

## Supplementary Online Content

McInnes MDF, Moher D, Thombs BD, McGrath TA, Bossuyt PM, and the PRISMA-DTA Group. Preferred reporting items for a systematic review and meta-analysis of diagnostic test accuracy studies: the PRISMA-DTA statement. *JAMA*. doi:10.1001/jama.2017.19163

**eTable 1.** PRISMA-DTA Group with description of Delphi participation, meeting attendance and relevant areas of expertise

**eTable 2.** List of excluded items following the Delphi process

**eTable 3.** PRISMA-DTA consensus meeting agenda

This supplementary material has been provided by the authors to give readers additional information about their work.

**eTable 1.** PRISMA-DTA Group with description of Delphi participation, meeting attendance and relevant areas of expertise

Name (n = 24)	Meeting Attendance (n= 18)	Delphi-3 Rounds (n=23)	Expertise						
			DTA Systematic Review			DTA Systematic Review User			
			Author	Methods Research	Reviewer	Journal Editor	Policy/ Guidelines	Physician/ Medical Student	Funder
Patrick Bossuyt									
Tammy Clifford									
Jeremie F Cohen									
Jon Deeks									
Constantine Gatsonis									
Lotty Hoofst									
Harriet Hunt									
Chris Hyde									
Daniel Korevaar									
Mariska Leeflang									
Petra Macaskill									
David Moher									
Trevor McGrath									
Matthew McInnes									
Johannes B. Reitsma									
Rachel Rodin									
Anne Rutjes									
Adrienne Stevens									
Yemisi Takwoingi									
Brett Thombs									
Marcello Tonelli									
Laura Weeks*									
Penny Whiting									
Brian Willis									

\*Attended meeting in lieu of TC who completed the Delphi process

**eTable 2.** List of excluded items following the Delphi process

<b>Items excluded after 3 rounds of Delphi exercise</b>
<ol style="list-style-type: none"><li>1. Title: State whether the report is a comparative (one diagnostic test vs. another) or a non-comparative review</li><li>2. Methods: Report which outcomes are considered primary and secondary</li><li>3. Methods: Report if and how any parameters beyond test accuracy will be evaluated (e.g. cost effectiveness, mortality)</li><li>4. Methods: Provide any data collection forms used as an appendix</li><li>5. Methods: Describe if and how 'piloting' the risk of bias tool was done</li><li>6. Methods: Describe test used to assess for publication bias</li><li>7. Methods: Report inter-observer agreement for risk of bias assessment</li><li>8. Methods: Report any programming deviations made from published software packages</li><li>9. Results: Present results of any assessment of publication bias</li><li>10. Conclusion: Discuss the five GRADE considerations (study limitations, consistency of effect, imprecision, indirectness and publication bias)</li><li>11. Conclusion: Report how issues specific to equity will be addressed. For example, how will populations with lower access to index test be considered</li></ol>

Note: the PRISMA-DTA group felt that most of these items were relevant to reporting of DTA systematic reviews. However, most were felt to be either too detailed for a 'minimum reporting guideline' or not relevant depending on the particular scope or purpose of the review.

<b>Items excluded after the consensus meeting</b>	
<b>Item</b>	<b>Reason for exclusion</b>
1. Methods: Report whether hand searching of reference lists was done	Felt to be too much detail, only relevant for a subset of studies and there is no strong evidence that hand searching is of particular benefit in DTA systematic reviews. Issues particular to DTA searching will be discussed in the E&E document.
2. Methods: List any search of the grey literature including search of study registries	Felt to be too much detail, only relevant for a subset of studies and there is no strong evidence that searching the grey literature is of particular benefit in DTA systematic reviews. Issues particular to DTA searching will be discussed in the E&E document.
3. Methods: Describe methods to ensure that overlapping patient populations were identified and accounted for	Felt to be too much detail, only relevant for a subset of studies and there is no strong evidence that this is a particular problem in DTA systematic reviews. Issues of overlapping study populations will be discussed in the E&E document.
4. Methods: Report how studies for which only a subgroup of participants is relevant to the review will be handled	Felt to be too much detail, only relevant for a subset of studies and there is no strong evidence that this is a particular problem in DTA systematic reviews.
5. Methods: List patient demographic information (age, sex)	Felt to be too much detail, and there is no strong evidence that age and sex are of particular relevance in DTA systematic reviews.
6. Methods: List blinding information	Felt to be too much detail and perhaps redundant. This information should be captured when assessing for risk of bias in individual studies.
7. Methods: List disease prevalence	Felt to be too much detail and perhaps redundant. This information can be derived from the 2x2 data.
8. Methods: List spectrum of results for continuous tests	Felt to be too much detail, only relevant for a subset of studies. Issues pertaining to continuous vs. binary tests will be discussed in the E&E document.
9. Methods: List criteria used for risk of bias ratings applied during the review	Felt to be too much detail with no strong evidence to support improving repeatability of systematic review. However, relevance of presenting specific criteria used in risk of bias assessment will be discussed in the E&E document.

