

DATE:	16 March 2026
TO:	All Zones: Physicians, Nurses and Healthcare Providers, Laboratory Staff
FROM:	Clinical Biochemistry
RE:	Implementation of Serum Tryptase Testing in Alberta

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- **Effective March 19, 2026**, all testing for serum tryptase for the province will be performed by Alberta Precision Laboratories (APL) at the Edmonton Base Laboratory (EBL).
 - Testing will no longer be performed by the out-of-province referral laboratory, and there will be no change in testing methodology, reference intervals or interpretation.
- Tryptase will be orderable in Connect Care (Test code: Tryptase [LAB10455]) and by using the general community laboratory requisition (free text in the 'Additional Tests' box).
- Tryptase test turnaround times will be significantly improved.

Background

- Tryptase is a serine protease enzyme primarily released by mast cells during degranulation.
- Serum tryptase concentration may be helpful in the evaluation of patients with suspected anaphylaxis, and when investigating mast cell activation disorders that include mast cell activation syndrome and cutaneous or systematic mastocytosis.
- Serum tryptase concentration of 11.5 ug/L or higher may indicate mast cell activation during anaphylaxis. However, it may remain below 11.5 ug/L for some patients during anaphylaxis.
- For suspected anaphylaxis, it is recommended to measure serum tryptase in an acute sample (collected between 15 minutes and 3 hours after an event) and a baseline sample (collected at least 24 hours after all signs and symptoms have been resolved).
- Serum tryptase concentration >20 ug/L may be associated with systemic mastocytosis.

Action Required

- Be aware that tryptase testing will now be performed by APL and will require a new Connect Care order test code: (Tryptase [LAB10455]). Please update order sets and preference lists accordingly.
- Refer to the Tryptase Laboratory Test Directory page for information on sample collection and handling.

Questions/Concerns

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

Approved by

- Dr. Carolyn O'Hara, Interim Chief Medical Laboratory Officer, APL

References:

1. Golden, David BK, et al. "Anaphylaxis: a 2023 Practice Parameter Update." *Annals of Allergy, Asthma & Immunology* 132.2 (2024): 124-176.
2. Arber, Daniel A., et al. "International Consensus Classification of Myeloid Neoplasms and Acute Leukemias: Integrating Morphologic, Clinical, and Genomic Data." *Blood, The Journal of the American Society of Hematology* 140.11 (2022): 1200-1228.
3. Khoury, Joseph D., et al. "The 5th edition of the World Health Organization Classification of Haematolymphoid Tumours: Myeloid and Histiocytic/dendritic Neoplasms." *Leukemia* 36.7 (2022): 1703-1719.