Biolab SRL

MONTHLY IMMUNOASSAY END OF CYCLE REPORT

CYCLE 17

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RIQAS

UKAS PROFICIENCY TESTING
0010

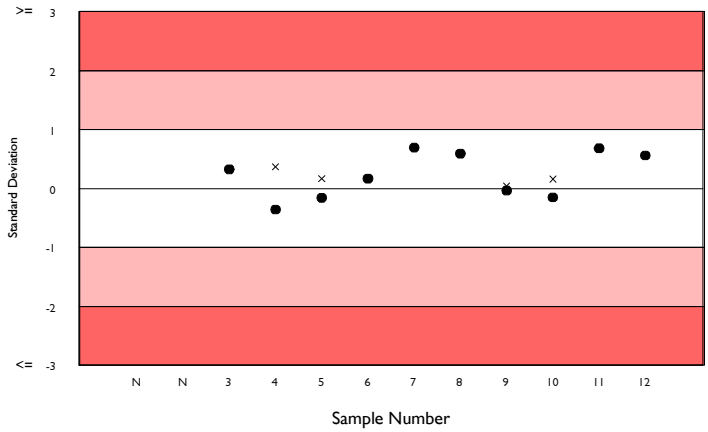
AFP, ng/ml

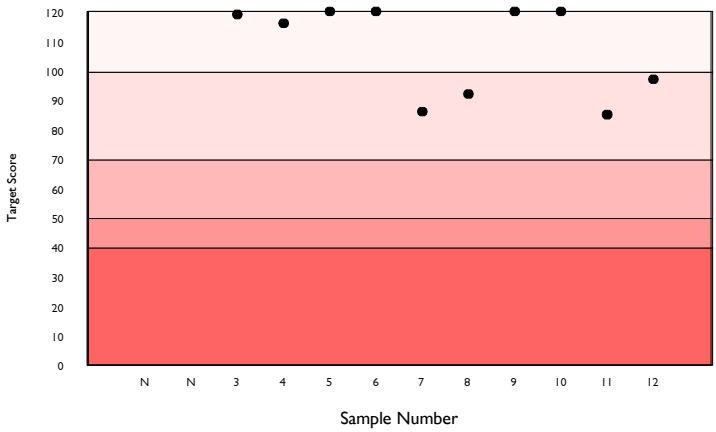
Method: Fujirebio Lumipulse G Series
Instrument: Fujirebio Lumipulse GSeries
Reagent: Fujirebio Inc.

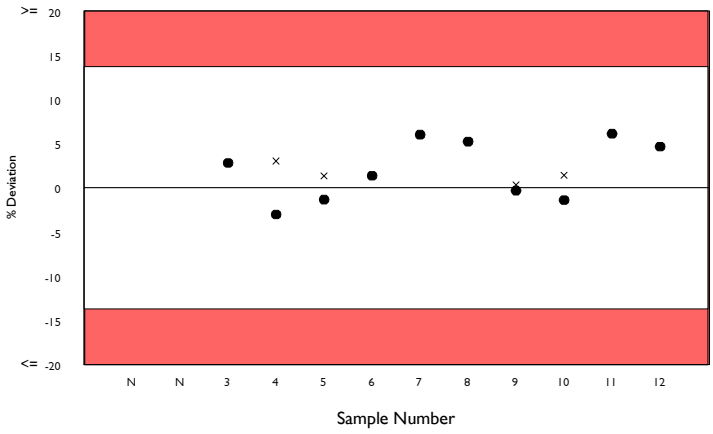
RIQAS TDPA: 13.7% **Biological Variation:** 21.9%

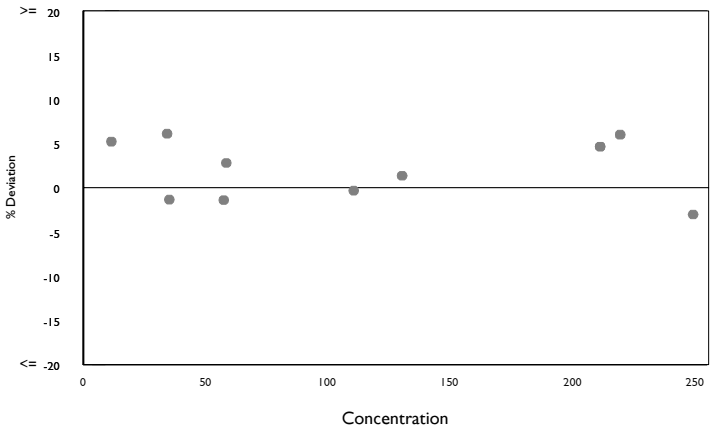
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	ng/ml	4	M 12.859	9.7	0.78	1.32a			
2	No Result	ng/ml	8	M 155.279	2.2	1.49	12.93			
3	60.100	ng/ml	9	M 58.459	6.2	1.51	5.10a	0.32	119	2.81
4	241.500	ng/ml	10	M 249.009	3.6	3.54	20.74	-0.36	116	-3.02
5	34.700	ng/ml	9	M 35.174	2.9	0.43	2.93	-0.16	120	-1.35
6	132.000	ng/ml	8	M 130.225	2.3	1.32	10.85	0.16	120	1.36
7	232.400	ng/ml	7	M 219.239	5.4	5.57	19.09a	0.69	86	6.00
8	12.100	ng/ml	7	M 11.500	6.5	0.35	1.02a	0.59	92	5.22
9	110.100	ng/ml	8	M 110.463	2.4	1.16	9.20	-0.04	120	-0.33
10	56.600	ng/ml	10	M 57.403	8.6	1.95	5.16a	-0.16	120	-1.40
11	36.400	ng/ml	8	M 34.305	7.7	1.17	3.09a	0.68	85	6.11
12	220.900	ng/ml	10	M 211.090	4.7	3.93	17.58	0.56	97	4.65

	Cycle 16	Cycle 17
Cycle Average SDI	-0.02	0.23
Cycle Average TS	111	108
Cycle Average %DEV	-0.21	2.01
Cycle Average Absolute SDI	0.33	0.37
Cycle Average Absolute %DEV	3.01	3.22









RIQAS

UKAS PROFICIENCY TESTING
0010

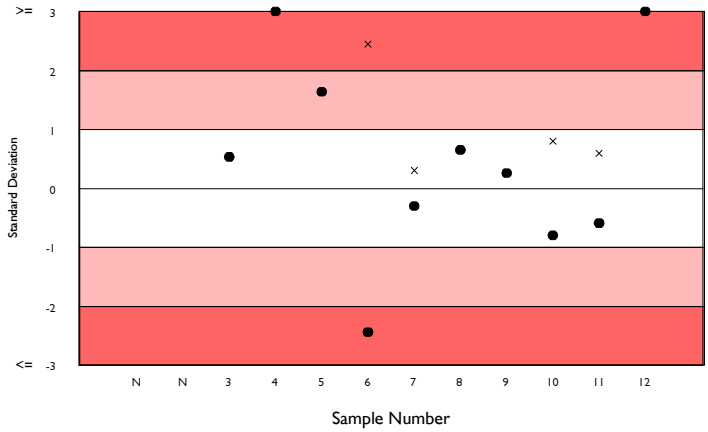
Beta-2-Microglobulin, mg/l

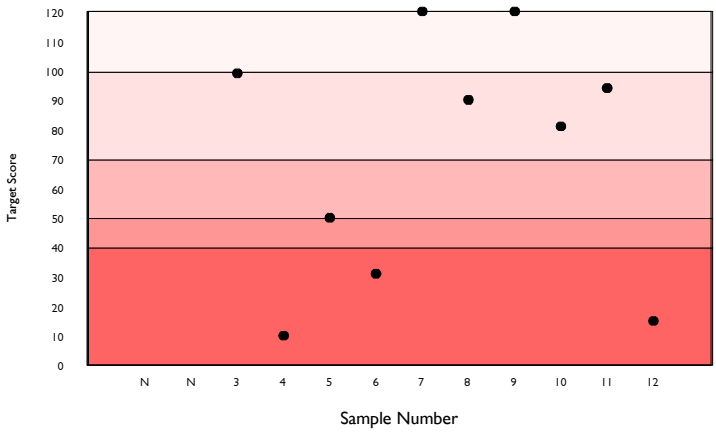
Method: bioMerieux, VIDAS
Instrument: Biomerieux Vidas/miniVidas/Vidas 3
Reagent: bioMerieux

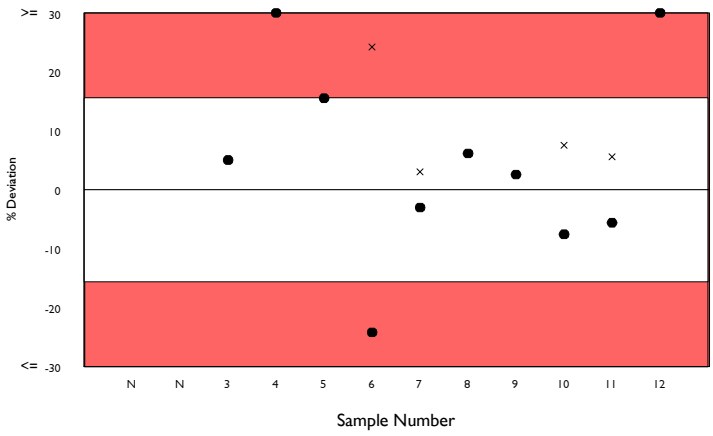
RIQAS TDPA: 15.6% **Biological Variation:** 9%

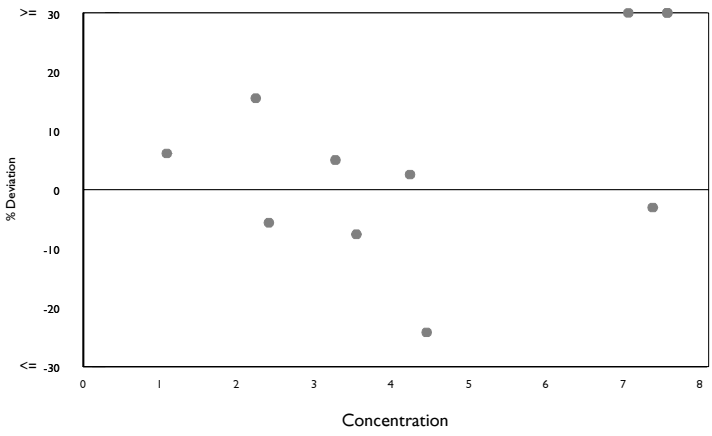
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	mg/l	22	M 1.033	5.9	0.02	0.10			
2	No Result	mg/l	19	M 4.770	12.0	0.16	0.48a			
3	3.430	mg/l	32	M 3.265	10.5	0.08	0.31	0.53	99	5.04
4	13.430	mg/l	27	M 7.057	16.5	0.28	0.73a	8.78	10	90.32
5	2.580	mg/l	36	M 2.233	10.5	0.05	0.21	1.64	50	15.52
6	3.370	mg/l	30	M 4.446	12.6	0.13	0.44a	-2.44	31	-24.20
7	7.150	mg/l	20	M 7.374	11.8	0.24	0.74a	-0.30	120	-3.03
8	1.150	mg/l	28	M 1.083	8.7	0.02	0.10	0.65	90	6.17
9	4.340	mg/l	28	M 4.231	12.7	0.13	0.42a	0.26	120	2.57
10	3.270	mg/l	30	M 3.538	8.7	0.07	0.34	-0.80	81	-7.57
11	2.270	mg/l	30	M 2.405	7.5	0.04	0.23	-0.59	94	-5.60
12	10.230	mg/l	26	M 7.562	18.5	0.34	0.79a	3.36	15	35.28

	Cycle 16	Cycle 17
Cycle Average SDI	-0.21	1.11
Cycle Average TS	85	71
Cycle Average %DEV	-2.33	11.45
Cycle Average Absolute SDI	0.85	1.94
Cycle Average Absolute %DEV	9.15	19.53









RIQAS

UKAS PROFICIENCY TESTING 0010

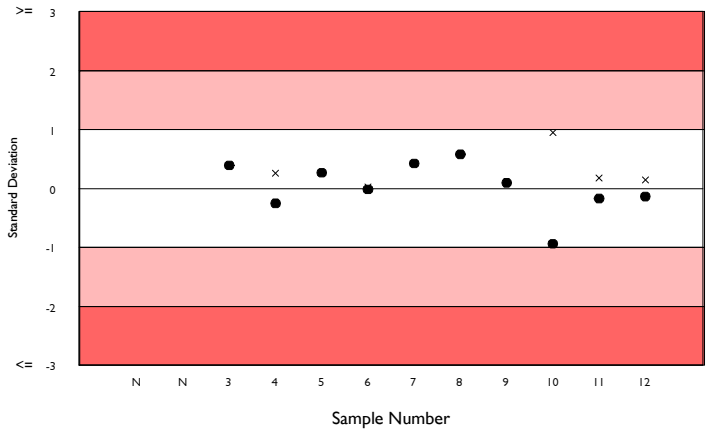
CA 125, U/ml

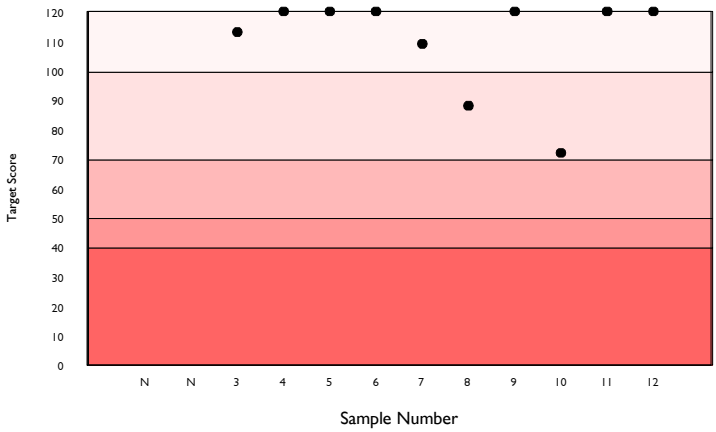
Method: Fujirebio Lumipulse G Series
Instrument: Fujirebio Lumipulse GSeries
Reagent: Fujirebio Inc.

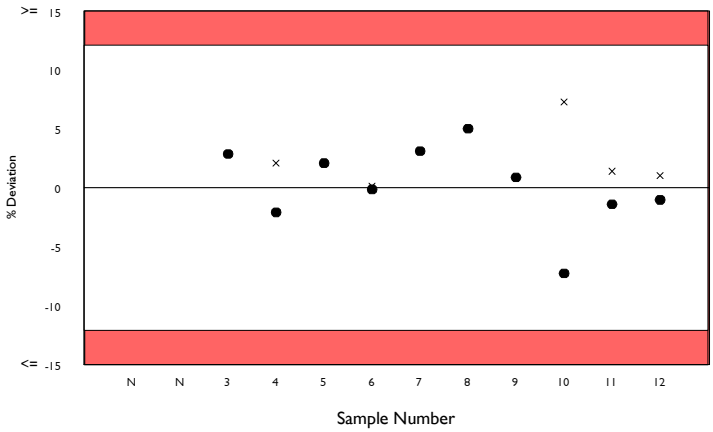
RIQAS TDPA: 12.1% **Biological Variation:** 35.4%

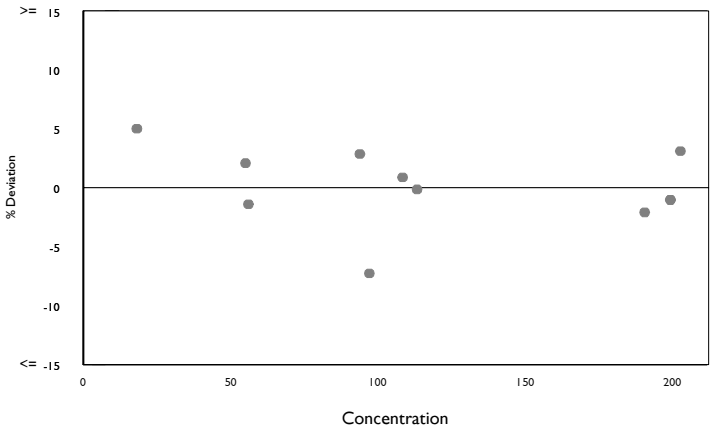
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	U/ml	5	M 19.100	6.1	0.65	1.55a			
2	No Result	U/ml	8	M 138.763	6.8	4.18	11.03a			
3	96.400	U/ml	9	M 93.722	3.9	1.52	6.89	0.39	113	2.86
4	186.200	U/ml	10	M 190.170	8.9	6.70	15.51a	-0.26	120	-2.09
5	56.100	U/ml	11	M 54.955	7.9	1.63	4.36a	0.26	120	2.08
6	112.900	U/ml	8	M 113.063	1.5	0.75	8.32	-0.02	120	-0.14
7	208.500	U/ml	8	M 202.225	3.9	3.45	14.88	0.42	109	3.10
8	19.100	U/ml	8	M 18.189	10.5	0.84	1.58a	0.58	88	5.01
9	109.100	U/ml	9	M 108.157	14.1	6.34	10.17a	0.09	120	0.87
10	89.900	U/ml	9	M 96.944	5.5	2.22	7.47a	-0.94	72	-7.27
11	55.200	U/ml	9	M 55.982	7.6	1.78	4.49a	-0.17	120	-1.40
12	196.800	U/ml	8	M 198.846	4.5	3.94	14.63	-0.14	120	-1.03

	Cycle 16	Cycle 17
Cycle Average SDI	0.20	0.02
Cycle Average TS	110	110
Cycle Average %DEV	1.64	0.20
Cycle Average Absolute SDI	0.35	0.33
Cycle Average Absolute %DEV	2.79	2.59









RIQAS

UKAS PROFICIENCY TESTING 0010

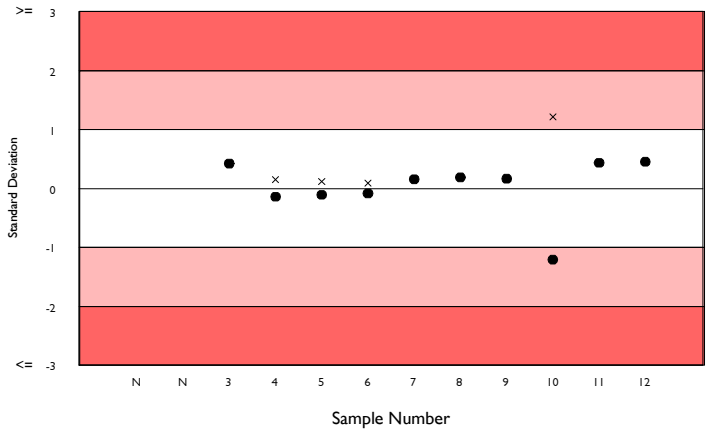
CA 15-3, U/ml

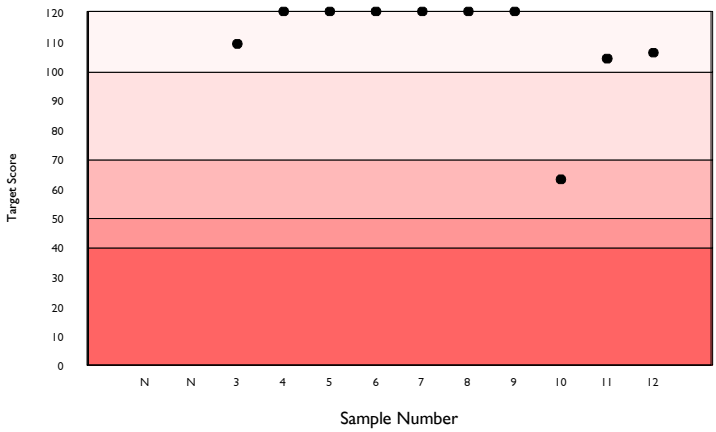
Method: Fujirebio Lumipulse G Series
Instrument: Fujirebio Lumipulse GSeries
Reagent: Fujirebio Inc.

