

Laboratorio Emotest s.r.l.

# MONTHLY HAEMATOLOGY

CYCLE 16 SAMPLE 10

## Explanation of codes used in this report

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

Authorised by: Sally Picton, RIQAS Manager

Issue No: 1

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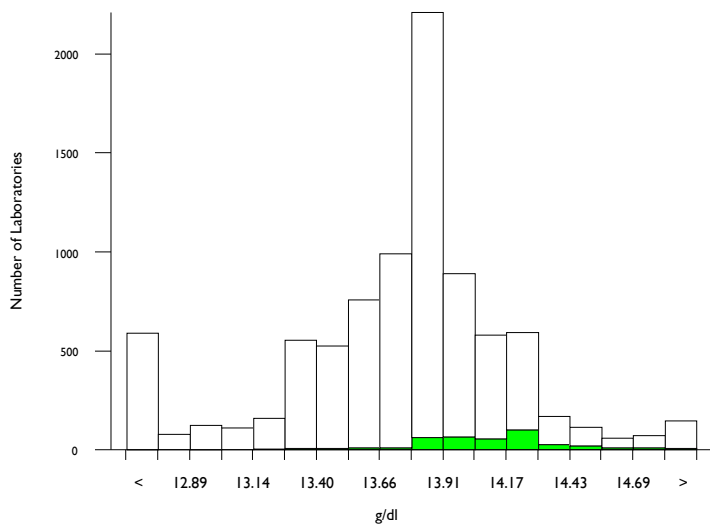
# Haemoglobin, g/dl

- All Methods
- Abbott Cell-Dyn Ruby

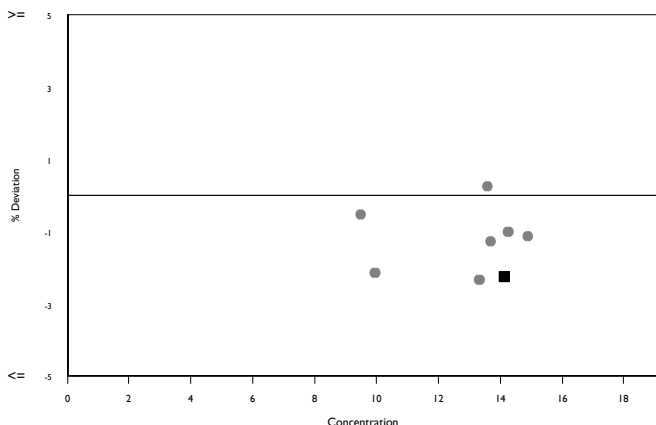
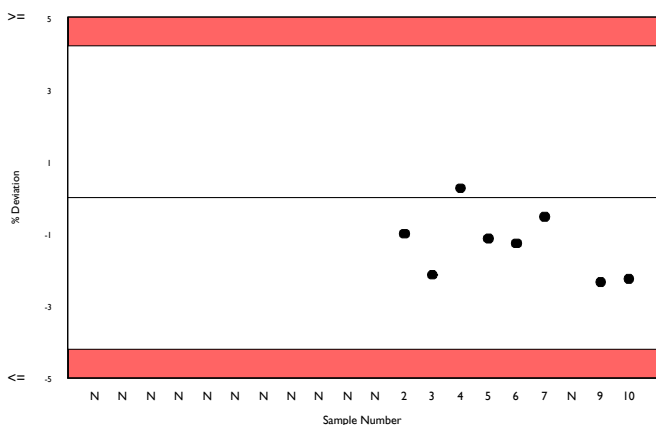
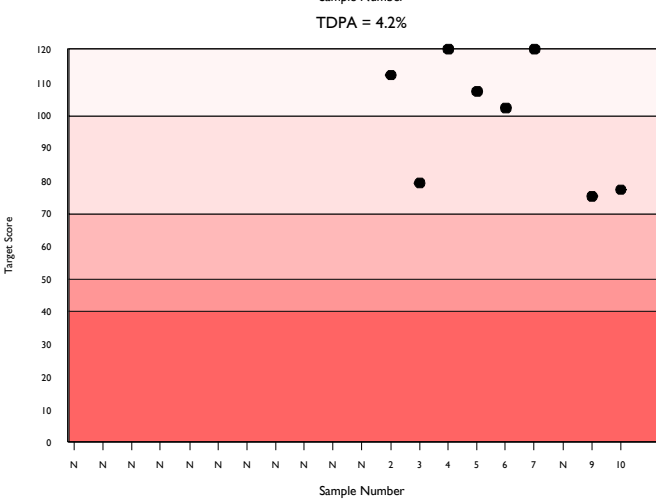
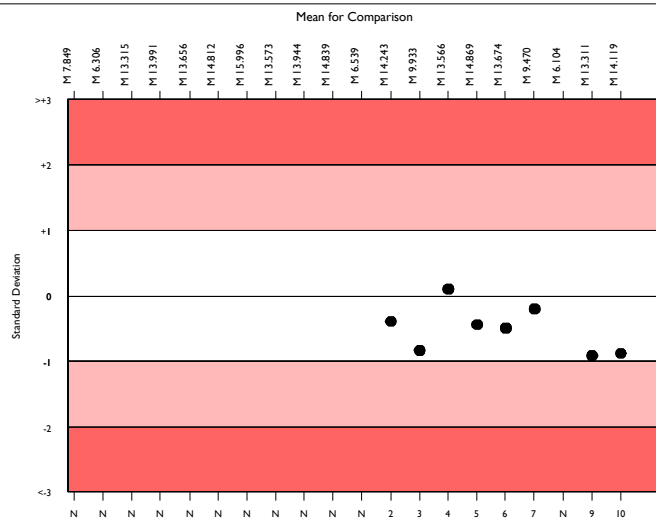
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	8012	13.791	2.5	0.00	0.35	711
Abbott Cell-Dyn Ruby	366	14.119	1.7	0.02	0.36	29

<b>▲ Your Result</b>	13.800	SDI	-0.88
		RMSDI	Too Few
<b>■ Mean for Comparison</b>	14.119	TS	77
		RMTS	Too Few
		%DEV	-2.3
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	4.20%



Method	N	Mean	CV%	U <sub>m</sub>
Sysmex XN Series	1867	13.853	1.2	0.00
Sysmex XN-L Series (330/350/450/550)	702	13.698	1.0	0.01
Mindray BC-6000/6200/6600/6800/6800Plus	428	13.871	1.1	0.01
Abbott Cell-Dyn Ruby	366	14.119	1.7	0.02
Beckman Coulter DxH 600/800/900 Series	357	13.401	1.2	0.01
Sysmex XP Series	332	13.580	1.6	0.02
Mindray BC 1000/2000/3000 series	285	13.839	2.7	0.03
Nihon Kohden Celltac Alpha/plus	275	14.155	2.4	0.03
Siemens/Bayer Advia 120/2120	240	14.131	1.5	0.02
Sysmex XS series	239	13.790	1.4	0.02
Calculated from HCT	229	12.168	3.3	0.03
Mindray BC 5100/5180/5300/5380/5390	188	13.837	1.8	0.02
Manual Methods	161	12.264	2.8	0.03
Mindray BC 5000/5150/5140/5130/5120	143	13.707	1.8	0.03
Mindray BC 10/20/30	132	13.982	1.9	0.03
ABX Micros/Minos/ABC VET	125	13.561	3.0	0.05
Horiba Yumizen H500/ 550	125	13.562	1.5	0.02
Beckman Coulter DxH 500 Series	123	12.780	2.1	0.03
Sysmex XT series	122	13.755	1.3	0.02
Nihon Kohden Celltac E/Es	90	14.072	1.8	0.03
Sysmex KX 21	93	13.594	1.9	0.03

