Proteus Laboratories

All acceptable

# MONTHLY HAEMATOLOGY

## CYCLE 13 SAMPLE 10

**Explanation of codes used in this report**

R - Results removed due to reconstitution error
N - No result returned
C - Result corrected

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Issue No: 1

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RIQAS

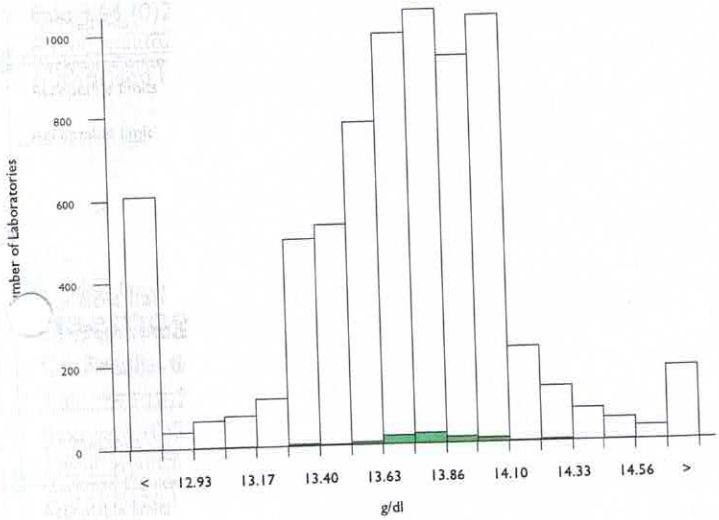
UKAS PROFICIENCY TESTING

# Haemoglobin, g/dl

| | N | Mean | CV% | $U_m$ | SDPA | Exc. |
|---|---|---|---|---|---|---|
| All Methods | 6724 | 13.753 | 2.3 | 0.00 | 0.33 | 671 |
| Beckman Coulter Ac. T 5 series | 79 | 13.812 | 1.1 | 0.02 | 0.34 | 11 |

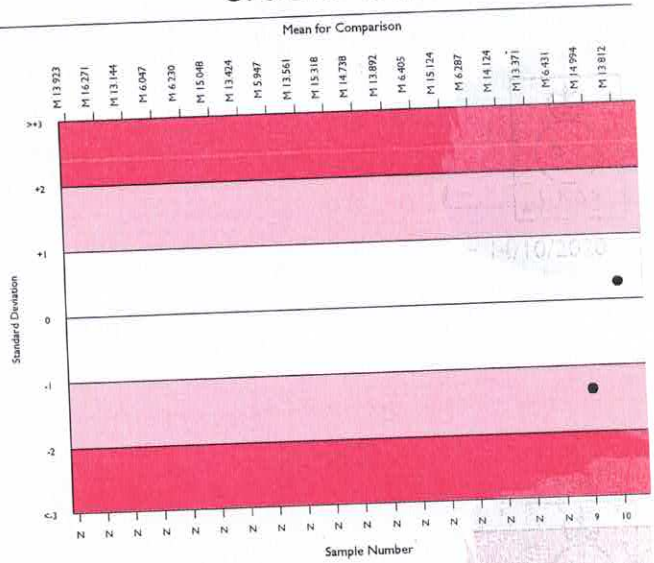
| | | | |
|---|---|---|---|
| ▲ Your Result | 13.900 | SDI | 0.26 |
| | | RMSDI | Too Few |
| Mean for Comparison | 13.812 | TS | 120 |
| | | RMTS | Too Few |
| | | %DEV | 0.6 |
| | | RM%DEV | Too Few |

| | |
|---|---|
| Acceptable limits derived from Biological Variation | N/A |
| Acceptable limits of performance for RIQAS | 4.00% |

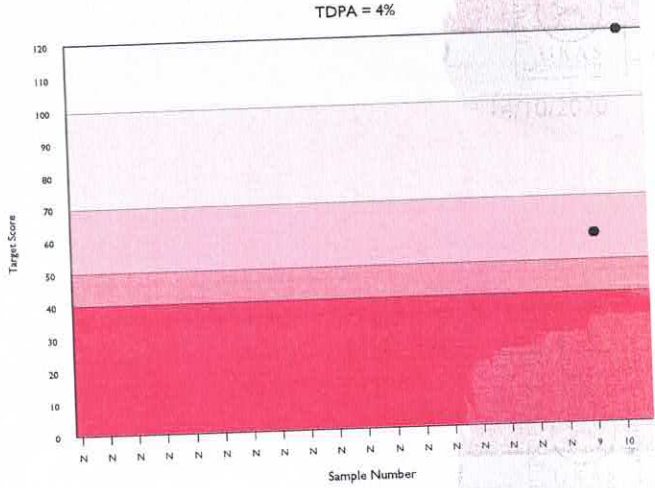


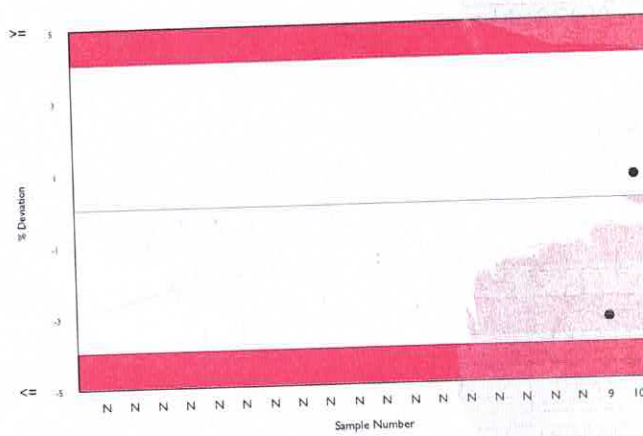

▲

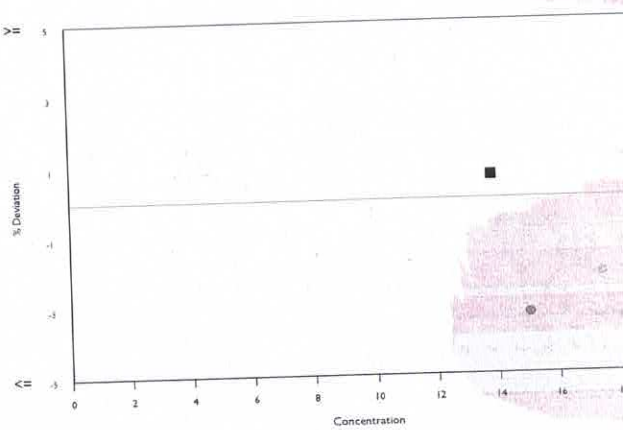
| Method | N | Mean | CV% | $U_m$ |
|---|---|---|---|---|
| Sysmex XN Series | 1282 | 13.819 | 1.3 | 0.01 |
| Abbott Cell-Dyn Ruby | 414 | 13.912 | 1.8 | 0.02 |
| Sysmex XN-L Series (330/350/450/550) | 322 | 13.708 | 1.1 | 0.01 |
| Sysmex XS series | 315 | 13.784 | 1.3 | 0.01 |
| Mindray BC 1000/2000/3000 series | 301 | 13.675 | 2.7 | 0.03 |
| Siemens/Bayer Advia 120/2120 | 295 | 13.853 | 1.5 | 0.02 |
| Beckman Coulter DxH 600/800/900 Series | 295 | 13.564 | 1.1 | 0.01 |
| Nihon Kohden Celltac Alpha | 278 | 13.894 | 2.2 | 0.02 |
| Sysmex XP Series | 284 | 13.560 | 2.1 | 0.02 |
| Sysmex XT series | 268 | 13.747 | 1.2 | 0.01 |
| Manual Methods | 197 | 12.198 | 4.4 | 0.05 |
| Mindray BC-6000/6200/6600/6800/6800Plus | 180 | 13.858 | 1.0 | 0.01 |
| ABX Micros/Minos/ABC VET | 180 | 13.637 | 3.4 | 0.04 |
| Sysmex KX 21 | 158 | 13.550 | 1.7 | 0.02 |
| Horiba ABX Pentra 60/80/XLR | 153 | 13.797 | 1.3 | 0.02 |
| Calculated from HCT | 129 | 12.033 | 3.2 | 0.04 |
| Mindray BC 5100/5180/5300/5380/5390 | 119 | 13.780 | 1.7 | 0.03 |
| Nihon Kohden Celltac E/Es | 89 | 13.830 | 1.3 | 0.02 |
| Medonic M series/Swelab | 82 | 13.990 | 2.4 | 0.05 |
| Beckman Coulter Ac. T 5 series | 79 | 13.812 | 1.1 | 0.02 |
| Beckman Coulter LH700 Series | 76 | 13.715 | 1.0 | 0.02 |




TDPA = 4%




RIQAS

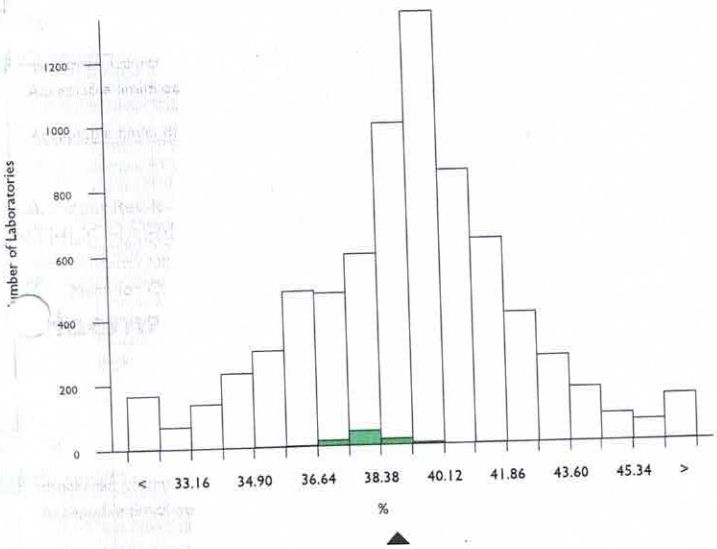
UKAS PROFICIENCY TESTING

# Haematocrit (HCT), %

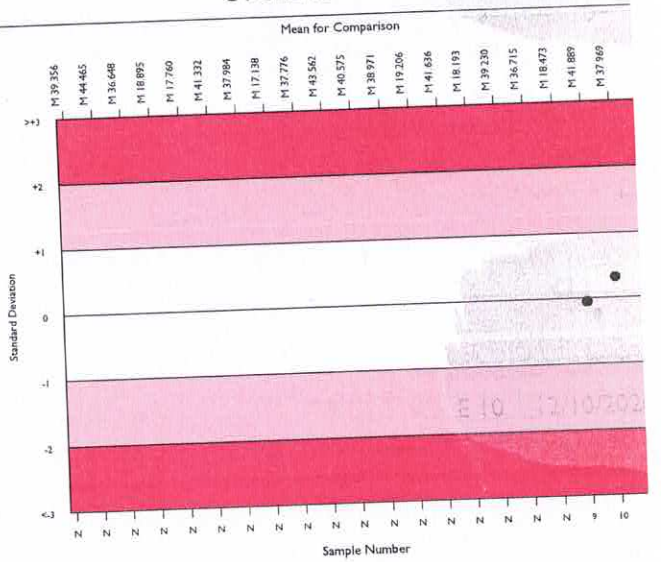
| | N | Mean | CV% | $U_m$ | SDPA | Exc. |
|---|---|---|---|---|---|---|
| All Methods | 6796 | 39.253 | 5.9 | 0.04 | 1.44 | 569 |
| Beckman Coulter Ac. T 5 series | 80 | 37.969 | 1.5 | 0.08 | 1.39 | 10 |

| | | | |
|---|---|---|---|
| ▲ Your Result | 38.400 | SDI | 0.31 |
| | | RMSDI | Too Few |
| Mean for Comparison | 37.969 | TS | 120 |
| | | RMTS | Too Few |
| | | %DEV | 1.1 |
| | | RM%DEV | Too Few |

