

## SUPPLEMENTARY MATERIAL

**Table S1. Inflammatory mediators levels pre-and post-vaccination: differences in each IS-DMT group**

Cladribine-treated pwMS		<i>p</i>
GrB_pre-vaccination (pg/ml)	GrB_post-vaccination (pg/ml)	
9.876 ± 5.022	9.309 ± 3.448	0.642
IFN-γ_pre-vaccination (pg/ml)	IFN-γ_post-vaccination (pg/ml)	
0.634 ± 0.544	0.580 ± 0.447	0.984
TNF-α_pre-vaccination (pg/ml)	TNF-α_post-vaccination (pg/ml)	
9.133 ± 2.990	9.006 ± 2.050	1.000
Fingolimod-treated pwMS		<i>p</i>
GrB_pre-vaccination (pg/ml)	GrB_post-vaccination (pg/ml)	
9.587 ± 6.914	9.849 ± 4.728	0.847
IFN-γ_pre-vaccination (pg/ml)	IFN-γ_post-vaccination (pg/ml)	
0.551 ± 0.480	0.778 ± 0.411	0.178
TNF-α_pre-vaccination (pg/ml)	TNF-α_post-vaccination (pg/ml)	
12.513 ± 4.964	11.051 ± 2.980	0.653
Ocrelizumab-treated pwMS		<i>p</i>
GrB_pre--vaccination (pg/ml)	GrB_post-vaccination (pg/ml)	
10.555 ± 3.264	13.115 ± 4.407	0.021
IFN-γ_pre-vaccination (pg/ml)	IFN-γ_post-vaccination (pg/ml)	
0.986 ± 1.008	0.981 ± 0.865	0.985
TNF-α_pre-vaccination (pg/ml)	TNF-α_post-vaccination (pg/ml)	
10.904 ± 2.258	12.036 ± 4.368	0.311

No significant differences were found in serum GrB, IFN-γ, TNF-α levels between pre-and post-vaccination in each DMTs group (repeated measures ANCOVA).