

On-line Table 1: Long-term treatment in different MS subtypes^a

Treatment Category	PPMS	RRMS	RR _{EM}
First line: IFN, GA, IVIG, teriflunomide (Aubagio)	4%	48%	30%
Second line: fingolimod (Gilenya), dimethyl fumarate (Tecfidera), daclizumab, cladribine	0%	19%	25%
Third line: natalizumab (Tysabri), alemtuzumab (Lemtrada), mitoxantrone (Novantrone), rituximab (Mabthera), firtagrat	0%	9%	18%
Non-MS-specific immune suppressive treatment	29%	4%	3%
No treatment	67%	21%	25%

Note:—IFN indicates interferon; GA, glatiramer-acetate, IVIG, intravenous immunoglobulin.

^a Data are % of total number of patients.

On-line Table 2: Results of statistical comparison of QS values within thalamic substructures obtained by manual segmentation

	Pair-wise Comparison (<i>P</i> Value) with B-H Correction		
	HC vs PPMS	HC vs RRMS (RR _{EM})	PP vs RRMS (RR _{EM})
Entire thalamus	.777	.057 (.097)	.026 ^a (.053)
Pulvinar	.95	.28 (.28)	.28 (.28)
Thalamus without pulvinar	.904	.035 ^a (.035) ^a	.035 ^a (.035) ^a

Note:—B-H indicates Benjamini-Hochberg.

^a Significant.

On-line Table 3: Regression coefficient estimates of interaction testing between conventional MRI parameters and susceptibility in DGM nuclei by MS subtype^a

	TILL × MS Subtype	T2LL × MS MS Subtype	BPF × MS MS Subtype	CCV × MS MS Subtype
CN	−0.1760, 0.7157 (.806)	−0.08181, 0.13986 (.560)	−0.3366, 0.7624 (.660)	−1.8459, 2.7140 (.498)
GP	0.7059, 1.0769 (.514)	0.00693, 0.20693 (.973)	0.7359, 1.1519 (.524)	−1.2363, 4.1161 (.765)
Put	0.1852, 0.8262 (.823)	−0.01760, 0.16272 (.914)	0.5597, 0.8684 (.520)	−2.384, 3.089 (.442)
Thal	−1.26239, 0.32936 (<.001) ^b	−0.40186, 0.05978 (<.001) ^b	0.5123, 0.3696 (.169)	2.439, 1.323 (.068)

Note:—Thal indicates thalamus.

^a Regression coefficient estimates representing the slope of the linear regression curve for RRMS compared with PPMS and the *P* values of *t* tests are shown. Numbers in cells represent point estimate, standard error (*P* values). Rows are dependent variables; columns are independent variables.

^b Significant.

On-line Table 4: Associations of EDSS with conventional MRI metrics and susceptibility values^a

MRI Metrics and QS Values	PPMS EDSS ≤ 4	PPMS EDSS > 4	RRMS EDSS ≤ 4	RRMS EDSS > 4	ANOVA/K-W (<i>P</i> Value)
TILL ^b	1.47 (1.58)	2.26 (7.34)	0.95 (1.08)	1.91 (2.5)	.004 ^c
T2LL ^b	2.80 (4.56)	3.69 (16.44)	1.99 (4.02)	10.14 (16.36)	.027 ^c
BPF	84.93 (2.10)	84.37 (3.83)	84.37 (2.33)	82.88 (2.59)	.273
CCV	4.19 (0.78)	3.90 (0.87)	4.17 (0.73)	3.82 (0.73)	.400
CN	35.84 (5.42)	37.67 (8.11)	35.19 (9.93)	33.76 (7.64)	.771
GP	70.11 (12.01)	71.51 (14.35)	71.92 (13.48)	72.99 (18.35)	.981
Put	23.80 (9.09)	32.32 (10.34)	24.37 (10.66)	23.72 (11.42)	.104
Thal	4.96 (2.14)	6.21 (5.16)	3.22 (4.41)	−1.65 (5.87)	<.001 ^c

Note:—K-W indicates Kruskal-Wallis; Thal, thalamus.