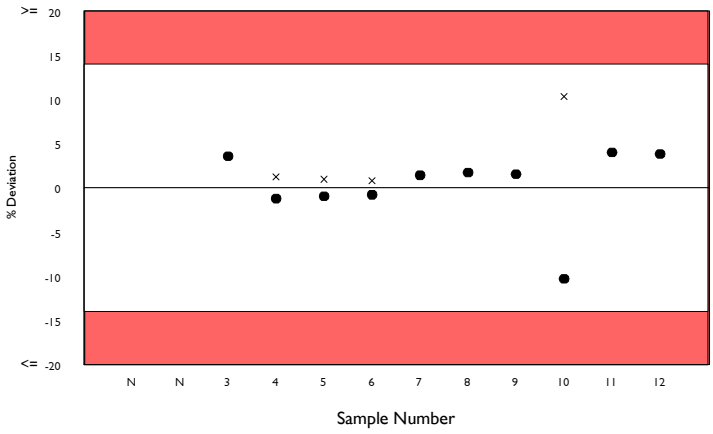
RIQAS TDPA: 14% **Biological Variation:** 20.8%

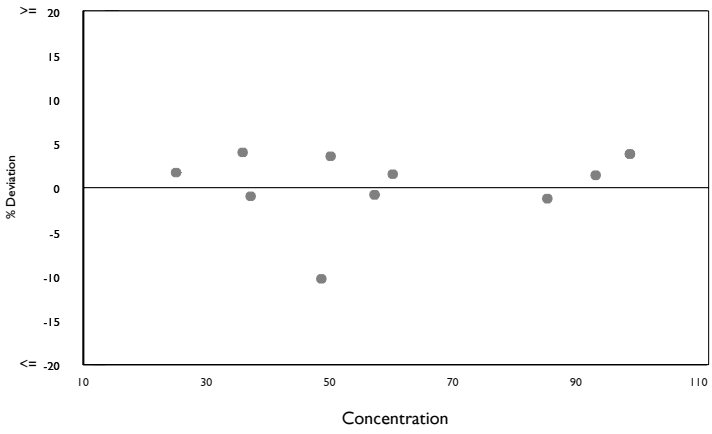
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	U/ml	3	M 26.267	2.4	0.46	2.24			
2	No Result	U/ml	7	M 67.171	5.7	1.82	6.00a			
3	51.900	U/ml	8	M 50.113	2.1	0.47	4.27	0.42	109	3.57
4	84.200	U/ml	8	M 85.250	4.4	1.67	7.26	-0.14	120	-1.23
5	36.800	U/ml	9	M 37.156	6.0	0.93	3.16	-0.11	120	-0.96
6	56.800	U/ml	9	M 57.256	8.1	1.94	5.25a	-0.09	120	-0.80
7	94.400	U/ml	6	M 93.083	6.9	3.29	8.58a	0.15	120	1.41
8	25.500	U/ml	7	M 25.067	8.3	0.98	2.35a	0.18	120	1.73
9	61.100	U/ml	8	M 60.178	9.1	2.43	5.67a	0.16	120	1.53
10	43.600	U/ml	7	M 48.610	3.0	0.69	4.14	-1.21	63	-10.31
11	37.300	U/ml	9	M 35.867	8.9	1.33	3.33a	0.43	104	4.00
12	102.400	U/ml	8	M 98.630	3.1	1.34	8.39	0.45	106	3.82

	Cycle 16	Cycle 17
Cycle Average SDI	0.31	0.02
Cycle Average TS	105	110
Cycle Average %DEV	2.91	0.28
Cycle Average Absolute SDI	0.40	0.34
Cycle Average Absolute %DEV	3.66	2.94









RIQAS

UKAS PROFICIENCY TESTING 0010

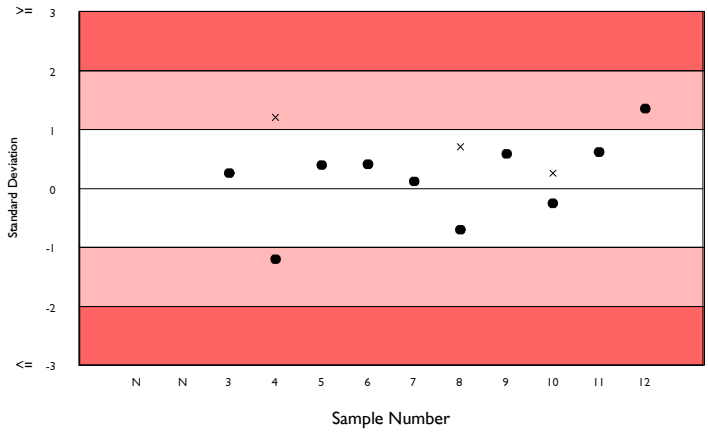
CA 19-9, U/ml

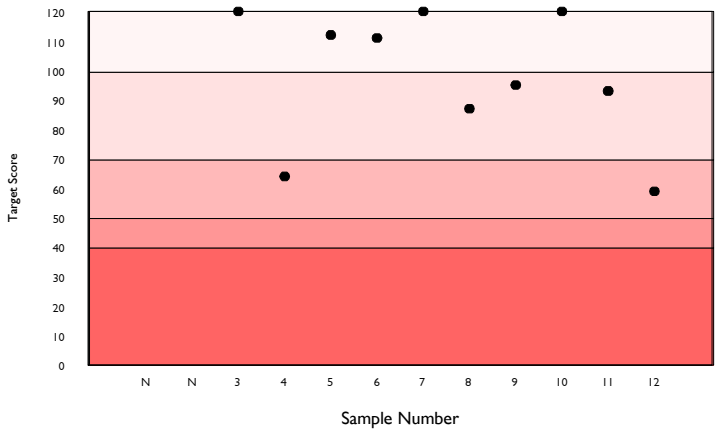
Method: Fujirebio Lumipulse G Series
Instrument: Fujirebio Lumipulse GSeries
Reagent: Fujirebio Inc.

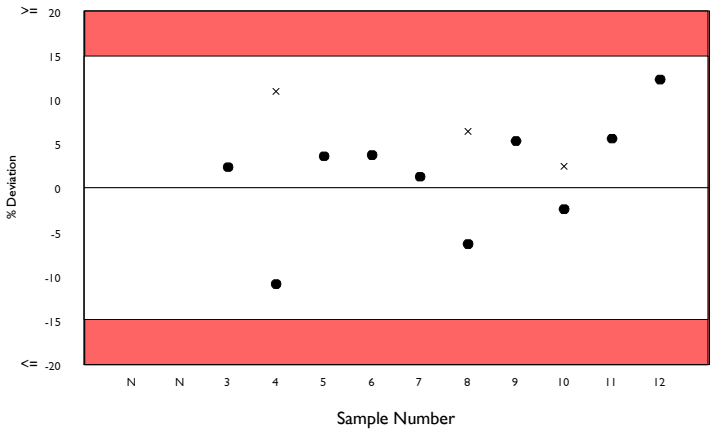
RIQAS TDPA: 14.9% **Biological Variation:** 46.03%

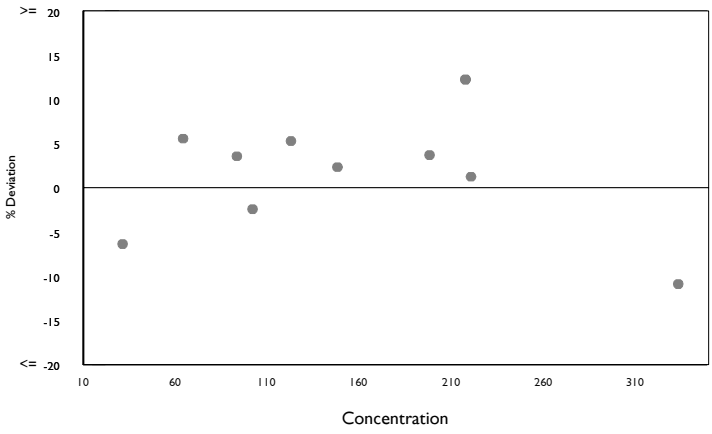
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	U/ml	4	M 36.250	21.8	4.93	5.92a			
2	No Result	U/ml	8	M 235.425	6.2	6.43	22.27a			
3	151.400	U/ml	8	M 147.950	4.9	3.19	13.40	0.26	120	2.33
4	296.500	U/ml	10	M 332.750	6.0	7.89	30.14	-1.20	64	-10.89
5	96.700	U/ml	9	M 93.367	4.2	1.63	8.46	0.39	112	3.57
6	205.200	U/ml	8	M 197.888	3.6	3.12	17.93	0.41	111	3.70
7	223.100	U/ml	6	M 220.352	11.1	12.53	23.57a	0.12	120	1.25
8	29.400	U/ml	5	M 31.400	1.4	0.24	2.84	-0.70	87	-6.37
9	129.200	U/ml	6	M 122.717	3.0	1.90	11.12	0.58	95	5.28
10	99.400	U/ml	8	M 101.865	6.4	2.86	9.66a	-0.26	120	-2.42
11	67.800	U/ml	7	M 64.229	3.8	1.16	5.82	0.61	93	5.56
12	244.000	U/ml	8	M 217.395	2.9	2.75	19.69	1.35	59	12.24

	Cycle 16	Cycle 17
Cycle Average SDI	0.15	0.16
Cycle Average TS	114	98
Cycle Average %DEV	1.47	1.42
Cycle Average Absolute SDI	0.25	0.59
Cycle Average Absolute %DEV	2.47	5.36









RIQAS

UKAS PROFICIENCY TESTING 0010

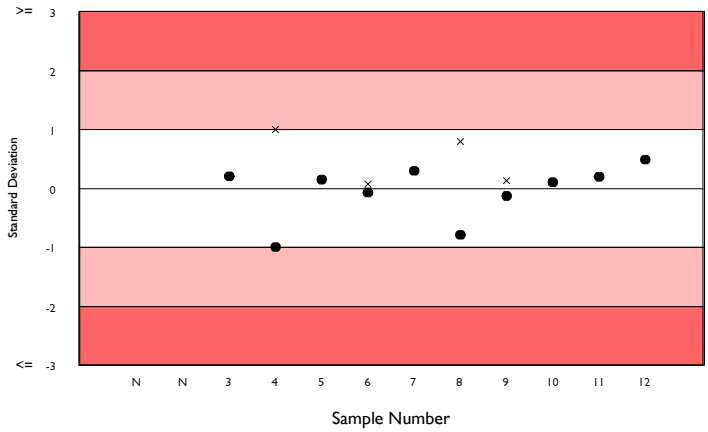
CEA, ng/ml

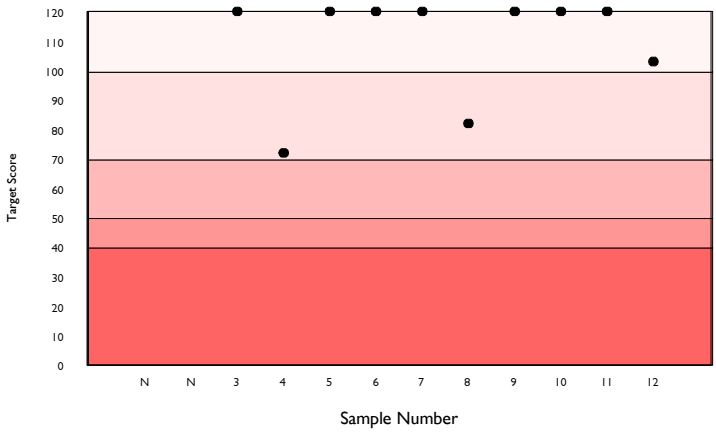
Method: Fujirebio Lumipulse G Series
Instrument: Fujirebio Lumipulse GSeries
Reagent: Fujirebio Inc.

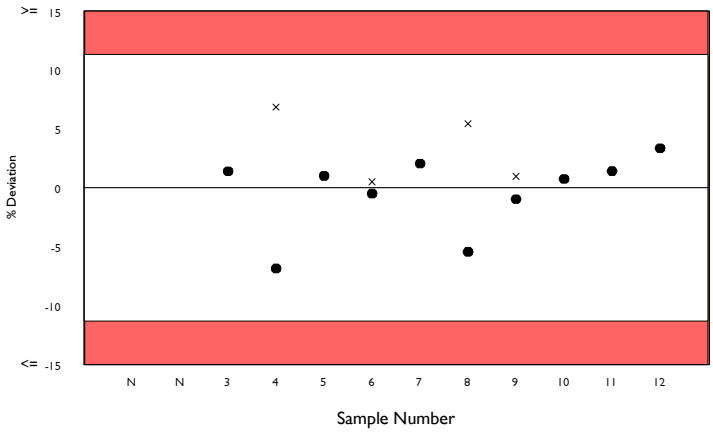
RIQAS TDPA: 11.3% **Biological Variation:** 24.7%

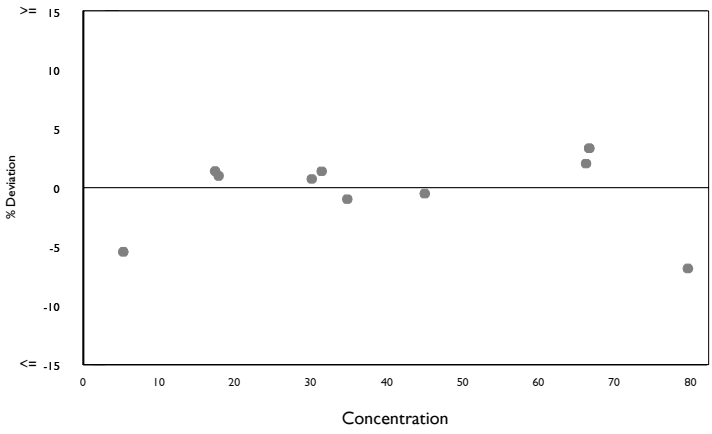
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	ng/ml	5	M 5.080	3.8	0.11	0.37a			
2	No Result	ng/ml	10	M 54.980	5.6	1.22	3.97a			
3	31.800	ng/ml	11	M 31.364	4.3	0.51	2.15	0.20	120	1.39
4	74.100	ng/ml	12	M 79.550	5.2	1.49	5.47	-1.00	72	-6.85
5	18.000	ng/ml	10	M 17.820	2.2	0.15	1.22	0.15	120	1.01
6	44.700	ng/ml	9	M 44.922	1.3	0.24	3.09	-0.07	120	-0.49
7	67.500	ng/ml	6	M 66.150	2.0	0.66	4.54	0.30	120	2.04
8	5.000	ng/ml	8	M 5.288	3.6	0.08	0.36	-0.79	82	-5.44
9	34.400	ng/ml	10	M 34.735	6.6	0.91	2.55a	-0.13	120	-0.96
10	30.300	ng/ml	11	M 30.075	6.9	0.78	2.21a	0.10	120	0.75
11	17.600	ng/ml	9	M 17.356	5.1	0.37	1.25a	0.20	120	1.41
12	68.800	ng/ml	10	M 66.575	4.3	1.14	4.57	0.49	103	3.34

	Cycle 16	Cycle 17
Cycle Average SDI	-0.16	-0.06
Cycle Average TS	116	110
Cycle Average %DEV	-1.35	-0.38
Cycle Average Absolute SDI	0.21	0.34
Cycle Average Absolute %DEV	1.69	2.37









RIQAS

UKAS PROFICIENCY TESTING 0010

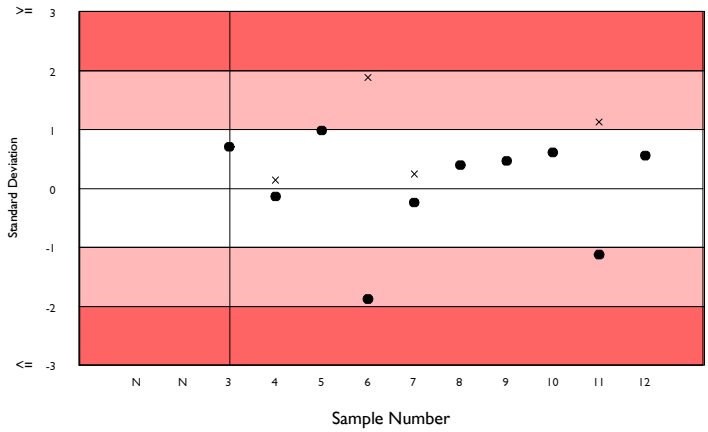
Cortisol, ug/dl

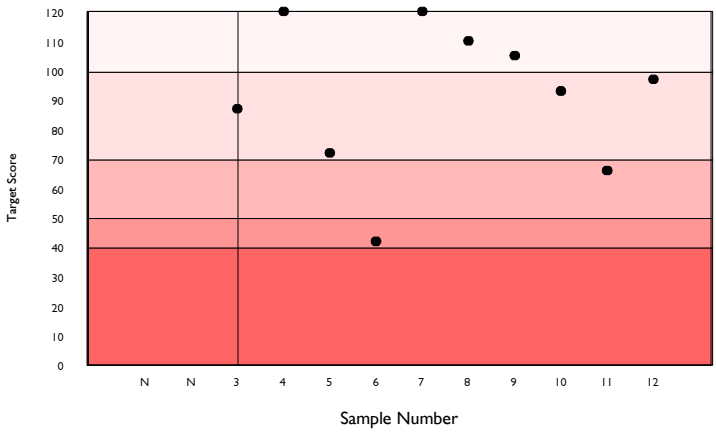
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

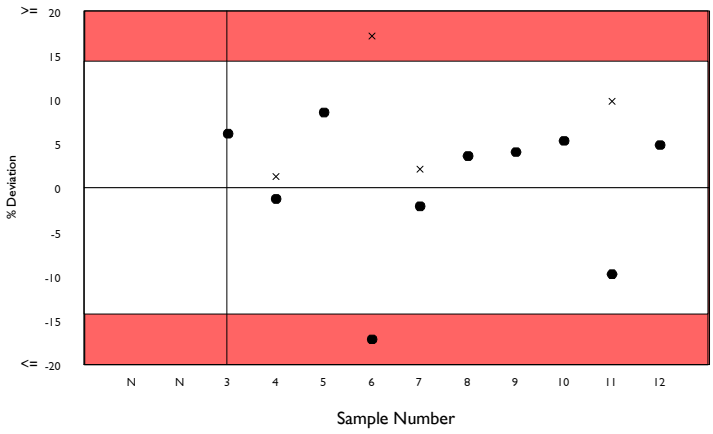
RIQAS TDPA: 14.3% **Biological Variation:** 22.8%

