Supplementary Appendix

eTable. Change in standardized CUA lesion counts from Baseline Period for specific subgroups of interest.

	Period*	Patients, n (%)	Least Squares Mean Estimate†	95% Confidence Interval	*P* value
HRA‡ (N= 164)	Period 1	152 (92.7)	-1.446	(-1.6978, -1.1935)	< 0.0001
	Period 2	152 (92.7)	-1.801	(-1.9903, -1.6123)	< 0.0001
	Period 3	147 (89.6)	-2.018	(-2.1330, -1.9022)	< 0.0001
Non-HRA (N = 106)	Period 1	100 (94.3)	-0.827	(-1.0019, -0.6522)	< 0.0001
	Period 2	100 (94.3)	-1.057	(-1.1627, -0.9517)	< 0.0001
	Period 3	99 (93.4)	-1.201	(-1.2676, -1.1340)	< 0.0001
Treatment Naïve (N = 117)	Period 1	107 (91.5)	-1.092	(-1.2350, -0.9500)	< 0.0001
	Period 2	108 (92.3)	-1.316	(-1.4215, -1.2105)	< 0.0001
	Period 3	108 (92.3)	-1.460	(-1.5759, -1.3443)	< 0.0001
Prior DMT Treatment (N = 153)	Period 1	145 (94.8)	-1.269	(-1.4852, -1.0535)	< 0.0001
	Period 2	144 (94.1)	-1.637	(-1.8323, -1.4427)	< 0.0001
	Period 3	138 (90.2)	-1.876	(-1.9816, -1.7696)	< 0.0001
Baseline Period CUA Count > 0 (N = 141)	Period 1	140 (99.3)	-2.253	(-2.4970, -2.0080)	< 0.0001
	Period 2	141 (100)	-2.790	(-3.0011, -2.5790)	< 0.0001
	Period 3	137 (97.2)	-3.132	(-3.2702, -2.9933)	< 0.0001

*Post-baseline periods are compared with the Baseline Period, and were defined as Period 1 (Month 1–Month 6); Period 2 (Month 2–Month 6); and Period 3 (Month 3–Month 6). Least squares means fitting a mixed-effects linear model adjusted for the baseline count, age (years), EDSS score at baseline (> 3 vs. ≤ 3 [reference]), and within-pooled center correlation. ‡HRA was defined as ≥2 relapses in the previous year.

CUA, combined unique active; DMT, disease-modifying therapy; EDSS, Expanded Disability Status Scale; HRA, high relapse activity.

eTable2. Previous DMTs.

Prior DMT, n (%)*	**HRA[†] n = 164**	**Non-HRA n = 106**	**Total Patients n = 270**
Interferon beta-1a	29 (17.7)	41 (38.7)	70 (25.9)
Glatiramer acetate	22 (13.4)	29 (27.4)	51 (18.9)
Dimethyl fumarate	15 (9.1)	21 (19.8)	36 (13.3)
Teriflunomide	10 (6.1)	19 (17.9)	29 (10.7)
Interferon beta-1b	5 (3.0)	14 (13.2)	19 (7.0)
Peginterferon beta-1a	6 (3.7)	10 (9.4)	16 (5.9)
Azathioprine	4 (2.4)	2 (1.9)	6 (2.2)
Immunoglobulin human normal	1 (0.6)	2 (1.9)	3 (1.1)
Interferon beta	1 (0.6)	1 (0.9)	2 (0.7)
Fingolimod[‡]	1 (0.6)	0 (0)	1 (0.4)
Immunoglobulin NOS	1 (0.6)	0 (0)	1 (0.4)
Investigational drug	0 (0)	1 (0.9)	1 (0.4)

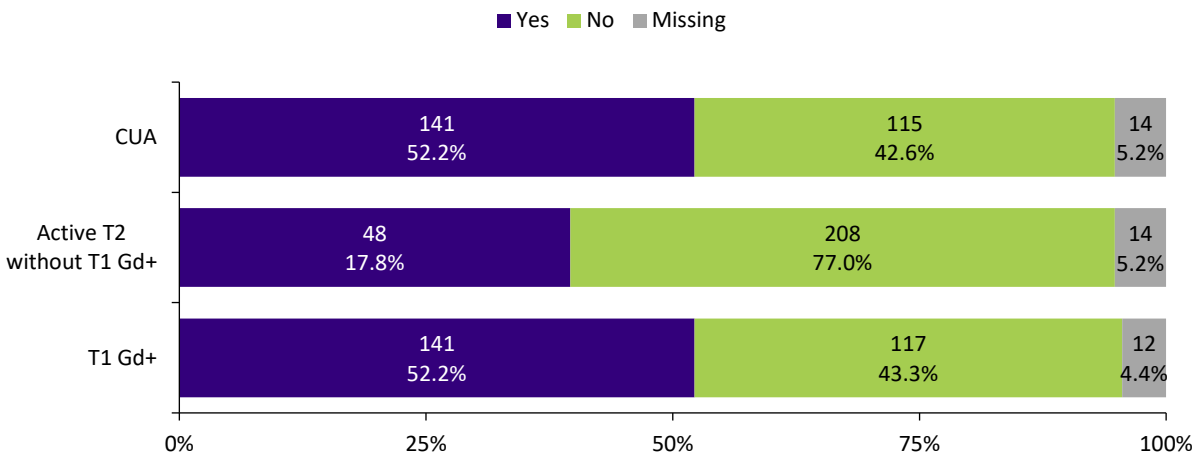
*A patient receiving the same DMT more than once, is only counted once against that DMT. [†] HRA was defined as two or more relapses in the previous year. [‡]Patient included inadvertently and subsequently withdrawn from study.
DMT, disease-modifying therapy; HRA, high relapse activity; NOS, not otherwise specified.

eTable3. Overview of treatment-emergent adverse events reported during the first six months of the MAGNIFY-MS study.

