

Burtom Tibbi Tahill Laboratuvari

# MONTHLY CLINICAL CHEMISTRY

CYCLE 12 SAMPLE 6

## 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: 24/06/2015

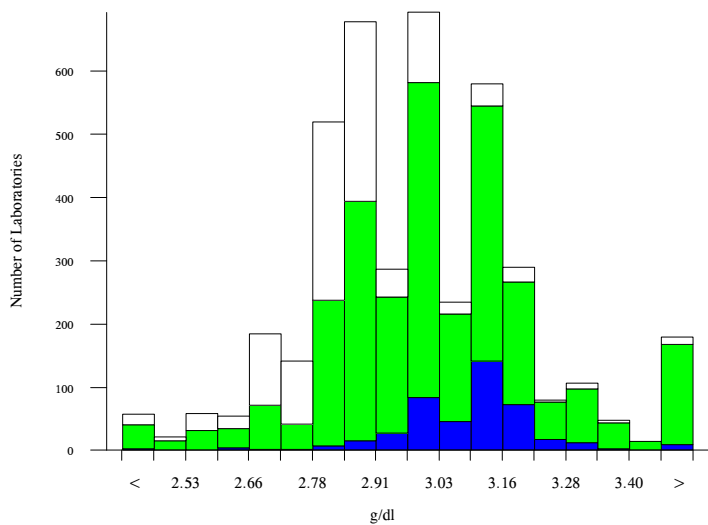
Randox Laboratories Limited  
55 Diamond Road  
CRUMLIN BT29 4QY  
Tel: +44 (0)28 9445 4399  
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Email: mail@riqas.com

# Albumin, g/dl

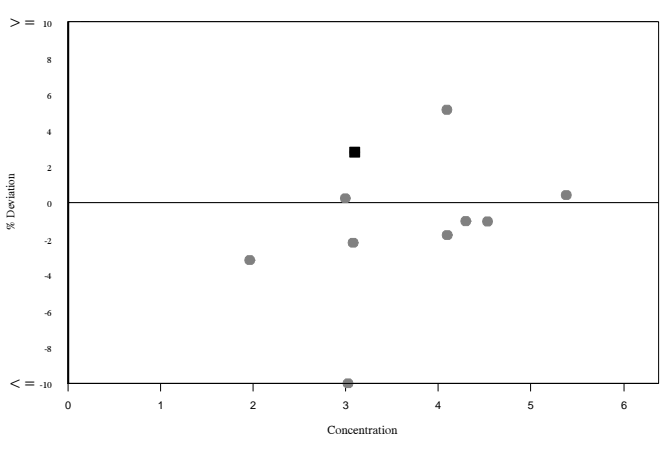
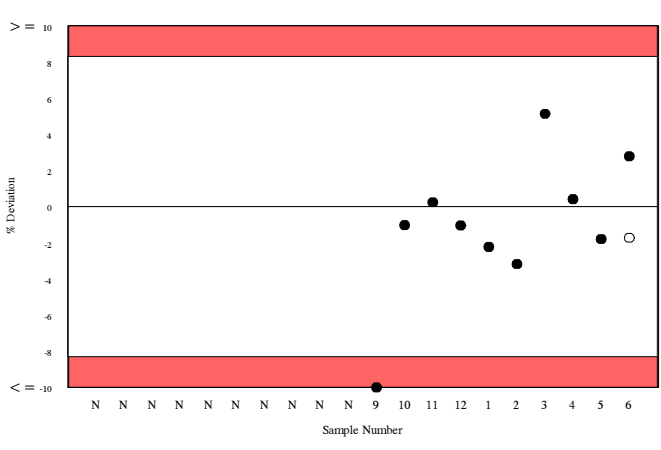
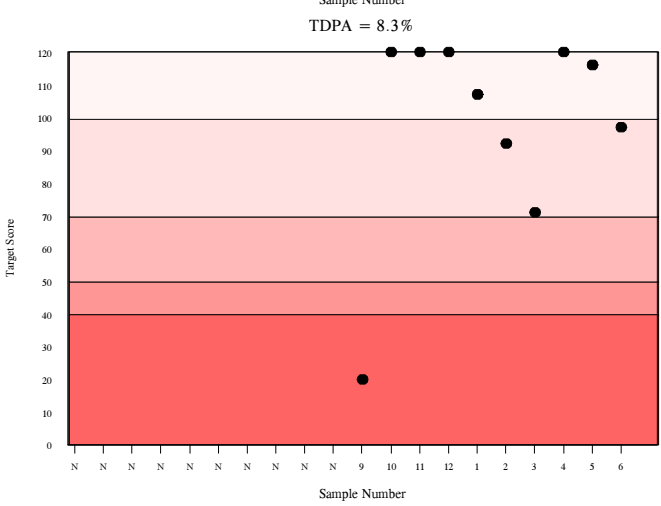
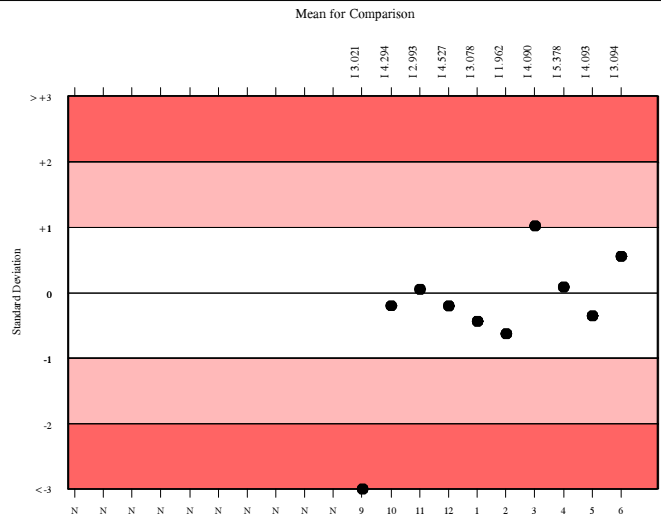
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	3944	2.975	5.6	0.00	0.15	273
Bromocresol Green	2877	3.018	5.2	0.00	0.15	231
Roche Cobas c501/502 e601/602	412	3.094	3.1	0.01	0.16	26

▲ Your Result	3.180	SDI	0.55
		RMSDI	-0.34
■ Mean for Comparison	3.094	TS	97
		RMTS	98
		%DEV	2.8
		RM%DEV	-1.7

Acceptable limits derived from Biological Variation	4.07%
Acceptable limits of performance for RIQAS	8.30%



Method	N	Mean	CV%	U <sub>m</sub>
Bromocresol Green	2877	3.018	5.2	0.00
Bromocresol Purple	708	2.847	3.3	0.00
Ortho Vitros MicroSlide Systems	225	2.861	3.9	0.01
Turbidimetric Assays	57	2.676	4.5	0.02
Agappe - Bromocresol Green	13	3.165	5.2	0.06
Vitros DT60/DT60 II/DTSC II	10	3.100	5.0	0.06
Other Dry Chemistry	3	2.793	3.2	0.07
Nephelometric Assays	2	2.952	5.3	0.14



# Alkaline Phosphatase, U/I @ 37°C

	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	3851	288.291	20.4	1.18	34.00	313
Roche AMP buffer IFCC	1218	241.384	5.0	0.43	28.47	120
Roche Cobas c501/502 e601/602	487	246.521	3.7	0.51	29.08	42

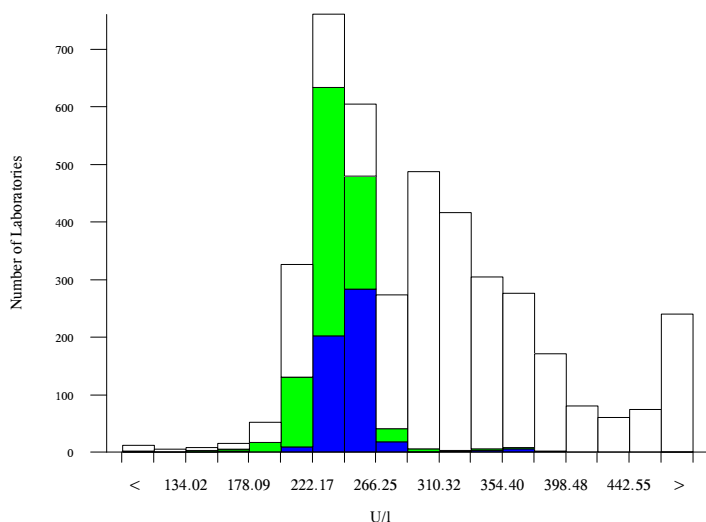
▲ Your Result	164.000	SDI	-2.84
		RMSDI	-0.69
■ Mean for Comparison	246.521	TS	26
		RMTS	98
		%DEV	-33.5
		RM%DEV	-8.2

Acceptable limits derived from Biological Variation 12.04%

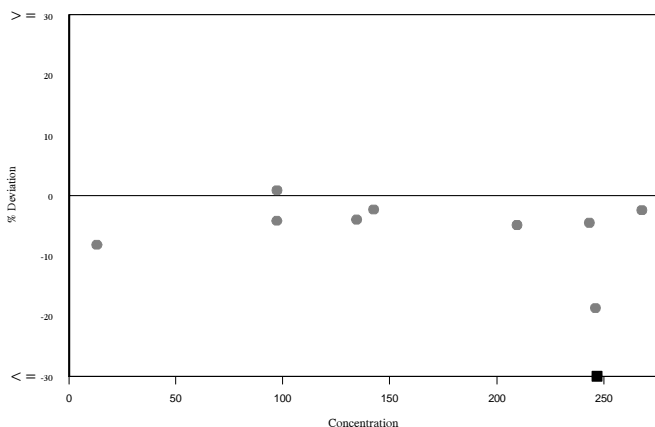
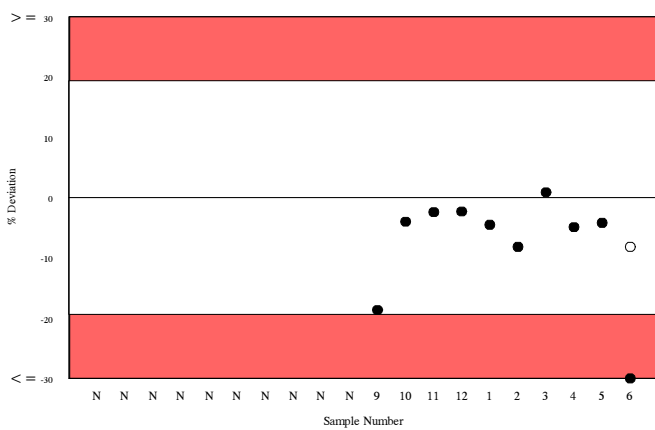
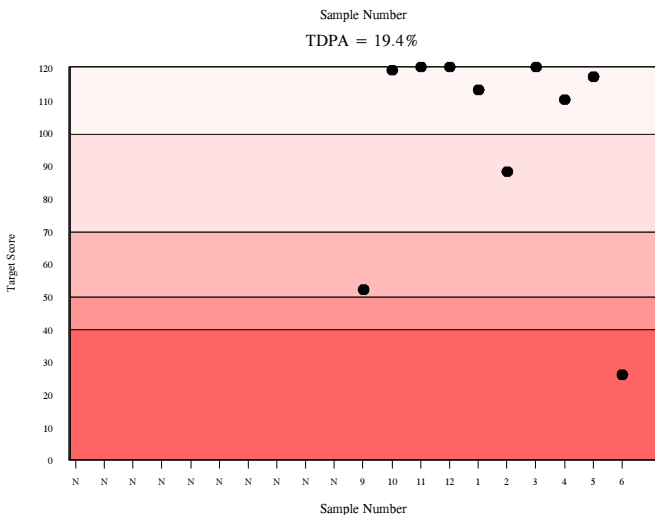
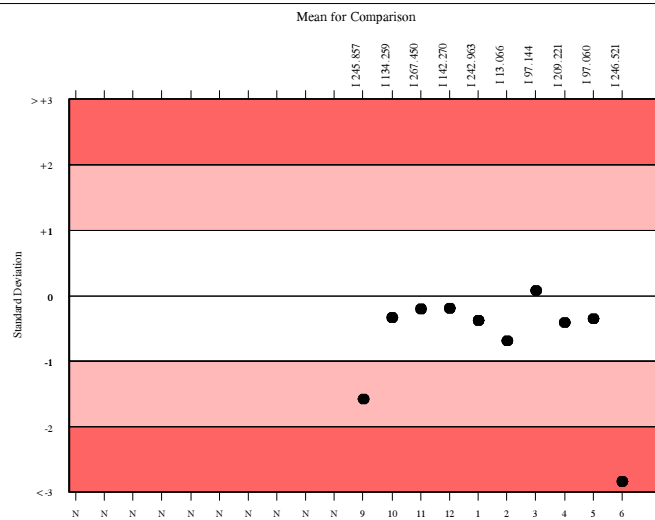
Acceptable limits of performance for RIQAS 19.40%

SDI in bottom 5% of peer group

TS & %DEV outside limits



Method	N	Mean	CV%	U <sub>m</sub>
AMP, optimised to IFCC	1329	325.683	12.0	1.34
Roche AMP buffer IFCC	1218	241.384	5.0	0.43
Diethanolamine buffer, DEA	376	452.196	14.6	4.25
AMP, non-optimised	227	316.088	9.2	2.41
Ortho Vitros MicroSlide Systems	219	219.879	5.0	0.93
Dade Dimension, AMP buffer	194	275.023	11.7	2.90
Other AMP kits	109	319.782	7.6	2.91
Tris/carbonate buffer, KA units	49	368.188	10.8	7.10
Colorimetric	22	290.999	22.5	17.44
Agappe - DGKC-SCE	22	411.482	23.1	25.34
AMP, optimised to NVKC/SFBC	19	326.094	17.4	16.31
Vitros DT60/DT60 II/DTSC II	13	213.923	9.1	6.75
Other Dry Chemistry	8	347.750	31.7	48.72
Tris/carbonate buffer	8	360.319	12.7	20.29
AMP, reduced interference	6	329.217	5.2	8.78
- select -	3	358.667	14.7	38.03



# ALT (GPT), U/l @ 37°C

	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	4613	113.813	7.4	0.16	9.69	408
Tris buffer without P5P	3598	112.846	7.4	0.17	9.60	312
Roche Cobas c501/502 e601/602	472	107.946	4.1	0.26	9.19	47

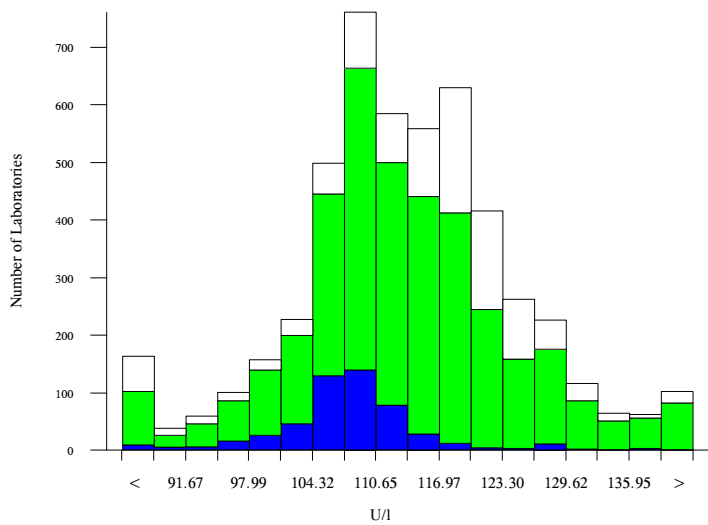
▲ Your Result	11.700	SDI	-10.48
		RMSDI	-1.15
■ Mean for Comparison	107.946	TS	10
		RMTS	97
		%DEV	-89.2
		RM%DEV	-9.8

Acceptable limits derived from Biological Variation 27.48%

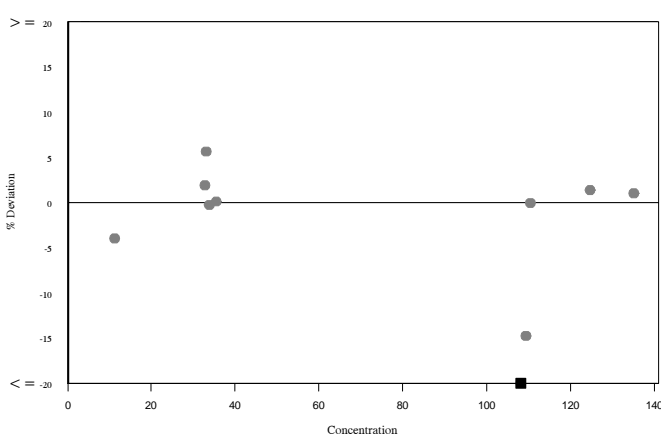
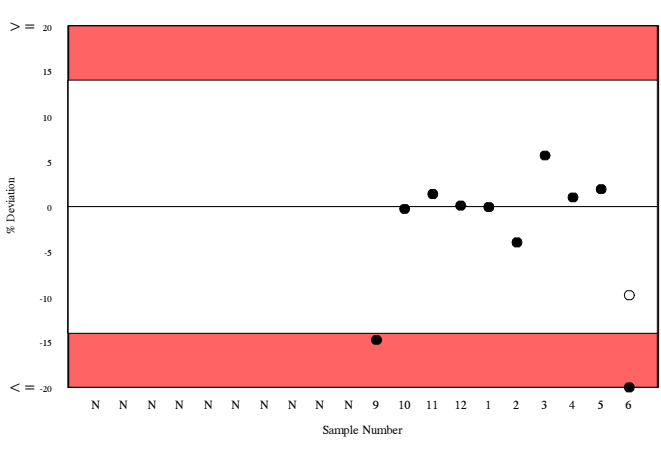
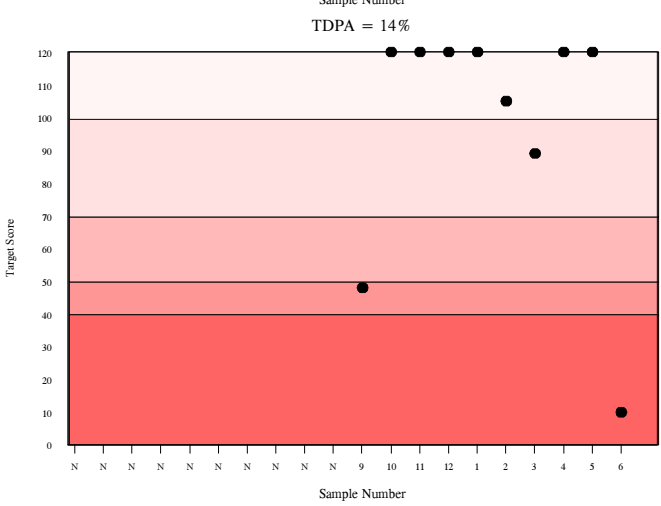
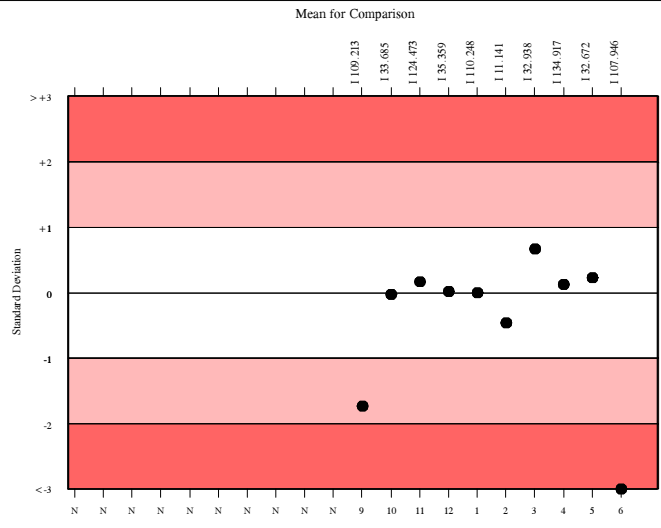
Acceptable limits of performance for RIQAS 14.00%

SDI in bottom 5% of peer group

TS & %DEV outside limits



Method	N	Mean	CV%	U <sub>m</sub>
Tris buffer without P5P	3598	112.846	7.4	0.17
Tris buffer with P5P	424	115.744	5.6	0.39
Ortho Vitros MicroSlide Systems	232	120.906	3.8	0.37
Siemens/Dade, standard nonIFCC correlated	146	120.420	4.6	0.57
Colorimetric	81	84.045	36.1	4.21
Agappe - IFCC	50	108.876	14.3	2.76
Tris buffer, SCE	27	107.054	5.3	1.37
Phosphate buffer, DGKC	23	113.770	10.6	3.15
Vitros DT60/DT60 II/DTSC II	12	118.750	4.2	1.78
Other Dry Chemistry	14	108.357	7.7	2.79
Tris buffer with P5P, NVKC	8	113.355	10.1	5.04



**RIQAS**

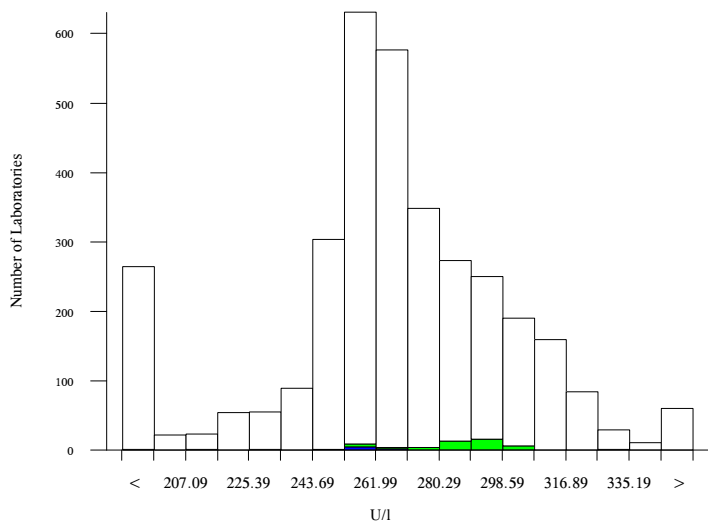


# Amylase, Total, U/l @ 37°C

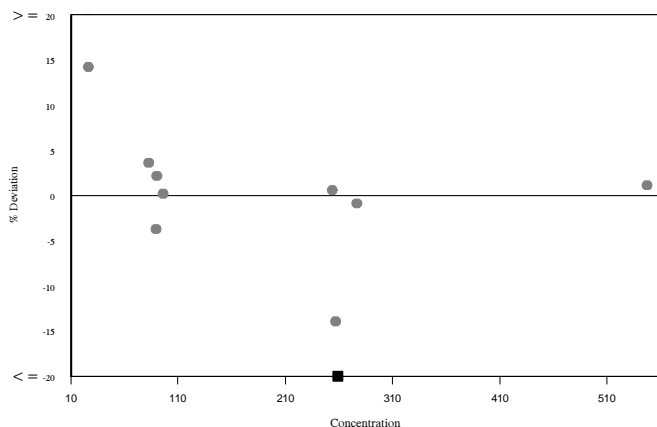
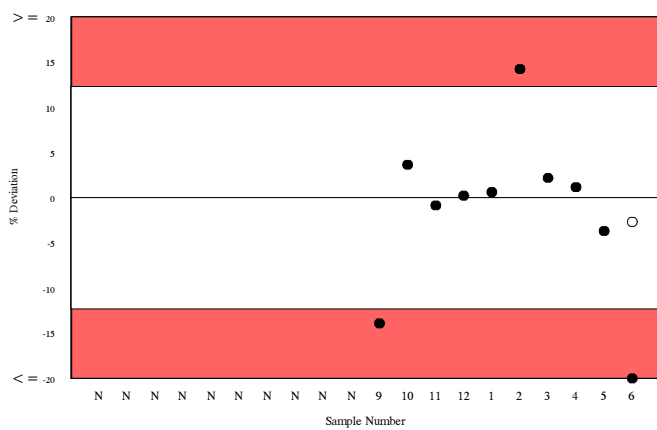
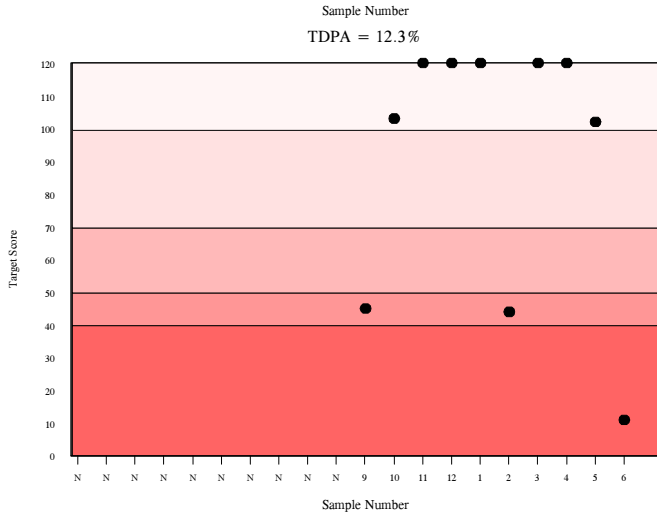
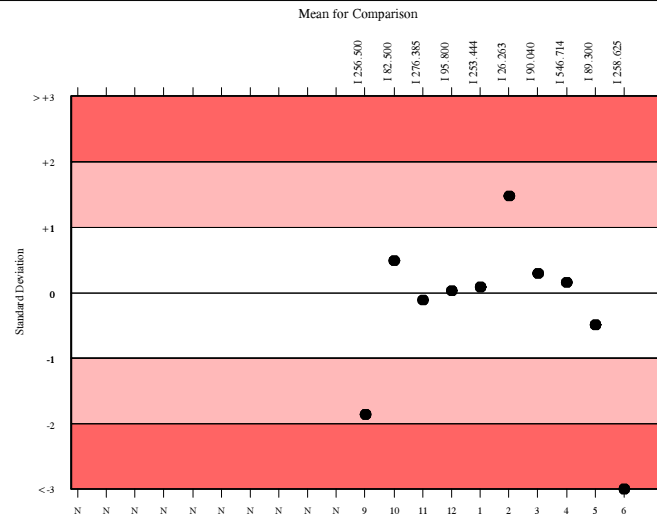
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	3102	271.145	9.0	0.55	20.28	319
Randox liquid stable pNPG7	53	281.967	5.5	2.66	21.09	4
Roche Cobas c501/502 e601/602	8	258.625	1.7	1.92	19.34	1

