

Supplementary Table 2. Frequencies, sensitivity, specificity and odds ratios for lesions in NMOSD and MS

Lesion	NMOSD			MS			OR (95% CI)
	Frequency	Sensitivity	Specificity	Frequency	Sensitivity	Specificity	
	n/N (%)			n/N (%)			
<b>Longitudinally Extensive Spinal Cord T2 Lesion (NMOSD)</b>	<b>43/61 (70)</b>	<b>0.705</b>	<b>0.988</b>	<b>1/86 (1)</b>	<b>0.012</b>	<b>0.295</b>	<b>203.056 (26.223 - 1572.34)</b>
<b>Bright Spotty Spinal Cord T2 Lesion (NMOSD)</b>	<b>32/61 (52)</b>	<b>0.525</b>	<b>0.988</b>	<b>1/86 (1)</b>	<b>0.012</b>	<b>0.475</b>	<b>93.793 (12.263 - 717.392)</b>
<b>Whole (Axial) Spinal Cord T2 Lesion (NMOSD)</b>	<b>15/61 (25)</b>	<b>0.250</b>	<b>0.994</b>	<b>0/86 (0)</b>	<b>0.006</b>	<b>0.750</b>	<b>57.667 (3.374 - 985.702)</b>
<b>Bilateral Optic Nerve T2 or Gd-enhancing T1 Lesions (NMOSD)</b>	<b>8/62 (13)</b>	<b>0.135</b>	<b>0.995</b>	<b>0/100 (0)</b>	<b>0.005</b>	<b>0.865</b>	<b>31.349 (1.775 - 553.567)</b>
<b>Gd-enhancing Spinal Cord T1 Lesion</b>	<b>17/55 (31)</b>	<b>0.309</b>	<b>0.985</b>	<b>1/65 (2)</b>	<b>0.015</b>	<b>0.691</b>	<b>28.632 (3.662 - 223.831)</b>
<b>Nucleus Tractus Solitarius T2 Lesion (NMOSD)</b>	<b>5/62 (9)</b>	<b>0.087</b>	<b>0.995</b>	<b>0/100 (0)</b>	<b>0.005</b>	<b>0.913</b>	<b>19.226 (1.044 - 354.059)</b>
Leptomeningeal Gd-enhancing T1 Lesion (NMOSD)	4/52 (8)	0.085	0.995	0/100 (0)	0.005	0.915	18.649 (0.984 - 353.414)
<b>Periaqueductal T2 Lesion (NMOSD)</b>	<b>9/62 (15)</b>	<b>0.145</b>	<b>0.990</b>	<b>1/100 (1)</b>	<b>0.010</b>	<b>0.855</b>	<b>16.811 (2.074 - 136.297)</b>
Optic Chiasm T2 or Gd-enhancing T1 Lesion (NMOSD)	4/62 (7)	0.071	0.995	0/100 (0)	0.005	0.929	15.462 (0.818 - 292.328)
Central Medullary T2 Lesion (NMOSD)	4/62 (7)	0.071	0.995	0/100 (0)	0.005	0.929	15.462 (0.818 - 292.328)
<b>Optic Nerve Gd-enhancing T1 Lesion</b>	<b>7/52 (13)</b>	<b>0.135</b>	<b>0.990</b>	<b>1/100 (1)</b>	<b>0.010</b>	<b>0.865</b>	<b>15.4 (1.84 - 128.911)</b>
<b>Third Ventricular Periependymal T2 Lesion (NMOSD)</b>	<b>7/62 (11)</b>	<b>0.113</b>	<b>0.990</b>	<b>1/100 (1)</b>	<b>0.010</b>	<b>0.887</b>	<b>12.6 (1.511 - 105.088)</b>
<b>Spinal Cord Swelling (NMOSD)</b>	<b>13/61 (21)</b>	<b>0.213</b>	<b>0.977</b>	<b>2/86 (2)</b>	<b>0.023</b>	<b>0.787</b>	<b>11.375 (2.462 - 52.552)</b>
Cloud-like Gd-enhancing T1 Lesion (NMOSD)	2/52 (5)	0.047	0.995	0/100 (0)	0.005	0.953	9.95 (0.469 - 211.2)
<b>Central Spinal Cord T2 Lesion (NMOSD)</b>	<b>43/58 (74)</b>	<b>0.741</b>	<b>0.772</b>	<b>18/79 (23)</b>	<b>0.228</b>	<b>0.259</b>	<b>9.715 (4.415 - 21.375)</b>
<b>Optic Nerve T2 Lesion</b>	<b>20/62 (32)</b>	<b>0.323</b>	<b>0.950</b>	<b>5/100 (5)</b>	<b>0.050</b>	<b>0.677</b>	<b>9.048 (3.182 - 25.729)</b>
Area Postrema T2 Lesion (NMOSD)	2/62 (4)	0.040	0.995	0/100 (0)	0.005	0.960	8.306 (0.392 - 175.928)

