

**CDC Vitamin D Standardization-Certification Program (VDSCP)—Total 25hydroxy Vitamin D Certified Procedures (UPDATED 03/2017)**

The following laboratories have successfully passed the performance criterion of  $\pm 5\%$  mean bias to the CDC and University of Ghent Vitamin D2 and D3 Reference Method and an overall imprecision of  $<10\%$  over the concentration range of 22-275 nmol/L for total 25hydroxyvitamin D. Laboratories are awarded certificates for successfully completing bias and imprecision testing using specific methods, reagent lots, calibrator lots and instrumentation. During the year, it is the responsibility of the participant to ensure that the results of their method remain consistent over time, throughout the year, between lots, and over the measurement range reported. It is not the intent of the CDC VDSCP to certify each lot of reagents, or to issue certification beyond the measurement range of 22.5-275 nmol/L, at this time.

Participants are listed in alphabetical order.

Participant	Measurement Principle	Method Identifier*	Measurement Range (nmol/L)	Certification Date (active for 1 year)	Individual Samples Pass Rate§ (%)	Participants contact information
<b>Abbott GmbH</b>	Chemiluminescence Immunoassay	ARCHITECT 25-OH Vitamin D (List Number 5P02)	8.5–389.8	Feb 2016	N/A	Dr. Christian Popp <a href="mailto:christian.popp@abbott.com">christian.popp@abbott.com</a> +49-6122-58-1828
<b>Abbott Laboratories</b>	Chemiluminescence Immunoassay	ARCHITECT 25-OH Vitamin D (List Number 3L52)	32.5–240.0	May 2016 Aug 2015	N/A N/A	Karen Gignac <a href="mailto:karen.gignac@abbott.com">karen.gignac@abbott.com</a> 224-667-4649
<b>CCR Laboratory University of Maryland Clinical Pathology</b>	Protein crash / HPLC – Tandem Mass Spectrometry	Total 25 OH-Vitamin D 10 – 400 nmol/mL	10–400	Aug 2016	N/A	Dr. Show-Hong Duh 410-328-5705 <a href="mailto:sduh@umm.edu">sduh@umm.edu</a>
<b>Centre for Microscopy, Characterisation and Analysis, University of Western Australia</b>	LC/MS/MS†	Serum 25(OH)D3, Epi-25(OH)D3, 25(OH)D2	2–200	Aug 2016 Aug 2015 Aug 2014	N/A N/A N/A	Dr. Michael W Clarke <a href="mailto:michael.clarke@uwa.edu.au">michael.clarke@uwa.edu.au</a>
<b>Chromsystems Instruments &amp; Chemicals GmbH</b>	LC-MS/MS†	MassChrom® 25-OH-Vitamin D3/D2 in Serum/Plasma	1.50–624	May 2016 May 2015	N/A N/A	Dr. Ralf Fischer <a href="mailto:fischer@chromsystems.de">fischer@chromsystems.de</a> +49 89 189 30 0
<b>Cork Centre for Vitamin D and Nutrition Research</b>	LC/MS/MS†	Total serum 25OHD	3.84-491	Feb 2017 Feb 2016 Feb 2015 Feb 2014	85 N/A N/A N/A	Prof. Kevin Cashman <a href="mailto:k.cashman@ucc.ie">k.cashman@ucc.ie</a> +353 21 4901317
<b>Covance Central Laboratory Services, Inc.</b>	LC/MS/MS†	Total 25 Hydroxy VitaminD2/D3	1.25–1996.80	Aug 2016 Aug 2015 Aug 2014	N/A N/A N/A	Cristina Hedin <a href="mailto:cristina.hedin@covance.com">cristina.hedin@covance.com</a> 317-273-7842
<b>Department of Clinical Chemistry, University of Leige, CHU Sart-Tilman, Liege, Belgium</b>	LC/MS/MS†	Serum Total Vitamin D	5–625	May 2016 May 2015 May 2014	N/A N/A N/A	Prof. Etienne Cavalier <a href="mailto:etienne.cavalier@chu.ulg.ac.be">etienne.cavalier@chu.ulg.ac.be</a> +32 4 3668822