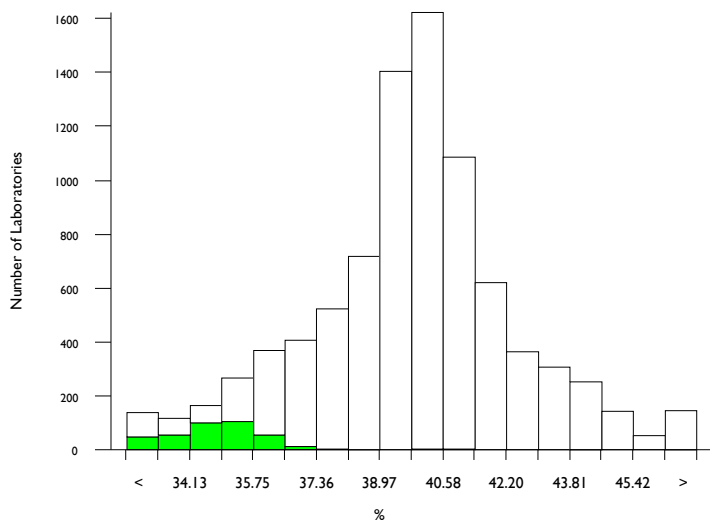


# Haematocrit (HCT), %

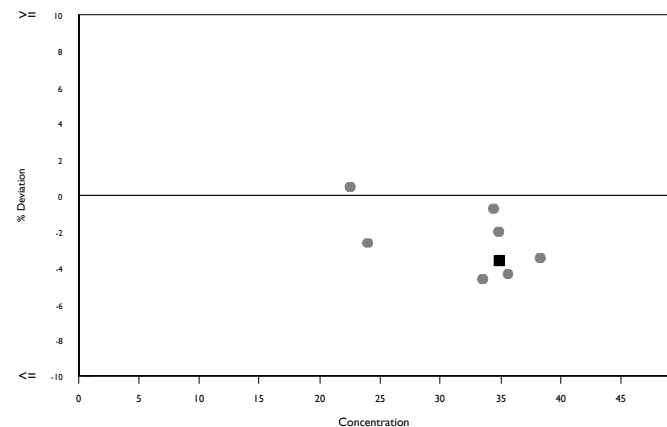
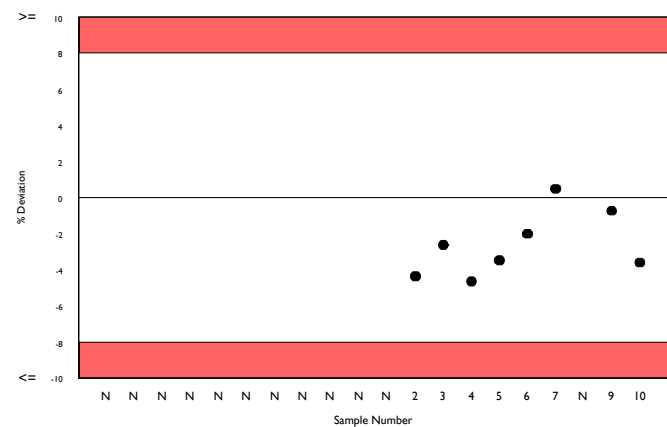
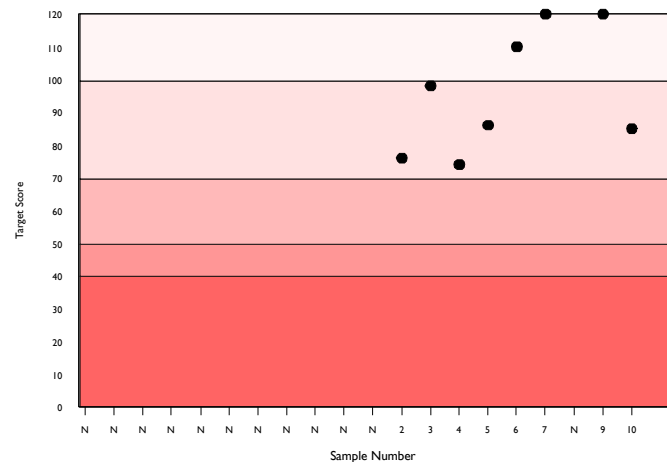
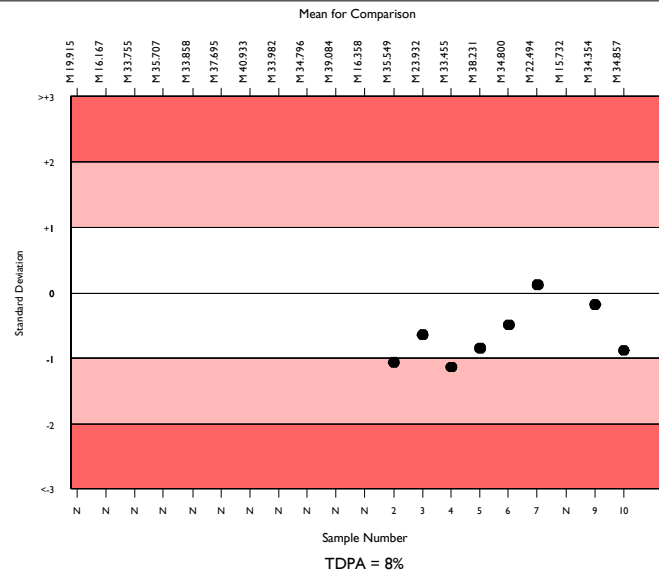
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	8089	39.783	5.4	0.03	1.62	599
Abbott Cell-Dyn Ruby	354	34.857	2.7	0.06	1.42	35

▲ Your Result	33.600	SDI	-0.88
		RMSDI	Too Few
■ Mean for Comparison	34.857	TS	85
		RMTS	Too Few
		%DEV	-3.6
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	8.00%



Method	N	Mean	CV%	U <sub>m</sub>
Sysmex XN Series	1825	39.803	1.8	0.02
Sysmex XN-L Series (330/350/450/550)	679	39.641	2.1	0.04
Mindray BC-6000/6200/6600/6800/6800Plus	425	43.893	1.8	0.05
Abbott Cell-Dyn Ruby	354	34.857	2.7	0.06
Beckman Coulter DxH 600/800/900 Series	348	40.887	1.4	0.04
Sysmex XP Series	327	37.135	2.8	0.07
Mindray BC 1000/2000/3000 series	288	40.670	3.4	0.10
Nihon Kohden Celltac Alpha/plus	270	41.370	3.4	0.11
Microhematocrit Centrifugation	254	36.873	2.8	0.08
Siemens/Bayer Advia 120/2120	242	35.800	2.5	0.07
Sysmex XS series	227	39.842	2.2	0.07
Mindray BC 5100/5180/5300/5380/5390	189	41.819	3.0	0.11
Manual Methods	178	36.947	2.5	0.09
Mindray BC 5000/5150/5140/5130/5120	136	41.125	2.6	0.11
Mindray BC 10/20/30	130	40.630	2.9	0.13
ABX Micros/Minos/ABC VET	125	39.405	3.5	0.15
Sysmex XT series	122	39.892	1.9	0.09
Horiba Yumizen H500/ 550	124	38.898	2.7	0.12
Beckman Coulter DxH 500 Series	123	40.479	2.7	0.12
Nihon Kohden Celltac E/Es	93	42.249	2.5	0.14
Sysmex KX 21	91	37.297	3.1	0.15

