Supplementary Material

	All	≤40 years at MS clinical onset	>40 years at MS clinical onset	
	N=7563	N=5538	N=2025	
Age at MS onset (years) ^a				
[25; 30]	2444 (32.3%)	2444 (56.5%)	0 (0%)	
[31; 40]	3094 (40.9%)	3094 (71.6%)	0 (0%)	
[41; 50]	1610 (21.3%)	0 (0%)	1610 (116.7%)	
[51; max=80]	415 (5.5%)	0 (0%)	415 (30.1%)	
MS clinical onset period ^a				
[1996-1999]	1339 (17.7%)	1033 (23.9%)	306 (22.2%)	
[2000-2004]	1880 (24.9%)	1429 (33.1%)	451 (32.7%)	
[2005-2009]	2171 (28.7%)	1576 (36.5%)	595 (43.1%)	
[2010-2014]	2173 (28.7%)	1500 (34.7%)	673 (48.8%)	
Education level ^a				
Low	643 (8.5%)	352 (8.1%)	291 (21.1%)	
Medium	3492 (46.2%)	2462 (57%)	1030 (74.6%)	
High	2329 (30.8%)	1829 (42.3%)	500 (36.2%)	
Very high	1099 (14.5%)	895 (20.7%)	204 (14.8%)	

^a N (%)

eTable 1: Baseline characteristics of patients with Relapsing onset Multiple Sclerosis (MS) between 1996 and 2014 according to age at MS clinical onset.

	All	≤40 years at MS clinical onset	>40 years at MS clinical onset				
	N=5703	N=4323	N=1380				
MS clinical onset period ^a							
[1996-1999]	979 (17.2%)	789 (18.3%)	190 (13.8%)				
[2000-2004]	1490 (26.1%)	1152 (26.6%)	308 (22.3%)				
[2005-2009]	1734 (30.4%)	1283 (29.7%)	451 (32.7%)				
[2010-2014]	1530 (26.8%)	1099 (25.4%)	431 (31.2%)				
Age at platform therapy start (years) ^a							
≤40	3385 (59.4%)	3385 (78.3%)	0 (0%)				
>40	2318 (40.6%)	938 (21.7%)	1380 (100%)				
MS duration at platform therapy start (years) ^a							
One year	2026 (35.5%)	1521 (35.2%)	505 (36.6%)				
Two years	1065 (18.7%)	784 (18.1%)	281 (20.4%)				
More than two	2612 (45.8%)	2018 (46.7%)	594 (43%)				
EDSS at platform therapy start (years) ^a							
[0;3.5]	3005 (52.7%)	2338 (54.1%)	667 (48.3%)				
[4.0; 10.0]	337 (5.9%)	202 (4.7%)	135 (9.8%)				
Missing	2361 (41.4%)	1783 (41.2%)	578 (41.9%)				
Number of relapses before treats	ment start ^a	, ,					
None	1025 (18%)	736 (17%)	289 (20.9%)				
One	3002 (52.6%)	2277 (52.7%)	725 (52.5%)				
Two	1323 (23.2%)	1020 (23.6%)	303 (22%)				
Three or more	353 (6.2%)	290 (6.7%)	63 (4.6%)				
8 NT (0/)	·	·					

^a N (%)

EDSS, Expanded Disability Status Scale

eTable 2: Characteristics of patients with Relapsing onset Multiple Sclerosis (MS) who initiated a platform therapy as first treatment between 1996 and 2014, according to age at MS clinical onset.

