

Proteus Laboratories

MONTHLY HAEMATOLOGY

CYCLE 14 SAMPLE 2

Explanation of codes used in this report

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



Authorised by: Stephen Doherty, RIQAS Manager

Issue No: 1

Issue Date: 11/02/2021

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RIOAS 

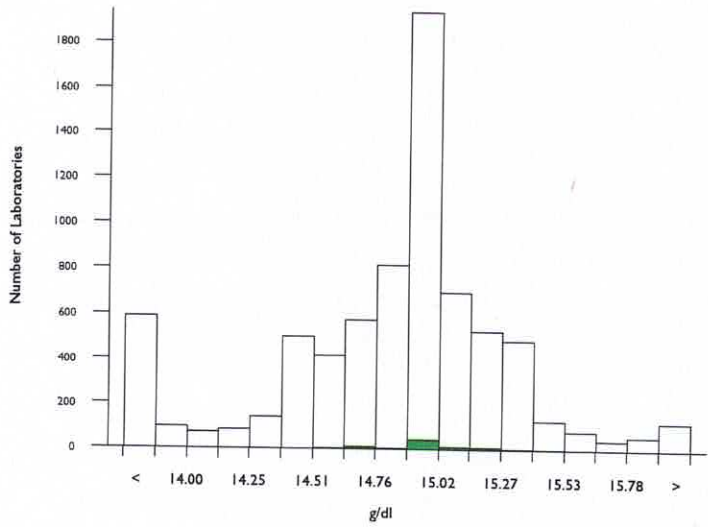


Haemoglobin, g/dl

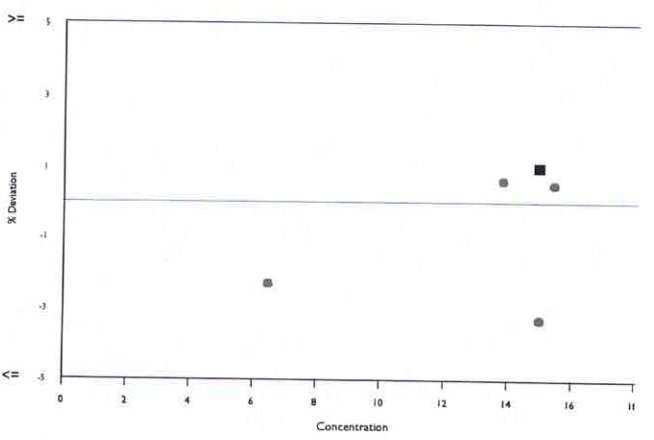
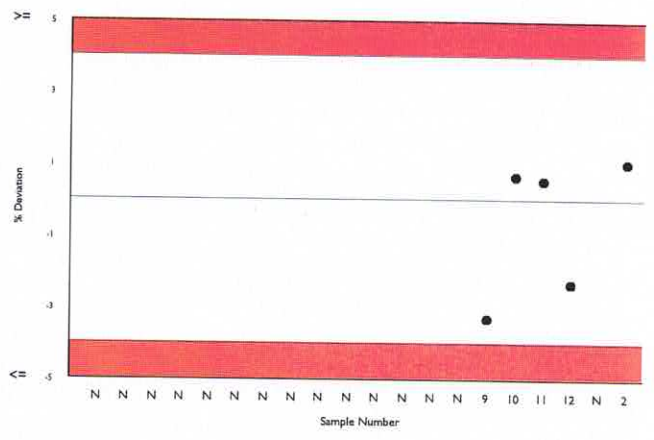
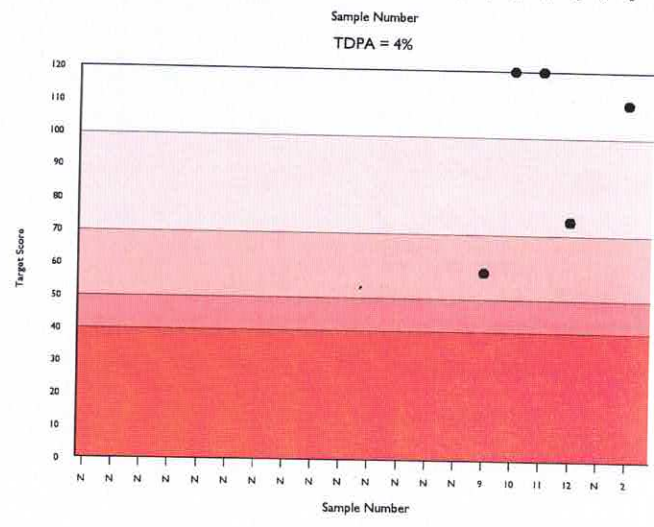
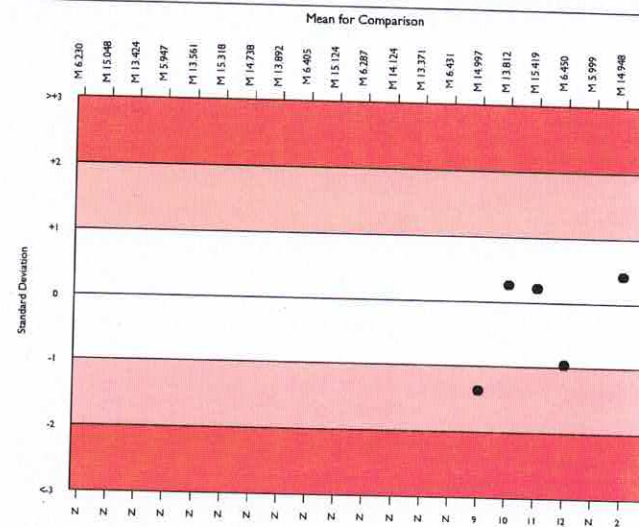
	N	Mean	CV%	U _m	SDPA	Exc.
☐ All Methods	6693	14.894	2.3	0.01	0.36	673
■ Beckman Coulter Ac. T 5 series	78	14.948	1.1	0.02	0.36	10

▲ Your Result	15.100	SDI	0.42
		RMSDI	Too Few
■ Mean for Comparison	14.948	TS	110
		RMTS	Too Few
		%DEV	1.0
		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	1338	14.960	1.1	0.01
Abbott Cell-Dyn Ruby	394	15.149	1.6	0.02
Sysmex XN-L Series (330/350/450/550)	355	14.835	0.9	0.01
Sysmex XS series	314	14.916	1.2	0.01
Beckman Coulter DxH 600/800/900 Series	305	14.539	1.1	0.01
Mindray BC 1000/2000/3000 series	285	14.917	2.8	0.03
Siemens/Bayer Advia 120/2120	290	15.033	1.5	0.02
Nihon Kohden Celltac Alpha	259	15.043	2.3	0.03
Sysmex XP Series	243	14.613	2.1	0.02
Sysmex XT series	238	14.814	1.2	0.01
Mindray BC-6000/6200/6600/6800/6800Plus	241	15.014	1.2	0.01
ABX Micros/Minos/ABC VET	158	14.668	2.9	0.04
Manual Methods	163	13.474	4.3	0.06
Horiba ABX Pentra 60/80/XLR	141	14.935	1.4	0.02
Calculated from HCT	134	13.317	3.1	0.04
Sysmex KX 21	133	14.687	1.9	0.03
Mindray BC 5100/5180/5300/5380/5390	114	14.925	1.7	0.03
Nihon Kohden Celltac E/Es	87	15.013	1.6	0.03
Mindray BC 5000/5150/5140/5130/5120	86	14.921	1.5	0.03
Beckman Coulter Ac. T 5 series	78	14.948	1.1	0.02
Horiba Yumizen H500/ 550	74	14.773	1.4	0.03