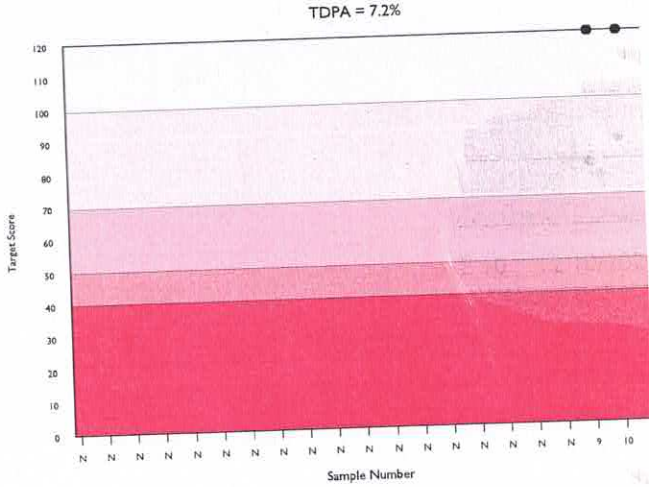
| | |
|---|---|
| Acceptable limits derived from Biological Variation | N/A |
| Acceptable limits of performance for RIQAS | 7.20 % |

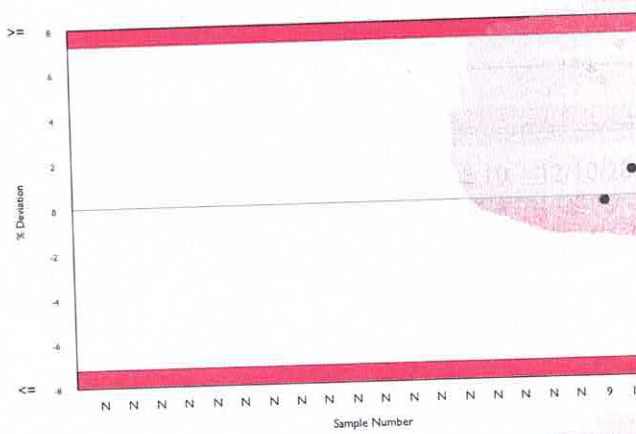


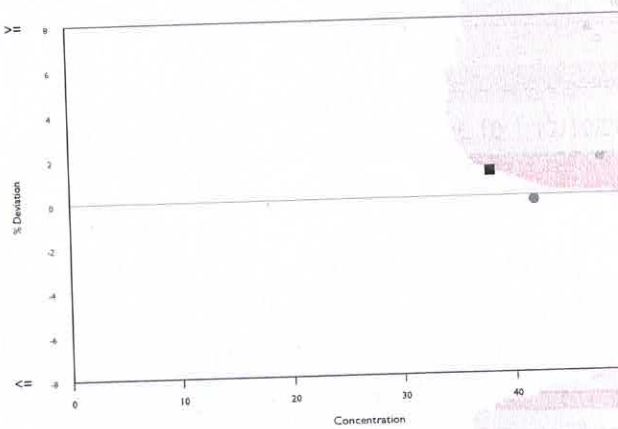

| Method | N | Mean | CV% | $U_m$ |
|---|---|---|---|---|
| Sysmex XN Series | 1247 | 39.543 | 2.1 | 0.03 |
| Abbott Cell-Dyn Ruby | 400 | 34.565 | 2.6 | 0.06 |
| Sysmex XN-L Series (330/350/450/550) | 329 | 39.354 | 2.3 | 0.06 |
| Sysmex XS series | 306 | 39.616 | 2.3 | 0.07 |
| Mindray BC 1000/2000/3000 series | 296 | 41.116 | 3.5 | 0.11 |
| Siemens/Bayer Advia 120/2120 | 299 | 35.875 | 2.7 | 0.07 |
| Beckman Coulter DxH 600/800/900 Series | 288 | 40.465 | 1.6 | 0.05 |
| Sysmex XP Series | 273 | 36.685 | 3.2 | 0.09 |
| Nihon Kohden Celltac Alpha | 278 | 40.907 | 3.2 | 0.10 |
| Sysmex XT series | 263 | 39.558 | 2.5 | 0.08 |
| Manual Methods | 195 | 36.672 | 2.7 | 0.09 |
| Mindray BC-6000/6200/6600/6800/6800Plus | 182 | 43.834 | 2.0 | 0.08 |
| ABX Micros/Minos/ABC VET | 173 | 39.002 | 3.8 | 0.14 |
| Sysmex KX 21 | 163 | 36.993 | 2.6 | 0.09 |
| Horiba ABX Pentra 60/80/XLR | 146 | 38.184 | 2.5 | 0.10 |
| Microhematocrit Centrifugation | 146 | 36.331 | 2.8 | 0.10 |
| Mindray BC 5100/5180/5300/5380/5390 | 114 | 42.190 | 3.3 | 0.16 |
| Nihon Kohden Celltac E/Es | 86 | 41.859 | 2.4 | 0.14 |
| Medonic M series/Swelab | 81 | 39.135 | 3.7 | 0.20 |
| Beckman Coulter Ac. T 5 series | 80 | 37.969 | 1.5 | 0.08 |
| Beckman Coulter LH700 Series | 74 | 40.651 | 2.1 | 0.12 |




TDPA = 7.2%




RIQAS

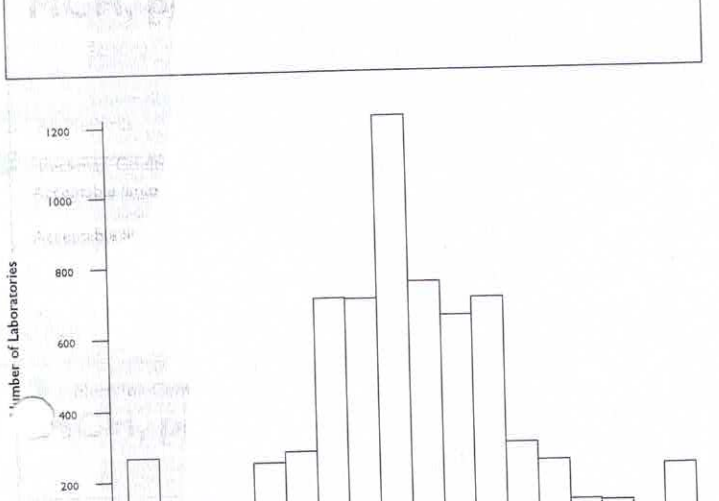
UKAS PROFICIENCY TESTING

# MCH, pg

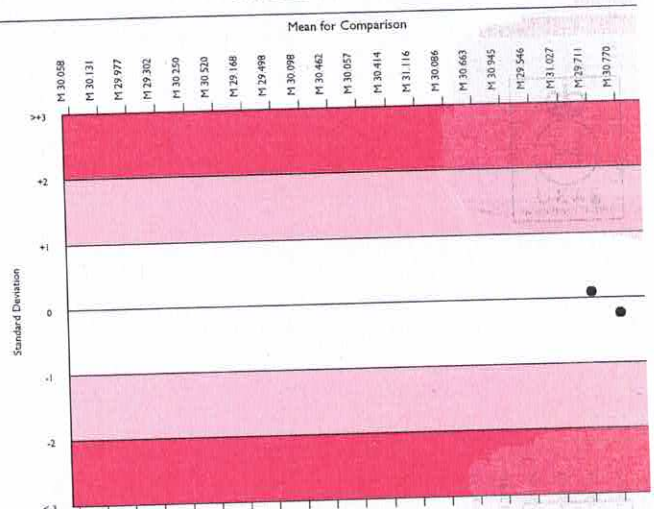
| | N | Mean | CV% | $U_m$ | SDPA | Exc. |
|---|---|---|---|---|---|---|
| All Methods | 6294 | 30.502 | 2.2 | 0.01 | 1.10 | 599 |
| Beckman Coulter Ac. T 5 series | 81 | 30.770 | 1.2 | 0.05 | 1.11 | 9 |

| | | | |
|---|---|---|---|
| ▲ Your Result | 30.500 | SDI | -0.24 |
| | | RMSDI | Too Few |
| Mean for Comparison | 30.770 | TS | 120 |
| | | RMTS | Too Few |
| | | %DEV | -0.9 |
| | | RM%DEV | Too Few |

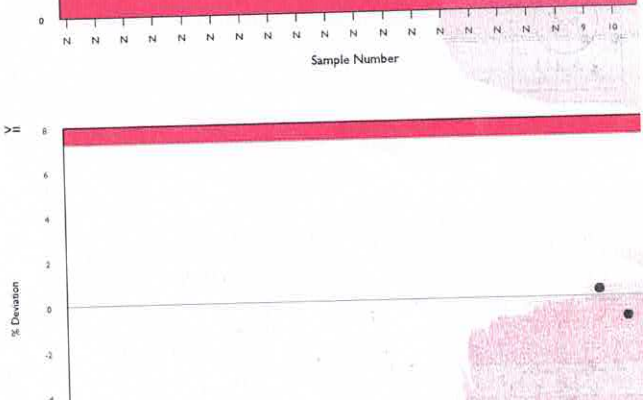
| | |
|---|---|
| Acceptable limits derived from Biological Variation | N/A |
| ceptable limits of performance for RIQAS | 7.20% |

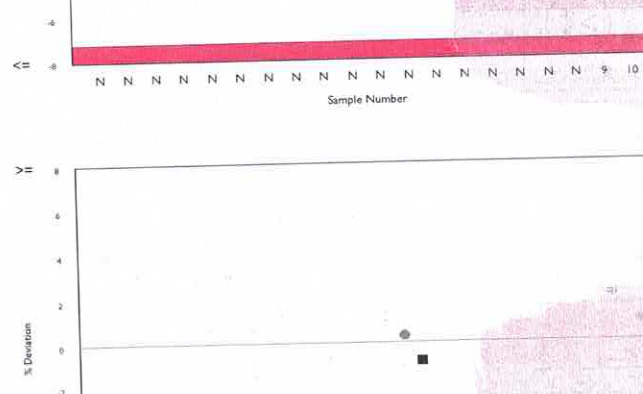



| Method | N | Mean | CV% | $U_m$ |
|---|---|---|---|---|
| Sysmex XN Series | 1252 | 30.449 | 1.4 | 0.02 |
| Abbott Cell-Dyn Ruby | 407 | 30.730 | 2.7 | 0.05 |
| Sysmex XN-L Series (330/350/450/550) | 331 | 30.478 | 1.4 | 0.03 |
| Sysmex XS series | 311 | 30.525 | 1.5 | 0.03 |
| Mindray BC 1000/2000/3000 series | 288 | 29.779 | 3.2 | 0.07 |
| Beckman Coulter DxH 600/800/900 Series | 288 | 30.518 | 1.3 | 0.03 |
| Siemens/Bayer Advia 120/2120 | 290 | 30.709 | 2.2 | 0.05 |
| Nihon Kohden Celltac Alpha | 272 | 30.636 | 2.5 | 0.06 |
| Sysmex XP Series | 273 | 30.506 | 2.6 | 0.06 |
| Sysmex XT series | 269 | 30.371 | 1.6 | 0.04 |
| Mindray BC-6000/6200/6600/6800/6800Plus | 186 | 30.759 | 1.6 | 0.04 |
| Sysmex KX 21 | 165 | 30.422 | 2.2 | 0.07 |
| ABX Micros/Minos/ABC VET | 164 | 30.393 | 3.3 | 0.10 |
| Horiba ABX Pentra 60/80/XLR | 150 | 30.717 | 1.8 | 0.06 |
| Mindray BC 5100/5180/5300/5380/5390 | 117 | 30.845 | 1.9 | 0.07 |
| Nihon Kohden Celltac E/Es | 84 | 30.649 | 1.9 | 0.08 |
| Medonic M series/Swelab | 81 | 31.025 | 2.0 | 0.09 |
| Beckman Coulter Ac. T 5 series | 81 | 30.770 | 1.2 | 0.05 |
| Beckman Coulter LH700 Series | 75 | 30.359 | 1.6 | 0.07 |
| Mindray BC 5000/5150/5130/5140 | 70 | 30.659 | 2.4 | 0.11 |
| ABX Pentra 120/Nexus Series | 62 | 30.179 | 2.0 | 0.10 |