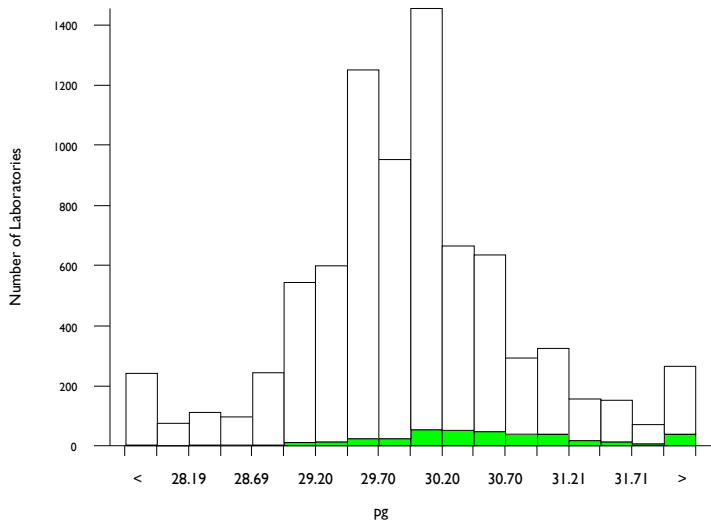


# MCH, pg

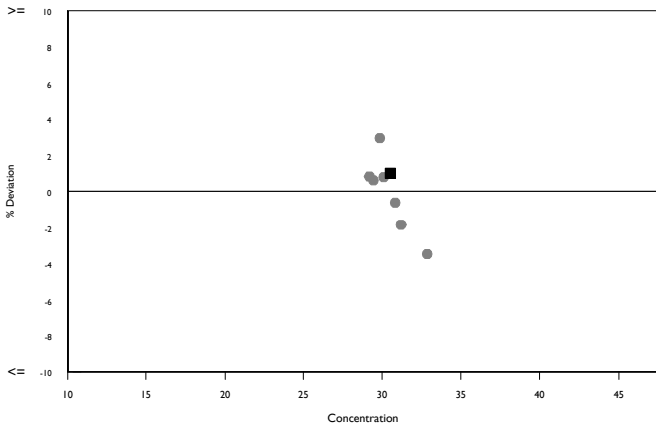
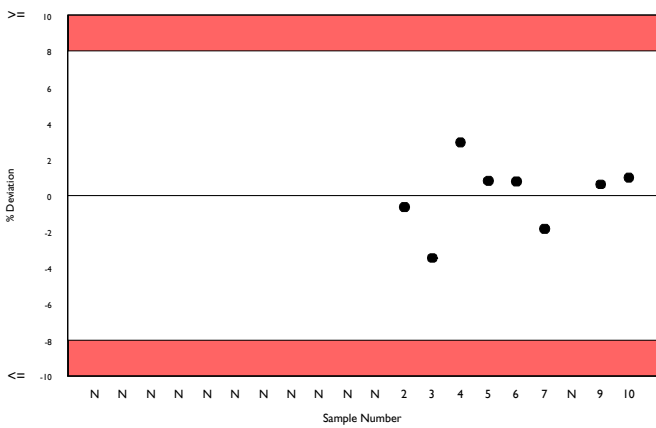
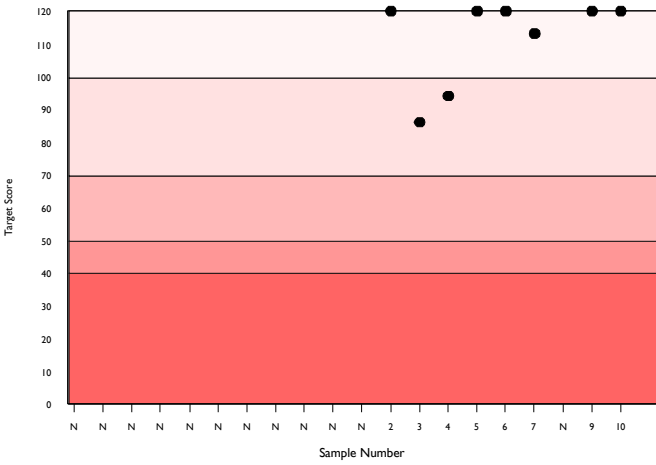
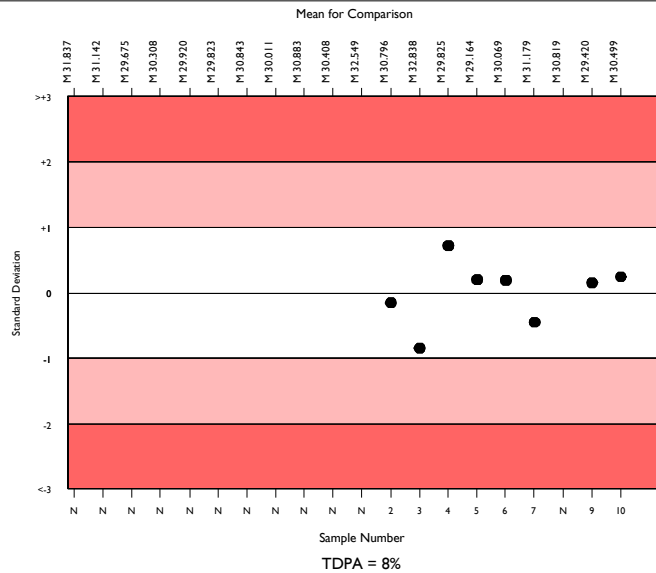
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	7473	29.955	2.2	0.01	1.22	653
Abbott Cell-Dyn Ruby	352	30.499	2.3	0.05	1.24	35

▲ Your Result	30.800	SDI	0.24
		RMSDI	Too Few
■ Mean for Comparison	30.499	TS	120
		RMTS	Too Few
		%DEV	1.0
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	8.00%



Method	N	Mean	CV%	U <sub>m</sub>
Sysmex XN Series	1837	29.867	1.3	0.01
Sysmex XN-L Series (330/350/450/550)	691	29.810	1.2	0.02
Mindray BC-6000/6200/6600/6800/6800Plus	427	29.905	1.4	0.02
Abbott Cell-Dyn Ruby	352	30.499	2.3	0.05
Beckman Coulter DxH 600/800/900 Series	354	29.519	1.5	0.03
Sysmex XP Series	318	29.805	1.8	0.04
Mindray BC 1000/2000/3000 series	283	29.738	2.9	0.06
Nihon Kohden Celltac Alpha/plus	272	30.348	2.8	0.06
Siemens/Bayer Advia 120/2120	233	30.744	2.1	0.05
Sysmex XS series	228	29.885	1.5	0.04
Mindray BC 5100/5180/5300/5380/5390	184	30.292	1.7	0.05
Mindray BC 5000/5150/5140/5130/5120	133	30.175	2.2	0.07
Mindray BC 10/20/30	132	30.964	2.6	0.09
Beckman Coulter DxH 500 Series	125	27.700	2.4	0.07
Horiba Yumizen H500/ 550	126	29.294	2.2	0.07
Sysmex XT series	123	29.624	1.6	0.05
ABX Micros/Minos/ABC VET	118	29.662	3.2	0.11
Nihon Kohden Celltac E/Es	94	30.321	2.3	0.09
Horiba ABX Pentra 60/80/XLR	91	29.900	1.5	0.06
Sysmex KX 21	91	29.888	2.5	0.10
Boule Medonic/ Swelab 3-part diff	81	31.181	1.7	0.07

