

## OPEN PEER REVIEW REPORT 1

**Name of journal:** Neural Regeneration Research

**Manuscript NO:** NRR-D-20-00201

**Title:** Repetitive transcranial magnetic stimulation for lower extremity motor function in patients with stroke: systematic review and network meta-analysis

**Reviewer's Name:** Kamal Arya

**Reviewer's country:** India

### COMMENTS TO AUTHORS

Section	Comments
<b>Title</b>	<ul style="list-style-type: none"> <li>Clarify as per the objective of the study</li> </ul>
<b>Abstract</b>	<ul style="list-style-type: none"> <li>Background should be revised for language and key issue related to the objective. For instance, <i>The optimal... stroke were unknown</i> should be in present tense</li> <li>The objective is not as per the title of the study. There is no mention of comparison of type of rTMS (low/high frequency) in the title. The author should clarify the main objective of the study.</li> <li>Results should indicate the number of the studies</li> </ul>
<b>Introduction</b>	<ul style="list-style-type: none"> <li>Introduction lacks the expression of the previous systematic reviews on this topic (such as <i>Ghayour-Najafabadi M et al 2019, Tung YC et al 2019, Li Y et al 2018</i>). Why this review is needed?</li> <li>When other systematic review / meta-analysis provided limited / insufficient evidence for rTMS, justify the purpose of present study.</li> <li>The approach and justification for this Network metaanalysis should also be mentioned</li> <li>Mechanism of action and difference between the type of rTMS (Deep, high-frequency, low-frequency, and intermittent theta-burst rTMS) should be mentioned.</li> <li>Introduction is weak to comprehensively cover the background problem, existing reviews, objective, rationale, and novelty.</li> </ul>
<b>Methods</b>	<ul style="list-style-type: none"> <li>Stroke diagnostic criteria should be as per WHO</li> <li>Language need revision at many places</li> <li>Eligibility criteria should be clearly mentioned in PICO format</li> <li>There are multiple primary outcome measures. The primary measure should only be one or two. Rest other should be secondary measures.</li> <li>The primary measure should be mentioned in conceptual form (motor recovery of lower limb), then about the specific measure use to examine the same.</li> <li>Consider the title / main objective (lower limb function) to decide the primary measure</li> <li>Unlike the main text, in abstract only FMA has been mention as primary measure. This needs to be same at both the places</li> <li>Was there any data collection form used?</li> <li>Study selection: How the consensus was reached between the two authors? Was there any third investigator to resolve the issue?</li> <li>In view of one or two primary measures, the heterogeneity of the studies should be redefined.</li> </ul>

<b>Results</b>	<ul style="list-style-type: none"> <li>• The first paragraph (study selection) has redundant information from the figure 1. Revise the same.</li> <li>• In view of one or two primary measures, the heterogeneity of the studies should be reconsidered and reanalyzed.</li> <li>• Number of studies based on the type of rTMS (Deep, high-frequency, low-frequency, and intermittent theta-burst rTMS) should be briefly mentioned.</li> </ul>
<b>Discussion</b>	<ul style="list-style-type: none"> <li>• Other systematic reviews need to be properly discussed in the light of findings of the present study</li> <li>• Discussion needs to be expanded for comprehensively explaining the findings</li> <li>• Should be modified as per the reanalysis suggested above</li> </ul>
<b>Conclusion</b>	<ul style="list-style-type: none"> <li>• Be specific for sufficient or insufficient evidence; avoid phrases <i>can probably</i>.</li> <li>• Last two lines does not justify the need of present network meta-analysis</li> </ul>
<b>General</b>	<ul style="list-style-type: none"> <li>• It seems the present review has not been registered prospectively with any of the database such as PROSPERO. If not registered, it raises the question for acceptance of the manuscript.</li> <li>• Multiple types of rTMS and multiple types of outcome measures from multiple studies raise the question for the generalizability of the study.</li> </ul>
<b>Figure 1</b>	<ul style="list-style-type: none"> <li>• Edit redundant information</li> </ul>
<b>Table 1</b>	<ul style="list-style-type: none"> <li>• Avoid using word <i>hemiplegia</i>; prefer <i>hemiparesis</i> (mild/moderate/severe)</li> </ul>