

Table 6. GRADE Summary of Findings of Test Accuracy Results for Prevalence/Pre-Test Probability of 10% and 40% for single versus repeat PCR testing

Single testing	Sensitivity: 0.71 (95% CI: 0.65 to 0.77)						
	Specificity: 1.00 (95% CI: 0.99 to 1.00)						
Repeat testing	Sensitivity: 0.88 (95% CI: 0.80 to 0.96)						
	Specificity: 1.00 (95% CI: 0.99 to 1.00)						
Outcome	Effect per 1,000 patients tested				No of patients (studies)	Test accuracy CoE	
	pre-test probability of 10%^c		pre-test probability of 40%^d				
	RT-PCR Single testing	RT-PCR Repeat testing	RT-PCR single testing	RT-PCR Repeat testing			
True positives (TP) (patients with COVID 19)	71 (65 to 77)	88 (80 to 96)	284 (260 to 308)	352 (320 to 384)	253 (3)	⊕⊕○○ LOW ^{a,b}	
	17 fewer TP in RT-PCR rapid testing		68 fewer TP in RT-PCR rapid testing				
False negatives (FN) (patients incorrectly classified as not having COVID 19)	29 (23 to 35)	12 (4 to 20)	116 (92 to 140)	48 (16 to 80)	105 (2)	⊕⊕○○ LOW ^{a,b}	
	17 more FN in RT-PCR rapid testing		68 more FN in RT-PCR rapid testing				
True negatives (TN) (patients without COVID 19)	900 (891 to 900)	900 (891 to 900)	600 (594 to 600)	600 (594 to 600)	105 (2)	⊕⊕○○ LOW ^{a,b}	
	0 fewer TN in RT-PCR rapid testing		0 fewer TN in RT-PCR rapid testing				

IDSA Guidelines on the Diagnosis of COVID-19: Molecular Diagnostic Testing

False positives (FP) (patients incorrectly classified as having COVID 19)	0 (0 to 9)	0 (0 to 9)	0 (0 to 6)	0 (0 to 6)		
	0 fewer FP in RT-PCR rapid testing		0 fewer FP in RT-PCR rapid testing			

CoE: Certainty of evidence

Explanations: This table is based on applying the sensitivity and specificity estimates to calculate True and false positives and negatives in a hypothetical population of 1000 individuals

- a. Studies reported test accuracy results but did not report on patient-important and population-important outcomes based on the results.
- b. Considering the lower vs upper limit of the sensitivity confidence interval may lead to different clinical decision, and the low number of patients lead to very serious imprecision
- c. Typically seen in symptomatic outpatients who have not reached a hospital facility
- d. Typically seen in patients meeting clinical definition for COVID-19 who were hospitalized