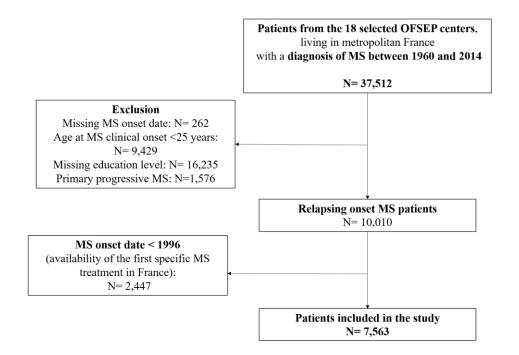
		≤40 years at MS clinical onset				>40 years at MS clinical onset				
	Year 1 4323	Year 2 4225	Year 3 4125	Year 4	Year 5 3841	Year 1 1380	Year 2 1322	Year 3 1290	Year 4 1252	Year 5 1218
				3992						
Low ducation level	263	258	253	246	237	190	182	175	171	170
Number of relapses										
No relapse	152 (57.8%)	183 (70.9%)	178 (70.4%)	184 (74.8%)	174 (73.4%)	112 (58.9%)	139 (76.4%)	135 (77.1%)	132 (77.2%)	150 (88.2%)
One relapse	72 (27.4%)	57 (22.1%)	58 (22.9%)	44 (17.9%)	45 (19%)	60 (31.6%)	36 (19.8%)	38 (21.7%)	35 (20.5%)	18 (10.6%)
More than one relapse	39 (14.8%)	18 (7%)	17 (6.7%)	18 (7.3%)	18 (7.6%)	18 (9.5%)	7 (3.8%)	2 (1.1%)	4 (2.3%)	2 (1.2%)
Transition to SPMS	1 (0.4%)	4 (1.5%)	10 (4.0%)	17 (6.9%)	22 (9.3%)	9(4.7%)	15(8.2%)	26(14.8%)	36(21.0%)	41(24.4%)
Medium ducation level										
Number of relapses	1925	1886	1835	1773	1715	723	690	672	655	643
No relapse	1154 (59.9%)	1277 (67.7%)	1327 (72.3%)	1305 (73.6%)	1304 (76%)	476 (65.8%)	510 (73.9%)	503 (74.9%)	515 (78.6%)	527 (82%)
One relapse	507 (26.3%)	449 (23.8%)	376 (20.5%)	374 (21.1%)	336 (19.6%)	185 (25.6%)	140 (20.3%)	138 (20.5%)	120 (18.3%)	97 (15.1%)
More than one relapse	264 (13.7%)	160 (8.5%)	132 (7.2%)	94 (5.3%)	75 (4.4%)	62 (8.6%)	40 (5.8%)	31 (4.6%)	20 (3.1%)	19 (3%)
Transition to SPMS	13(0.7%)	30(1.6%)	53(2.9%)	76(4.3%)	105(6.1%)	17(2.6%)	40(5.8%)	58(8.6%)	77(11.8%)	117(18.2%)
High ducation level										
Number of relapses	1438	1409	1380	1332	1279	340	329	323	310	295
No relapse	866 (60.2%)	984 (69.8%)	1012 (73.3%)	1010 (75.8%)	968 (75.7%)	231 (67.9%)	246 (74.8%)	254 (78.6%)	248 (80%)	246 (83.4%)
One relapse	388 (27%)	314 (22.3%)	279 (20.2%)	252 (18.9%)	239 (18.7%)	77 (22.6%)	65 (19.8%)	54 (16.7%)	46 (14.8%)	42 (14.2%)
More than one relapse	184 (12.8%)	111 (7.9%)	89 (6.4%)	70 (5.3%)	72 (5.6%)	32 (9.4%)	18 (5.5%)	15 (4.6%)	16 (5.2%)	7 (2.4%)
Transition to SPMS	2(0.1%)	7(0.5%)	20(1.5%)	31(2.3%)	51(4.0%)	4(1.2%)	11(3.3%)	24(7.4%)	30(9.7%)	42(14.2%)
Very high ducation level										
Number of relapses	697	672	657	641	610	127	121	120	116	110
No relapse	442 (63.4%)	485 (72.2%)	496 (75.5%)	485 (75.7%)	475 (77.9%)	90 (70.9%)	98 (81%)	101 (84.2%)	94 (81%)	93 (84.5%)
One relapse	177 (25.4%)	144 (21.4%)	130 (19.8%)	132 (20.6%)	110 (18%)	24 (18.9%)	17 (14%)	15 (12.5%)	17 (14.7%)	13 (11.8%)
More than one relapse	78 (11.2%)	43 (6.4%)	31 (4.7%)	24 (3.7%)	25 (4.1%)	13 (10.2%)	6 (5%)	4 (3.3%)	5 (4.3%)	4 (3.6%)
Transition to SPMS	0(0.0%)	1(0.1%)	3(0.5%)	5(0.8%)	9(1.5%)	5(3.9%)	8(6.6%)	11(9.1%)	15(12.9%)	22(20.0%)
P*	0.503	0.448	0.367	0.241	0.268	0.192	0.708	0.075	0.372	0.504

^{*}p value of the Fisher's exact test to compare the number of relapses per year in function of the education level, from MS clinical onset to year 5 of follow-up.

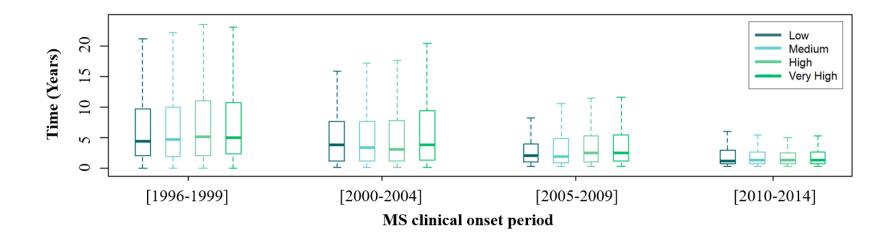
SPMS, secondary progressive multiple sclerosis.

eTable 3: Clinical disease activity (relapses and transition into secondary progressive multiple sclerosis, SPMS) during the 5 years from the first platform therapy in patients with Relapsing onset MS (RMS), according to education level and age at MS clinical onset.

eFigure1: Study flowchart.



eFigure 2: Time from multiple sclerosis (MS) clinical onset to first treatment initiation in function of the MS onset period and education level.



P*=0.132

Comparison of time from MS clinical onset to first treatment initiation according to level of education for each MS onset period

p*=0.003

p*=0.633

*p value of the Kruskall-Wallis test by period

p*=0.553