Quality and accuracy come first in SARS-CoV-2 antibody testing

The CDC suggests use of tests with a specificity ≥99.5% to minimize potential for false-positive results.¹

Test accuracy is paramount to minimize risks of inaccurate results. A highly accurate test such as one that has a specificity between 99.5% to 100% supports better performance even in populations with low disease prevalence.²

City A

Of 1,000 citizens, 50 are infected with SARS-CoV-2

That’s a disease prevalence of 5%

A highly specific antibody test minimizes inaccurate results. With a 5% disease prevalence, this test will deliver incorrect results to only 3.7% of those that tested positive.

Test with lower specificity of 96.0%

Even with a specificity of over 95%, this test will deliver incorrect results to 43% of those that tested positive in populations with a 5% disease prevalence.

City B

Of 1,000 citizens, 100 are infected with SARS-CoV-2

That’s a disease prevalence of 10%

Whereas with a 10% disease prevalence, this test will deliver incorrect results to only 1.8% of those that tested positive.

Test with higher specificity of 99.8%

With a 10% disease prevalence, tests with lower specificity will deliver incorrect results to 27% of those that tested positive.

². Prevalence: The percentage of individuals in the population who have antibodies to SARS-CoV-2. Specificity results above use an assumed sensitivity of 100%.