Reviewer’s report

Title: Comparative efficacy of Chinese medicine injections for treating acute cerebral infarction: A network meta-analysis of randomized controlled trials

Version: 2 Date: 14 Feb 2018

Reviewer: Tetsuhiro Yoshino

Reviewer’s report:

This is an interesting article performing systematic review and network meta-analysis of efficacy of Chinese herbal injections for treating acute cerebral infarction. The study findings suggest that SXN + AADN and YXDM + AADN, both containing Ginkgo biloba extracts, might be the optimum treatment regimens for acute cerebral infarction.

However, I would like to highlight some points which I believe should be considered.

Major revision required.

1. Redundancy of Background and discussion.

The Methods and Results sections are well-written, but other two parts contain many redundants.

Therefore, I recommend authors to revise structure and logic, especially of Background, with neurologists specializing acute cerebral infarction if you can. This is not a review of acute cerebral infarction, but a review of Chinese herbal injection. I believe previous reviewer 1 pointed out almost the same point, and this is not a problem of English correctness of each sentence, but a problem of big picture of this article. The previous reviewer 1 also pointed out the references in conclusion, and I agree with reviewer 1 and believe that authors should remove these references. Conclusion is YOUR conclusion and does not need any references after presenting your results.

First paragraph of background introduce too much and less-related information about detailed number of mortality and disability rate.

In second paragraph of background, authors stated that "there is no routine, effective, generally accepted, specific treatment for ACI", but afterwards, authors also mentioned that "Grade-I recommendation in the Guidance of diagnosis and treatment of acute ischemic stroke in China 2010". I believe such Grade-I recommended conventional medications are "routine, effective, generally accepted, specific treatment for ACI" all over the world.

In third paragraph of background, authors stated that "the pathogenesis of ACI is due to the stagnation of Qi and blood. Therefore, promoting blood flow is of primary importance" and it sounds like TCM doctors treat patients with close concept with conventional neurologists. However, authors also stated that "the overall treatment concept is different from that in Western
medicine. I can understand the meaning of both sentences because I am a Western physician specializing traditional medicine, but your logic might be confusing for usual physicians. This is what I mean that you need to revise your logic with neurologists.

The second and third paragraph of discussion contains too much repeated results. You can remove majority of information in these paragraphs, and leave only the last sentences in each paragraph and combine with the first paragraph.

2. Structure of Results.

Authors mixed outcomes in the section "pairwise meta-analysis" and "Bayesian network meta-analysis", and separated the markedly effective rate and improvement of neurological impairment in further analysis. Authors can separate these two outcomes from the initial pairwise meta-analysis, and I believe that this re-structuring of results might be easy to read for many readers.

3. Limitation

I am not sure about the difference in background of included patients. For example, if the severity of participants included in the SXN trial was mild, and that in other CHI trial was worse, then you might have the beneficial result for SXN. How did you evaluate and normalize participants' background in you analysis? If not, it might be one of limitations of your analysis.

Minor revision required.

Title

The words "Chinese medicine injections" appears only in title, and authors use the words "Chinese herbal injections (CHIs)" in the rest of parts. It should be consistent.

Page 6, line 122

The words "RCTs at home and abroad" does not make sense; especially "at home". Do you mean "inside of China" like domestic, or "outpatient treatment at patients' home"?

Page 7, like 145

I believe just MRI is an usual term, and "nuclear" is not needed.

Page 9, like 187

There are no full spelling of ADRs/ADEs in main text.
There are no full spellings of NMA in any part of this article.

What is "gray literature"?

**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

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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