TDPA = 7.2%


RIQAS

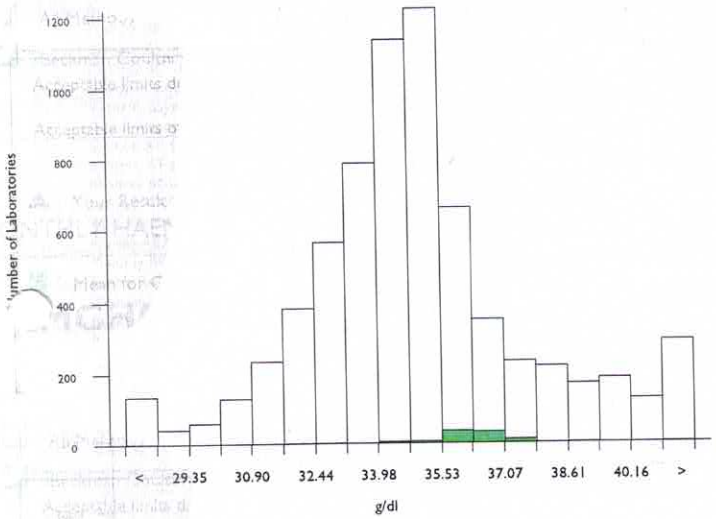
UKAS PROFICIENCY TESTING

# MCHC, g/dl

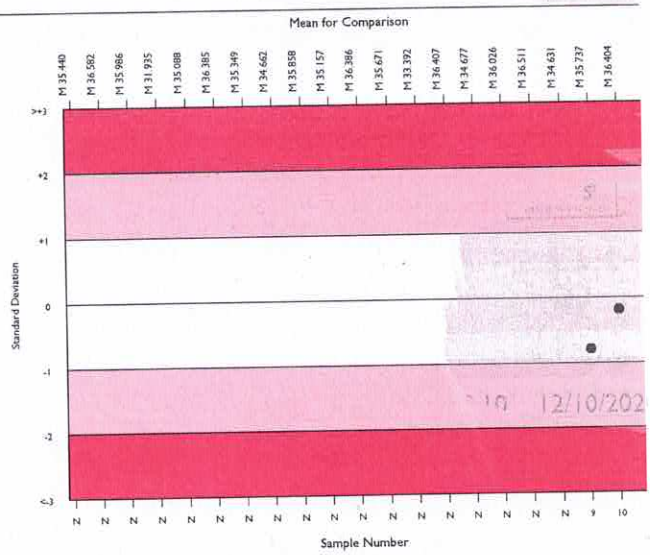
| | N | Mean | CV% | $U_m$ | SDPA | Exc. |
|---|---|---|---|---|---|---|
| All Methods | 6291 | 34.759 | 5.9 | 0.03 | 1.52 | 592 |
| Beckman Coulter Ac. T 5 series | 74 | 36.404 | 1.1 | 0.06 | 1.59 | 16 |

| | | | |
|---|---|---|---|
| ▲ Your Result | 36.100 | SDI | -0.19 |
| | | RMSDI | Too Few |
| Mean for Comparison | 36.404 | TS | 120 |
| | | RMTS | Too Few |
| | | %DEV | -0.8 |
| | | RM%DEV | Too Few |

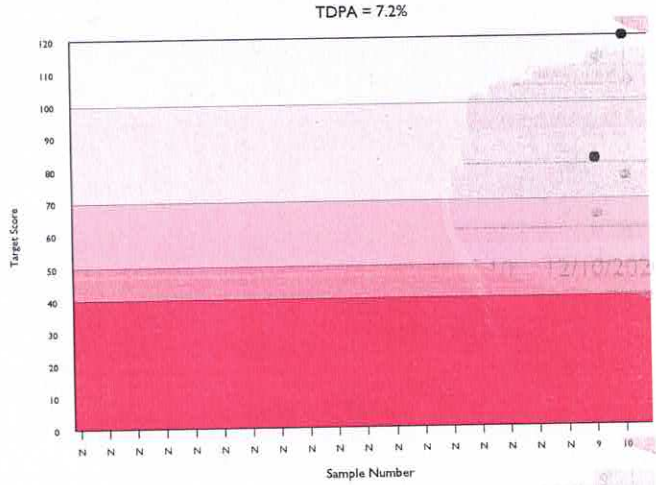
| | |
|---|---|
| Acceptable limits derived from Biological Variation | N/A |
| ceptable limits of performance for RIQAS | 7.20% |

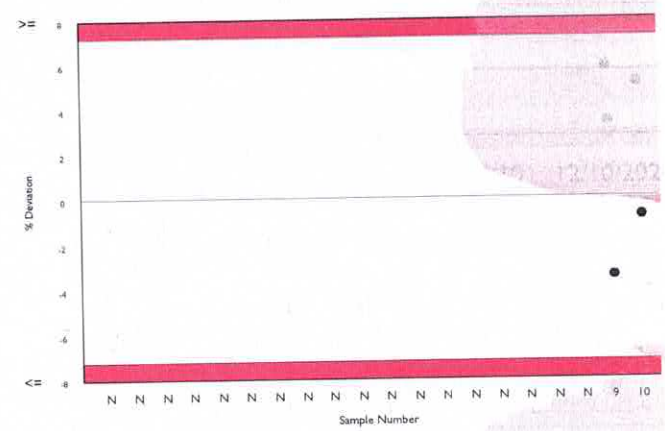


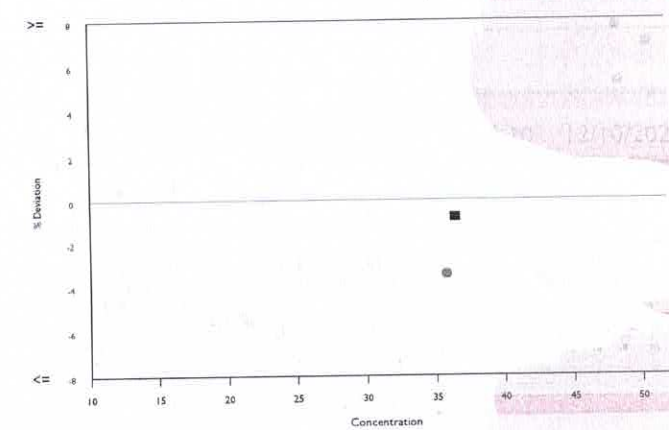

| Method | N | Mean | CV% | $U_m$ |
|---|---|---|---|---|
| Sysmex XN Series | 1239 | 34.888 | 1.9 | 0.02 |
| Abbott Cell-Dyn Ruby | 387 | 40.256 | 2.8 | 0.07 |
| Sysmex XN-L Series (330/350/450/550) | 338 | 34.801 | 2.3 | 0.05 |
| Sysmex XS series | 307 | 34.721 | 2.3 | 0.06 |
| Mindray BC 1000/2000/3000 series | 278 | 33.220 | 3.8 | 0.09 |
| Beckman Coulter DxH 600/800/900 Series | 281 | 33.516 | 1.4 | 0.04 |
| Siemens/Bayer Advia 120/2120 | 290 | 38.516 | 2.6 | 0.07 |
| Nihon Kohden Celltac Alpha | 268 | 33.933 | 3.4 | 0.09 |
| Sysmex XP Series | 275 | 36.875 | 3.7 | 0.10 |
| Sysmex XT series | 256 | 34.687 | 2.6 | 0.07 |
| Mindray BC-6000/6200/6600/6800/6800Plus | 182 | 31.523 | 1.9 | 0.05 |
| Sysmex KX 21 | 161 | 36.468 | 3.2 | 0.12 |
| ABX Micros/Minos/ABC VET | 163 | 34.918 | 3.5 | 0.12 |
| Horiba ABX Pentra 60/80/XLR | 145 | 36.167 | 2.0 | 0.08 |
| Mindray BC 5100/5180/5300/5380/5390 | 115 | 32.463 | 3.1 | 0.12 |
| Nihon Kohden Celltac E/Es | 86 | 32.995 | 2.6 | 0.12 |
| Medonic M series/Swelab | 82 | 35.833 | 3.3 | 0.16 |
| Beckman Coulter Ac. T 5 series | 74 | 36.404 | 1.1 | 0.06 |
| Beckman Coulter LH700 Series | 75 | 33.647 | 1.9 | 0.09 |
| Mindray BC 5000/5150/5130/5140 | 66 | 32.432 | 2.7 | 0.14 |
| ABX Pentra 120/Nexus Series | 61 | 35.946 | 2.3 | 0.13 |




TDPA = 7.2%




RIQAS

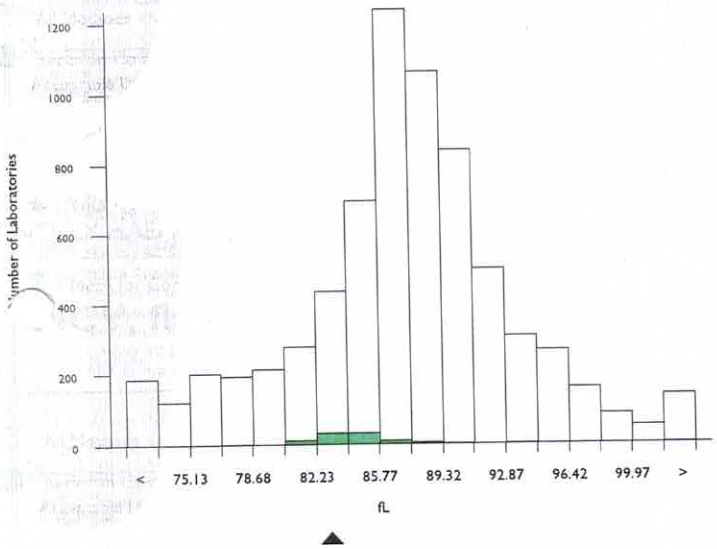
UKAS PROFICIENCY TESTING

# MCV, fL

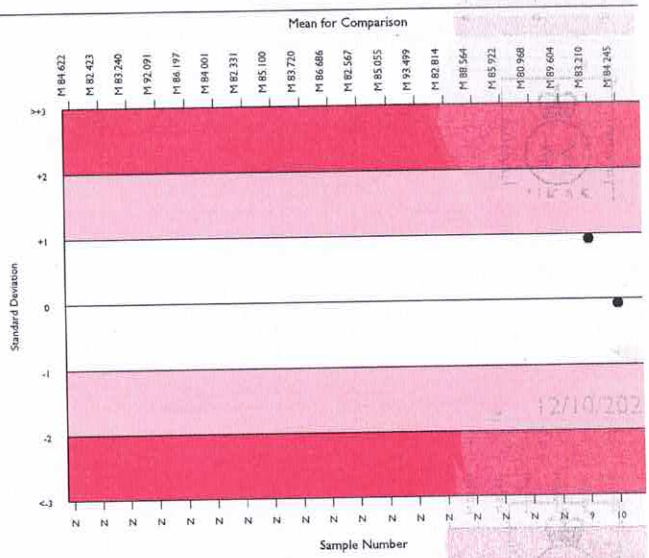
| | N | Mean | CV% | $U_m$ | SDPA | Exc. |
|---|---|---|---|---|---|---|
| All Methods | 6361 | 87.553 | 5.4 | 0.07 | 3.22 | 568 |
| Beckman Coulter Ac. T 5 series | 81 | 84.245 | 1.5 | 0.17 | 3.09 | 9 |