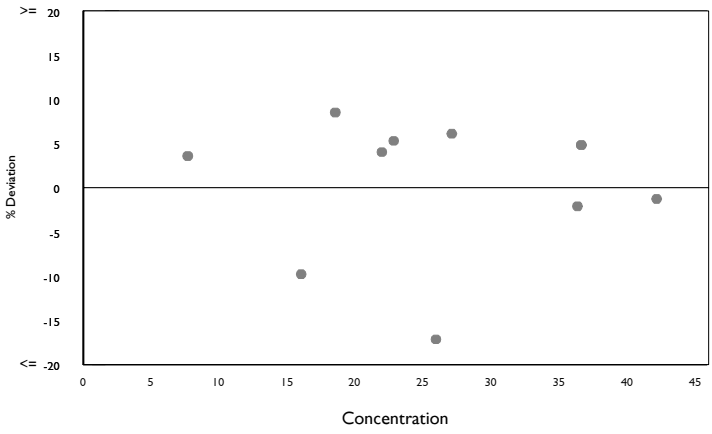
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	ug/dl	85	M 7.426	9.1	0.09	0.65			
2	N/A	ug/dl	112	M 32.539	6.4	0.25	2.83			
3	28.740	ug/dl	11	M 27.085	5.8	0.60	2.35	0.70	87	6.11
4	41.600	ug/dl	14	M 42.133	7.9	1.12	3.83a	-0.14	120	-1.27
5	20.100	ug/dl	13	M 18.523	6.1	0.39	1.61	0.98	72	8.52
6	21.470	ug/dl	18	M 25.914	9.4	0.72	2.36a	-1.88	42	-17.15
7	35.560	ug/dl	17	M 36.321	7.7	0.84	3.16	-0.24	120	-2.09
8	7.960	ug/dl	19	M 7.685	9.4	0.21	0.70a	0.39	110	3.58
9	22.820	ug/dl	21	M 21.937	6.2	0.37	1.91	0.46	105	4.03
10	24.020	ug/dl	25	M 22.812	7.5	0.43	1.98	0.61	93	5.29
11	14.450	ug/dl	26	M 16.015	7.6	0.30	1.39	-1.12	66	-9.77
12	38.370	ug/dl	22	M 36.605	5.8	0.56	3.18	0.55	97	4.82

	Cycle 16	Cycle 17
Cycle Average SDI	-0.43	0.03
Cycle Average TS	92	91
Cycle Average %DEV	-3.81	0.21
Cycle Average Absolute SDI	0.70	0.71
Cycle Average Absolute %DEV	6.26	6.26









RIQAS

UKAS PROFICIENCY TESTING 0010

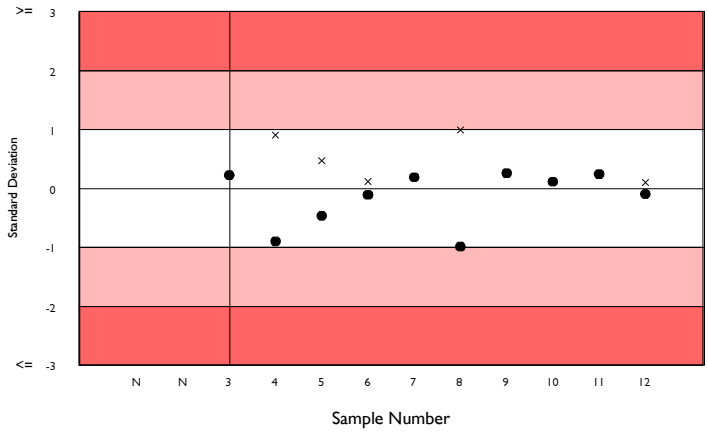
DHEA-S, ug/dl

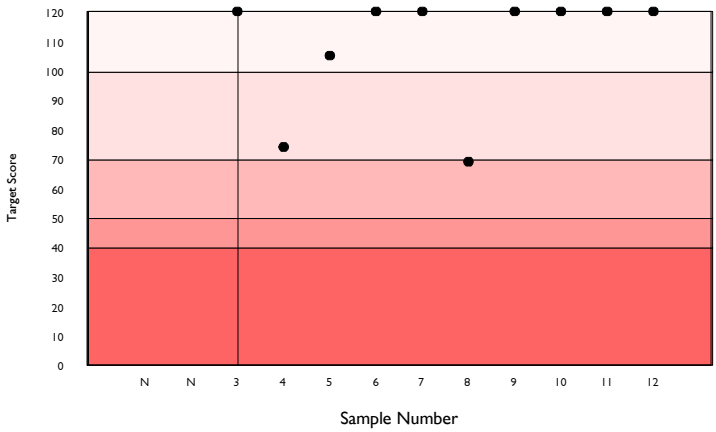
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

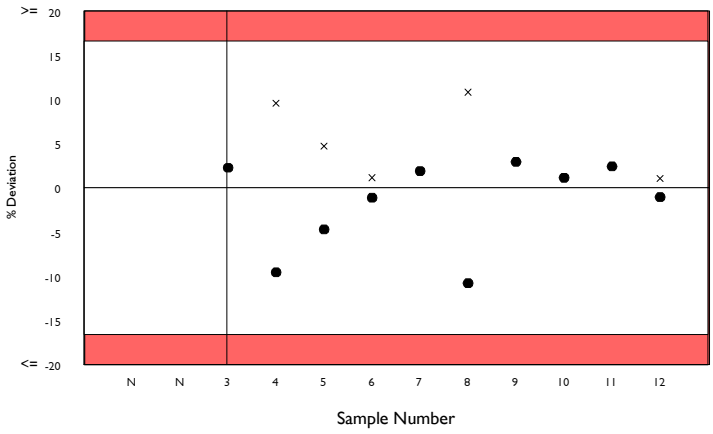
RIQAS TDPA: 16.6% **Biological Variation:** 10.9%

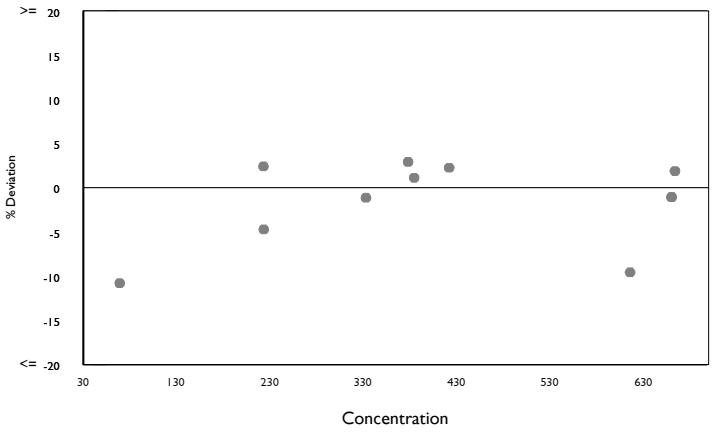
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	ug/dl	30	M 75.021	13.9	2.39	7.93a			
2	N/A	ug/dl	33	M 491.059	7.4	7.92	49.56			
3	431.300	ug/dl	6	M 421.806	4.5	9.59	42.57	0.22	120	2.25
4	556.560	ug/dl	6	M 615.434	6.5	20.42	65.38a	-0.90	74	-9.57
5	212.760	ug/dl	7	M 223.285	5.7	5.97	22.53	-0.47	105	-4.71
6	329.000	ug/dl	8	M 332.769	6.5	9.54	33.58	-0.11	120	-1.13
7	676.000	ug/dl	8	M 663.487	5.7	16.70	66.96	0.19	120	1.89
8	61.570	ug/dl	7	M 69.024	8.8	2.88	7.53a	-0.99	69	-10.80
9	388.770	ug/dl	10	M 377.722	13.4	19.97	43.03a	0.26	120	2.92
10	388.740	ug/dl	9	M 384.392	4.9	7.79	38.79	0.11	120	1.13
11	228.450	ug/dl	9	M 223.057	3.7	3.45	22.51	0.24	120	2.42
12	652.950	ug/dl	9	M 659.926	8.9	24.34	70.90a	-0.10	120	-1.06

	Cycle 16	Cycle 17
Cycle Average SDI	0.24	-0.16
Cycle Average TS	94	109
Cycle Average %DEV	2.73	-1.67
Cycle Average Absolute SDI	0.71	0.36
Cycle Average Absolute %DEV	7.91	3.79









RIQAS

UKAS PROFICIENCY TESTING 0010

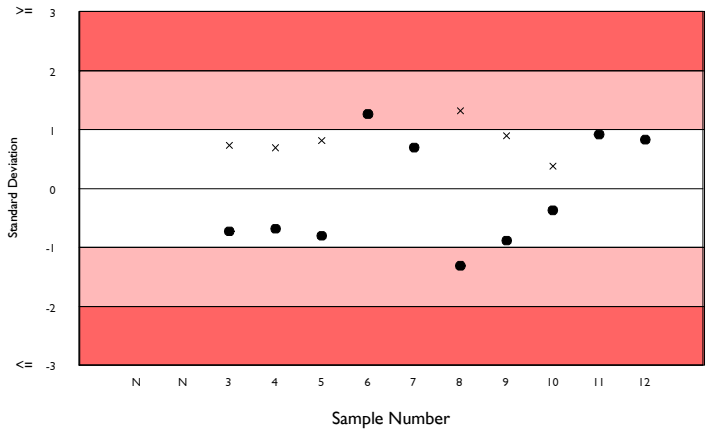
Digoxin, ng/ml

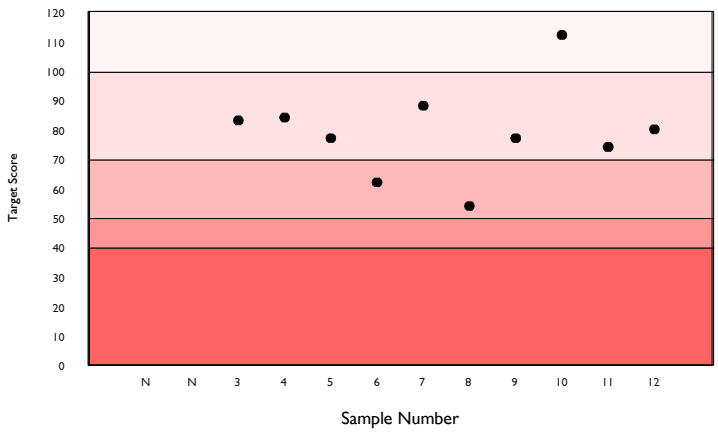
Method: bioMerieux, VIDAS
Instrument: Biomerieux Vidas/miniVidas/Vidas 3
Reagent: bioMerieux

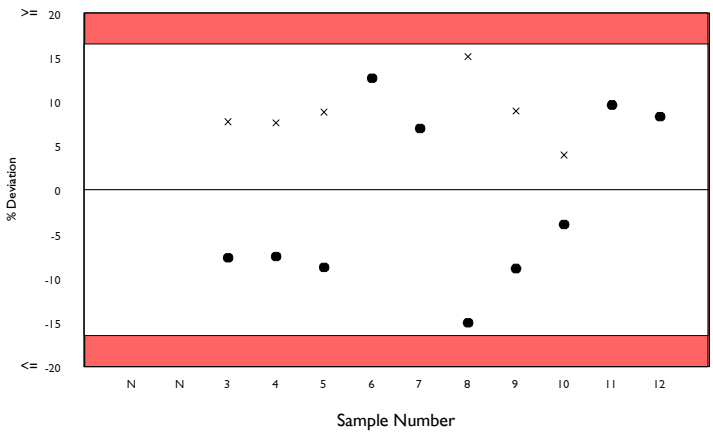
RIQAS TDPA: 16.5% **Biological Variation:** N/A

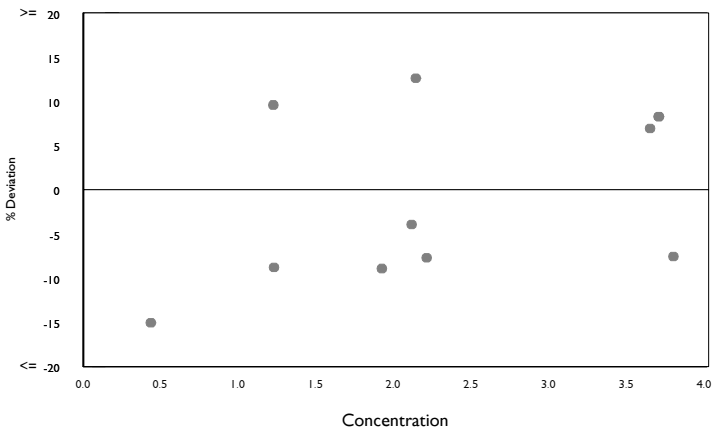
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	ng/ml	5	M 0.526	5.1	0.02	0.05			
2	No Result	ng/ml	7	M 2.989	8.9	0.13	0.32a			
3	2.040	ng/ml	11	M 2.210	8.7	0.07	0.23a	-0.73	83	-7.69
4	3.510	ng/ml	9	M 3.797	10.9	0.17	0.42a	-0.69	84	-7.55
5	1.120	ng/ml	9	M 1.228	10.2	0.05	0.13a	-0.81	77	-8.78
6	2.410	ng/ml	7	M 2.140	1.6	0.02	0.21	1.26	62	12.62
7	3.900	ng/ml	7	M 3.647	4.9	0.08	0.37	0.69	88	6.93
8	0.370	ng/ml	9	M 0.436	13.3	0.02	0.05a	-1.32	54	-15.05
9	1.750	ng/ml	8	M 1.921	6.7	0.06	0.19	-0.89	77	-8.91
10	2.030	ng/ml	7	M 2.113	6.5	0.07	0.22a	-0.37	112	-3.92
11	1.340	ng/ml	7	M 1.223	6.5	0.04	0.13a	0.91	74	9.58
12	4.010	ng/ml	8	M 3.704	5.4	0.09	0.37	0.82	80	8.27

	Cycle 16	Cycle 17
Cycle Average SDI	0.54	-0.11
Cycle Average TS	85	79
Cycle Average %DEV	6.29	-1.45
Cycle Average Absolute SDI	0.85	0.85
Cycle Average Absolute %DEV	9.76	8.93









RIQAS

UKAS PROFICIENCY TESTING 0010

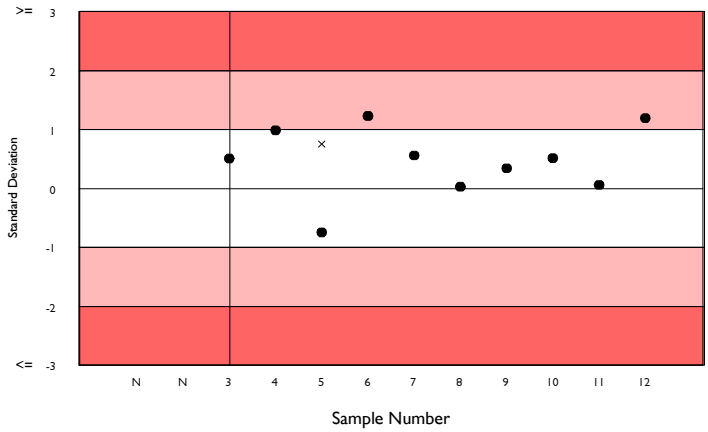
Ferritin, ng/ml

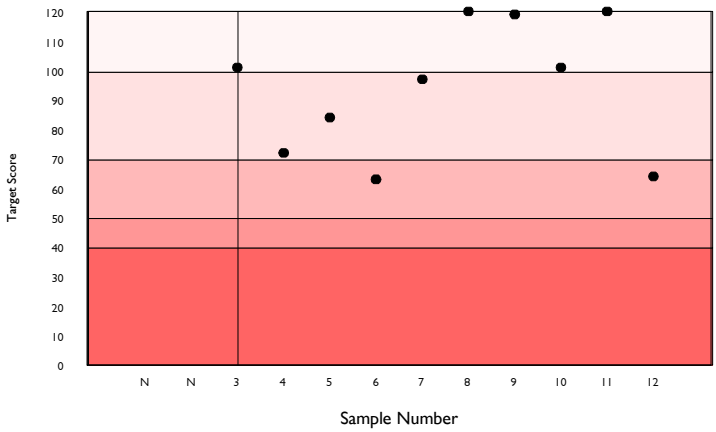
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

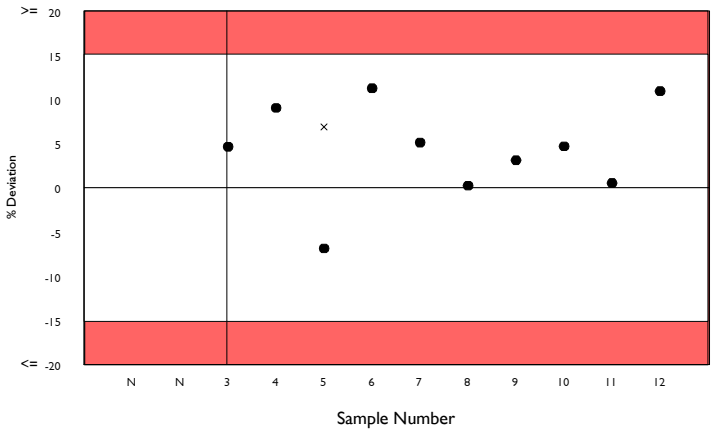
RIQAS TDPA: 15.1% **Biological Variation:** 16.9%

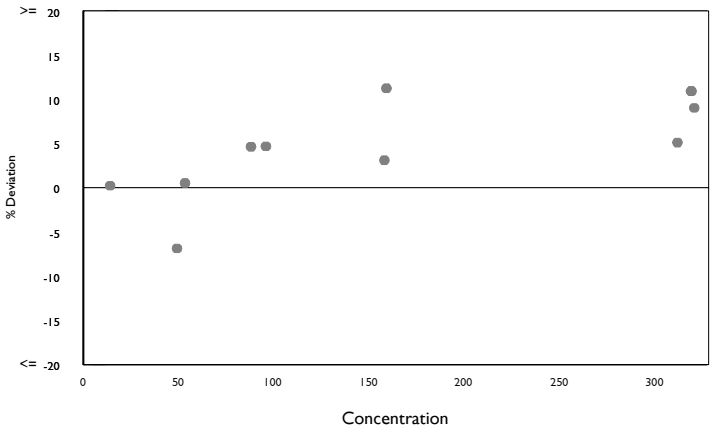
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	ng/ml	145	M 13.600	7.7	0.11	1.25			
2	N/A	ng/ml	189	M 204.449	5.4	1.01	18.77			
3	92.100	ng/ml	17	M 88.016	5.2	1.39	8.08	0.51	101	4.64
4	349.300	ng/ml	21	M 320.359	6.8	5.91	29.41	0.98	72	9.03
5	45.800	ng/ml	22	M 49.176	3.7	0.49	4.51	-0.75	84	-6.87
6	176.900	ng/ml	22	M 159.015	2.9	1.25	14.60	1.23	63	11.25
7	327.500	ng/ml	22	M 311.576	3.7	3.08	28.60	0.56	97	5.11
8	14.200	ng/ml	25	M 14.166	8.1	0.29	1.30	0.03	120	0.24
9	162.800	ng/ml	26	M 157.882	4.3	1.68	14.49	0.34	119	3.11
10	100.300	ng/ml	30	M 95.802	4.6	1.00	8.79	0.51	101	4.69
11	53.700	ng/ml	29	M 53.416	4.1	0.50	4.90	0.06	120	0.53
12	353.600	ng/ml	31	M 318.786	5.4	3.87	29.27	1.19	64	10.92

	Cycle 16	Cycle 17
Cycle Average SDI	0.20	0.46
Cycle Average TS	101	94
Cycle Average %DEV	1.73	4.27
Cycle Average Absolute SDI	0.52	0.61
Cycle Average Absolute %DEV	4.48	5.64









