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Leaders in Laboratory Medicine

Laboratory Bulletin

DATE:	5 September 2025
TO:	All Zones - All Physicians, Nurses, and Managers
FROM:	Clinical Biochemistry, Alberta Precision Labs (APL)
RE:	**REVISED: Standardization of the 1,25 di-hydroxyvitamin D Test on the Liaison Instrument**

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Key Message

- Effective **August 12, 2025**, the University of Alberta Hospital (UAH) laboratory in Edmonton will transition 1,25 di-hydroxyvitamin D (1,25-diOHvitD) testing to the DiaSorin Liaison instrument.
- There will be provincial standardization of the reference interval for 1,25-diOHvitD.

Background

- Currently, testing for 1,25-diOHvitD is performed by a manual enzyme linked immunosorbent assay (ELISA) method at UAH and performed on an automated instrument (Liaison) at the Diagnostic Scientific Centre (DSC) in Calgary.
- Test volumes for 1,25-diOHvitD continue to grow, which necessitates an automated workflow.
- The UAH and DSC will standardize methodology, and both perform 1,25-diOHvitD blood test on the Liaison instrument, a chemiluminescent immunoassay (CLIA) platform.
- Clinical indication: 1,25-dihydroxy vitamin D should only be ordered as a second tier investigation for unexplained, persistent abnormalities in serum calcium and/or phosphate such as PTH-independent hypercalcemia, severe hypophosphatemia or vitamin D–resistant rickets.

How this will impact you

- The preferred specimen type is serum (min volume 0.5mL) collected in a GOLD SST or RED SST.
- The method will change from ELISA to CLIA for Edmonton (see re-baselining reporting comment below). No change in testing method for Calgary.
- The expected turnaround time is 2 to 3 weeks.
- Refer to the **new** provincially standardized CLIA reference interval below for 1,25-diOHvitD.

Method	Reference Interval	Reporting Comment
ELISA (Current)	43-168 pmol/L	None
CLIA (New)	60-210 pmol/L	Testing performed by DiaSorin chemiluminescent immunoassay. Edmonton: Effective August 12, 2025, this test is being run by a different method. Recommend re-baselining known patients monitored over time due to difference in results and reference interval between ELISA and chemiluminescent immunoassay.

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Action Required

- Be aware of the new testing method at UAH, and the provincially standardized reference interval.
- Continue to order the 25 Hydroxyvitamin D test in serum for initial assessment of Vitamin D status
- Refer to the APL test directory to become familiar with 1,25-diOHvitD testing changes.

Questions/Concerns

- Dr. Kareena Schnabl, Clinical Biochemist, UAH, 780 407-3186, kareena.schnabl@aplabs.ca
- Dr. Qian Wang, Clinical Biochemist, DSC, 403-770-3219, qian.wang@aplabs.ca

Approved by

- Dr. Allison Venner, Section Chief Clinical Biochemistry, South Sector, APL
- Dr. Carolyn O'Hara, Chief Medical Laboratory Officer, APL