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Appendix 1

Positive likelihood ratio (LR+) was defined as (sensitivity)/(1-specificity) and negative likelihood ratio was defined as (1-sensitivity)/(Specificity) [1]. In addition to point estimates, MetaDTA was used to generate forest plots and summary receiver operating characteristics (sROC) curves to visualize the results graphically [2 3]. In cases where the bivariate binomial model could not be fitted for meta-analysis, a random effects univariate model was fitted [4]. Heterogeneity was assessed by examining the distribution of sensitivity and specificity in forest plots as well as the sROC curves. In analyses where sufficient data was available, heterogeneity was assessed formally by adding covariates in the bivariate binomial model to perform meta-regression. Each covariate was tested one-by-one using likelihood ratio test with the R package lmtest [1]. No assumption of equal variance between the two test types was made when a dichotomous covariate was added to the models. The covariates are dichotomous and were defined a priori in the protocol as follows: mydriasis (mydriatic versus non-mydriatic imaging), imaging device (Hand-held versus table-top device), use of ancillary imaging (optical coherence tomography versus no optical coherence tomography). If multiple diagnostic test accuracy data was available for each grader separately, data from grader one was taken in all cases.

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