

DATE:	27 November 2023
TO:	North, Edmonton, and Central Zones (sites that refer testing to Edmonton) All Physicians, Nurses, and Managers
FROM:	Clinical Biochemistry, Alberta Precision Labs (APL)
RE:	Implementation of Bioplex Instrument - Myeloperoxidase (MPO) and Proteinase 3 (PR3) Antibodies

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- Effective **December 11, 2023**, Alberta Precision Labs will begin the implementation of a new chemistry immunoassay instrument, Bioplex, in the University of Alberta Hospital (UAH), Special Chemistry lab in Edmonton.
- *Anti-Myeloperoxidase (MPO)* and *Anti-Proteinase 3 (PR3)* testing at UAH will transition from the Luminex to the Bioplex instrument to align with the APL Immunochemistry lab in Calgary.

Why this is important

- Implementation of the Bioplex is part of a large-scale provincial project to standardize chemistry instrumentation. This initiative will reduce the variation of autoantibody immunoassays in the province.

Background

- The Luminex instrument has reached end of life. Current supply of MPO and PR3 antibody test kits will be used up by December 11, 2023.
- MPO and PR3 antibodies are useful for evaluating patients suspected of having immune-mediated small-vessel vasculitis in conjunction with *Anti-Neutrophil Cytoplasmic Antibody (ANCA)* testing.

How this will impact you

- There will now be reporting limits, a new reference interval, and a change in units as shown below:

	Current Assay (Luminex)	New Assay (Bioplex)
Method	Multiplex bead immunoassay	Multiplex bead immunoassay
Reporting Limits	none	<0.2 and >800.0
Reference Interval (Units)	<120 MFU	<1.0 AI

MFU = mean fluorescence unit and AI = antibody index

Action Required

- Be aware of changes in assay and laboratory reporting. Refer to the updated APL ANCA test directory.
- Patients having serial monitoring at the time of transition may need a new baseline for comparison.
- For urgent requests, contact the on-call clinical biochemist.



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Questions/Concerns

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Approved by

- Dr. Michael Mengel, Medical Director, North Sector, APL
- Dr. Allison Venner, Associate Section Chief, Clinical Biochemistry, APL

Effective September 1, 2023, APL has become the sole provider of all public lab services in Alberta. As a result, community lab services formally provided by DynaLIFE Medical Labs will become the responsibility of Alberta Precision Labs (APL). This change impacts all zones.