10. Methods: Report modifications to risk of bias tool	Felt to be too much detail with no strong evidence to support improving repeatability of systematic review.
11. Methods: Provide measures of consistency (e.g., tau <sup>2</sup> ) for each meta-analysis	Since there is no agreed upon method for statistical evaluation of consistency/ variability in DTA systematic reviews, the wording of this was felt to be too specific. Rather, the more general term ‘variability’ was chosen and is included in PRISMA-DTA item 21. Challenges regarding variability in DTA systematic reviews will be discussed in the E&E document.
12. Methods: If comparative design, state the statistical methods used to compare test accuracy.	Felt to be too much detail and only relevant for a small subset of DTA reviews.
13. Methods: When performing meta-regression report the form of factors being explored (categorical vs. continuous) and the cut-off points used.	Felt to be too much detail and only relevant for a small subset of studies. Issues regarding reporting of meta-regression factors will be discussed in the E&E document.
14. Methods: State which software package and macros was used for meta-analysis	Felt to be too much detail and only relevant for a small subset of DTA reviews.
15. Methods: ( <b>Original PRISMA Item 15</b> ): Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	There is limited evidence that publication or reporting bias is a major issue for primary DTA studies; the rationale for mandating its evaluation in DTA systematic reviews is not as strong as for intervention reviews. There is no appropriate test statistic with adequate power to reliably assess publication bias in DTA systematic reviews.
16. Results: Provide an appendix with studies that met eligibility criteria that were then excluded, with per-study reasons for exclusion.	Felt to be too much detail; however this issue will be elaborated on in the E&E document since reporting exclusions can help with updating of systematic reviews.
17. Results: Report each meta-analysis including measures of consistency (e.g. tau <sup>2</sup> ).	Please see comment for excluded item number 11 above.
18. Results: Report risk of bias in the synthesis (e.g. analyses stratified by risk of bias)	Felt to be too much detail and only relevant for a small subset of DTA reviews; options for using risk of bias results as a form of subgroup analysis will be discussed in the E&E document.
19. Results: Report any adverse events or harms from reference standard	Harms from the reference standard were felt to be beyond the scope of a DTA systematic review whose specific aim is to evaluate the index test; however, the harms from the index test were thought to be important and were included in modified PRISMA-DTA item 23.

20. Results: Report summary of findings table with main outcomes & issues re: applicability of results	Felt to be too constraining regarding how results are presented and might not be compatible with all journals. No proven value for DTA systematic reviews.
21. Results: Report 'frequency' tables of 2x2 data demonstrating potential findings in a patient population based on the prevalence	Felt to be potentially only relevant to a subset of reviews. The importance of frequency tables and the impact of disease prevalence on results will be discussed in the E&E document.
22. Results: Present results of any assessment of risk of bias across studies ( <b>Original PRISMA Item 22</b> )	See rationale provided for item 15 above.
23. Discussion: For comparative design, report whether conclusions were based on direct vs. indirect comparisons	Felt to be only relevant to a subset of DTA systematic reviews. However, challenges and sources of bias in comparative reviews will be discussed in the E&E document.
24. Discussion: Account for any statistical heterogeneity when interpreting the results	Please refer to comment for excluded item number 11 above.
25. Discussion: Discuss the implications of any missing data	Felt to be quite specific, not of particular relevance to DTA reviews and not likely relevant to most reviews.
26. Discussion: Discuss the potential impact of reporting biases	Please see comment for excluded item number 15 above.
27. Disclosure: Report potential relevant conflicts of interest for review investigators	This was felt to be beyond the scope of issues particular to DTA systematic reviews. In addition, journals typically have their own variable conflict of interest disclosure policies.

**eTable 3.** PRISMA-DTA consensus meeting agenda

<b>Location</b>	Amsterdam, Netherlands	
<b>Date</b>	May 26-27 <sup>th</sup> 2017	
<b>Day 1</b>		
<b>Time</b>	<b>Presenter</b>	<b>Topic</b>
Morning Session	Chair: Matthew McInnes	
0830 – 0840	Patrick Bossuyt & Corien Meijer	Welcome, introductions
0840 – 0900	David Moher	Overview of existing guidelines with emphasis on current PRISMA extensions
0900 – 0920	Brett Thombs	Potential uses of the PRISMA-DTA checklist/ Knowledge Users
0920 – 1030	Matthew McInnes	Overview of rationale, process and scope of PRISMA-DTA
1030 – 1045	Break	
1045 – 1100	David Moher	Evidence gathering process
1100 – 1130	Trevor McGrath	Results from Delphi Process
1130 – 1200	Group Discussion	Begin review of individual PRISMA-DTA checklist items
1200 – 1300	Lunch	
Afternoon session	Chair: David Moher	
1300 – 1500	Group discussion	Review of individual PRISMA-DTA checklist items
1500 – 1530	Break	
1530 – 1700	Group discussion	Review of individual PRISMA-DTA checklist items
<b>Day 2</b>		
Morning session	Chair: Patrick Bossuyt	
0830 – 0845	Patrick Bossuyt	Summary of Day 1
0845 – 1030	Group discussion	Review of individual PRISMA-DTA checklist items
1030 – 1050	Break	
1050 – 1230	Group discussion	Review of PRISMA-DTA for abstracts
1230 – 1330	Lunch	
Afternoon session	Chair: Brett Thombs	
1330 – 1400	Group discussion	Summary of revised PRISMA-DTA checklist
1400 – 1430	Patrick Bossuyt	Drafting the PRISMA-DTA Statement
1430 – 1450	Matthew McInnes	Developing a PRISMA-DTA Explanation and Elaboration document
1450 – 1515	Break	
1515 – 1600	David Moher	Dissemination strategies and evaluation approaches for statement impact
1600 – 1615	Matthew McInnes	Closing remarks