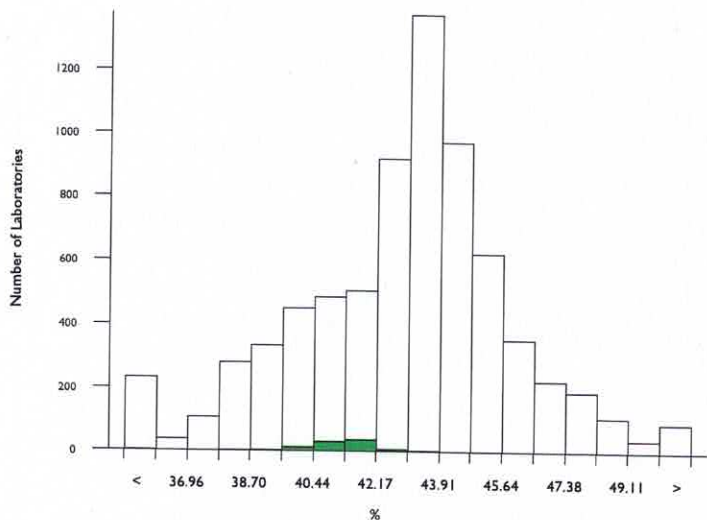


Haematocrit (HCT), %

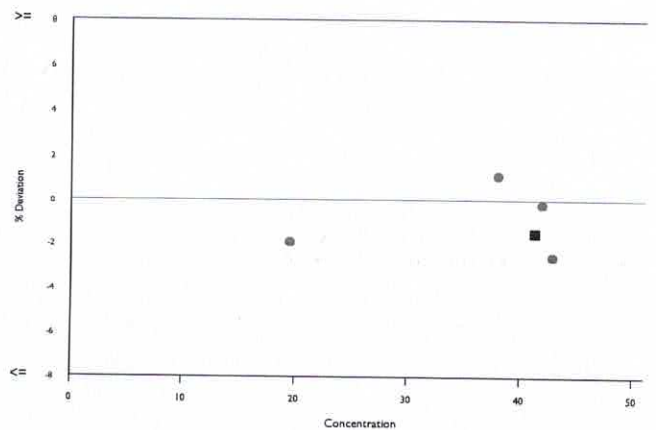
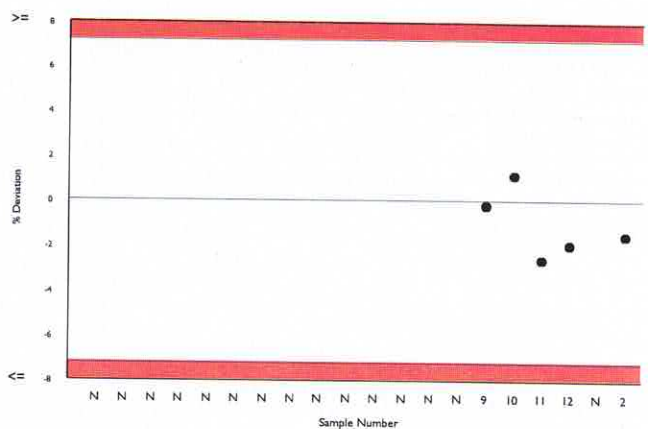
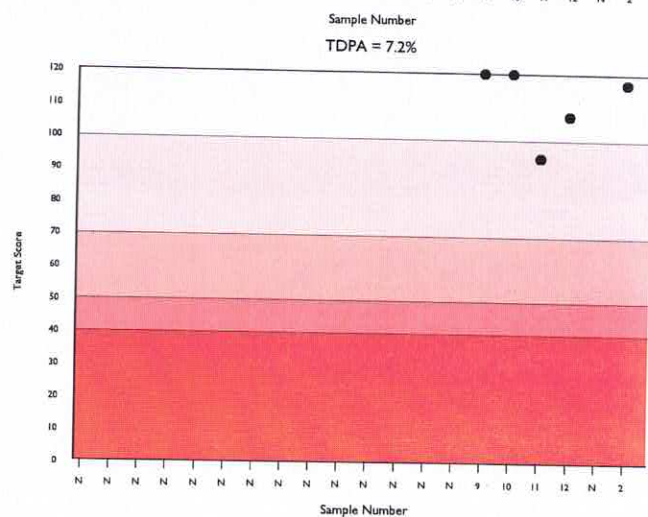
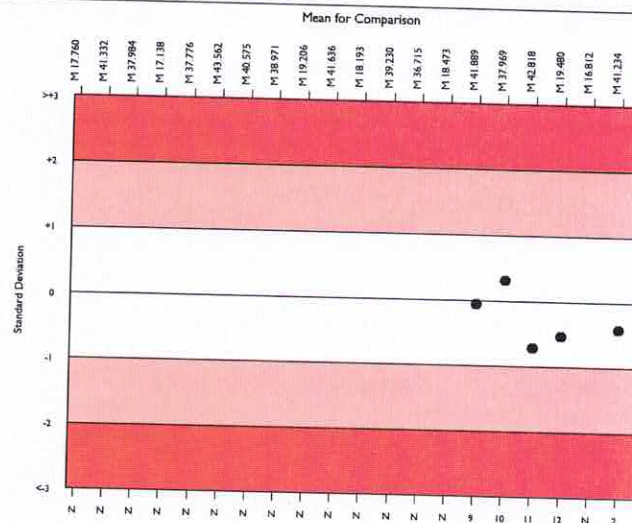
	N	Mean	CV%	U _m	SDPA	Exc.
□ All Methods	6769	43.045	5.4	0.04	1.58	549
■ Beckman Coulter Ac. T 5 series	80	41.234	1.6	0.09	1.51	8

▲ Your Result	40.600	SDI	-0.42
		RMSDI	Too Few
■ Mean for Comparison	41.234	TS	117
		RMTS	Too Few
		%DEV	-1.5
		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	1307	43.687	1.7	0.03
Abbott Cell-Dyn Ruby	380	38.688	2.6	0.06
Sysmex XN-L Series (330/350/450/550)	360	43.218	1.8	0.05
Sysmex XS series	311	43.297	1.8	0.06
Beckman Coulter DxH 600/800/900 Series	299	43.960	1.4	0.04
Mindray BC 1000/2000/3000 series	283	44.700	3.7	0.12
Siemens/Bayer Advia 120/2120	285	39.107	2.3	0.07
Nihon Kohden Celltac Alpha	262	44.437	3.6	0.12
Sysmex XP Series	238	40.392	2.6	0.09
Sysmex XT series	236	43.277	2.1	0.07
Mindray BC 6000/6200/6600/6800/6800Plus	238	47.739	2.0	0.08
Manual Methods	160	40.460	2.8	0.11
ABX Micros/Minos/ABC VET	157	42.832	3.8	0.16
Microhematocrit Centrifugation	155	40.319	3.2	0.13
Horiba ABX Pentra 60/80/XLR	137	41.256	2.2	0.10
Sysmex KX 21	133	40.736	2.5	0.11
Mindray BC 5100/5180/5300/5380/5390	121	46.389	3.0	0.16
Nihon Kohden Celltac E/Es	85	45.297	2.3	0.14
Mindray BC 5000/5150/5140/5130/5120	84	45.846	2.9	0.18
Beckman Coulter Ac. T 5 series	80	41.234	1.6	0.09
Horiba Yumizen H500/ 550	77	42.642	2.5	0.15

