

Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Kuhle J, Pohl C, Mehling M, et al. Lack of association between antimyelin antibodies and progression to multiple sclerosis. *N Engl J Med* 2007;356:371-8.

Web only Appendix

Supplemental Table 1. Hazard Ratios for the Development of Multiple Sclerosis According to the McDonald Criteria with Respect to IgM and IgG Antibody Status.*				
Variable	IgM		IgG	
	Hazard Ratio (95% CI)	p-Value	Hazard Ratio (95% CI)	p-Value
Antibody status				
Negative for anti-MOG, negative for anti-MBP	1.00		1.00	
Negative for anti-MOG, positive for anti-MBP	0.76 (0.51–1.12)	0.17	1.27 (0.92–1.76)	0.15
Positive for anti-MOG, negative for anti-MBP	0.88 (0.67–1.16)	0.36	1.18 (0.87–1.61)	0.28
Positive for anti-MOG, positive for anti-MBP	1.02 (0.74–1.40)	0.92	0.82 (0.52–1.31)	0.41
Female sex	1.03 (0.81–1.31)	0.84	1.02 (0.80–1.30)	0.90
Age at onset of disease (per year)	0.97 (0.96–0.99)	<0.001	0.97 (0.96–0.99)	<0.001
IFNB-1b treatment	0.53 (0.42–0.66)	< 0.001	0.53 (0.42–0.67)	< 0.001
Steroid treatment of first event	1.46 (1.14–1.88)	0.003	1.44 (1.12–1.87)	0.005
Multifocal presentation	1.05 (0.83–1.32)	0.69	1.03 (0.82–1.29)	0.82
Number of lesions on T2-weighted MRI (per lesion)	1.01 (1.01–1.02)	< 0.001	1.01 (1.01–1.02)	< 0.001
Number of gadolinium-enhancing MRI lesions (per	1.04 (1.01–1.07)	0.024	1.04 (1.01–1.07)	0.017

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*Hazard ratios were calculated with the final Cox proportional hazards model. MOG denotes myelin oligodendrocyte glycoprotein, MBP myelin basic protein, and MRI magnetic resonance imaging.

Supplemental Table 2. Hazard Ratios for the Development of Clinically Definite Multiple Sclerosis According to IgM and IgG Antibody Status in different Patient Subgroups.*				
Variable	IgM		IgG	
	Hazard Ratio (95% CI)	p-Value	Hazard Ratio (95% CI)	p-Value
Patients with positive cerebrospinal fluid findings (raised IgG- index and/or positive oligoclonal bands)(n=263)				
Negative for anti-MOG, negative for anti-MBP	1.00		1.00	
Negative for anti-MOG, positive for anti-MBP	0.40 (0.16–0.99)	0.05	0.88 (0.47–1.66)	0.69
Positive for anti-MOG, negative for anti-MBP	0.67 (0.40–1.13)	0.13	1.53 (0.87–2.69)	0.14
Positive for anti-MOG, positive for anti-MBP	0.67 (0.37–1.21)	0.19	1.00 (0.35–2.88)	1.00
Patients treated with placebo (n=173)				
Negative for anti-MOG, negative for anti-MBP	1.00		1.00	
Negative for anti-MOG, positive for anti-MBP	0.64 (0.27–1.55)	0.32	1.46 (0.72–2.94)	0.29
Positive for anti-MOG, negative for anti-MBP	0.57 (0.31–1.03)	0.06	1.31 (0.71–2.40)	0.39
Positive for anti-MOG, positive for anti-MBP	1.01 (0.55–1.86)	0.96	1.04 (0.31–3.47)	0.95
Patients treated with IFNB-1b (n=289)				

