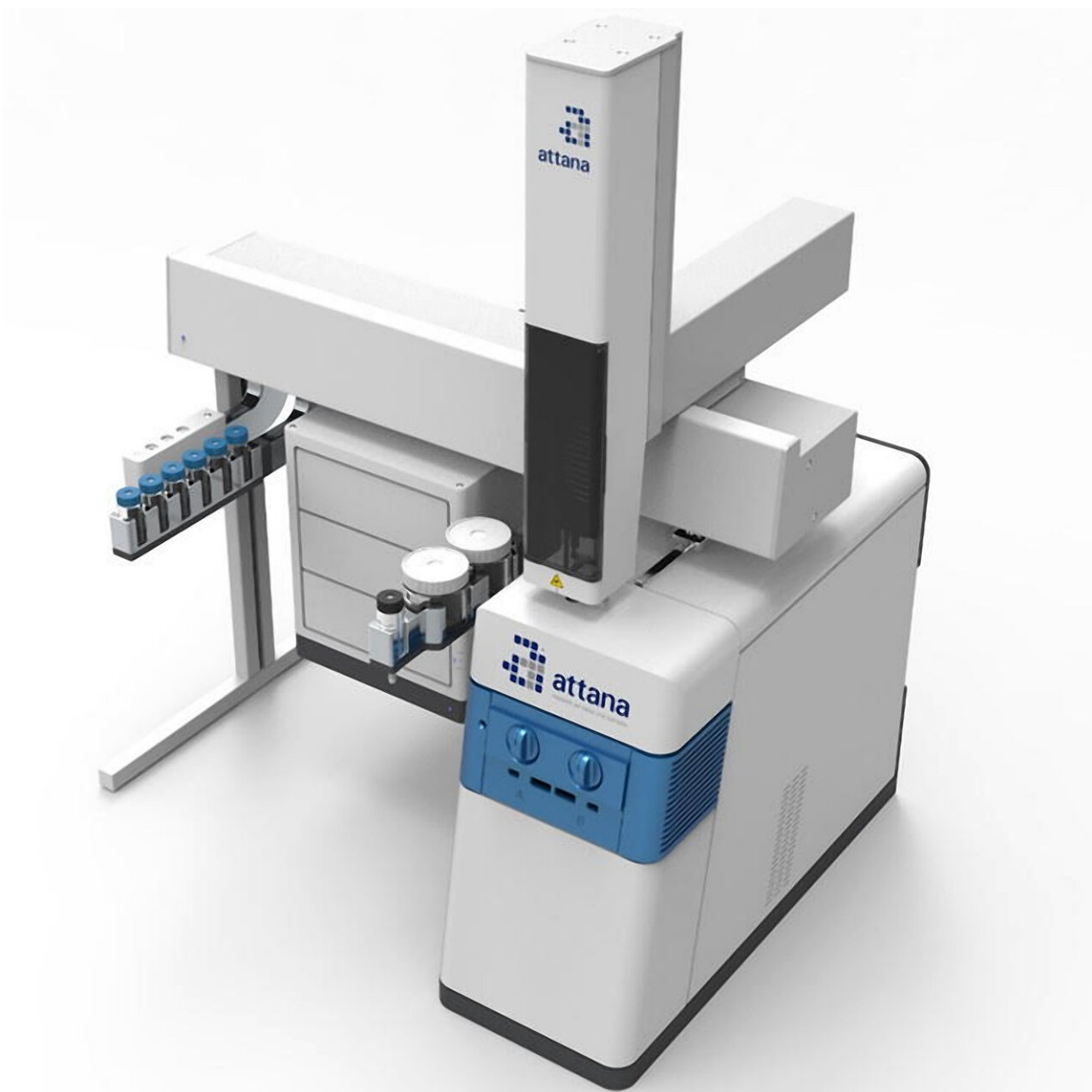


New antibody test for COVID-19 gives more reliable and more detailed answers to immunity

December 29 2020



Credit: Attana Virus Analytics

A new type of antibody test is being developed by researchers at Linnaeus University and the bioanalysis company Attana. Compared to the binary antibody tests used today, this rapid test can give more detailed information on how our immune systems react to COVID-19 and other types of viruses and bacteria.