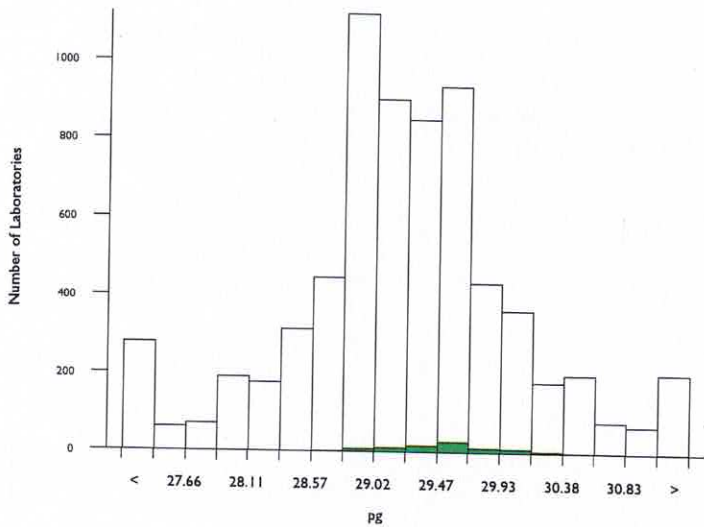


MCH, pg

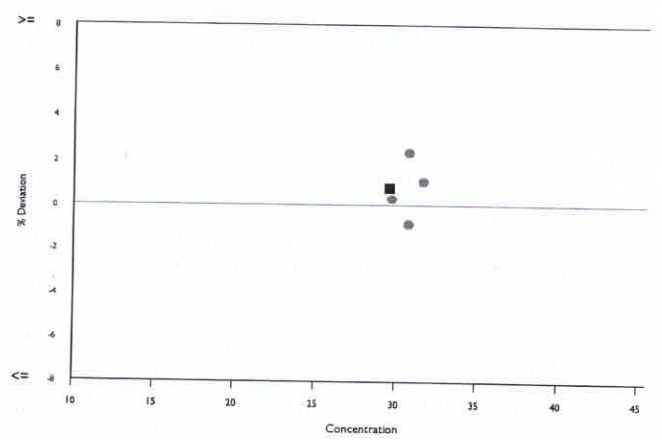
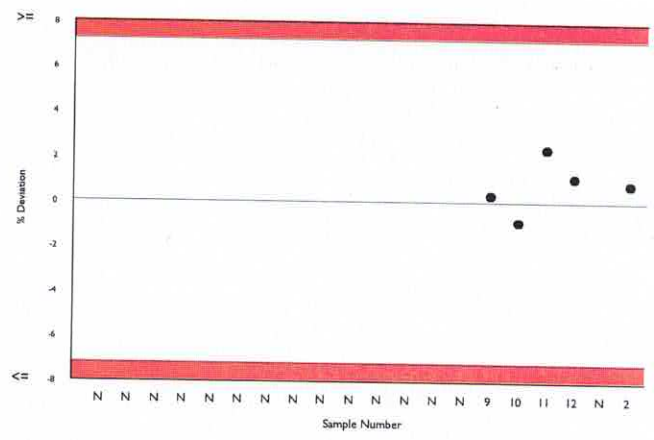
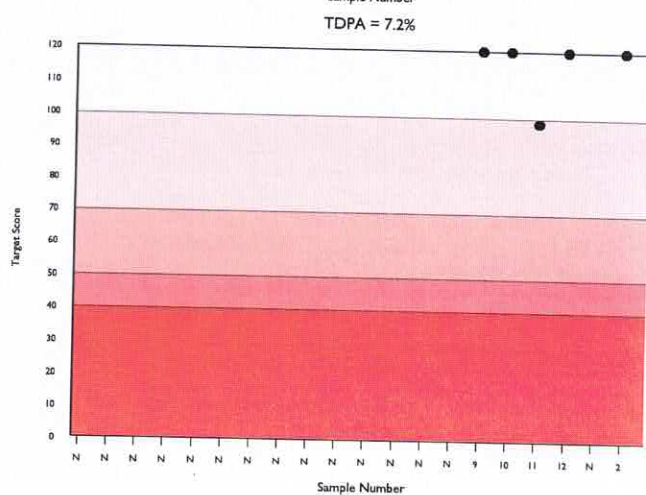
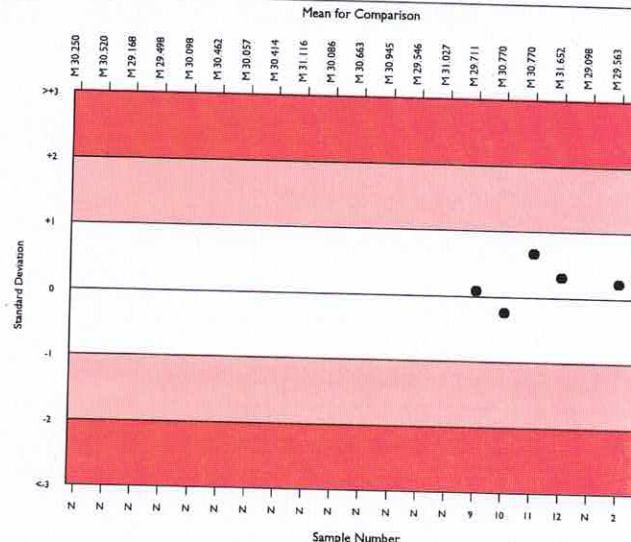
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	6259	29.252	2.1	0.01	1.05	609
Beckman Coulter Ac. T 5 series	82	29.563	1.1	0.05	1.06	6

▲ Your Result	29.800	SDI	0.22
		RMSDI	Too Few
■ Mean for Comparison	29.563	TS	120
		RMTS	Too Few
		%DEV	0.8
		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	1316	29.146	1.3	0.01
Abbott Cell-Dyn Ruby	384	29.204	2.1	0.04
Sysmex XN-L Series (330/350/450/550)	360	29.120	1.2	0.02
Sysmex XS series	315	29.231	1.2	0.02
Beckman Coulter DxH 600/800/900 Series	299	29.074	1.3	0.03
Mindray BC 1000/2000/3000 series	281	29.152	3.7	0.08
Siemens/Bayer Advia 120/2120	278	29.646	1.7	0.04
Nihon Kohden Celltac Alpha	258	29.631	2.8	0.07
Sysmex XT series	238	29.001	1.4	0.03
Sysmex XP Series	230	29.163	2.1	0.05
Mindray BC-6000/6200/6600/6800/6800Plus	235	29.458	1.4	0.03
ABX Micros/Minos/ABC VET	150	29.273	3.3	0.10
Horiba ABX Pentra 60/80/XLR	135	29.621	1.5	0.05
Sysmex KX 21	126	29.259	1.9	0.06
Mindray BC 5100/5180/5300/5380/5390	118	29.637	1.9	0.07
Nihon Kohden Celltac E/Es	85	29.637	2.0	0.08
Mindray BC 5000/5150/5140/5130/5120	84	29.337	2.1	0.08
Beckman Coulter Ac. T 5 series	82	29.563	1.1	0.05
Horiba Yumizen H500/ 550	77	29.020	2.0	0.08
Medonic M series/Swelab	71	29.744	1.7	0.08
ABX Pentra 120/Nexus Series	59	28.937	2.4	0.11