RIQAS

UKAS PROFICIENCY TESTING 0010

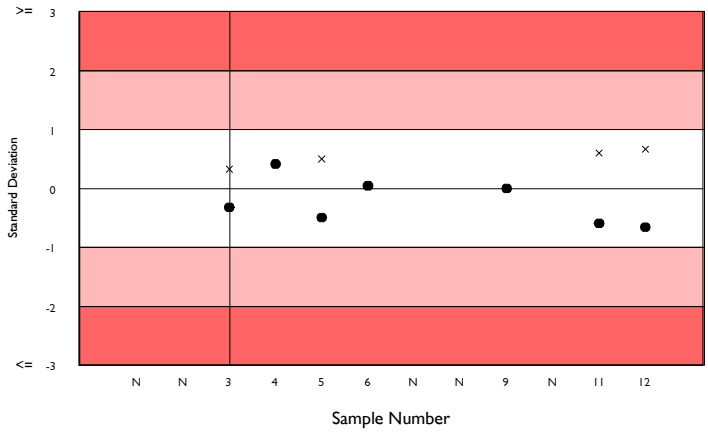
Folate, ng/ml

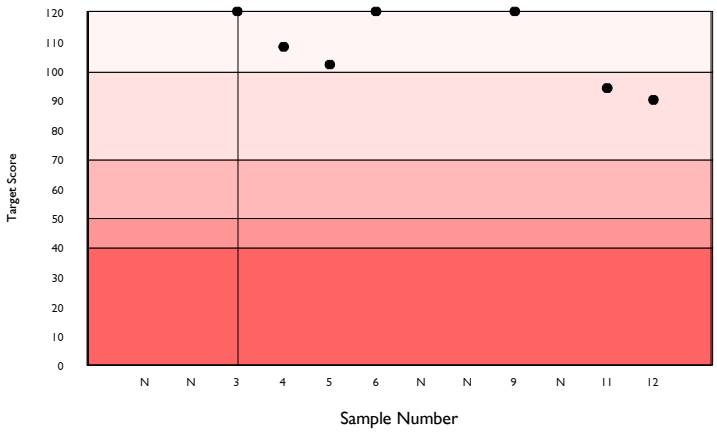
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

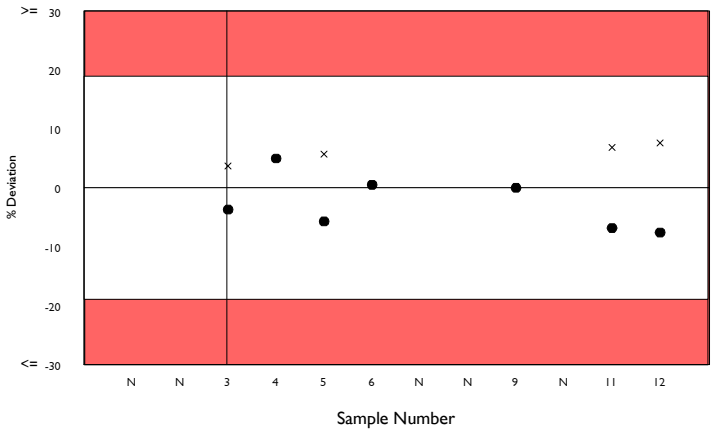
RIQAS TDPA: 18.9% **Biological Variation:** 39%

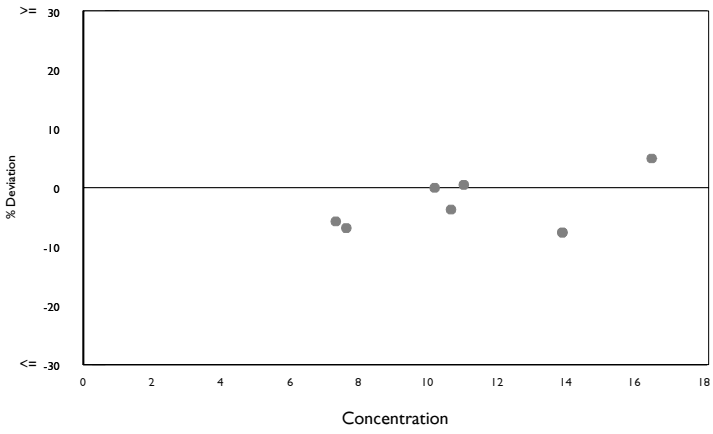
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	ng/ml	10	M 3.212	25.4	0.32	0.49a			
2	N/A	ng/ml	10	M 11.451	12.2	0.55	1.43a			
3	10.260	ng/ml	11	M 10.655	6.0	0.24	1.22	-0.32	120	-3.71
4	17.290	ng/ml	14	M 16.473	10.9	0.60	1.98a	0.41	108	4.96
5	6.900	ng/ml	13	M 7.318	8.0	0.20	0.84	-0.50	102	-5.71
6	11.080	ng/ml	16	M 11.026	10.7	0.37	1.27	0.04	120	0.49
7	No Result	ng/ml	15	M 13.913	7.4	0.33	1.60			
8	No Result	ng/ml	17	M 5.243	11.2	0.18	0.60			
9	10.180	ng/ml	22	M 10.182	13.2	0.36	1.22a	-0.00	120	-0.02
10	No Result	ng/ml	22	M 10.251	10.6	0.29	1.18			
11	7.100	ng/ml	21	M 7.622	9.9	0.21	0.88	-0.60	94	-6.84
12	12.830	ng/ml	20	M 13.885	10.9	0.42	1.60	-0.66	90	-7.60

	Cycle 16	Cycle 17
Cycle Average SDI	0.68	-0.23
Cycle Average TS	67	108
Cycle Average %DEV	8.75	-2.63
Cycle Average Absolute SDI	1.22	0.36
Cycle Average Absolute %DEV	16.10	4.19









RIQAS

UKAS PROFICIENCY TESTING 0010

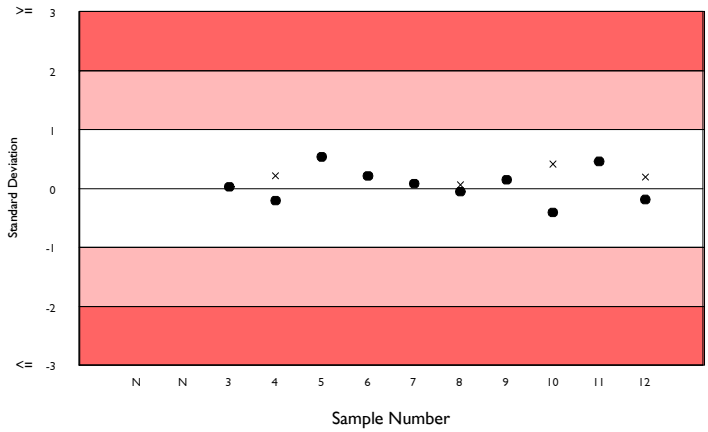
FSH, mU/ml

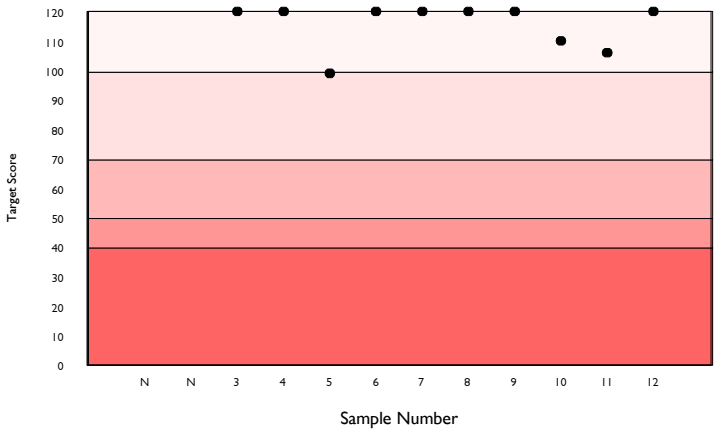
Method: Fujirebio Lumipulse G Series
Instrument: Fujirebio Lumipulse GSeries
Reagent: Fujirebio Inc.

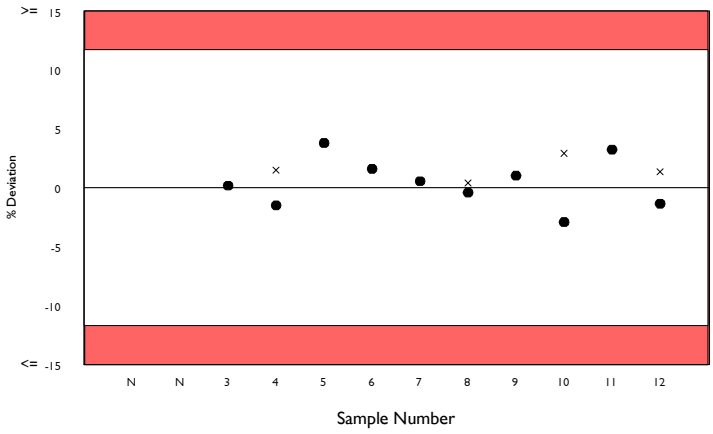
RIQAS TDPA: 11.7% **Biological Variation:** 21.19%

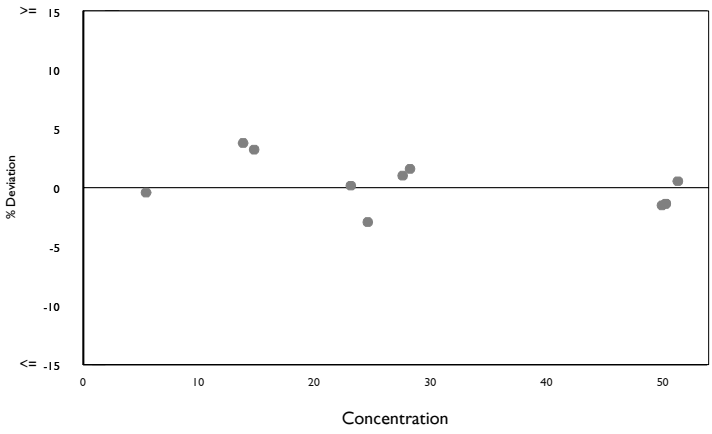
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	mU/ml	3	M 5.067	11.6	0.42	0.56a			
2	No Result	mU/ml	9	M 35.978	3.4	0.51	2.56			
3	23.100	mU/ml	10	M 23.060	4.9	0.45	1.64	0.02	120	0.17
4	49.100	mU/ml	11	M 49.845	3.7	0.70	3.55	-0.21	120	-1.50
5	14.300	mU/ml	9	M 13.778	3.1	0.18	0.98	0.53	99	3.79
6	28.600	mU/ml	10	M 28.150	6.8	0.76	2.14a	0.21	120	1.60
7	51.500	mU/ml	7	M 51.214	1.4	0.35	3.64	0.08	120	0.56
8	5.400	mU/ml	9	M 5.422	4.7	0.11	0.39	-0.06	120	-0.41
9	27.800	mU/ml	11	M 27.518	4.7	0.49	1.96	0.14	120	1.02
10	23.800	mU/ml	10	M 24.515	4.4	0.42	1.74	-0.41	110	-2.92
11	15.200	mU/ml	11	M 14.724	2.5	0.14	1.05	0.45	106	3.24
12	49.500	mU/ml	12	M 50.181	3.4	0.61	3.57	-0.19	120	-1.36

	Cycle 16	Cycle 17
Cycle Average SDI	-0.41	0.06
Cycle Average TS	104	116
Cycle Average %DEV	-3.20	0.42
Cycle Average Absolute SDI	0.44	0.23
Cycle Average Absolute %DEV	3.43	1.66









RIQAS

UKAS PROFICIENCY TESTING 0010

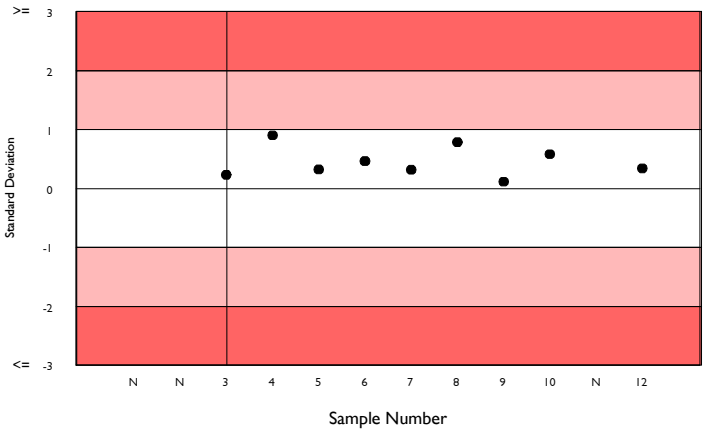
hCG, mU/ml

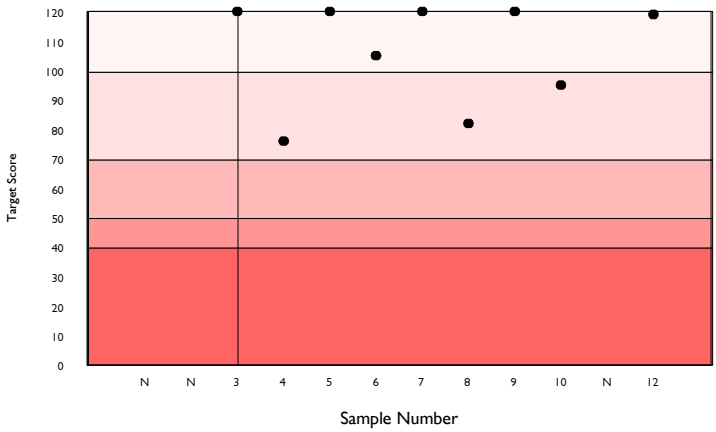
Method: Siemens Atellica IM
Instrument: Siemens ADVIA Centaur XP/XPT/Classic
Reagent: Siemens

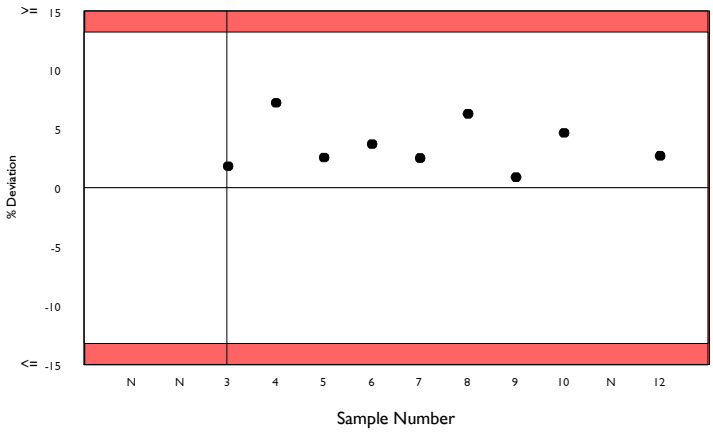
RIQAS TDPA: 13.2% **Biological Variation:** N/A

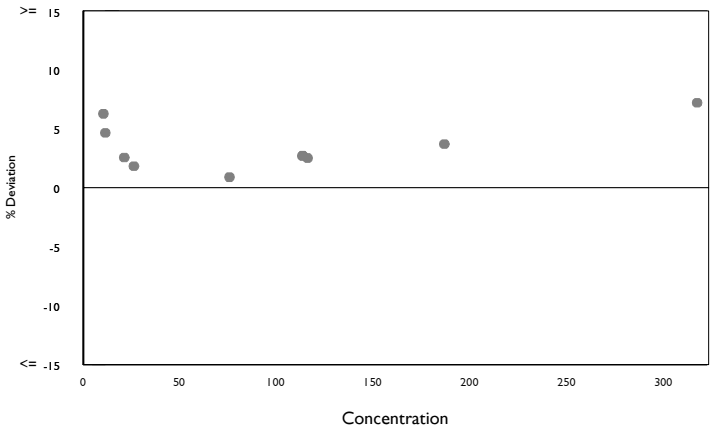
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	mU/ml	142	M 19.105	6.7	0.13	1.53			
2	N/A	mU/ml	189	M 168.660	4.0	0.61	13.54			
3	26.700	mU/ml	13	M 26.219	5.3	0.48	2.10	0.23	120	1.83
4	339.800	mU/ml	16	M 316.962	4.3	4.26	25.44	0.90	76	7.21
5	21.800	mU/ml	16	M 21.256	7.7	0.51	1.71	0.32	120	2.56
6	193.400	mU/ml	17	M 186.501	5.1	2.88	14.97	0.46	105	3.70
7	118.800	mU/ml	17	M 115.878	3.4	1.19	9.30	0.31	120	2.52
8	11.100	mU/ml	23	M 10.445	5.7	0.16	0.84	0.78	82	6.27
9	76.200	mU/ml	24	M 75.522	4.6	0.89	6.06	0.11	120	0.90
10	12.000	mU/ml	31	M 11.467	5.3	0.14	0.92	0.58	95	4.65
11	No Result	mU/ml	28	M 11.306	6.6	0.18	0.91			
12	116.400	mU/ml	27	M 113.332	3.4	0.92	9.09	0.34	119	2.71

	Cycle 16	Cycle 17
Cycle Average SDI	0.05	0.45
Cycle Average TS	92	106
Cycle Average %DEV	0.40	3.59
Cycle Average Absolute SDI	0.67	0.45
Cycle Average Absolute %DEV	5.63	3.59









RIQAS

UKAS PROFICIENCY TESTING 0010

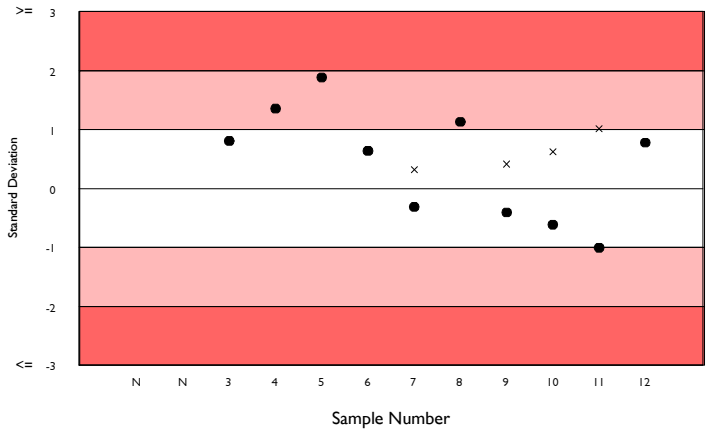
IgE, U/ml

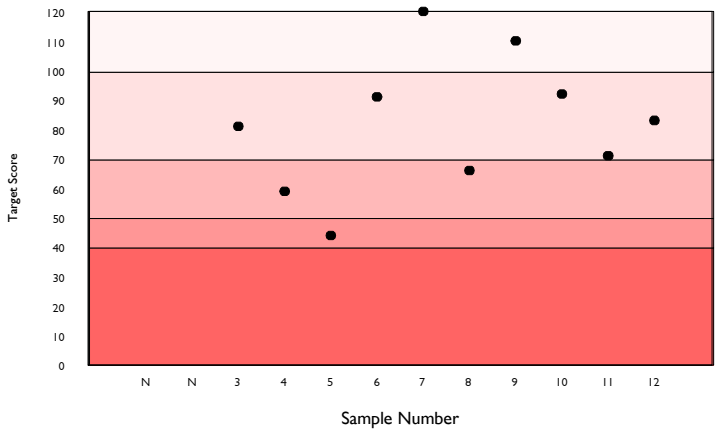
Method: Siemens Centaur XP/XPT/Classic
Instrument: Siemens ADVIA Centaur XP/XPT/Classic
Reagent: Siemens