▲ Your Result	180.000	SDI	-4.07
		RMSDI	-0.40
■ Mean for Comparison	258.625	TS	11
		RMTS	90
		%DEV	-30.4
		RM%DEV	-2.7

Acceptable limits derived from Biological Variation	14.6%
Acceptable limits of performance for RIQAS	12.30%
SDI in bottom 5% of peer group	
TS & %DEV outside limits	



Method	N	Mean	CV%	U <sub>m</sub>
Roche liquid stable pNPG7	755	257.430	2.5	0.29
Other 2-chloro-pNPG3	705	277.250	9.4	1.23
Dade Behring 2-chloro-pNPG3	233	310.090	2.5	0.62
Ortho Vitros MicroSlide Systems	174	164.326	4.0	0.62
Beckman Olympus - blocked pNPG7	170	268.261	4.0	1.02
Beckman Synchron AMY7	148	279.226	3.0	0.86
Other - blocked pNPG7	131	268.999	6.1	1.78
Roche Integra 2-chloro-pNPG7	121	260.886	2.7	0.80
Bayer - blocked pNPG7	100	268.825	3.1	1.05
pNP Maltotrioidase substrates	72	272.433	6.3	2.53
Randox - Ethylidene pNPG7	70	273.807	10.3	4.23
Other non blocked pNPG7	58	268.733	6.0	2.66
Randox liquid stable pNPG7	53	281.967	5.5	2.66
Other 2-chloro-pNP-linked sub.	48	280.426	8.0	4.07
Saccharogenic	47	185.634	23.2	7.86
Beckman maltotetraose	28	276.281	4.4	2.85
bioMerieux 2-chloro-pNPG3	25	264.136	6.2	4.10
Human - blocked pNPG7	17	262.587	11.2	8.88
Other Roche 2-chloro-pNPG7	19	254.556	4.7	3.45
I.L. 2-chloro-pNPG3	21	284.810	6.1	4.73
Agappe - CNPG3	17	273.868	10.2	8.46



# AST (GOT), U/l @ 37°C

	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	4582	128.297	10.7	0.25	10.53	380
Tris buffer without P5P	3599	124.107	6.4	0.17	10.19	330
Roche Cobas c501/502 e601/602	475	119.899	3.3	0.22	9.84	52

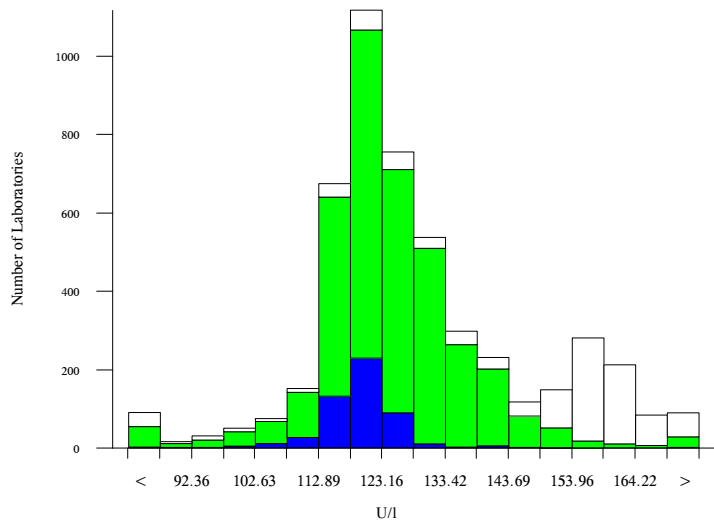
▲ Your Result	26.700	SDI	-9.47
		RMSDI	-1.06
■ Mean for Comparison	119.899	TS	10
		RMTS	98
		%DEV	-77.7
		RM%DEV	-8.7

Acceptable limits derived from Biological Variation 16.69%

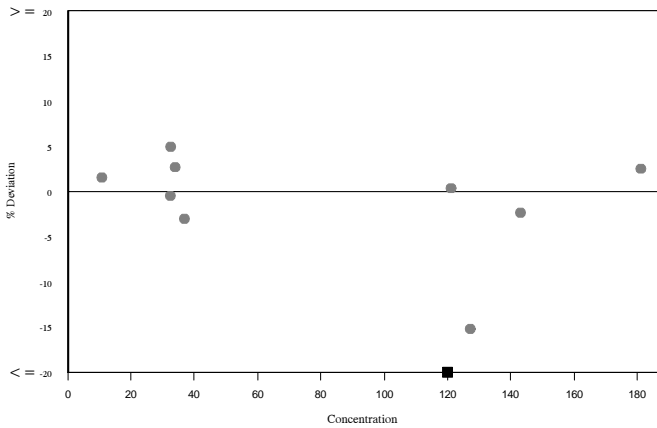
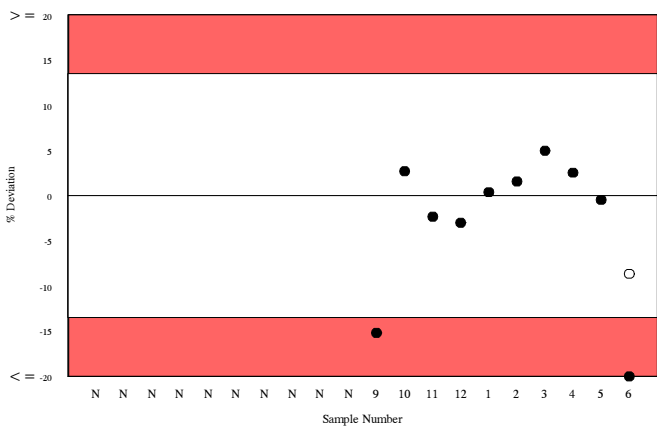
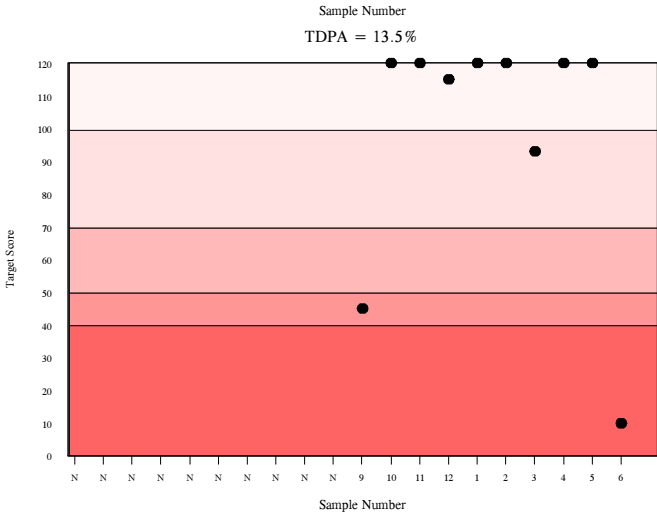
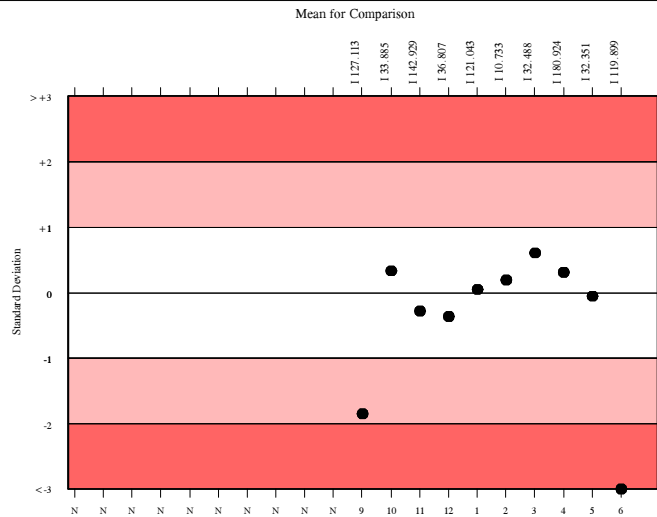
Acceptable limits of performance for RIQAS 13.50%

SDI in bottom 5% of peer group

TS & %DEV outside limits



Method	N	Mean	CV%	U <sub>m</sub>
Tris buffer without P5P	3599	124.107	6.4	0.17
Tris buffer with P5P	335	154.464	6.7	0.70
Ortho Vitros MicroSlide visible sl.	218	160.226	3.2	0.43
Siemens/Dade, standard non IFCC corr.	165	157.055	3.9	0.59
Colorimetric	74	97.288	36.8	5.20
Agappe - IFCC	47	124.820	10.5	2.38
Tris buffer, SCE	26	118.304	2.5	0.73
Phosphate buffer, DGKC	20	127.066	8.0	2.83
Tris buffer with P5P, NVKC	19	134.506	11.5	4.42
Vitros DT60/DT60 II/DTSC II	16	174.688	10.0	5.45
Other Dry Chemistry	13	138.462	14.3	6.85



**RIQAS**



# Bilirubin, Direct, mg/dl

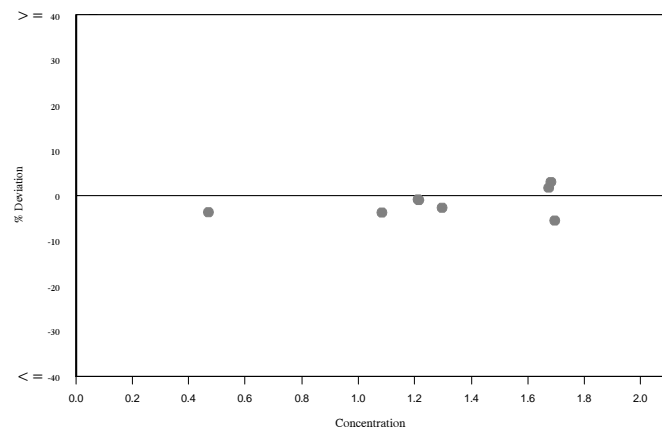
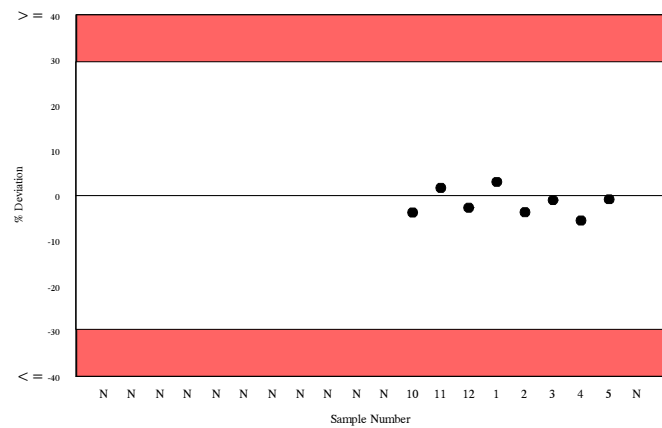
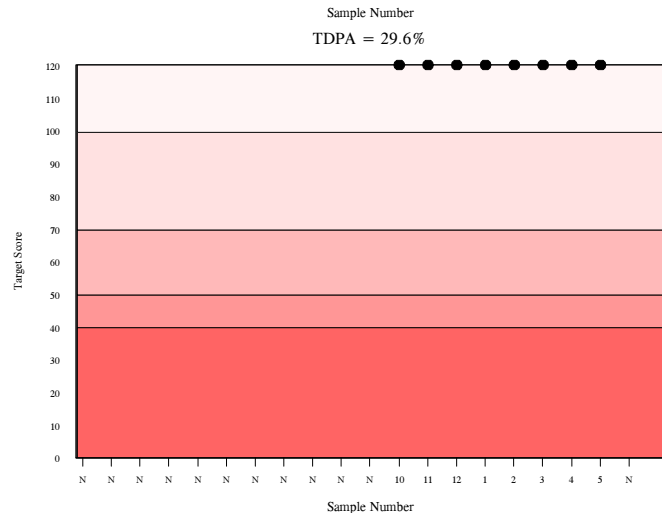
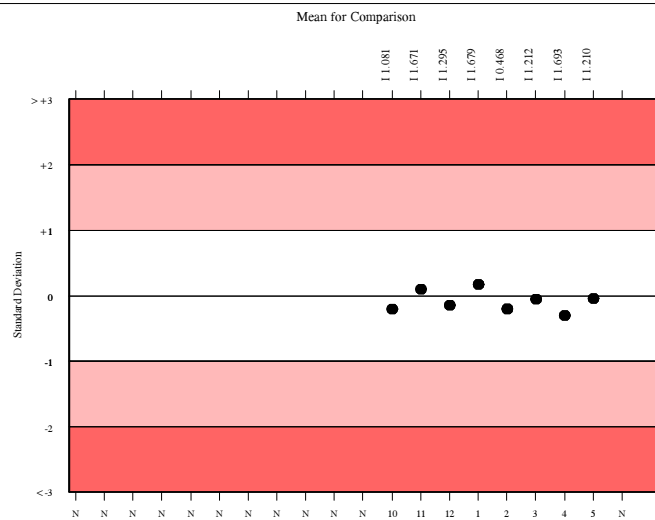
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	3841					
Dichlorophenyl Diazonium	1216					
Roche Integra	136					

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

Acceptable limits derived from Biological Variation	44.5%
Acceptable limits of performance for RIQAS	29.60%

No Histogram

Method	N	Mean	CV%	U <sub>m</sub>
Diazo with Sulphanilic Acid	1838			
Dichlorophenyl Diazonium	1216			
Diazo with Dichloroaniline	435			
Oxidation to Biliverdin	143			
Vitros conjugated from BUBC	89			
Roche (US calibrator only)	72			
Vitros Total Bil - BU	26			
Roche JG factored	26			
Agappe - DIAZO	12			
- select -	4			
Other Dry Chemistry	2			



# Bilirubin, Total, mg/dl

	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	4384	4.809	7.5	0.01	0.45	428
Dichlorophenyl Diazonium	1131	4.770	6.3	0.01	0.45	85
Roche Cobas c501/502 e601/602	175	4.585	2.5	0.01	0.43	22

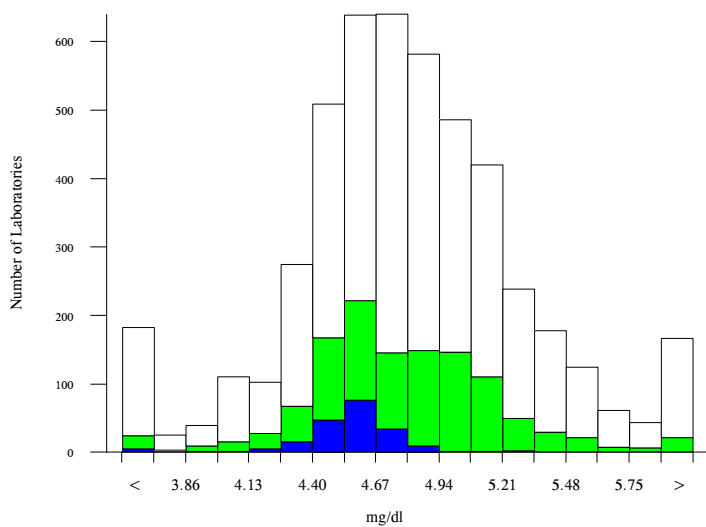
▲ Your Result	0.447	SDI	-9.58
		RMSDI	-0.90
■ Mean for Comparison	4.585	TS	10
		RMTS	92
		%DEV	-90.3
		RM%DEV	-8.4

Acceptable limits derived from Biological Variation 26.94%

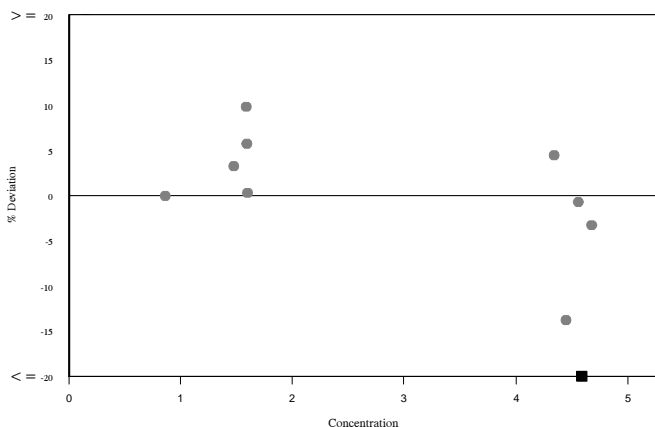
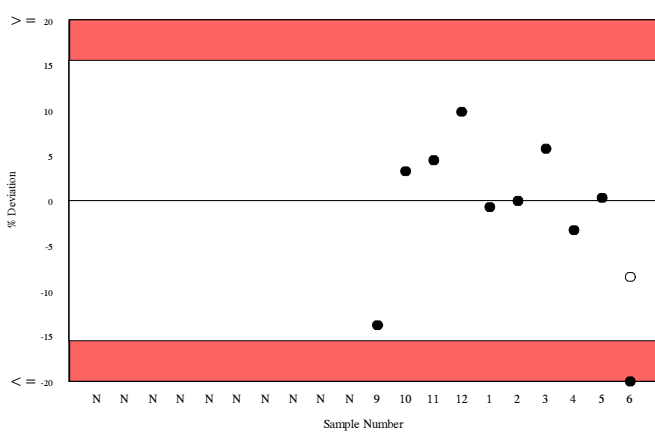
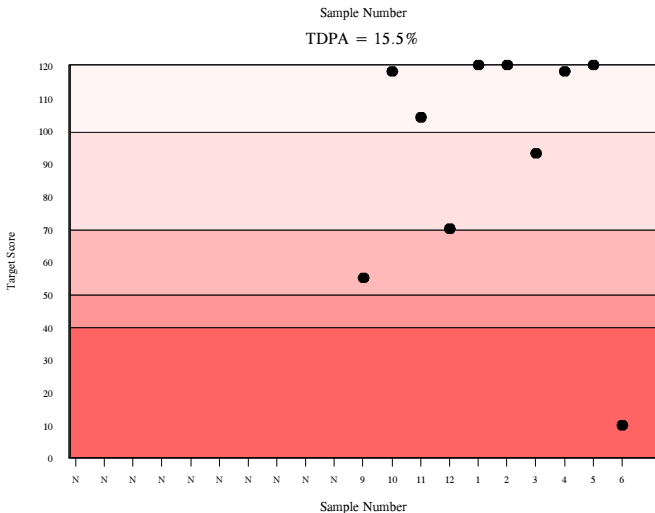
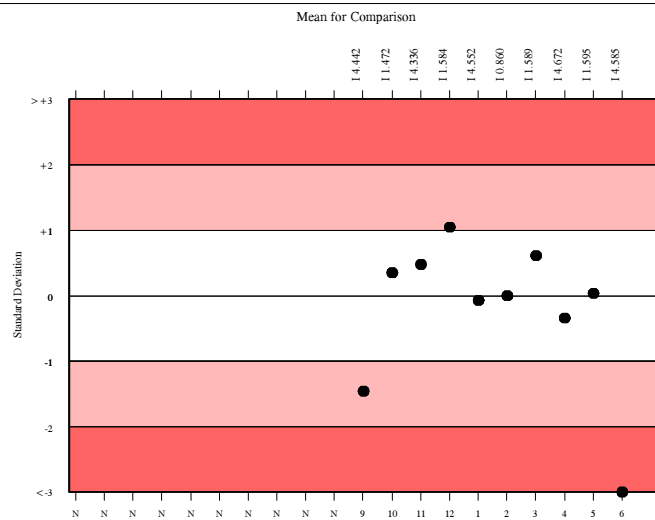
Acceptable limits of performance for RIQAS 15.50%

SDI in bottom 5% of peer group

TS & %DEV outside limits



Method	N	Mean	CV%	U <sub>m</sub>
Diazo with Sulphanilic Acid	1862	4.865	7.7	0.01
Dichlorophenyl Diazonium	1131	4.770	6.3	0.01
Diazonium ion	566	4.619	5.2	0.01
Diazo with Dichloroaniline	338	5.011	5.5	0.02
Ortho Vitros MicroSlide System Total Bil	179	4.451	4.8	0.02
Oxidation to Biliverdin	163	5.316	3.9	0.02
Nitrobenzediazonium Salt	40	4.860	5.3	0.05
Ortho Vitros MicroSlide Total BUBC	32	4.416	5.1	0.05
Other Dry Chemistry	12	4.134	11.3	0.17
Vitros DT60/DT60 II Total Bil	7	4.100	7.8	0.15
Agappe - TAB	5	5.188	10.7	0.31
No longer in use	3	3.536	51.9	1.32
Agappe - DMSO	2	4.530	27.2	1.09
- select -	2	5.150	2.5	0.11



