

## SUPPLEMENTARY MATERIAL

**Table S3. *Lymphocytes immunophenotype pre-and post-vaccination***

Lymphocytes/ul	Pre- vaccination	Post-vaccination	p
	mean $\pm$ SD (cells count/ul)	mean $\pm$ SD (cells count/ul)	
<b>CD19+ B cell</b>			
Cladribine	81.616 $\pm$ 77.455	93.874 $\pm$ 75.597	1.000
Ocrelizumab	7.401 $\pm$ 17.658	7.573 $\pm$ 16.432	1.000
<b>CD3+ T cell</b>			
Cladribine	811.905 $\pm$ 496.021	768.905 $\pm$ 421.546	0.998
Ocrelizumab	1.217.126 $\pm$ 527.237	1.305.160 $\pm$ 593.981	0.759
<b>CD4+ T cell</b>			
Cladribine	475.524 $\pm$ 284.689	464.619 $\pm$ 320.932	1.000
Ocrelizumab	837.833 $\pm$ 394.981	910.143 $\pm$ 451.069	0.436
<b>CD8+ T cell</b>			
Cladribine	299.905 $\pm$ 241.424	286.333 $\pm$ 207.881	1.000
Ocrelizumab	379.293 $\pm$ 225.432	395.017 $\pm$ 256.120	0.898

No differences were found considering lymphocytes count pre-vaccination and post-vaccination both in c-pwMS and o-pwMS (Student's t-test). However, o-pwMS shown a trend to increase of CD4+ T cells. No sufficient lymphocytes immunophenotype data were available of fingolimod-treated patients pre-vaccination.