**Supplementary Table 2.** Difference of NIRS parameters between RLS patients with PLMS and controls during sleep

<table>
<thead>
<tr>
<th></th>
<th>Right OxyHb</th>
<th>p-value †</th>
<th>Left OxyHb</th>
<th>p-value †</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RLS with PLMS</td>
<td>Control</td>
<td>RLS with PLMS</td>
<td>Control</td>
</tr>
<tr>
<td>Wake</td>
<td>0.77 (0.60–1.00)</td>
<td>0.66 (0.24–1.00)</td>
<td>0.468</td>
<td>0.78 (0.54–1.00)</td>
</tr>
<tr>
<td>LS</td>
<td>0.59 (0.30–0.87)</td>
<td>0.33 (0.15–0.48)</td>
<td>0.248</td>
<td>0.62 (0.18–1.02)</td>
</tr>
<tr>
<td>SWS</td>
<td>0.35 (0.06–0.67)</td>
<td>0.22 (0.09–0.39)</td>
<td>0.724</td>
<td>0.31 (0.04–0.68)</td>
</tr>
<tr>
<td>REM*</td>
<td>0.59 (0.42–0.98)</td>
<td>0.36 (0.13–0.44)</td>
<td>0.043</td>
<td>0.63 (0.42–0.92)</td>
</tr>
<tr>
<td>Right DeoxyHb</td>
<td>0.63 (0.52–0.78)</td>
<td>0.59 (0.39–1.00)</td>
<td>0.773</td>
<td>0.68 (0.50–0.91)</td>
</tr>
<tr>
<td></td>
<td>RLS with PLMS</td>
<td>Control</td>
<td>RLS with PLMS</td>
<td>Control</td>
</tr>
<tr>
<td>LS</td>
<td>0.59 (0.24–0.84)</td>
<td>0.24 (0.19–0.73)</td>
<td>0.149</td>
<td>0.49 (0.16–0.76)</td>
</tr>
<tr>
<td>SWS</td>
<td>0.24 (0.05–0.48)</td>
<td>0.19 (0.14–0.58)</td>
<td>0.480</td>
<td>0.23 (0.04–0.35)</td>
</tr>
<tr>
<td>REM*</td>
<td>0.52 (0.34–0.78)</td>
<td>0.26 (0.19–0.66)</td>
<td>0.149</td>
<td>0.55 (0.38–0.72)</td>
</tr>
<tr>
<td>Right phase difference</td>
<td>167.56 (153.75–177.35)</td>
<td>169.01 (162.91–174.06)</td>
<td>0.773</td>
<td>162.64 (145.54–171.52)</td>
</tr>
<tr>
<td></td>
<td>RLS with PLMS</td>
<td>Control</td>
<td>RLS with PLMS</td>
<td>Control</td>
</tr>
<tr>
<td>LS</td>
<td>178.90 (170.57–183.01)</td>
<td>180.36 (172.27–182.61)</td>
<td>0.564</td>
<td>180.33 (167.10–183.55)</td>
</tr>
<tr>
<td>SWS</td>
<td>176.69 (166.99–186.26)</td>
<td>180.95 (180.89–186.07)</td>
<td>0.289</td>
<td>179.43 (168.73–187.26)</td>
</tr>
<tr>
<td>REM</td>
<td>175.75 (171.51–182.99)</td>
<td>178.18 (170.11–180.68)</td>
<td>1.000</td>
<td>175.67 (167.55–179.92)</td>
</tr>
<tr>
<td>Left phase difference</td>
<td>0.231</td>
<td>0.033</td>
<td>0.069</td>
<td>0.053</td>
</tr>
</tbody>
</table>

Values are median (range), *Sleep stage with p-value < 0.05, †Mann-Whitney U test was used to compare the difference between groups, ‡Kruskall-Wallis test was used to compare the difference between sleep stages [Wake-LS (LS without PLM in PLMS patients)-SWS-REM].