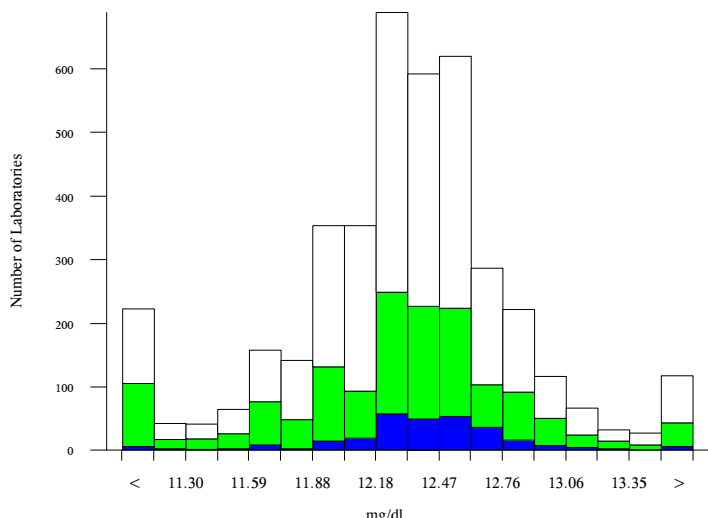


# Calcium, mg/dl

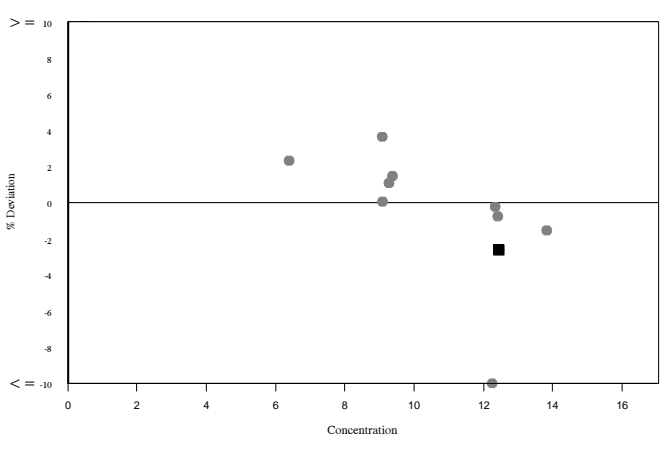
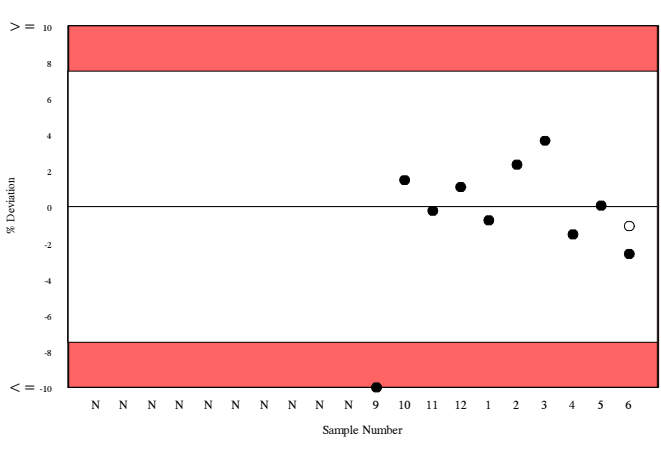
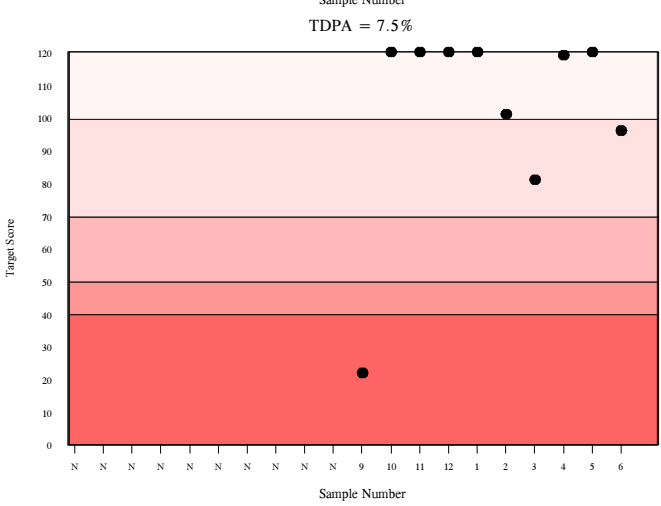
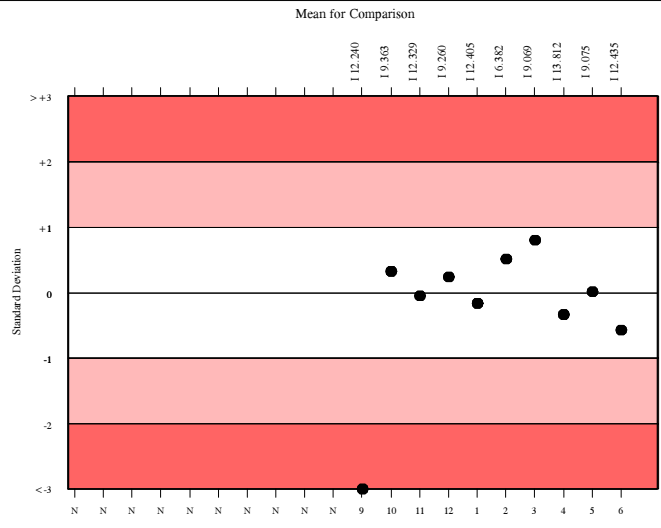
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	3786	12.328	3.2	0.01	0.56	351
Cresolphthalein complexone	1402	12.329	3.4	0.01	0.56	143
Roche Cobas c501/502 e601/602	254	12.435	2.0	0.02	0.57	30

▲ Your Result	12.110	SDI RMSDI	-0.57 -0.24
■ Mean for Comparison	12.435	TS RMTS	96 101
		%DEV RM%DEV	-2.6 -1.1

Acceptable limits derived from Biological Variation	2.55%
Acceptable limits of performance for RIQAS	7.50%



Method	N	Mean	CV%	U <sub>m</sub>
Cresolphthalein complexone	1402	12.329	3.4	0.01
Arsenazo	1328	12.338	3.4	0.01
NM-BAPTA	538	12.409	2.0	0.01
Ortho Vitros MicroSlide Systems	224	12.239	2.0	0.02
Ion selective electrode	200	12.116	2.5	0.03
Methylthymol blue	24	12.192	7.0	0.22
Vitros DT60/DT60 II/DTSC II	22	12.517	5.7	0.19
Agappe - ARSENAZO	11	12.521	4.2	0.20
Phosphonazo	9	12.240	4.8	0.24
Agappe - OCPC	4	12.865	3.8	0.30
Atomic absorption	3	12.073	4.9	0.43
- select -	3	12.247	0.9	0.08
Other Dry Chemistry	2	11.450	3.1	0.31



**RIQAS**

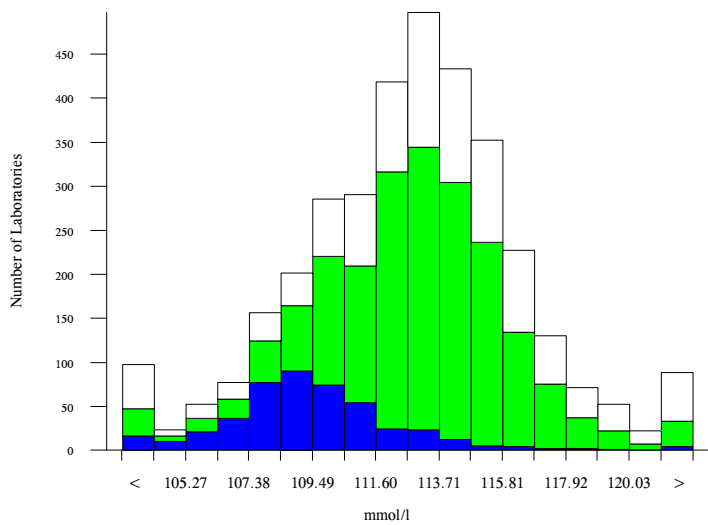


# Chloride, mmol/l

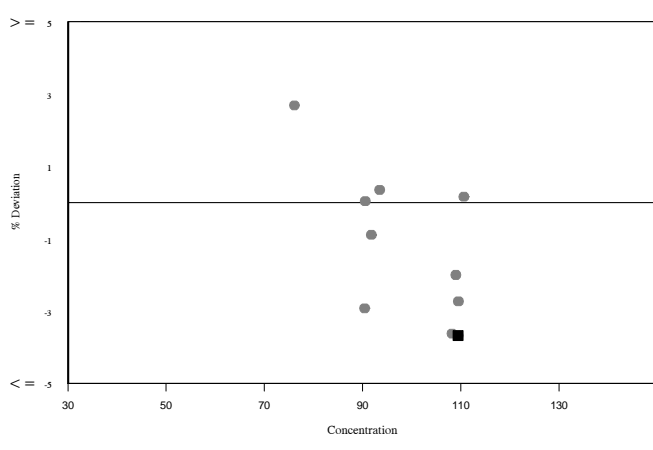
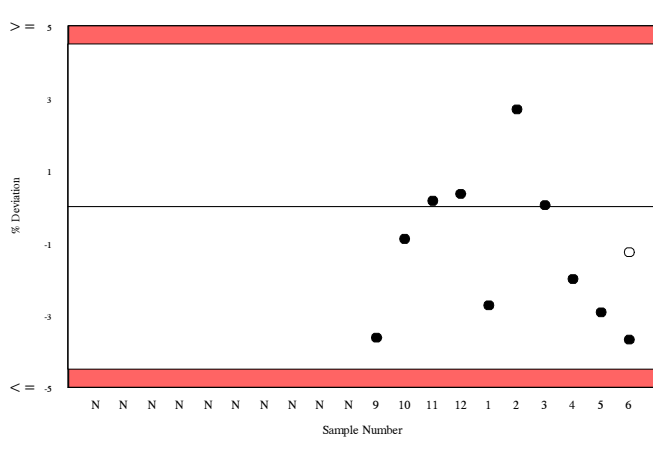
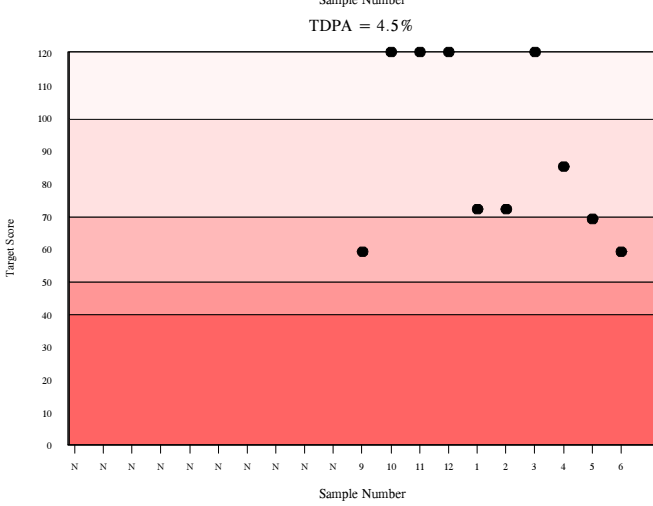
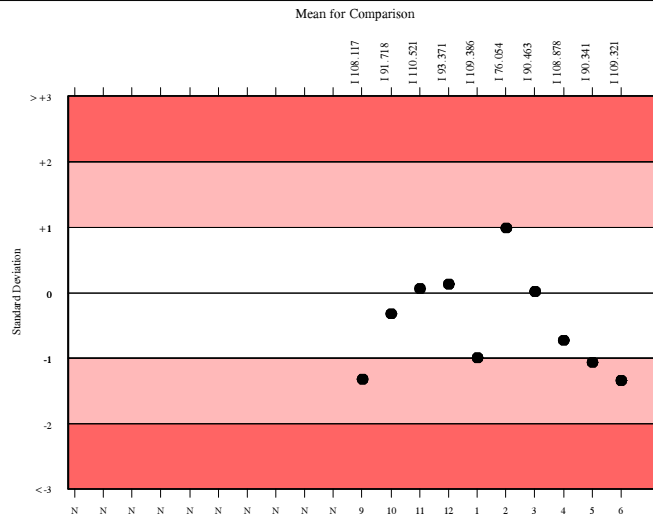
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	3210	112.657	2.5	0.06	3.08	263
ISE, indirect	2224	112.408	2.3	0.07	3.08	160
Roche Cobas c501/502 e601/602	416	109.321	1.8	0.12	2.99	39

▲ Your Result	105.300	SDI	-1.34
		RMSDI	-0.46
■ Mean for Comparison	109.321	TS	59
		RMTS	89
		%DEV	-3.7
		RM%DEV	-1.3

Acceptable limits derived from Biological Variation	1.5%
Acceptable limits of performance for RIQAS	4.50%



Method	N	Mean	CV%	U <sub>m</sub>
ISE, indirect	2224	112.408	2.3	0.07
ISE, direct	672	113.607	2.9	0.16
Ortho Vitros MicroSlide Systems	186	113.641	1.5	0.15
Colorimetric	101	112.022	4.1	0.58
Vitros, DT60/DT60 II/DTE II	13	115.677	2.2	0.86
Agappe - THIOCYANATE	7	105.906	6.0	3.02
Optical Fluorescence	5	123.080	2.4	1.63
- select -	3	113.703	1.1	0.88
Other Dry Chemistry	2	122.000	5.8	6.25

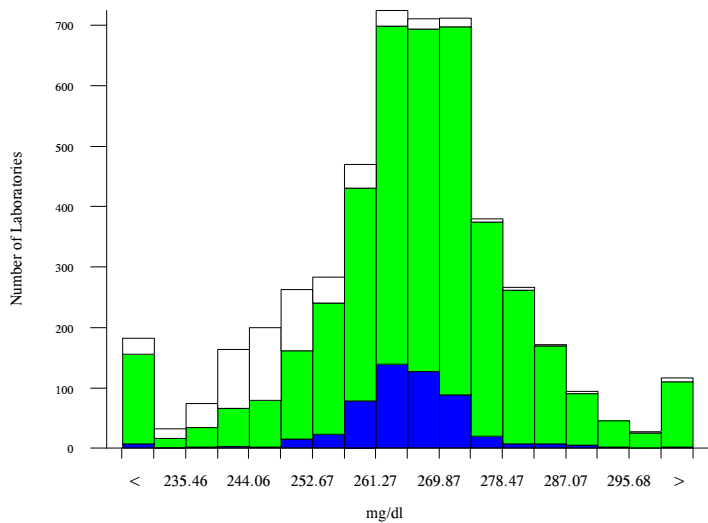


# Cholesterol, mg/dl

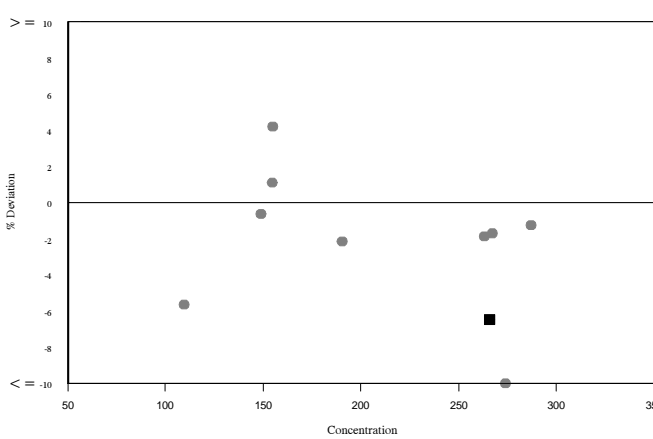
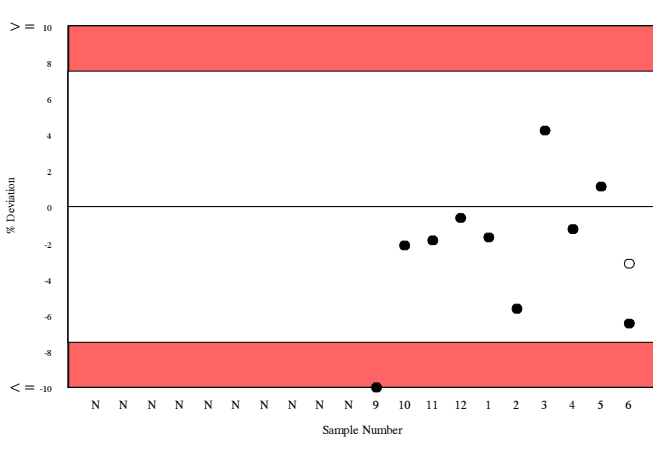
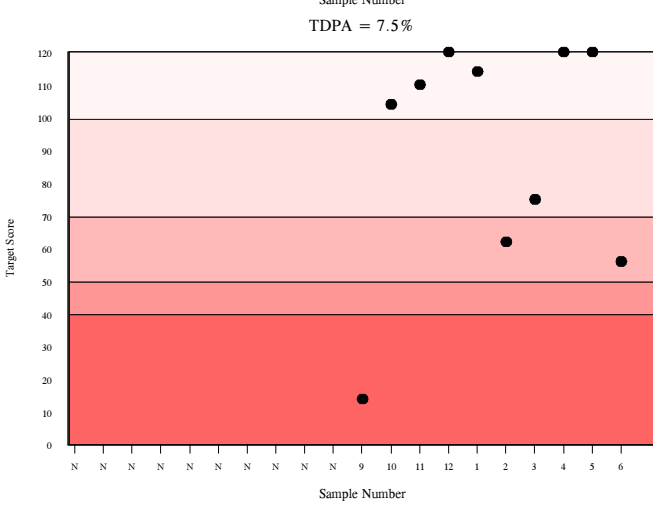
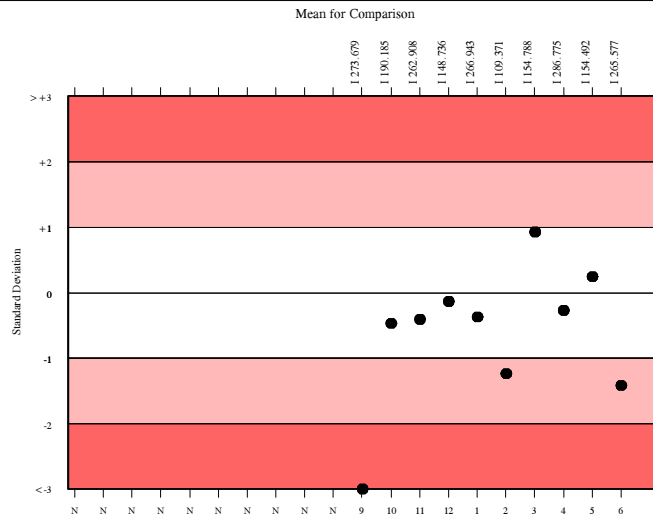
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	4504	265.575	4.3	0.21	12.11	404
Cholesterol Oxidase	3936	267.706	3.6	0.19	12.20	408
Roche Cobas c501/502 e601/602	483	265.577	2.1	0.31	12.11	45

▲ Your Result	248.400	SDI	-1.42
		RMSDI	-0.69
■ Mean for Comparison	265.577	TS	56
		RMTS	89
		%DEV	-6.5
		RM%DEV	-3.2

Acceptable limits derived from Biological Variation	9.01%
Acceptable limits of performance for RIQAS	7.50%



Method	N	Mean	CV%	U <sub>m</sub>
Cholesterol Oxidase	3936	267.706	3.6	0.19
Ortho Vitros MicroSlide Systems	229	246.382	2.7	0.54
Dimension-Dade Behring reagents	221	247.500	2.8	0.58
Agappe - CHOD-PAP	39	266.346	4.9	2.61
Vitros DT60/DT60 II/DTSC II	16	255.534	6.5	5.22
Other Dry Chemistry	10	258.731	7.0	7.18
- select -	2	265.896	6.3	14.74



**RIQAS**

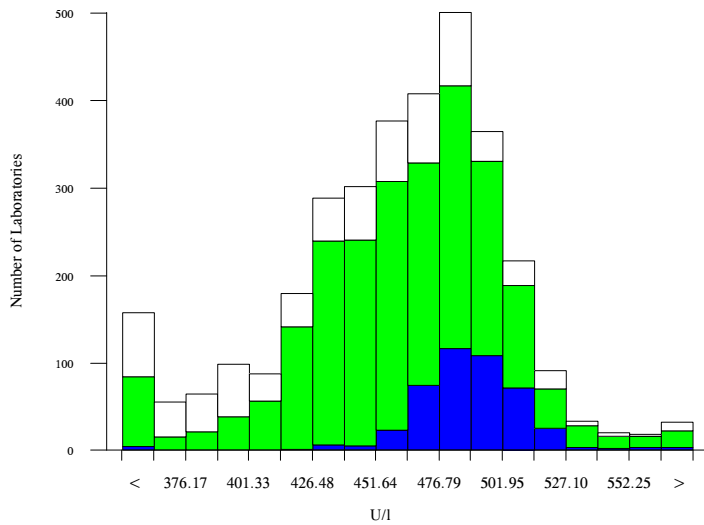


# CK, Total, U/I @ 37°C

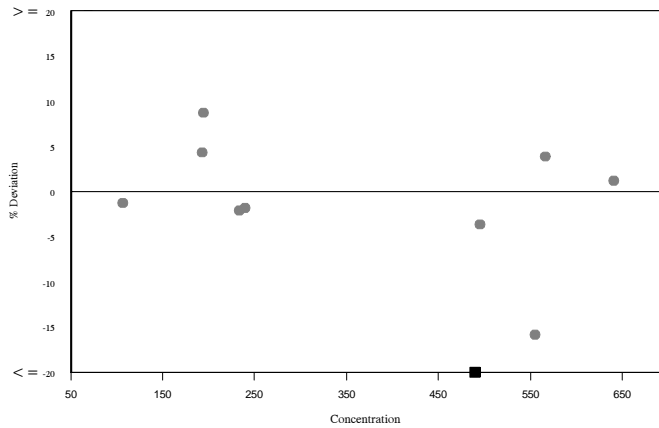
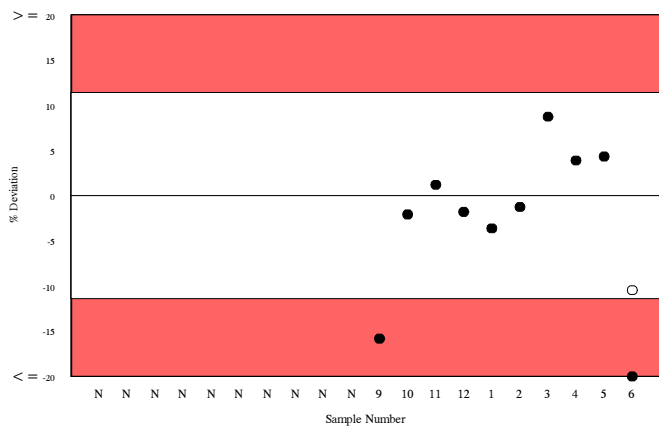
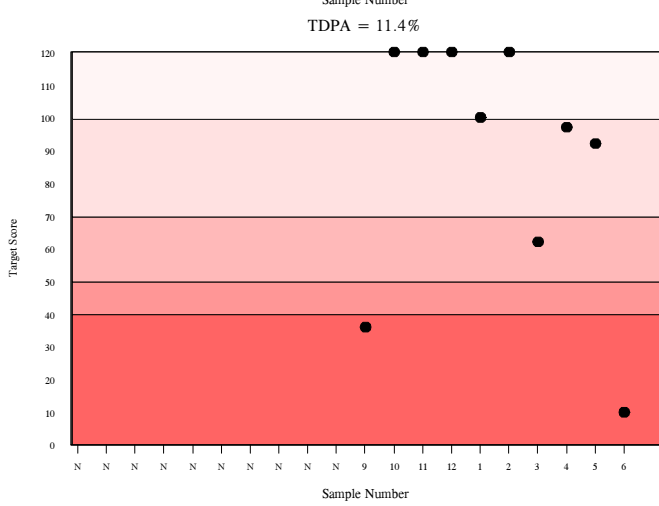
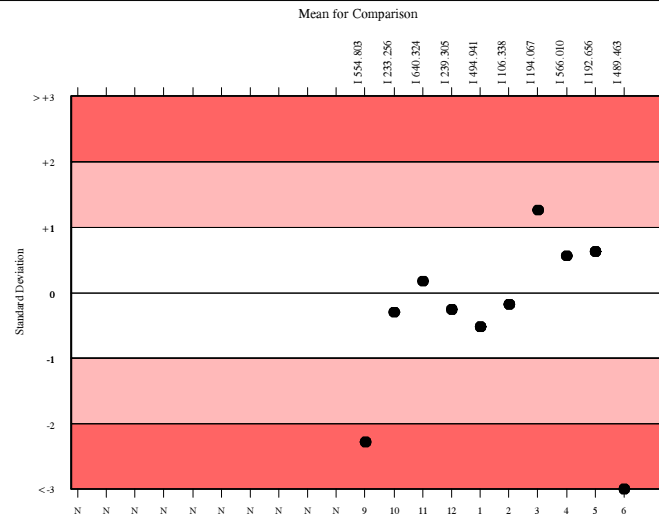
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	3013	464.219	7.2	0.76	32.17	274
CK-NAC (IFCC)	2357	468.510	6.2	0.75	32.47	199
Roche Cobas c501/502 e601/602	413	489.463	3.1	0.93	33.92	31

