Northwell Health Labs

NEW TEST TEST CHANGE NOTIFICATION DATE: 06/28/2024

EFFECTIVE DATE: 07/16/2024

Cardiolipin Antibodies, IgG, IgM, and IgA

On the effective date, as part of our commitment to provide best-in-class clinical diagnostic services, Northwell Health Laboratories will update the Cardiolipin Antibodies, IgG, IgM, and IgA tests to improve turnaround time. The current enzyme-linked immunosorbent assay (QUANTA Lite ACA IgG, IgM, and IgA ELISA) will be replaced with a multiplex flow immunoassay (BioPlex 2200 APLS IgG, IgM, and IgA).

Measurement of cardiolipin antibodies can aid in the evaluation of patients with suspected cases of antiphospholipid syndrome (APS). APS is a systemic autoimmune disease characterized by arterial, venous, or microvascular thrombosis or pregnancy morbidity in patients with persistently elevated antiphospholipid antibodies (i.e., cardiolipin antibodies or β 2-glycoprotein 1 antibodies and/or lupus anticoagulant). [1]

An in-house method comparison study conducted at Northwell Health Laboratories demonstrated acceptable qualitative clinical concordance between the two assays. *However, it is important to note that due to differences in immunoassay design and antibody epitope recognition, direct comparison of semi-quantitative values between the two assays is not feasible, as highlighted in the table below.*

| Test Name | Cardiolipin Ab IgG | | Cardiolipin Ab IgM | | Cardiolipin Ab IgA | |
|----------------------------|-------------------------------|---|-------------------------------|---|-------------------------------|---|
| Test Requirements | New | Current | New | Current | New | Current |
| Methodology | Multiplex Flow Immunoassay | Enzyme-Linked Immunosorbent Assay | Multiplex Flow Immunoassay | Enzyme-Linked Immunosorbent Assay | Multiplex Flow Immunoassay | Enzyme-Linked Immunosorbent Assay |
| Assay Manufacturer | Bio-Rad Laboratories | Inova Diagnostics (WERFEN) | Bio-Rad Laboratories | Inova Diagnostics (WERFEN) | Bio-Rad Laboratories | Inova Diagnostics (WERFEN) |
| Result Interpretation | <20 GPL-U/mL: Negative | <12.5 GPL: Negative 12.5-20 GPL: Indeterminate | <20 MPL-U/mL: Negative | <12.5 MPL: Negative 12.5-20 MPL: Indeterminate | <20 APL-U/mL: Negative | <12.5 APL: Negative 12.5-20 APL: Indeterminate |
| | ≥20 GPL-U/mL: Positive | > 20 GPL: Positive | ≥20 MPL-U/mL: Positive | > 20 MPL: Positive | ≥20 APL-U/mL: Positive | >20 APL: Positive |
| Computer Interface Code | PDM #5901410 | PDM #5901410 | PDM #5901405 | PDM #5901405 | PDM #5901400 | PDM #5901400 |
| Test Order | CARDIGG | CARDIGG | CARDIGM | CARDIGM | CARDIGA | CARDIGA |

If you have any questions, please contact Client Services at (800) 472-5757.

1. Barbhaiya M et al. The 2023 ACR/EULAR Antiphospholipid Syndrome Classification Criteria. Arthritis Rheumatol, 75: 1687-1702. https://doi.org/10.1002/art.42624