

Supplementary data:

Legend:

eTable 1: Patients' characteristics (A) before pregnancy, (B) at delivery and during the post-partum (secondary analysis).

eTable 1:

eTable 1: Characteristics at baseline in each cohort				
	Total Cohort	Treated Patients	Non treated Patients	p-value
	N = 350	N = 71	N = 279	
A) At baseline				
CLINICAL CHARACTERISTICS				
Age at MS onset (years)^b	24.3 ± 5.3	24.7 ± 5.5	24.2 ± 5.2	0.465
MS duration at conception (years)^b	7.2 ± 4.2	6.9 ± 4.6	7.3 ± 4.2	0.540
Relapses over the two years before pregnancy				
At least one relapse ^a	219 (62.6%)	39 (54.9%)	180 (64.5%)	0.169
ARR ^{b,c}	0.6 ± 0.7	0.6 ± 0.8	0.6 ± 0.7	0.435
Relapses during pregnancy				
At least one relapse ^a	77 (22%)	16 (22.5%)	61 (21.9%)	0.872
ARR ^b	0.35 ± 0.78	0.32 ± 0.61	0.36 ± 0.74	0.644
EDSS at pregnancy onset (±3 months)^{b,a}	1.3 ± 1.5	1.1 ± 1.3	1.3 ± 1.5	0.312
<3	270 (83.6%)	57 (86.4%)	213 (82.9%)	0.759
[3;6[49 (15.2%)	9 (13.6%)	40 (15.6%)	
>6	4 (1.2%)	0 (0%)	4 (1.6%)	
NA	27	5	22	
MRI within the two years before pregnancy				
At least one available MRI ^{a,c}	266 (76%)	53 (74.6%)	213 (76.3%)	
At least one MRI activity ^{a,c}	171 (64.3%)	34 (64.2%)	137 (64.3%)	1.00
TREATMENT EXPOSURE				
Mean DMD duration before pregnancy (years)	3.8 ± 3.2	4.2 ± 3.7	3.7 ± 3.1	0.312
DMD within the year before pregnancy				
None	109 (31.2%)	25 (35.2%)	84 (30.1%)	0.473
First line	167 (47.7%)	36 (50.7%)	131 (46.9%)	
Other DMDs (2 nd and 3 rd line, off label)	74 (21.1%)	10 (14.1%)	64 (23%)	
DMD exposure during pregnancy	150 (42.9%)	33 (46.5%)	117 (41.9%)	0.504
PREGNANCY AND ENVIRONMENT				
Smoker				
before pregnancy ^{a,c}	92 (35.8%)	11 (39.3%)	81 (35.4%)	0.681
NA	75	36	39	
during pregnancy ^{a,c}	49 (19.2%)	7 (25.9%)	42 (18.4%)	0.437
NA	77	37	40	
Vitamin D				
before pregnancy ^{a,c}	90 (38.3%)	9 (33.3%)	81 (38.9%)	0.676

NA	97	37	60	
during pregnancy ^{a,c}	127 (54%)	15 (55.6%)	112 (53.8%)	1.00
NA	97	37	60	
B) At delivery and in post-partum				
CIRCUMSTANCES OF DELIVERY				
Age at delivery (years) ^a	32.2 ± 4.3	32.4 ± 4.1	32.2 ± 4.4	0.765
Term of pregnancy (months) ^a	9 ± 0.5	8.8 ± 0.7	9 ± 0.4	0.025
EDSS at delivery (±3 months) ^{b,a,c}	1.3 ± 1.5	1.3 ± 1.6	1.2 ± 1.4	0.517
Breastfeeding				
Yes ^{b,c}	141 (48.6%)	33 (71.7%)	108 (44.3%)	6.81x10 ⁻⁵
NA	42	18	24	
Duration (months) ^a	5.9 ± 8.1	4.4 ± 4.4	6.2 ± 8.7	
TIME TO DMD START FROM DELIVERY				
DMDs resumption^b				
At 3 months	155 (44%)	30 (42%)	125 (45%)	
At 6 months	209 (60%)	47 (66%)	162 (58%)	
At two years	270 (77%)	57 (80%)	213 (76%)	
Median time before DMD resumption (years) [95%CI]	0.33 [0.27; 0.40]	0.32 [0.21; 0.49]	0.34 [0.24; 0.42]	
RMST				
RMST [95%CI]	0.72 [0.64; 0.81]	0.67 [0.49; 0.84]	0.74 [0.65; 0.83]	0.600
Difference RMST		-0.07 [-0.27; 0.127]		
Proba.* at 3 months PP	44% [39%; 50%]	42% [30%; 53%]	45% [39%; 51%]	
Type of DMD				
None	80 (23%)	14 (20%)	66 (24%)	
First line	178 (51%)	39 (55%)	139 (50%)	
Other DMDs (2 nd and 3 rd line, off label)	92 (26%)	18 (25%)	74 (26%)	
^a N(%); ^b mean± standard deviation; ^c computed on available data; *probability of being newly treated MS: Multiple Sclerosis; ARR: Annual Relapse Rate; EDSS: Expanded Disability Status Scale; DMD: disease-modifying drug; MRI: Magnetic Resonance Imaging; PP: post-partum First line: interferon, glatiramer acetate, teriflunomide, dimethyl fumarate; Second line: natalizumab, fingolimod; Third line: mitoxantrone, alemtuzumab; Off-label: azathioprine, cyclophosphamide, laquinimod, methotrexate, mycophenolate mofetil, rituximab				