▲ Your Result	9.000	SDI	-14.16
		RMSDI	-1.51
■ Mean for Comparison	489.463	TS	10
		RMTS	87
		%DEV	-98.2
		RM%DEV	-10.5

Acceptable limits derived from Biological Variation	30.3%
Acceptable limits of performance for RIQAS	11.40%
SDI in bottom 5% of peer group	
TS & %DEV outside limits	



Method	N	Mean	CV%	U <sub>m</sub>
CK-NAC (IFCC)	2357	468.510	6.2	0.75
Ortho Vitros MicroSlide Systems	177	384.834	5.0	1.81
CK-NAC substrate start (DGKC)	166	467.143	6.6	2.99
Monothioglycerol	145	470.674	3.6	1.75
CK-NAC serum start (DGKC)	74	459.687	7.6	5.09
Creatine phosphate substrate start	34	449.649	10.2	9.86
Dithioerythritol (DTE), IFCC correlated	17	446.060	7.4	9.96
Dithioerythritol (DTE)	10	433.330	1.4	2.41
Vitros DT60/DT60 II/DTSC II	10	355.100	5.3	7.49
Agappe - IFCC/KINETIC	10	444.650	14.5	25.47
- select -	8	497.588	3.3	7.17
Other Dry Chemistry	4	392.250	8.3	20.39

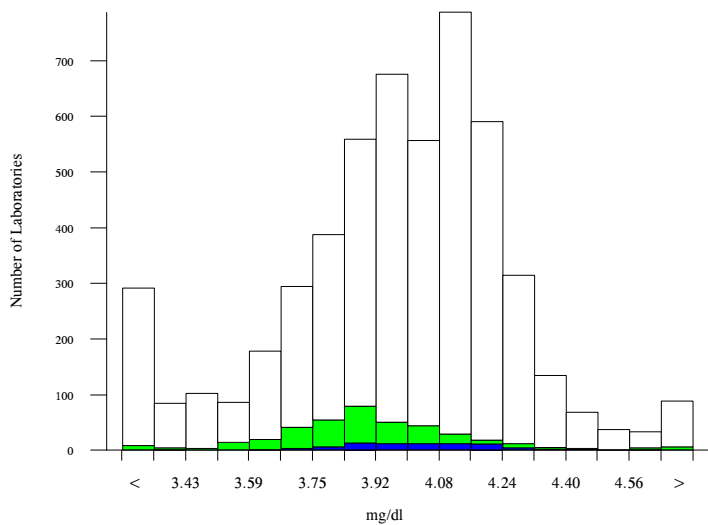


# Creatinine, mg/dl

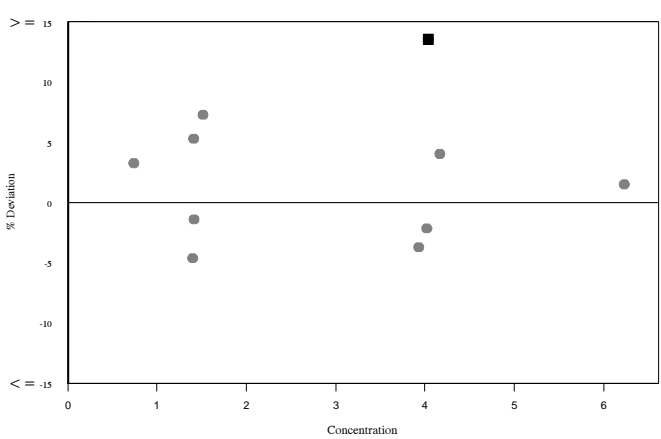
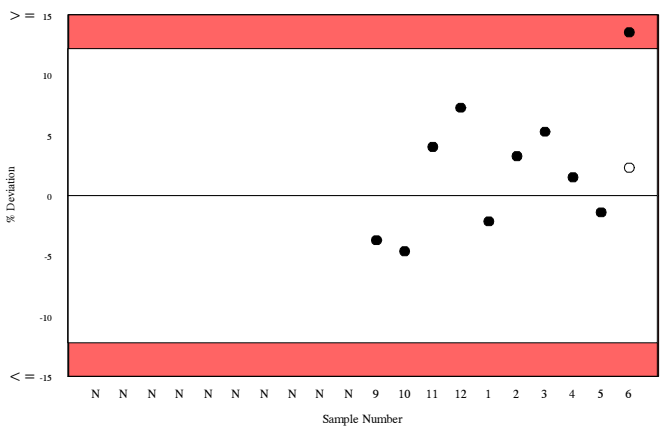
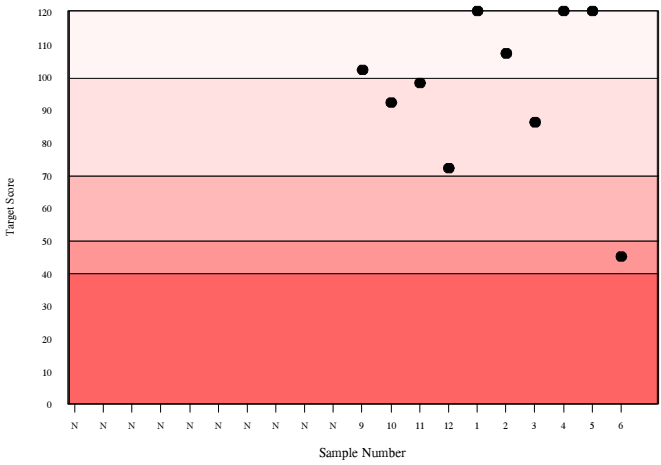
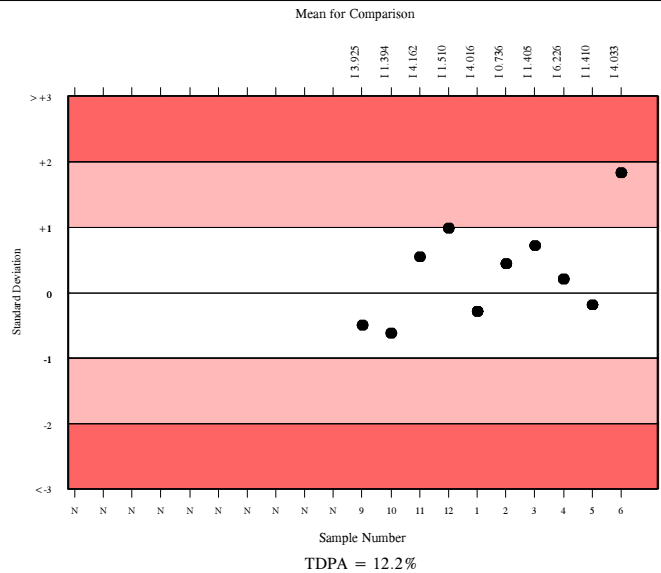
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	4768	4.002	5.4	0.00	0.30	494
Jaffe rate comp. (-18umol/l)	361	3.906	4.4	0.01	0.29	33
Roche Cobas c501/502 e601/602	74	4.033	3.8	0.02	0.30	7

▲ Your Result	4.580	SDI	1.83
		RMSDI	0.31
■ Mean for Comparison	4.033	TS	45
		RMTS	96
		%DEV	13.6
		RM%DEV	2.3

Acceptable limits derived from Biological Variation	8.87%
Acceptable limits of performance for RIQAS	12.20%
TS & %DEV outside limits	



Method	N	Mean	CV%	U <sub>m</sub>
Alkaline picrate no deprot.	1766	3.927	6.7	0.01
Jaffe rate blanked	724	3.940	6.2	0.01
Jaffe rate blanked comp. (-26umol/l)	508	4.020	3.5	0.01
Roche Creatinine Plus	375	4.099	3.5	0.01
Jaffe rate comp. (-18umol/l)	361	3.906	4.4	0.01
Vitros, IDMS traceable	246	4.257	3.2	0.01
Alkaline picrate with deprot.	194	3.889	5.4	0.02
Enzymatic UV method	192	4.099	2.9	0.01
IDMS traceable	193	4.086	2.7	0.01
Creatinine PAP method	107	4.092	2.9	0.01
Other enzymatic methods	79	4.170	3.9	0.02
Agappe - JAFFE'S KINETIC	36	3.825	8.7	0.07
Other Dry Chemistry	20	4.121	8.0	0.09
Vitros DT60/DT60 II/DTSC II	15	4.037	4.3	0.06
Agappe - ENZYMATIC	7	3.933	3.8	0.07



# GGT, U/l @ 37°C

	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	3489	172.099	9.4	0.34	14.75	263
Gamma glut.-3-carb.-4-nitro.	767	164.458	8.1	0.60	14.10	54
Roche Cobas c501/502 e601/602	113	155.953	3.7	0.68	13.37	16

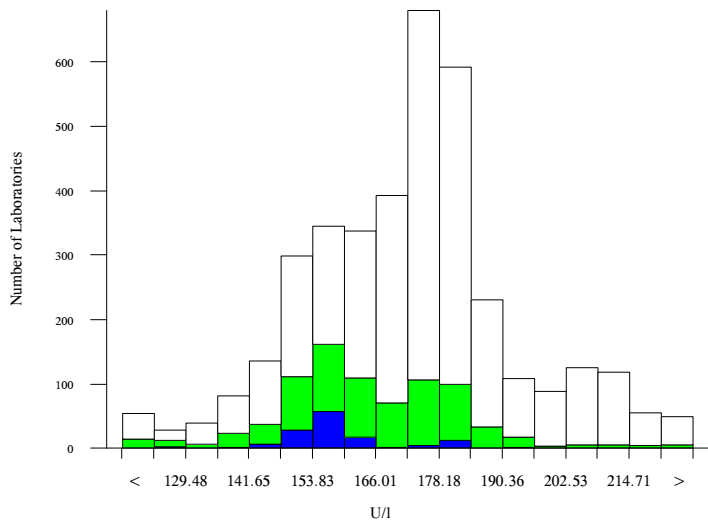
▲ Your Result	123.400	SDI	-2.44
		RMSDI	-0.54
■ Mean for Comparison	155.953	TS	33
		RMTS	101
		%DEV	-20.9
		RM%DEV	-4.6

Acceptable limits derived from Biological Variation 22.11%

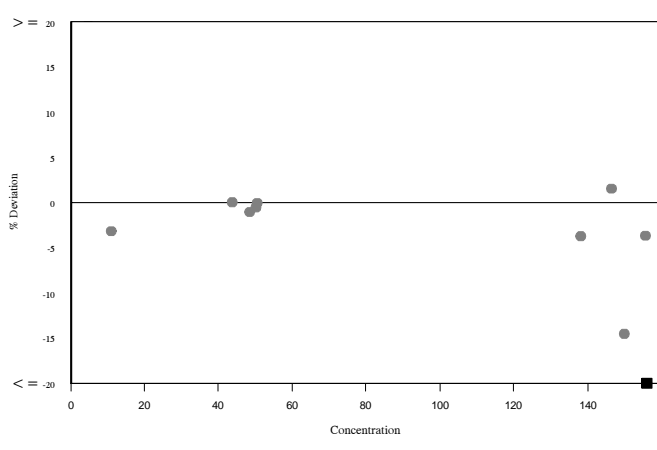
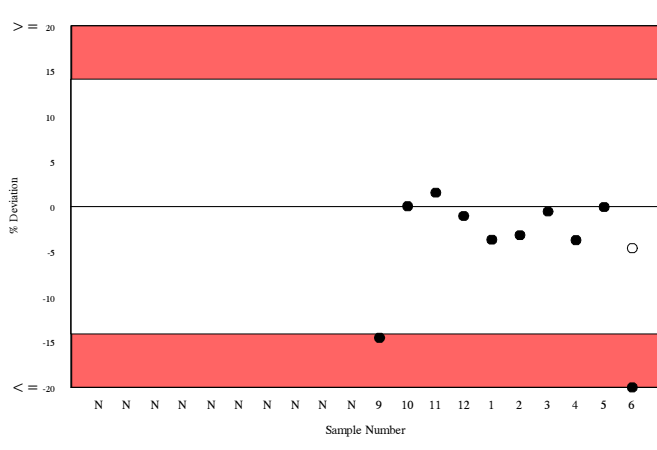
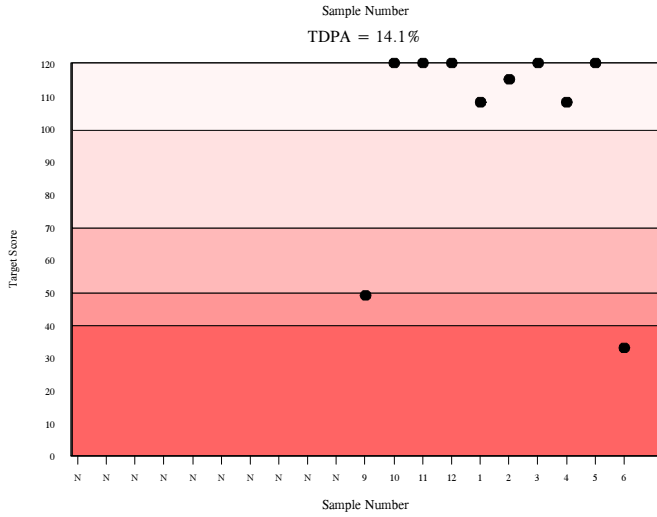
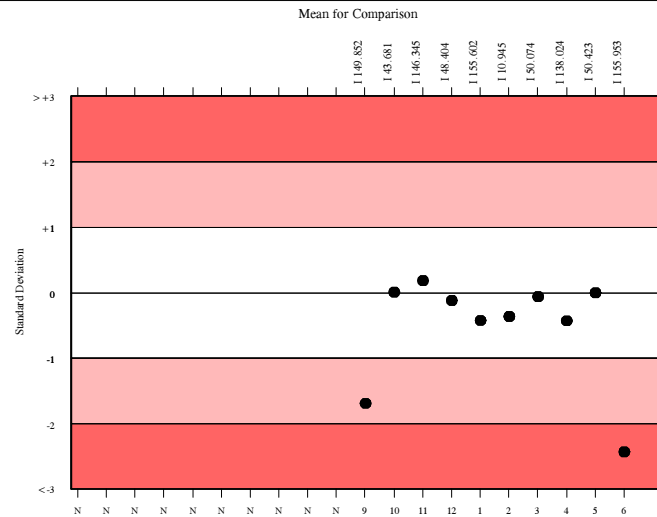
Acceptable limits of performance for RIQAS 14.10%

SDI in bottom 5% of peer group

TS & %DEV outside limits



Method	N	Mean	CV%	U <sub>m</sub>
Gamma glut'3-carb'4-nitro(IFCC)	2100	173.234	6.1	0.29
Gamma glut.-3-carb.-4-nitro.	767	164.458	8.1	0.60
Ortho Vitros MicroSlide Systems	177	204.368	2.5	0.49
Gamma glutamyl-4-nitroanilide	159	142.571	4.6	0.66
Siemens/Dade, standard nonIFCC correlate	148	211.291	3.6	0.78
DCL, gamma glut.-3-carb.-4-nitro.	58	165.675	7.9	2.14
Agappe - SZASZ KINETIC	23	160.360	5.5	2.32
Vitros, DT60/DT60 II/DTSC II	14	212.929	4.9	3.45
Other Dry Chemistry	4	147.500	4.3	3.97
- select -	3	154.667	17.7	19.70



**RIQAS**

# Glucose, mg/dl

	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	4906	264.803	3.7	0.18	11.59	515
Hexokinase	2765	265.458	2.6	0.16	11.62	227
Roche Cobas c501/502 e601/602	492	263.801	2.3	0.33	11.55	50

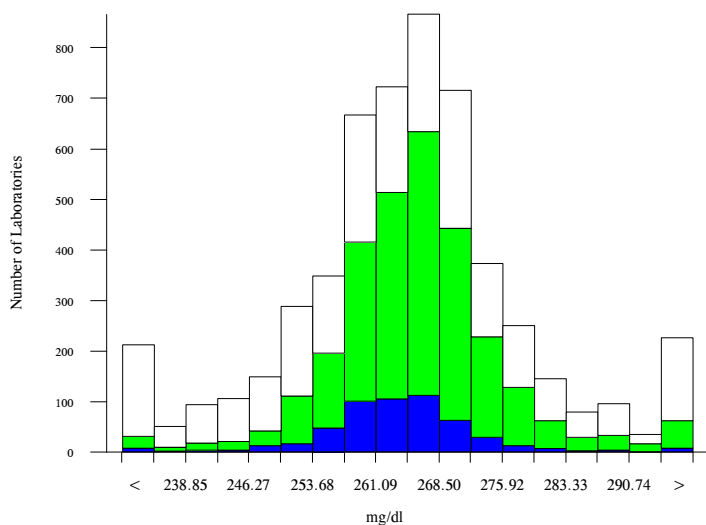
▲ Your Result	80.800	SDI	-15.85
		RMSDI	-1.96
■ Mean for Comparison	263.801	TS	10
		RMTS	84
		%DEV	-69.4
		RM%DEV	-8.6

Acceptable limits derived from Biological Variation 6.96%

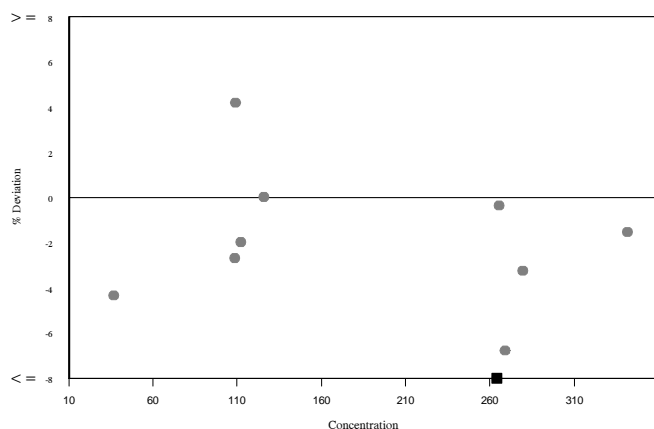
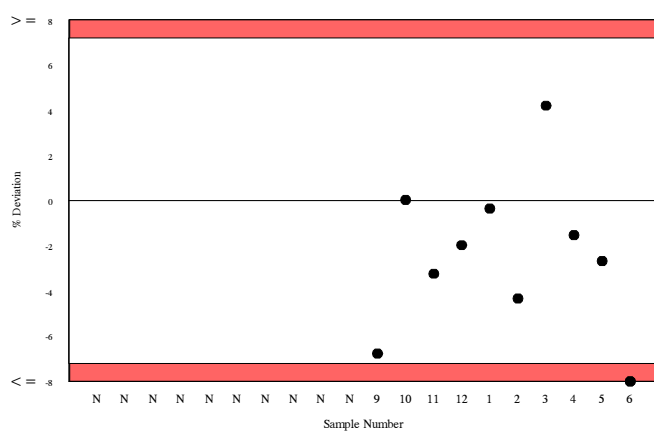
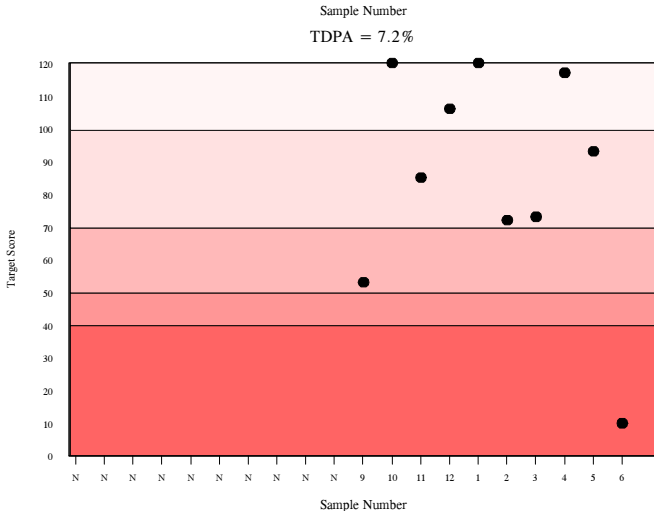
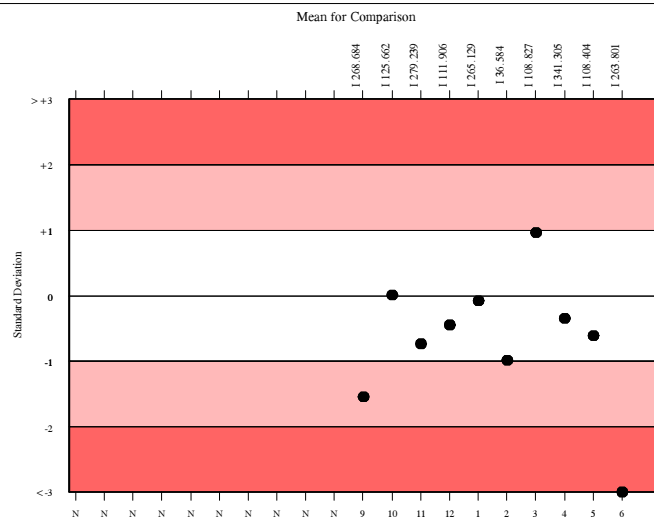
Acceptable limits of performance for RIQAS 7.20%

SDI in bottom 5% of peer group

TS & %DEV outside limits



Method	N	Mean	CV%	U <sub>m</sub>
Hexokinase	2765	265.458	2.6	0.16
Glucose oxidase	1824	266.206	5.4	0.42
Ortho Vitros MicroSlide Systems	236	247.234	2.2	0.45
GOD/02-Beckman method	43	260.695	2.5	1.24
Glucose dehydrogenase	36	265.651	2.7	1.52
Agappe - GOD-PAP	28	262.480	6.2	3.84
Oxygen electrode	17	263.753	3.9	3.08
Vitros, DT60/DT60 II	14	250.036	2.5	2.12
Other Dry Chemistry	9	263.341	3.3	3.59
- select -	3	286.267	6.8	14.06



