

# THE PATHCARE NEWS

# INTRODUCTION OF SEROLOGICAL ASSAYS FOR SARS-COV-2 VACCINE RESPONSES

PathCare has introduced an antibody test that is capable of detecting antibodies directed against the SARS-CoV-2 spike ("S") protein, induced by SARS-CoV-2 vaccines or by natural infection. Diagnostic assays previously introduced only target the nucleocapsid ("N") protein and will therefore not be able to detect an antibody response from vaccines.

## Tests available for order are the following:

#### N-antibodies only (M4789):

This test will not be able to demonstrate vaccine-induced antibody responses, and if positive, indicates a previous infection with SARS-CoV-2. If negative however, past infection with SARS-CoV-2 cannot be excluded as patient may not launch an antibody response post-infection, or may have had a transient antibody response.

### Combination N- and S-antibodies (R5958):

A positive test indicates either previous infection or an immune response to vaccination and cannot differentiate between the two states. The presence of antibodies, whether due to previous infection or vaccination, also does not necessarily imply protection against re-infection, but does imply that the immune system has been primed with SARS-CoV-2 antigen which should result in some level of protection, particularly against severe disease. A negative result after vaccination could be due to inappropriate timing of testing (testing too early or too late post-vaccination), or could indicate vaccine failure. A negative test does not necessarily indicate complete vaccine failure as this test does not measure other components of the immune system, notably cellular immunity. If clinically indicated, a re-test may be considered after 4-8 weeks to allow enough time for antibody responses to become detectable, since the time to seroconversion varies between individuals.

Both tests have a turn-around time of 24-48 hours depending on whether samples are referred from central or peripheral locations.

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