Negative for anti-MOG, negative for anti-MBP	1.00		1.00	
Negative for anti-MOG, positive for anti-MBP	0.83 (0.37–1.86)	0.64	1.14 (0.89–1.47)	0.30
Positive for anti-MOG, negative for anti-MBP	0.58 (0.31–1.08)	0.08	1.11 (0.77–1.62)	0.57
Positive for anti-MOG, positive for anti-MBP	0.91 (0.46–1.82)	0.81	1.01 (0.81–1.25)	0.94
Patients who received steroids for the first event (n=327)				
Negative for anti-MOG, negative for anti-MBP	1.00		1.00	
Negative for anti-MOG, positive for anti-MBP	1.06 (0.86–1.32)	0.57	0.72 (0.37–1.40)	0.33
Positive for anti-MOG, negative for anti-MBP	1.18 (0.94–1.48)	0.17	0.93 (0.56–1.56)	0.79
Positive for anti-MOG, positive for anti-MBP	1.02 (0.89–1.16)	0.81	0.97 (0.39–2.46)	0.96
Patients who did not receive steroids for the first event (n=135)				
Negative for anti-MOG, negative for anti-MBP	1.00		1.00	
Negative for anti-MOG, positive for anti-MBP	0.31 (0.04–2.41)	0.26	1.69 (0.68–4.22)	0.26
Positive for anti-MOG, negative for anti-MBP	0.35 (0.11–1.07)	0.07	1.29 (0.40–4.14)	0.67
Positive for anti-MOG, positive for anti-MBP	1.30 (0.53–3.20)	0.56	1.21 (0.40–3.67)	0.74
Patients with samples obtained ≤46 days after				

disease onset (n=110)				
Negative for anti-MOG, negative for anti-MBP	1.00		1.00	
Negative for anti-MOG, positive for anti-MBP	0.62 (0.18–2.16)	0.46	1.10 (0.36–3.34)	0.87
Positive for anti-MOG, negative for anti-MBP	0.65 (0.27–1.58)	0.34	0.43 (0.13–1.47)	0.18
Positive for anti-MOG, positive for anti-MBP	0.41 (0.14–1.26)	0.12	--†	
Patients with samples obtained 46 – 54 days after disease onset (n=109)				
Negative for anti-MOG, negative for anti-MBP	1.00		1.00	
Negative for anti-MOG, positive for anti-MBP	1.85 (0.39–8.79)	0.44	1.06 (0.35–3.19)	0.92
Positive for anti-MOG, negative for anti-MBP	0.65 (0.23–1.86)	0.43	0.94 (0.30–3.00)	0.92
Positive for anti-MOG, positive for anti-MBP	1.72 (0.68–4.33)	0.25	0.56 (0.7–4.33)	0.58
Patients with samples obtained 55 – 58 days after disease onset (n=119)				
Negative for anti-MOG, negative for anti-MBP	1.00		1.00	
Negative for anti-MOG, positive for anti-MBP	0.86 (0.31–2.37)	0.77	0.89 (0.33–2.43)	0.82
Positive for anti-MOG, negative for anti-MBP	0.42 (0.17–1.01)	0.05	0.72 (0.25–2.08)	0.54
Positive for anti-MOG, positive for anti-MBP	0.94 (0.34–2.58)	0.90	1.01 (0.27–3.70)	0.99
Patients with samples obtained ≥59 days after disease onset (n=124)				

Negative for anti-MOG, negative for anti-MBP	1.00		1.00	
Negative for anti-MOG, positive for anti-MBP	0.17 (0.02–1.29)	0.09	1.35 (0.47–3.87)	0.58
Positive for anti-MOG, negative for anti-MBP	0.82 (0.36–1.88)	0.64	1.70 (0.81–3.57)	0.16
Positive for anti-MOG, positive for anti-MBP	1.19 (0.52–2.74)	0.68	1.74 (0.63–4.77)	0.29

*Hazard ratios were calculated with the final Cox proportional-hazards model. Cox proportional hazard models were adjusted for age, sex, IFNB-1b treatment (not in the placebo and the IFNB-1b subgroups), steroid treatment of the first event (not in the subgroups related to steroid treatment), multifocal presentation, number of lesions on T2-weighted MRI scan (per lesion) and number of gadolinium-enhancing MRI lesions (per lesion).

MOG denotes myelin oligodendrocyte glycoprotein, MBP myelin basic protein, and MRI magnetic resonance imaging.

†Only one patient was positive for anti-MOG and anti-MBP IgG.