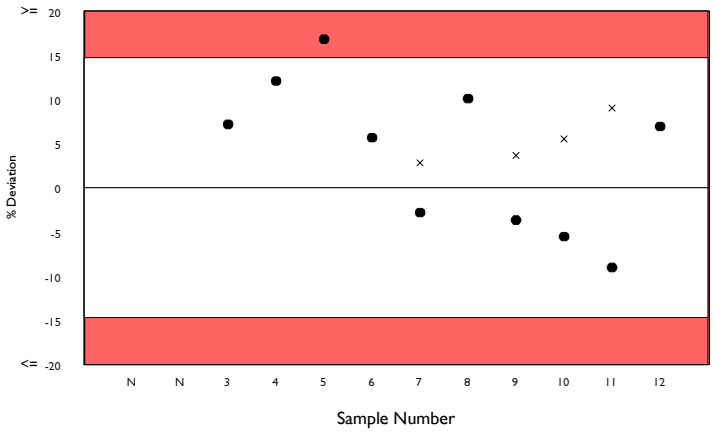
RIQAS TDPA: 14.7% **Biological Variation:** N/A

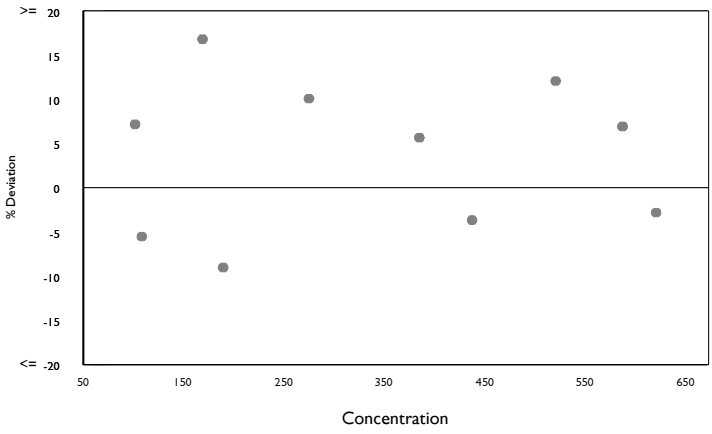
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	U/ml	59	M 234.696	6.0	2.29	20.97			
2	No Result	U/ml	80	M 310.655	7.1	3.08	27.76			
3	108.900	U/ml	83	M 101.615	5.9	0.83	9.08	0.80	81	7.17
4	583.100	U/ml	86	M 520.286	7.2	5.08	46.50	1.35	59	12.07
5	197.100	U/ml	82	M 168.751	6.3	1.48	15.08	1.88	44	16.80
6	406.400	U/ml	85	M 384.623	6.2	3.22	34.37	0.63	91	5.66
7	602.700	U/ml	59	M 620.181	6.3	6.39	55.43	-0.32	120	-2.82
8	302.400	U/ml	65	M 274.722	5.3	2.27	24.55	1.13	66	10.07
9	421.000	U/ml	75	M 436.996	5.4	3.42	39.05	-0.41	110	-3.66
10	102.400	U/ml	69	M 108.387	6.1	0.99	9.69	-0.62	92	-5.52
11	172.300	U/ml	81	M 189.397	5.3	1.39	16.93	-1.01	71	-9.03
12	627.300	U/ml	64	M 586.690	7.9	7.21	52.43	0.77	83	6.92

	Cycle 16	Cycle 17
Cycle Average SDI	-0.27	0.42
Cycle Average TS	87	82
Cycle Average %DEV	-2.29	3.77
Cycle Average Absolute SDI	0.80	0.89
Cycle Average Absolute %DEV	6.80	7.97









RIQAS

UKAS PROFICIENCY TESTING 0010

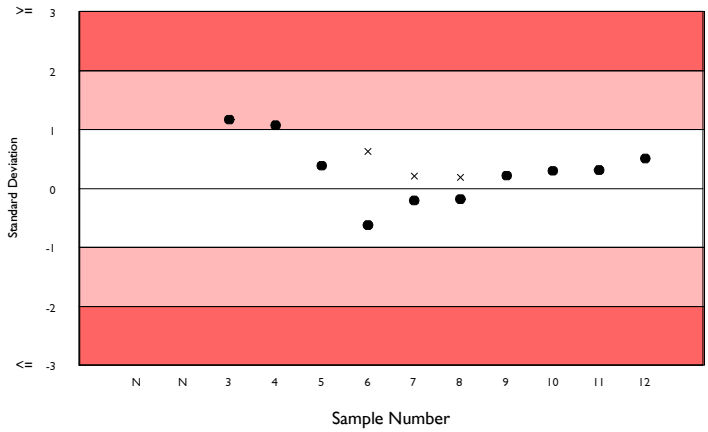
LH, mU/ml

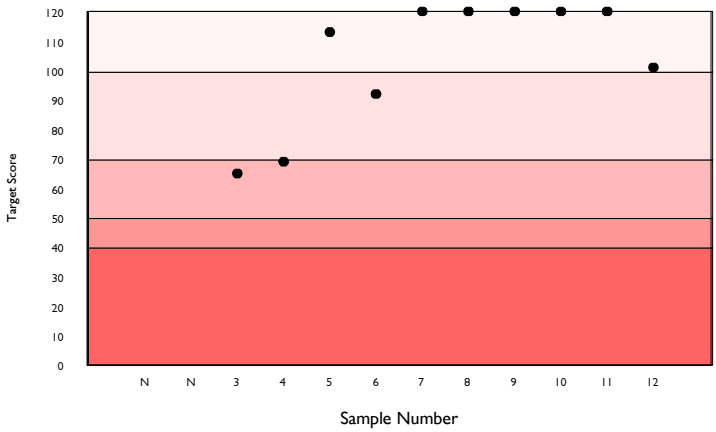
Method: Siemens Centaur XP/XPT/Classic
Instrument: Siemens ADVIA Centaur XP/XPT/Classic
Reagent: Siemens

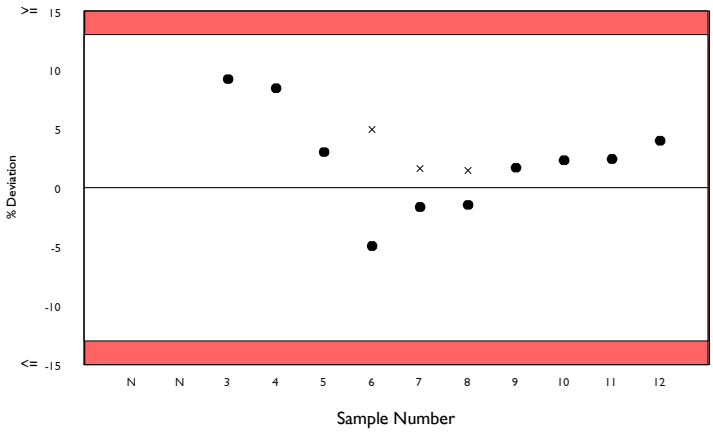
RIQAS TDPA: 13% **Biological Variation:** 27.92%

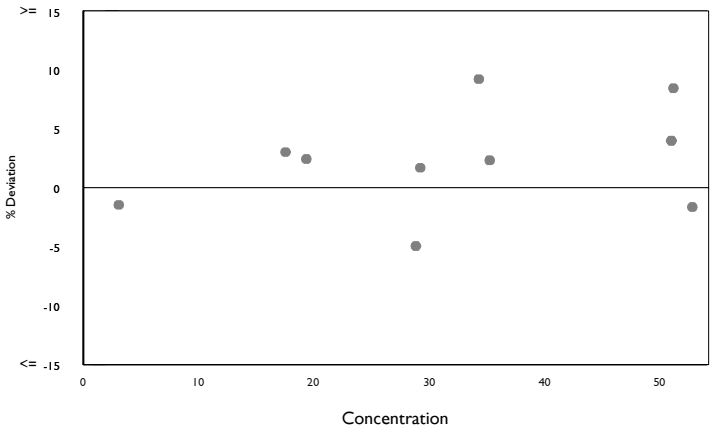
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	mU/ml	126	M 2.579	5.9	0.02	0.20			
2	No Result	mU/ml	169	M 42.473	5.2	0.21	3.36			
3	37.410	mU/ml	178	M 34.254	5.5	0.18	2.71	1.17	65	9.21
4	55.420	mU/ml	178	M 51.105	5.5	0.26	4.04	1.07	69	8.44
5	18.060	mU/ml	167	M 17.529	6.1	0.10	1.39	0.38	113	3.03
6	27.390	mU/ml	166	M 28.814	4.9	0.14	2.28	-0.63	92	-4.94
7	51.880	mU/ml	129	M 52.744	5.5	0.32	4.17	-0.21	120	-1.64
8	3.040	mU/ml	138	M 3.085	6.2	0.02	0.24	-0.18	120	-1.46
9	29.680	mU/ml	170	M 29.183	4.1	0.11	2.31	0.22	120	1.70
10	36.020	mU/ml	152	M 35.201	5.1	0.18	2.78	0.29	120	2.33
11	19.800	mU/ml	169	M 19.329	4.8	0.09	1.53	0.31	120	2.44
12	52.960	mU/ml	141	M 50.928	5.4	0.29	4.03	0.50	101	3.99

	Cycle 16	Cycle 17
Cycle Average SDI	0.22	0.29
Cycle Average TS	102	104
Cycle Average %DEV	1.58	2.31
Cycle Average Absolute SDI	0.52	0.50
Cycle Average Absolute %DEV	3.76	3.92









RIQAS

UKAS PROFICIENCY TESTING 0010

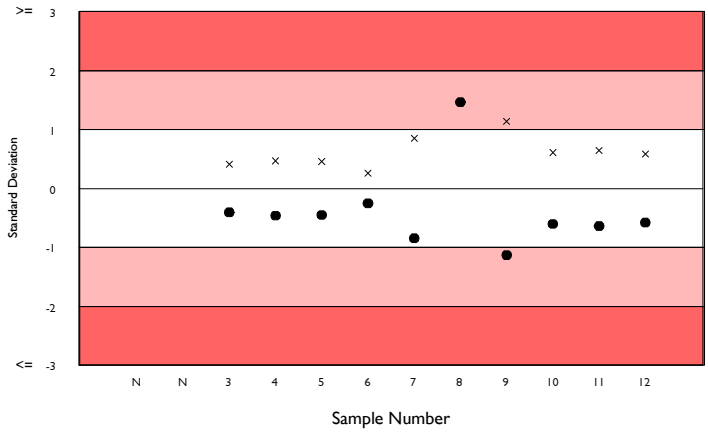
Oestradiol, pg/ml

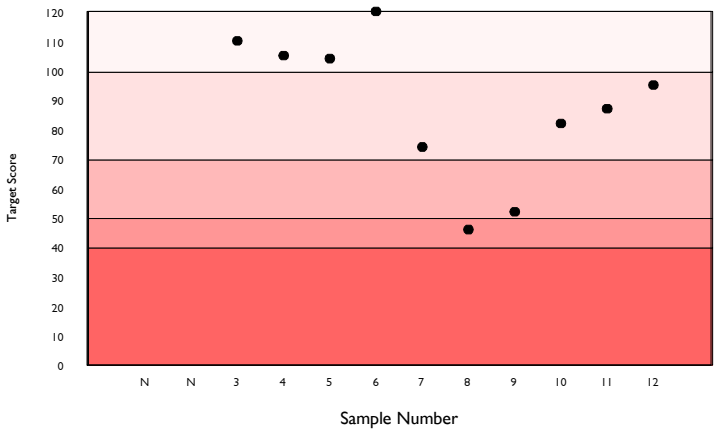
Method: Fujirebio Lumipulse G Series
Instrument: Fujirebio Lumipulse GSeries
Reagent: Fujirebio Inc.

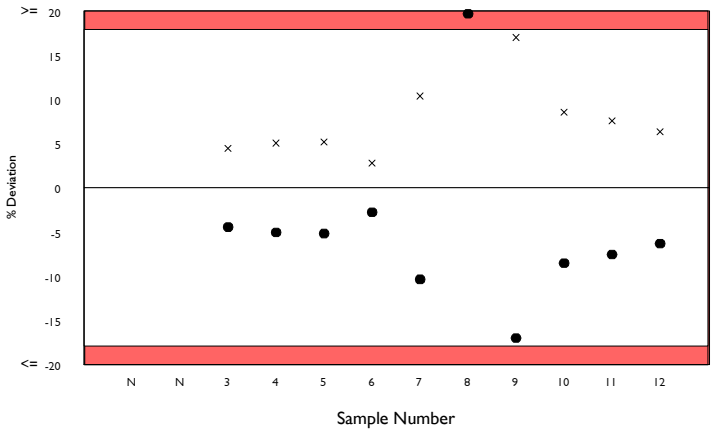
RIQAS TDPA: 17.9% **Biological Variation:** 26.86%

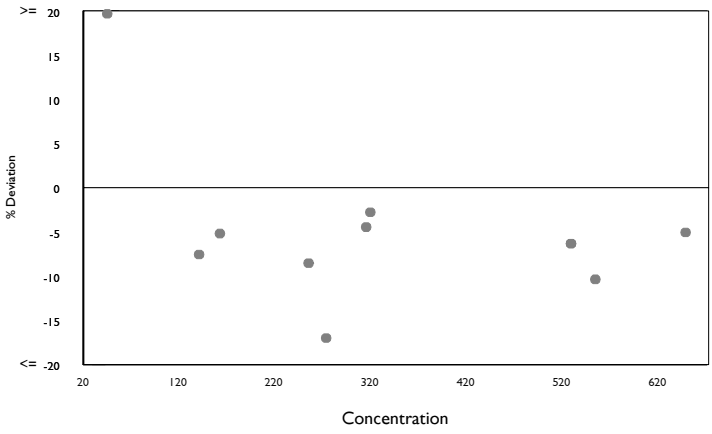
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	pg/ml	3	M 49.822	25.5	9.16	10.65a			
2	No Result	pg/ml	5	M 482.844	3.4	9.30	52.55			
3	301.100	pg/ml	6	M 315.123	3.9	6.27	34.29	-0.41	110	-4.45
4	615.400	pg/ml	5	M 648.140	5.6	20.24	70.53	-0.46	105	-5.05
5	154.200	pg/ml	5	M 162.620	6.2	5.62	18.57a	-0.45	104	-5.18
6	310.600	pg/ml	5	M 319.480	4.1	7.27	34.77	-0.26	120	-2.78
7	496.600	pg/ml	6	M 554.012	10.9	30.74	67.68a	-0.85	74	-10.36
8	53.900	pg/ml	5	M 45.040	14.2	3.58	6.07a	1.46	46	19.67
9	226.900	pg/ml	6	M 273.378	20.2	28.17	40.97a	-1.13	52	-17.00
10	233.400	pg/ml	6	M 255.174	17.6	22.86	35.97a	-0.61	82	-8.53
11	130.200	pg/ml	7	M 140.839	9.5	6.34	16.59a	-0.64	87	-7.55
12	495.200	pg/ml	6	M 528.648	4.7	12.74	57.53	-0.58	95	-6.33

	Cycle 16	Cycle 17
Cycle Average SDI	-0.39	-0.39
Cycle Average TS	97	88
Cycle Average %DEV	-4.27	-4.76
Cycle Average Absolute SDI	0.56	0.69
Cycle Average Absolute %DEV	6.11	8.69









RIQAS

UKAS PROFICIENCY TESTING 0010

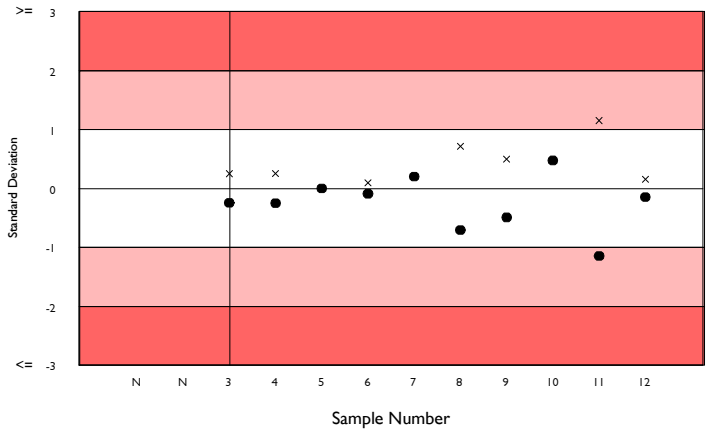
Progesterone, ng/ml

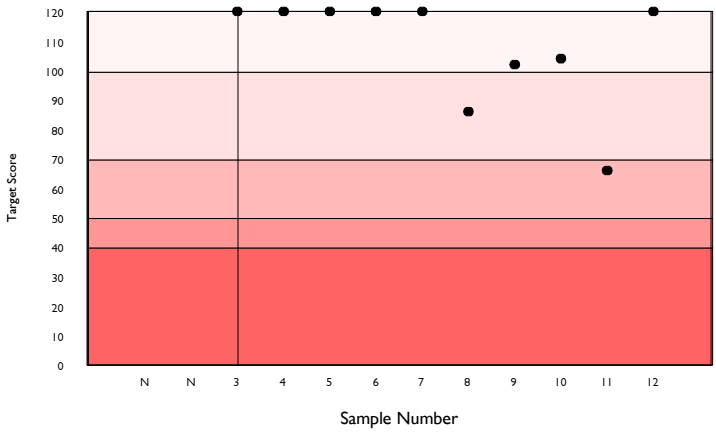
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

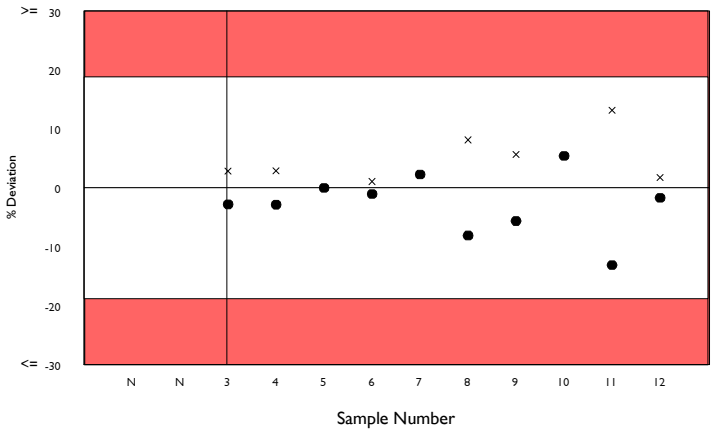
RIQAS TDPA: 18.8% **Biological Variation:** N/A

