

Supplementary table 1: Clinical characteristics of MS patients.

Patient no.	Age (years)	Sex	Duration of MS (years)	Clinical subtype	Current DMT	EDSS
1	73	f	30	SPMS	none	5.5
2	47	f	25	SPMS	IFN- β	4.0
3	53	f	7	RRMS	NAT	4.0
4	52	f	12	RRMS	FTY	6.5
5	57	m	26	SPMS	none	6.5
6	43	m	18	SPMS	none	6.0
7	63	f	32	SPMS	MIT	6.5
8	63	f	34	SPMS	none	6.0
9	46	m	11	RRMS	IFN- β	4.0
10	52	m	20	SPMS	none	4.0
11	46	f	17	RRMS	none	4.5
12	40	m	16	SPMS	IFN- β	5.5
13	70	f	8	PPMS	none	3.0
14	57	f	21	SPMS	none	4.0
15	41	m	13	SPMS	MIT	5.5
16	46	m	7	SPMS	none	5.0
17	59	f	3	PPMS	none	6.0
18	61	f	4	PPMS	none	6.0
19	31	m	17	SPMS	none	6.5
20	52	m	26	SPMS	none	6.5
Mean	52.6		17.4		Median	5.5
\pm SD	\pm 10.5		\pm 9.3		[range]	[3.0-6.5]

m = male; f = female; EDSS = expanded disability status scale; RRMS = relapsing-remitting MS; SPMS = secondary progressive MS; PPMS = primary progressive MS; DMT = disease modifying therapy with immunomodulators; IFN- β = interferon β ; MIT = mitoxantrone; NAT = natalizumab; FTY = fingolimod.