**RIQAS**

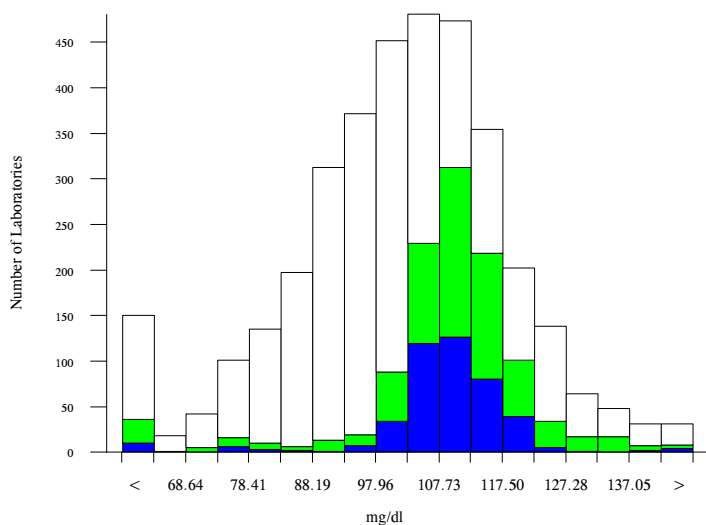
0010

# HDL-Cholesterol, mg/dl

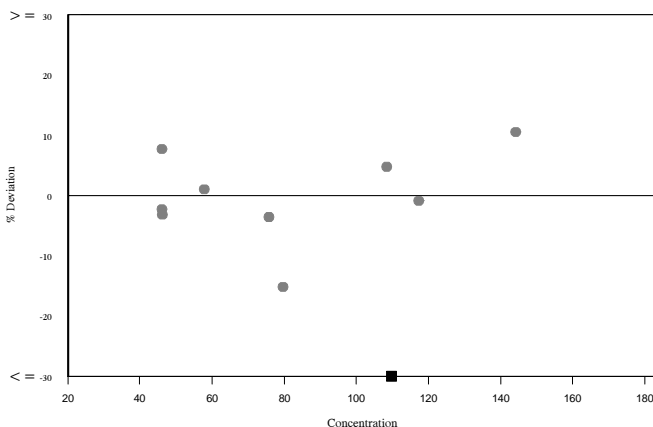
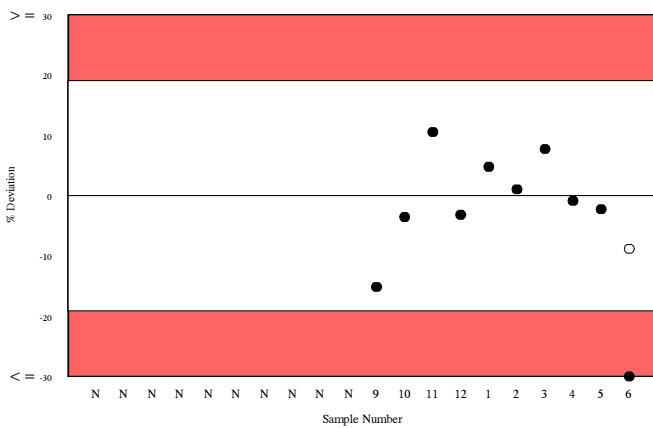
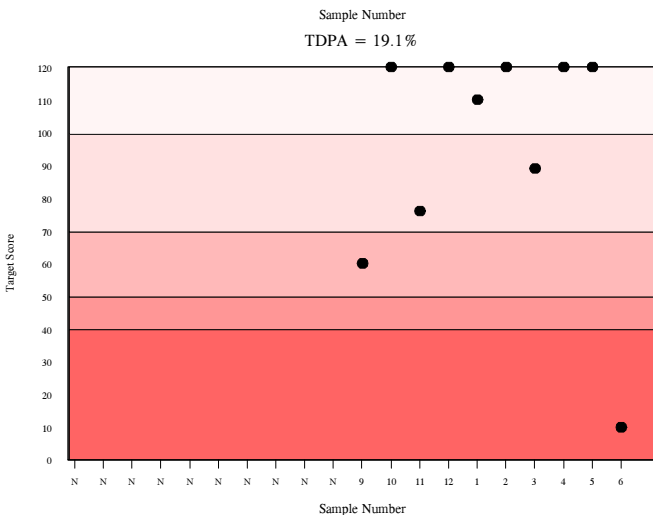
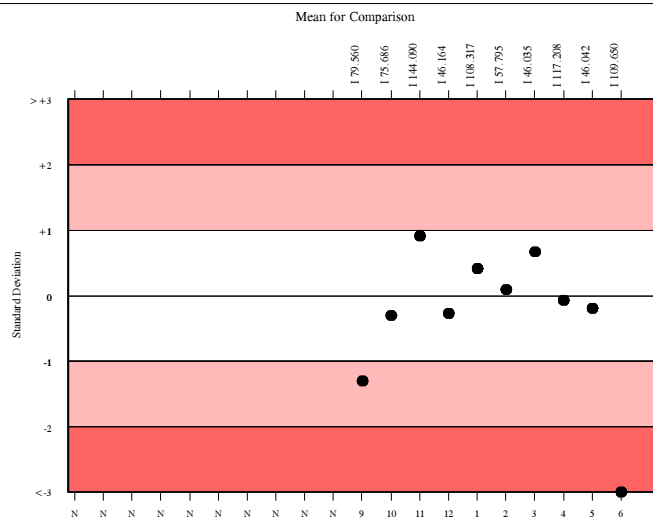
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	3337	102.850	12.7	0.28	11.94	269
Direct HDL, Roche 3rd gen.	1025	110.475	6.2	0.27	12.83	116
Roche Cobas c501/502 e601/602	394	109.650	4.8	0.33	12.73	45

▲ Your Result	13.900	SDI	-7.52
		RMSDI	-0.76
■ Mean for Comparison	109.650	TS	10
		RMTS	94
		%DEV	-87.3
		RM%DEV	-8.8

Acceptable limits derived from Biological Variation	11.63%
Acceptable limits of performance for RIQAS	19.10%
SDI in bottom 5% of peer group	
TS & %DEV outside limits	



Method	N	Mean	CV%	U <sub>m</sub>
Direct HDL, Roche 3rd gen.	1025	110.475	6.2	0.27
Direct HDL, Clearance method	566	94.748	13.7	0.68
Direct HDL, Immunoseparation	549	96.080	12.2	0.63
HDL Ultra/Accel Selective Detergent	295	95.991	7.3	0.50
Direct HDL, PPD	317	115.062	12.1	0.97
Direct HDL, PEGME	274	110.108	7.8	0.64
Vitros dHDL, PTA/MgCl2 direct precip.	167	91.031	5.8	0.50
Vitros, Magnetic HDL	29	91.547	8.8	1.88
Vitros 5.1 FS Microtip assay	19	93.184	6.1	1.63
Agappe - SELECTIVE INHIBITION	16	106.767	12.3	4.10
Other Dry Chemistry	5	90.000	20.9	10.52



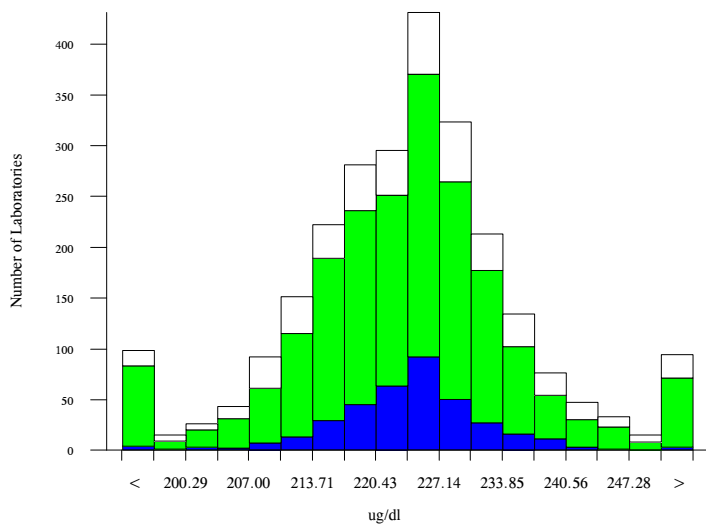


# Iron, ug/dl

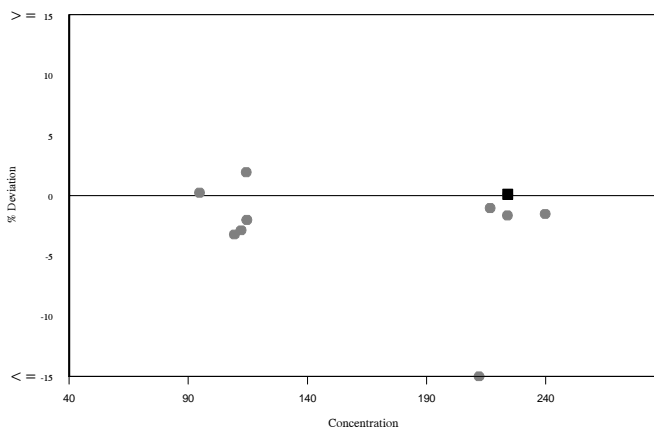
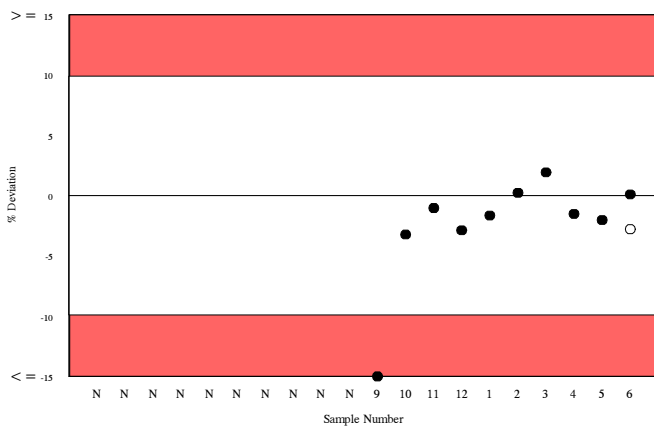
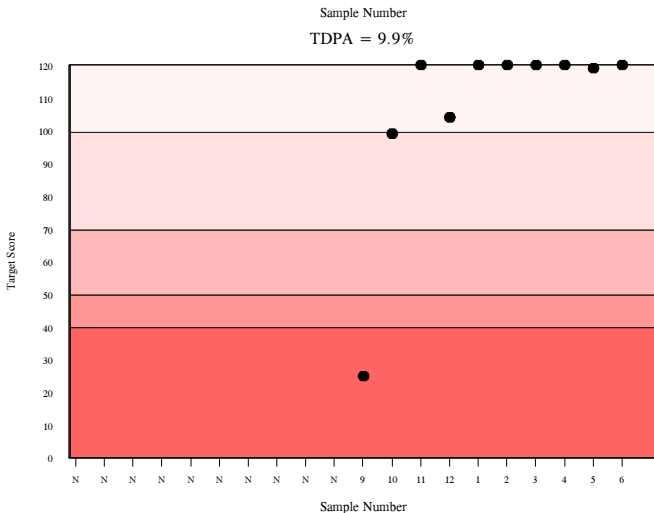
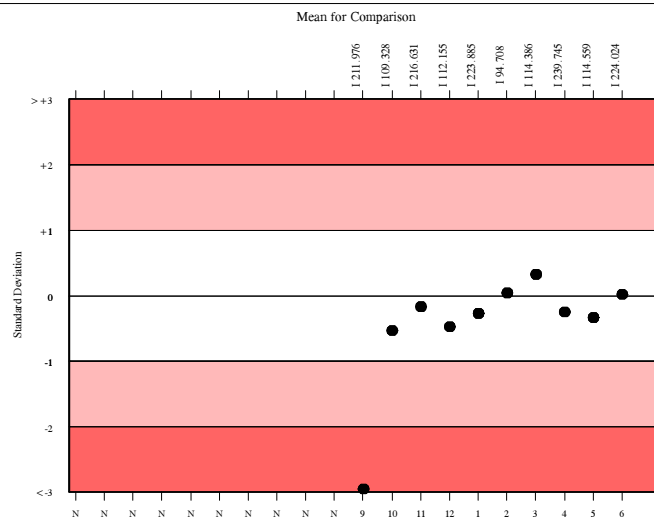
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	2385	223.788	4.0	0.23	13.47	205
Colorimetric without ppt.	1926	223.738	3.8	0.24	13.47	169
Roche Cobas c501/502 e601/602	336	224.024	2.5	0.38	13.48	34

▲ Your Result	224.250	SDI	0.02
		RMSDI	-0.46
■ Mean for Comparison	224.024	TS	120
		RMTS	106
		%DEV	0.1
		RM%DEV	-2.8

Acceptable limits derived from Biological Variation	30.7%
Acceptable limits of performance for RIQAS	9.90%



Method	N	Mean	CV%	U <sub>m</sub>
Colorimetric without ppt.	1926	223.738	3.8	0.24
Colorimetric with ppt.	247	220.995	4.2	0.73
Ortho Vitros MicroSlide Systems	139	231.630	4.4	1.07
Other method with blank	45	225.374	3.7	1.55
Agappe - CHROMAZUROL	7	224.500	5.3	5.63
Other method without blank	7	221.957	4.3	4.48
Vitros DT60/DT60 II/DTSC II	6	182.610	35.1	32.73
Other Dry Chemistry	2	205.000	2.1	3.75



**RIQAS**



0010

# LD (LDH), U/I @ 37°C

	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	2794	457.370	36.7	3.96	40.04	215
L to P, IFCC	1482	363.354	4.0	0.47	31.81	165
Roche Cobas c501/502 e601/602	308	358.640	2.2	0.56	31.40	30

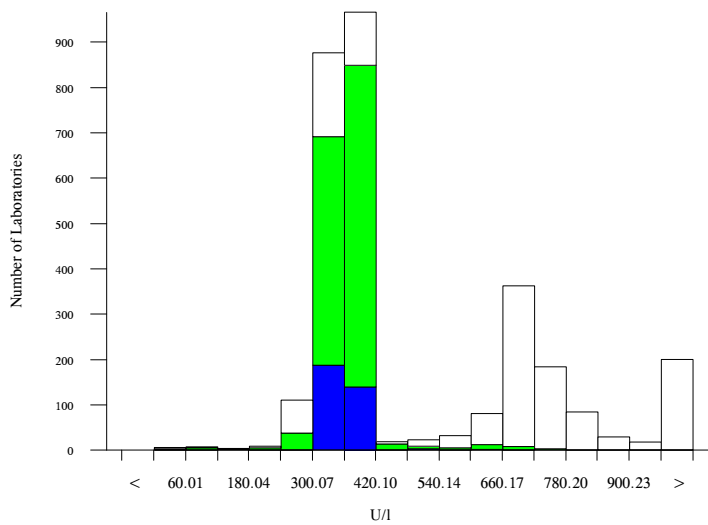
▲ Your Result	111.000	SDI	-7.89
		RMSDI	-1.26
■ Mean for Comparison	358.640	TS	10
		RMTS	89
		%DEV	-69.0
		RM%DEV	-11.0

Acceptable limits derived from Biological Variation 11.4%

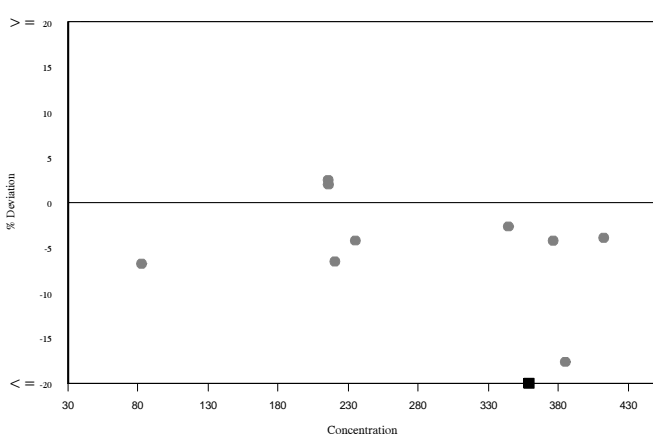
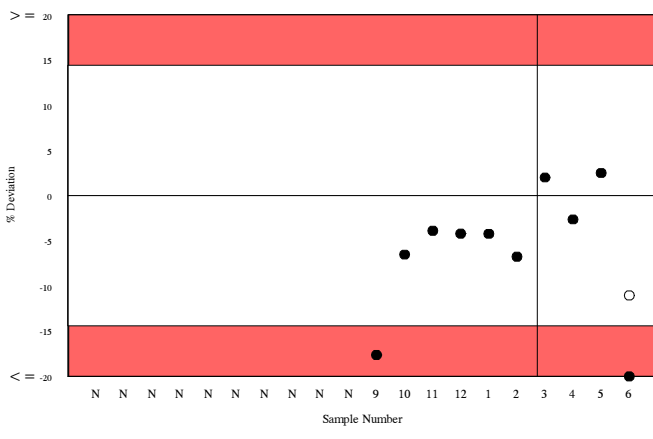
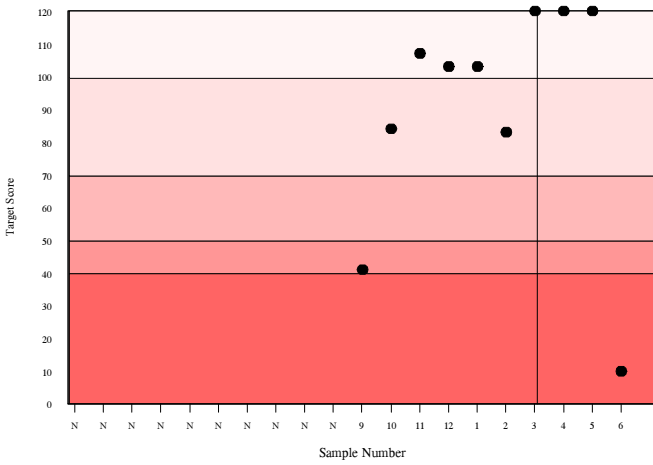
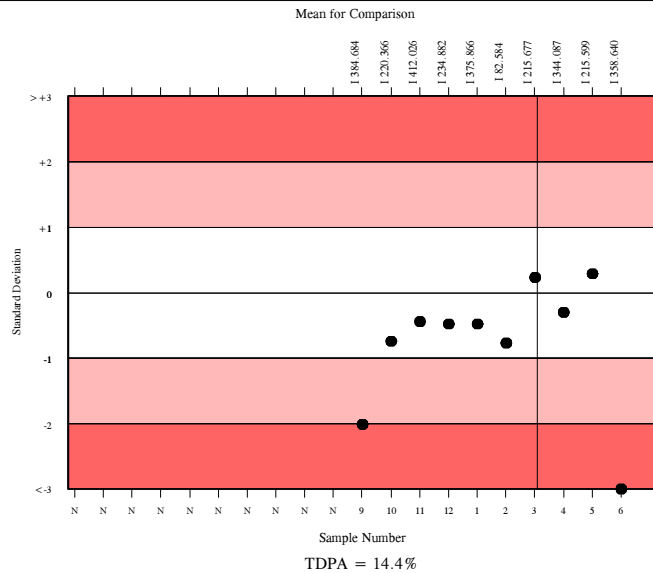
Acceptable limits of performance for RIQAS 14.40%

SDI in bottom 5% of peer group

TS & %DEV outside limits



Method	N	Mean	CV%	U <sub>m</sub>
L to P, IFCC	1482	363.354	4.0	0.47
P to L, German methods	464	703.955	5.3	2.16
Lactate to Pyruvate methods	281	333.147	9.8	2.43
Ortho Vitros MicroSlide Systems	162	1051.236	2.4	2.49
P to L, Scandinavian & Dutch	119	757.341	8.6	7.44
P to L, SFBC	94	702.752	11.3	10.24
L to P Siemens/Dade, Non-IFCC	47	361.186	3.4	2.26
Pyruvate 1.4 mM - Beckman LD-P	26	878.123	19.8	42.53
Agappe - SCE	10	740.664	9.0	26.49
Vitros, DT60/DT60 II/DTSC II	10	1086.600	5.0	21.33
Other Dry Chemistry	4	620.225	27.5	106.52



# Lipase, U/I @ 37°C

- All Methods
- Colorimetric, Roche
- Roche Integra

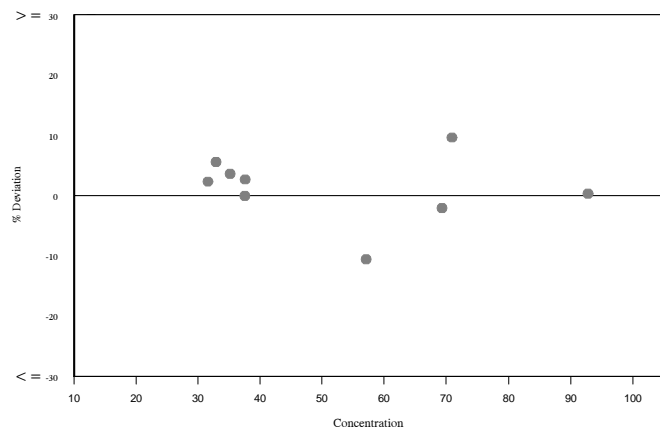
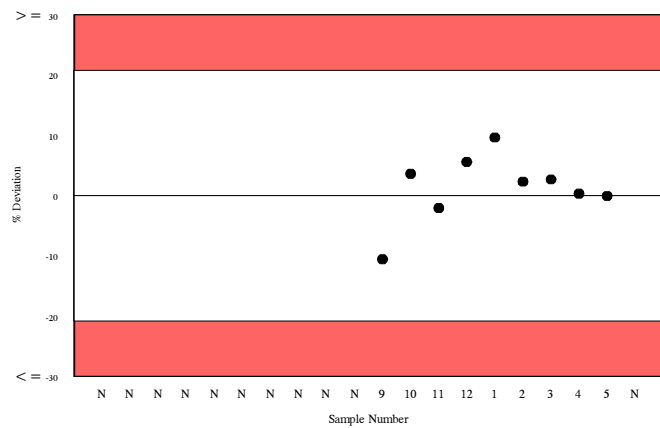
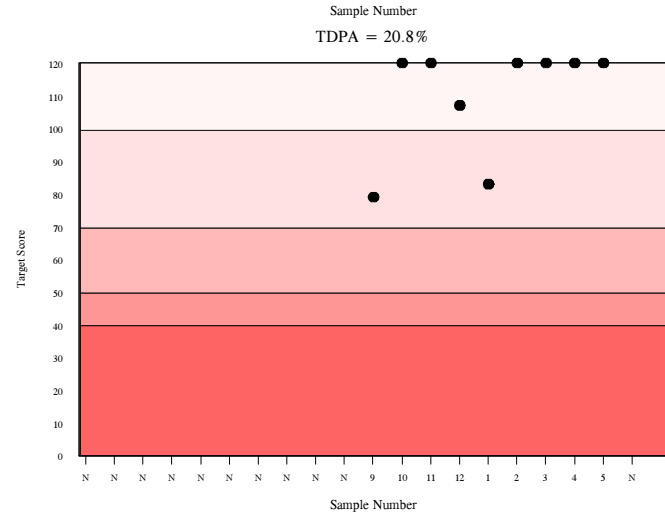
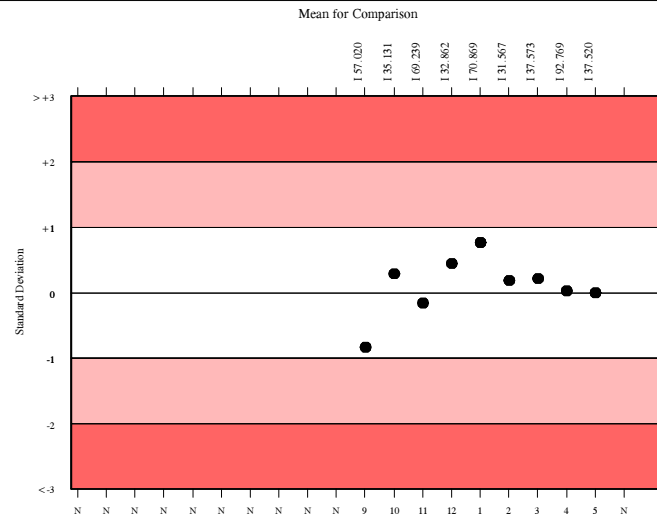
N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
1129					
441					
103					

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

Acceptable limits derived from Biological Variation	37.88%
Acceptable limits of performance for RIQAS	20.80%

No Histogram

Method	N	Mean	CV%	U <sub>m</sub>
Other Colorimetric	448			
Colorimetric, Roche	441			
Ortho Vitros MicroSlide Systems	93			
Colorimetric, Dade Dimension (LIPL Kit)	64			
Colorimetric, Randox	31			
Other Turbidimetric with colipase	21			
Colorimetric, Dade Dimension (LIP Kit)	9			
Randox Turbidimetric with colipase	7			
Vitros, DT60/DT60 II/DTSC II	8			
Roche Turbidimetric with colipase	6			
Agappe - METHYL RESORUFIN	7			
Titrimetric	4			
Turbidimetric without colipase	3			
Other Dry Chemistry	2			