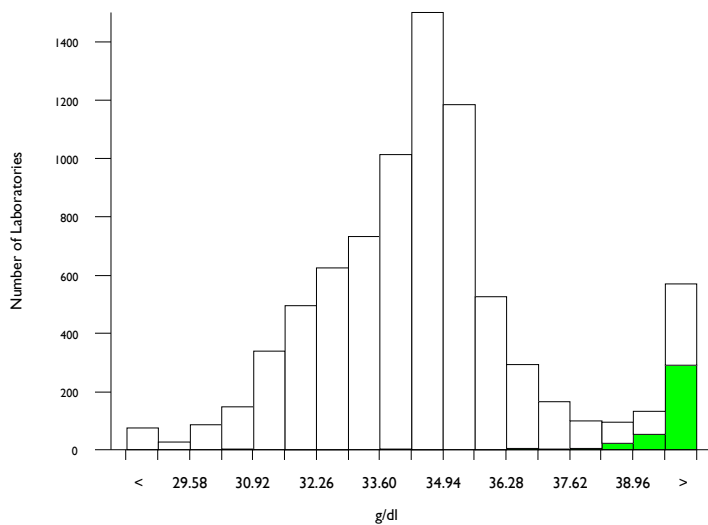


# MCHC, g/dl

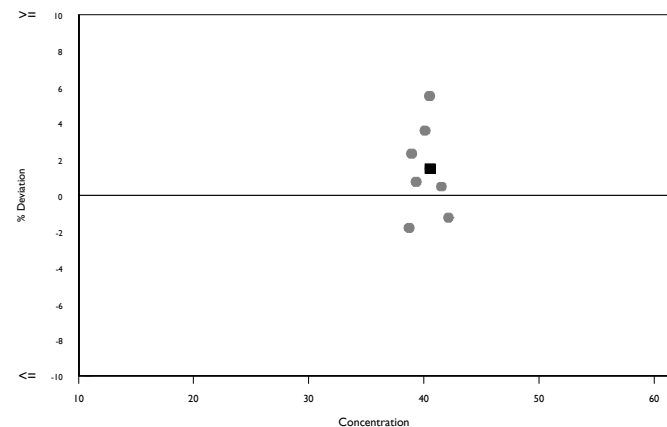
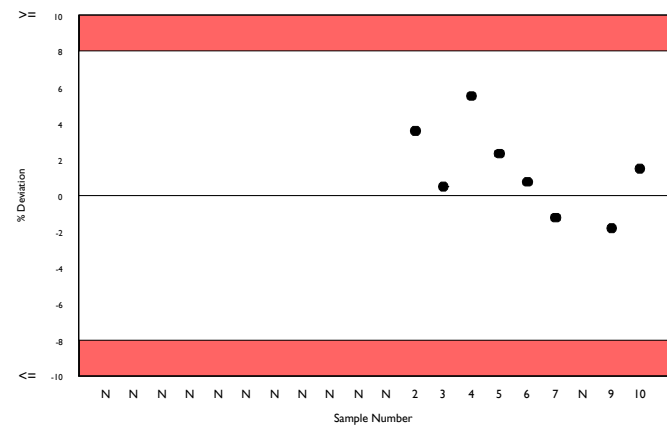
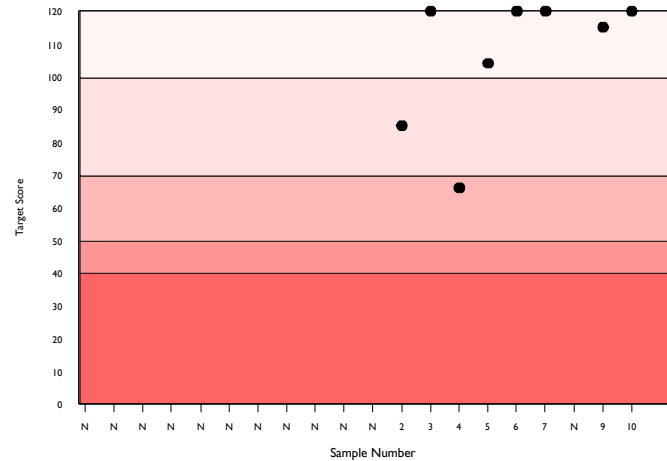
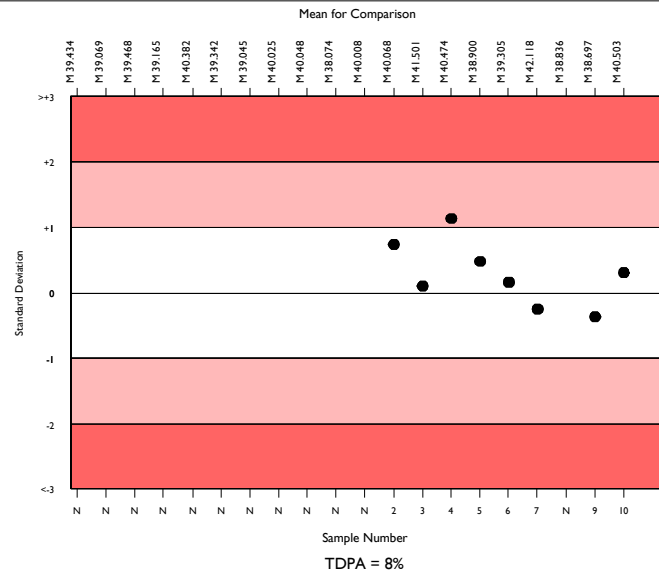
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	7396	34.275	5.2	0.03	1.67	709
Abbott Cell-Dyn Ruby	350	40.503	3.0	0.08	1.97	36

▲ Your Result	41.100	SDI	0.30
		RMSDI	Too Few
■ Mean for Comparison	40.503	TS	120
		RMTS	Too Few
		%DEV	1.5
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	8.00%



Method	N	Mean	CV%	U <sub>m</sub>
Sysmex XN Series	1827	34.797	1.9	0.02
Sysmex XN-L Series (330/350/450/550)	698	34.571	2.1	0.03
Mindray BC-6000/6200/6600/6800/6800Plus	424	31.586	1.7	0.03
Abbott Cell-Dyn Ruby	350	40.503	3.0	0.08
Beckman Coulter DxH 600/800/900 Series	347	32.817	1.6	0.03
Sysmex XP Series	326	36.472	3.0	0.08
Mindray BC 1000/2000/3000 series	277	33.936	4.0	0.10
Nihon Kohden Celltac Alpha/plus	259	34.218	3.4	0.09
Siemens/Bayer Advia 120/2120	240	39.438	2.7	0.09
Sysmex XS series	220	34.638	2.1	0.06
Mindray BC 5100/5180/5300/5380/5390	187	33.224	3.0	0.09
Mindray BC 5000/5150/5140/5130/5120	135	33.335	2.8	0.10
Mindray BC 10/20/30	132	34.364	3.1	0.12
Sysmex XT series	126	34.609	2.2	0.08
Beckman Coulter DxH 500 Series	121	31.532	2.8	0.10
Horiba Yumizen H500/ 550	121	34.731	2.8	0.11
ABX Micros/Minos/ABC VET	118	34.413	3.4	0.13
Sysmex KX 21	85	36.318	3.0	0.15
Nihon Kohden Celltac E/Es	91	33.462	2.9	0.13
Horiba ABX Pentra 60/80/XLR	87	36.046	2.1	0.10
Boule Medonic/ Swelab 3-part diff	78	36.221	3.1	0.16



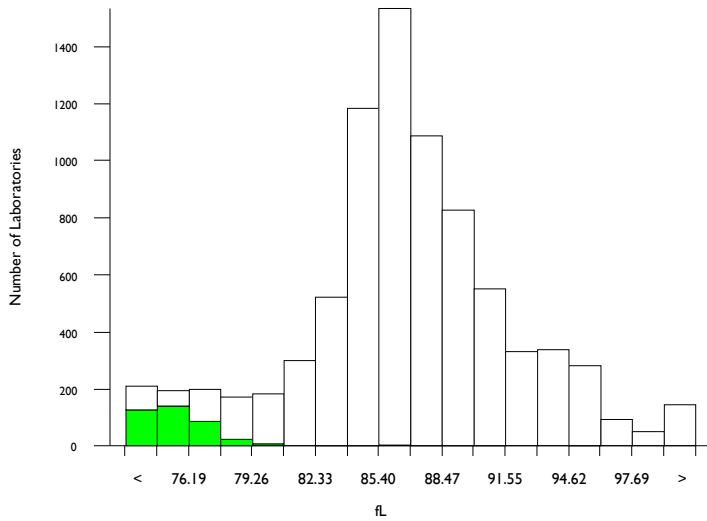
# MCV, fL

- All Methods
- Abbott Cell-Dyn Ruby

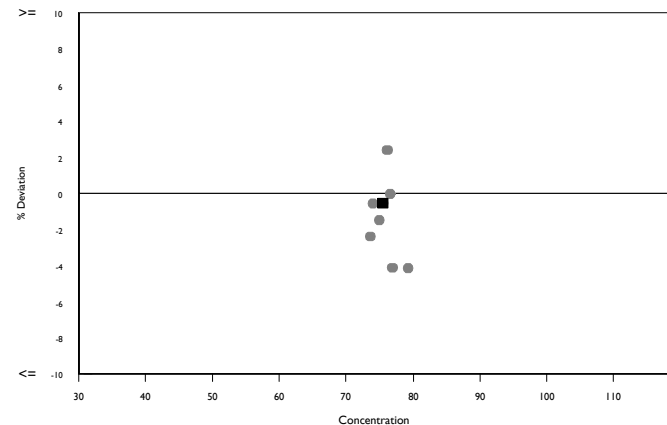
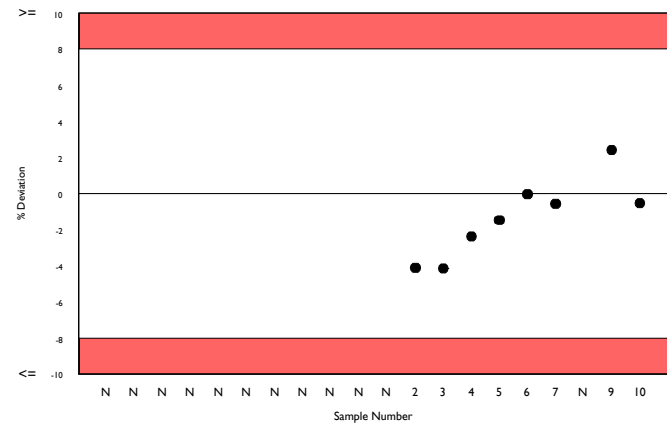
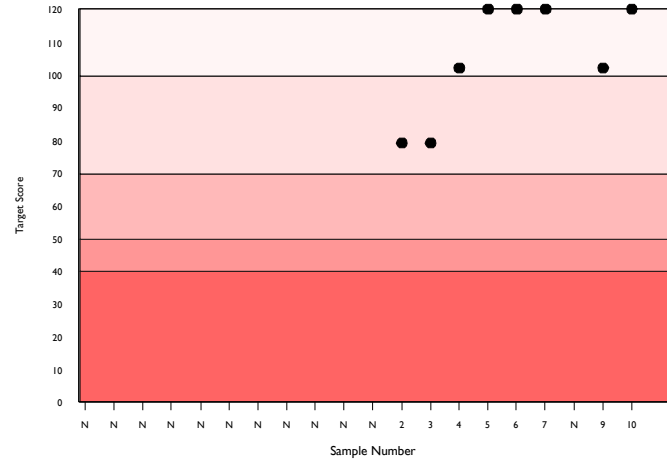
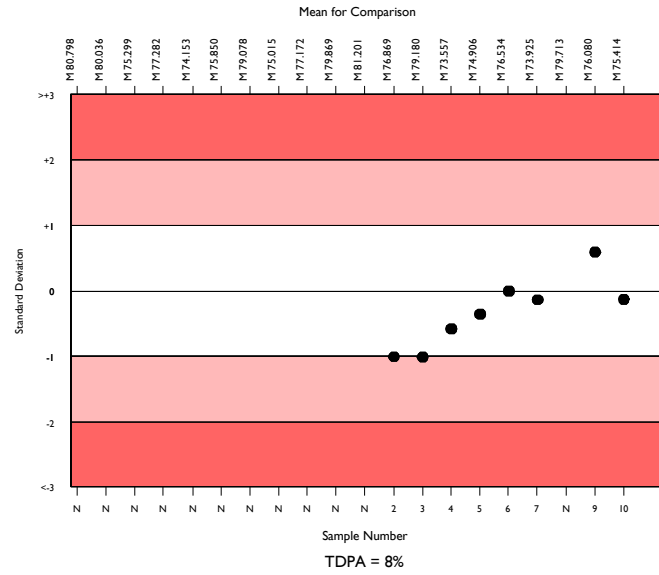
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All Methods	7541	86.944	4.7	0.06	3.55	645
Abbott Cell-Dyn Ruby	354	75.414	2.0	0.10	3.08	35

