Reviewer’s report

Title: Efficacy of Once-daily Indacaterol 75ug Relative to Alternative Bronchodilators in COPD: a study level and a patient level Network meta-analysis

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Reviewer: Mark Weatherall

Reviewer’s report:

The authors present a complex pooled analysis of a number of different placebo controlled randomised controlled trials of inhaler use in COPD with the aim of estimating the possible differences between indacaterol and other agents used in COPD based on FEV1 and the St Georges Respiratory Questionnaire.

The literature review seems comprehensive and the authors also had access to individual patient data from a company research program about indacaterol.

The analysis was by a Bayesian model as implemented in WinBUGS and I think the authors could usefully present, as a supplement, an example of their code so that the hierarchical structure, statistical distributions, and priors are more obvious than in the text description of their methods.

In the event there was little evidence found in a difference in 12 week FEV1 and St Georges Respiratory Questionnaire between the multiple different agents examined.

I felt the authors gave a balanced description of the strengths and weaknesses of their study in the discussion.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare I have no competing interests