



Supplemental Figure 1.

Supplemental Table 1. Comparison of parameters of iron metabolism in MS patients regarding relapse, EDSS and DMT.

	Relapse			EDSS		DMT		
	No relapse (n=59)	Relapse (n=12)	p-value ³	r	p-value ²	No DMT (n=35)	DMT (n=36)	p-value ³
Hepcidin (ng/mL) ¹	29.5 (22.2 – 36.8)	25.1 (19.2 – 30.9)	1.000 (0.713)	0.024	1.000 (0.864)	27.0 (21.1 – 33.0)	27.1 (21.2 – 32.9)	1.000 (0.880)
Iron (μmol/L) ¹	14.6 (12.1 – 17.1)	16.5 (13.8 – 19.2)	1.000 (0.289)	-0.024	1.000 (0.860)	15.7 (13.5 – 17.4)	14.9 (13.1 – 16.8)	1.000 (0.675)
Ferritin (μg/L) ¹	124.0 (64.9 – 183.2)	92.5 (51.0 – 134.0)	1.000 (0.738)	0.217	0.999 (0.111)	86.0 (59.9 – 112.0)	133.5 (79.9 – 187.1)	0.621 (0.069)
Transferrin (mg/L) ¹	244.3 (226.5 – 262.0)	275.6 (257.0 – 294.2)	1.000 (0.202)	-0.212	1.000 (0.120)	268.8 (254.1 – 283.5)	259.1 (241.6 – 276.5)	1.000 (0.523)
TFS (%) ¹	24.5 (20.2 – 28.8)	24.4 (20.3 – 28.6)	1.000 (0.638)	0.078	1.000 (0.572)	23.9 (20.5 – 27.2)	23.8 (20.5 – 27.2)	1.000 (0.982)
sTfR (mg/L) ¹	2.9 (2.6 – 3.2)	2.6 (2.2 – 2.9)	1.000 (0.129)	0.046	1.000 (0.739)	2.9 (2.6 – 3.2)	2.5 (2.3 – 2.8)	0.999 (0.111)
Hepcidin- Ferritin-Ratio ¹	0.33 (0.24 – 0.41)	0.41 (0.32 – 0.51)	1.000 (0.588)	-0.257	0.567 (0.063)	0.41 (0.34 – 0.49)	0.30 (0.24 – 0.36)	0.072 (0.008)
Hepcidin-TFS- Ratio ¹	1.24 (0.94 – 1.53)	1.10 (0.83 – 1.38)	1.000 (0.677)	-0.015	1.000 (0.916)	1.18 (0.94 – 1.41)	1.15 (0.89 – 1.40)	1.000 (0.721)
Hepcidin-TfR- Ratio ¹	11.3 (8.3 – 14.3)	11.2 (8.2 – 14.2)	1.000 (0.653)	0.003	1.000 (0.983)	11.5 (8.0 – 15.1)	11.8 (9.2 – 14.4)	1.000 (0.990)

¹mean and 95% confidence intervals. r = correlation coefficient.

MS: multiple sclerosis. EDSS: expanded disability status scale. DMT: disease modifying treatment. sTfR: soluble transferrin receptor. TFS: transferrin saturation. ²p-values calculated by linear-regression models (fixed effects: study group, sex and age), corrected for multiple testing (Bonferroni) with uncorrected p-values in brackets. ³p-values calculated by Pearson test, corrected for multiple testing (Bonferroni) with uncorrected p-values in brackets