Reviewer’s report

Title: Antidepressant outcomes of high-frequency repetitive transcranial magnetic stimulation (rTMS) with F8-coil and deep transcranial magnetic stimulation (DTMS) with H1-coil in major depression: a systematic review and meta-analysis

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Reviewer: Ying-hui Chou

Reviewer's report:

This meta-analysis reported antidepressant outcomes of rTMS with the figure-of-eight (F8) coil vs. H1 coil in unipolar major depressive disorder (MDD). Nineteen studies (F8 coils: n = 11; H1 coils: n = 8) with a total of 368 patients with MDD were included in this meta-analysis. Overall, rTMS with H1 coils (i.e., deeper but non-focal stimulation) showed a significantly larger reduction in depression severity after 10 sessions of rTMS relative to the rTMS with F8 coils. However, as pointed by the authors, the difference in antidepressant outcomes could potentially be confounded by stimulation intensity, number of stimuli, and inter-train interval because majority of the rTMS studies with H1 coils had higher stimulation intensity, higher number of stimuli, and shorter inter-train interval than the rTMS studies with F8 coils.

The findings of this meta-analysis are important and clinically relevant. The authors did a great job in describing the meta-analytic methods and this methodology section could be very educational for readers who are not familiar with the meta-analytic methods. All sections are very-well organized. The only minor comment I could have would be to include the assessment of the risk of bias in the included studies. A number of tools that could be used to assess the risk of bias include the Cochrane risk of bias assessment tool, PEDro scale, and/or Grading of Recommendations, Assessment, Development and Evaluation (GRADE) tool. I have enjoyed reading this manuscript - very well done.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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