

☐ NEW TEST ☒ TEST CHANGE

NOTIFICATION DATE: 01/13/2025

EFFECTIVE DATE: 01/21/2025

Myeloperoxidase Antibody (MPO)

Effective 01/21/2025, Northwell Health Laboratories will change the **Myeloperoxidase Antibody (MPO)** test method to improve result turnaround time. The current enzyme-linked immunosorbent assay (QUANTA Lite MPO IgG ELISA) will be replaced with a multiplex flow immunoassay (BioPlex 2200 Vasculitis Kit).

Anti-neutrophil cytoplasmic antibodies (ANCA), targeting proteins like proteinase 3 (PR3) and myeloperoxidase (MPO), are associated with a distinct form of small-vessel vasculitis known as ANCA-associated vasculitis (AAV), including polyangiitis (GPA) and microscopic polyangiitis (MPA). MPO antibodies are commonly associated with MPA and usually exhibit the perinuclear indirect immunofluorescence ANCA (p-ANCA) staining pattern. [1,2]

A method comparison study at Northwell Health Laboratories showed acceptable qualitative agreement between the assays. *However, due to design and epitope recognition differences, quantitative values from the two assays cannot be directly compared.* Please consider this methodological change when reviewing patient histories and prior MPO results, especially for patients undergoing serial monitoring. Adjustments in clinical interpretation are necessary, as detailed in the table below.

Test Requirement	New	Previous
Methodology	Multiplex flow immunoassay	Enzyme-linked immunosorbent assay
Assay Manufacturer	Bio-Rad Laboratories	Inova Diagnostics (Werfen)
Result Interpretation	<1.0 AI: Negative	≤20 Units: Negative
	≥1.0 AI: Positive	21 – 30 Units: Weak Positive >30 Units: Moderate/Strong Positive
Specimen Collection	1 mL Serum (0.5 mL minimum)	1 mL Serum (0.5 mL minimum)
Computer Interface Code	PDM # 5700370	PDM # 5700370
Test Order	MPO	MPO

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

References:

1. Hellmich B, et al. EULAR recommendations for the management of ANCA-associated vasculitis: 2022 update. *Ann Rheum Dis* 2024;83:30–47. doi:10.1136/ard-2022-223764
2. Bossuyt, X, et al. Revised 2017 international consensus on testing of ANCAs in granulomatosis with polyangiitis and microscopic polyangiitis. *Nat Rev Rheumatol* 13, 683–692 (2017). <https://doi.org/10.1038/nrrheum.2017.140>

