1 score – Standing	Integer	X
<b>nsaa_2_walk</b>	NSAA item 2 score – Walk	Integer	X
<b>nsaa_3_chair</b>	NSAA item 3 score – Stand up from chair	Integer	X
<b>nsaa_4_oneleg_right</b>	NSAA item 4 score – Stand on one leg right	Integer	X
<b>nsaa_5_oneleg_left</b>	NSAA item 5 score – Stand on one leg left	Integer	X
<b>nsaa_6_climb_right</b>	NSAA item 6 score – Climb box step right	Integer	X
<b>nsaa_7_descend_right</b>	NSAA item 7 score – Descend box step right	Integer	X
<b>nsaa_8_climb_left</b>	NSAA item 8 score – Climb box step left	Integer	X
<b>nsaa_9_descend_left</b>	NSAA item 9 score – Descend box step left	Integer	X
<b>nsaa_10_head</b>	NSAA item 10 score – Lifts head from supine	Integer	X
<b>nsaa_11_sitting</b>	NSAA item 11 score – Gets to sitting	Integer	X
<b>nsaa_12_rise</b>	NSAA item 12 score – Rise from floor	Integer	X
<b>nsaa_12_rise_time</b>	NSAA item 12 time – Rise from floor time	Decimal	XX.XX seconds
<b>nsaa_13_heels</b>	NSAA item 13 score – Stands on heels	Integer	X
<b>nsaa_14_jump</b>	NSAA item 14 score – Jump	Integer	X

## Strength, Function, and Range of Motion Measures Continued

<b>nsaa_15_hop_right</b>	NSAA item 15 score – Hop right	Integer	X
<b>nsaa_16_hop_left</b>	NSAA item 16 score – Hop left	Integer	X
<b>nsaa_17_run</b>	NSAA item 17 score – Run (10 meters)	Integer	X
<b>nsaa_17_run_time</b>	NSAA item 17 time – Run (10 meters) time	Decimal	XX.XX seconds
<b>nsaa_total</b>	NSAA item total score out of 34	Integer	X
<b>PUL 2.0</b>			
<b>pul_entry_item</b>	PUL 2.0 entry item score	Integer	X
<b>pul_high_raise_arms</b>	PUL 2.0 item 1 score – Shoulder abduction arms above head	Integer	X
<b>pul_high_shoulder_abduction</b>	PUL 2.0 item 2 score – Raise both arms to shoulder height	Integer	X
<b>pul_high_flex_no_weights</b>	PUL 2.0 item 3 score – Shoulder flexion to shoulder height (no weights)	Integer	X
<b>pul_high_flex_500g</b>	PUL 2.0 item 4 score – Shoulder flexion to shoulder height with 500g weight	Integer	X
<b>pul_high_flex_above_500g</b>	PUL 2.0 item 5 score – Shoulder flexion above shoulder with 500 g weight	Integer	X
<b>pul_high_flex_above_1kg</b>	PUL 2.0 item 6 score – Shoulder flexion above shoulder with 1 kg weight	Integer	X
<b>pul_mid_hands_to_mouth</b>	PUL 2.0 item 7 score – Hand(s) to mouth	Integer	X
<b>pul_mid_hands_to_table</b>	PUL 2.0 item 8 score – Hands to table from lap	Integer	X
<b>pul_mid_move_100g</b>	PUL 2.0 item 9 score – Move weight on table 100 g	Integer	X
<b>pul_mid_move_500g</b>	PUL 2.0 item 10 score – Move weight on table 500 g	Integer	X
<b>pul_mid_move_1kg</b>	PUL 2.0 item 11 score – Move weight on table 1 kg	Integer	X
<b>pul_mid_lift_can_diag</b>	PUL 2.0 item 12 score – Lift heavy can diagonally	Integer	X
<b>pul_mid_stack_3_cans</b>	PUL 2.0 item 13 score – Stack of three cans (heavy cans)	Integer	X
<b>pul_mid_stack_5_cans</b>	PUL 2.0 item 14 score – Stack of five cans (heavy cans)	Integer	X
<b>pul_mid_remove_lid</b>	PUL 2.0 item 15 score – Remove lid from container	Integer	X
<b>pul_distal_tearing_paper</b>	PUL 2.0 item 16 score – Tearing paper	Integer	X
<b>pul_distal_tracing_path</b>	PUL 2.0 item 17 score – Tracing a path	Integer	X
<b>pul_distal_push_on_light</b>	PUL 2.0 item 18 score – Push on light	Integer	X
<b>pul_distal_supination</b>	PUL 2.0 item 19 score – Supination	Integer	X
<b>pul_distal_pick_coins</b>	PUL 2.0 item 20 score – Pick up coins	Integer	X
<b>pul_distal_place_finger</b>	PUL 2.0 item 21 score – Placing finger on number diagram	Integer	X
<b>pul_distal_pick_10g</b>	PUL 2.0 item 22 score – Pick up 10 g weight finger pinch	Integer	X
<b>pul_high_subtotal</b>	PUL 2.0 sub score for the high level shoulder dimension - Items 1-6	Integer	XX
<b>pul_mid_subtotal</b>	PUL 2.0 sub score for the mid level elbow dimension - Items 7-16	Integer	XX
<b>pul_distal_subtotal</b>	PUL 2.0 sub score for the distal level wrist and hand dimension - Items 17-22	Integer	XX
<b>pul_total</b>	PUL 2.0 total score out of 42	Integer	XX