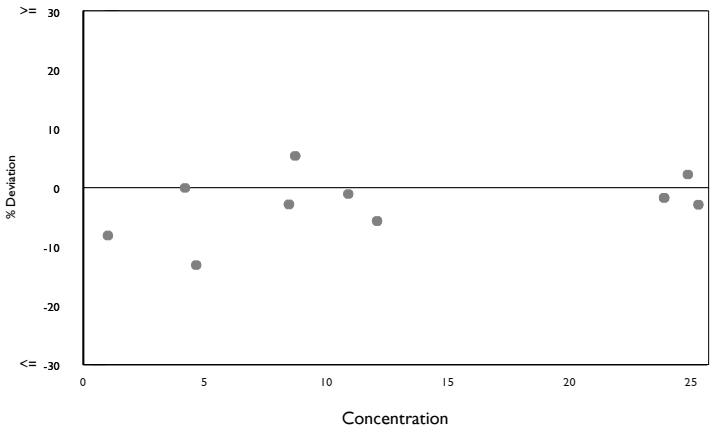
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	ng/ml	101	M 0.717	15.3	0.01	0.08			
2	N/A	ng/ml	126	M 15.273	6.6	0.11	1.75			
3	8.210	ng/ml	9	M 8.449	2.5	0.09	0.97	-0.25	120	-2.82
4	24.540	ng/ml	13	M 25.267	6.6	0.58	2.89	-0.25	120	-2.88
5	4.180	ng/ml	12	M 4.181	5.8	0.09	0.48	-0.00	120	-0.03
6	10.770	ng/ml	13	M 10.885	3.1	0.12	1.24	-0.09	120	-1.06
7	25.390	ng/ml	15	M 24.830	5.6	0.45	2.84	0.20	120	2.25
8	0.930	ng/ml	15	M 1.012	9.4	0.03	0.12	-0.71	86	-8.11
9	11.390	ng/ml	19	M 12.072	6.7	0.23	1.38	-0.49	102	-5.65
10	9.180	ng/ml	20	M 8.710	4.0	0.10	1.00	0.47	104	5.39
11	4.030	ng/ml	21	M 4.639	3.6	0.04	0.53	-1.15	66	-13.12
12	23.450	ng/ml	19	M 23.860	3.2	0.22	2.73	-0.15	120	-1.72

	Cycle 16	Cycle 17
Cycle Average SDI	0.33	-0.24
Cycle Average TS	97	108
Cycle Average %DEV	3.62	-2.77
Cycle Average Absolute SDI	0.64	0.38
Cycle Average Absolute %DEV	7.05	4.30









RIQAS

UKAS PROFICIENCY TESTING 0010

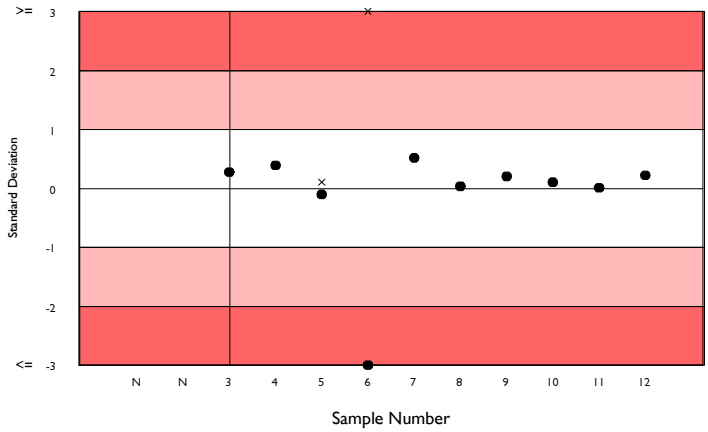
Prolactin, uU/ml

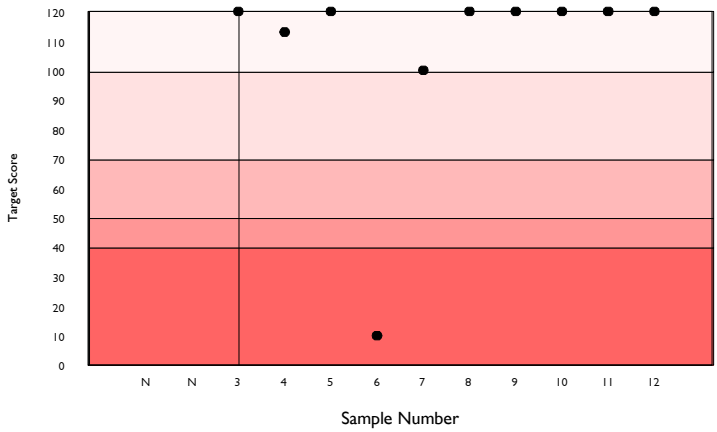
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

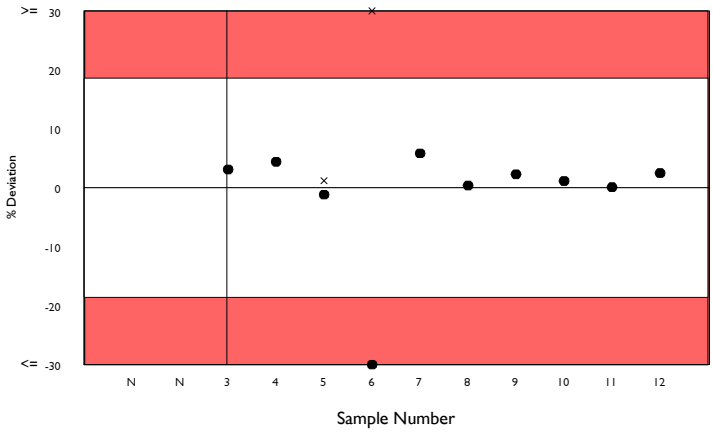
RIQAS TDPA: 18.6% **Biological Variation:** 29.4%

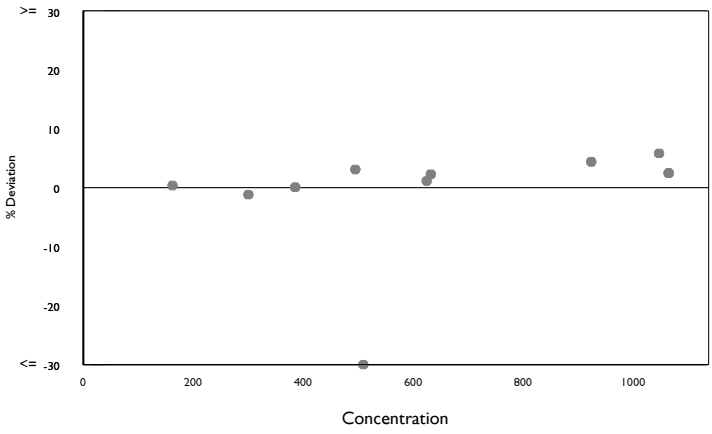
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	uU/ml	122	M 139.857	3.7	0.59	15.82			
2	N/A	uU/ml	156	M 738.018	5.1	3.78	83.46			
3	509.776	uU/ml	8	M 494.446	5.6	12.25	55.91	0.27	120	3.10
4	963.540	uU/ml	12	M 922.907	4.4	14.80	104.36	0.39	113	4.40
5	296.376	uU/ml	11	M 299.920	3.6	4.12	33.91	-0.10	120	-1.18
6	23.390	uU/ml	14	M 508.665	4.3	7.26	57.52	-8.44	10	-95.40
7	1107.064	uU/ml	17	M 1046.034	3.9	12.36	118.29	0.52	100	5.83
8	162.820	uU/ml	19	M 162.202	3.3	1.55	18.34	0.03	120	0.38
9	645.752	uU/ml	16	M 631.333	4.6	9.05	71.39	0.20	120	2.28
10	631.124	uU/ml	22	M 623.955	3.8	6.34	70.56	0.10	120	1.15
11	385.628	uU/ml	21	M 385.258	6.0	6.26	43.57	0.01	120	0.10
12	1089.892	uU/ml	23	M 1063.487	4.9	13.69	120.26	0.22	120	2.48

	Cycle 16	Cycle 17
Cycle Average SDI	0.09	-0.68
Cycle Average TS	115	106
Cycle Average %DEV	1.26	-7.69
Cycle Average Absolute SDI	0.30	1.03
Cycle Average Absolute %DEV	4.29	11.63









RIQAS

UKAS PROFICIENCY TESTING 0010

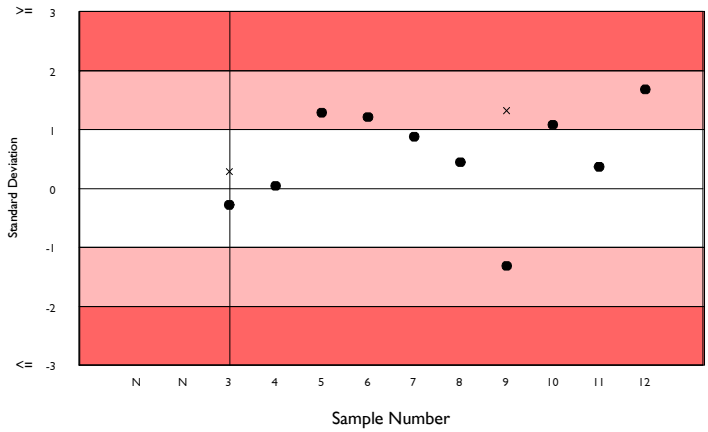
PSA, Free, ng/ml

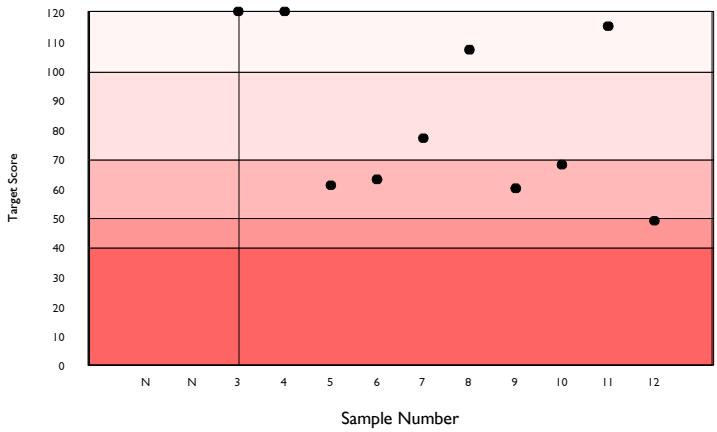
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

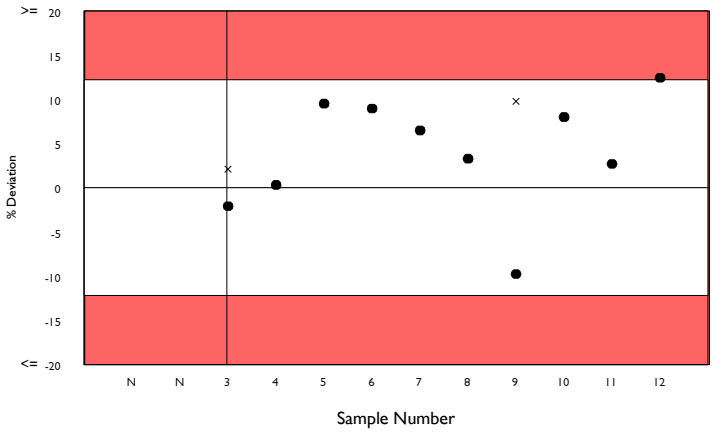
RIQAS TDPA: 12.2% **Biological Variation:** N/A

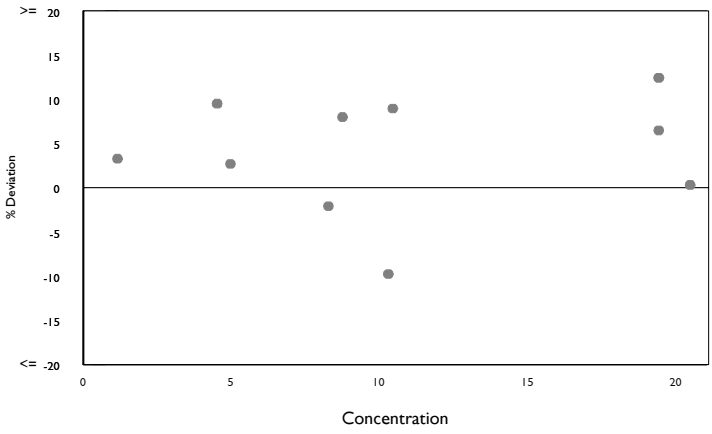
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	ng/ml	82	M 1.142	4.4	0.01	0.08			
2	N/A	ng/ml	119	M 13.528	4.9	0.08	1.00			
3	8.100	ng/ml	11	M 8.273	5.8	0.18	0.61	-0.28	120	-2.09
4	20.540	ng/ml	12	M 20.476	6.8	0.50	1.60a	0.04	120	0.31
5	4.950	ng/ml	15	M 4.520	6.3	0.09	0.34	1.28	61	9.51
6	11.380	ng/ml	15	M 10.445	5.5	0.19	0.77	1.21	63	8.96
7	20.670	ng/ml	15	M 19.411	4.6	0.29	1.44	0.87	77	6.48
8	1.200	ng/ml	16	M 1.162	3.6	0.01	0.09	0.44	107	3.28
9	9.290	ng/ml	16	M 10.295	6.0	0.19	0.76	-1.32	60	-9.76
10	9.450	ng/ml	20	M 8.751	4.6	0.11	0.65	1.08	68	7.99
11	5.100	ng/ml	17	M 4.966	4.0	0.06	0.37	0.36	115	2.70
12	21.830	ng/ml	17	M 19.415	2.4	0.14	1.44	1.68	49	12.44

	Cycle 16	Cycle 17
Cycle Average SDI	0.10	0.54
Cycle Average TS	89	84
Cycle Average %DEV	0.70	3.98
Cycle Average Absolute SDI	0.73	0.86
Cycle Average Absolute %DEV	5.22	6.35









RIQAS

UKAS PROFICIENCY TESTING 0010

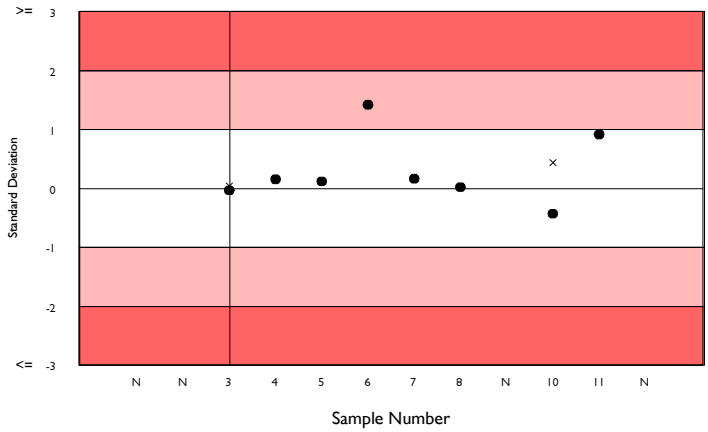
PSA, Total, ng/ml

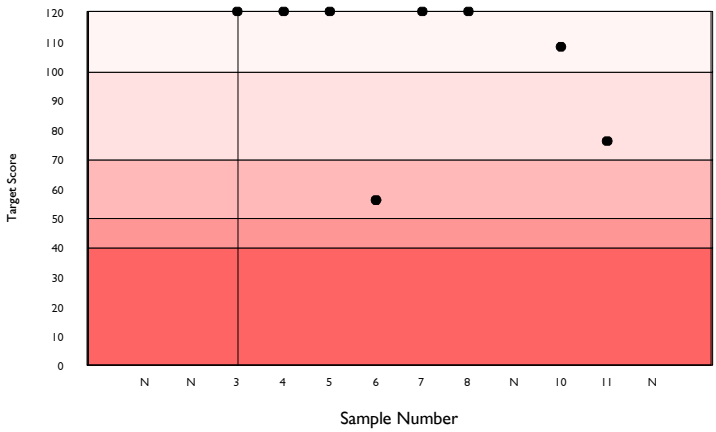
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

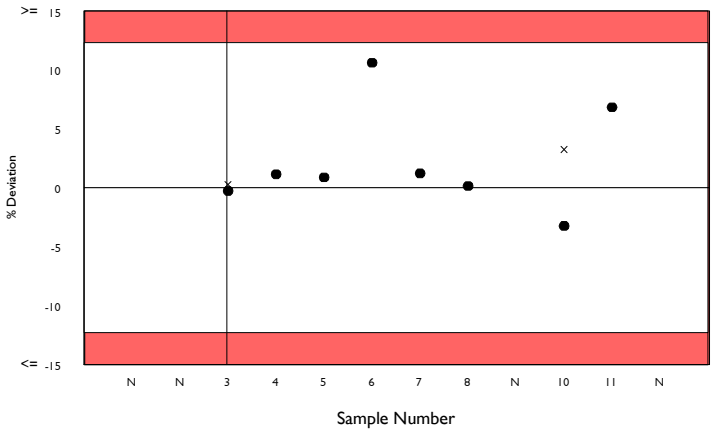
RIQAS TDPA: 12.3% **Biological Variation:** 33.6%

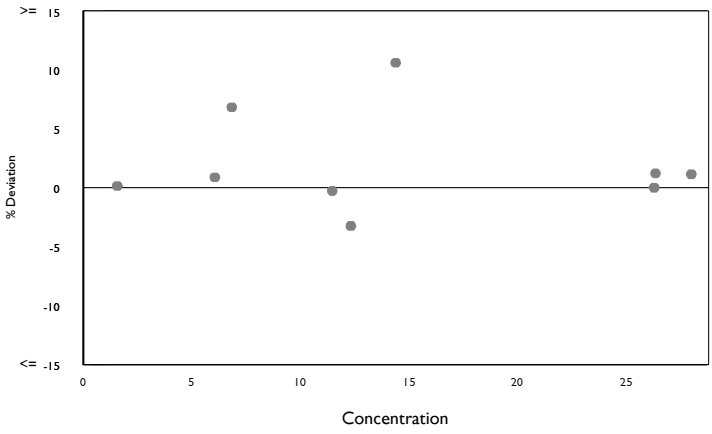
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	ng/ml	160	M 1.465	4.6	0.01	0.11			
2	N/A	ng/ml	213	M 18.384	5.1	0.08	1.37			
3	11.420	ng/ml	13	M 11.451	3.4	0.13	0.86	-0.04	120	-0.27
4	28.270	ng/ml	16	M 27.951	5.1	0.45	2.09	0.15	120	1.14
5	6.110	ng/ml	21	M 6.057	4.7	0.08	0.45	0.12	120	0.87
6	15.890	ng/ml	20	M 14.368	4.0	0.16	1.07	1.42	56	10.60
7	26.630	ng/ml	21	M 26.310	3.5	0.25	1.97	0.16	120	1.22
8	1.570	ng/ml	24	M 1.568	3.0	0.01	0.12	0.02	120	0.14
9	No Result	ng/ml	24	M 13.833	4.9	0.17	1.03			
10	11.910	ng/ml	29	M 12.309	4.8	0.14	0.92	-0.43	108	-3.24
11	7.300	ng/ml	30	M 6.834	4.0	0.06	0.51	0.91	76	6.83
12	No Result	ng/ml	28	M 26.244	5.0	0.31	1.96			

	Cycle 16	Cycle 17
Cycle Average SDI	0.29	0.29
Cycle Average TS	85	105
Cycle Average %DEV	2.16	2.16
Cycle Average Absolute SDI	0.88	0.41
Cycle Average Absolute %DEV	6.59	3.04