^a Group statistics (means and SD or median and interquartile range) and *P* values of simultaneous *F* tests (ANOVA/Kruskal-Wallis) are shown.

^b Median and interquartile range.

^c Significant.

On-line Table 5: Pair-wise comparison between EDSS and thalamic QS by MS subtypes^a

	PPMS, EDSS ≤ 4	PPMS, EDSS > 4	RRMS, EDSS ≤ 4
PPMS, EDSS > 4	.448		
RRMS, EDSS ≤ 4	.061	.095	
RRMS, EDSS > 4	.019 ^b	.019 ^b	.058

^a Pair-wise comparisons using *t* tests with nonpooled SD with *P* values by Benjamini-Hochberg for significant variables were used.

^b Significant.

On-line Table 7: Pair-wise comparison for T2LL by MS subtypes (Kruskal-Wallis test)^a

	PPMS, EDSS ≤ 4	PPMS, EDSS > 4	RRMS, EDSS ≤ 4
PPMS, EDSS > 4	.539		
RRMS, EDSS ≤ 4	.539	.539	
RRMS, EDSS > 4	.367	.539	.033 ^b

^a Data are *P* values.

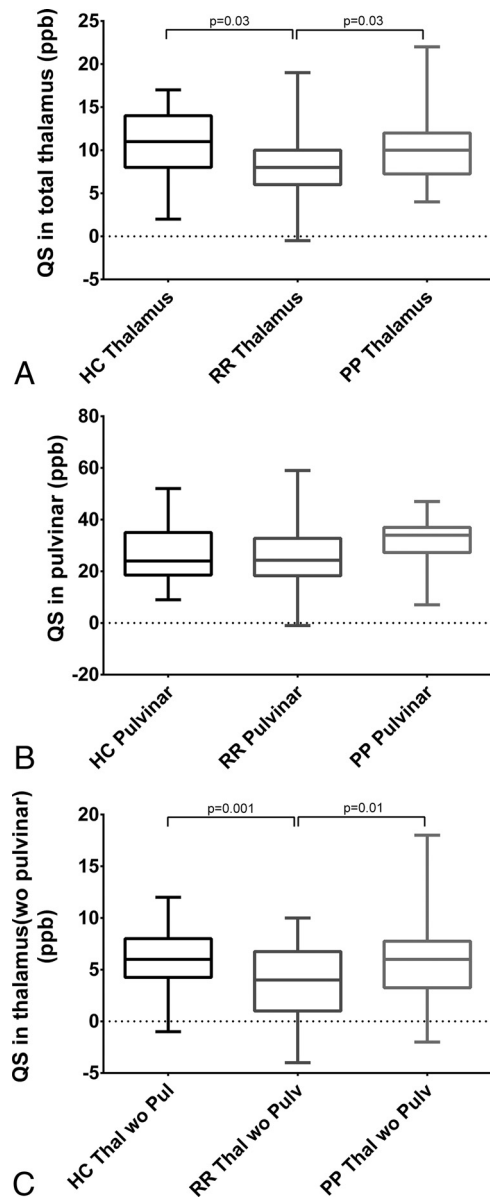
^b Significant.

On-line Table 6: Pair-wise comparison for TILL by MS subtypes (Kruskal-Wallis test)^a

