

SUPPLEMENTARY MATERIAL

Supplementary table 1: Descriptive analysis of patients according to the washout status before conception

	Treated patients	First-line	Second- and third Line	Natalizumab	Fingolimod
Stopped and on-going patients^a	217	147	70	51	16
Washout duration(months)	0 (0-3.5)	0 (0-3.3)	0.1 (0-3.5)	0.0 (0.0-2.7)	1.6 (0.2-3.6)
Stopped patients^c	93 (42.8%)	57 (38.7%)	36 (51.4%)	21 (41.1%)	12 (75.0%)
Washout duration (months)^b	3.8 (1.9-5.6)	4.1 (2.0-7.1)	3.5 (1.2-6.0)	3.6 (1.1-5.6)	3.1 (1.2-3.9)

^aN, ^b median (Interquartile Range), ^c N(%)

Supplementary table 2: Percentage of patients with at least one relapse in different periods by treatment status and line.

	1stline	2ndline -3rd line	Untreated	All
% of patients with at least one relapse	N=147	N=70	N = 122	N=350
During the year before conception	46 (31.3%)	30 (42.9%)	57 (46.7%)	136 (38.8%)
During pregnancy	21 (14.3%)	33 (47.1%)	19 (15.6%)	77 (22%)
During 3 months postpartum	16 (10.9%)	13 (18.6%)	15 (12.3%)	47 (13%)
During 12 months postpartum	53 (36.1%)	25 (35.7%)	44 (36.1%)	128 (36.6%)

Supplementary table 3: Percentage of patients with at least one relapse in different periods by second- and third-line, in detail.

	Natalizumab	Fingolimod	Mitoxantrone	Alemtuzumab
% of patients with at least one relapse	N=51	N= 16	N= 2	N= 1
During the year before conception	18 (35.3%)	9 (56.2%)	2 (100%)	1
During pregnancy	25 (49.0%)	7 (43.7%)	1 (50.0%)	0 (0%)
During 3 months postpartum	10 (19.6%)	2 (12.5%)	1 (50.0%)	0 (0%)
During 12 months postpartum	15 (29.4%)	9 (56.2%)	1 (50.0%)	0 (0%)

Supplementary table 4: Logistic regression of the variables that may predispose to relapses in pregnancy and 3 first months of postpartum, including treatment status variable (on going or stopped treatment), for the first-line treated patients.

	Univariate analysis			Multivariate analysis		
	OR	95%CI	p	OR	95%CI	p
Age at MS onset (> 25 vs ≤ 25 (ref.))	1.23	[0.58 ; 2.6]	0.592			
Age at conception (> 35 vs ≤ 35 (ref.))	1.51	[0.57 ; 3.77]	0.390			
MS duration at conception (> 7 vs ≤ 7 (ref.))	0.59	[0.27 ; 1.25]	0.170	0.51	[0.21 ; 1.18]	0.122
Status (On going vs Stopped (ref.))	0.27	[0.12 ; 0.59]	0.001	0.31	[0.13 ; 0.72]	0.006
Relapse one year before conception (Yes vs No (ref))	2.03	[0.93 ; 4.41]	0.073	1.59	[0.65 ; 3.80]	0.303
EDSS at conception (±3 months) (< 3 vs ≤ 3(ref.))	3.31	[1.2 ; 9.11]	0.019	2.58	[0.84 ; 7.94]	0.094
MRI activity - one year before pregnancy (Yes vs No (ref))	1.37	[0.58 ; 3.09]	0.461			
Use of ART¹ (Yes vs No (ref))	0.99	[0.14 ; 4.53]	0.991			
Smoker before conception (Yes vs No (ref))	1.48	[0.55 ; 3.86]	0.421			
Vitamin D before conception (Yes vs No (ref))	0.48	[0.14 ; 1.44]	0.209			

¹ART: assisted reproductive technology

Supplementary table 5: Logistic regression of the variables that may predispose to relapses in pregnancy and 3 first months of postpartum, including treatment status variable (on going or stopped treatment), for the second-line treated patients.

	Univariate analysis			Multivariate analysis		
	OR	95%CI	p	OR	95%CI	p
Age at MS onset (> 25 vs ≤ 25 (ref.))	0.32	[0.1 ; 0.9]	0.036	0.51	[0.14 ;1.69]	0.274
Age at conception (> 35 vs ≤ 35 (ref.))	0.88	[0.22 ; 3.45]	0.845			
MS duration at conception (> 7 vs ≤ 7 (ref.))	1.97	[0.74 ; 5.37]	0.177	2.20	[0.69 ; 7.45]	0.188
Status (On going vs Stopped (ref.))	1.01	[0.39 ; 2.59]	0.989	1.13	[0.38 ; 3.34]	0.817
Relapse one year before conception (Yes vs No (ref))	3.50	[1.31 ; 9.92]	0.015	3.66	[1.18 ; 2.40]	0.028
EDSS at conception (±3 months) (< 3 vs ≥ 3(ref.))	2.36	[0.78 ; 7.77]	0.137	1.44	[0.40 ; 5.32]	0.578
MRI activity - one year before pregnancy (Yes vs No (ref))	1.32	[0.46 ; 3.93]	0.607			
Use of ART (Yes vs No (ref))	7.47	[1.23 ; 143.93]	0.991			
Smoker before conception (Yes vs No (ref))	1.47	[0.51 ; 4.37]	0.48			
Vitamin D before conception (Yes vs No (ref))	0.75	[0.25 ; 2.21]	0.596			