

**Conference Attendees, International Conference on Spinal Cord Involvement and  
Imaging in MS and NMOSD, Berlin Germany 18-20 May 2017**

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**Supplementary Table: Clinical trials with MRI-assessed spinal cord atrophy as a primary or secondary endpoint**

Intervention and reference	Type of trial	Trial population	Trial Duration (years)	Spinal cord measures	Results
Riluzole <sup>1</sup>	Run-in versus treatment trial (no specific treatment during the first year and all patients on riluzole during the second year)	PPMS (n=16)	2	Upper cervical cord cross-sectional area	Mean change in 1 <sup>st</sup> year, without treatment: -2% Mean change in 2 <sup>nd</sup> year, on treatment: -0.2%.
Interferon beta-1a <sup>2</sup>	Double-blind, placebo-controlled trial of two doses of interferon beta-1a versus placebo	PPMS (n=50)	2	Upper cervical cord cross-sectional area	Placebo arm: median area at baseline 69.2 mm <sup>2</sup> vs. 67.9 at year 2 High-dose interferon beta-1a arm: 65.3 at baseline vs. 66.8 at year 2 not significant
Interferon beta-1a <sup>3</sup>	Patients recruited from two phase 3 double-blind, randomized, placebo-controlled trials (PRISMS in RRMS and SPECTRIMS in SPMS)	RRMS (n=20), SPMS (n=18)	4	Upper cervical cord cross sectional area	Change from baseline to year 4: Placebo arm: -5.7% Treated arm: -4.5% p=0.35
Interferon beta-1b <sup>4</sup>	Double-blind, placebo-controlled, single-center trial	PPMS (n=49), "transitional MS" (n=24)	2	Spinal cord cross-sectional area	Change from baseline to year 1: Placebo arm: -1.3 mm <sup>3</sup> Interferon beta-1b arm: -1.6 mm <sup>3</sup> p=0.39 Change from baseline to year 2: Placebo arm: -1.6 mm <sup>3</sup> Interferon beta-1b arm: -0.9 mm <sup>3</sup> p=0.21
Lamotrigine <sup>5</sup>	Double-blind, randomized, placebo-controlled, parallel-group trial	SPMS (n=120)	2	Upper cervical cord cross-sectional area	Change from baseline to year 2: Placebo arm: -1.26% Lamotrigine arm: -1.60% p=0.18
Fingolimod <sup>6</sup>	Double-blind, randomized, placebo-controlled, multi-center trial	PPMS (n=823)	3	Upper cervical cord cross-sectional area	Change from baseline to year 3: Placebo arm: -2.04% Fingolimod arm: -2.44% p=0.26

PPMS = primary progressive multiple sclerosis, RRMS = relapsing-remitting multiple sclerosis, SPMS = secondary progressive multiple sclerosis

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