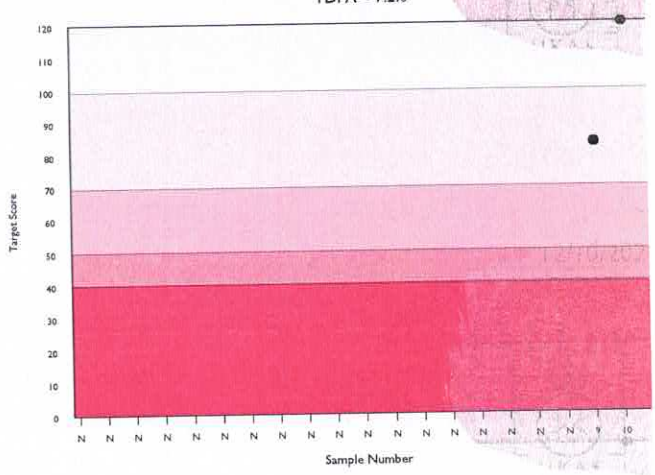
| | | | |
|---|---|---|---|
| ▲ Your Result | 84.000 | SDI | -0.08 |
| | | RMSDI | Too Few |
| Mean for Comparison | 84.245 | TS | 120 |
| | | RMTS | Too Few |
| | | %DEV | -0.3 |
| | | RM%DEV | Too Few |

| | |
|---|---|
| Acceptable limits derived from Biological Variation | N/A |
| ceptable limits of performance for RIQAS | 7.20% |

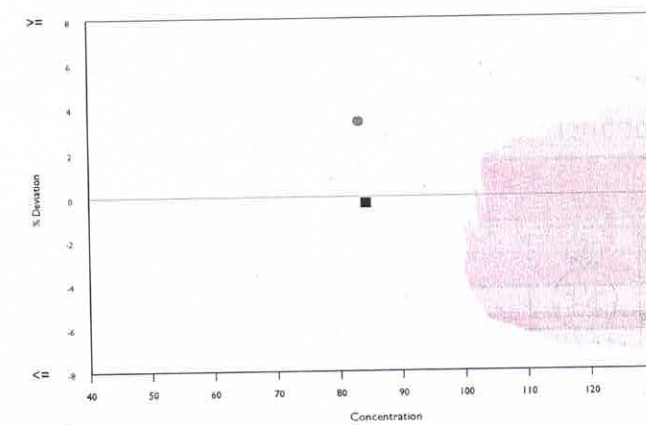



| Method | N | Mean | CV% | $U_m$ |
|---|---|---|---|---|
| Sysmex XN Series | 1249 | 87.118 | 1.9 | 0.06 |
| Abbott Cell-Dyn Ruby | 403 | 76.246 | 2.4 | 0.11 |
| Sysmex XN-L Series (330/350/450/550) | 328 | 87.497 | 2.3 | 0.14 |
| Sysmex XS series | 303 | 87.652 | 2.1 | 0.13 |
| Mindray BC1000/2000/3000 series | 290 | 89.815 | 2.7 | 0.18 |
| Beckman Coulter DxH 600/800/900 Series | 286 | 90.977 | 1.2 | 0.08 |
| Siemens/Bayer Advia 120/2120 | 296 | 79.643 | 2.8 | 0.16 |
| Nihon Kohden Celltac Alpha | 274 | 90.341 | 2.4 | 0.16 |
| Sysmex XP Series | 272 | 82.592 | 2.6 | 0.17 |
| Sysmex XT series | 256 | 87.332 | 2.2 | 0.15 |
| Mindray BC-6000/6200/6600/6800/6800Plus | 180 | 97.386 | 1.9 | 0.17 |
| ABX Micros/Minos/ABC VET | 164 | 87.257 | 2.9 | 0.25 |
| Sysmex KX 21 | 156 | 83.153 | 2.6 | 0.22 |
| Horiba ABX Pentra 60/80/XLR | 146 | 84.859 | 2.0 | 0.18 |
| Mindray BC 5100/5180/5300/5380/5390 | 116 | 95.090 | 2.9 | 0.32 |
| Nihon Kohden Celltac E/Es | 84 | 92.302 | 2.2 | 0.27 |
| Medonic M series/Swelab | 82 | 86.649 | 2.3 | 0.28 |
| Beckman Coulter Ac. T 5 series | 81 | 84.245 | 1.5 | 0.17 |
| Beckman Coulter LH700 Series | 74 | 89.567 | 1.6 | 0.21 |
| Mindray BC 5000/5150/5130/5140 | 65 | 94.470 | 1.6 | 0.24 |
| ABX Pentra 120/Nexus Series | 65 | 83.914 | 1.7 | 0.22 |








RIQAS

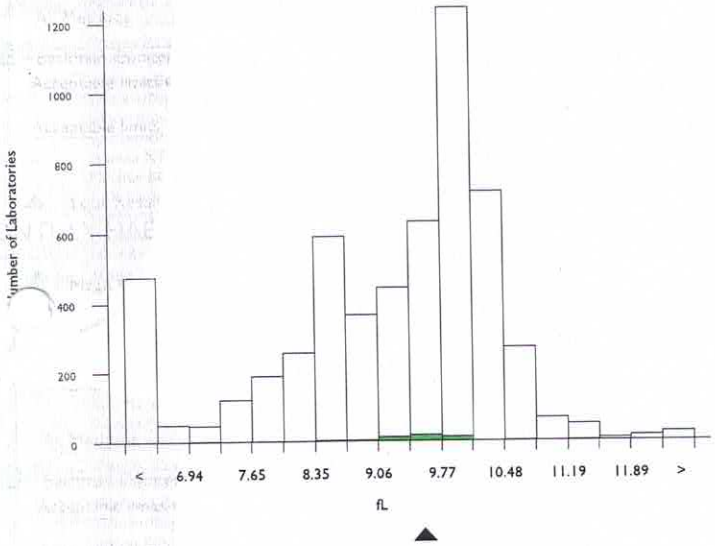
UKAS PROFICIENCY TESTING

# Mean Platelet Volume, fL

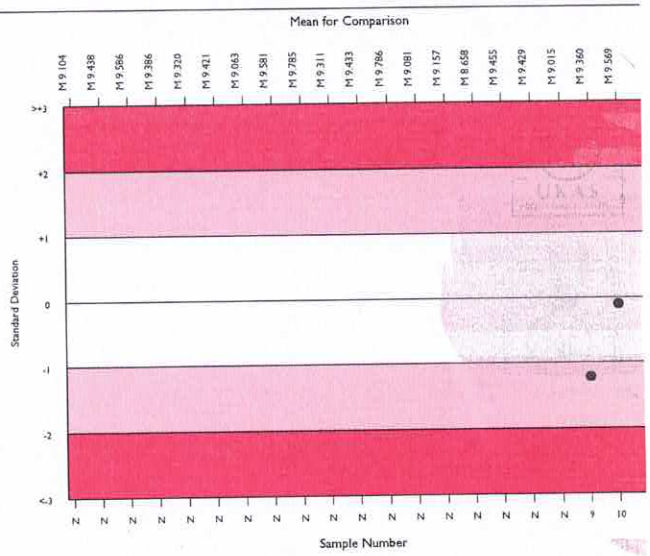
| | N | Mean | CV% | $U_m$ | SDPA | Exc. |
|---|---|---|---|---|---|---|
| All Methods | 5058 | 9.420 | 10.0 | 0.02 | 0.62 | 471 |
| Beckman Coulter Ac. T 5 series | 41 | 9.569 | 3.0 | 0.06 | 0.63 | 6 |

| | | | |
|---|---|---|---|
| ▲ Your Result | 9.500 | SDI | -0.11 |
| | | RMSDI | Too Few |
| Mean for Comparison | 9.569 | TS | 120 |
| | | RMTS | Too Few |
| | | %DEV | -0.7 |
| | | RM%DEV | Too Few |

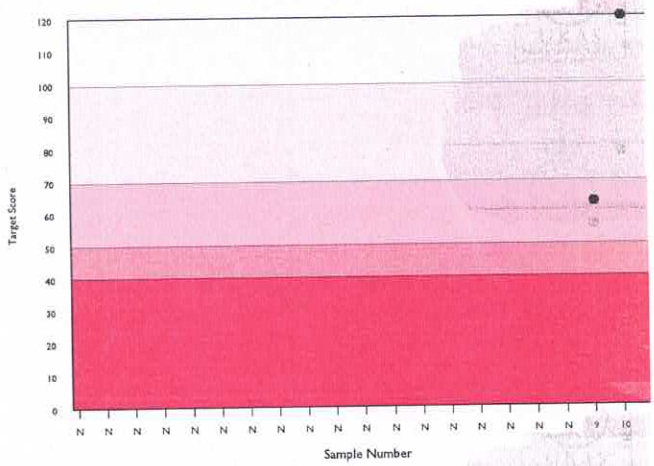
| | |
|---|---|
| Acceptable limits derived from Biological Variation | N/A |
| ceptable limits of performance for RIQAS | 10.90% |

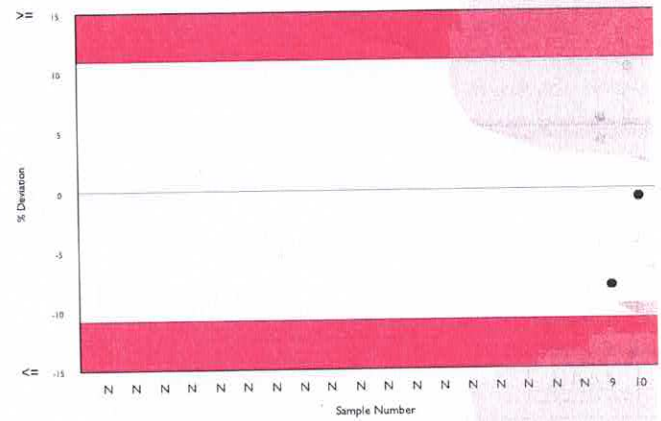


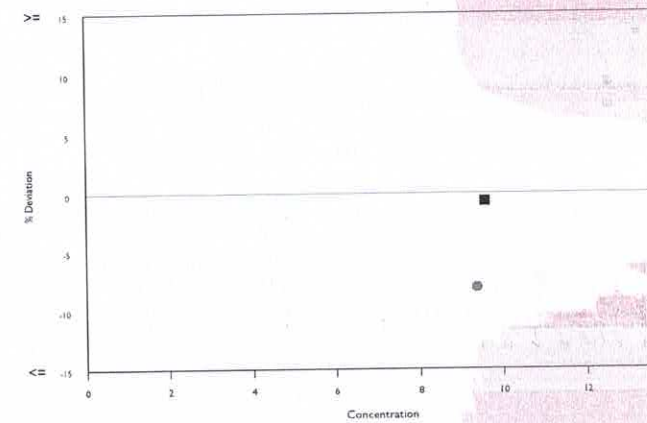

| Method | N | Mean | CV% | $U_m$ |
|---|---|---|---|---|
| Sysmex XN Series | 1026 | 10.058 | 2.2 | 0.01 |
| Abbott Cell-Dyn Ruby | 311 | 4.583 | 13.8 | 0.04 |
| Mindray BC 1000/2000/3000 series | 266 | 8.911 | 6.7 | 0.05 |
| Beckman Coulter DxH 600/800/900 Series | 256 | 8.595 | 2.6 | 0.02 |
| Sysmex XS series | 247 | 10.167 | 2.9 | 0.02 |
| Sysmex XN-L Series (330/350/450/550) | 248 | 10.045 | 2.4 | 0.02 |
| Nihon Kohden Celltac Alpha | 242 | 8.122 | 8.8 | 0.06 |
| Sysmex XP Series | 214 | 9.619 | 3.1 | 0.03 |
| Sysmex XT series | 221 | 9.759 | 2.8 | 0.02 |
| Siemens/Bayer Advia 120/2120 | 210 | 10.525 | 5.5 | 0.05 |
| Mindray BC-6000/6200/6600/6800/6800Plus | 155 | 10.279 | 3.4 | 0.04 |
| Sysmex KX 21 | 124 | 9.492 | 2.9 | 0.03 |
| ABX Micros/Minos/ABC VET | 126 | 8.325 | 5.6 | 0.05 |
| Horiba ABX Pentra 60/80/XLR | 113 | 9.339 | 4.6 | 0.05 |
| Mindray BC 5100/5180/5300/5380/5390 | 96 | 8.931 | 3.4 | 0.04 |
| Medonic M series/Swelab | 71 | 8.489 | 3.9 | 0.05 |
| Nihon Kohden Celltac E/Es | 63 | 7.443 | 5.4 | 0.06 |
| Mindray BC 5000/5150/5130/5140 | 61 | 10.167 | 2.9 | 0.05 |
| Beckman Coulter LH700 Series | 55 | 8.451 | 3.3 | 0.05 |
| ABX Pentra 120/Nexus Series | 55 | 9.489 | 3.5 | 0.06 |
| Human Humacount Series | 48 | 8.338 | 7.7 | 0.12 |




