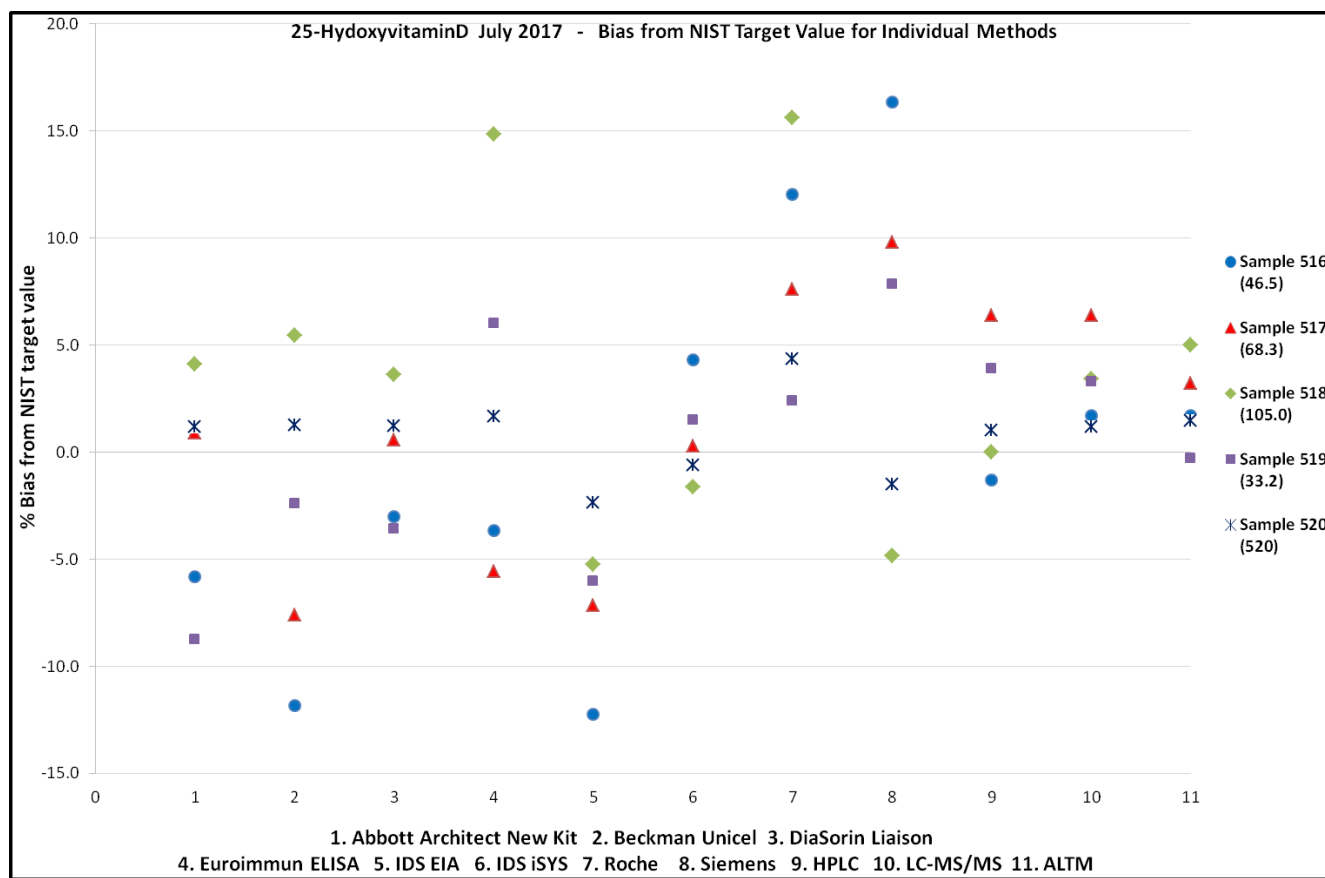


NOTES TO ACCOMPANY THE JULY 2017 25-HYDROXYVITAMIN D REPORT

Chart showing between-sample variability of % bias from the target value



Sample numbers with target values in nmol/L in parenthesis

Samples 518 and 520

Sample numbers 518 and 520 were prepared from the same pool of serum and should give similar results. The table below compares the trimmed method means and imprecision (CV%) for these two samples, for the major methods, where the number of returned results is >10.