<b>Hypothalamic T2 Lesion (NMOSD)</b>	<b>8/62 (13)</b>	<b>0.129</b>	<b>0.980</b>	<b>2/100 (2)</b>	<b>0.020</b>	<b>0.871</b>	<b>7.259 (1.488 - 35.41)</b>
<b>Initial Brain MRI Normal (NMOSD)</b>	<b>10/62 (16)</b>	<b>0.161</b>	<b>0.970</b>	<b>3/100 (3)</b>	<b>0.030</b>	<b>0.839</b>	<b>6.218 (1.639 - 23.592)</b>
<b>Spinal Cord Atrophy (NMOSD)</b>	<b>12/61 (20)</b>	<b>0.197</b>	<b>0.953</b>	<b>4/86 (5)</b>	<b>0.047</b>	<b>0.803</b>	<b>5.02 (1.534 - 16.431)</b>
Longitudinal Corticospinal Tract T2 Lesion (NMOSD)	1/62 (2)	0.024	0.995	0/100 (0)	0.005	0.976	4.902 (0.197 - 122.253)
Longitudinal T2 Optic Nerve Lesion (NMOSD)	1/62 (2)	0.024	0.995	0/100 (0)	0.005	0.976	4.902 (0.197 - 122.253)
Cystic Brain Lesion (NMOSD)	3/62 (5)	0.048	0.980	2/100 (2)	0.020	0.952	2.492 (0.404 - 15.349)
Cerebellar Gd-enhancing T1 Lesion	1/52 (2)	0.019	0.990	1/100 (1)	0.010	0.981	1.941 (0.119 - 31.679)
Patch White Matter T2 Lesion (NMOSD)	33/62 (53)	0.532	0.620	38/100 (38)	0.380	0.468	1.857 (0.977 - 3.527)
Tumefactive Brain T2 Lesion (NMOSD)	1/62 (2)	0.016	0.990	1/100 (1)	0.010	0.984	1.623 (0.1 - 26.427)
Subcortical Gd-enhancing T1 Lesion	3/52 (6)	0.058	0.950	5/100 (5)	0.050	0.942	1.163 (0.267 - 5.071)
Bridging Splenium T2 Lesion (NMOSD)	2/62 (3)	0.032	0.970	3/100 (3)	0.030	0.968	1.078 (0.175 - 6.638)
Brainstem Periependymal T2 Lesion (NMOSD)	2/62 (3)	0.032	0.970	3/100 (3)	0.030	0.968	1.078 (0.175 - 6.638)
Linear Periventricular Periependymal T2 Lesion (NMOSD)	8/62 (13)	0.129	0.860	14/100 (14)	0.140	0.871	0.91 (0.358 - 2.313)
Brainstem T2 Lesion (MS)	13/62 (21)	0.210	0.770	23/100 (23)	0.230	0.790	0.888 (0.412 - 1.916)
Rounded Corpus Callosum T2 Lesion	1/62 (2)	0.016	0.980	2/100 (2)	0.020	0.984	0.803 (0.071 - 9.049)
Heterogeneous Corpus Callosum T2 Lesion (NMOSD)	3/62 (5)	0.048	0.940	6/100 (6)	0.060	0.952	0.797 (0.192 - 3.308)
Large Infratentorial T2 Lesion	8/62 (13)	0.129	0.840	16/100 (16)	0.160	0.871	0.778 (0.312 - 1.942)
Pencil-like Callosum T2 Lesion (NMOSD)	8/62 (13)	0.129	0.840	16/100 (16)	0.160	0.871	0.778 (0.312 - 1.942)
Punctate White Matter T2 Lesion (NMOSD)	10/62 (16)	0.161	0.800	20/100 (20)	0.200	0.839	0.769 (0.334 - 1.774)
Cerebral Peduncle T2 Lesion (NMOSD)	8/62 (13)	0.129	0.830	17/100 (17)	0.170	0.871	0.723 (0.292 - 1.792)
Thalamic T2 Lesion	2/62 (3)	0.032	0.950	5/100 (5)	0.050	0.968	0.633 (0.119 - 3.369)

