

Table 1. Reporting Frequency of PRISMA-DTA Items. For all included studies, black-shaded items were infrequently reported (<33%); gray-shaded items were moderately reported (33-66% of studies), and unshaded items were frequently reported (>66% of studies).

Item	Sub-Item	Description	Number of studies reporting the item (n=100)	
Title	1	Identify the report as a systematic review (+/- meta-analysis) of diagnostic test accuracy (DTA) studies.	94	
Abstract	2	Abstract: See PRISMA-DTA for abstracts.		
Introduction				
Rationale	3	Describe the rationale for the review in the context of what is already known.	100	
Clinical role of index test	D1	D1. a	State the scientific and clinical background, including the intended use and clinical role of the index test	92
		D1. b	if applicable, the rationale for minimally acceptable test accuracy (or minimum difference in accuracy for comparative design) (N/A if no minimal acceptable accuracy specified)	84
Objectives	4	4.a	Provide an explicit statement of question(s) being addressed in terms of participants	55
		4.b	Provide an explicit statement of question(s) being addressed in terms of index test (s)	97
		4.c	Provide an explicit statement of question(s) being addressed in terms of target condition(s)	95
Methods				
Protocol and registration	5	Indicate where the review protocol can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	29	

Eligibility criteria	6	Specify study characteristics used as criteria for eligibility, giving rationale for:		
	6.a	participants		79
	6.b	setting		28
	6.c	index test(s)		96
	6.d	reference standard(s)		76
	6.e	target conditions(s)		93
	6.f	study design		74
	6.g	report characteristics (e.g., years considered, language, publication status)		83
Information sources	7	7.a	Describe all information sources (e.g., contact with study authors to identify additional studies) in the search	75
		7.b	Date last searched	43
Search	8	Present full search strategies for all electronic databases and other sources searched, including any limits used, such that they could be repeated.		44
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).		91
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.		84
Definitions for data extraction	11	Provide definitions used in data extraction and classifications of:		
		11.a	target condition(s)	39
		11.b	index test(s)	47
		11.c	reference standard(s)	40
		11.d	other characteristics (e.g. study design, clinical setting).	40
Risk of bias and applicability	12	12.a	Describe methods used for assessing risk of bias in individual studies	87
		12.b	Describe methods used for assessing concerns regarding the applicability to the review question	66
Diagnostic accuracy measures	13	13.a	State the principal diagnostic accuracy measure(s) reported (e.g. sensitivity, specificity)	96
		13.b	state the unit of assessment (e.g. per-patient, per-lesion).	54

Synthesis of results	14		Describe methods of handling data, combining results of studies and describing variability between studies. This could include, but is not limited to:	
		14.a	handling of multiple definitions of target condition	45
		14.b	handling of multiple thresholds of test positivity	58
		14.c	handling multiple index test readers	36
		14.d	handling of indeterminate test results	10
		14.e	grouping and comparing tests	59
		14.f	handling of different reference standards	44
Meta-analysis	D2		Report the statistical methods used for meta-analyses, if performed. (N/A if no meta-analysis done)	92
Additional analyses	16	16.a	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done	96
		16.b	indicate which were pre-specified.	46
Results				
Study selection	17	17.a	number of studies screened available	97
		17.b	number of studies assessed for eligibility available	96
		17.c	number of studies included in the review available	100
		17.d	number of studies included in the meta-analysis available, if applicable	100
		17.e	reasons for exclusions at each stage provided	78
		17.f	flow diagram provided	93
Study characteristics	18		For each included study provide citations and present key characteristics including:	
		18.a	participant characteristics (presentation, prior testing)	69
		18.b	clinical setting	31
		18.c	study design	68
		18.d	target condition definition	61
		18.e	index test(s)	91
		18.f	reference standard(s)	68
		18.g	sample size	91
		18.h	funding sources	3
Risk of bias and applicability	19	19.a	Present evaluation of risk of bias for each study	64

		19.b	concerns regarding applicability for each study	51
Results of individual studies	20		For each analysis in each study (e.g. unique combination of index test, reference standard, and positivity threshold) report:	
		20.a	2x2 data (TP, FP, FN, TN)	36
		20.b	estimates of diagnostic accuracy	84
		20.c	estimates of confidence intervals	79
		20.d	forest or ROC plot.	88
Synthesis of results	21	21.a	describe test accuracy and meta-analysis results if done	97
		21.b	describe variability in accuracy (e.g. confidence intervals if meta-analysis done)	97
Additional analyses	22		Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression; analysis of index test: failure rates, proportion of inconclusive results, adverse events).	96
Discussion				
Summary	24	24.a	Summarize the main findings	98
		24.b	the strength of evidence summarized	46
Limitations	25		Discuss limitations from:	
		25.a	included studies (e.g. risk of bias and concerns regarding applicability)	74
		25.b	the review process (e.g. incomplete retrieval of identified research).	51
Conclusions	26	26.a	Provide a general interpretation of the results in the context of other evidence.	98
		26.b	Discuss implications for future research and clinical practice (e.g. the intended use and clinical role of the index test).	84
Other				
Funding	27	27.a	Describe sources of funding for the systematic review and other support	64
		27.b	Describe role of funders for the systematic review (N/A if no funders).	44

Table 2. Reporting Frequency of PRISMA-DTA for abstracts items. For all included studies, black-shaded items were infrequently reported (<33%); gray-shaded items were moderately reported (33-66% of studies), and unshaded items were frequently reported (>66% of studies).