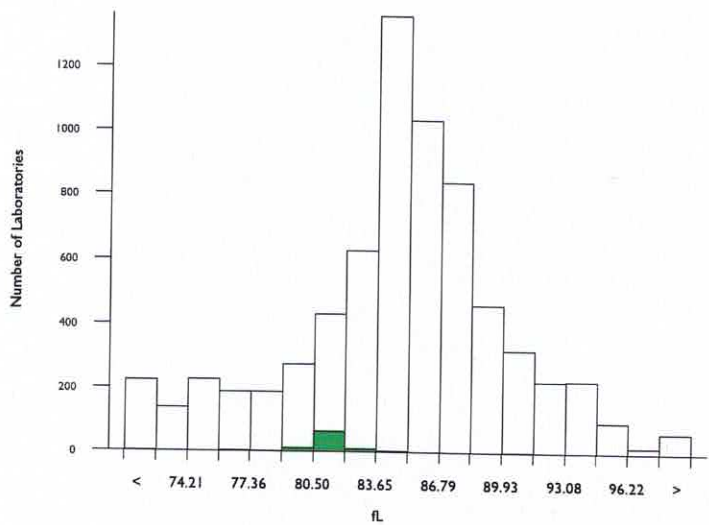


MCV, fL

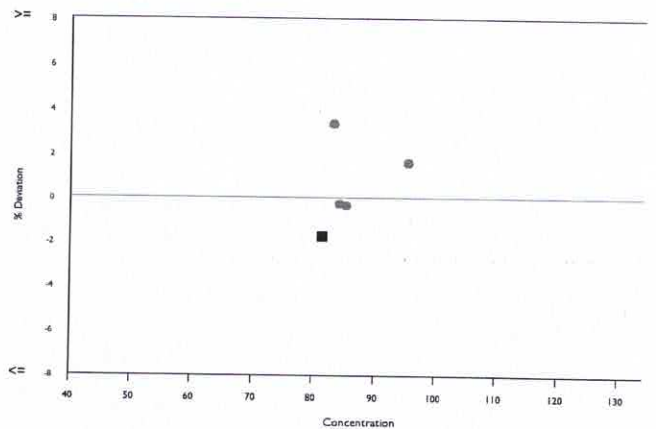
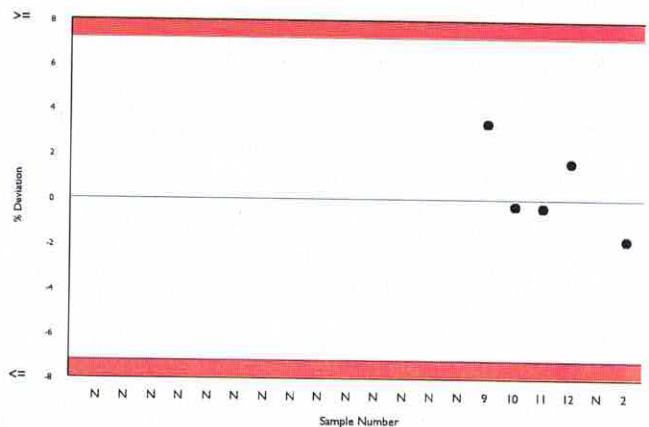
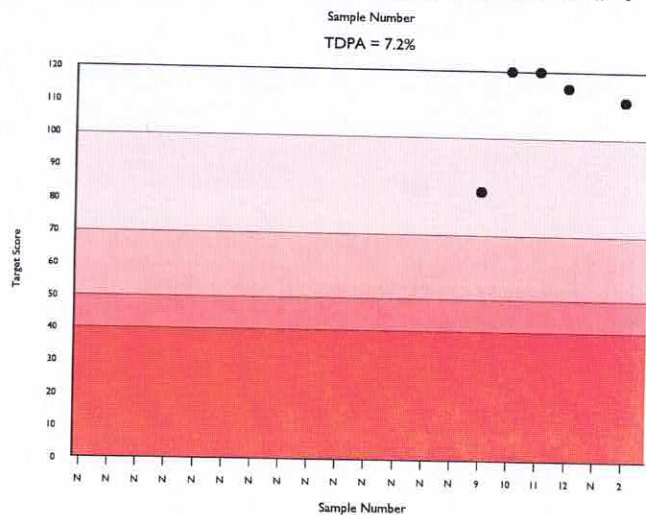
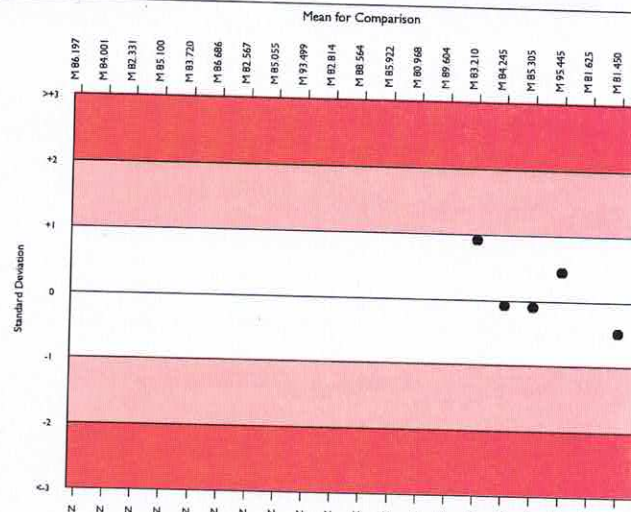
	N	Mean	CV%	U _m	SDPA	Exc.
<input type="checkbox"/> All Methods	6366	85.223	4.9	0.07	3.13	564
<input checked="" type="checkbox"/> Beckman Coulter Ac. T 5 series	78	81.450	1.0	0.11	2.99	10

<input checked="" type="checkbox"/> Your Result	80.000	SDI	-0.48
		RMSDI	Too Few
<input checked="" type="checkbox"/> Mean for Comparison	81.450	TS	111
		RMTS	Too Few
		%DEV	-1.8
		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	1322	85.047	1.5	0.04
Abbott Cell-Dyn Ruby	381	74.389	1.9	0.09
Sysmex XN-L Series (330/350/450/550)	359	84.757	1.4	0.08
Sysmex XS series	315	84.708	1.5	0.09
Beckman Coulter DxH 600/800/900 Series	292	87.905	0.8	0.05
Mindray BC 1000/2000/3000 series	281	87.435	2.7	0.18
Siemens/Bayer Advia 120/2120	280	77.120	1.8	0.11
Nihon Kohden Celltac Alpha	266	87.441	3.0	0.20
Sysmex XT series	239	84.841	1.6	0.11
Sysmex XP Series	240	80.804	2.2	0.14
Mindray BC-6000/6200/6600/6800/6800Plus	232	93.860	1.2	0.09
ABX Micros/Minos/ABC VET	151	85.174	2.8	0.24
Horiba ABX Pentra 60/80/XLR	139	82.018	1.7	0.15
Sysmex KX 21	126	80.883	1.9	0.17
Mindray BC 5100/5180/5300/5380/5390	116	91.944	2.1	0.23
Nihon Kohden Celltac E/Es	87	89.314	2.1	0.26
Mindray BC 5000/5150/5140/5130/5120	80	90.380	1.6	0.20
Beckman Coulter Ac. T 5 series	78	81.450	1.0	0.11
Horiba Yumizen H500/ 550	75	83.833	1.6	0.20
Medonic M series/Swelab	71	84.590	2.5	0.31
ABX Pentra 120/Nexus Series	56	81.455	1.5	0.20

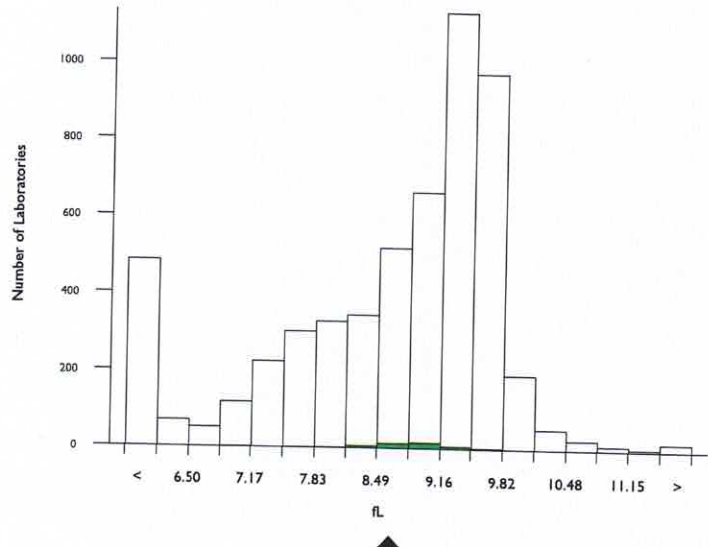


Mean Platelet Volume, fL

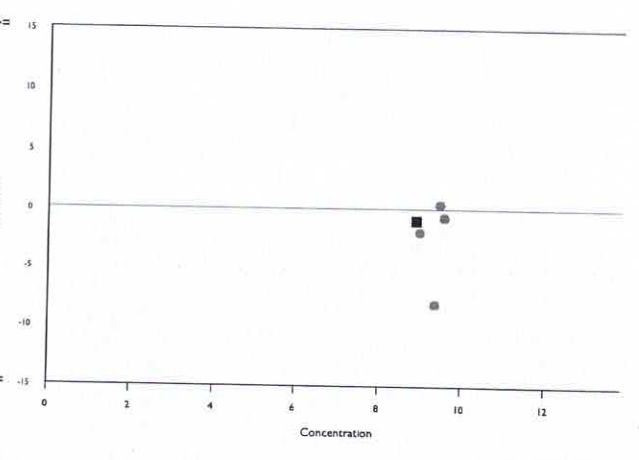
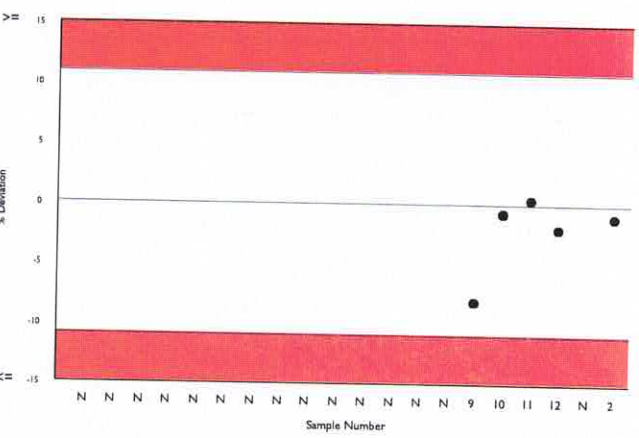
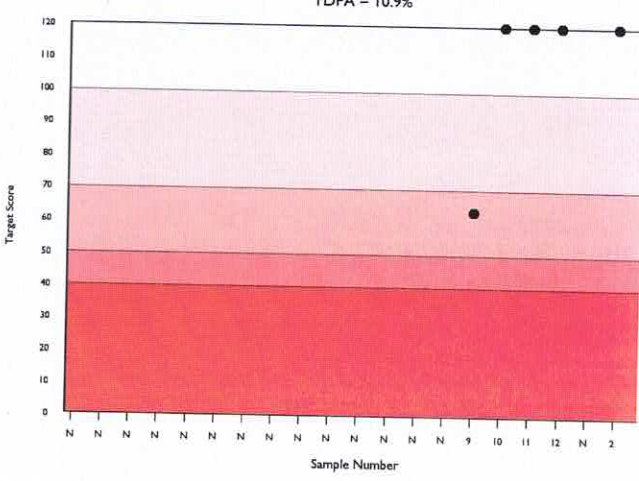
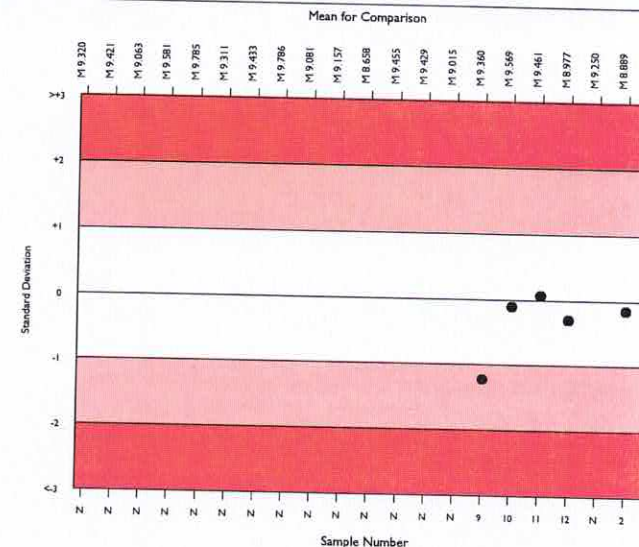
	N	Mean	CV%	U _m	SDPA	Exc.
☐ All Methods	5043	8.831	10.0	0.02	0.59	473
■ Beckman Coulter Ac. T 5 series	41	8.889	3.7	0.06	0.59	4