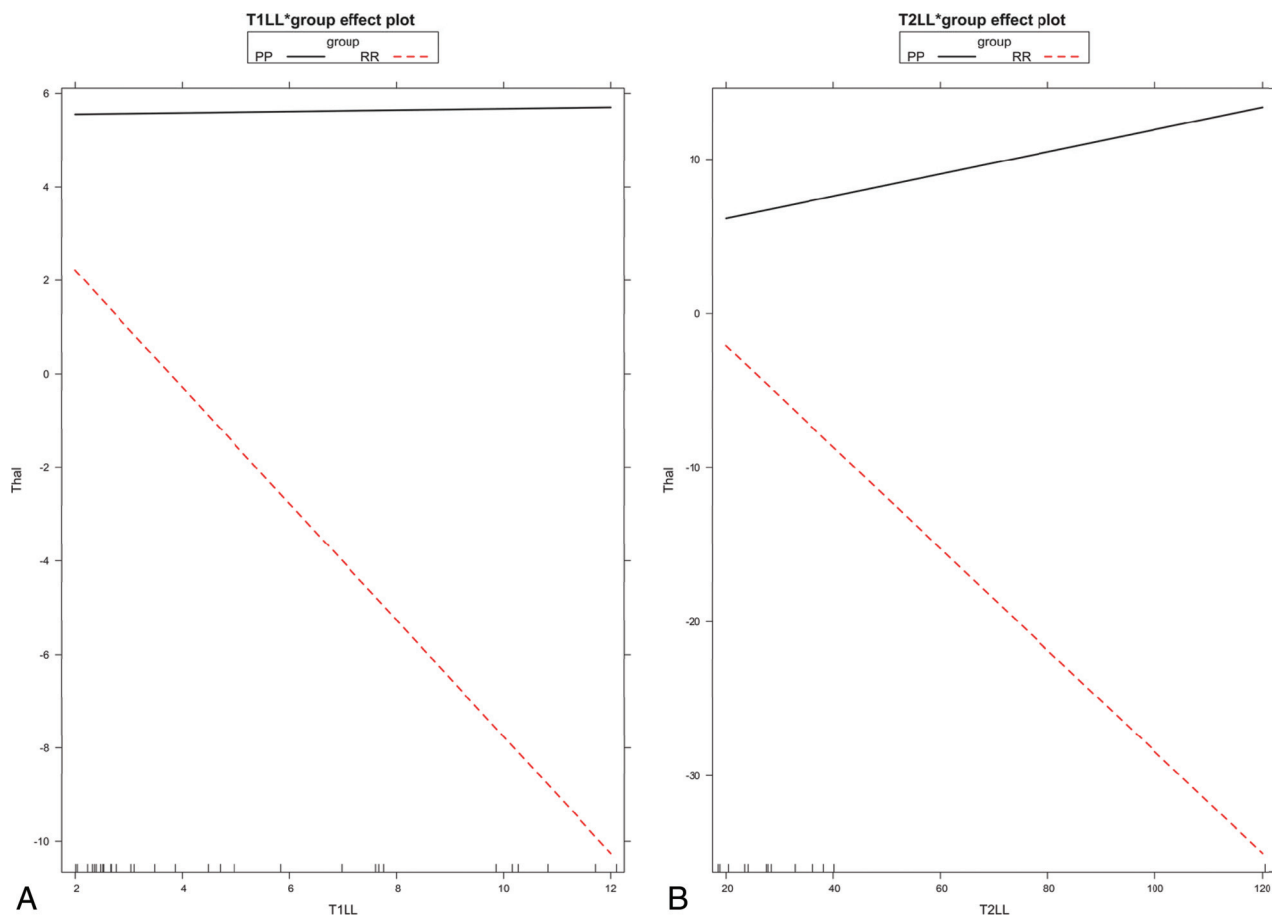
	PPMS, EDSS ≤ 4	PPMS, EDSS > 4	RRMS, EDSS ≤ 4
PPMS, EDSS > 4	.872		
RRMS, EDSS ≤ 4	.117	.872	
RRMS, EDSS > 4	.872	.872	.041 ^b

^a Data are *P* values.

^b Significant.



ON-LINE FIG 1. Boxplots of QS values within thalamic substructures obtained by manual segmentation: entire thalamus (A), pulvinar (B), and thalamus without the pulvinar (C).



ON-LINE FIG 2. Effect plot of the interaction term of T1LL (A) and T2LL (B) and MS subtype on susceptibility in the thalamus, showing negative correlation between T1LL and T2LL and thalamic susceptibility in the RRMS group (*red dashed line*) and no dependency between T1LL and T2LL and thalamic susceptibility in the PPMS group (*black solid line*).