

To: Penn Medicine Physicians and Staff
Date: May 4, 2022

From: Eline T. Luning Prak, MD, PhD
Joyce Gonzalez, BS, M (ASCP)
Andrew Gaano, BS

Re: **SARS-CoV-2 Serology, antibody, immunoassay (RBD assessment)**

Beginning on May 5, the HUP Immunology Laboratory will discontinue offering the IgA antibody portion of the SARS-CoV-2 immunoassay RBD (Receptor Binding Domain) assessment. The assay will only measure IgG antibody, which, based on in-house testing, are correlated with virus neutralization titer. The assay will still be performed on the DYNEX DSX instrument on human serum and uses the RBD antigen from the Wuhan-Hu-1 strain of the virus.

The primary use of the HUP SARS-CoV-2 RBD assay is to determine if an immunocompromised person has mounted a potentially protective immune response to either the SARS-CoV-2 virus or to a spike/RBD vaccine. In a healthy individual who has been exposed to the SARS-CoV-2 virus or been given a vaccine, the immune system responds by producing antibodies. Antibodies begin to be detectable in the serum within two weeks and persist for months, with IgG antibodies lasting longer than IgA and IgM antibodies. If this assay is being used to evaluate the immune response to a spike/RBD-based vaccine, we recommend testing 1-2 weeks after the administration of the second or subsequent doses. This assay is ****not**** recommended for routine monitoring of antibody responses in immunocompetent individuals. For the evaluation of prior viral exposure, we recommend using the COVID-19 (SARS-CoV-2) Antibodies assay (Abbott Diagnostics Nucleocapsid IgG). Serologic testing is not suitable for evaluating active infection with SARS-CoV-2.

Ordering Information:

In EPIC: **SARS-CoV-2 serology, antibody, immunoassay (RBD assessment)**

Collection: serum separator tube

One assay will be performed and reported SARS-CoV-2 RBD, IgG

SARS-CoV-2 RBD IgG:

NEGATIVE: (≤ 0.300 AU)

EQUIVOCAL: (0.301 AU- 0.699 AU)

POSITIVE: (≥ 0.700 AU)

For clinical questions related to this change, please contact the Immunology Resident at 215-980-9871. For questions regarding research studies or test interpretation, please contact Dr. Luning Prak (luning@pennmedicine.upenn.edu). For operational questions related to this change, please contact Joyce Gonzalez at Joyce.Gonzalez@pennmedicine.upenn.edu or 215-662-6023.