Cerebellar Peduncle Gd-enhancing T1 Lesion	0/52 (0)	0.009	0.985	1/100 (1)	0.015	0.991	0.632 (0.025 - 15.781)
Corpus Callosum Gd-enhancing T1 Lesion	0/52 (0)	0.009	0.985	1/100 (1)	0.015	0.991	0.632 (0.025 - 15.781)
Deep Grey Matter T2 Lesion	7/62 (11)	0.113	0.810	19/100 (19)	0.190	0.887	0.543 (0.214 - 1.378)
<b>Partial Spinal Cord T2 Lesion (MS)</b>	<b>29/58 (50)</b>	<b>0.500</b>	<b>0.316</b>	<b>54/79 (68)</b>	<b>0.684</b>	<b>0.500</b>	<b>0.463 (0.23 - 0.932)</b>
Cerebellar Peduncle T2 Lesion (MS)	8/62 (13)	0.129	0.740	26/100 (26)	0.260	0.871	0.422 (0.177 - 1.003)
<b>Short Spinal Cord T2 Lesion (MS)</b>	<b>29/61 (48)</b>	<b>0.475</b>	<b>0.291</b>	<b>61/86 (71)</b>	<b>0.709</b>	<b>0.525</b>	<b>0.371 (0.187 - 0.737)</b>
<b>Juxtacortical T2 Lesion (MS)</b>	<b>35/62 (56)</b>	<b>0.565</b>	<b>0.220</b>	<b>78/100 (78)</b>	<b>0.780</b>	<b>0.435</b>	<b>0.366 (0.183 - 0.729)</b>
<b>Subcortical T2 Lesion</b>	<b>37/62 (60)</b>	<b>0.597</b>	<b>0.190</b>	<b>81/100 (81)</b>	<b>0.810</b>	<b>0.403</b>	<b>0.347 (0.17 - 0.708)</b>
<b>Cortical T2 Lesion</b>	<b>15/62 (24)</b>	<b>0.242</b>	<b>0.510</b>	<b>49/100 (49)</b>	<b>0.490</b>	<b>0.758</b>	<b>0.332 (0.165 - 0.67)</b>
Any Brain Gd-enhancing T1 Lesion	3/52 (6)	0.058	0.830	17/100 (17)	0.170	0.942	0.299 (0.083 - 1.072)
<b>Large T2 Brain Lesion (MS)</b>	<b>27/62 (44)</b>	<b>0.435</b>	<b>0.270</b>	<b>73/100 (73)</b>	<b>0.730</b>	<b>0.565</b>	<b>0.285 (0.146 - 0.557)</b>
<b>Large Supratentorial T2 Lesion</b>	<b>24/62 (39)</b>	<b>0.387</b>	<b>0.290</b>	<b>71/100 (71)</b>	<b>0.710</b>	<b>0.613</b>	<b>0.258 (0.132 - 0.504)</b>
<b>Cerebellar T2 Lesion (MS)</b>	<b>4/62 (6)</b>	<b>0.065</b>	<b>0.760</b>	<b>24/100 (24)</b>	<b>0.240</b>	<b>0.935</b>	<b>0.218 (0.072 - 0.664)</b>
<b>Initial MRI Brain Meets Barkhof Criteria (MS)</b>	<b>15/62 (24)</b>	<b>0.242</b>	<b>0.400</b>	<b>60/100 (60)</b>	<b>0.600</b>	<b>0.758</b>	<b>0.213 (0.105 - 0.431)</b>
<b>Inferior Temporal Lobe T2 Lesion (MS)</b>	<b>6/62 (10)</b>	<b>0.097</b>	<b>0.650</b>	<b>35/100 (35)</b>	<b>0.350</b>	<b>0.903</b>	<b>0.199 (0.078 - 0.508)</b>
<b>New Brain T2 Lesion (MS)</b>	<b>13/62 (21)</b>	<b>0.210</b>	<b>0.420</b>	<b>58/100 (58)</b>	<b>0.580</b>	<b>0.790</b>	<b>0.192 (0.093 - 0.398)</b>
<b>Splenium T2 Lesion</b>	<b>2/62 (3)</b>	<b>0.032</b>	<b>0.850</b>	<b>15/100 (15)</b>	<b>0.150</b>	<b>0.968</b>	<b>0.189 (0.042 - 0.857)</b>
<b>Any Corpus Callosum T2 Lesion</b>	<b>8/62 (13)</b>	<b>0.129</b>	<b>0.550</b>	<b>45/100 (45)</b>	<b>0.450</b>	<b>0.871</b>	<b>0.181 (0.078 - 0.42)</b>
<b>Hypodense T1 Brain Lesion (Black Hole)</b>	<b>6/62 (10)</b>	<b>0.097</b>	<b>0.590</b>	<b>41/100 (41)</b>	<b>0.410</b>	<b>0.903</b>	<b>0.154 (0.061 - 0.391)</b>
New Brain Gd-enhancing T1 Lesion (MS)	0/52 (0)	0.009	0.936	6/100 (6)	0.064	0.991	0.138 (0.008 - 2.507)
<b>Any Temporal Lobe T2 Lesion</b>	<b>8/62 (13)</b>	<b>0.129</b>	<b>0.480</b>	<b>52/100 (52)</b>	<b>0.520</b>	<b>0.871</b>	<b>0.137 (0.059 - 0.317)</b>