RIQAS

UKAS PROFICIENCY TESTING 0010

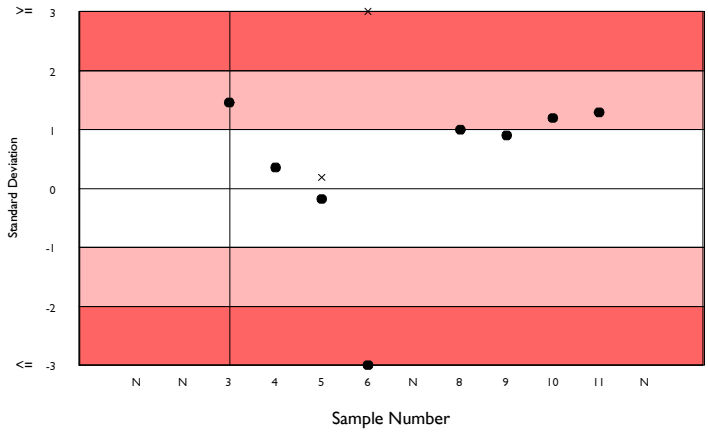
Parathyroid hormone, pg/ml

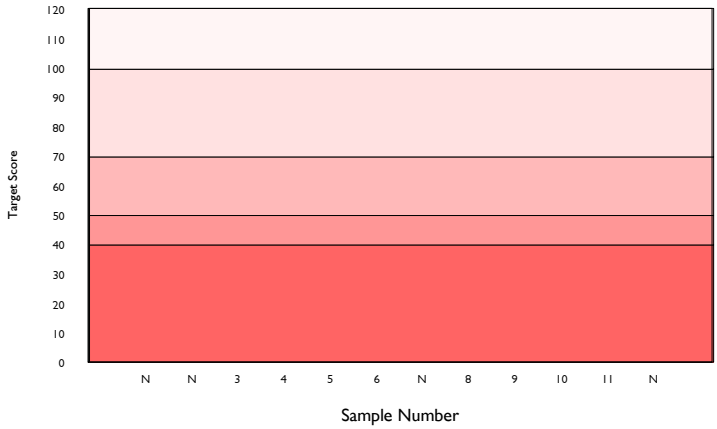
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

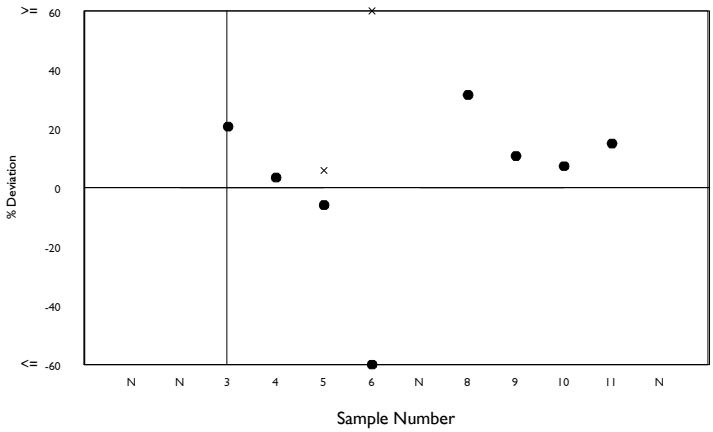
RIQAS TDPA: N/A **Biological Variation:** 30.2%

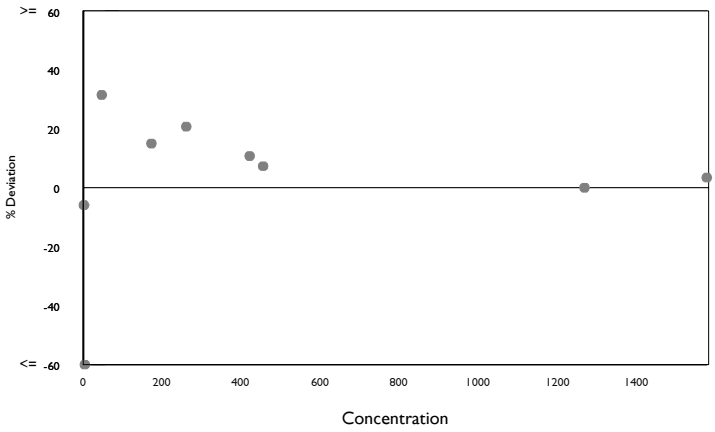
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	pg/ml	7	M 1.886	30.0	0.27	0.62a		N/A	
2	N/A	pg/ml	17	M 655.171	17.3	34.32	118.29a		N/A	
3	314.300	pg/ml	10	M 260.350	13.2	13.63	37.07a	1.46	N/A	20.72
4	1630.000	pg/ml	9	M 1575.697	9.1	59.42	154.48a	0.35	N/A	3.45
5	2.000	pg/ml	4	M 2.125	27.3	0.36	0.68a	-0.18	N/A	-5.88
6	1.600	pg/ml	5	M 4.140	11.4	0.26	0.54a	-4.71	N/A	-61.35
7	No Result	pg/ml	12	M 1255.650	5.4	24.53	72.27a		N/A	
8	61.700	pg/ml	12	M 46.921	29.8	5.05	14.89a	0.99	N/A	31.50
9	465.900	pg/ml	14	M 420.706	11.4	15.98	50.42a	0.90	N/A	10.74
10	488.000	pg/ml	15	M 454.644	5.9	8.60	28.01a	1.19	N/A	7.34
11	198.400	pg/ml	18	M 172.527	11.6	5.92	20.10	1.29	N/A	15.00
12	No Result	pg/ml	18	M 1266.932	6.1	22.62	76.77		N/A	

	Cycle 16	Cycle 17
Cycle Average SDI	-1.23	0.16
Cycle Average TS	N/A	N/A
Cycle Average %DEV	-14.20	2.69
Cycle Average Absolute SDI	1.58	1.38
Cycle Average Absolute %DEV	17.03	19.50









RIQAS

UKAS PROFICIENCY TESTING 0010

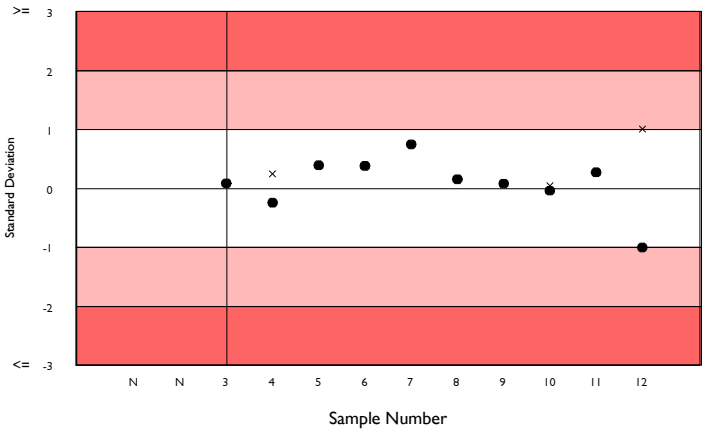
Free T3, pmol/l

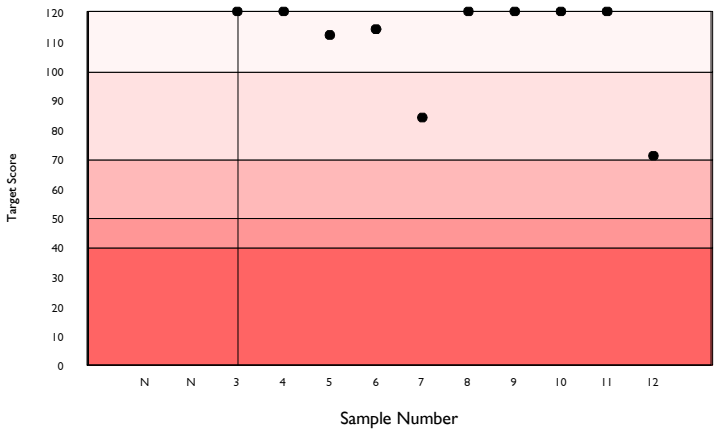
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

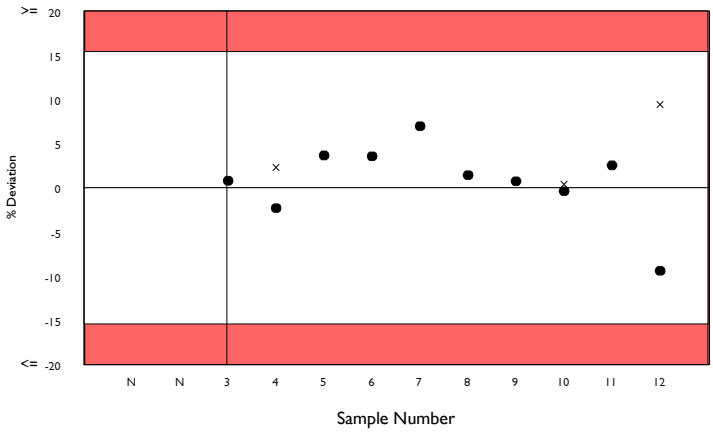
RIQAS TDPA: 15.4% **Biological Variation:** 11.3%

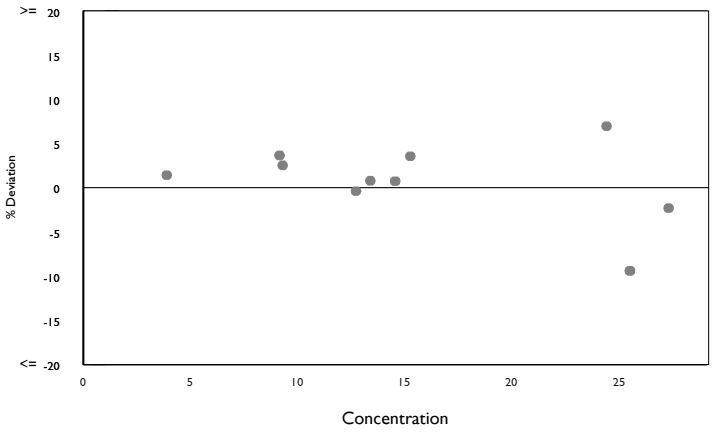
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	pmol/l	174	M 3.604	3.9	0.01	0.34			
2	N/A	pmol/l	227	M 18.701	5.2	0.08	1.75			
3	13.490	pmol/l	15	M 13.384	2.5	0.11	1.25	0.08	120	0.79
4	26.660	pmol/l	19	M 27.286	5.8	0.45	2.55	-0.25	120	-2.30
5	9.490	pmol/l	20	M 9.155	2.1	0.05	0.86	0.39	112	3.66
6	15.790	pmol/l	24	M 15.248	2.6	0.10	1.43	0.38	114	3.56
7	26.100	pmol/l	22	M 24.399	4.8	0.31	2.28	0.74	84	6.97
8	3.950	pmol/l	29	M 3.894	3.5	0.03	0.36	0.15	120	1.43
9	14.650	pmol/l	30	M 14.544	3.4	0.11	1.36	0.08	120	0.73
10	12.670	pmol/l	31	M 12.718	2.4	0.07	1.19	-0.04	120	-0.38
11	9.530	pmol/l	37	M 9.295	2.6	0.05	0.87	0.27	120	2.53
12	23.090	pmol/l	35	M 25.486	7.1	0.38	2.39	-1.00	71	-9.40

	Cycle 16	Cycle 17
Cycle Average SDI	-0.05	0.08
Cycle Average TS	109	110
Cycle Average %DEV	-0.42	0.76
Cycle Average Absolute SDI	0.41	0.34
Cycle Average Absolute %DEV	3.51	3.17









RIQAS

UKAS PROFICIENCY TESTING 0010

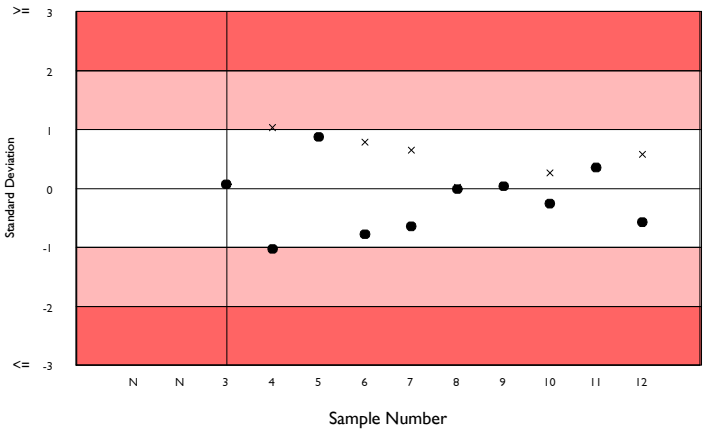
Free T4, pmol/l

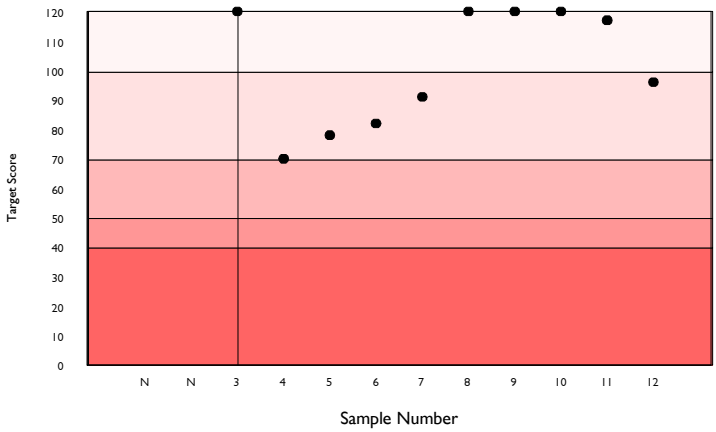
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

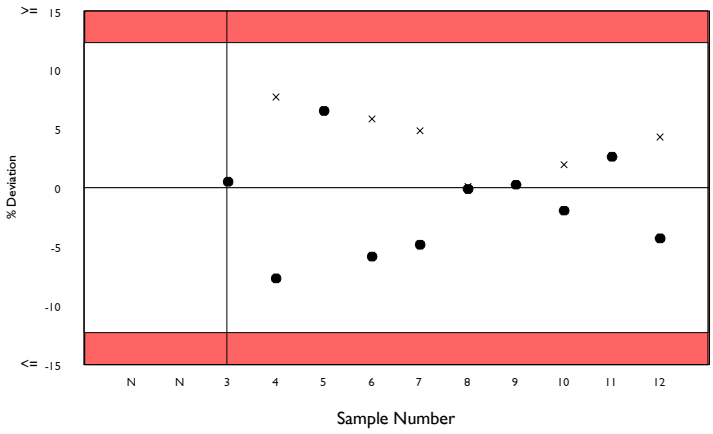
RIQAS TDPA: 12.3% **Biological Variation:** 8%

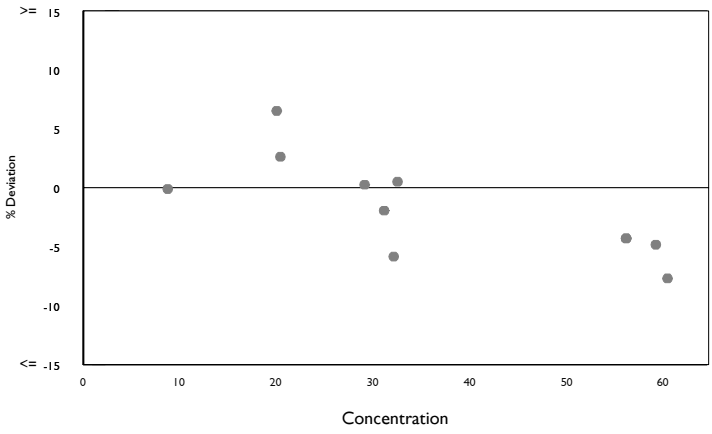
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	pmol/l	200	M 8.197	7.9	0.06	0.61			
2	N/A	pmol/l	255	M 40.272	6.1	0.19	3.01			
3	32.660	pmol/l	17	M 32.495	3.1	0.30	2.43	0.07	120	0.51
4	55.760	pmol/l	21	M 60.408	5.3	0.87	4.52	-1.03	70	-7.69
5	21.310	pmol/l	23	M 20.006	4.7	0.24	1.50	0.87	78	6.52
6	30.230	pmol/l	27	M 32.104	4.4	0.34	2.40	-0.78	82	-5.84
7	56.340	pmol/l	25	M 59.200	5.0	0.73	4.43	-0.65	91	-4.83
8	8.730	pmol/l	29	M 8.739	7.2	0.15	0.65	-0.01	120	-0.11
9	29.180	pmol/l	35	M 29.104	4.7	0.29	2.18	0.03	120	0.26
10	30.520	pmol/l	37	M 31.125	4.0	0.25	2.33	-0.26	120	-1.94
11	20.930	pmol/l	36	M 20.394	3.9	0.17	1.53	0.35	117	2.63
12	53.720	pmol/l	35	M 56.134	3.9	0.46	4.20	-0.57	96	-4.30

	Cycle 16	Cycle 17
Cycle Average SDI	-0.46	-0.20
Cycle Average TS	94	101
Cycle Average %DEV	-3.53	-1.48
Cycle Average Absolute SDI	0.67	0.46
Cycle Average Absolute %DEV	5.11	3.46









RIQAS

UKAS PROFICIENCY TESTING 0010

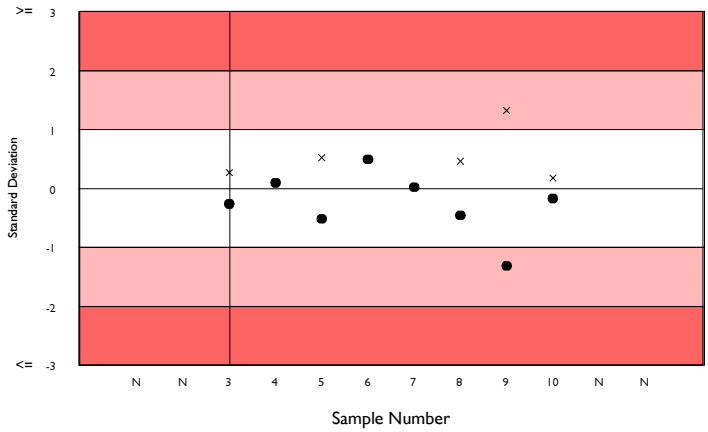
Testosterone, ng/dl

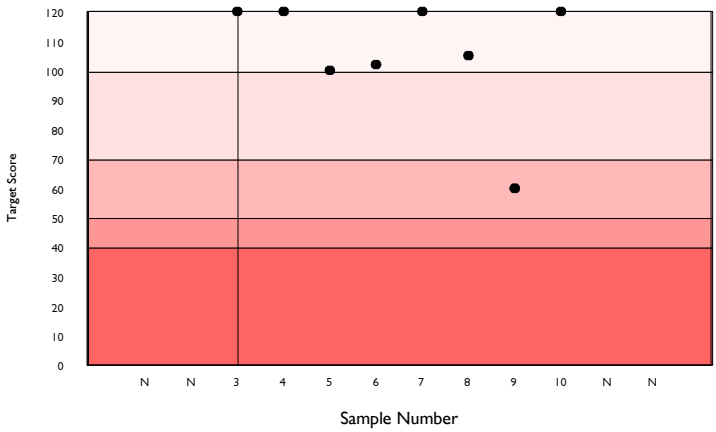
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

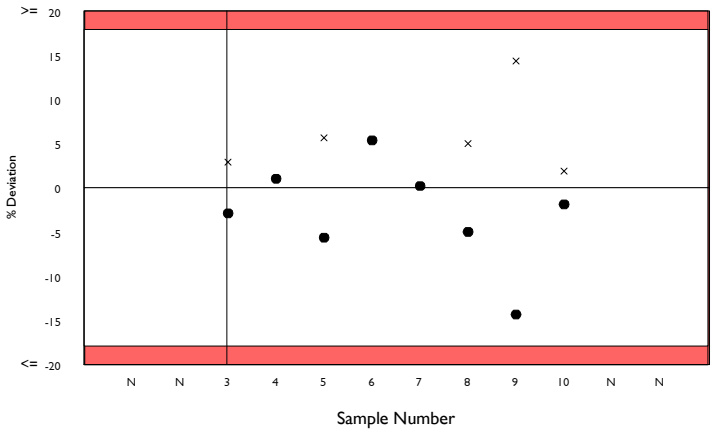
RIQAS TDPA: 17.9% **Biological Variation:** 13.61%