▲ Your Result	75.000	SDI	-0.13
		RMSDI	Too Few
■ Mean for Comparison	75.414	TS	120
		RMTS	Too Few
		%DEV	-0.5
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	8.00%



Method	N	Mean	CV%	U <sub>m</sub>
Sysmex XN Series	1824	85.802	1.5	0.04
Sysmex XN-L Series (330/350/450/550)	672	86.159	1.6	0.06
Mindray BC-6000/6200/6600/6800/6800Plus	420	94.661	1.2	0.07
Abbott Cell-Dyn Ruby	354	75.414	2.0	0.10
Beckman Coulter DxH 600/800/900 Series	347	89.884	1.0	0.06
Sysmex XP Series	329	81.707	2.2	0.12
Mindray BC 1000/2000/3000 series	278	87.883	2.8	0.18
Nihon Kohden Celltac Alpha/plus	276	88.702	2.4	0.16
Siemens/Bayer Advia 120/2120	239	77.978	2.0	0.12
Sysmex XS series	223	86.466	1.7	0.12
Mindray BC 5100/5180/5300/5380/5390	184	91.268	2.3	0.20
Mindray BC 5000/5150/5140/5130/5120	133	90.501	2.1	0.20
Mindray BC 10/20/30	128	89.942	1.9	0.19
Sysmex XT series	119	86.064	1.4	0.14
ABX Micros/Minos/ABC VET	118	85.859	2.4	0.23
Horiba Yumizen H500/ 550	121	84.102	2.1	0.20
Beckman Coulter DxH 500 Series	118	88.006	1.7	0.17
Nihon Kohden Celltac E/Es	90	90.465	2.2	0.26
Sysmex KX 21	88	82.104	2.4	0.26
Horiba ABX Pentra 60/80/XLR	88	82.822	1.8	0.20
Boule Medonic/ Swelab 3-part diff	77	86.310	2.4	0.30

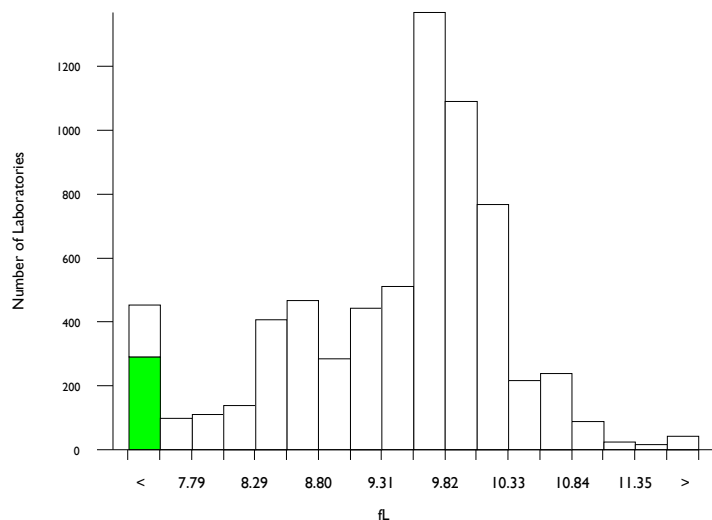


# Mean Platelet Volume, fL

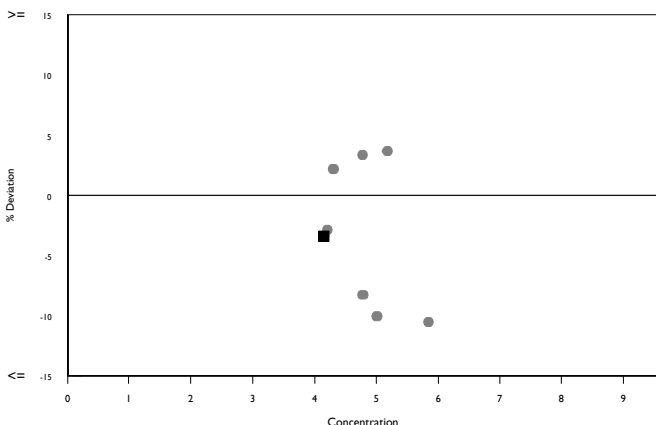
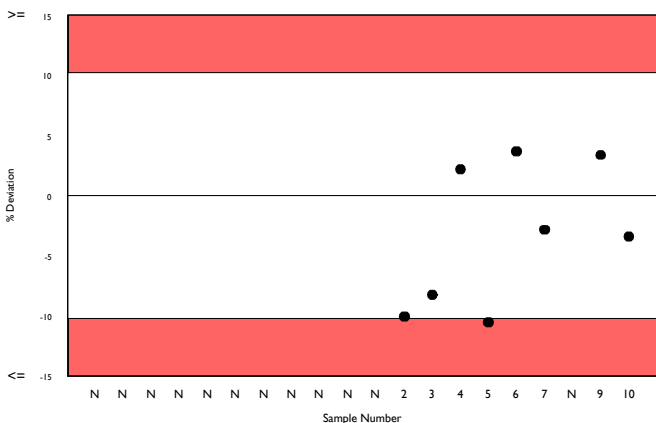
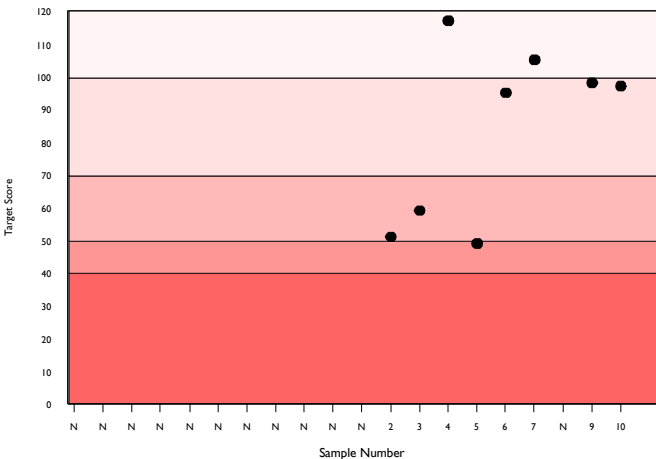
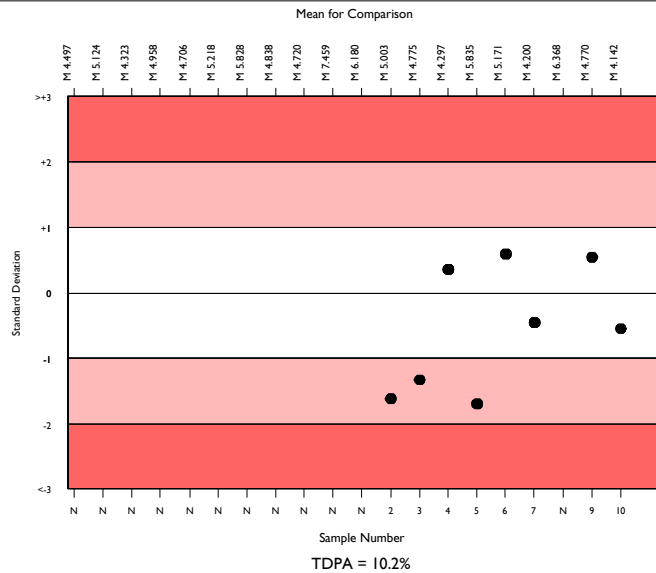
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	6141	9.574	7.1	0.01	0.59	621
Abbott Cell-Dyn Ruby	272	4.142	6.5	0.02	0.26	26

