

DATE:	15 October 2024
TO:	Edmonton, North, and Central Zones
FROM:	Clinical Biochemistry, Alberta Precision Labs (APL)
RE:	Changes to Random Urine Protein Electrophoresis Testing at Edmonton Baselab

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Key Message

- For random urine protein electrophoresis (UPE) testing, Edmonton Baselab will only perform immunofixation electrophoresis (IFE) when an unequivocal band suggestive of a monoclonal protein is present. This will permit standardization across Alberta and aligns with best practice recommendations from Choosing Wisely Canada.
- There are no changes to 24 hour UPE testing.

Background

- Recent recommendations from Choosing Wisely Canada indicate that random UPE should not be used to screen for a monoclonal gammopathy ([Clinical Biochemistry - Choosing Wisely Canada](#)) as there is very limited evidence supporting its sensitivity.
- Serum protein electrophoresis (SPE) should be the initial screening test for suspected monoclonal gammopathy. Immunoglobulin free light chains (FLC) may be ordered if SPE is negative.
- 24 hour UPE may be useful in certain settings, such as suspected amyloidosis.

How this will impact you

- When questionable bands are noted on random UPE, IFE will no longer be performed. Instead, the random UPE interpretation will indicate the presence of various protein fractions, and suggest a 24 hour UPE if clinically indicated.

Action Required

- Order SPE as the initial screening test for suspected monoclonal gammopathy. Random UPE is not recommended and should not be used for screening purposes. If ordered, immunofixation will only be performed when an unequivocal band suggestive of a monoclonal protein is present.

Effective October 14, 2024

Questions/Concerns

- Edmonton Baselab Clinical Chemist Team, 825-394-1816, apl.clinicalchemists@albertaprecisionlabs.ca

Approved by

- Dr. Mathew Estey, Medical Lead Clinical Biochemistry, Hub Lab, North Sector
- Dr. Erene Farag, Associate Medical Director, Hub Lab, North Sector
- Dr. Michael Mengel, Medical Director, North Sector

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.