

S1 Table. Nonparametric Group Analysis Results of Quantitative MRI in 18 WM Tracts for Patients and Controls with completed MRI protocol. Provided are T- or Z-values

N (controls/ALS)	AD Z 28/14	RD Z 28/14	MD Z 28/14	FA Z 28/14	MTR Z 28/14	R ₂ * Z 28/14
FMAJOR	2.03*	0.29	1.47	0.56	-1.49	-0.24
FMINOR	0.56	1.71	1.31	-1.36	0.05	-0.77
lh ATR	1.52	0.99	1.44	-0.48	-0.59	0.16
lh CAB	0.80	0.48	0.88	0.11	0.80	0.45
lh CCG	-0.88	1.97*	1.07	-1.97*	-1.09	1.33
lh CST	0.99	3.58**	3.55**	-3.04**	-2.48*	-1.68
lh ILF	0.64	1.09	1.28	-0.51	-1.57	0.19
lh SLFP	1.49	2.35*	2.27*	-2.45*	-1.01	-1.01
lh SLFT	1.63	2.16*	2.24*	-1.41	-0.67	-0.88
lh UNC	1.23	0.56	0.80	0.08	-0.13	-1.52
rh ATR	1.17	1.55	1.44	-1.49	-1.09	-0.48
rh CAB	0.40	0.53	0.83	-0.27	-0.72	-0.75
rh CCG	-1.31	1.39	0.64	-1.92	-0.40	0.67
rh CST	-0.21	2.99*	2.43*	-2.69*	-3.06**	-1.09
rh ILF	0.43	1.20	1.17	-1.31	-0.11	0.27
rh SLFP	1.15	1.47	1.57	-1.55	-0.75	1.15
rh SLFT	0.96	1.87	1.92	-0.93	-0.88	0.75
rh UNC	0.29	0.88	0.56	-1.12	0.63	-1.15

** p_{Bonferroni} < 0.05, * p value < 0.05, AD = axial diffusivity, RD = radial diffusivity, MD = mean diffusivity, FA = fractional anisotropy, MTR = magnetization transfer ratio, N = number of subjects, ALS = amyotrophic lateral sclerosis, FMAJOR = corpus callosum forceps major, FMINOR = corpus callosum forceps minor, ATR = anterior thalamic radiation, CAB = cingulum angular bundle, CCG = cingulum cingulate gyrus, CST = corticospinal tract, ILF = inferior longitudinal fasciculus, SLFP = superior longitudinal fasciculus parietal, SLFT = superior longitudinal fasciculus temporal, UNC = uncinate fasciculus, lh = left hemisphere, rh = right hemisphere