▲ Your Result	8.800	SDI	-0.15
		RMSDI	Too Few
■ Mean for Comparison	8.889	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	10.90%



Method	N	Mean	CV%	U _m
Sysmex XN Series	1064	9.376	2.0	0.01
Abbott Cell-Dyn Ruby	284	4.511	6.9	0.02
Sysmex XN-L Series (330/350/450/550)	270	9.436	2.3	0.02
Sysmex XS series	265	9.482	2.8	0.02
Beckman Coulter DxH 600/800/900 Series	246	7.697	2.5	0.02
Mindray BC 1000/2000/3000 series	244	8.553	6.7	0.05
Nihon Kohden Celltac Alpha	238	7.742	11.2	0.07
Mindray BC-6000/6200/6600/6800/6800Plus	206	9.603	2.4	0.02
Siemens/Bayer Advia 120/2120	200	9.499	5.6	0.05
Sysmex XP Series	191	8.945	2.9	0.02
Sysmex XT series	198	9.125	3.1	0.02
ABX Micros/Minos/ABC VET	108	7.813	6.3	0.06
Horiba ABX Pentra 60/80/XLR	102	8.725	3.7	0.04
Sysmex KX 21	94	8.831	2.9	0.03
Mindray BC 5100/5180/5300/5380/5390	88	8.463	2.5	0.03
Mindray BC 5000/5150/5140/5130/5120	73	9.510	2.8	0.04
Nihon Kohden Celltac E/Es	67	6.999	6.6	0.07
Medonic M series/Swelab	61	8.190	3.4	0.05
Horiba Yumizen H500/ 550	64	9.687	4.1	0.06
Abbott Cell-Dyn Emerald 18	46	7.670	7.4	0.10
ABX Pentra 120/Nexus Series	50	8.606	3.2	0.05

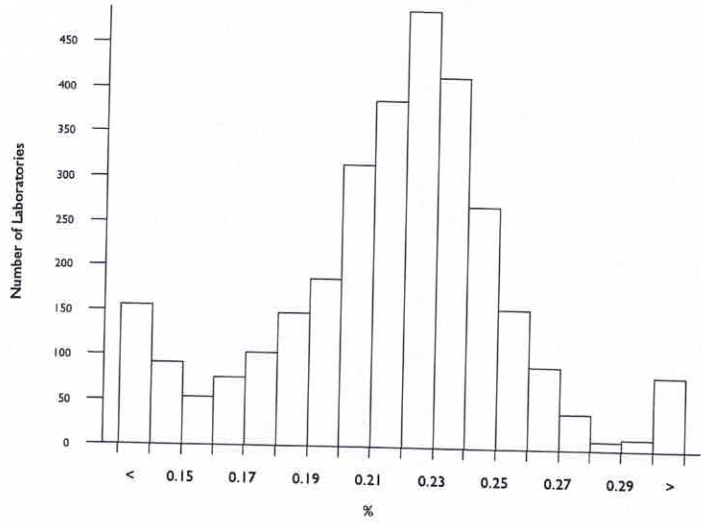


Plateletcrit, %

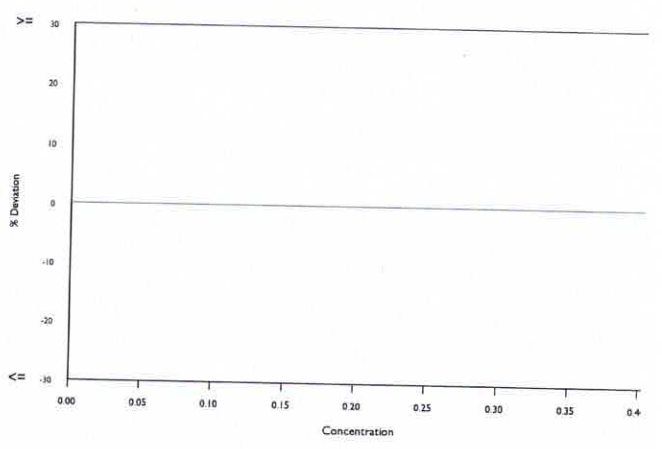
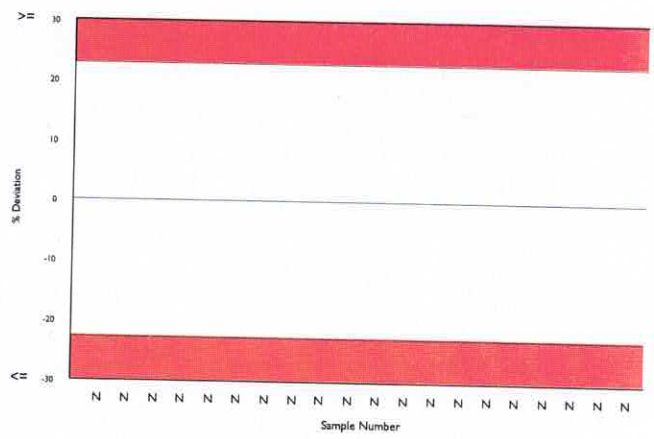
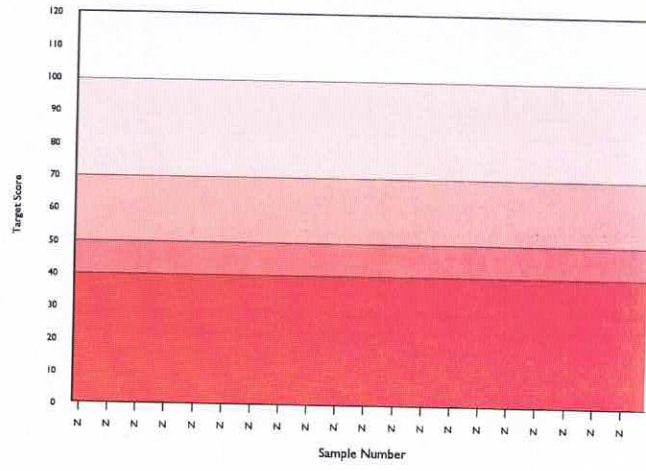
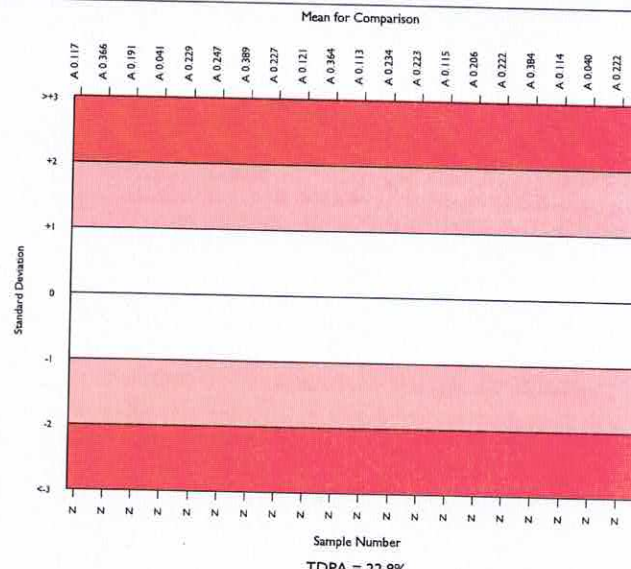
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<input type="checkbox"/> All Methods	2774	0.222	12.4	0.00	0.03	301
<input checked="" type="checkbox"/> Beckman Coulter Ac. T 5 series	0					

