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

<table>
<thead>
<tr>
<th>Intervention and reference</th>
<th>Type of trial</th>
<th>Trial population</th>
<th>Trial Duration (years)</th>
<th>Spinal cord measures</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riluzole¹</td>
<td>Run-in versus treatment trial (no specific treatment during the first year and all patients on riluzole during the second year)</td>
<td>PPMS (n=16)</td>
<td>2</td>
<td>Upper cervical cord cross-sectional area</td>
<td>Mean change in 1st year, without treatment: -2% Mean change in 2nd year, on treatment: -0.2%.</td>
</tr>
<tr>
<td>Interferon beta-1a²</td>
<td>Double-blind, placebo-controlled trial of two doses of interferon beta-1a versus placebo</td>
<td>PPMS (n=50)</td>
<td>2</td>
<td>Upper cervical cord cross-sectional area</td>
<td>Placebo arm: median area at baseline 69.2 mm² vs. 67.9 at year 2 High-dose interferon beta-1a arm: 65.3 at baseline vs. 66.8 at year 2 not significant</td>
</tr>
<tr>
<td>Interferon beta-1a³</td>
<td>Patients recruited from two phase 3 double-blind, randomized, placebo-controlled trials (PRISMS in RRMS and SPECTRIMS in SPMS)</td>
<td>RRMS (n=20), SPMS (n=18)</td>
<td>4</td>
<td>Upper cervical cord cross-sectional area</td>
<td>Change from baseline to year 4: Placebo arm: -5.7% Treated arm: -4.5% p=0.35</td>
</tr>
<tr>
<td>Interferon beta-1b⁴</td>
<td>Double-blind, placebo-controlled, single-center trial</td>
<td>PPMS (n=49), “transitional MS” (n=24)</td>
<td>2</td>
<td>Spinal cord cross-sectional area</td>
<td>Change from baseline to year 1: Placebo arm: -1.3 mm³ Interferon beta-1b arm: -1.6 mm³ p=0.39 Change from baseline to year 2: Placebo arm: -1.6 mm³ Interferon beta-1b arm: -0.9 mm³ p=0.21</td>
</tr>
<tr>
<td>Lamotrigine⁵</td>
<td>Double-blind, randomized, placebo-controlled, parallel-group trial</td>
<td>SPMS (n=120)</td>
<td>2</td>
<td>Upper cervical cord cross-sectional area</td>
<td>Change from baseline to year 2: Placebo arm: -1.26% Lamotrigine arm: -1.60% p=0.18</td>
</tr>
<tr>
<td>Fingolimod⁶</td>
<td>Double-blind, randomized, placebo-controlled, multi-center trial</td>
<td>PPMS (n=823)</td>
<td>3</td>
<td>Upper cervical cord cross-sectional area</td>
<td>Change from baseline to year 3: Placebo arm: -2.04% Fingolimod arm: -2.44% p=0.26</td>
</tr>
</tbody>
</table>

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

References

