

CLINICAL BIOCHEMISTRY

25 - Hydroxy Vitamin D Testing Update

Date issued: August 2, 2023

Effective August 8, 2023, testing of 25-hydroxy vitamin D testing will change from LC-MS/MS to chemiluminescent competitive immunoassay on DiaSorin Liaison XL instrument at Health Science Centre.

- There is good agreement between two methodologies (bias <2%).
- Cut-off values will be updated based on Osteoporosis Canada Guidelines [1]

Category	Result (nmol/L)
Deficiency:	<25
Insufficiency:	27 – 74
Sufficiency:	75 – 249
Possibly harmful:	≥ 250

- There is no change to the ordering procedure or requisition. Signature of ordering physician is required on the requisition to avoid test cancellations.
- Acceptable specimen includes serum with or without gel. Plasma is not acceptable.

As opposed to mass spectrometry-based assay, immunoassay does cross react with 3-epimer and suitable for testing in children less than 1 year old. Ordering of a separate test in young children (test code: VDY1) is no longer be required.

System Improvements/Patient Impact:

- Reduction in turnaround time for result

Resources:

For more information visit [Lab Information Manual](#) see [VITAMIN D \(25-HYDROXY\) - \(S\)](#)

References:

[1]. Hanley DA, Cranney A, Jones G, Whiting SJ, Leslie WD; Guidelines Committee of the Scientific Advisory Council of Osteoporosis Canada. Vitamin D in adult health and disease: a review and guideline statement from Osteoporosis Canada (summary). CMAJ. 2010 Sep 7;182(12):1315-9. doi: 10.1503/cmaj.091062.

Contact Information:

Dr. Eleonora Petryayeva | Clinical Biochemist, Clinical Biochemistry | Diagnostic Services
phone: 431-373-0322 | email: epetryayeva@sharedhealthmb.ca

Dr. Laurel Thorlacius | Medical Director, Clinical Biochemistry | Diagnostic Services
phone: 204-787-8858 | email: lthorlacius@sharedhealthmb.ca