Reviewer's report

Title: Bayesian Meta-analysis of Comparative Diagnostic Test Accuracy Studies

Version: 4 Date: 17 May 2015

Reviewer: Jing Zhang

Reviewer's report:

Previous comments addressed well in general, but a few minor issues remain.

Please check the typos and missing references. For example, on page 13 line 12, “as for example in is done” should be “as for example it is done”? And on page 13 lines 33-34, a reference regarding bias was missing, and a question mark appeared instead.

On page 13 lines 27-37, it is nice that the authors acknowledged DTAs studies may be subject to larger heterogeneity, bias, and inconsistency. Another potential issue is study-level outliers, which could be more severe for DTAs than for RCTs. A paper has proposed several nice Bayesian detection measures for study-level outliers [Zhang J., Fu H., Carlin B.P. (2015), Detecting outlying trials in network meta-analysis, Statistics in Medicine], which may be of interest to the authors as well.

It is nice that the authors clarified in the revised manuscript that a broad range of studies were combined. Does the “randomized test comparison” have better accuracy compared with the other types of studies? As we all know that randomized trials are at the top of hierarchy of evidence, is it true for DTAs? If yes, the authors should acknowledge this too.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests