Author's response to reviews

Title: Cochrane diagnostic test accuracy reviews

Authors:

Mariska Leeflang (m.m.leeflang@amc.uva.nl)
Jon Deeks (j.deeks@bham.ac.uk)
Petra Macaskill (petra.macaskill@sydney.edu.au)
Yemisi Takwoingi (y.takwoingi@bham.ac.uk)

Version: 2 Date: 13 September 2013

Author's response to reviews: see over
To: BMC Systematic Reviews
Editorial Board

Mariska M. G. Leeflang, PhD
Dept. of Clinical Epidemiology, Biostatistics and Bioinformatics
Academic Medical Center, University of Amsterdam
PO Box 22700
1100 DE Amsterdam
Telephone: +31 20 56 66934
Fax: +31 20 69 12683
m.m.leeflang@amc.uva.nl

Amsterdam, September 11th, 2013

Dear Editor,

On behalf of my co-authors, I would like to submit our revised manuscript entitled “Cochrane diagnostic test accuracy reviews” for publication in BMC Systematic Reviews. This manuscript is an invited manuscript, intended for the special issue on the 20th anniversary of The Cochrane Collaboration. It highlights the (past and future) developments in systematic reviews of diagnostic test accuracy, both within and outside Cochrane.

It has been revised according to the peer reviewer’s comments and to the journal’s requirements.

Sincerely yours,

Mariska M. G. Leeflang, PhD
On behalf of Jonathan Deeks, Petra Macaskill and Yemisi Takwoingi
Response to peer reviewer’s comments.

The last sentence of the first paragraph of the background states that “Systematic reviews of DTA studies summarise (...) evidence in a clinical context.” I agree that this is what an ideal DTA review should do, however many reviews don’t investigate heterogeneity, only look at single tests or fail to consider the clinical context. Could you rephrase this slightly to acknowledge that this is the “ideal” rather than what is routinely done?

Response: This has been rephrased as follows: “Systematic reviews of diagnostic test accuracy summarize the evidence about test accuracy. Ideally, they also investigate why the results may vary between studies, compare the performance of alternative tests, and help the reader to put the evidence in a clinical context [2].”

The final sentence of the first paragraph under “Early methodology”, I’m not sure that the words “that appeared in journal articles” is necessary. Didn’t all reviews adopt this method?

Response: the words “that appeared in journal articles” have been removed.

In the second paragraph on this section you state that there is no best design analogous RCTs and that consequently it is more difficult to retrieve relevant studies from electronic databases. I’m not sure that this follows directly; I think it is the lack of a standard terminology for the study design rather than the lack of a best design that is the problem.

Response: A sentence was added to mention the lack of terminology. “There is no standard terminology either to describe the variety of study designs used to assess accuracy.”

Under the section on search and selection you state that “review authors are often forced to screen thousands of retrieved articles to find the small number (typically around a hundred)”. Whilst I agree with this statement I’m not sure it’s reasonable to state that the number of included studies in a DTA review is typically around 100.

Response: the words “typically around a hundred” have been removed.

I have some suggestions with regards to some of the references.

References 1 and 2 are quite old and there are many more recent references which I think may be more appropriate here. - Response: These have been replaced by more recent work.

I think reference 3 is the incorrect reference and should be reference 4 (which I don’t think is currently cited) the first time that it is used. – Response: correct reference cited

Under the section on “early methodology” the first sentence you talk about meta-analyses of DTA and interventions but only include references for the DTA meta-analyses, could you also include some for the interventions? – Response: we removed the part about intervention meta-analyses.

The references for use of filters are also not the most recent studies in this area – Response: the Devillé paper has been replaced with the Whiting 2011 paper.

One of the references for QUADAS under quality assessment is not correct – reference 19 does not report QUADAS, I think you may be meaning to cite the HTA report here (Whiting HTA 2004) or just reference 20 alone would be sufficient. Reference 3 does not appear complete. – Response: reference 19 now refers to the risk of bias and variation paper in Ann Int Med, to acknowledge the work done in that area.