▲ Your Result	4.000	SDI	-0.55
		RMSDI	Too Few
■ Mean for Comparison	4.142	TS	97
		RMTS	Too Few
		%DEV	-3.4
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	10.20%



Method	N	Mean	CV%	U <sub>m</sub>
Sysmex XN Series	1556	9.831	2.0	0.01
Sysmex XN-L Series (330/350/450/550)	481	9.929	2.1	0.01
Mindray BC-6000/6200/6600/6800/6800Plus	384	10.453	3.3	0.02
Beckman Coulter DxH 600/800/900 Series	280	8.528	2.3	0.01
Sysmex XP Series	273	9.536	2.4	0.02
Abbott Cell-Dyn Ruby	272	4.142	6.5	0.02
Mindray BC 1000/2000/3000 series	268	9.051	6.0	0.04
Nihon Kohden Celltac Alpha/plus	234	8.635	5.1	0.04
Sysmex XS series	198	9.972	2.8	0.02
Siemens/Bayer Advia 120/2120	178	10.338	5.3	0.05
Mindray BC 5100/5180/5300/5380	124	9.000	4.4	0.04
Mindray BC 5000/5150/5140/5130/5120	123	10.091	2.6	0.03
Horiba Yumizen H500/ 550	110	10.235	4.1	0.05
Mindray BC 10/20/30	108	9.738	2.2	0.03
Sysmex XT series	108	9.678	2.7	0.03
Beckman Coulter DxH 500 Series	98	8.832	3.4	0.04
ABX Micros/Minos/ABC VET	89	8.427	5.2	0.06
Nihon Kohden Celltac E/Es	69	7.521	2.8	0.03
Horiba ABX Pentra 60/80/XLR	74	9.561	3.6	0.05
Sysmex KX 21	75	9.401	2.8	0.04
Boule Medonic/ Swelab 3-part diff	72	9.096	7.5	0.10

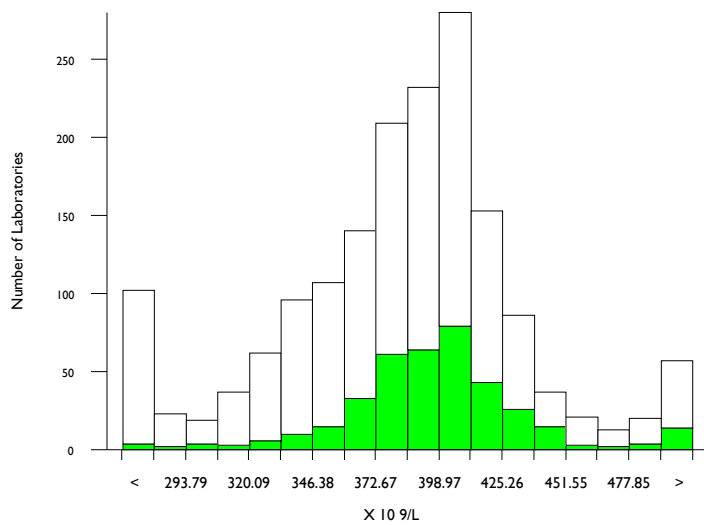


# Platelets (Optical Count), X 10<sup>9</sup>/L

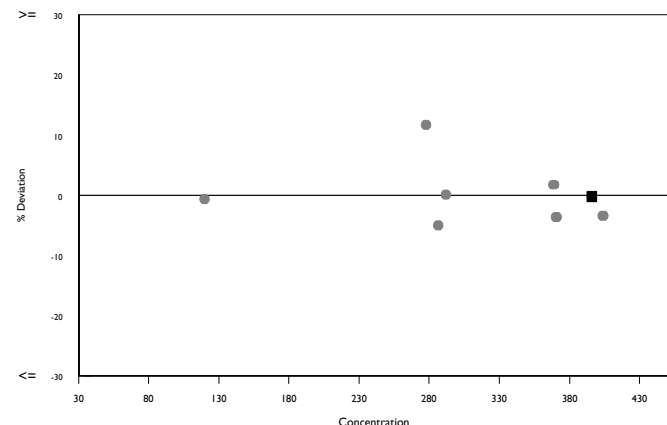
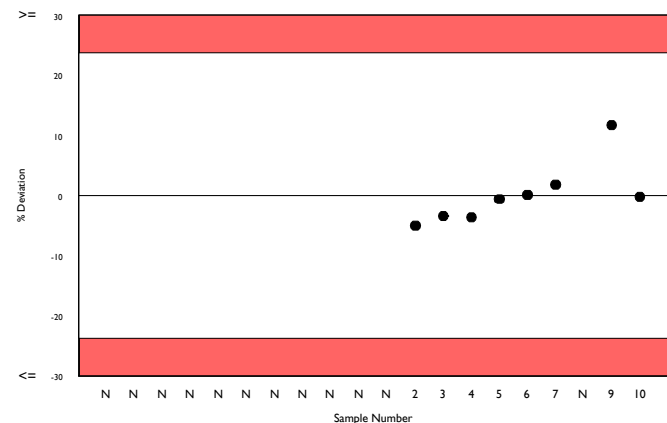
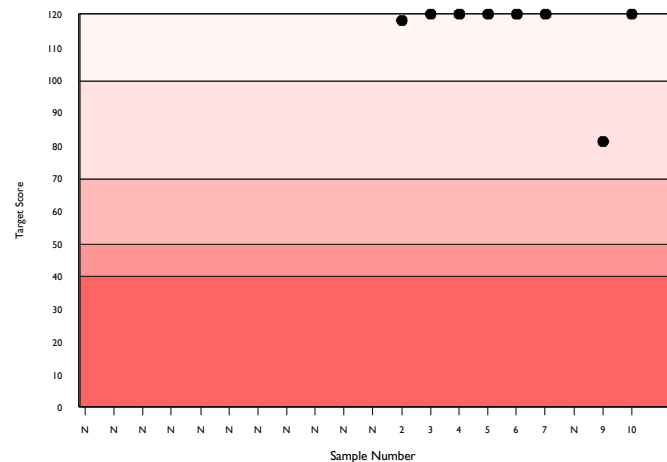
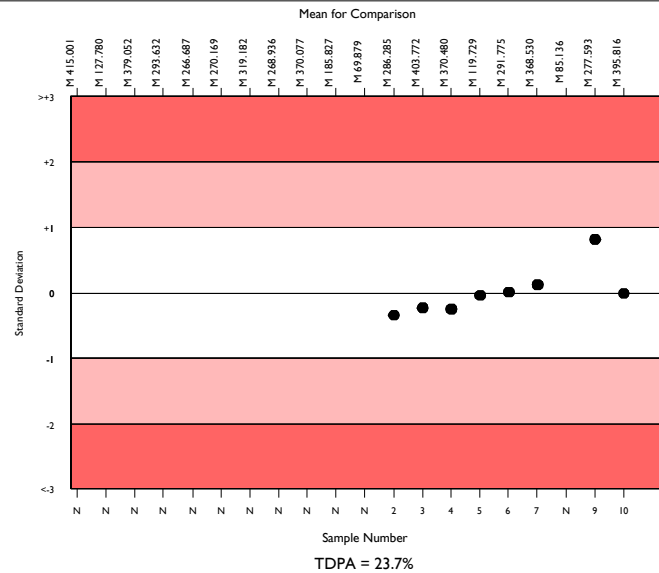
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	1507	385.824	9.1	1.13	55.59	187
Abbott Cell-Dyn Ruby	353	395.816	6.4	1.70	57.03	35

▲ Your Result	395.000	SDI RMSDI	-0.01 Too Few
■ Mean for Comparison	395.816	TS RMTS	120 Too Few
		%DEV RM%DEV	-0.2 Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	23.70%