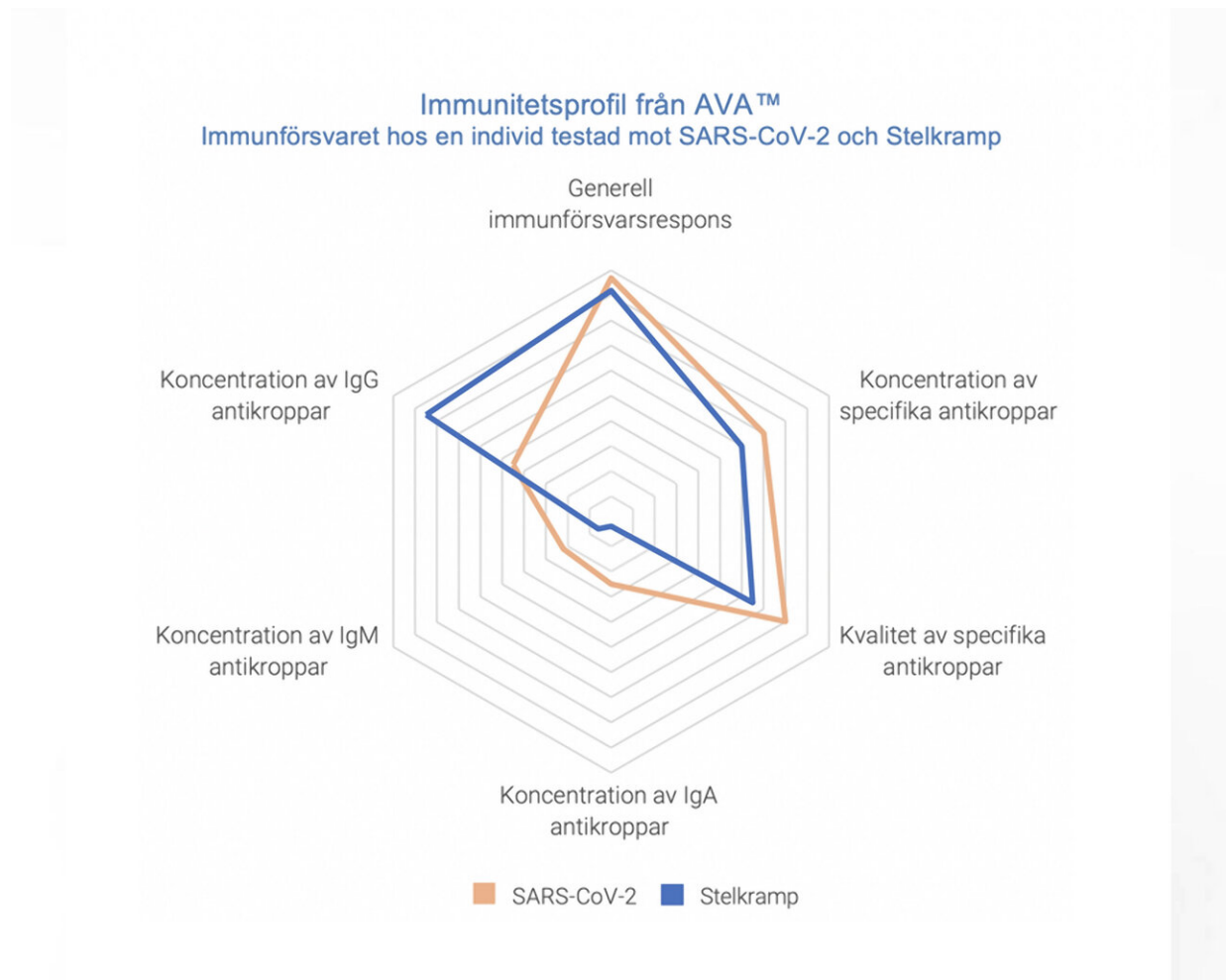
The research groups, led by Ian Nicholls and Per Nilsson at Linnaeus University and Teodor Aastrup at Attana, are currently developing and evaluating a new diagnostic platform with the name AVA (Attana Virus Analytics). Tests have been conducted through serum, plasma, and full blood analyses to study individuals' immune response to SARS Cov-2 and the bacteria *Clostridium tetani*, which causes tetanus. The samples have been collected from both the bend of the arm and from finger sticks with promising results, which enables easy sampling where results can be ready in 15 minutes.

More reliable measurements of COVID-19 antibodies

"Thanks to this new platform, we obtain a detailed picture of what antibodies are present and how strongly they interact with COVID-19. This should, among other things, help decide who needs to take vaccine and how well an individual has responded to a vaccine," explains Ian Nicholls, professor of chemistry at Linnaeus University.

AVA gives a more nuanced picture of how our immune systems react to different types of viruses and bacteria than the binary tests that are used today. A unique thing about AVA is that the diagnostics platform not

only ensures that an antibody test is correct, it can also offer insights concerning the sustainability of immunity.



Example of immunity profile from AVA. Credit: Linnaeus University

AVA gives individual immunity profiles

By collecting data on the quantity and quality of antibodies in a sample and then comparing these with samples taken at a later time, an

immunity development profile can be established. AVA also offers laboratories the opportunity to validate already existing test results with great accuracy.

The platform can assist decision makers concerning, for instance, recommendations, restrictions, and vaccination. Better tests for [antibodies](#) will impact at all levels, from individual to authorities as well as for companies and society at large.

Linnaeus University successfully collaborated with Attana for more than ten years now and this is one of the most significant projects to date.

"At Attana, we look forward to continuing this rewarding collaboration with Linnaeus University to continue to explore and develop our unique technique's possible applications in diagnostics. Our vision is a general diagnostics [platform](#) that is relevant not just at present, during the ongoing pandemic, but one that will also serve a greater broader purpose in the future," says Teodor Aastrup, CEO at Attana.

Provided by Linnaeus University

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