**RIQAS**

0010

# Lithium, mmol/l

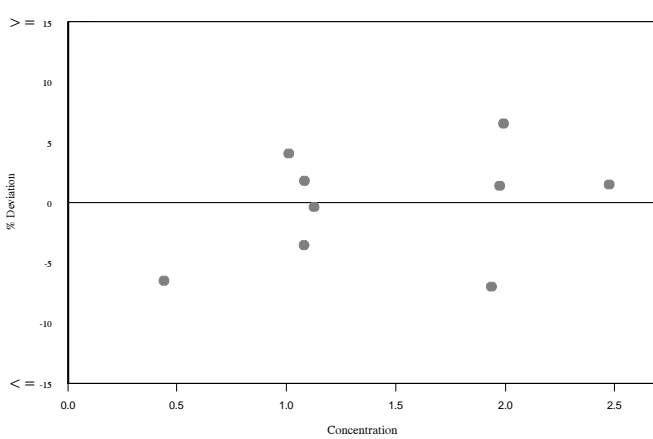
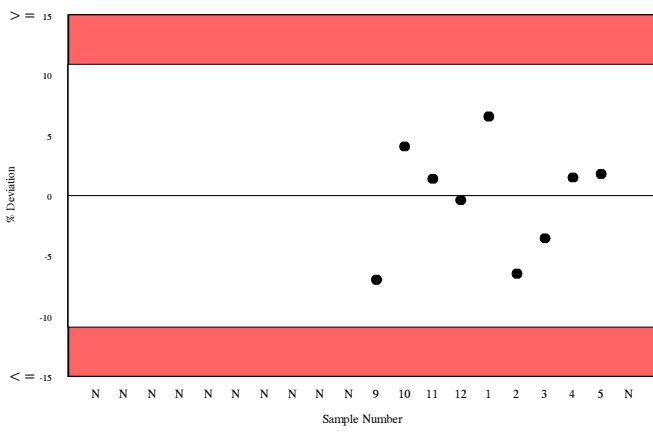
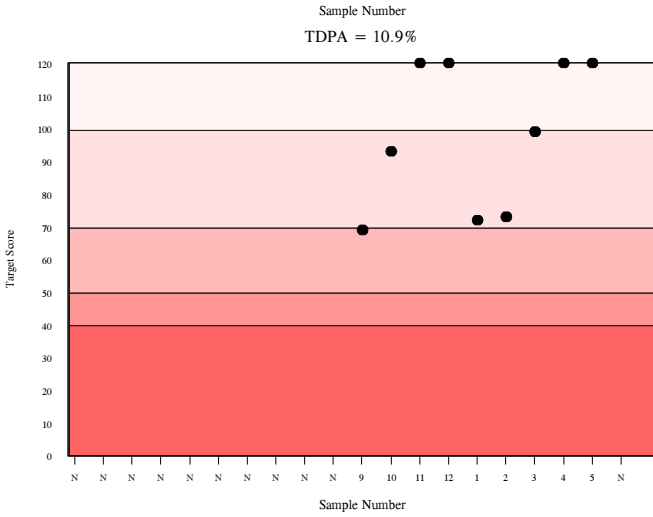
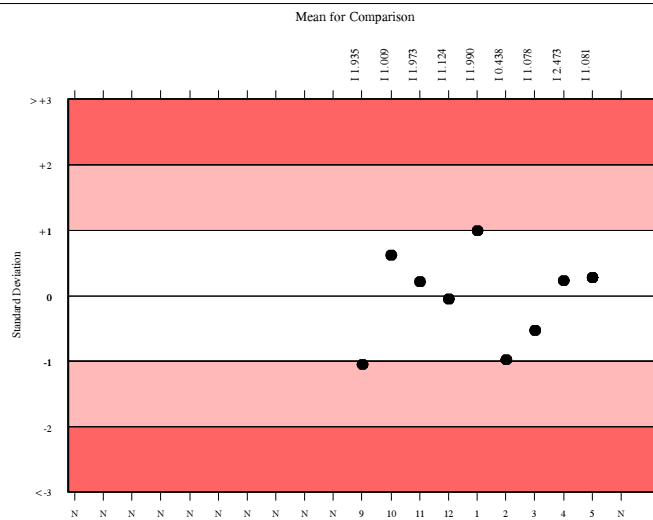
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	300					
Ion selective electrode	111					
Roche Integra	17					

▲ Your Result	No Result	SDI	Too Few
		RMSDI	Too Few
■ Mean for Comparison		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	10.90%

No Histogram

Method	N	Mean	CV%	U <sub>m</sub>
Spectrophotometric	128			
Ion selective electrode	111			
Ortho Vitros MicroSlide Systems	32			
Flame photometry	17			
Vitros, DT60/DT60 II/DTSC II	7			
Atomic absorption	6			
Other Dry Chemistry	2			



**RIQAS**

0010

# Magnesium, mg/dl

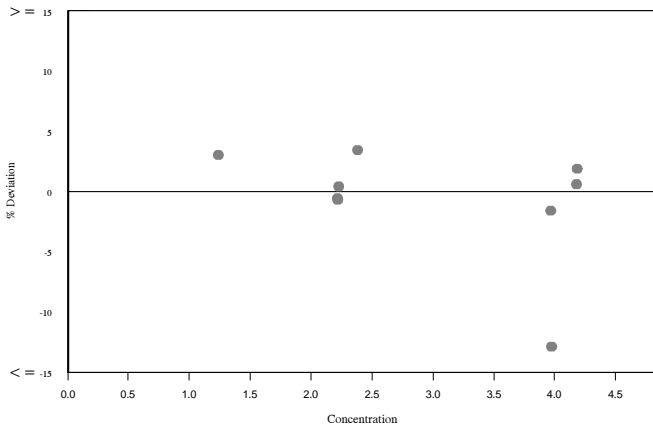
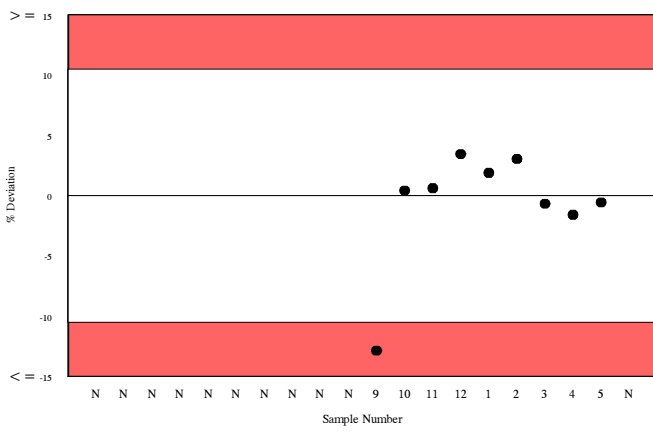
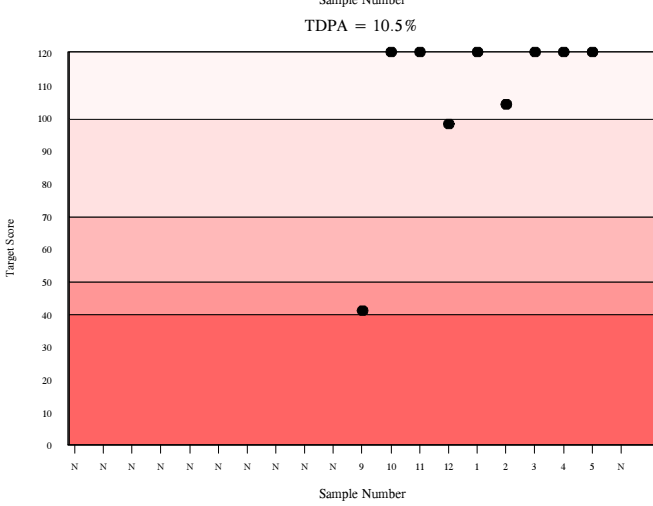
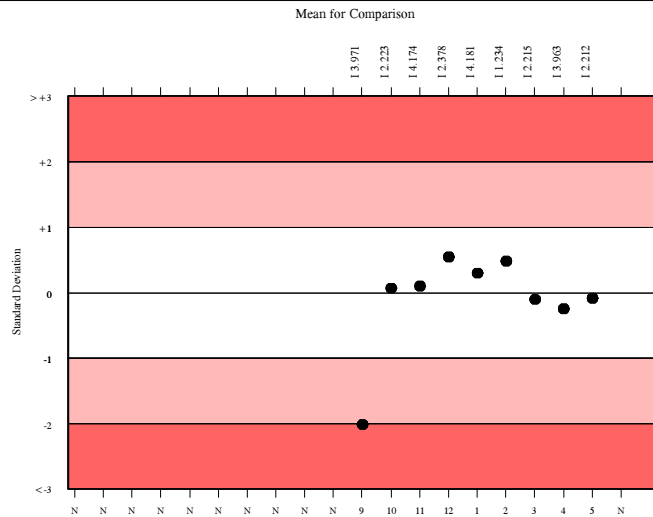
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	2483					
Chlorphosphonazo III	495					
Roche Integra	235					

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

Acceptable limits derived from Biological Variation	4.8%
Acceptable limits of performance for RIQAS	10.50%

No Histogram

Method	N	Mean	CV%	U <sub>m</sub>
Xylidyl Blue	1023			
Chlorphosphonazo III	495			
Calmagite	238			
Methylthymol blue	232			
Ortho Vitros MicroSlide Systems	163			
Enzymatic	150			
Arsenazo	119			
Other magnesium dyes	13			
- select -	11			
Atomic absorption	9			
Vitros, DT60/DT60 II/DTSC II	10			
Agappe - XYLIDYL BLUE	8			
Other Dry Chemistry	4			



**RIQAS**

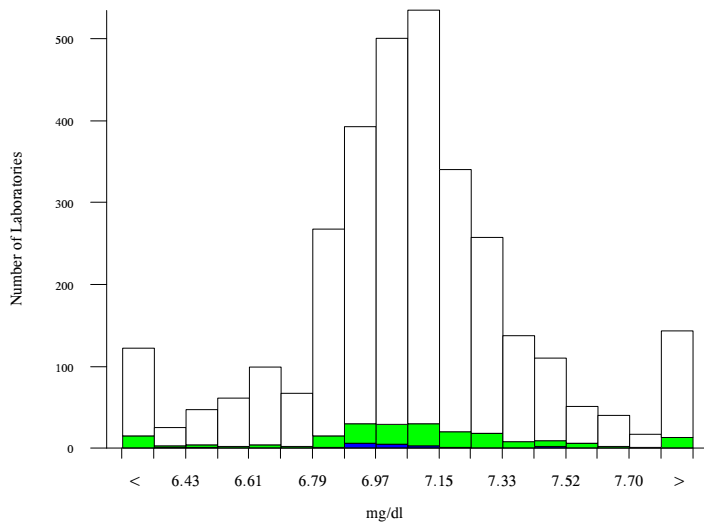


# Phosphate, Inorganic, mg/dl

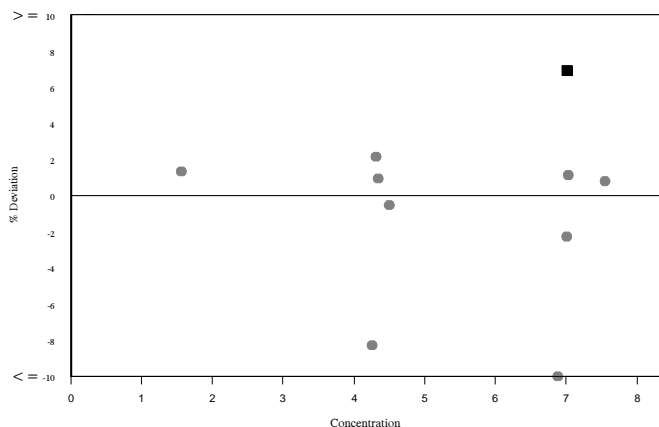
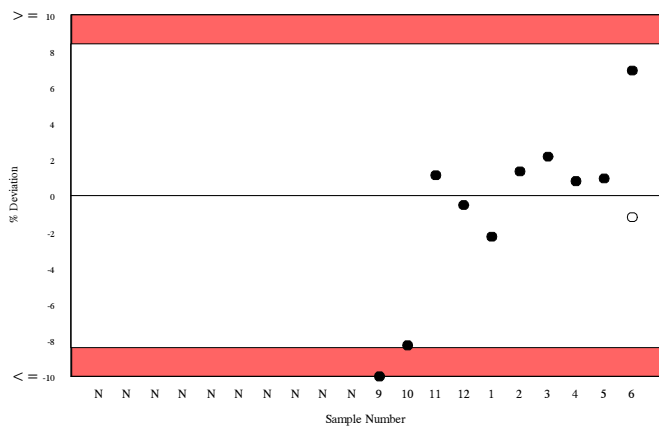
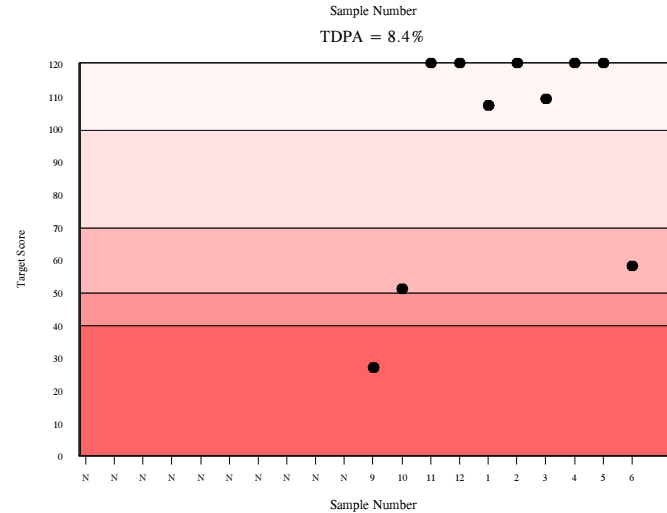
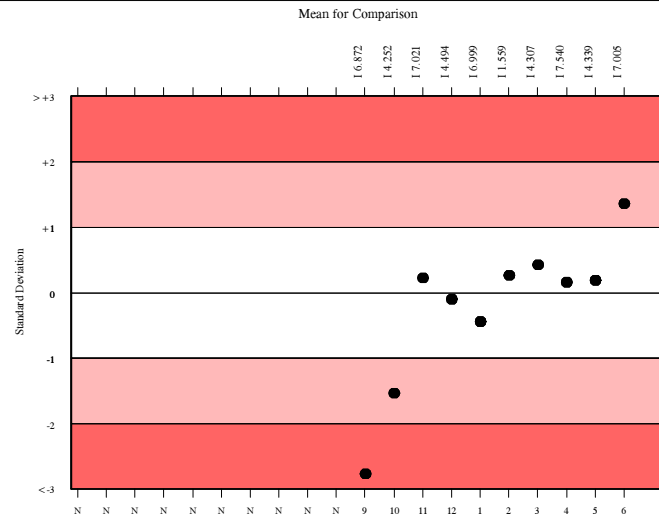
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	2932	7.067	3.4	0.01	0.36	278
Phosphomolybdate enzymatic	187	7.082	4.0	0.03	0.36	24
Roche Cobas c501/502 e601/602	16	7.005	1.4	0.03	0.36	4

▲ Your Result	7.490	SDI	1.36
		RMSDI	-0.23
■ Mean for Comparison	7.005	TS	58
		RMTS	95
		%DEV	6.9
		RM%DEV	-1.2

Acceptable limits derived from Biological Variation	10.11%
Acceptable limits of performance for RIQAS	8.40%



Method	N	Mean	CV%	U <sub>m</sub>
Phosphomolybdate UV	2398	7.056	3.1	0.01
Phosphomolybdate enzymatic	187	7.082	4.0	0.03
Ortho Vitros MicroSlide Systems	181	7.190	2.6	0.02
Other methods, no protein ppt	57	6.947	3.8	0.04
Beckman PHOSm kit (365nm)	54	7.710	7.5	0.10
Agappe - PHOSPHOLYBDATE	13	7.133	3.9	0.10
Vitros, DT60/DT60 II/DTSC II	13	6.930	9.7	0.23
Other methods, with protein ppt	2	6.990	1.8	0.11

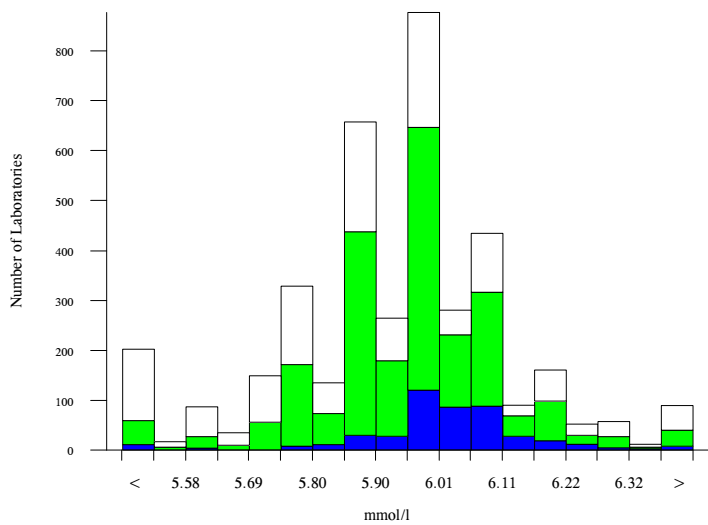


# Potassium, mmol/l

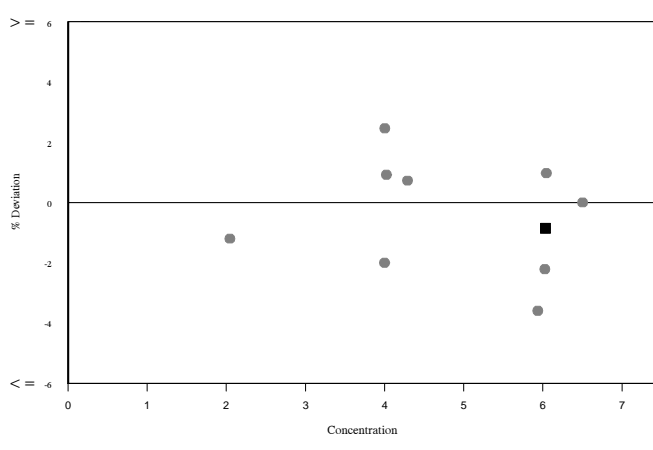
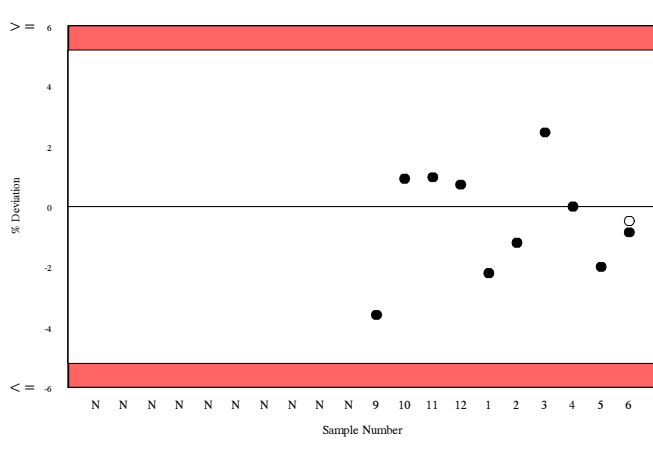
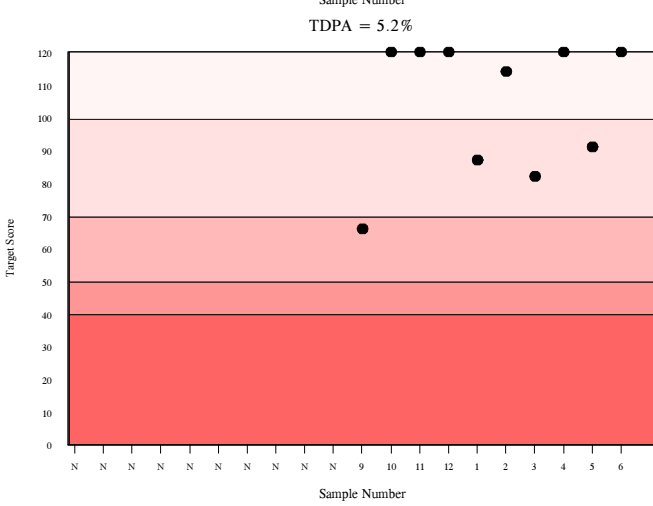
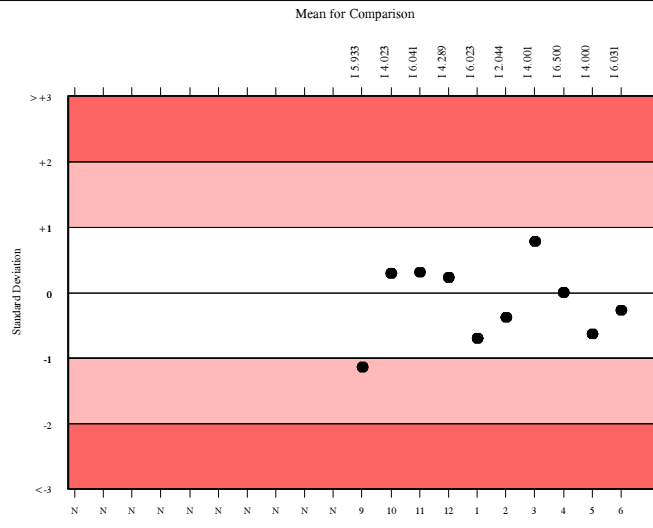
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	3601	5.959	2.4	0.00	0.19	325
ISE method - indirect	2244	5.981	1.7	0.00	0.19	238
Roche Cobas c501/502 e601/602	414	6.031	1.4	0.01	0.19	47

▲ Your Result	5.980	SDI	-0.27
		RMSDI	-0.15
■ Mean for Comparison	6.031	TS	120
		RMTS	104
		%DEV	-0.9
		RM%DEV	-0.5

Acceptable limits derived from Biological Variation	5.61%
Acceptable limits of performance for RIQAS	5.20%



Method	N	Mean	CV%	U <sub>m</sub>
ISE method - indirect	2244	5.981	1.7	0.00
ISE method - direct	964	5.896	3.5	0.01
Ortho Vitros MicroSlide Systems	216	5.945	1.8	0.01
Flame photometry	71	5.889	3.7	0.03
Colorimetric	19	5.844	8.4	0.14
Vitros, DT60/DT60 II/DTE II	17	5.952	3.1	0.06
Optical Fluorescence	10	6.152	3.0	0.07
Enzymatic	8	5.886	1.1	0.03
- select -	5	5.895	0.5	0.02
Other Dry Chemistry	6	6.067	6.3	0.20
Agappe - ISE DIRECT	4	5.725	3.9	0.14

