

Batch 44 Report - Final

Pilot schemes (MK-4, MK-7 & K₁O)

Analysis period: April 2021

KEQAS
Nutristasis Unit
Viapath
4th Floor, North Wing
St. Thomas' Hospital
London SE1 7EH
Email: david.card@viapath.co.uk
Telephone: +44 (0) 20 7188 6815
www.keqas.com



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Notes:

Outliers are removed for vitamin K₁, MK-4 and MK-7 using Grubbs test. There is currently insufficient data from the measurement of K₁O to allow removal of outliers.

There are currently no established targets for the pilot analytes, therefore Z scores are calculated using the SD from the sample round as the target.

Vitamin K₁ is included for comparison using the same statistical systems.

Results

| Group | Vitamin K ₁ (ug/L) | | MK-4 (ug/L) | | MK-7 (ug/L) | | Vitamin K ₁ O (ug/L) | |
|--------|-------------------------------|---------|-------------|---------|-------------|---------|---------------------------------|---------|
| | Serum A | Serum B | Serum A | Serum B | Serum A | Serum B | Serum A | Serum B |
| 11 | 0.44 | 0.46 | 10.17 | 6.12 | 20.00 | 11.54 | | |
| 47 | | | 18.90 | 12.30 | 21.20 | 12.50 | | |
| 56 | 0.56 | 0.52 | 14.30 | 9.50 | 14.30 | 8.70 | | |
| 63 | 0.53 | 0.49 | 12.32 | 7.46 | 18.97 | 12.17 | | |
| 67 | | | | | | | 10.40 | 4.91 |
| 69 | | | 15.09 | 9.10 | 19.89 | 17.45 | | |
| 70 | 0.40 | 0.50 | 13.30 | 7.80 | 8.20 | 8.50 | | |
| 72 | 0.46 | 0.49 | 10.28 | 5.20 | 17.69 | 10.86 | | |
| 73 | 0.25 | 0.29 | | | 14.60 | 7.45 | | |
| 79 | 0.53 | 0.48 | 14.80 | 7.30 | 19.50 | 11.20 | | |
| 87 | | | 16.89 | 8.33 | 14.83 | 15.34 | | |
| 92 | 0.87 | 0.85 | 38.40 | 42.60 | 10.90 | 8.22 | | |
| 94 | 0.45 | 0.46 | 11.60 | 7.30 | 15.70 | 10.40 | | |
| 96 | 0.38 | 0.36 | 15.16 | 9.78 | 21.17 | 13.64 | 9.65 | 4.69 |
| ALTM | 0.44 | 0.45 | 13.89 | 8.20 | 16.69 | 11.38 | | |
| Median | 0.46 | 0.49 | 14.55 | 8.07 | 17.69 | 11.20 | | |
| SD | 0.10 | 0.08 | 2.70 | 1.94 | 4.04 | 2.91 | | |
| CV (%) | 21 | 17 | 19 | 24 | 24 | 26 | | |

Z scores

| | Vitamin K ₁ (ug/L) | | MK-4 (ug/L) | | MK-7 (ug/L) | | Vitamin K ₁ O (ug/L) | | |
|----|-------------------------------|---------|-------------|---------|-------------|---------|---------------------------------|---------|----|
| | Serum A | Serum B | Serum A | Serum B | Serum A | Serum B | Serum A | Serum B | |
| 11 | 0.0 | 0.1 | 1.4 | 1.1 | 0.8 | 0.1 | | | 11 |
| 47 | | | 1.9 | 2.1 | 1.1 | 0.4 | | | 47 |
| 56 | 1.2 | 0.9 | 0.2 | 0.7 | 0.6 | 0.9 | | | 56 |
| 63 | 0.9 | 0.5 | 0.6 | 0.4 | 0.6 | 0.3 | | | 63 |
| 67 | | | | | | | | | 67 |
| 69 | | | 0.4 | 0.5 | 0.8 | 2.1 | | | 69 |
| 70 | 0.5 | 0.7 | 0.2 | 0.2 | 2.1 | 1.0 | | | 70 |
| 72 | 0.2 | 0.5 | 1.3 | 1.5 | 0.2 | 0.2 | | | 72 |
| 73 | 2.0 | 2.1 | | | 0.5 | 1.4 | | | 73 |
| 79 | 0.9 | 0.4 | 0.3 | 0.5 | 0.7 | 0.1 | | | 79 |
| 87 | | | 1.1 | 0.1 | 0.5 | 1.4 | | | 87 |
| 92 | 4.5 | 5.3 | 9.1 | 17.8 | 1.4 | 1.1 | | | 92 |
| 94 | 0.1 | 0.1 | 0.8 | 0.5 | 0.2 | 0.3 | | | 94 |
| 96 | 0.7 | 1.2 | 0.5 | 0.8 | 1.1 | 0.8 | | | 96 |

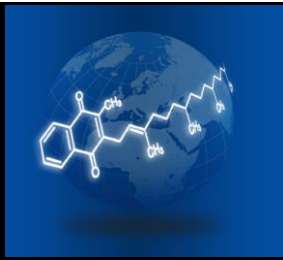
Abbreviations and definitions

ALTM: All Laboratory Trimmed Mean
 BLD: Below Limit of Detection
 * Insufficient data

Outlier

Traffic Light Z Scores

Z < 2.....Satisfactory-**GREEN**
 2 < Z < 3.....Questionable-**AMBER**
 Z > 3.....Unsatisfactory-**RED**



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