

## Supplemental Data

### Patient demographic and disease characteristics

		All Patients (n <sub>bl</sub> =59, n <sub>long</sub> =36)				CIS (n <sub>bl</sub> =18, n <sub>long</sub> =11)		Early RRMS (n <sub>bl</sub> =22, n <sub>long</sub> =14)		Late RRMS (n <sub>bl</sub> =19, n <sub>long</sub> =11)		ANOVA	
		Min	Max	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F	p
Demographics	Age (yrs)	19.3	68.4	40.6	10.9	34.1	7.5	38.6	9.6	49.2	9.8	13.6	<0.0001
	DD (yrs)	0.03	31.7	6.4	7.6	2.4	4.3	1.9	1.4	14.8	6.7	48.3	<0.0001
Clinical Disease Parameters	EDSS	0	4.5	0.59	1.17	0.3	0.95	0.5	0.85	1	1.6	1.8	0.18
	BPF (% ICV)	68.7	92.2	85	4.8	87	4.1	85.2	4.2	82.9	5.4	3.5	0.036
Baseline ePVS count (n)	FLAIR Lesion Load (% ICV)	0.05	3	0.49	0.53	0.25	0.2	0.48	0.39	0.74	0.76	4.5	0.016
	Centrum Semiovale	21	126	74.0	26.7	72.3	23.3	82.9	30.6	82.9	30.6	1.8	0.18
Change in ePVS count (n/yr)	Basal Ganglia	23	143	62.5	21.9	54.7	17.9	60.5	17.1	72.3	27.2	3.4	0.042
	Midbrain	0	13	5.6	2.9	5.2	3.0	5.8	2.9	5.7	3.0	0.2	0.79
	Centrum Semiovale	-8.0	27.9	4.1	8.8	2.8	3.8	6.6	11.1	8.1	22.6	1.0	0.39
	Basal Ganglia	-15.9	15.9	2.3	6.8	0.4	6.1	2.1	5.7	13.8	34.2	0.9	0.42
	Midbrain	-2.0	5.0	0.3	1.4	0.5	1.0	0.4	1.7	0.5	1.6	0.1	0.90