<b>Periventricular T2 Lesion (MS)</b>	<b>27/62 (44)</b>	<b>0.435</b>	<b>0.150</b>	<b>85/100 (85)</b>	<b>0.850</b>	<b>0.565</b>	<b>0.136 (0.065 - 0.286)</b>
<b>Initial MRI Brain Meets Paty Criteria (MS)</b>	<b>37/62 (60)</b>	<b>0.597</b>	<b>0.080</b>	<b>92/100 (92)</b>	<b>0.920</b>	<b>0.403</b>	<b>0.129 (0.053 - 0.311)</b>
Juxtacortical Gd-enhancing T1 Lesion	0/52 (0)	0.009	0.926	7/100 (7)	0.074	0.991	0.119 (0.007 - 2.121)
<b>Other Corpus Callosum T2 Lesion</b>	<b>1/62 (2)</b>	<b>0.016</b>	<b>0.860</b>	<b>14/100 (14)</b>	<b>0.140</b>	<b>0.984</b>	<b>0.101 (0.013 - 0.786)</b>
Periventricular Gd-enhancing T1 Lesion	0/52 (0)	0.009	0.896	10/100 (10)	0.104	0.991	0.082 (0.005 - 1.43)
<b>Pyramidal Corpus Callosum T2 Lesion (MS)</b>	<b>1/62 (2)</b>	<b>0.016</b>	<b>0.780</b>	<b>22/100 (22)</b>	<b>0.220</b>	<b>0.984</b>	<b>0.058 (0.008 - 0.443)</b>
<b>Dawson's Finger T2 Lesion (MS)</b>	<b>0/62 (0)</b>	<b>0.008</b>	<b>0.797</b>	<b>20/100 (20)</b>	<b>0.203</b>	<b>0.992</b>	<b>0.031 (0.002 - 0.53)</b>
<b>Ovoid T2 Lesion (MS)</b>	<b>1/62 (2)</b>	<b>0.016</b>	<b>0.640</b>	<b>36/100 (36)</b>	<b>0.360</b>	<b>0.984</b>	<b>0.029 (0.004 - 0.219)</b>

Entries in **bold** were significantly different

NMOSD = neuromyelitis optica; MS = multiple sclerosis; Gd = gadolinium, OR = odds ratios; CI = confidence interval