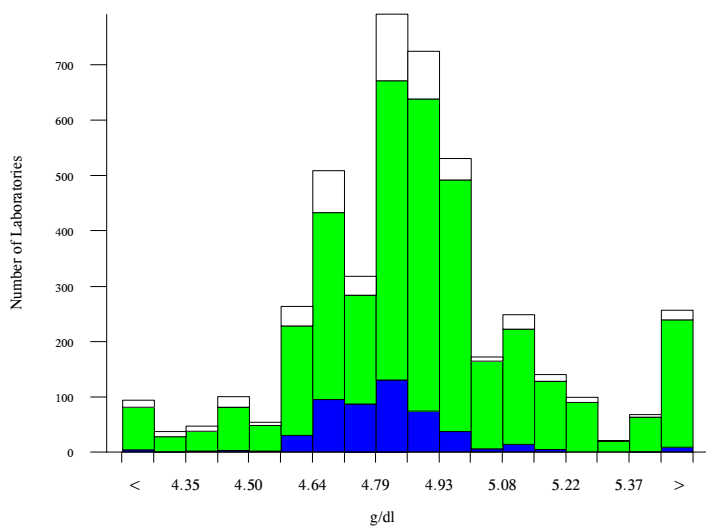


# Protein, Total, g/dl

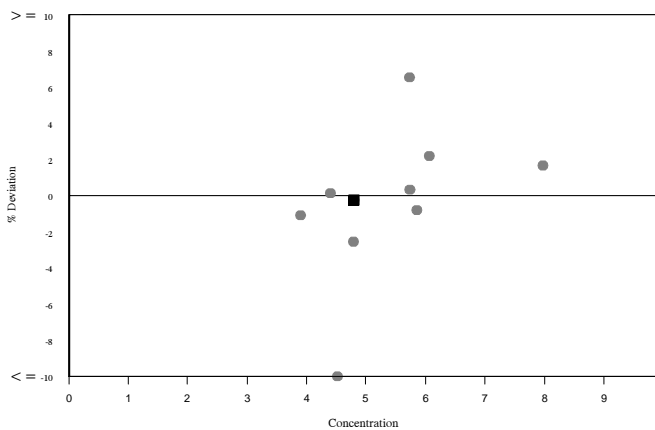
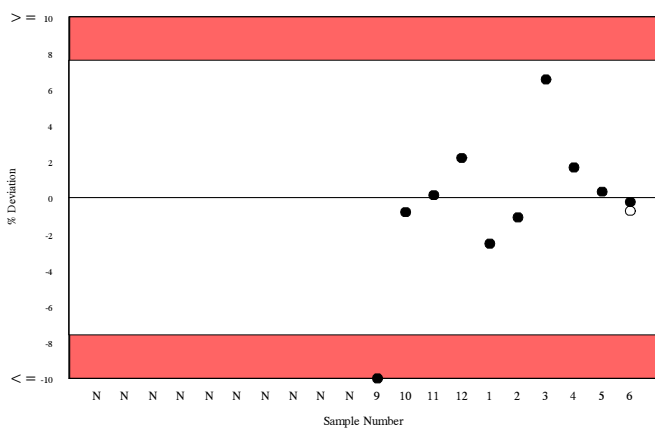
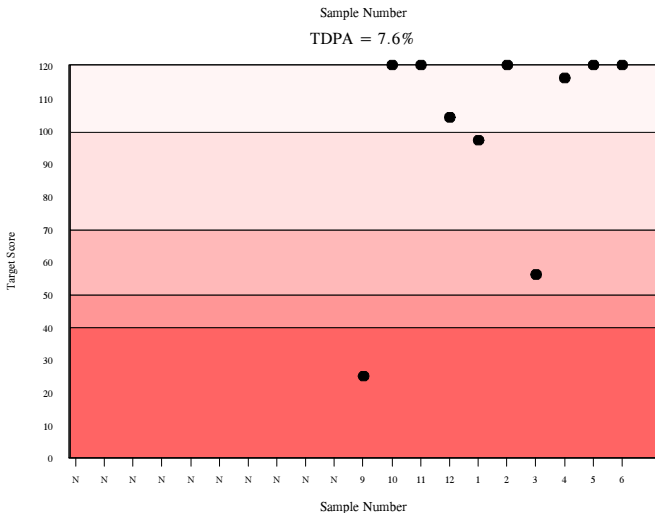
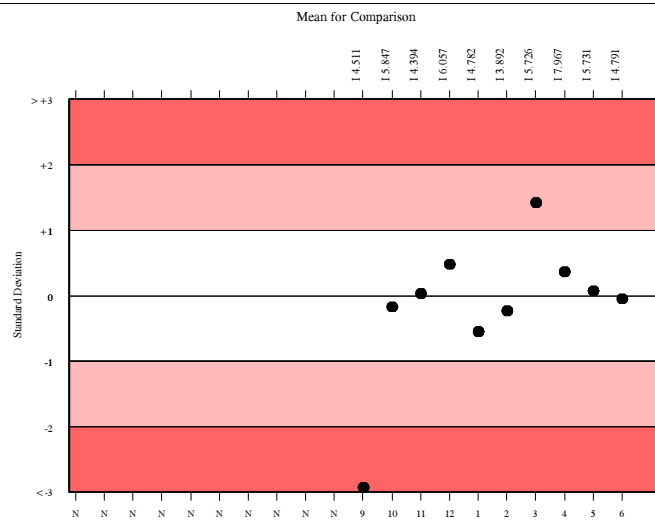
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	4075	4.864	4.0	0.00	0.22	392
Biuret reaction, end point	3595	4.871	4.0	0.00	0.23	348
Roche Cobas c501/502 e601/602	461	4.791	2.1	0.01	0.22	39

▲ Your Result	4.780	SDI	-0.05
		RMSDI	-0.16
■ Mean for Comparison	4.791	TS	120
		RMTS	99
		%DEV	-0.2
		RM%DEV	-0.7

Acceptable limits derived from Biological Variation	3.63%
Acceptable limits of performance for RIQAS	7.60%



Method	N	Mean	CV%	U <sub>m</sub>
Biuret reaction, end point	3595	4.871	4.0	0.00
Ortho Vitros MicroSlide Systems	215	4.850	2.7	0.01
Biuret reaction, kinetic	158	4.750	3.3	0.02
Biuret reaction, CX4/5/7	57	4.776	3.7	0.03
Agappe - BIURET	18	4.943	6.3	0.09
Vitros, DT60/DT60 II	9	4.889	6.7	0.14
Other Dry Chemistry	5	4.882	5.3	0.14
- select -	3	4.807	0.8	0.03



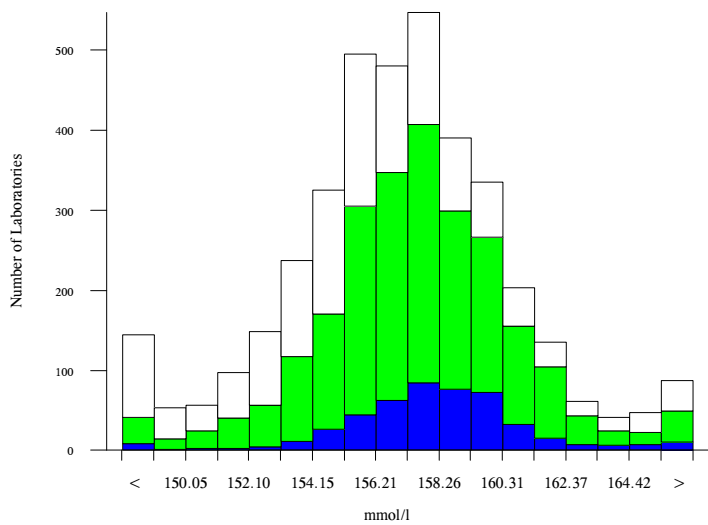


# Sodium, mmol/l

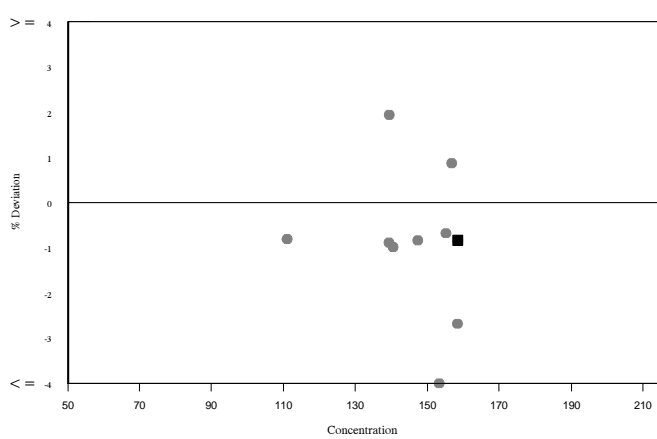
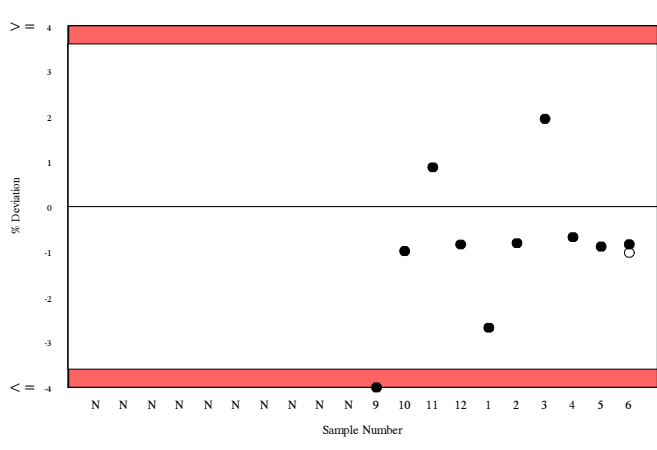
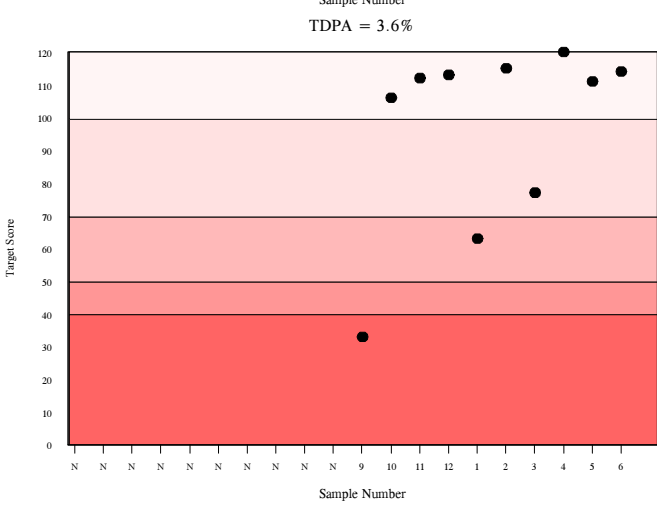
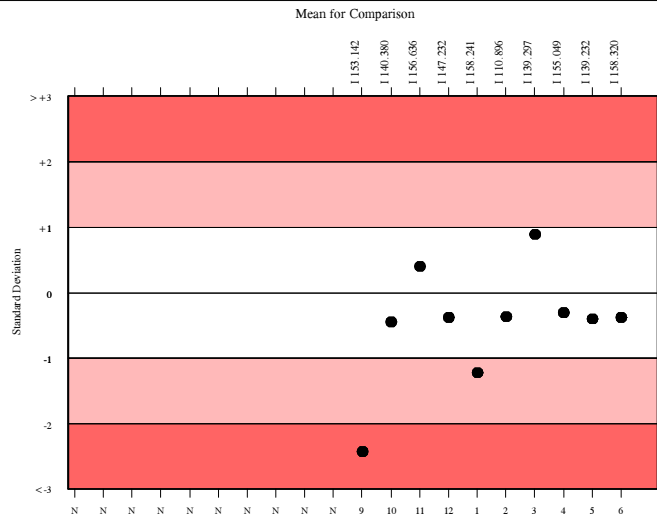
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	3542	157.237	1.7	0.06	3.44	340
ISE method - indirect	2297	157.733	1.5	0.06	3.45	187
Roche Cobas c501/502 e601/602	427	158.320	1.2	0.12	3.47	42

▲ Your Result	157.000	SDI	-0.38
		RMSDI	-0.47
■ Mean for Comparison	158.320	TS	114
		RMTS	96
		%DEV	-0.8
		RM%DEV	-1.0

Acceptable limits derived from Biological Variation	0.73%
Acceptable limits of performance for RIQAS	3.60%



Method	N	Mean	CV%	U <sub>m</sub>
ISE method - indirect	2297	157.733	1.5	0.06
ISE method - direct	937	155.887	2.2	0.14
Ortho Vitros MicroSlide Systems	204	156.395	1.6	0.21
Flame photometry	65	155.111	2.0	0.47
Vitros, DT60/DT60 II/DTE II	18	155.750	2.7	1.23
Enzymatic	8	154.454	1.4	0.95
Optical Fluorescence	10	160.340	2.5	1.56
Colorimetric	9	151.703	5.3	3.38
- select -	5	156.338	4.1	3.60
Agappe - ISE DIRECT	4	159.013	2.6	2.60
Other Dry Chemistry	2	154.500	4.1	5.62



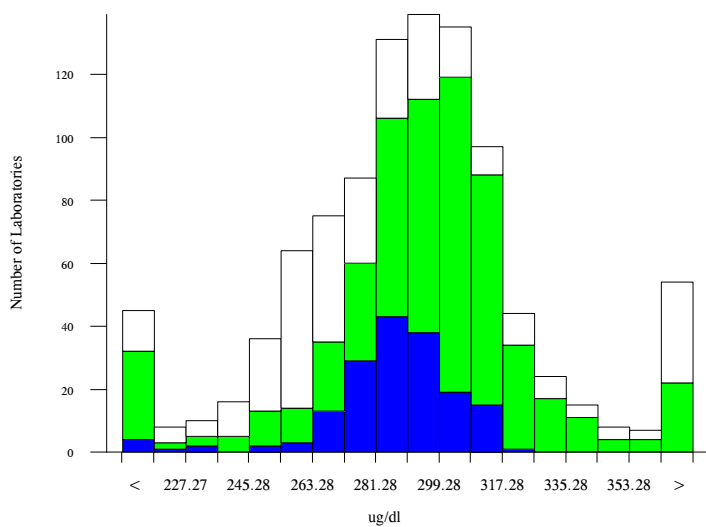
**RIQAS**  
PROFICIENCY TESTING

# TIBC, ug/dl

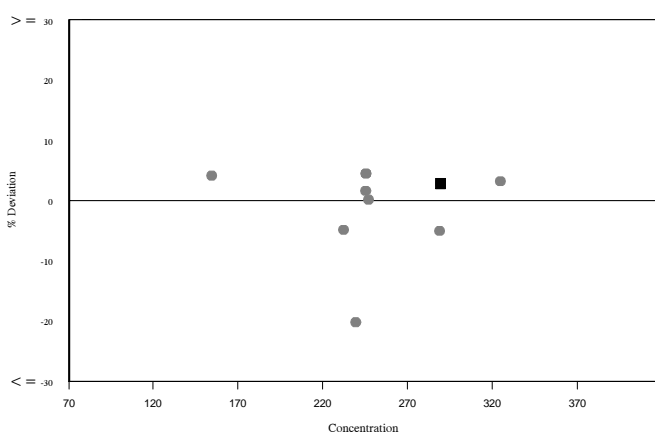
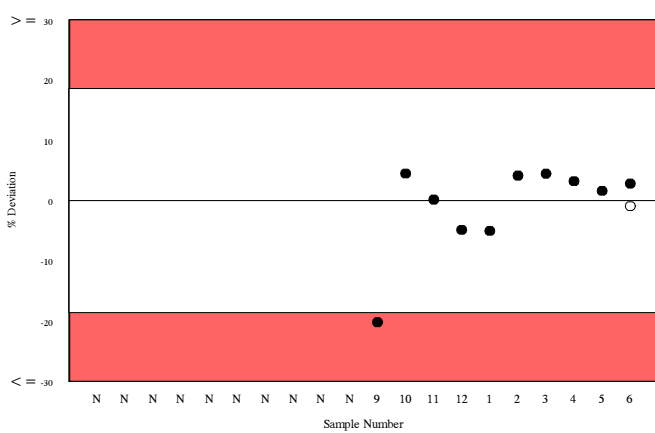
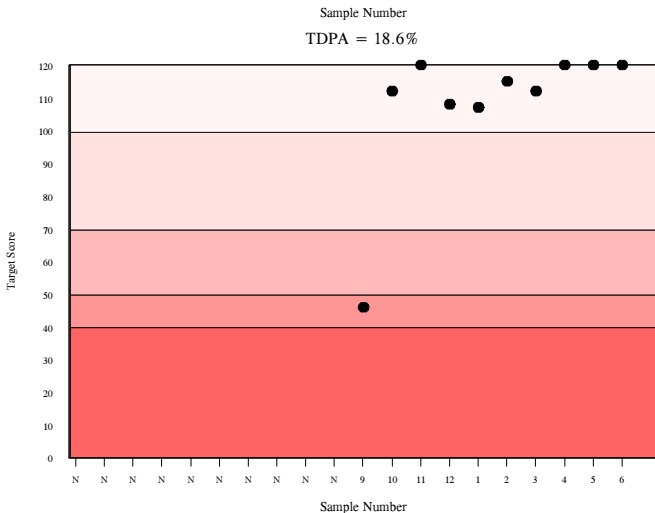
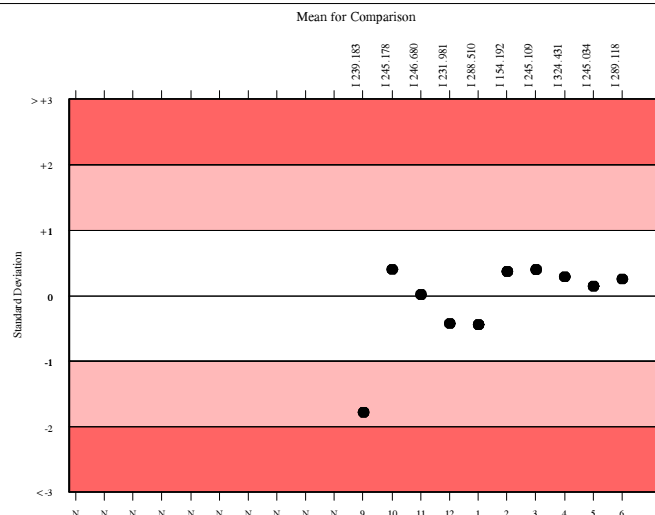
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	891	290.284	8.3	1.00	32.83	105
FE+UIBC(saturation with iron)	613	295.912	6.3	0.93	33.46	72
Roche Cobas c501/502 e601/602	156	289.118	4.2	1.23	32.69	14

▲ Your Result	297.300	SDI	0.25
		RMSDI	-0.08
■ Mean for Comparison	289.118	TS	120
		RMTS	108
		%DEV	2.8
		RM%DEV	-0.9

Acceptable limits derived from Biological Variation	N/A
Acceptable limits of performance for RIQAS	18.60%



Method	N	Mean	CV%	U <sub>m</sub>
FE+UIBC(saturation with iron)	613	295.912	6.3	0.93
Direct Colorimetric	142	273.000	7.9	2.27
Removal of excess free iron	83	282.259	9.5	3.68
Ortho Vitros MicroSlide Systems	38	329.194	20.7	13.84
Calculated from Transferrin	10	253.790	10.4	10.39
Agappe - PRECIPITATION	3	399.667	9.9	28.60



**RIQAS**

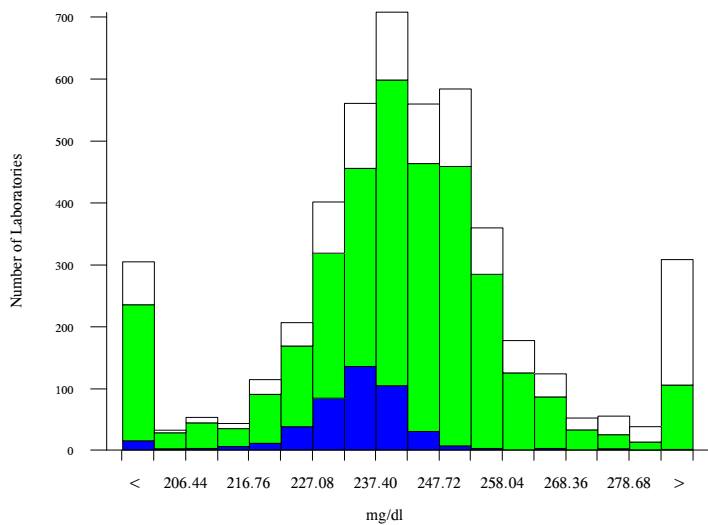
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# Trig Total, mg/dl

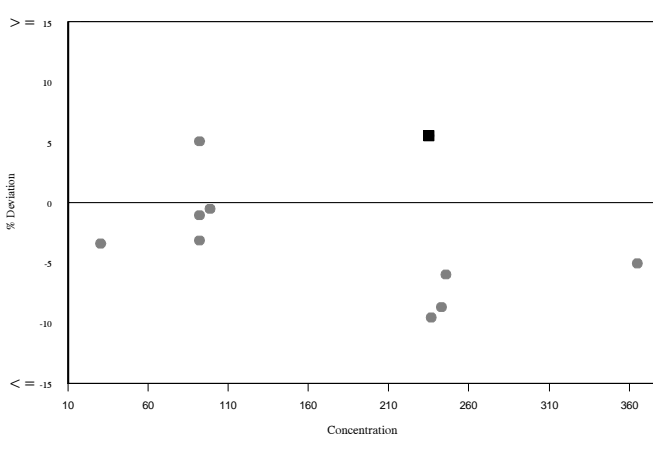
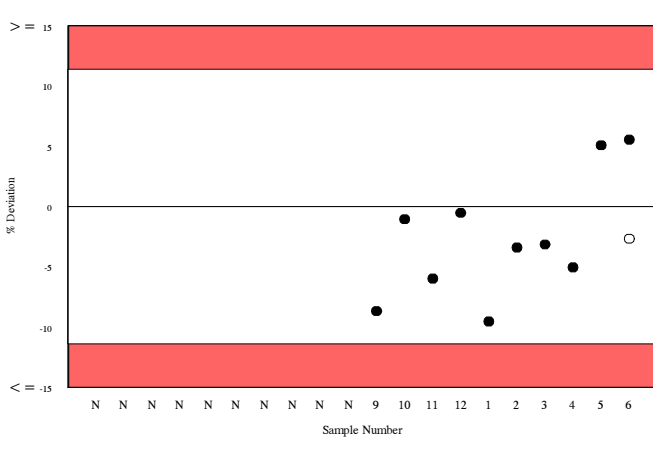
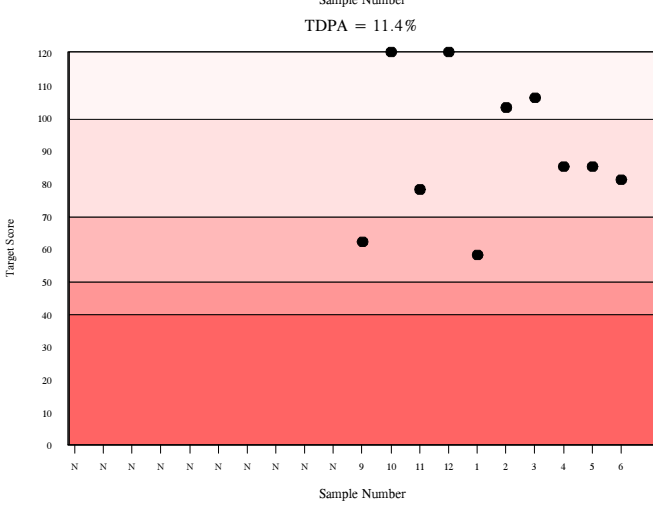
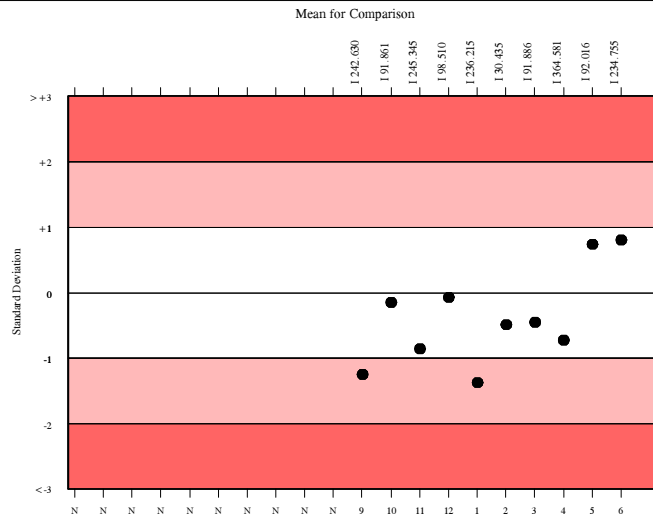
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	4075	242.566	5.7	0.27	16.81	600
Lipase/GPO-PAP no correction	3161	241.659	4.9	0.26	16.74	403
Roche Cobas c501/502 e601/602	399	234.755	2.4	0.35	16.27	45

▲ Your Result	247.800	SDI	0.80
		RMSDI	-0.38
■ Mean for Comparison	234.755	TS	81
		RMTS	89
		%DEV	5.6
		RM%DEV	-2.7

Acceptable limits derived from Biological Variation	25.99%
Acceptable limits of performance for RIQAS	11.40%



