

**Supplementary Table S1.** Clinical and demographic characteristics of patients with multiple sclerosis (PwMS). Continuous data are expressed as mean ± standard deviation and ordinal data as median [range].

PwMS <sub>Real</sub>	Age	Gender	T25FW (s)	tDCS-mode	Duration of MS (y)	Disease Subtype	Current DMT	EDSS	PwMS <sub>Sham</sub>	Age	Gender	T25FW (s)	tDCS-mode	Duration of MS (y)	Disease Subtype	Current DMT	EDSS
1	32	F	8.46	Real	5	RRMS	-	3.5	1	56	F	6.05	Sham	3		TR	2
2	50	M	5.67	Real	9	PPMS	FN; OR	3	2	49	F	8.24	Sham	30	PPMS	NAT	3.5
3	43	M	15.01	Real	15	SPMS	-	6.5	3	39	F	5.12	Sham	8		DMF	4.5
4	53	M	5.73	Real	23	RRMS	IF	3	4	36	F	5.46	Sham	16	RRMS	OR	3
5	48	M	6.85	Real	19	RRMS	DMF	4.5	5	44	F	5.67	Sham	12	SPMS	FN	3.5
6	51	M	7.19	Real	8	PPMS	-	3.5	6	35	M	5.87	Sham	4	RRMS		2
7	31	M	5.47	Real	16	RRMS	-	4.5	7	61	F	4.04	Sham	1	RRMS		3
8	63	M	17.09	Real	16	PPMS	-	6	8	53	M	9.84	Sham	0	PPMS	OR	5
9	59	F	5.67	Real	19	RRMS	TR	3	9	42	M	4.97	Sham	8	PPMS		4
10	64	F	10.79	Real	30	SPMS	GA	4.5	10	54	F	6.67	Sham	18	SPMS	FM	5
11	53	F	5.77	Real	23	RRMS	IF	3									
12	51	F	10.80	Real	13	SPMS	-	6									
Mean ± SD	49.83 ± 10.46		8.71 ± 3.94		16.33 ± 7.10			4.0 [3-6.5]		46.90 ± 9.00		6.19 ± 1.70		10.00 ± 9.30			3.5 [2-5]

Abbreviations: F = female; M = male; RRMS = relapsing-remitting multiple sclerosis; SPMS = secondary progressive multiple sclerosis; PPMS = primary progressive multiple sclerosis; EDSS = Expanded Disability Status Scale; T25FW= timed 25-foot walking test; R= right-handed, L = left-handed; MS= multiple sclerosis; DMT = disease-modifying therapy; IF = interferon beta; FN = fingolimod; GA = glatirameracetate; DMF = dimethyl fumarate; FM = fampridine; NAT = natalizumab; OR= ocrelizumab; TR = teriflunomide.