

Results from the NIST Reference Measurement Procedure for the April 2017 to July 2018 25-hydroxyvitamin D EQA Samples

Distribution	Sample No.	NIST 3-epi-25-OHD3 nmol/L	NIST 25-OHD2 nmol/L	NIST 25-OHD3 nmol/L	NIST 'Total' 25-OHD (25-OHD3 + 25-OHD2) nmol/L	DEQAS ALTM nmol/L	% Difference *
April 2017	511	(4.3)	1.5	65.7	67.2	72.5	7.9
	512	(2.7)	1.9	44.9	46.8	49.9	6.6
	513	(6.8)	0.8	102.8	103.7	104.4	0.7
	514	(1.5)	0.6	27.1	27.7	29.6	6.9
	515***	(3.0)	18.5	47.7	66.2	66.3	0.2
July 2017	516	2.9	1.3	45.2	46.5	47.3	1.7
	517	7.1	0.8	67.5	68.3	70.5	3.4
	518	8.7	1.2	103.7	105.0	110.3	5.1
	519	2.7	1.1	32.1	33.2	33.1	-0.3
	520	8.3	1.2	102.9	104.1	110.0	5.7
October 2017	521	2.1	1.0	39.6	40.5	41.2	1.7
	522	9.1	1.0	83.9	84.9	89.3	5.2
	523	1.2	3.5	22.5	25.9	25.7	-0.8
	524	14.1	0.9	107.9	108.8	124.8	14.7
	525	3.8	0.8	55.6	56.3	61.5	9.2
January 2018	526	3.0	0.9	46.5	47.3	52.7	11.3
	527	5.5	1.0	88.4	89.4	96.1	7.5
	528	4.5	1.9	68.9	70.8	76.6	8.2
	529	1.4	0.7	19.9	20.5	25.4	23.7
	530***	2.8	21.5	36.8	58.3	58.2	-0.1
April 2018	531	2.1	1.0	22.2	23.3	27.1	16.5
	532	3.0	0.8	44.1	44.9	47.2	5.1
	533	4.9	1.9	74.8	76.7	83.4	8.8
	534	3.2	2.3	59.2	61.5	65.3	6.1
	535	9.1	1.6	134.1	135.6	147.1	8.5
July 2018	536	4.8	3.9	68.7	72.6	80.6	11.0
	537	3.5	0.6	46.2	46.8	49.1	4.9
	538	1.9	0.9	28.2	29.1	34.0	17.0
	539	5.2	1.1	78.6	79.7	85.6	7.4
	540***	3.2	29.5	37.3	66.8	64.1	-4.0

* % Difference of the ALTM from the NIST RMP assigned value. All values rounded to one decimal place.

*** Sample contained a mixture of endogenous 25-OHD2 and 25-OHD3

! Lipaemic sample

n/a Result not available due to presence of an unknown interferent not completely resolved from the 3-epi-25OH-D3 peak

() Use result with caution due to presence of an unknown interferent not completely resolved from the 3-epi-25OH-D3 peak