<input checked="" type="checkbox"/> Your Result	No Result	SDI	Too Few
		RMSDI	
<input type="checkbox"/> Mean for Comparison	0.222	TS	Too Few
		RMTS	Too Few
		%DEV	Too Few
		RM%DEV	Too Few

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



Method	N	Mean	CV%	U _m
Sysmex XN Series	530	0.231	4.7	0.00
Mindray BC 1000/2000/3000 series	209	0.216	9.2	0.00
Nihon Kohden Celltac Alpha	199	0.184	14.9	0.00
Mindray BC-6000/6200/6600/6800/6800Plus	149	0.253	4.5	0.00
Sysmex XS series	153	0.232	5.0	0.00
Sysmex XT series	134	0.227	6.4	0.00
Sysmex XP Series	106	0.247	6.8	0.00
Sysmex XN-L Series (330/350/450/550)	112	0.234	5.6	0.00
Siemens/Bayer Advia 120/2120	88	0.238	7.5	0.00
Abbott Cell-Dyn Ruby	76	0.122	11.8	0.00
Beckman Coulter DxH 600/800/900 Series	75	0.200	4.1	0.00
Mindray BC 5100/5180/5300/5380/5390	73	0.223	5.6	0.00
ABX Micros/Minos/ABC VET	64	0.186	12.1	0.00
Mindray BC 5000/5150/5140/5130/5120	60	0.255	6.2	0.00
Nihon Kohden Celltac E/Es	57	0.181	8.6	0.00
Medonic M series/Swelab	50	0.191	7.1	0.00
Horiba ABX Pentra 60/80/XLR	41	0.233	5.6	0.00
Human Humacount Series	41	0.194	15.3	0.01
Mindray BC 20/30	30	0.248	5.6	0.00
ABX Pentra 120/Nexus Series	36	0.220	5.9	0.00
Mindray BC 5600/5800	32	0.227	5.5	0.00

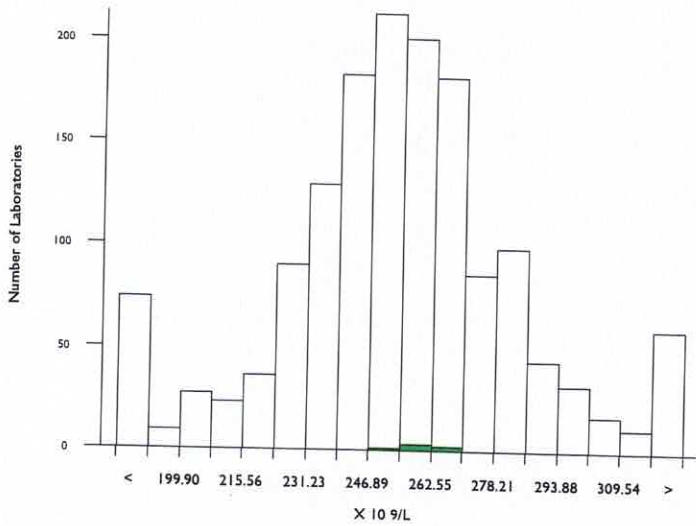


Platelets (Optical Count), X 10⁹/L

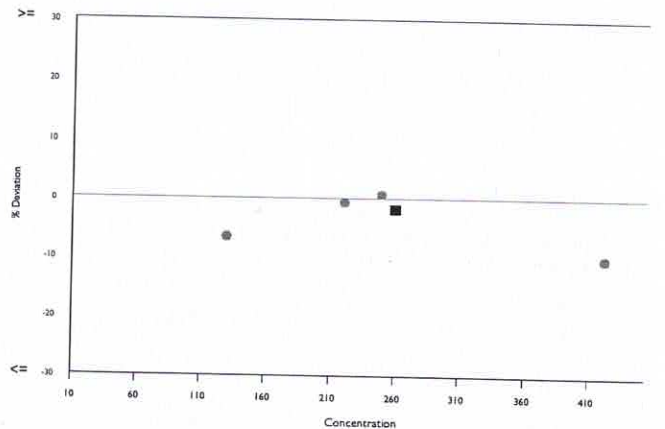
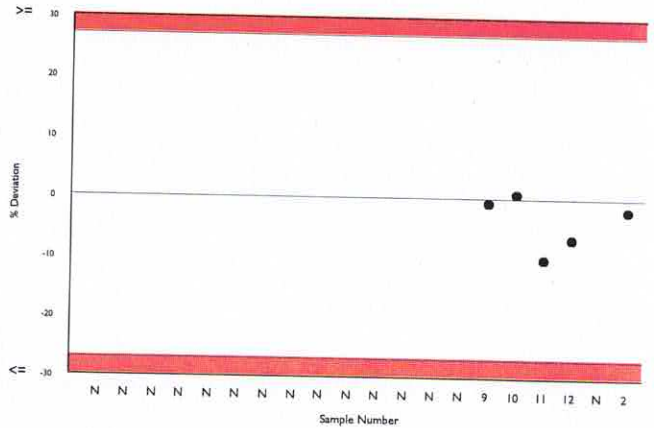
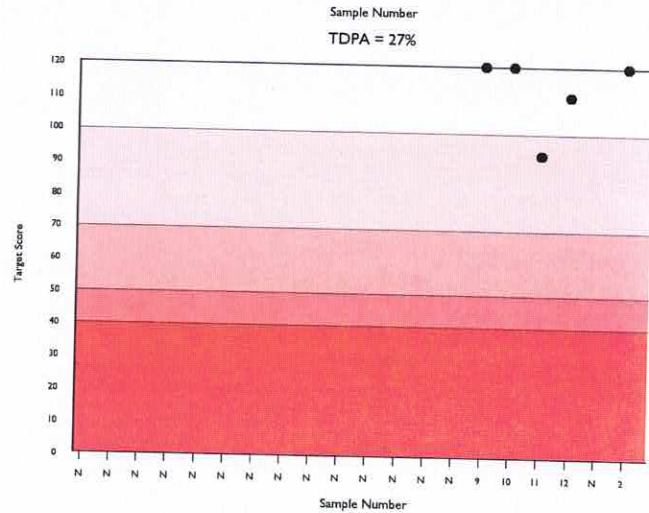
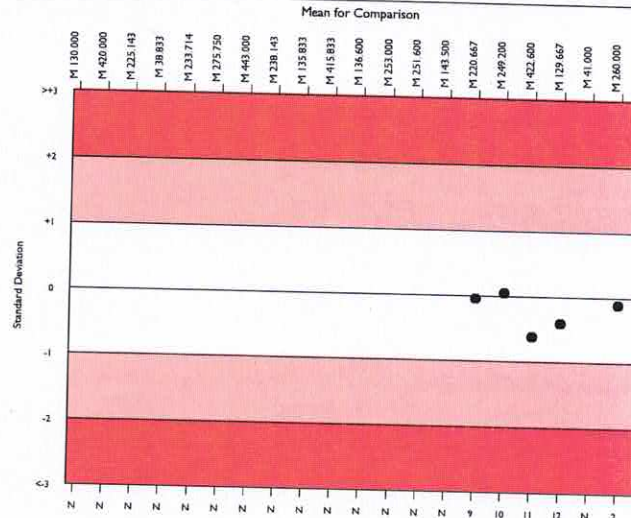
	N	Mean	CV%	U _m	SDPA	Exc.
<input type="checkbox"/> All Methods	1360	254.725	8.2	0.71	41.81	157
<input checked="" type="checkbox"/> Beckman Coulter Ac. T 5 series	6	260.000	2.1	2.85	42.68	0

<input checked="" type="checkbox"/> Your Result	255.000	SDI	-0.12
		RMSDI	Too Few
<input checked="" type="checkbox"/> Mean for Comparison	260.000	TS	120
		RMTS	Too Few
		%DEV	-1.9
		RM%DEV	Too Few

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



Method	N	Mean	CV%	U _m
Abbott Cell-Dyn Ruby	378	267.304	5.9	1.01
Siemens/Bayer Advia 120/2120	279	246.532	5.7	1.06
Manual Methods	240	244.227	11.4	2.25
Sysmex XN Series	99	272.859	14.6	4.99
Abbott Cell-Dyn 3200	40	247.813	8.5	4.16
Abbott Alinity hq	40	253.950	6.6	3.33
Sysmex XN-L Series (330/350/450/550)	40	249.048	4.1	2.01
Sysmex XT Series	42	252.338	5.5	2.69
Sysmex XS Series	34	240.441	3.2	1.64
Mindray BC-6000/6200/6600/6800/6800Plus	35	259.629	7.6	4.18
Beckman Coulter DxH 600/800/900 Series	19	257.742	2.3	1.69
Abbott Cell-Dyn Sapphire	17	245.706	2.9	2.19
Sysmex KX21	11	276.000	3.2	3.38
Horiba Yumizen H500/ 550	8	260.250	3.3	3.83
ABX Micros/Minos/ABC VET	9	242.589	9.0	9.07
Horiba ABX Pentra 60/80/XLR	9	272.556	4.7	5.31
Beckman Coulter Ac. T 5 series	6	260.000	2.1	2.85
Horiba Yumizen HI500/ 2500	5	259.000	3.0	4.38
Sysmex XE-2100	5	275.800	18.1	27.95
Beckman Coulter DxH 500 Series	5	256.380	12.0	17.14
ABX Pentra 120/Nexus Series	4	245.250	3.6	5.46