TDPA = 10.9%




RIQAS

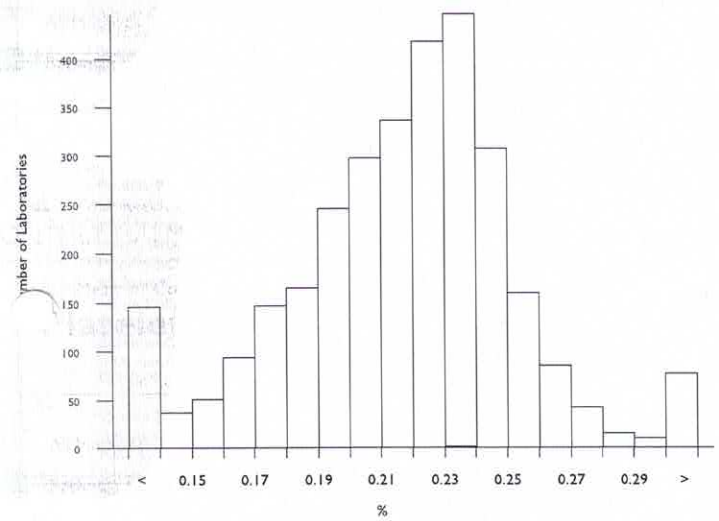
UKAS PROFICIENCY TESTING

# Plateletcrit, %

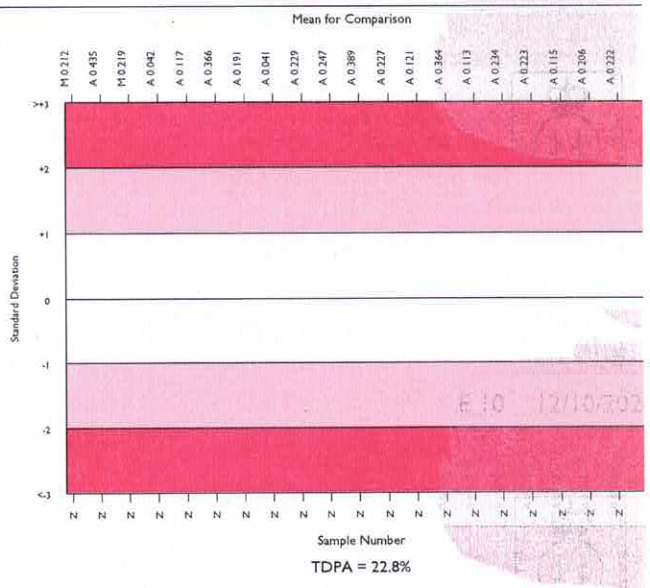
| | N | Mean | CV% | $U_m$ | SDPA | Exc. |
|---|---|---|---|---|---|---|
| All Methods | 2792 | 0.222 | 12.2 | 0.00 | 0.03 | 284 |
| Beckman Coulter Ac. T 5 series | 1 | 0.241 | 0.0 | 0.00 | N/A | 0 |

| | | | |
|---|---|---|---|
| ▲ Your Result | No Result | SDI | |
| | | RMSDI | Too Few |
| Mean for Comparison | 0.222 | TS | |
| | | RMTS | Too Few |
| | | %DEV | |
| | | RM%DEV | Too Few |

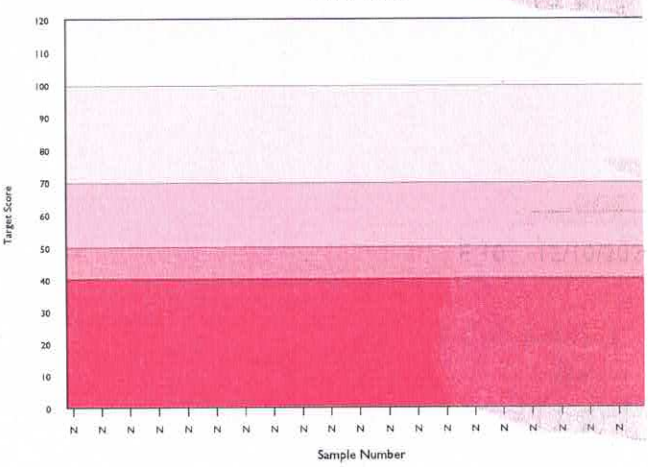
| | |
|---|---|
| Acceptable limits derived from Biological Variation | N/A |
| ceptable limits of performance for RIQAS | 22.80% |

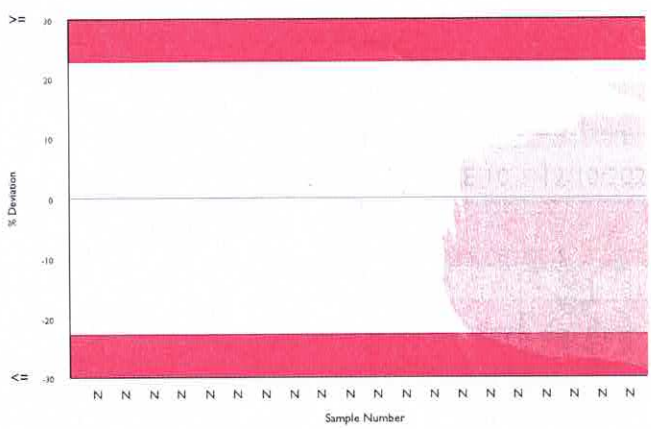


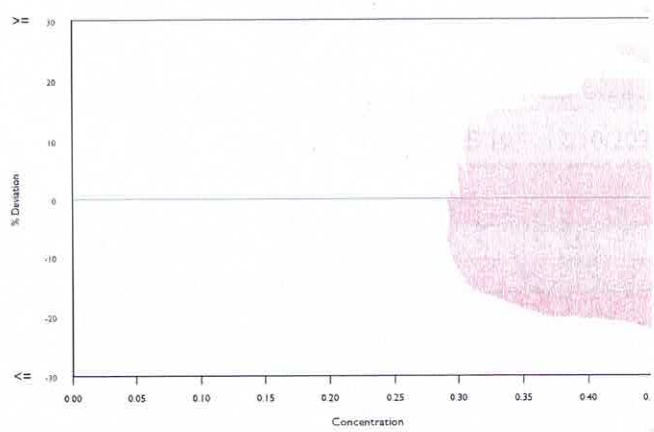

| Method | N | Mean | CV% | $U_m$ |
|---|---|---|---|---|
| Sysmex XN Series | 501 | 0.236 | 5.0 | 0.00 |
| Mindray BC 1000/2000/3000 series | 229 | 0.212 | 9.3 | 0.00 |
| Nihon Kohden Celltac Alpha | 209 | 0.184 | 11.9 | 0.00 |
| Sysmex XS series | 147 | 0.237 | 6.1 | 0.00 |
| Sysmex XT series | 142 | 0.229 | 6.0 | 0.00 |
| Sysmex XP Series | 135 | 0.249 | 7.1 | 0.00 |
| Mindray BC-6000/6200/6600/6800/6800Plus | 113 | 0.252 | 5.4 | 0.00 |
| Sysmex XN-L Series (330/350/450/550) | 104 | 0.237 | 7.0 | 0.00 |
| Abbott Cell-Dyn Ruby | 87 | 0.120 | 29.1 | 0.00 |
| Siemens/Bayer Advia 120/2120 | 83 | 0.225 | 7.5 | 0.00 |
| ABX Micros/Minos/ABC VET | 82 | 0.193 | 10.7 | 0.00 |
| Mindray BC 5100/5180/5300/5380/5390 | 71 | 0.216 | 6.3 | 0.00 |
| Beckman Coulter DxH 600/800/900 Series | 74 | 0.208 | 3.7 | 0.00 |
| Medonic M series/Swelab | 63 | 0.191 | 8.3 | 0.00 |
| Nihon Kohden Celltac E/Es | 57 | 0.179 | 7.7 | 0.00 |
| Mindray BC 5000/5150/5130/5140 | 54 | 0.245 | 6.9 | 0.00 |
| Horiba ABX Pentra 60/80/XLR | 45 | 0.226 | 6.5 | 0.00 |
| Human Humacount Series | 44 | 0.196 | 12.5 | 0.00 |
| ABX Pentra 120/Nexus Series | 39 | 0.235 | 5.1 | 0.00 |
| Erba Lachema Elite series | 31 | 0.200 | 10.8 | 0.00 |
| Mindray BC 5600/5800 | 28 | 0.215 | 7.6 | 0.00 |




TDPA = 22.8%




RIQAS

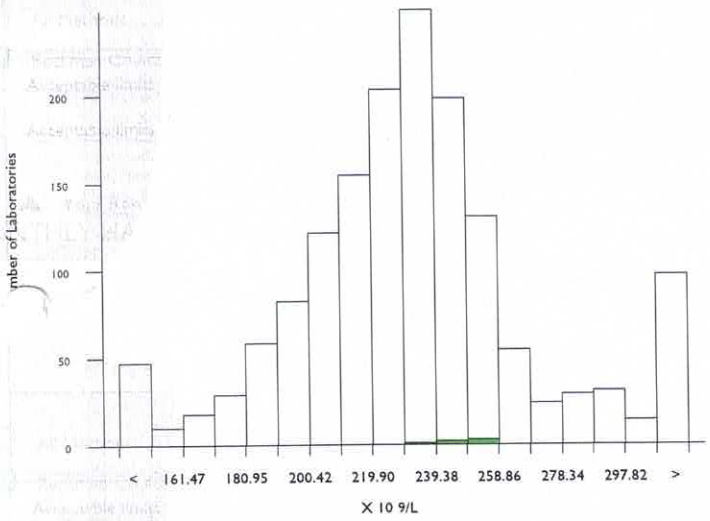
UKAS PROFICIENCY TESTING

# Platelets (Optical Count), X 10 9/L

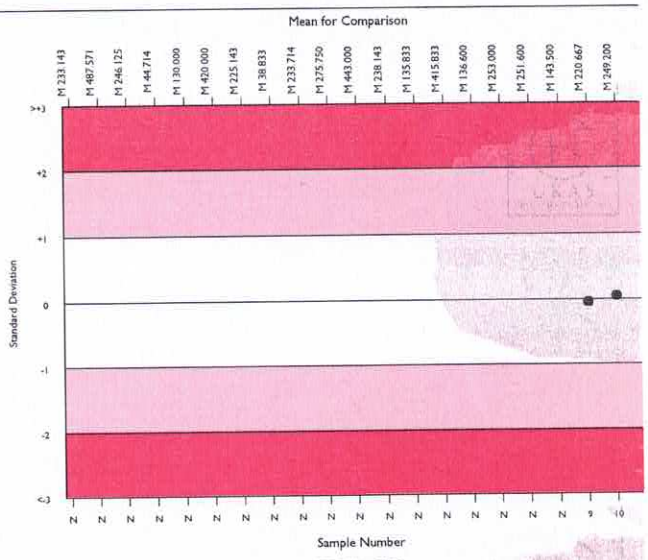
| | N | Mean | CV% | $U_m$ | SDPA | Exc. |
|---|---|---|---|---|---|---|
| All Methods | 1388 | 229.648 | 11.3 | 0.87 | 37.70 | 160 |
| Beckman Coulter Ac. T 5 series | 5 | 249.200 | 1.0 | 1.39 | 40.91 | 1 |

| | | | |
|---|---|---|---|
| ▲ Your Result | 251.000 | SDI | 0.04 |
| | | RMSDI | Too Few |
| Mean for Comparison | 249.200 | TS | 120 |
| | | RMTS | Too Few |
| | | %DEV | 0.7 |
| | | RM%DEV | Too Few |