Participants should compare their own results for these two samples.

| Method | Sample 518 Method Mean (nmol/L) | Sample 520 Method Mean (nmol/L) | % Difference (nmo/L) | Sample 518 Method Mean CV% | Sample 520 Method Mean CV% |
|------------------------|---------------------------------|---------------------------------|----------------------|----------------------------|----------------------------|
| Abbott Architect - New | 109.3 | 108.8 | -0.5 | 3.8 | 4.5 |
| Beckman Unicel Dxi | 110.7 | 109.2 | -1.4 | 9.1 | 11.6 |
| DiaSorin Liaison | 108.8 | 109.0 | 0.2 | 7.1 | 7.3 |
| Euroimmun ELISA | 120.6 | 110.8 | -8.1 | 19.4 | 22.8 |
| IDS EIA | 99.5 | 94.7 | -4.8 | 10.2 | 16.1 |
| IDS iSYS | 103.3 | 101.6 | -1.6 | 8.9 | 10.1 |
| Roche Total 25OHD | 121.4 | 121.7 | 0.2 | 8.7 | 9.0 |
| Siemens ADVIA Centaur | 99.9 | 98.0 | -1.9 | 9.3 | 9.0 |
| HPLC | 106.2 | 108.5 | 2.2 | 22.5 | 14.6 |
| LC-MS/MS | 108.6 | 108.9 | 0.3 | 9.8 | 9.7 |
| ALTM | 110.4 | 110.0 | -0.4 | 10.5 | 11.1 |
| Target Value | 105.0 | 104.1 | -0.9 | | |

24,25-dihydroxyvitamin D results for samples 516 - 520

| DEQAS Lab No. | Method | Sample 516 24,25OH-D3 nmol/L | Sample 517 24,25OH-D3 nmol/L | Sample 518 24,25OH-D3 nmol/L | Sample 519 24,25OH-D3 nmol/L | Sample 520 24,25OH-D3 nmol/L |
|---------------|----------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| 52 | LC-MS/MS | 2.2 | 4.2 | 5.7 | 1.2 | 5.7 |
| 106 | LC-MS/MS | 3.9 | 6.7 | 9.2 | 2.1 | 9.8 |
| 528 | LC-MS/MS | 3.4 | 6.5 | 9.4 | 1.7 | 9.4 |
| 1455 | LC-MS/MS | 4.7 | 7.6 | 11.5 | 2.6 | 10.7 |
| 1479 | LC-MS/MS | 3.0 | 6.8 | 7.6 | 1.6 | 9.1 |
| 1751 | LC-MS/MS | 4.5 | 6.8 | 7.6 | 1.6 | 9.1 |
| 1864 | LC-MS/MS | 2.2 | 5.5 | 7.0 | 1.2 | 7.4 |
| 2123 | LC-MS/MS | 4.0 | 6.9 | 9.3 | 2.3 | 9.4 |
| 2211 | LC-MS/MS | 3.4 | 5.6 | 8.2 | <2.5 | 7.8 |
| 2258 | LC-MS/MS | 6.7 | 14.3 | 18.4 | 5.3 | 17.0 |
| | | | | | | |
| | | | | | | |
| Median | | 3.7 | 6.7 | 9.3 | 1.9 | 9.4 |
| | | | | | | |
| Mean | | 3.6 | 6.5 | 9.0 | 1.9 | 9.5 |
| SD | | 0.8 | 0.7 | 1.4 | 0.6 | 1.5 |
| CV% | | 22.4 | 10.5 | 15.7 | 29.2 | 15.6 |
| n | | 8 | 8 | 8 | 8 | 8 |
| | | | | | | |

Comment:

The statistics were calculated on trimmed data. Clearly, with such a small number of results the summary statistics are very unreliable.

This data is for information purposes only.

Free 25-hydroxyvitamin D results for samples 516 - 520 in pmol/L

No results were returned for free 25-hydroxyvitamin D this distribution.