Patients, n (%)	**Total Patients n = 270**
Any TEAE[a]	191 (70.7)
Mild	128 (47.4)
Moderate	60 (22.2)
Severe	3 (1.1)
Any study treatment-related TEAE[a,b]	89 (33.0)
Mild	63 (23.3)
Moderate	25 (9.3)
Severe	1 (0.4)
Any serious TEAE	7 (2.6)
Any non-serious TEAE	189 (70.0)
Any study treatment-related serious TEAE[b]	0 (0)
Any TEAE leading to death	0 (0)
Any study treatment-related TEAE leading to death[b]	0 (0)

[a]Worst severity per patient is reported. [b]Related TEAEs are events with relationship set to Yes, Unknown, or Missing.
TEAE, treatment-emergent adverse event.

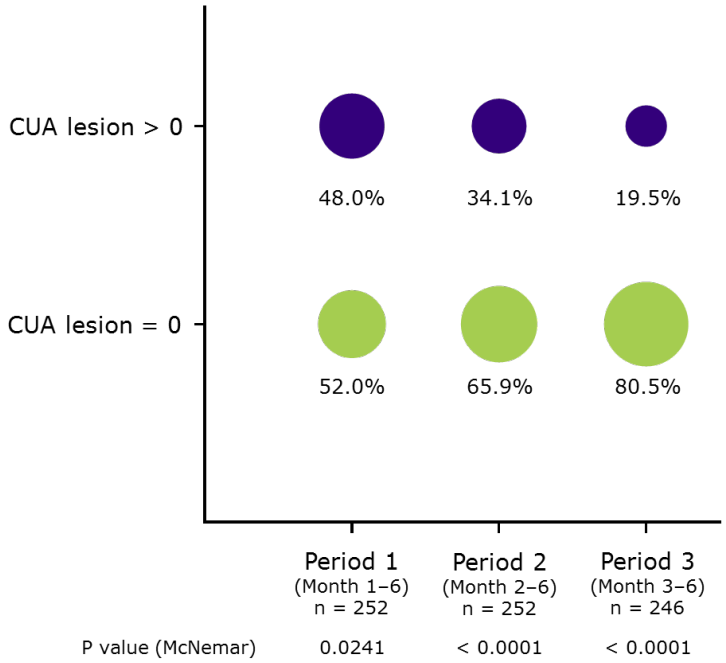
eFigure1. Presence of MRI lesions during the Baseline Period.



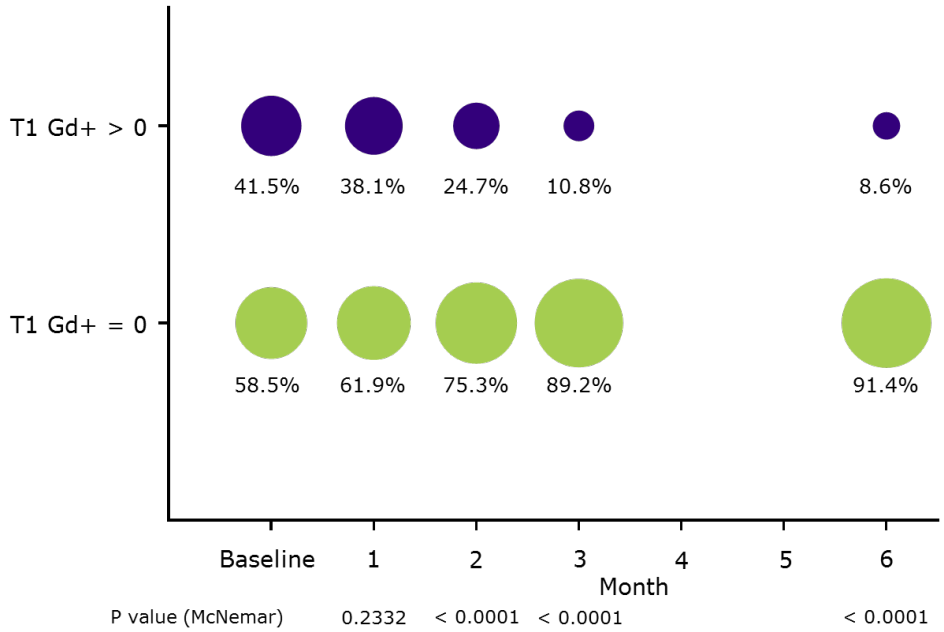
Presence was defined as a lesion count > 0 ('Yes'), and an absence when lesion count = 0 ('No'), at any time during the Baseline Period.
CUA, combined unique active; Gd+, gadolinium-enhancing lesions; MRI, magnetic resonance imaging.

eFigure2. Proportion of patients a) CUA lesion free, and b) presenting a shift in presence of T1 Gd+ lesion count during the MAGNIFY-MS study.

a)



b)



Note: Percentages are based on number of patients in the full analysis set (n = 270).
McNemar test determines change in the presence or absence of lesions between each post-baseline Period/Visit and the Baseline Period/Visit.
CUA, combined unique active; Gd+, gadolinium-enhancing lesions.