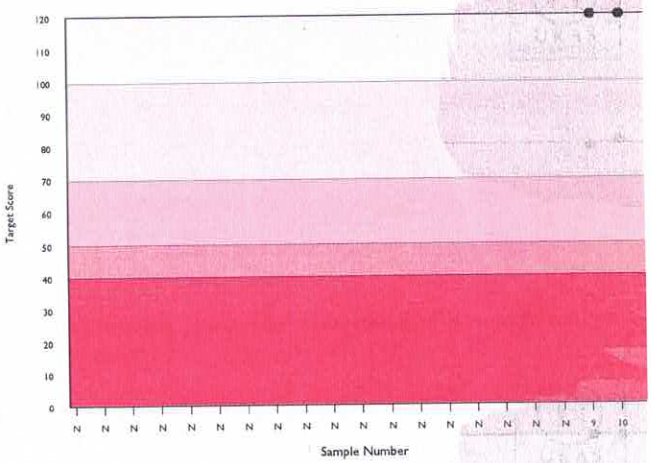
| | |
|---|---|
| Acceptable limits derived from Biological Variation | N/A |
| ceptable limits of performance for RIQAS | 27.00% |

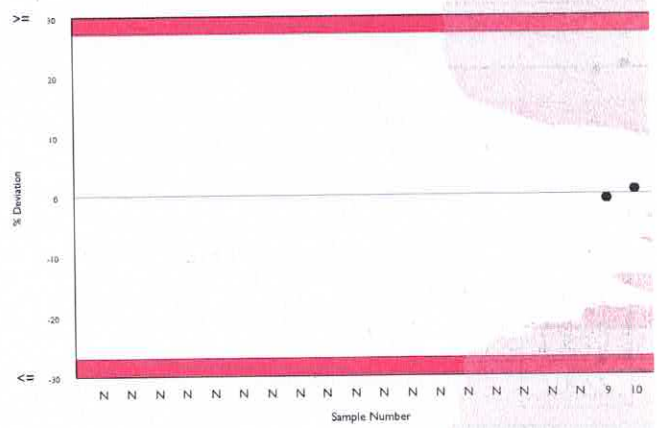


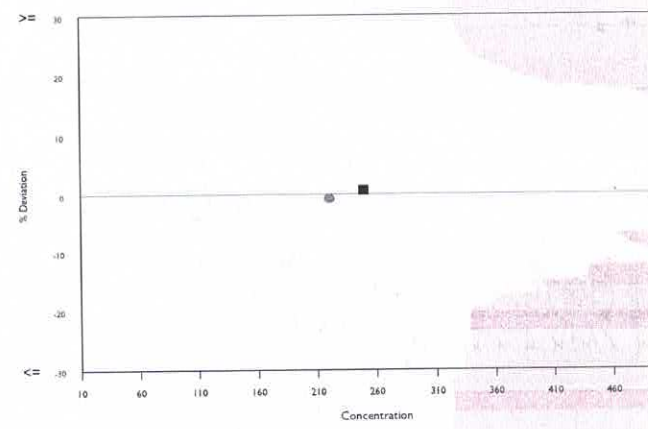

| Method | N | Mean | CV% | $U_m$ |
|---|---|---|---|---|
| Abbott Cell-Dyn Ruby | 393 | 247.689 | 14.1 | 2.20 |
| Siemens/Bayer Advia 120/2120 | 293 | 210.822 | 8.4 | 1.29 |
| Manual Methods | 259 | 219.494 | 10.8 | 1.85 |
| Sysmex XN Series | 85 | 255.341 | 10.0 | 3.48 |
| Abbott Cell-Dyn 3200 | 48 | 225.585 | 8.4 | 3.44 |
| Sysmex XT Series | 42 | 234.179 | 6.0 | 2.72 |
| Sysmex XN-L Series (330/350/450/550) | 36 | 237.944 | 5.4 | 2.66 |
| Abbott Alinity hq | 36 | 229.444 | 4.3 | 2.04 |
| Sysmex XS Series | 33 | 233.039 | 4.5 | 2.30 |
| Beckman Coulter DxH 600/800/900 Series | 28 | 240.832 | 3.3 | 1.89 |
| Mindray BC-6000/6200/6600/6800/6800Plus | 26 | 235.000 | 10.3 | 5.96 |
| Sysmex KX21 | 20 | 242.450 | 4.9 | 3.30 |
| Abbott Cell-Dyn Sapphire | 19 | 232.368 | 6.7 | 4.49 |
| Horiba ABX Pentra 60/80/XLR | 10 | 256.100 | 10.9 | 11.01 |
| Horiba Yumizen H500/ 550 | 7 | 251.143 | 3.0 | 3.52 |
| Sysmex XE-2100 | 7 | 245.571 | 8.9 | 10.29 |
| Beckman Coulter Ac. T 5 series | 5 | 249.200 | 1.0 | 1.39 |
| Beckman Coulter DxH 500 Series | 6 | 255.067 | 6.6 | 8.61 |
| ABX Micros/Minos/ABC VET | 6 | 213.633 | 14.6 | 15.87 |
| ABX Pentra 120/Nexus Series | 5 | 244.400 | 3.8 | 5.16 |
| Sysmex XE-5000 | 5 | 253.600 | 4.3 | 6.07 |




TDPA = 27%




RIQAS

UKAS PROFICIENCY TESTING

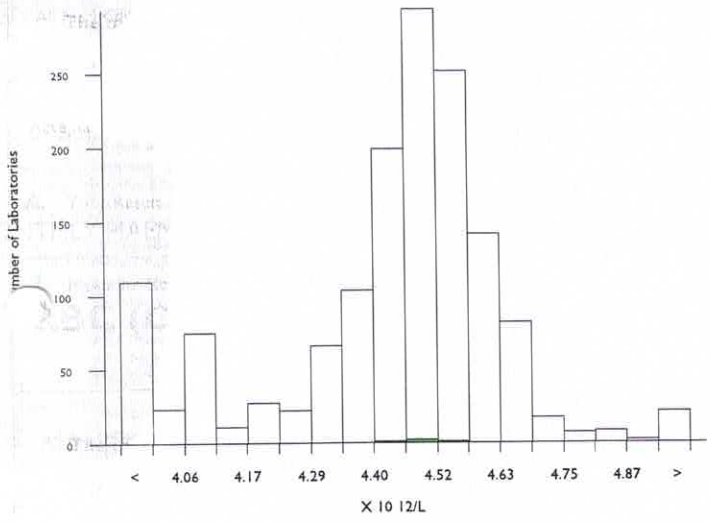
# RBC (Optical Count), X 10 12/L

| | N | Mean | CV% | $U_m$ | SDPA | Exc. |
|---|---|---|---|---|---|---|
| All Methods | 1313 | 4.467 | 3.4 | 0.01 | 0.15 | 140 |
| Beckman Coulter Ac. T 5 series | 4 | 4.493 | 0.9 | 0.03 | 0.15 | 0 |

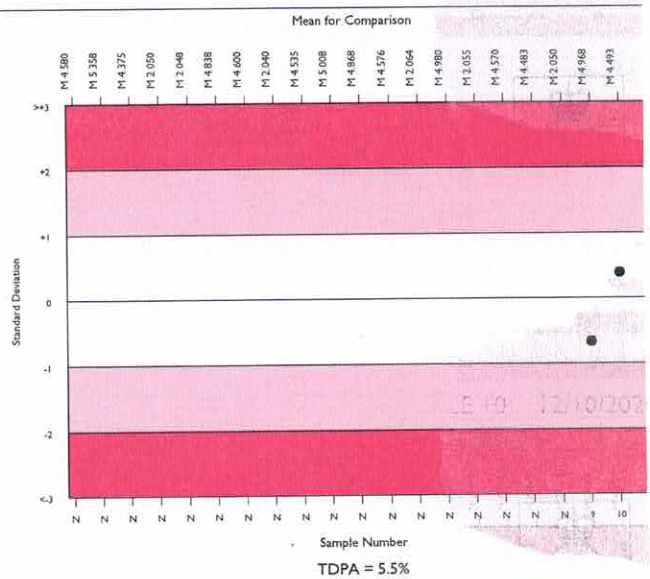
| | | | |
|---|---|---|---|
| ▲ Your Result | 4.550 | SDI | 0.38 |
| | | RMSDI | Too Few |
| Mean for Comparison | 4.493 | TS | 113 |
| | | RMTS | Too Few |
| | | %DEV | 1.3 |
| | | RM%DEV | Too Few |

**The mean for comparison is not statistically significant**

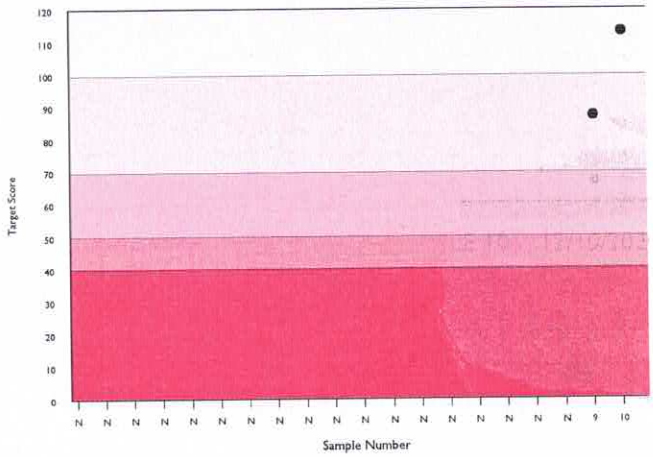
| | |
|---|---|
| Acceptable limits derived from Biological Variation | N/A |
| ceptable limits of performance for RIQAS | 5.50% |

