



**POSITION STATEMENT OF THE
PHILIPPINE SOCIETY OF ALLERGY, ASTHMA AND IMMUNOLOGY ON
ANTIBODY TESTING AFTER COVID-19 VACCINATION
July 10, 2021**

Vaccination is one of the ways to end the COVID-19 pandemic. With more than 10 million people inoculated with COVID-19 vaccines in the Philippines, people want assurance that the vaccines are working, so some of them resort to antibody testing. This document will answer the question: can post-vaccination antibody testing be used to evaluate the level of protection against COVID-19 infection?

The Philippine Society of Allergy, Asthma, and Immunology DOES NOT recommend antibody testing after COVID-19 vaccination to evaluate the level of protection against COVID-19 because of the following reasons:

1. The antibody tests that are presently available have not been evaluated and validated to assess the level of protection afforded by the immune response after COVID-19 vaccination. Inaccurately interpreted antibody test results after COVID-19 vaccination may create a false sense of protection, making people more complacent with lesser observation of health care protocols.
2. The level of antibody that will provide protection against COVID-19 remains undetermined. Antibody tests can be qualitative or quantitative. Neither a “positive” qualitative nor a “high” quantitative test result can tell if a person is adequately protected or not after COVID-19 vaccination. Qualitative tests provide information if a person has positive or negative antibodies. Quantitative tests provide actual antibody levels or titer. A positive antibody test result may indicate previous infection to COVID-19 or post-vaccination antibody production. More research is needed to understand the meaning of a positive or a negative antibody test beyond the presence or absence of antibodies
3. Standardized assays that can correlate antibody levels with neutralization are still under investigation. Antibodies to COVID-19 may include binding and neutralizing antibodies. Neutralizing antibodies are primarily IgG antibodies and prevent SARS-COV2 virus from infecting the cell. Therefore, neutralizing antibody tests determine the ability of the antibodies to actually prevent infection. The role of binding antibodies after COVID-19 infection is not yet clear. Many COVID-19 antibody tests are non-specific and can test both binding and neutralizing antibodies. There are some neutralizing antibody tests (quantitative and qualitative) available but the gold standard test for this has not yet been established.
4. COVID-19 vaccines trigger the production of antibodies to specific viral protein targets. For example, mRNA vaccines trigger the production of antibodies to the S1 and RBD proteins. If the test used is not able to detect the antibodies produced by the vaccine, then the post vaccination serologic test will most likely be negative.
5. COVID-19 vaccines not only stimulate the humoral arm of the immune system which produces the antibodies but also the cellular arm which involves the T cells. This generated T cell immunity is not measured by any antibody test.

This position statement is based on current data and will be updated once new information becomes available. The best thing to do right now is to get the COVID-19 vaccine and continue practicing minimum health and safety protocols.

References:

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