Method	N	Mean	CV%	U <sub>m</sub>
Lipase/GPO-PAP no correction	3161	241.659	4.9	0.26
Lipase/GK UV. no correction	362	243.515	4.9	0.78
Ortho Vitros MicroSlide Systems	226	287.077	6.0	1.42
Lipase/GPO-PAP, 0.11mmol/l correction	196	240.448	5.9	1.27
Lipase/Glycerol Dehydrogenase	111	241.266	5.8	1.66
Lipase/GK UV., 0.11 mmol/l correction	41	244.278	7.5	3.58
Agappe - GPO - TOPS	17	245.908	5.1	3.83
Vitros DT60/DT60 II/DTSC II	13	281.272	6.6	6.39
Other Dry Chemistry	14	257.018	17.4	14.93

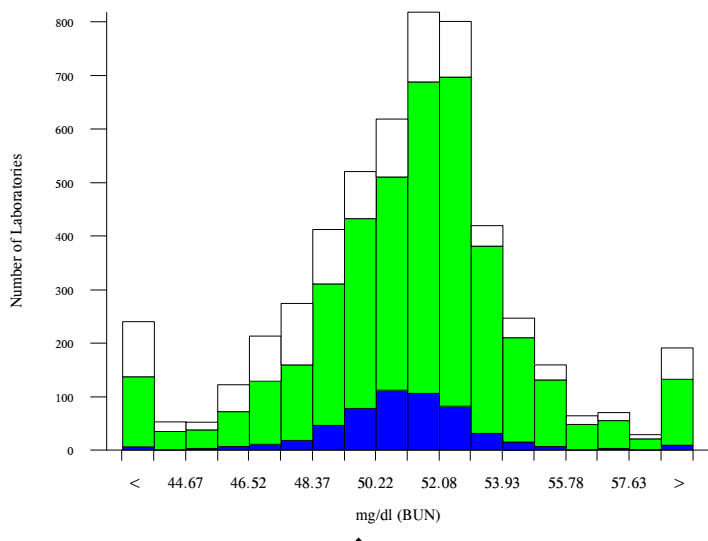


# Urea, mg/dl (BUN)

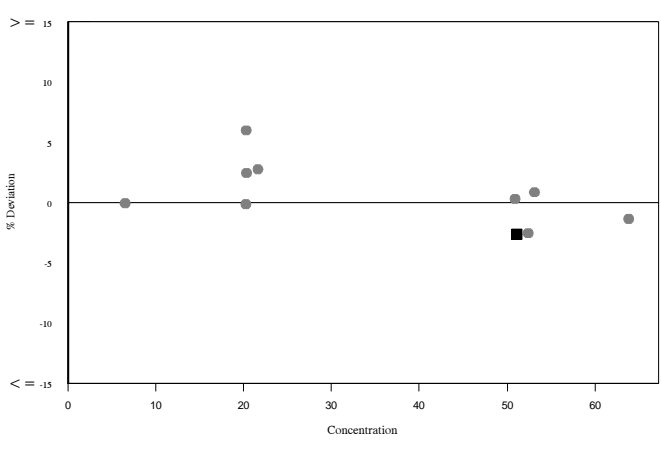
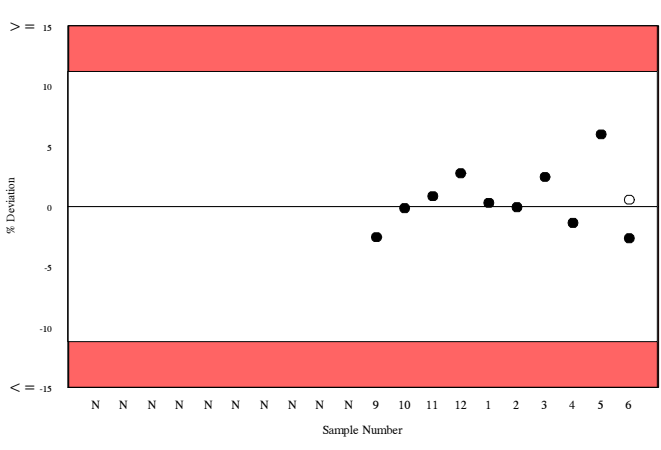
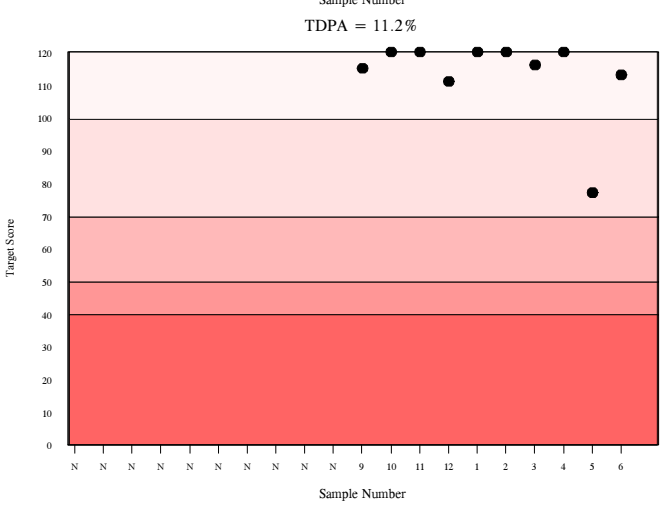
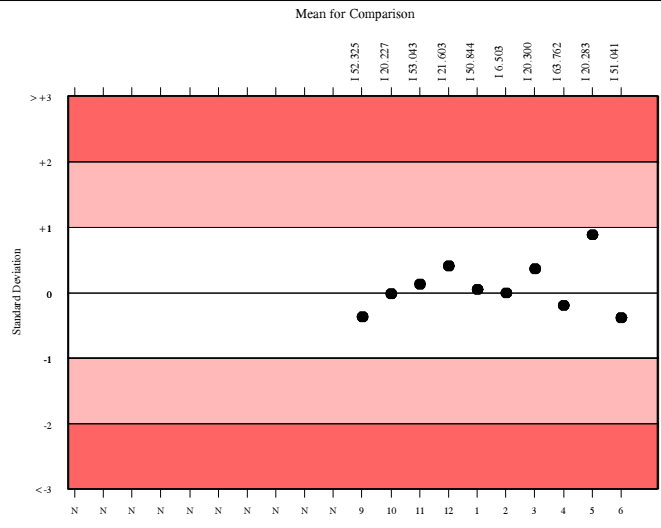
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	4806	51.155	4.8	0.04	3.48	494
Urease, kinetic	3808	51.413	4.3	0.04	3.50	376
Roche Cobas c501/502 e601/602	496	51.041	3.1	0.09	3.48	41

▲ Your Result	49.700	SDI RMSDI	-0.39 0.08
■ Mean for Comparison	51.041	TS RMTS	113 113
		%DEV RM%DEV	-2.6 0.6

Acceptable limits derived from Biological Variation	15.55%
Acceptable limits of performance for RIQAS	11.20%



Method	N	Mean	CV%	U <sub>m</sub>
Urease, kinetic	3808	51.413	4.3	0.04
Urease, end point	354	51.112	7.6	0.26
Urease, hypochlorite	263	50.772	6.7	0.26
Ortho Vitros MicroSlide Systems	232	47.827	2.4	0.09
Beckman - Conductivity	78	51.046	3.8	0.27
Agappe - UREASE GLDH	22	50.794	3.7	0.51
Vitros DT60/DT60 II	15	47.921	9.3	1.43
Other Dry Chemistry	11	49.223	6.2	1.15
Agappe - BERTHELOT	7	49.015	13.5	3.12
Diacetyl monoxime	6	53.163	5.8	1.57
O-Phthalaldehyde	3	51.265	12.9	4.78

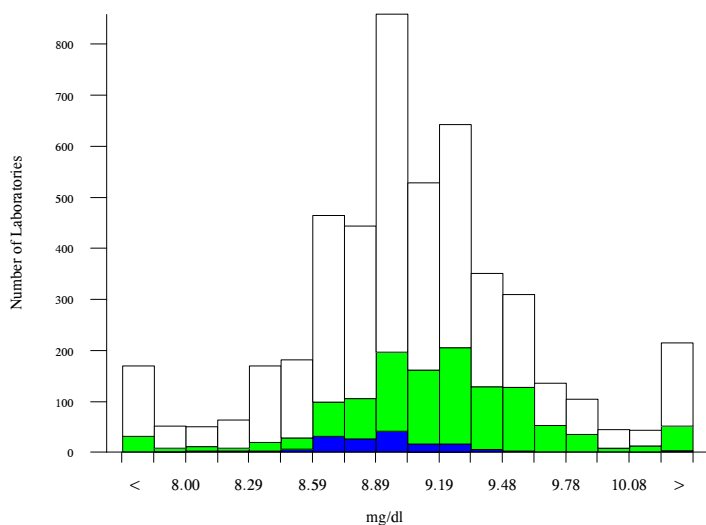


# Uric Acid (Urate), mg/dl

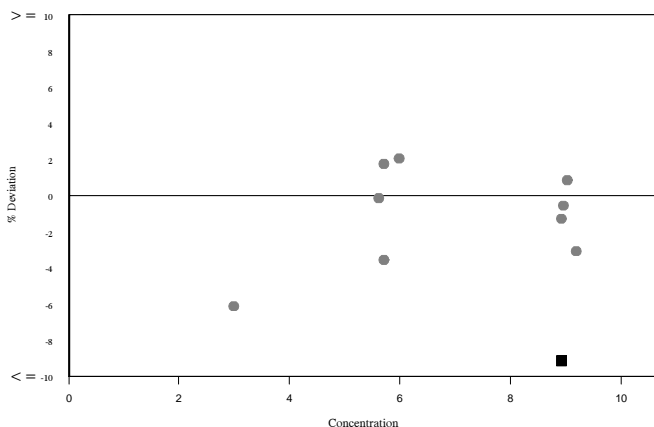
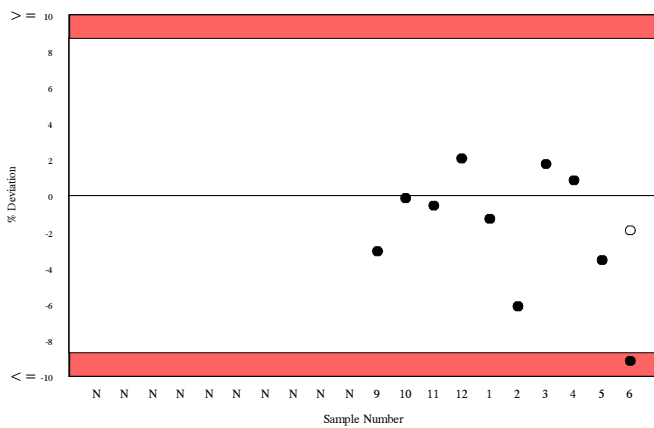
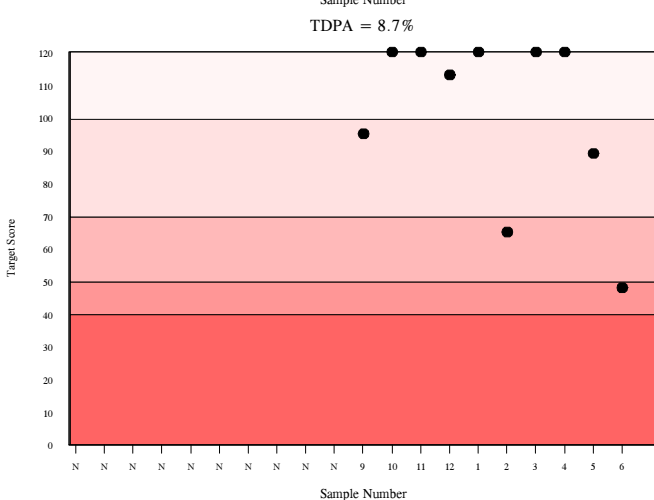
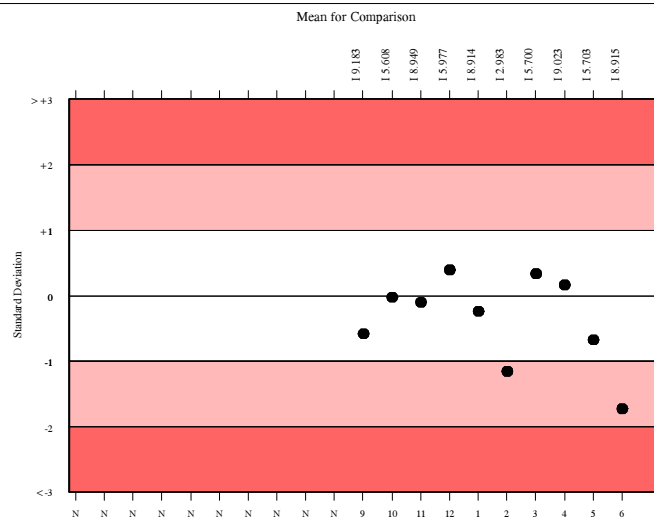
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	4386	9.044	4.4	0.01	0.48	432
Uricase Perox. with ascorb. ox	1164	9.154	3.8	0.01	0.48	119
Roche Cobas c501/502 e601/602	141	8.915	2.5	0.02	0.47	12

▲ Your Result	8.100	SDI	-1.73
		RMSDI	-0.36
■ Mean for Comparison	8.915	TS	48
		RMTS	101
		%DEV	-9.1
		RM%DEV	-1.9

Acceptable limits derived from Biological Variation	11.97%
Acceptable limits of performance for RIQAS	8.70%
TS & %DEV outside limits	



Method	N	Mean	CV%	U <sub>m</sub>
Uricase perox. no ascorb. ox.	1703	9.035	4.5	0.01
Uricase Perox. with ascorb. ox	1164	9.154	3.8	0.01
Uricase Perox. with ascorb. ox @ 546nm	964	9.066	4.3	0.02
Ortho Vitros MicroSlide Systems	217	8.599	2.5	0.02
Uricase @ 293 nm	123	8.938	2.0	0.02
Uricase, catalase 340nm.	101	9.027	2.3	0.03
Agappe - URICASE - PAP	24	8.842	6.2	0.14
Other Dry Chemistry	20	8.966	6.6	0.16
Vitros DT60/DT60 II	15	8.643	4.0	0.11
Agappe - URICASE - TOPS	9	8.646	8.4	0.30
Reduction methods	7	9.510	19.1	0.86
- select -	6	8.763	3.4	0.15



**RIQAS**



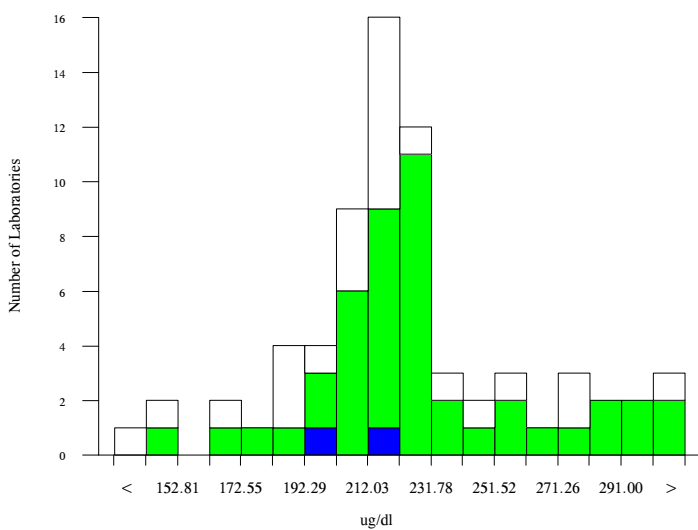
0010

# Zinc, ug/dl

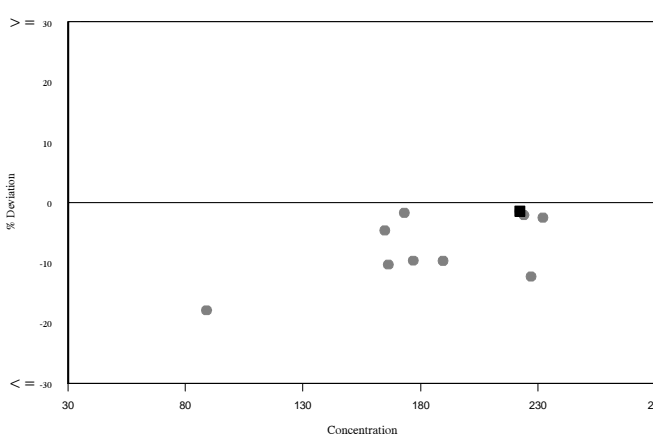
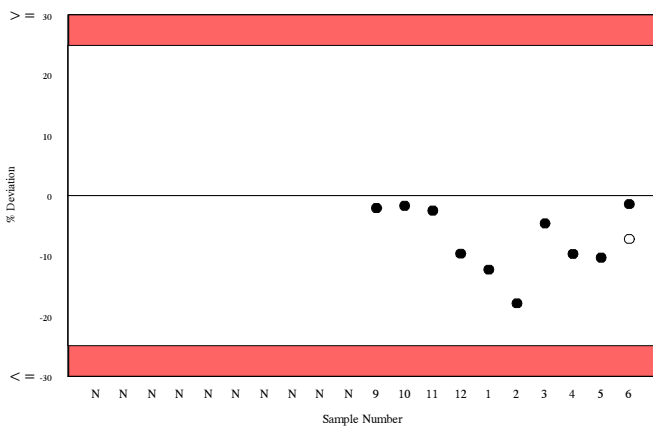
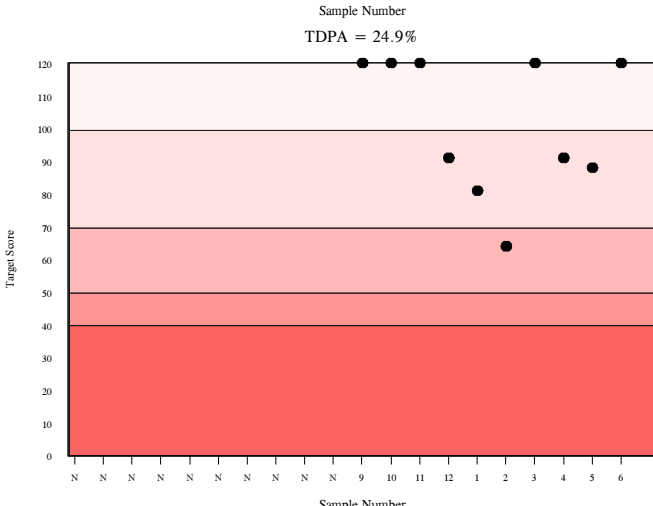
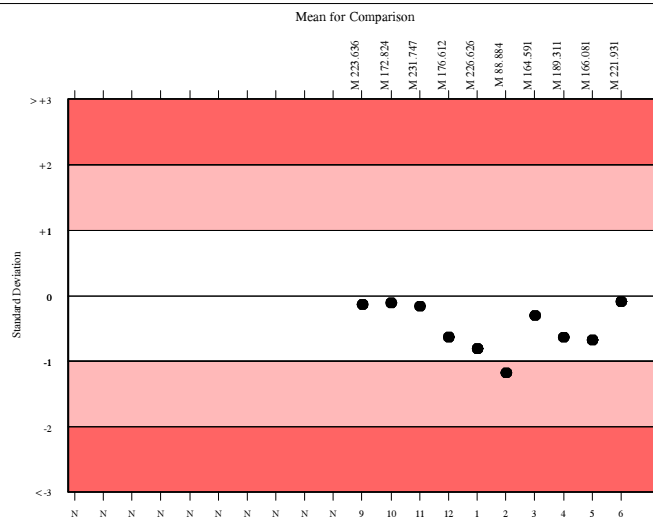
	N	Mean	CV%	U <sub>m</sub>	SDPA	Exc.
All Methods	62	221.911	11.9	4.18	33.59	8
Colorimetric with deprot.	40	221.931	10.6	4.66	33.60	6
Roche Cobas c501/502 e601/602	2	206.786	8.2	15.02	34.72a	0

▲ Your Result	218.800	SDI	-0.09
		RMSDI	-0.48
■ Mean for Comparison	221.931	TS	120
		RMTS	101
		%DEV	-1.4
		RM%DEV	-7.2

Acceptable limits derived from Biological Variation	11%
Acceptable limits of performance for RIQAS	24.90%



Method	N	Mean	CV%	U <sub>m</sub>
Colorimetric with deprot.	40	221.931	10.6	4.66
Atomic absorption	18	216.387	15.8	10.07
Mass Spectrometry	2	222.700	5.5	10.87
- select -	2	200.137	9.8	17.33



Analyte	Mean for Comparison	Your Result	SDI	RMSDI	%DEV	RM%DEV	TS	RMTS	Performance
Albumin	3.094	3.180	0.55	-0.34	2.8	-1.7	97	98	
Alkaline Phosphatase	246.521	164.000	<u>-2.84</u>	-0.69	<u>-33.5</u>	-8.2	<u>26</u>	98	▲
ALT (GPT)	107.946	11.700	<u>-10.48</u>	-1.15	<u>-89.2</u>	-9.8	<u>10</u>	97	▲
Amylase, Total	258.625	180.000	<u>-4.07</u>	-0.40	<u>-30.4</u>	-2.7	<u>11</u>	90	▲
AST (GOT)	119.899	26.700	<u>-9.47</u>	-1.06	<u>-77.7</u>	-8.7	<u>10</u>	98	▲
Bilirubin, Direct		No Result		Too Few		Too Few		Too Few	
Bilirubin, Total	4.585	0.447	<u>-9.58</u>	-0.90	<u>-90.3</u>	-8.4	<u>10</u>	92	▲
Calcium	12.435	12.110	-0.57	-0.24	-2.6	-1.1	96	101	
Chloride	109.321	105.300	-1.34	-0.46	-3.7	-1.3	59	89	
Cholesterol	265.577	248.400	-1.42	-0.69	-6.5	-3.2	56	89	
CK, Total	489.463	9.000	<u>-14.16</u>	-1.51	<u>-98.2</u>	-10.5	<u>10</u>	87	▲
Creatinine	4.033	4.580	1.83	0.31	<u>13.6</u>	2.3	<u>45</u>	96	
GGT	155.953	123.400	<u>-2.44</u>	-0.54	<u>-20.9</u>	-4.6	<u>33</u>	101	▲
Glucose	263.801	80.800	<u>-15.85</u>	-1.96	<u>-69.4</u>	-8.6	<u>10</u>	84	▲
HDL-Cholesterol	109.650	13.900	<u>-7.52</u>	-0.76	<u>-87.3</u>	-8.8	<u>10</u>	94	▲
Iron	224.024	224.250	0.02	-0.46	0.1	-2.8	120	106	
LD (LDH)	358.640	111.000	<u>-7.89</u>	-1.26	<u>-69.0</u>	-11.0	<u>10</u>	89	▲
Lipase		No Result		Too Few		Too Few		Too Few	
Lithium		No Result		Too Few		Too Few		Too Few	
Magnesium		No Result		Too Few		Too Few		Too Few	
Phosphate, Inorganic	7.005	7.490	1.36	-0.23	6.9	-1.2	58	95	
Potassium	6.031	5.980	-0.27	-0.15	-0.9	-0.5	120	104	
Protein, Total	4.791	4.780	-0.05	-0.16	-0.2	-0.7	120	99	
Sodium	158.320	157.000	-0.38	-0.47	-0.8	-1.0	114	96	
TIBC	289.118	297.300	0.25	-0.08	2.8	-0.9	120	108	
Trig Total	234.755	247.800	0.80	-0.38	5.6	-2.7	81	89	
Urea	51.041	49.700	-0.39	0.08	-2.6	0.6	113	113	
Uric Acid (Urate)	8.915	8.100	-1.73	-0.36	<u>-9.1</u>	-1.9	<u>48</u>	101	
Zinc	221.931	218.800	-0.09	-0.48	-1.4	-7.2	120	101	

ORMSDI -0.57

ORM%DEV -4.2

ORMTS 97

END OF REPORT