<b>DiaSorin</b>	Chemiluminescence Immunoassay	LIAISON® 25 OH Vitamin D TOTAL Assay	10–375	Nov 2016 Nov 2015 Nov 2014	N/A N/A N/A	Kym Pieper <a href="mailto:kym.pieper@diasorin.com">kym.pieper@diasorin.com</a> 651-351-5861  Cole Gilman <a href="mailto:cole.gilman@diasorin.com">cole.gilman@diasorin.com</a> 651-351-5933
<b>Douglass Hanly Moir Pathology</b>	LC/MS/MS†	Serum 25 hydroxyvitamin D2 and D3	4–600	May 2016 May 2015 May 2014	N/A N/A N/A	Dr. Grahame Caldwell <a href="mailto:gcaldwell@dhm.com.au">gcaldwell@dhm.com.au</a> +61 298555380  Andy Liu <a href="mailto:aliu@dhm.com.au">aliu@dhm.com.au</a> +61 298555275
<b>Endocrine Sciences Laboratory, LabCorp</b>	LC/MS/MS†	Test Code 500510 (Total)	2.4–625	Feb 2017 Feb 2016 Feb 2015 Feb 2014	55 N/A N/A N/A	Dr. Brett Holmquist <a href="mailto:Holmqub@labcorp.com">Holmqub@labcorp.com</a> or Dr. Walt Chandler <a href="mailto:Chandld@labcorp.com">Chandld@labcorp.com</a> (800)444-9111
<b>Fujirebio Inc.</b>	Chemiluminescence Enzyme Immunoassay	Lumipulse® G 25-OH Vitamin D	10–375	Nov 2016 Nov 2015	N/A N/A	Satoshi Saito <a href="mailto:ss-saito@fujirebio.co.jp">ss-saito@fujirebio.co.jp</a> +81-3-6279-0809
<b>Immunodiagnostic Systems (IDS)</b>	Enzymatic (EIA)	25-Hydroxy Vitamin D <sup>5</sup> EIA (AC-57S)	16.3 - 250	Feb 2017	25	Heather Pham <a href="mailto:Heather.pham@idsplc.com">Heather.pham@idsplc.com</a>
<b>Immunodiagnostic Systems (IDS)</b>	CLIA	IDS-iSYS 25 VitD <sup>5</sup> (IS-2500)	10 - 275	Feb 2017	45	Heather Pham <a href="mailto:Heather.pham@idsplc.com">Heather.pham@idsplc.com</a>
<b>Immunodiagnostic Systems (IDS)</b>	Chemiluminescence Immunoassay	IDS-iSYS 25-Hydroxy Vitamin D <sup>5</sup>	18–313	Feb 2016 Feb 2015 Feb 2014	N/A N/A N/A	Heather Pham <a href="mailto:heather.pham@idsplc.com">heather.pham@idsplc.com</a> +447408846732
<b>Nutrition Research Division Health Canada</b>	LC-MS/MS†	Serum Total 25OHD, 25OHD3, 25OHD2 and 3-epi-25OHD3	2.5–275	Aug 2016	N/A	Dr. Stephen Brooks <a href="mailto:steve.brooks@hc-sc.gc.ca">steve.brooks@hc-sc.gc.ca</a> 603-957-0932  Kurtis Sarafin <a href="mailto:kurtis.sarafin@hc-sc.gc.ca">kurtis.sarafin@hc-sc.gc.ca</a> 613-957-0921
<b>Nutritional Biomarkers Branch CDC</b>	LC-MS/MS†	#4027 routine method for serum 25OHD3, 25OHD2, C3-epimer-25OHD3	4–430	May 2016	N/A	Rosemary Schleicher, PhD <a href="mailto:RSchleicher@cdc.gov">RSchleicher@cdc.gov</a> (770) 488-4424

<b>Quest Diagnostics Nichols Institute of Valencia, Inc</b>	LC/MS/MS†	Total 25-HydroxyvitaminD (Vitamin D2/Vitamin D3)	10–1280	Feb 2017 Nov 2015 Nov 2014	73 N/A N/A	Amit Ghoshal PhD <a href="mailto:Amit.K.Ghoshal@QuestDiagnostics.com">Amit.K.Ghoshal@QuestDiagnostics.com</a> Quest Diagnostics Nichols Institute Valencia, Inc. (661)799-6204
<b>Siemens Healthcare Diagnostics</b>	Chemiluminescence Immunoassay	ADVIA Centaur® Vitamin D Total assay	10.5–375	Feb 2017 Feb 2015 Feb 2015 Feb 2014	25 N/A N/A N/A	Neil Parker <a href="mailto:neil.np.parker@siemens.com">neil.np.parker@siemens.com</a> 914-524-2477
<b>Tosoh Corporation</b>	Enzyme Immunoassay	ST AIA-PACK 25-OH Vitamin D	10-300	Feb 2017	30	Dr. SachiYuki Hasegawa <a href="mailto:sachiYuki-hasegawa-de@tosoh.co.jp">sachiYuki-hasegawa-de@tosoh.co.jp</a>
<b>University of Minnesota, Molecular Epidemiology and Biomarker Research Laboratory (MEBRL)</b>	LC/MS/MS†	25-Hydroxy Vitamin D2 and D3	5.3–1240	Nov 2016 Nov 2015 Nov 2014	N/A N/A N/A	Dr. Myron Gross <a href="mailto:gross001@umn.edu">gross001@umn.edu</a> 612-624-5417
<b>Waters</b>	LC-MS/MS†	Total Vitamin D (25(OH)D3 / 25(OH)D2), in plasma and serum	10–750	Aug 2016	N/A	Norma Breen <a href="mailto:norma_breen@waters.com">norma_breen@waters.com</a> 00353 (0) 53 9160514

\* Method Identifier is an internal code used to represent the standardized method used by the laboratory or manufacturer.

† LC/MS/MS – Liquid Chromatography Tandem Mass Spectrometry

§ Proportion of the 40 samples used in the analytical performance evaluation that meet the bias criterion

N/A not available. Note: Pass Rates are provided starting February 2017