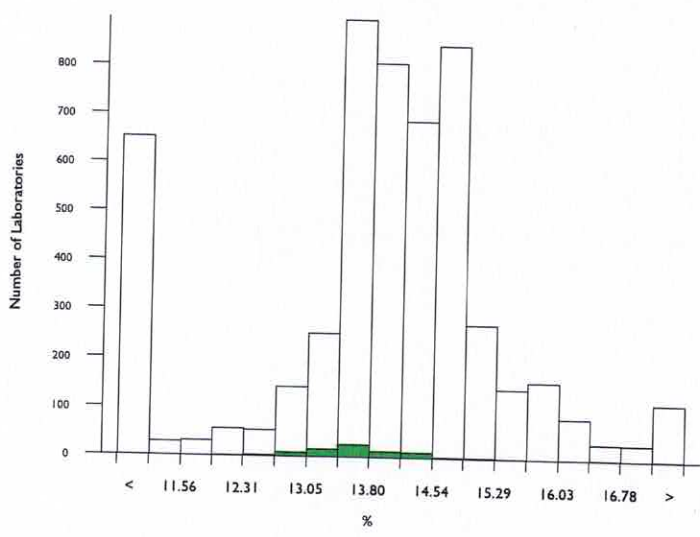


Red Cell Dist. Width CV, %

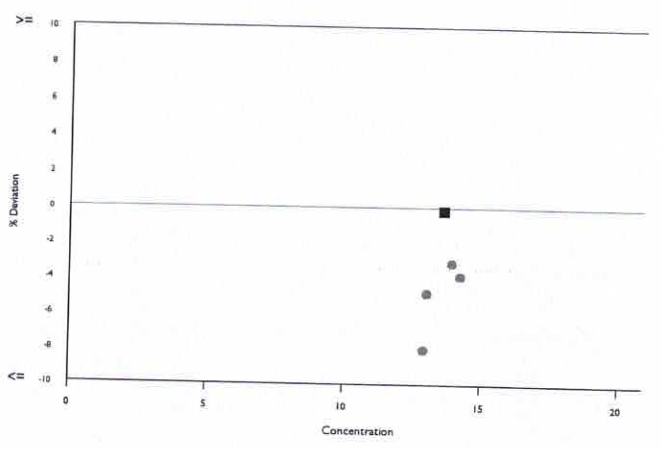
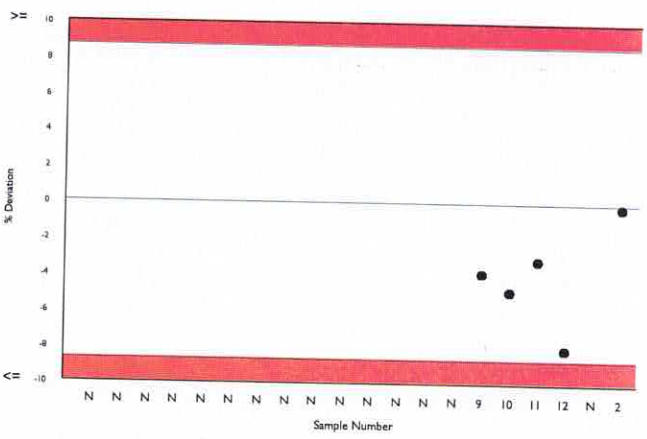
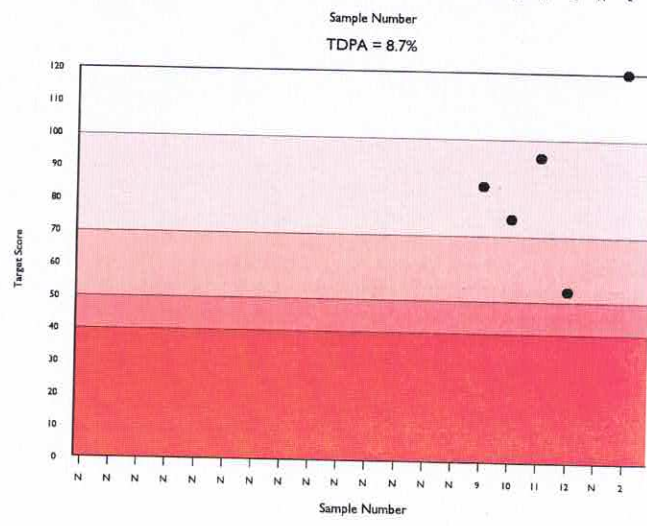
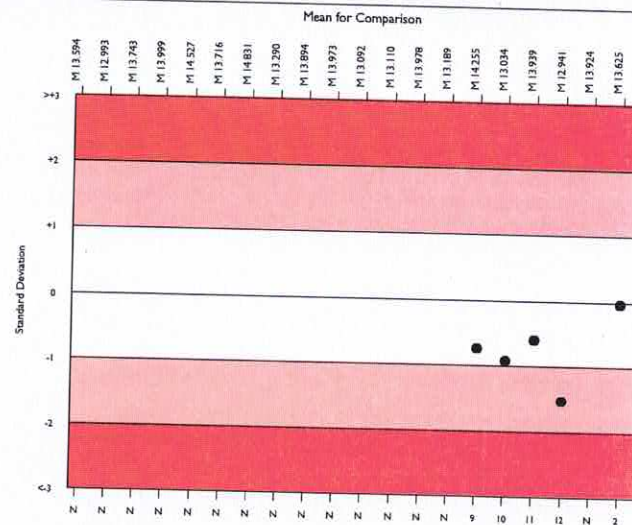
	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	4600	14.175	7.0	0.02	0.75	682
Beckman Coulter Ac. T 5 series	73	13.625	3.5	0.07	0.72	8

▲ Your Result	13.600	SDI	-0.04
		RMSDI	Too Few
■ Mean for Comparison	13.625	TS	120
		RMTS	Too Few
		%DEV	-0.2
		RM%DEV	Too Few

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



Method	N	Mean	CV%	U _m
Sysmex XN Series	1067	13.897	1.5	0.01
Abbott Cell-Dyn Ruby	263	9.874	4.6	0.03
Sysmex XN-L Series (330/350/450/550)	247	13.759	1.7	0.02
Sysmex XS series	247	14.748	1.7	0.02
Beckman Coulter DxH 600/800/900 Series	237	14.592	1.4	0.02
Mindray BC 1000/2000/3000 series	211	13.895	4.0	0.05
Nihon Kohden Celltac Alpha	219	14.260	5.2	0.06
Siemens/Bayer Advia 120/2120	208	15.057	3.3	0.04
Mindray BC-6000/6200/6600/6800/6800Plus	210	14.650	1.2	0.01
Sysmex XT series	184	14.655	1.4	0.02
Sysmex XP Series	173	9.627	4.7	0.04
Horiba ABX Pentra 60/80/XLR	103	13.707	4.5	0.08
Mindray BC 5100/5180/5300/5380/5390	92	13.715	2.8	0.05
Sysmex KX 21	69	9.763	3.7	0.05
Mindray BC 5000/5150/5140/5130/5120	72	15.965	1.3	0.03
Beckman Coulter Ac. T 5 series	73	13.625	3.5	0.07
ABX Micros/Minos/ABC VET	66	12.665	5.6	0.11
Nihon Kohden Celltac E/Es	67	15.925	4.7	0.11
Horiba Yumizen H500/ 550	60	12.560	6.4	0.13
Medonic M1 series/Swelab	52	12.155	9.1	0.19
Mindray BC 5600/5800	46	13.284	3.1	0.08



