

OPEN PEER REVIEW REPORT 2

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Title: Paired associative stimulation can improve synaptic plasticity and functional outcomes after cerebral ischemia

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Reviewer's country: USA

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COMMENTS TO AUTHORS

Overall, I felt this study was very well done - technically sound, incisive, and comprehensive (showing the results of PAS on the level of learning and behavior, synaptic structure, long-term potentiation, and BDNF and NMDAR1 protein and mRNA levels. I have only a few quibbles. I hope they will be of use.

1. The Abstract makes no mention of either control group. Even very brief mention (e.g., "compared to control tMCAO rats,") would help convey this strength of the experiments.
2. Introduction (page 2, line 36). "Considering the imbalance of interhemispheric inhibition (IHI) after stroke... it is rational to apply NIBS to rebalance it." I think the connection between NIBS and interhemispheric inhibition should be explained in a sentence or two.
3. Subjects and Methods (page 8, lines 17-33). I was very impressed by the anatomical precision of this analysis.