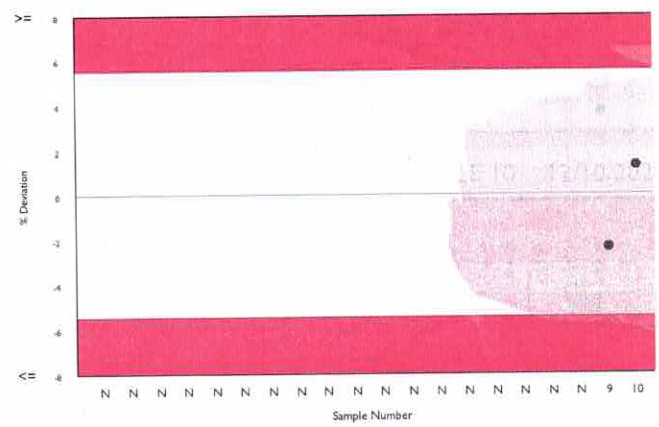


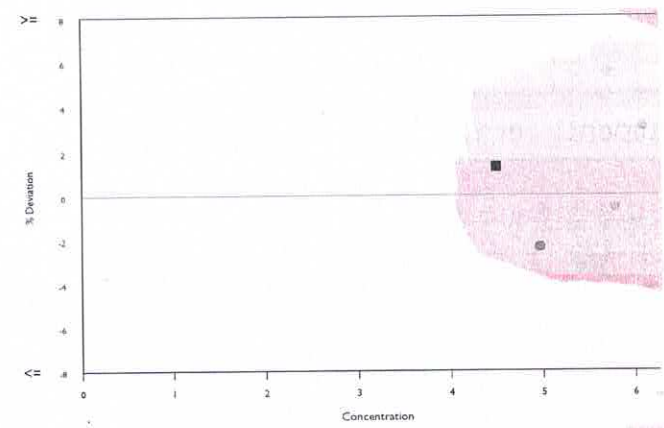

| Method | N | Mean | CV% | $U_m$ |
|---|---|---|---|---|
| Abbott Cell-Dyn Ruby | 405 | 4.521 | 2.0 | 0.01 |
| Siemens/Bayer Advia 120/2120 | 296 | 4.506 | 2.1 | 0.01 |
| Manual Methods | 219 | 4.066 | 3.8 | 0.01 |
| Sysmex XN Series | 108 | 4.506 | 1.7 | 0.01 |
| Abbott Cell-Dyn 3200 | 49 | 4.518 | 1.9 | 0.02 |
| Sysmex XT Series | 41 | 4.494 | 1.9 | 0.02 |
| Abbott Alinity hq | 37 | 4.556 | 1.4 | 0.01 |
| Sysmex XS Series | 35 | 4.485 | 1.1 | 0.01 |
| Beckman Coulter DxH 600/800/900 Series | 28 | 4.441 | 1.2 | 0.01 |
| Sysmex KX21 | 24 | 4.453 | 1.0 | 0.01 |
| Mindray BC-6000/6200/6600/6800/6800Plus | 16 | 4.505 | 1.5 | 0.02 |
| Abbott Cell-Dyn Sapphire | 11 | 4.507 | 2.7 | 0.05 |
| Horiba ABX Pentra 60/80/XLR | 12 | 4.512 | 2.2 | 0.04 |
| Horiba Yumizen H500/ 550 | 7 | 4.483 | 1.2 | 0.02 |
| Beckman Coulter DxH 500 Series | 5 | 4.556 | 1.1 | 0.03 |
| ABX Micros/Minos/ABC VET | 6 | 4.392 | 3.3 | 0.07 |
| ABX Pentra 120/Nexus Series | 5 | 4.618 | 2.0 | 0.05 |
| Sysmex XE-2100 | 6 | 4.407 | 2.5 | 0.06 |
| Beckman Coulter Ac. T 5 series | 4 | 4.493 | 0.9 | 0.03 |
| Beckman Coulter LH700 Series | 3 | 4.563 | 0.1 | 0.00 |
| Abbott Cell-Dyn 3700 | 2 | 4.580 | 0.6 | 0.02 |




TDPA = 5.5%




RIQAS

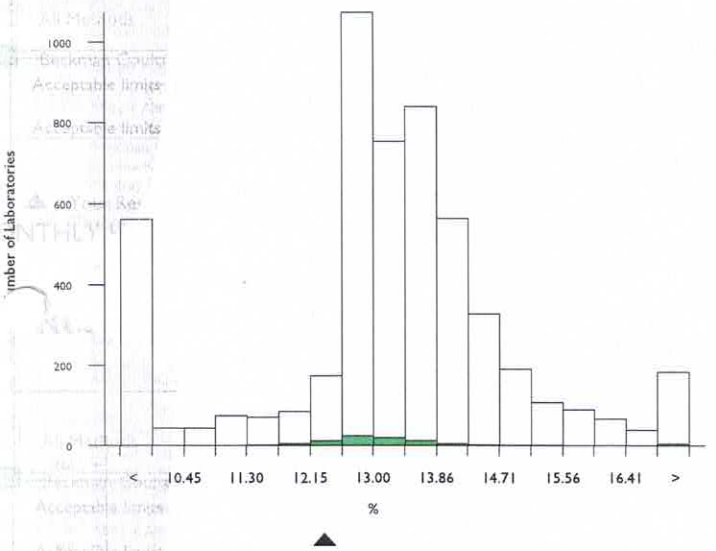
UKAS PROFICIENCY TESTING

# Red Cell Dist. Width CV, %

| | N | Mean | CV% | $U_m$ | SDPA | Exc. |
|---|---|---|---|---|---|---|
| All Methods | 4598 | 13.434 | 8.5 | 0.02 | 0.71 | 683 |
| Beckman Coulter Ac. T 5 series | 73 | 13.034 | 3.8 | 0.07 | 0.69 | 10 |

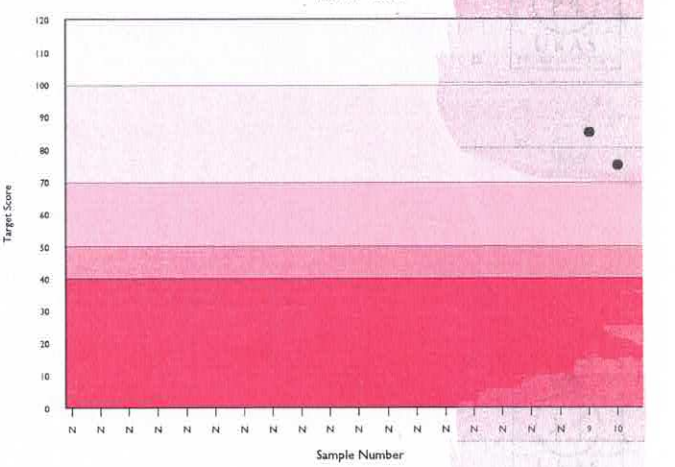
| | | | |
|---|---|---|---|
| ▲ Your Result | 12.400 | SDI | -0.92 |
| | | RMSDI | Too Few |
| Mean for Comparison | 13.034 | TS | 75 |
| | | RMTS | Too Few |
| | | %DEV | -4.9 |
| | | RM%DEV | Too Few |

| | |
|---|---|
| Acceptable limits derived from Biological Variation | N/A |
| ceptable limits of performance for RIQAS | 8.70% |

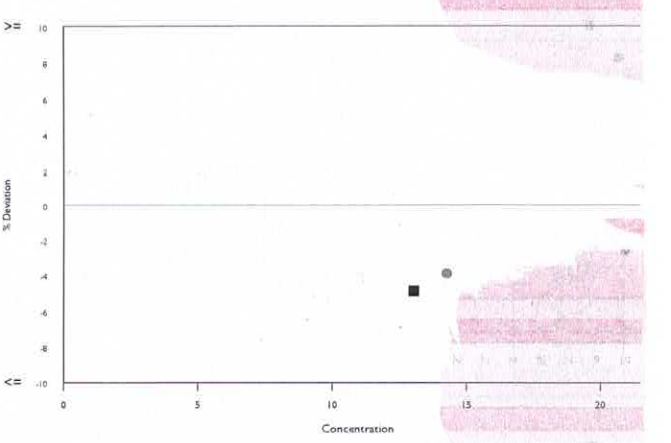



| Method | N | Mean | CV% | $U_m$ |
|---|---|---|---|---|
| Sysmex XN Series | 1057 | 13.105 | 3.1 | 0.02 |
| Abbott Cell-Dyn Ruby | 291 | 9.404 | 11.3 | 0.08 |
| Sysmex XS series | 243 | 13.543 | 2.5 | 0.03 |
| Sysmex XN-L Series (330/350/450/550) | 229 | 13.231 | 6.7 | 0.07 |
| Beckman Coulter DxH 600/800/900 Series | 232 | 13.926 | 1.8 | 0.02 |
| Nihon Kohden Celltac Alpha | 226 | 13.883 | 4.6 | 0.05 |
| Mindray BC 1000/2000/3000 series | 224 | 13.372 | 3.9 | 0.04 |
| Sysmex XT series | 201 | 13.534 | 2.3 | 0.03 |
| Siemens/Bayer Advia 120/2120 | 217 | 14.415 | 6.0 | 0.07 |
| Sysmex XP Series | 193 | 8.738 | 8.6 | 0.07 |
| Mindray BC-6000/6200/6600/6800/6800Plus | 151 | 13.774 | 1.4 | 0.02 |
| Horiba ABX Pentra 60/80/XLR | 108 | 13.098 | 6.6 | 0.10 |
| Sysmex KX 21 | 84 | 8.876 | 7.4 | 0.09 |
| Mindray BC 5100/5180/5300/5380/5390 | 94 | 13.344 | 3.7 | 0.06 |
| ABX Micros/Minos/ABC VET | 80 | 12.318 | 5.7 | 0.10 |
| Beckman Coulter Ac. T 5 series | 73 | 13.034 | 3.8 | 0.07 |
| Nihon Kohden Celltac E/Es | 67 | 15.567 | 5.8 | 0.14 |
| Mindray BC 5000/5150/5130/5140 | 56 | 15.076 | 2.0 | 0.05 |
| Beckman Coulter LH700 Series | 60 | 14.033 | 1.9 | 0.04 |
| Medonic M series/Swelab | 56 | 11.767 | 7.7 | 0.15 |
| ABX Pentra 120/Nexus Series | 45 | 14.719 | 3.7 | 0.10 |


TDPA = 8.7%








RIQAS

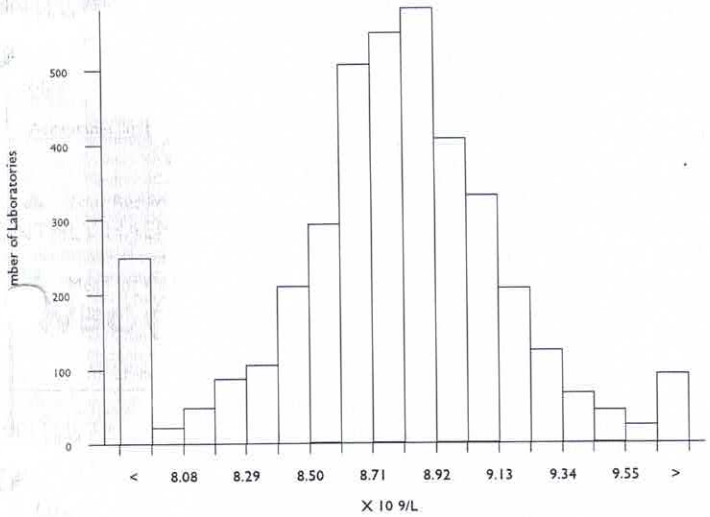
UKAS PROFICIENCY TESTING

# WBC (Optical Count), X 10 9/L

| | N | Mean | CV% | $U_m$ | SDPA | Exc. |
|---|---|---|---|---|---|---|
| All Methods | 3570 | 8.817 | 3.2 | 0.01 | 0.38 | 371 |
| Beckman Coulter Ac. T 5 series | 5 | 9.000 | 3.8 | 0.19 | 0.43a | 0 |

