

Supplemental Tables and Figures

Supplemental Table 1. Descriptive statistics of motor functional, self-report, and neurological baseline measures entered into predictive model selection process. Fugl-Meyer Total Score was not included.

Measure	Mean	Std Deviation	Observed Range
<i>Fugl-Meyer (FM) Upper Extremity Scores</i>			
Total Score (0-66)	19.8	9.62	10 - 45.5
Proprioception Score (0-6)	4.8	1.82	0 - 6
<i>Wolf Motor Function Test (WMFT)</i>			
Time (0-120 sec)	85	40.1	6.4 - 120
Score (0-5)	1.7	0.89	0.8 - 4.1
<i>Action Research Arm Test (ARAT) – Affected Arm</i>			
Total (0-57)	14.1	14.67	0 - 53.5
<i>Grip Strength</i>			
Paretic Hand (kg)	9.9	8.68	0 - 36.3
Non-Paretic Hand (kg)	31.1	11.31	13.7 - 65.3
SAFE Score (0-10)	4.9	2.09	2 - 9
<i>Stroke Impact Scale (SIS)</i>			
Hand Function (0-100)	20	27.1	0 - 95
Overall Score (0-800)	506	102.6	302 - 688
ACEQ Anticipated Improvement (0-100)	60	28.4	10 - 100
TMS Score* - Paretic Arm (0-9)	2.4	2.80	0 - 9
Lesion Volume (mm ³)**	55949	108037	224 - 496,787
<i>Corticospinal Tract (CST) – Affected Side</i>			
Percent Lesioned	21.6%	18.29	0 - 61.23%
Fractional Anisotropy (FA)	0.371	0.056	0.208 - 0.462
Mean Diffusivity (MD)	0.724	0.104	0.541 - 1.025

Note. *n=34 participants had baseline TMS measures. **n=36 participants had MRI measures.

Sup. Table 2. Number of participants per genotype.

Category ⁺	COMT SNP	BDNF SNP	Klotho SNP	DAT repeats
0	12	39	26	24
1 (heterozygous)	21	2	14	10
2	9	0	2	3
3+4	--	--	--	3

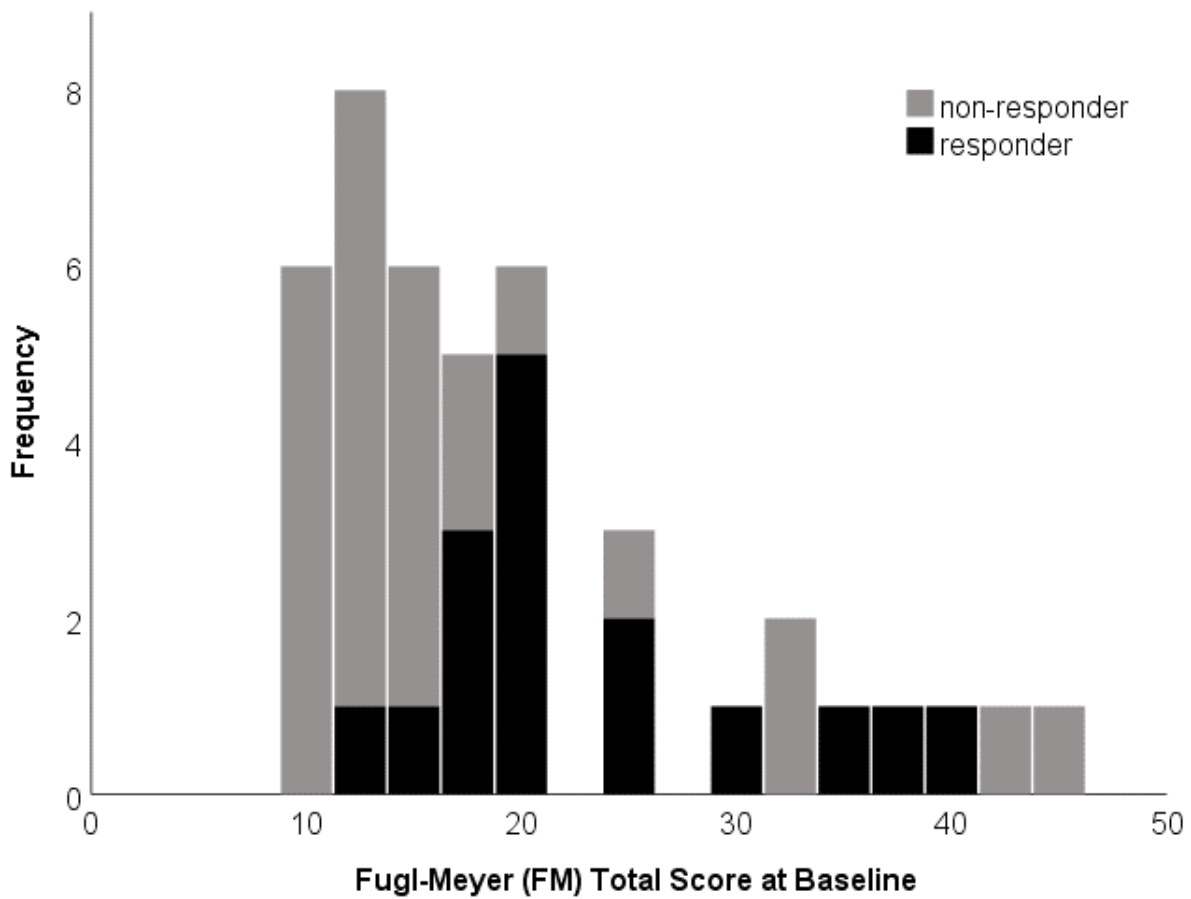
Note. ⁺Categories for COMT, rs4680 SNP: 0=GG, 1=AG, 2=AA, n=42; BDNF, rs6265 SNP: 0=CC, 1=CT, 2=TT, n=41; Klotho, rs95363614 SNP: 0=TT, 1=GT, 2=GG, n=42; DAT1, number of repeats: 0=10,10, 1=10,9, 2=9,9, 3=10,4, 4=11,10, n=40. Genetic variables were dummy-coded and included as potential predictors in the predictive model.

Supplemental Table 3. MRI measures for Responders and Non-Responders: Means (Standard Deviations)

Measure*	Responders (n=14)	Non-Responders (n=22)
Lesion Volume (mm ³)	24595 (33901)	75902 (132926)
Center of Gravity (MNI coordinates)	34.6, -14.4, 23.8	34.3, -15.0, 21.8
<i>Corticospinal Tract (CST) – Affected Side</i>		
Percent Lesioned	16.8% (16.13)	24.6% (19.28)
Fractional Anisotropy (FA)	0.389 (0.040)	0.360 (0.063)
Mean Diffusivity (MD)	0.695 (0.092)	0.742 (0.109)

Note. *A total of n=36 participants completed MRIs.

Supplemental Figures



Supplemental Figure 1. Histogram of Fugl-Meyer (FM) total scores at Baseline for responders to therapy (change in FM score \geq 5 points) and non-responders.