Item	Sub-Item	Description	Number of studies reporting the item (n=100)	
Objectives	2	The research question including components such as:		
	2.a	Participants	49	
	2.b	Index test(s)	98	
	2.c	target condition(s)	97	
Methods				
Eligibility criteria	3	Study characteristics used as criteria for eligibility.	55	
Information sources	4	4.a	Key databases searched	63
		4.b	search dates.	41
Risk of bias and applicability	5	5.a	Methods of assessing risk of bias	38
		5.b	Methods for assessing concerns regarding applicability	26
Results				
Included studies	6	6.a	Number of studies included	95
		6.b	Number of participants included	62
		6.c	Characteristics of included studies (including reference standard)	12
Synthesis of results	7	Results for analysis of diagnostic accuracy:		
		7.a	indicate the number of studies	89
		7.b	indicate the number of participants	64
		7.c	Describe test accuracy (e.g. meta-analysis results if done, if not done, range of accuracies from studies would be a minimum)	90
		7.d	Describe variability (e.g. confidence intervals if meta-analysis was done)	63
Discussion/Conclusions				
Strengths and Limitations	9	9.a	Summary of the strength	7
		9.b	limitations of the evidence	24
Interpretation	10	10.a	General interpretation of the results	95
		10.b	important implications	51
Other				
Funding	11	Primary source of funding for the review.		3
Registration	12	Registration number and registry name.		5

Table 3: Subgroup analyses evaluating for variability of PRISMA-DTA adherence

Subgroup	Number of studies	Mean (\pm SD)	p-value (test)
Country			0.0758 (ANOVA)
China	28	18.55 (\pm 1.74)	
United States of America	14	18.36 (\pm 2.86)	
South Korea	12	19.58 (\pm 1.02)	
United Kingdom	8	18.66 (\pm 1.84)	
Brazil	4	20.24 (\pm 1.74)	
Canada	4	21.24 (\pm 1.08)	
Netherlands	4	18.73 (\pm 2.71)	
Other	26	19.34 (\pm 2.01)	
Journal			0.5963 (ANOVA)
European radiology	4	20.48 (\pm 0.84)	
American Journal of Roentgenology	4	19.12 (\pm 0.91)	
BMC infectious diseases	4	20.20 (\pm 1.21)	
Acta Obstetricia et Gynecologica Scandinavica	3	19.03 (\pm 4.31)	
PloS One	3	18.97 (\pm 2.75)	
The British Journal of Radiology	3	19.40 (\pm 0.46)	
Oncotarget	3	17.43 (\pm 1.95)	
Other	79	18.89 (\pm 2.06)	
Index-test type			0.8122 (ANOVA)
Imaging	58	18.85 (\pm 2.20)	
Laboratory	25	19.07 (\pm 1.58)	
Microbiology	2	20.60 (\pm 0.71)	
Physical Examination	6	19.67 (\pm 1.93)	
Questionnaire	5	19.06 (\pm 2.51)	
Other	4	18.68 (\pm 2.48)	

Subspecialty area			0.3132 (ANOVA)
Diagnostic radiology	40	18.95 (± 2.27)	
Laboratory medicine	25	19.37 (± 1.43)	
Microbiology	2	20.60 (± 0.71)	
Internal Medicine	3	19.16 (± 1.81)	
Obstetrics and gynecology	6	17.86 (± 2.92)	
Other	10	18.79 (± 2.25)	
Surgery	2	16.18 (± 0.94)	
Nuclear Medicine	12	19.29 (± 1.62)	
Impact Factor			0.0144 (t-test)
< 2.768	51	18.51 (± 2.22)	
≥ 2.768	49	19.50 (± 1.70)	
Study Design			0.6682 (t-test)
Comparative	35	18.87 (± 2.24)	
Single test	65	19.08 (± 1.94)	
Use of Supplementary Material			0.0063 (t-test)
No	51	18.46 (± 2.07)	
Yes	49	19.56 (± 1.85)	
PRISMA citation			0.0120 (t-test)
No	30	18.23 (± 2.27)	
Yes	70	19.31 (± 1.80)	
Adoption by journal			0.3427 (t-test)
No	64	18.85 (± 2.08)	
Yes	36	19.25 (± 1.96)	