On-line Table 1: Diagnostic basis for each patient with NMO according to the Wingerchuk diagnostic criteria (2006)[1,a]

Patients	Absolute Criteria		Supportive Criteria		
	Optic Neuritis	Acute Myelitis	NMO-IgG	Brain MRI Not Meeting Diagnostic Criteria for MS	Contiguous Spinal Cord MRI Lesion Extending over ≥3 Vertebral Segments
NMO01	√	√	√	✕	√
NMO02	√	√	✕	√	√
NMO03	√	√	√	✕	√
NMO04	√	√	✕	√	√
NMO05	√	√	✕	√	√
NMO06	√	√	√	✕	√
NMO07	√	√	✕	√	√
NMO08	√	√	√	✕	√
NMO09	√	√	√	√	✕
NMO10	√	√	✕	√	√
NMO11	√	√	√	✕	√
NMO12	√	√	√	√	√
NMO13	√	√	√	√	√
NMO14	√	√	√	√	√
NMO15	√	√	√	✕	√
NMO16	√	√	√	✕	√
NMO17	√	√	√	✕	√
NMO18	√	√	✕	√	√
NMO19	√	√	√	✕	√
NMO20	√	√	√	✕	√
NMO21	√	√	√	✕	√
NMO22	√	√	√	✕	√
NMO23	√	√	✕	√	√
NMO24	√	√	√	√	√
NMO25	√	√	√	√	✕
NMO26	√	√	✕	√	√
NMO27	√	√	✕	√	√
NMO28	√	√	√	✕	√
NMO29	√	√	√	✕	√
NMO30	√	√	✕	√	√
NMO31	√	√	✕	√	√
NMO32	√	√	✕	√	√
NMO33	√	√	√	✕	√
NMO34	√	√	√	√	√
NMO35	√	√	√	✕	√
NMO36	√	√	√	✕	√
NMO37	√	√	✕	√	√
NMO38	√	√	√	✕	√
NMO39	√	√	√	√	√
NMO40	√	√	✕	√	√
NMO41	√	√	✕	√	√
NMO42	√	√	✕	√	√
NMO43	√	√	✕	√	√
NMO44	√	√	√	✕	√
NMO45	√	√	√	✕	√
NMO46	√	√	√	✕	√
NMO47	√	√	√	√	√
NMO48	√	√	✕	√	√
NMO49	√	√	√	√	✕
NMO50	√	√	√	✕	√

[a] √ represents meeting the criterion; ✕ means not meeting the criterion.

On-line Table 2: Demographic characteristics of the subjects participating in the California Verbal Learning Test–Second Edition[a]

CVLT-II	Patients with NMO	HCs	P Value
No. of subjects	44	45	NA
Sex (female/male)	36:8	38:7	.741
Age (yr)	48.6 (12.7)	50.2 (9.3)	.516
Education (yr)	10.9 (3.4)	12.2 (3.1)	.073

Note:— NA indicates not applicable.
[a] Data are shown as mean (SD).

On-line Table 3: Demographic characteristics of the subjects participating in the Paced Auditory Serial Addition Test–3 Seconds[a]

PASAT-3 Seconds	Patients with NMO	HCs	P Value
No. of subjects	43	45	NA
Sex (female/male)	36:7	38:7	.926
Age (yr)	47.5 (13.5)	50.2 (9.3)	.281
Education (yr)	11.1 (3.3)	12.2 (3.1)	.107

Note:— NA indicates not applicable.
[a] Data are shown as mean (SD).

On-line Table 4: Demographic characteristics of the subjects participating in the Symbol Digit Modality Test[a]

SDMT	Patients with NMO	HCs	P Value
No. of subjects	39	45	NA
Sex (female/male)	36:8	38:7	.741
Age (yr)	47.3 (12.8)	50.2 (9.3)	.244
Education (yr)	10.9 (3.4)	12.2 (3.1)	.084

Note:— –NA indicates not applicable.
[a] Data are shown as mean (SD).

On-line Table 5: Demographic characteristics of the subjects participating in the Wisconsin Card Sorting Test[a]

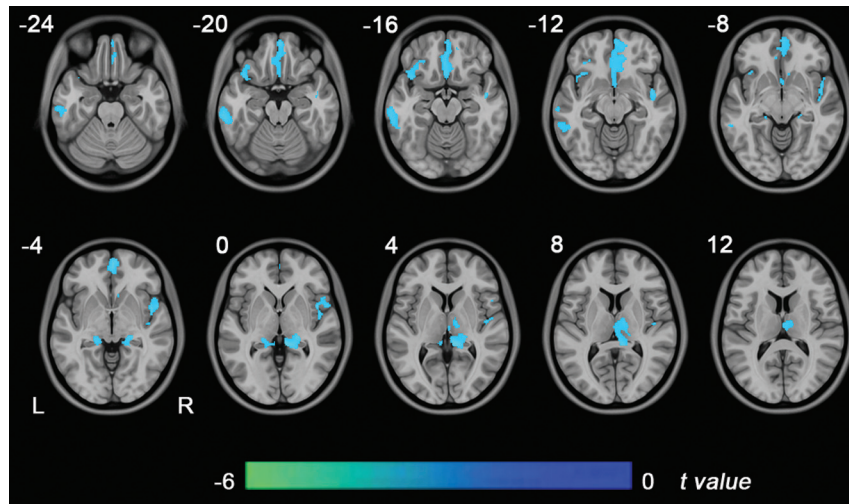| WCST	Patients with NMO	HCs	P Value
No. of subjects	34	44	NA
Sex (female/male)	26:8	37:7	.397
Age (yr)	47.5 (12.4)	50.6 (9.1)	.219
Education (yr)	11.1 (3.4)	12.1 (3.1)	.162

Note:— NA indicates not applicable.
[a] Data are shown as mean (SD).