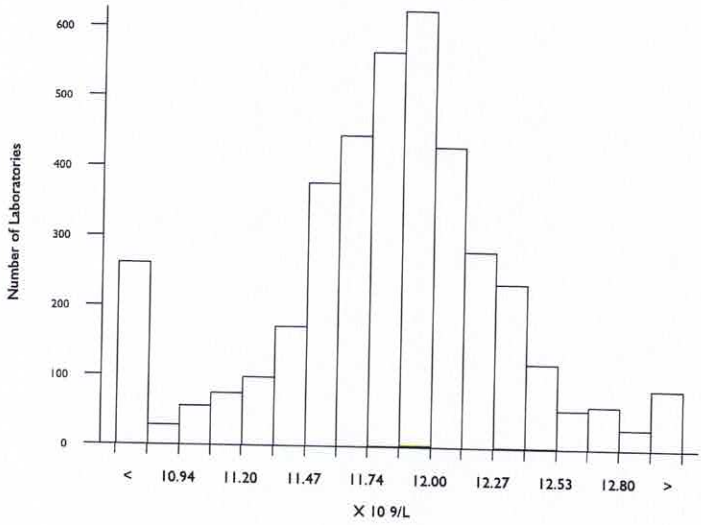
WBC (Optical Count), X 10⁹/L

	N	Mean	CV%	U _m	SDPA	Exc.
All Methods	3608	11.874	3.0	0.01	0.51	385
Beckman Coulter Ac. T 5 series	5	12.120	2.6	0.17	0.55a	0

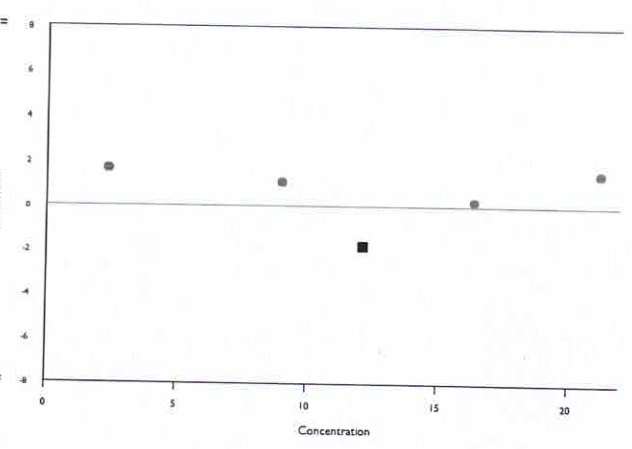
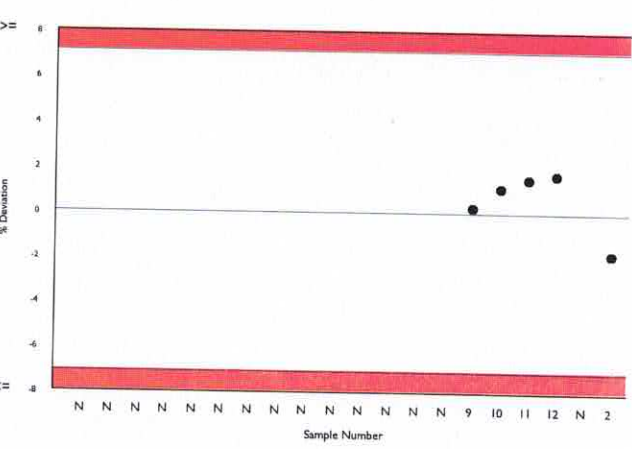
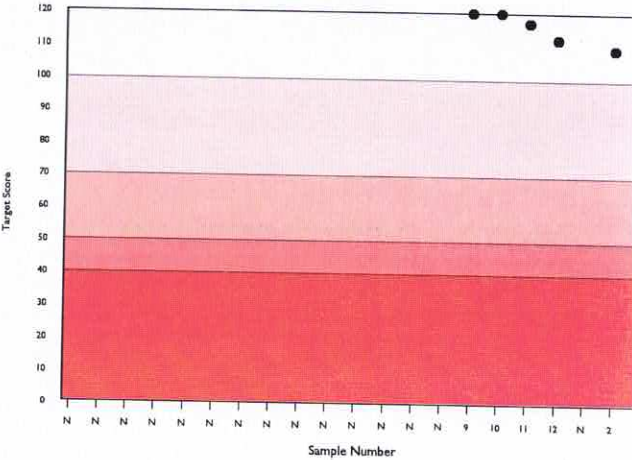
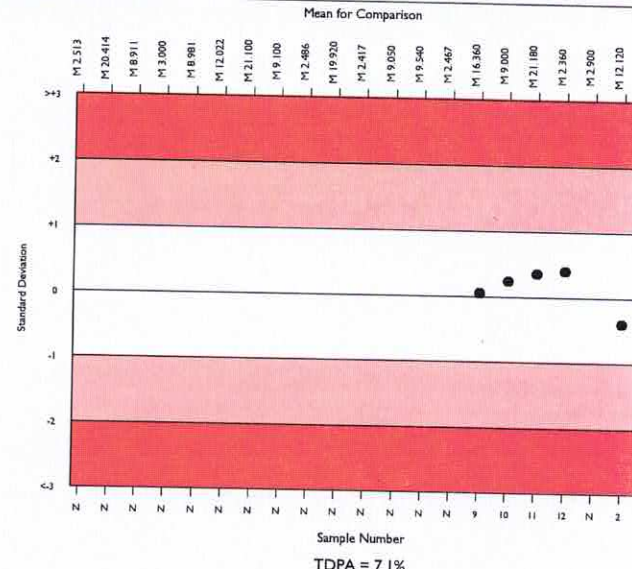
▲ Your Result	11.900	SDI	-0.40
		RMSDI	Too Few
■ Mean for Comparison	12.120	TS	109
		RMTS	Too Few
		%DEV	-1.8
		RM%DEV	Too Few

Acceptable limits derived from Biological Variation: N/A

Acceptable limits of performance for RIQAS: 7.10%



Method	N	Mean	CV%	U _m
Sysmex XN Series	1216	11.818	1.8	0.01
Abbott Cell-Dyn Ruby	381	12.032	2.7	0.02
Sysmex XS Series	306	12.119	2.5	0.02
Manual methods	267	11.607	8.6	0.08
Siemens/Bayer Advia 120/2120	280	11.624	3.4	0.03
Sysmex XN-L Series (330/350/450/550)	249	12.083	1.8	0.02
Sysmex XT Series	229	12.097	2.7	0.03
Mindray BC-6000/6200/6600/6800/6800Plus	224	11.695	2.0	0.02
Mindray BC 5000/5150/5140/5130/5120	77	11.737	2.5	0.04
Mindray BC 5600/5800	53	12.074	2.7	0.06
Abbott Cell-Dyn 3200	43	11.927	3.7	0.08
Abbott Alinity iq	44	11.705	2.9	0.06
Beckman Coulter DxH 600/800/900 Series	35	11.740	1.6	0.04
Sysmex XE-2100	22	11.427	3.4	0.11
Abbott Cell-Dyn Sapphire	18	12.022	2.2	0.08
ABX Pentra 120/Nexus Series	18	12.199	2.8	0.10
Sysmex KX21	17	11.574	3.5	0.12
Horiba Yumizen H500/ 550	15	11.283	4.5	0.16
ABX Micros/Minos/ABC VET	13	11.622	4.3	0.17
Horiba ABX Pentra 60/80/XLR	11	11.896	2.1	0.09
Mindray BC 5200/5500	10	11.887	3.4	0.16



Analyte	Mean for Comparison	Your Result	SDI	RMSDI	%DEV	RM%DEV	TS	RMTS	Performance
haemoglobin	14.948	15.100	0.42	Too Few	1.0	Too Few	110	Too Few	
haematocrit (HCT)	41.234	40.600	-0.42	Too Few	-1.5	Too Few	117	Too Few	
ICH	29.563	29.800	0.22	Too Few	0.8	Too Few	120	Too Few	
ICHC	36.327	37.100	0.49	Too Few	2.1	Too Few	103	Too Few	
ICV	81.450	80.000	-0.48	Too Few	-1.8	Too Few	111	Too Few	
lean Platelet Volume	8.889	8.800	-0.15	Too Few	-1.0	Too Few	120	Too Few	
lateletcrit	0.222	No Result		Too Few		Too Few		Too Few	
latelets (Optical Count)	260.000	255.000	-0.12	Too Few	-1.9	Too Few	120	Too Few	
BC (Optical Count)	5.028	5.070	0.25	Too Few	0.8	Too Few	120	Too Few	
ed Cell Dist. Width CV	13.625	13.600	-0.04	Too Few	-0.2	Too Few	120	Too Few	
VBC (Optical Count)	12.120	11.900	-0.40	Too Few	-1.8	Too Few	109	Too Few	

ORMSDI N/A

ORM%DEV N/A

ORMTS N/A