Comparison of multi-parallel qPCR and double-slide Kato-Katz for detection of soil-transmitted helminth infection among children in rural Bangladesh

S2 Checklist: STARD Bayes Latent Class Models Checklist

Section & Topic	No	Item	Reported on page #
TITLE OR ABSTRACT			
	1	Identification as a study of diagnostic accuracy, using at least one measure of accuracy (such as sensitivity, specificity, predictive values, or AUC) **and Bayesian latent class models**	Abstract
ABSTRACT			
	2	Structured summary of study design, methods, results, and conclusions (for specific guidance, see STARD for Abstracts)	Abstract
INTRODUCTION			
	3	Scientific and clinical background, including the intended use and clinical role of the **tests under evaluation**	Introduction, paragraph 2-4
	4	Study objectives and hypotheses, **such as estimation of diagnostic accuracy of the tests for a defined purpose through BLCM**	Introduction, paragraph 5
METHODS			
Study design	**5**	Whether data collection was planned before the **tests** were performed (prospective study) or after (retrospective study)	Methods, paragraph 1-4
Participants	**6**	Eligibility criteria **and description of the source population**	Methods, paragraph 1
	7	On what basis potentially eligible participants were identified (such as symptoms, results from previous tests, inclusion in registry)	Methods, paragraph 1
	8	Where and when potentially eligible participants were identified (setting, location and dates)	Methods, paragraph 1
	9	Whether participants formed a consecutive, random or convenience series	Methods, paragraph 1
Test methods	**10**	**Description of the tests under evaluation**, in sufficient detail to allow replication, **and/or cite references**	Methods, paragraph 3-7
	11	Rationale for choosing the **tests under evaluation in relation to their purpose**	Introduction, paragraph 2-4
	12	Definition of and rationale for test positivity cut-offs or result categories of **the tests under evaluation**, distinguishing pre-specified from exploratory	Methods, paragraph 3
	13	Whether clinical information was available to the performers or readers of **the tests under evaluation**	Methods, paragraph 3-4
Analysis	**14a**	**BLCM model** for estimating measures of diagnostic accuracy	Methods, paragraph 14
	14b	**Definition and rationale of prior information and sensitivity analysis**	Methods, paragraph 14
	15	How indeterminate results **of the tests under evaluation** were handled	Methods, paragraph 4, 6
	16	How missing data **of the tests under evaluation** were handled	N/A
	17	Any analyses of variability in diagnostic accuracy, distinguishing pre-specified from exploratory	Methods, paragraph 12-14
	18	Intended sample size and how it was determined	Methods, paragraph 1
RESULTS			
Participants	**19**	Flow of participants, using a diagram	S3 Appendix
	20	Baseline demographic and clinical characteristics of participants	Methods, paragraph 7; Results, paragraph 1
	21	**Not applicable: the distribution of the targeted conditions is unknown, hence the use of BLCM**	
	22	Time interval and any clinical interventions between **the tests under evaluation**	Methods, paragraph 2-3
Test results	**23**	Cross tabulation of the **tests' results (or for continuous tests results their distribution by infection stage)**	Results, paragraph 3; Table 3

	24	Estimates of diagnostic accuracy **under alternative prior specification** and their precision (such as 95% **credible/probability intervals**)	S3 Appendix
	25	Any adverse events from performing **the tests under evaluation**	N/A
DISCUSSION			
	26	Study limitations, including sources of potential bias, statistical uncertainty, and generalisability	Discussion, paragraph 2, 4, 7
	27	Implications for practice, including the intended use and clinical role of **the tests under evaluation in relevant settings (clinical, research, surveillance etc.)**	Discussion, paragraph 1, 8; Conclusion
OTHER INFORMATION			
	28	Registration number and name of registry	Methods, paragraph 1
	29	Where the full study protocol can be accessed	Methods, paragraph 1
	30	Sources of funding and other support; role of funders	Acknowledgements

STARD - BLCM

STARD-BLCM stands for “Standards for the Reporting of Diagnostic accuracy studies that use Bayesian Latent Class Models” and is a modification of the STARD statement (which was recently updated to STARD2015). STARD-BLCM aims to facilitate improved quality of reporting for diagnostic accuracy studies that use Bayesian latent class models in the absence of a reference standard. The proposed modifications are relevant to both Bayesian and frequentist estimation methods but the focus is on the former.

More information for STARD (STARD2015) can be found at: http://www.equator-network.org/reporting-guidelines/stard

More information for STARD-BLCM can be found at: http://www.equator-network.org/reporting-guidelines/stard-blcm