On-line Table 6: Demographic characteristics of the subjects participating in the Controlled Oral Word Association Test[a]
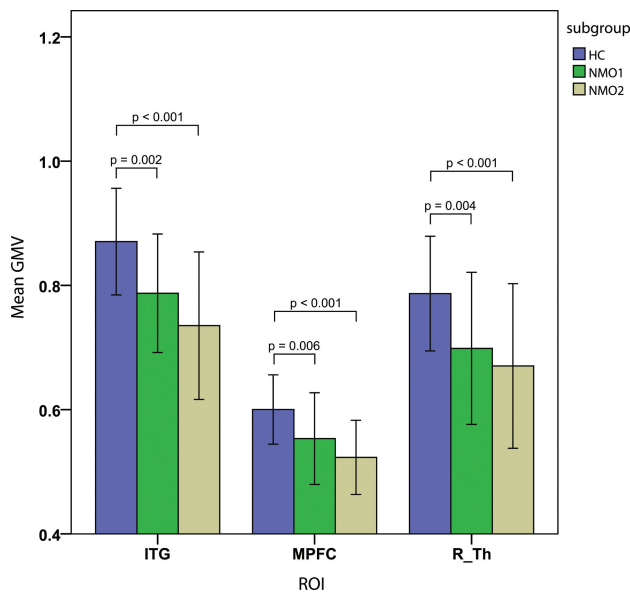
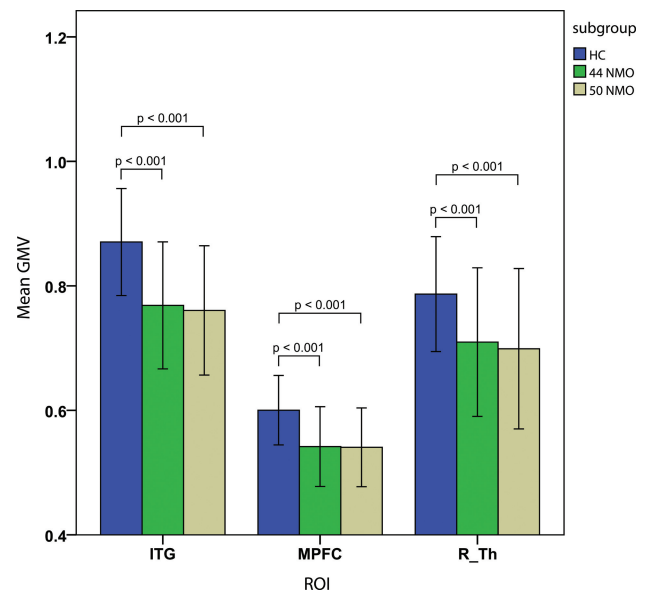| COWAT	Patients with NMO	HCs	P Value
No. of subjects	43	45	NA
Sex (female/male)	35:8	38:7	.704
Age (yr)	49.3 (12.0)	50.2 (9.3)	.710
Education (yr)	10.9 (3.4)	12.2 (3.1)	.071

Note:— NA indicates not applicable.
[a] Data are shown as mean (SD).

ON-LINE FIG 1. Brain regions with GMV differences between the NMO subgroup (NMO-IgG + spinal MR imaging) and the healthy control group (false discovery rate correction, $P < .05$). Blue represents significant GMV reductions in the patients with NMO.

ON-LINE FIG 2. ROI-based GMV comparisons between the NMO subgroups and the healthy control group (Bonferroni correction, $P < .05$). The ROIs were defined as brain regions with significant GMV reductions in the total patient population. Blue represents the HC group. Green represents the NMO1 group, in which the patients fulfilled the absolute criteria and the other 2 supportive criteria (brain MR imaging that did not meet the diagnostic criteria for multiple sclerosis and contiguous spinal cord MR imaging lesion extending over ≥3 vertebral segments). Tan represents the NMO2 group, in which the patients fulfilled the absolute criteria and the other 2 supportive criteria (NMO-IgG + and contiguous spinal cord MR imaging lesion extending over ≥3 vertebral segments).

ON-LINE FIG 3. ROI-based GMV comparisons before and after removing the 6 patients with other autoimmune diseases (Bonferroni correction, $P < .05$). The ROIs were defined as brain regions with significant GMV reductions in the total patient population. Blue represents the HC group. Green represents the 44 patients with NMO after excluding 6 patients who presented with other autoimmune diseases. Tan represents the 50 patients with NMO including the 6 patients who presented with other autoimmune diseases.