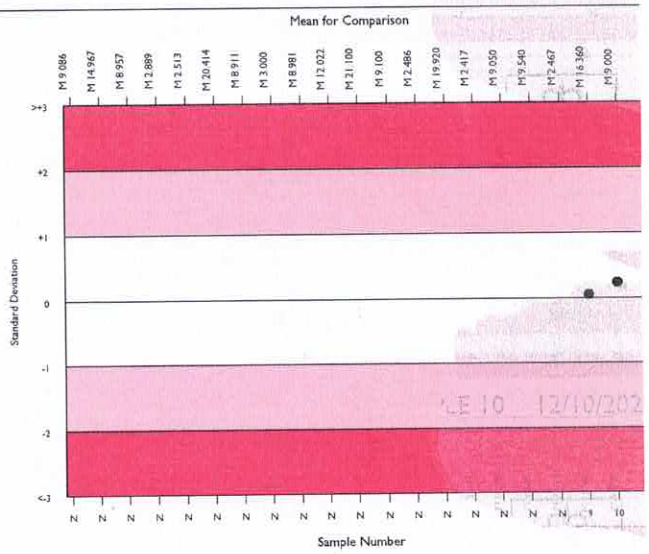
| | | | |
|---|---|---|---|
| ▲ Your Result | 9.100 | SDI | 0.23 |
| | | RMSDI | Too Few |
| Mean for Comparison | 9.000 | TS | 120 |
| | | RMTS | Too Few |
| | | %DEV | 1.1 |
| | | RM%DEV | Too Few |

| | |
|---|---|
| Acceptable limits derived from Biological Variation | N/A |
| ceptable limits of performance for RIQAS | 7.10% |

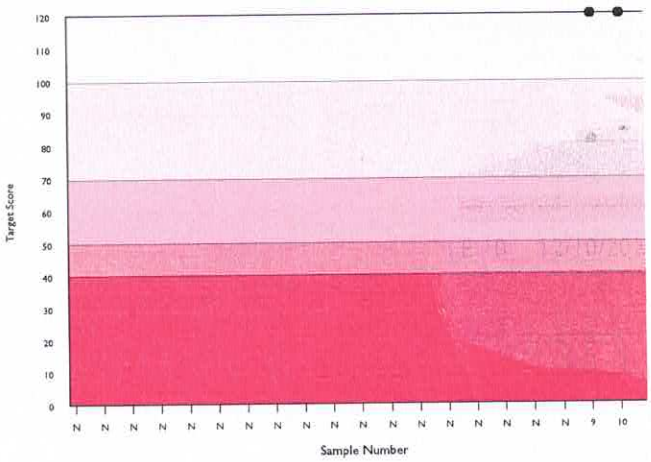


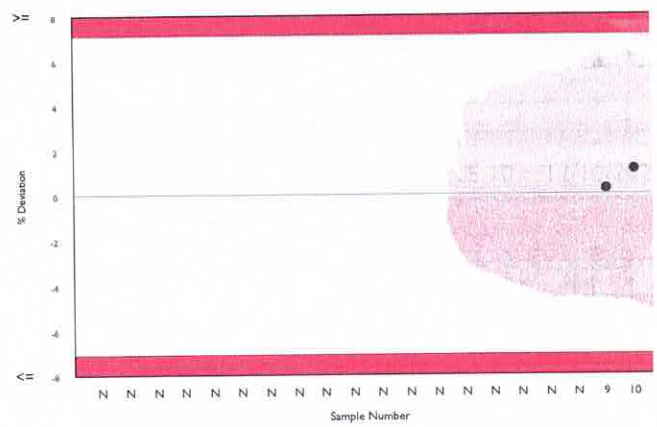

▲

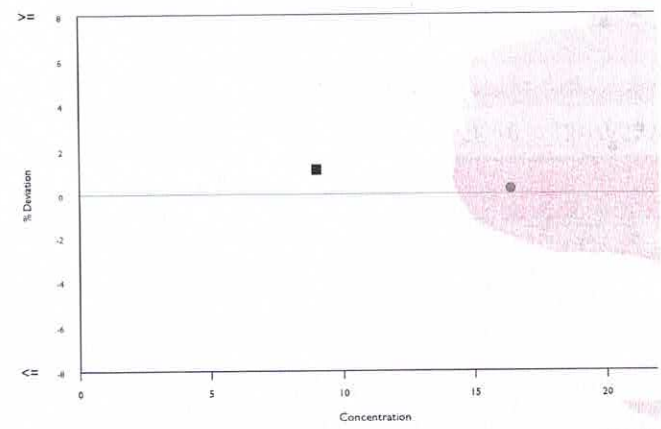
| Method | N | Mean | CV% | $U_m$ |
|---|---|---|---|---|
| Sysmex XN Series | 1160 | 8.778 | 2.2 | 0.01 |
| Abbott Cell-Dyn Ruby | 404 | 8.954 | 2.5 | 0.01 |
| Manual methods | 293 | 8.724 | 7.1 | 0.05 |
| Sysmex XS Series | 305 | 8.976 | 2.6 | 0.02 |
| Siemens/Bayer Advia 120/2120 | 291 | 8.547 | 3.3 | 0.02 |
| Sysmex XT Series | 261 | 8.938 | 2.4 | 0.02 |
| Sysmex XN-L Series (330/350/450/550) | 233 | 8.943 | 2.2 | 0.02 |
| Mindray BC-6000/6200/6600/6800/6800Plus | 181 | 8.622 | 2.2 | 0.02 |
| Mindray BC 5000/5150/5130/5140 | 66 | 8.746 | 2.7 | 0.04 |
| Abbott Cell-Dyn 3200 | 48 | 9.055 | 3.0 | 0.05 |
| Mindray BC 5600/5800 | 46 | 8.907 | 2.9 | 0.05 |
| Abbott Alinity hq | 37 | 8.794 | 2.6 | 0.05 |
| Beckman Coulter DxH 600/800/900 Series | 33 | 8.980 | 1.9 | 0.04 |
| Sysmex XE-2100 | 32 | 8.577 | 3.7 | 0.07 |
| Sysmex KX21 | 24 | 8.678 | 2.9 | 0.06 |
| ABX Pentra 120/Nexus Series | 21 | 8.928 | 4.9 | 0.12 |
| Abbott Cell-Dyn Sapphire | 19 | 9.022 | 2.3 | 0.06 |
| Horiba ABX Pentra 60/80/XLR | 14 | 8.743 | 4.9 | 0.14 |
| Sysmex XE-5000 | 11 | 8.454 | 2.2 | 0.07 |
| ABX Micros/Minos/ABC VET | 11 | 8.714 | 2.4 | 0.08 |
| Horiba Yumizen H500/ 550 | 10 | 8.281 | 4.1 | 0.14 |




TDPA = 7.1%




RIQAS

UKAS PROFICIENCY TESTING

| Analyte | Mean for Comparison | Your Result | SDI | RMSDI | %DEV | RM%DEV | TS | RMTS | Performance |
|---|---|---|---|---|---|---|---|---|---|
| emoglobin | 13.812 | 13.900 | 0.26 | Too Few | 0.6 | Too Few | 120 | Too Few | |
| ematocrit (HCT) | 37.969 | 38.400 | 0.31 | Too Few | 1.1 | Too Few | 120 | Too Few | |
| H | 30.770 | 30.500 | -0.24 | Too Few | -0.9 | Too Few | 120 | Too Few | |
| HC | 36.404 | 36.100 | -0.19 | Too Few | -0.8 | Too Few | 120 | Too Few | |
| V | 84.245 | 84.000 | -0.08 | Too Few | -0.3 | Too Few | 120 | Too Few | |
| an Platelet Volume | 9.569 | 9.500 | -0.11 | Too Few | -0.7 | Too Few | 120 | Too Few | |
| eletcrit | 0.222 | No Result | | Too Few | | Too Few | | Too Few | |
| elets (Optical Count) | 249.200 | 251.000 | 0.04 | Too Few | 0.7 | Too Few | 120 | Too Few | |
| C (Optical Count) | 4.493 | 4.550 | 0.38 | Too Few | 1.3 | Too Few | 113 | Too Few | |
| Cell Dist. Width CV | 13.034 | 12.400 | -0.92 | Too Few | -4.9 | Too Few | 75 | Too Few | |
| C (Optical Count) | 9.000 | 9.100 | 0.23 | Too Few | 1.1 | Too Few | 120 | Too Few | |

| ORMSDI N/A | ORM%DEV N/A | ORMTS N/A |
|---|---|---|

Proteus laboratories
Bophelong Med Centre

S/No: AX 26057
Tel: 011 737 2518

**Sample ID** sample 10/13 **Run Date/Time** 08/10/2020 17:24:12 **Collect Date/Time**
**Cass.** **Pos.** **Flagging Set** Proteus Standard **Panel** CBC/DIFF **Rerun** No
**Location** **Physician** **Operator** Supervisor
**Sample Comment**

**Patient ID**
**Last Name** **Date of Birth** **Age** **Gender** Unknown
**First Name**
**Patient Comment**

| | | | Range |
|---|---|---|---|
| WBC | 9.1 | $10^3/\mu L$ | 4.0 / 11.0 |
| RBC | 4.55 | $10^6/\mu L$ | 4.00 / 6.20 |
| HGB | 13.9 | g/dL | 11.0 / 18.8 |
| HCT | 38.4 | % | 35.0 / 55.0 |
| MCV | 84 | fL | 80 / 100 |
| MCH | 30.5 | pg | 26.0 / 34.0 |
| MCHC | 36.1HH | g/dL | 31.0 / 35.0 |
| RI | 12.4 | % | 10.0 / 20.0 |
| PLT | 251 | $10^3/\mu L$ | 150 / 400 |
| MPV | 9.5 | fL | 6.0 / 10.0 |

| | | | Range |
|---|---|---|---|
| NE | 3.0LL | % | 50.0 / 80.0 |
| LY | 1.4LL | % | 25.0 / 50.0 |
| MO | 0.1LL | % | 2.0 / 10.0 |
| EO | 95.6HH | % | 0.0 / 5.0 |
| BA | .... | % | 0.0 / 2.0 |

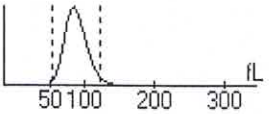
| | | | Range |
|---|---|---|---|
| NE# | 0.27LL | $10^3/\mu L$ | 2.00 / 8.00 |
| LY# | 0.12LL | $10^3/\mu L$ | 1.00 / 5.00 |
| MO# | 0.01L | $10^3/\mu L$ | 0.10 / 1.00 |
| EO# | 8.71HH | $10^3/\mu L$ | 0.00 / 0.40 |
| BA# | .... | $10^3/\mu L$ | 0.00 / 0.20 |

**Flags and Messages**

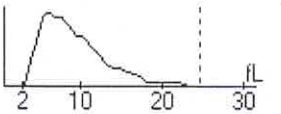
Analytical Messages
DB
BASO+
Interpretive Messages
Lymphopenia
Neutropenia
Eosinophilia
Cold Agglutinin

**Result Comment**

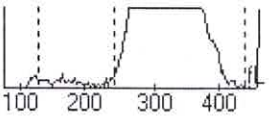

RBC




PLT




WBC/BASO




**Microscopic Examination**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Neutrophils | | Metamyelocytes | | Anisocytosis | | Retics | |
| Bands | | Myelocytes | | Hypochromia | | Sed. Rate | |
| Lymphocytes | | Promyelocytes | | Polychromasia | | | |
| Monocyte | | Blast | | Poikilocytosis | | | |
| Eosinophils | | Atyp. Lymph | | Microcytosis | | | |
| Basophils | | NRBCs | | Macrocytosis | | | |

**Comments**

**Requested by**
**Reviewed by**

**Raw Data**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WBC1 | 6742 | WBC2 | 6537 | LY# | 66 | SL | 23 | FNL | 5 | WBC | 6466 |
| RBC1 | 24569 | RBC2 | 24789 | MO# | 3 | ATL | 0 | FMN | 1 | RA# | 5757 |
| HCT1 | 1855729 | HCT2 | 1838027 | NE# | 144 | UM | 0 | FNE | 30 | DIFF# | 4868 |
| PLT1 | 18574 | PLT2 | 18564 | EO# | 4655 | LN | 17 | UN | 0 | CO% | 98.1 |
| HGBB | 3831 | HGBM | 1981 | DB | 753 | C127 | 24 | IMM | 24 | | |

Out of Action Range XXX Out of Patient Range XX.X

RAW DATA REPORT FOR INVESTIGATIONAL USE ONLY