

Supplementary table 1. The levels (pg/ml) of soluble molecules in different subtypes of MS and controls (median (25-75th percentiles))

Molecule	RRMS n=33	SPMS n=18	PPMS n=20	CIS n=15	Controls n=21
MIF	138.2 (50.0-229.4) ^{A,C}	225.8 (134.0-317.3)	290.7 (189.3-449.3) ^C	167.3 (97.8-268.2)	378.5 (236.4-535.9) ^A
sFas	4612.8 (4058.0-5940.7) ^C	5572.4 (4388.3-6845.4)	6787.6 (5393.9-7709.2) ^{B,C}	4318.8 (3320.0-5697.9) ^G	4824.9 (3405.1-5638.1) ^B
sFasL	90.6 (58.1-161.6)	96.2 (72.8-153.6)	111.2 (71.5-191.9)	83.6(67.1-174.6)	80.4 (56.6-129.1)
sTRAIL	765.9 (577.2-1728.9)	785.5 (587.2-1106.0)	1032.0 (762.8-2036.1)	902.3(593.3-1170.5)	738.7 (523.2-2260.8)
sTNF-α	4.5 (3.4-6.5) ^C	4.1 (3.3-5.8)	6.4 (4.4-8.9) ^{B,C}	4.6 (3.5-6.6)	3.7 (2.4-4.6) ^B
IFN-γ	0.3 (0.3-3.0)	1.5 (0.3-4.1)	0.6 (0.3-3.3)	2.8 (0.3-25.5)	0.5 (0.3-7.5)
IL-2	1.2 (0.2-3.6)	0.6 (0.2-5.2)	0.4 (0.2-2.4)	1.5 (0.5-6.2)	2.1 (0.2-6.1)
IL-6	4.9 (2.0-21.5)	7.1 (3.2-13.0)	8.8 (1.6-26.7)	3.6 (1.4-17.9)	4.1 (2.0-9.3)
IL-10	2.9 (0.6-5.7)	3.4 (1.8-7.7)	3.6 (2.2-9.2)	4.8 (1.2-25.9)	2.3 (0.2-6.0)
IL-12p70	0.4 (0.1-1.4)	1.3 (0.4-5.4)	0.8 (0.1-4.5)	1.7 (0.3-9.1)	1.6 (0.1-7.9)
CXCL10	95.7 (68.1-155.6)	90.5 (62.8-152.6)	106.9 (74.7-212.9)	65.9 (53.6-178.2)	106.9 (55.1-130.7)
CCL2	177.0 (140.4-271.8)	218.8 (157.0-331.0)	288.4 (201.3-461.6) ^B	248.3 (165.7-332.0)	152.8 (122.6-273.1) ^B
CCL3	37.3 (21.6-96.3)	55.7 (19.2-121.4)	45.4 (27.0-164.7)	72.6 (32.0-186.1)	51.4 (27.7-122.8)
CCL4	126.6 (20.4-668.0)	140.2 (17.0-873.8)	290.7 (39.8-1054.6)	365.1 (144.0-1188.5)	289.1 (16.8-725.0)

RRMS, relapsing remitting MS; SPMS, secondary progressive MS; PPMS, Primary progressive MS; CIS, clinically isolated syndrome. Analyses were performed for all four subtypes versus control, as well as between the subtypes. The results from the Mann-Whitney U Test are shown as the Bonferroni-corrected p-values ($p<0.05$).

A Comparison between the RRMS and HC groups

B Comparison between the PPMS and HC groups

C Comparison between the PPMS and RRMS groups

Supplementary table 2. Clinical characteristics of patients and controls included in serum analyses.

	RRMS n=33	SPMS n=18	PPMS n=20	CIS n=15	HC n=21
Sex (M/F) ^a	10/23	6/12	9/11	2/13	8/13
Age (years) ^b	37.0±8.6 (18-53)	49.5±8.2 (35-61)	56.9±9.2 (38-73)	35.3±9.5 (20-52)	
Duration of disease (years) ^b	4.1±4.0 (0.0-12.3)	11.6±9.5 (0.2-31.2)	12.0±8.6 (0.2-26.2)	NA	
EDSS ^b	1.6±1.5 (0-6.0)	4.8±1.7 (2.0-7.0)	4.7±1.9 (1.0-7.5)	0.1±0.3 (0.0-1.0)	
Number of relapses/ 2years ^{b,c}	1.6±1.4 (0-5)	0.2±0.5 (0-2)	NA	0.8±0.6 (0-2)	
Treatment (NT/IFN/GA) ^a	12/18/3	17/1/0	20/0/0	15/0/0	

MS, multiple sclerosis; CIS, clinically isolated syndrome; RRMS, relapsing-remitting MS; SPMS, secondary progressive MS; PPMS, primary progressive MS; HC, healthy controls; EDSS, expanded disability status scale; NT, no treatment; IFN, interferon- β ; GA, glatiramer acetate.

^a Number of patients.

^b Mean ± SD (range).

^c Number of relapses in the two years before study entry