Method	N	Mean	CV%	U <sub>m</sub>
Manual Methods	328	359.918	12.1	3.00
Abbott Cell-Dyn Ruby	353	395.816	6.4	1.70
Siemens/Bayer Advia 120/2120	236	357.500	7.3	2.14
Sysmex XN Series PLT-O	154	431.382	11.1	4.80
Mindray BC-6000/6200/6600/6800/6800Plus	80	402.850	6.7	3.78
Abbott Alinity hq	75	399.573	4.4	2.52
Sysmex XN-L Series (330/350/450/550)	61	400.247	4.3	2.77
Sysmex XS Series	46	391.913	3.4	2.44
Beckman Coulter DxH 600/800/900 Series	26	410.013	2.3	2.31
Sysmex XT Series	23	386.174	5.8	5.83
Abbott Cell-Dyn 3200	20	366.513	8.8	9.01
Horiba Yumizen H500/ 550	17	427.000	4.3	5.61
Sysmex XN Series PLT-F	13	395.077	3.7	5.03
Abbott Cell-Dyn Sapphire	12	402.667	5.2	7.51
Mindray BC-700 series	10	415.100	3.0	4.95
Beckman Coulter DxH 500 Series	9	422.556	6.9	12.08
Sysmex KX2I	8	417.250	4.7	8.58
UDIHEM-D	7	378.000	3.5	6.29
Horiba ABX Pentra 60/80/XLR	7	405.857	7.0	13.39
ABX Micros/Minos/ABC VET	6	367.500	7.3	13.76
Horiba Yumizen H1500/ 2500	6	424.167	2.3	5.00



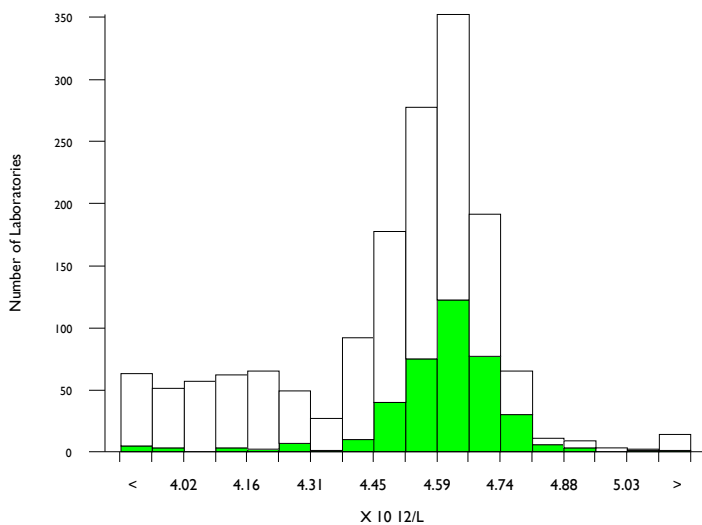


# RBC (Optical Count), X 10<sup>12</sup>/L

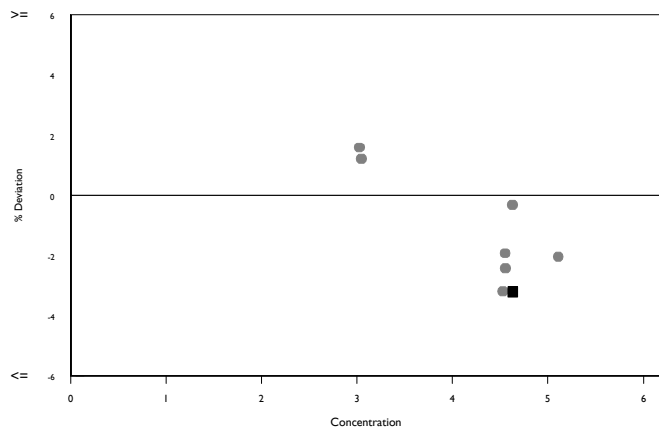
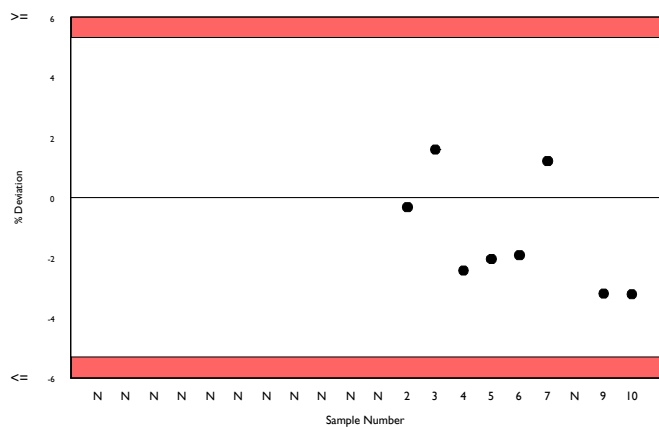
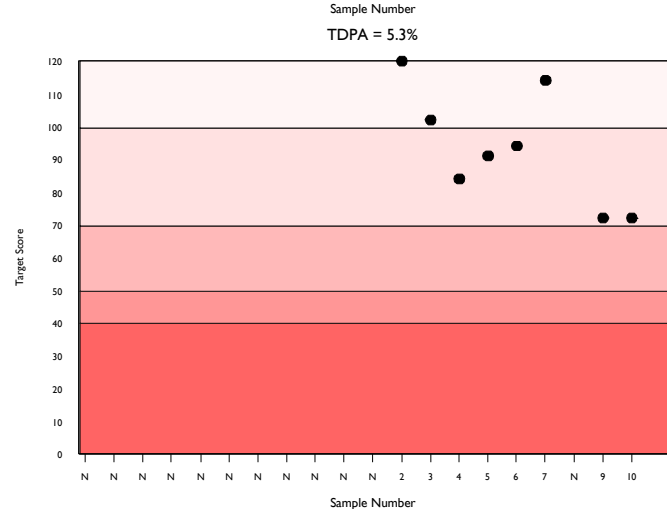
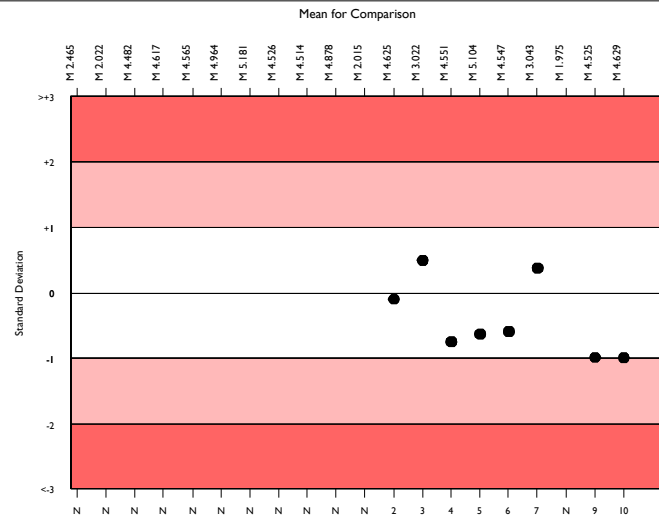
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	1436	4.526	4.2	0.01	0.15	132
Abbott Cell-Dyn Ruby	355	4.629	1.9	0.01	0.15	31

▲ Your Result	4.480	SDI	-1.00
		RMSDI	Too Few
■ Mean for Comparison	4.629	TS	72
		RMTS	Too Few
		%DEV	-3.2
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	5.30%



Method	N	Mean	CV%	U <sub>m</sub>
Abbott Cell-Dyn Ruby	355	4.629	1.9	0.01
Manual Methods	293	4.107	3.4	0.01
Siemens/Bayer Advia 120/2120	238	4.585	1.8	0.01
Sysmex XN Series	193	4.606	1.8	0.01
Abbott Alinity iq	72	4.514	1.5	0.01
Mindray BC-6000/6200/6600/6800/6800Plus	60	4.589	2.3	0.02
Sysmex XS Series	52	4.602	1.6	0.01
Beckman Coulter DxH 600/800/900 Series	26	4.539	1.2	0.01
Sysmex XT Series	23	4.642	1.9	0.02
Abbott Cell-Dyn 3200	22	4.561	2.5	0.03
Horiba Yumizen H500/ 550	17	4.638	1.7	0.02
Sysmex KX21	10	4.497	1.4	0.03
Horiba ABX Pentra 60/80/XLR	8	4.628	2.5	0.05
Abbott Cell-Dyn Sapphire	8	4.691	1.7	0.04
Beckman Coulter DxH 500 Series	8	4.588	2.5	0.05
UDIHEM-D	8	4.654	3.4	0.07
ABX Micros/Minos/ABC VET	5	4.652	3.9	0.10
ABX Pentra 120/Nexus Series	4	4.570	1.9	0.06
Avantor Benesphera H-51	3	4.593	3.0	0.10
Shenzhen Dymind DH36	2	5.165	15.5	0.71
Shenzhen Dymind DH615	2	4.520	1.9	0.07

