

DATE:	6 January 2025
TO:	Provincial
FROM:	Hematopathology (Lab Hematology)
RE:	Lupus Insensitive PTT replacing PT/PTT Mixing Studies

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- Effective **15 January 2025**, the Lupus Anticoagulant Insensitive PTT (LAI PTT) will be available at both the University of Alberta Hospital (UAH) and Royal Alexandra Hospital (RAH), as well as any sites that refer samples to those labs. This test is already available in Calgary (FMC). The LAI PTT will replace both the PT and PTT Mixing Studies, which are currently offered at UAH, RAH, Grey Nuns Hospital (GNH), Misericordia Hospital (MIS), and Sturgeon Hospital (SGH).
- The PT and PTT Inhibitor Screen tests, which include an incubated mixing study, will still be available through the UAH Special Coagulation Laboratory. These tests are **only** available on a routine basis (typically batched every 1-2 weeks).
- Please note, the LAI PTT is **NOT** calibrated for adjusting heparin infusion rates.

Background

- To standardize testing provincially, the 1:1 PT and PTT Mixing Studies will be replaced by the LAI PTT. The LAI PTT combined with the standard PTT reagent allow for:
 1. A quick confirmation of a suspected lupus anticoagulant (LAC), and
 2. Assessing for underlying clotting factor deficiencies.
- This testing is available **24/7**.
- The normal reference range for the LAI PTT is 22-33 sec.
- Validation studies included 12 lupus anticoagulant positive samples: 6 borderline positive and 6 frankly positive results. Of the 12 samples tested only one was elevated with the LAI PTT reagent, and the rest were within the normal reference range. Whether this sample also had an underlying factor deficiency is unknown.

How this will impact you

- PT/PTT Mixing Studies will no longer be available at UAH, RAH, GNH, MIS, and SGH.
- The LAI PTT will replace these studies and will only be available on-site at UAH and RAH on an urgent basis (1-4 hour Turn-Around Time). Testing on samples collected outside the UAH and RAH can also be performed but will take longer due to transport issues (4-24 hours Turn-Around Time).
- Whenever the LAI PTT is ordered, both the LAI PTT and a regular “aPTT” will be performed. The aPTT is the same test performed whenever a routine “Partial Thromboplastin Time” is reported and is moderately sensitive to the presence of Lupus Anticoagulants (see Appendix for example result).



**ALBERTA PRECISION
LABORATORIES**

Leaders in Laboratory Medicine

Effective 15 January 2025

Questions/Concerns

- Dr. Tessa Boyer, Hematopathologist, University of Alberta Hospital, Alberta Precision Labs, tessa.boyer@aplabs.ca

Approved by

- Dr. Artur Szkotak, Section Chief for Hematopathology, North Sector, Alberta Precision Labs, artur.szkotak@aplabs.ca



Appendix

Pathfinder,Fmc3
M, 24 years, 03/02/2000

24FH-339O00112
Blood, Blood
📍

Collected
04/12/2024 07:55
Received
04/12/2024 07:57

Ins
1C

[Summary](#) [Tracking](#) [Charges](#) [Communication](#) [Other Tests](#)

Specimen/Instrument ID

Specimen ID: 24FH-339O00112
Instrument ID: 100035765432

🚩 Lupus Anticoagulant Insensitive PTT

📄 Verified at 04/12/2024 08:21 by Lab, Autoverification User

Res	Component	Value	Units	!	Δ	L	IE	R	Ref. Range
1	Lupus Anticoagulant Insensitive PTT	28	seconds	✓					22-33
1	aPTT	45	Seconds		▲				26-40