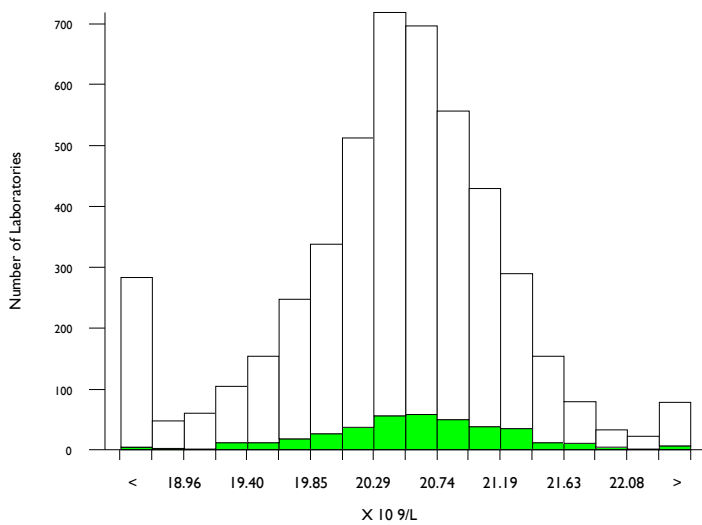


# WBC (Optical Count), X 10<sup>9</sup>/L

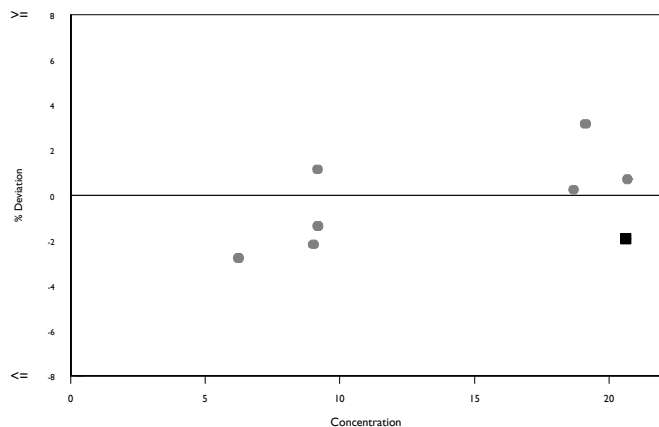
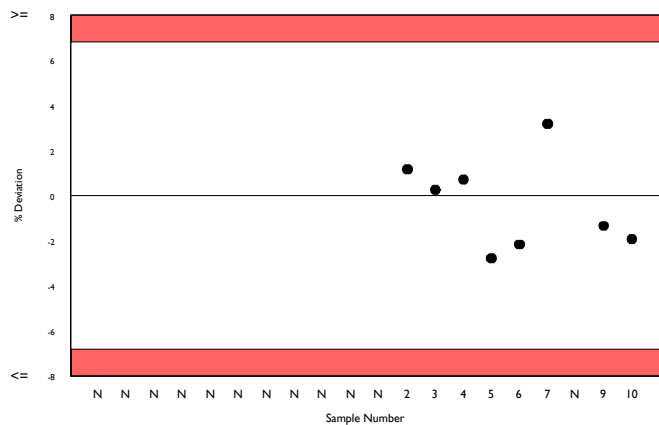
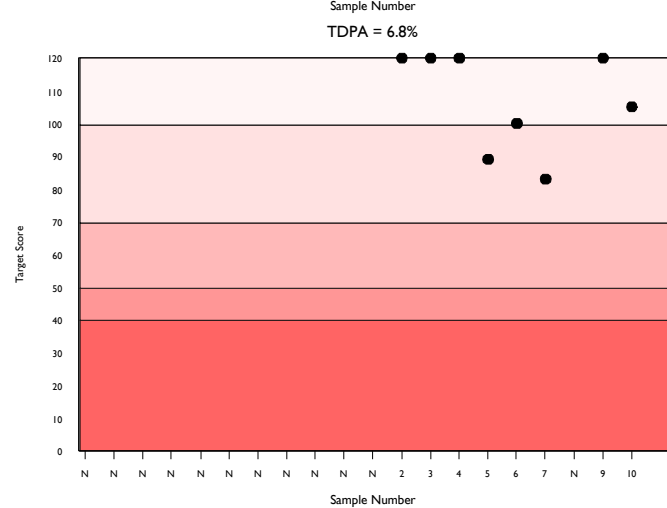
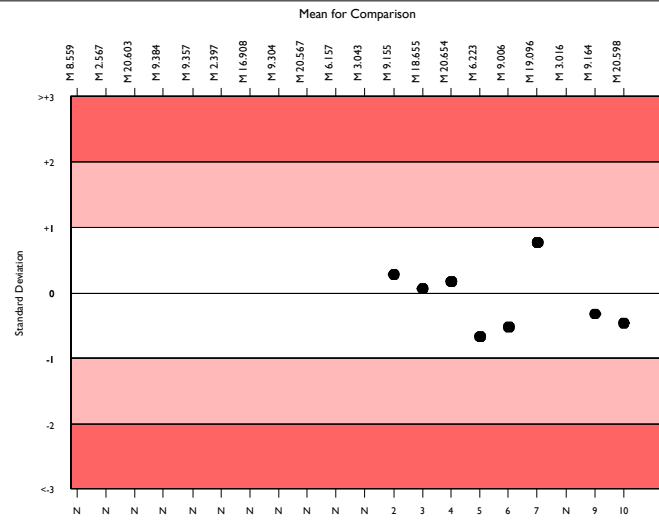
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	4405	20.522	2.9	0.01	0.85	398
Abbott Cell-Dyn Ruby	361	20.598	2.7	0.04	0.85	27

▲ Your Result	20.200	SDI	-0.47
		RMSDI	Too Few
■ Mean for Comparison	20.598	TS	105
		RMTS	Too Few
		%DEV	-1.9
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	6.80%



Method	N	Mean	CV%	U <sub>m</sub>
Sysmex XN Series	1724	20.585	2.0	0.01
Sysmex XN-L Series (330/350/450/550)	428	21.018	1.8	0.02
Manual methods	380	19.876	5.4	0.07
Mindray BC-6000/6200/6600/6800/6800Plus	409	20.184	1.9	0.02
Abbott Cell-Dyn Ruby	361	20.598	2.7	0.04
Siemens/Bayer Advia 120/2120	231	19.852	3.3	0.05
Sysmex XS Series	227	20.966	2.3	0.04
Sysmex XT Series	113	20.790	2.4	0.06
Mindray BC 5000/5150/5140/5130/5120	115	20.348	2.2	0.05
Abbott Alinity iq	74	20.389	2.3	0.07
Mindray BC 5600/5800	51	20.716	3.4	0.12
Mindray BC-700 series	40	21.049	3.1	0.13
Beckman Coulter DxH 600/800/900 Series	34	20.149	2.3	0.10
Horiba Yumizen H500/ 550	20	19.286	3.3	0.18
Abbott Cell-Dyn 3200	22	20.283	3.8	0.21
Beckman Coulter DxH 500 Series	17	20.659	2.8	0.17
Horiba ABX Pentra 60/80/XLR	17	20.231	3.1	0.19
Sysmex KX21	16	19.929	4.2	0.26
Abbott Cell-Dyn Sapphire	13	20.692	2.6	0.18
Shenzhen Dymind DF50	10	21.142	2.1	0.18
Mindray BC 5200/5500	8	20.568	2.3	0.21



Analyte	Mean for Comparison	Your Result	SDI	RMSDI	%DEV	RM%DEV	TS	RMTS	Performance
Haemoglobin	14.119	13.800	-0.88	Too Few	-2.3	Too Few	77	Too Few	
Haematocrit (HCT)	34.857	33.600	-0.88	Too Few	-3.6	Too Few	85	Too Few	
MCH	30.499	30.800	0.24	Too Few	1.0	Too Few	120	Too Few	
MCHC	40.503	41.100	0.30	Too Few	1.5	Too Few	120	Too Few	
MCV	75.414	75.000	-0.13	Too Few	-0.5	Too Few	120	Too Few	
Mean Platelet Volume	4.142	4.000	-0.55	Too Few	-3.4	Too Few	97	Too Few	
Platelets (Optical Count)	395.816	395.000	-0.01	Too Few	-0.2	Too Few	120	Too Few	
RBC (Optical Count)	4.629	4.480	-1.00	Too Few	-3.2	Too Few	72	Too Few	
WBC (Optical Count)	20.598	20.200	-0.47	Too Few	-1.9	Too Few	105	Too Few	

ORMSDI N/A

ORM%DEV N/A

ORMTS N/A

END OF REPORT