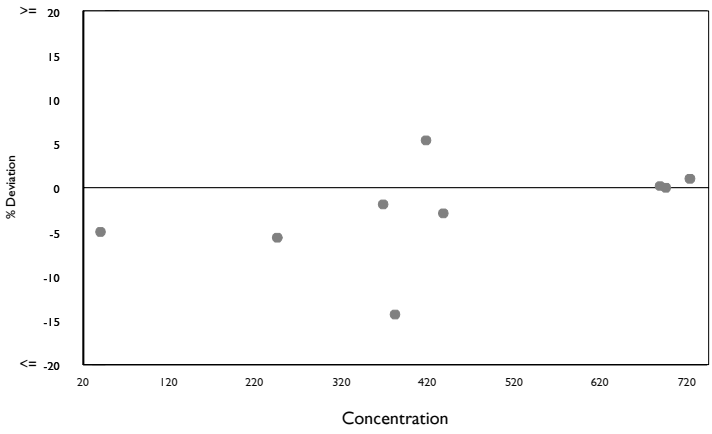
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	ng/dl	41	M 46.232	7.0	0.63	5.03			
2	N/A	ng/dl	56	M 604.693	9.3	9.39	65.80			
3	424.840	ng/dl	7	M 437.498	2.1	4.40	47.61	-0.27	120	-2.89
4	730.770	ng/dl	10	M 723.378	2.2	6.42	78.72	0.09	120	1.02
5	231.240	ng/dl	11	M 245.069	4.6	4.21	26.67	-0.52	100	-5.64
6	439.910	ng/dl	13	M 417.536	4.2	6.03	45.44	0.49	102	5.36
7	690.030	ng/dl	13	M 688.715	5.5	13.07	74.95	0.02	120	0.19
8	38.020	ng/dl	16	M 40.019	3.6	0.45	4.35	-0.46	105	-4.99
9	326.870	ng/dl	21	M 381.559	9.2	9.61	41.52	-1.32	60	-14.33
10	360.830	ng/dl	21	M 367.738	5.7	5.67	40.02	-0.17	120	-1.88
11	No Result	ng/dl	21	M 202.727	4.1	2.27	22.06			
12	No Result	ng/dl	18	M 695.489	6.5	13.23	75.69			

	Cycle 16	Cycle 17
Cycle Average SDI	-0.38	-0.27
Cycle Average TS	96	106
Cycle Average %DEV	-4.64	-2.90
Cycle Average Absolute SDI	0.64	0.42
Cycle Average Absolute %DEV	7.77	4.54









RIQAS

UKAS PROFICIENCY TESTING 0010

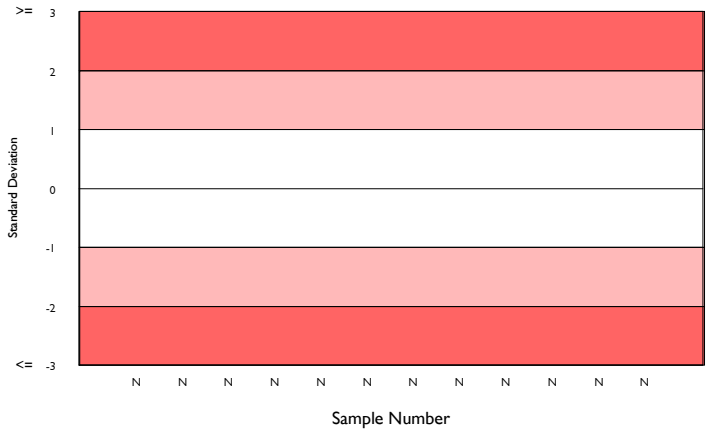
Thyroglobulin, ng/ml

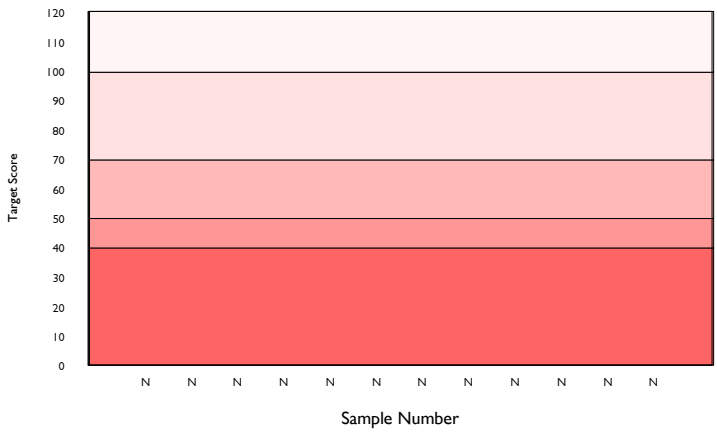
Method: Tosoh AIA Series
Instrument: TOSOH AIA Series
Reagent: TOSOH

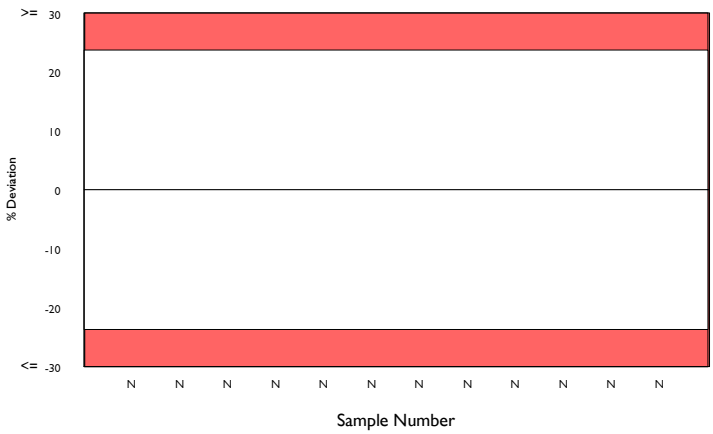
RIQAS TDPA: 23.7% **Biological Variation:** 21.9%

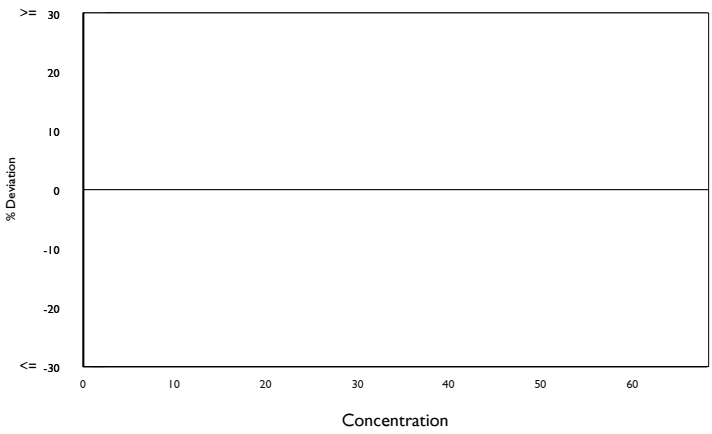
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	ng/ml	10	M 3.150	9.8	0.12	0.45			
2	No Result	ng/ml	11	M 51.445	7.1	1.39	7.41			
3	No Result	ng/ml	14	M 34.579	8.6	0.99	4.98			
4	No Result	ng/ml	14	M 67.207	9.2	2.06	9.68			
5	No Result	ng/ml	13	M 18.777	5.3	0.34	2.71			
6	No Result	ng/ml	13	M 37.277	6.7	0.86	5.37			
7	No Result	ng/ml	12	M 62.325	5.9	1.34	8.98			
8	No Result	ng/ml	8	M 1.825	8.2	0.07	0.26			
9	No Result	ng/ml	13	M 34.185	5.9	0.70	4.93			
10	No Result	ng/ml	11	M 33.691	4.7	0.59	4.85			
11	No Result	ng/ml	12	M 17.917	7.6	0.49	2.58			
12	No Result	ng/ml	8	M 63.975	2.4	0.68	9.22			

	Cycle 16	Cycle 17
Cycle Average SDI	0.01	N/A
Cycle Average TS	110	N/A
Cycle Average %DEV	0.15	N/A
Cycle Average Absolute SDI	0.29	N/A
Cycle Average Absolute %DEV	4.31	N/A









RIQAS

UKAS PROFICIENCY TESTING 0010

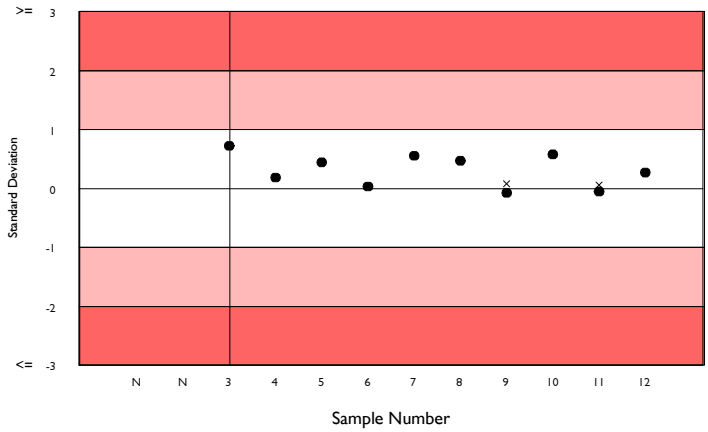
TSH, uU/ml

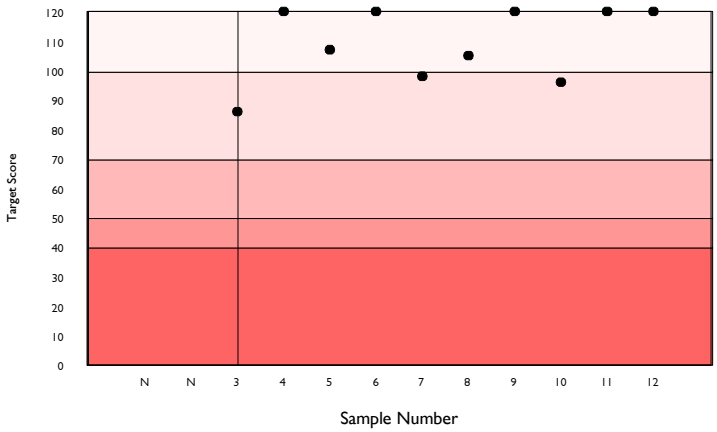
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

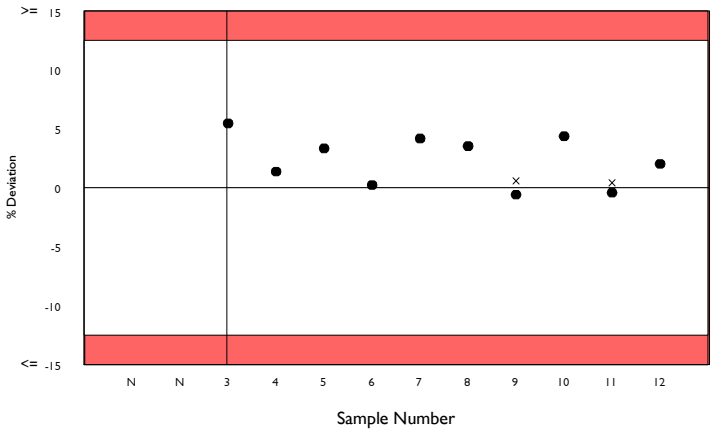
RIQAS TDPA: 12.5% **Biological Variation:** 23.7%

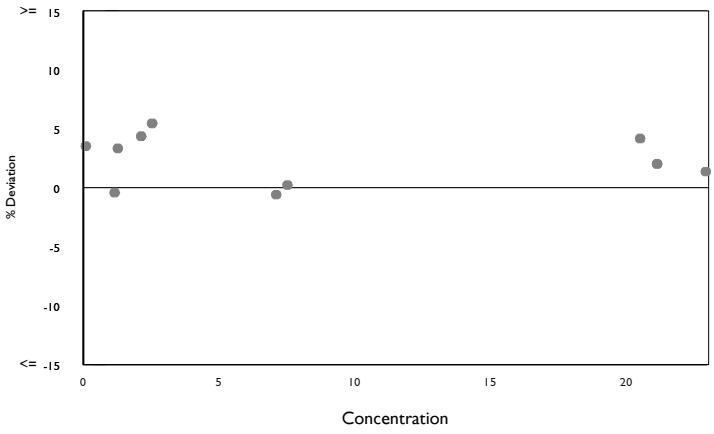
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	uU/ml	101	M 0.127	4.1	0.00	0.01			
2	N/A	uU/ml	119	M 8.773	3.5	0.04	0.67			
3	2.678	uU/ml	19	M 2.539	4.8	0.03	0.19	0.72	86	5.46
4	23.216	uU/ml	22	M 22.901	4.0	0.24	1.74	0.18	120	1.37
5	1.316	uU/ml	24	M 1.273	5.0	0.02	0.10	0.44	107	3.34
6	7.530	uU/ml	28	M 7.513	5.5	0.10	0.57	0.03	120	0.23
7	21.340	uU/ml	26	M 20.484	5.3	0.27	1.56	0.55	98	4.18
8	0.104	uU/ml	31	M 0.100	2.9	0.00	0.01	0.47	105	3.53
9	7.061	uU/ml	33	M 7.103	3.1	0.05	0.54	-0.08	120	-0.58
10	2.230	uU/ml	42	M 2.137	5.3	0.02	0.16	0.58	96	4.37
11	1.155	uU/ml	39	M 1.160	3.5	0.01	0.09	-0.06	120	-0.42
12	21.535	uU/ml	39	M 21.108	4.3	0.18	1.60	0.27	120	2.02

	Cycle 16	Cycle 17
Cycle Average SDI	0.21	0.31
Cycle Average TS	113	109
Cycle Average %DEV	1.58	2.35
Cycle Average Absolute SDI	0.35	0.34
Cycle Average Absolute %DEV	2.62	2.55









RIQAS

UKAS PROFICIENCY TESTING 0010

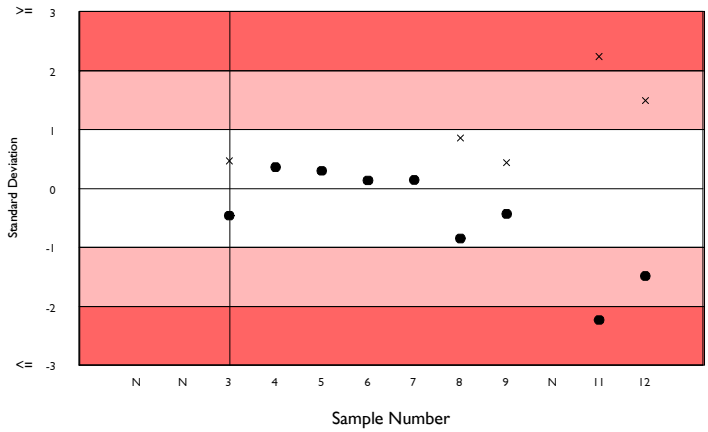
Vitamin B12, pg/ml

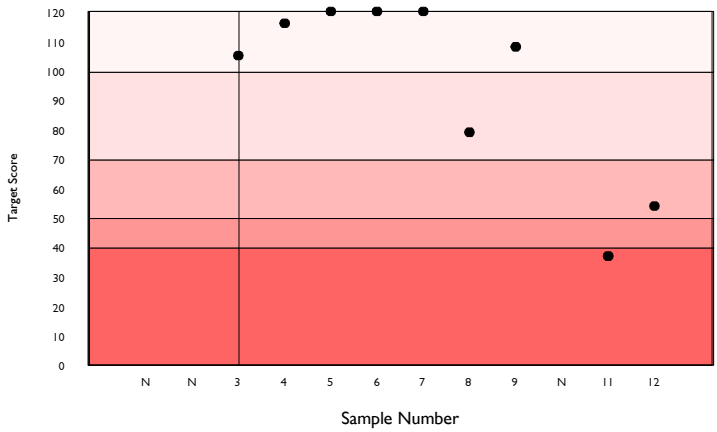
Method: Siemens Atellica IM
Instrument: Siemens Atellica Solution
Reagent: Siemens

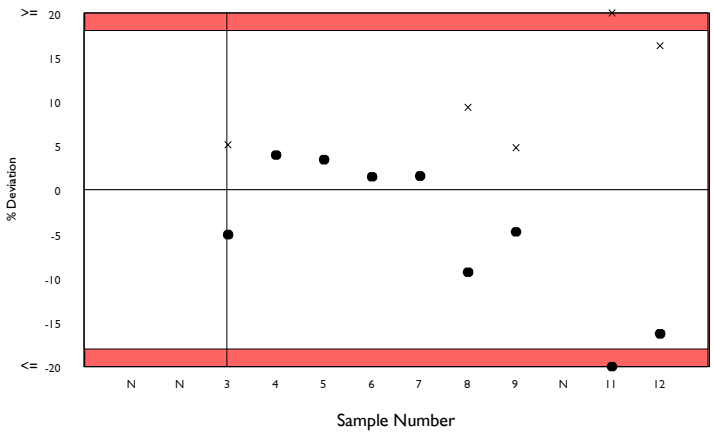
RIQAS TDPA: 18% **Biological Variation:** 30%

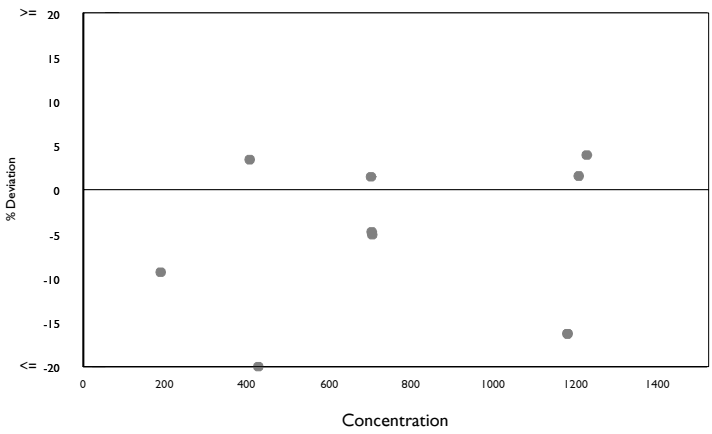
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	N/A	pg/ml	10	M 199.314	15.0	11.79	24.79a			
2	N/A	pg/ml	11	M 1424.555	5.7	30.65	155.89			
3	668.000	pg/ml	11	M 703.724	6.2	16.46	77.01	-0.46	105	-5.08
4	1274.000	pg/ml	13	M 1225.839	5.0	21.04	134.15	0.36	116	3.93
5	419.000	pg/ml	15	M 405.210	10.9	14.31	46.59a	0.30	120	3.40
6	711.000	pg/ml	17	M 700.755	7.8	16.54	76.69	0.13	120	1.46
7	1225.000	pg/ml	16	M 1206.290	6.1	22.86	132.01	0.14	120	1.55
8	171.000	pg/ml	20	M 188.576	10.7	5.64	20.64	-0.85	79	-9.32
9	669.000	pg/ml	23	M 702.441	12.0	21.95	76.87	-0.44	108	-4.76
10	No Result	pg/ml	24	M 678.974	5.9	10.21	74.30			
11	322.000	pg/ml	25	M 426.214	9.8	10.42	46.64	-2.23	37	-24.45
12	987.000	pg/ml	24	M 1178.998	8.3	24.90	129.02	-1.49	54	-16.28

	Cycle 16	Cycle 17
Cycle Average SDI	0.53	-0.50
Cycle Average TS	100	95
Cycle Average %DEV	5.83	-5.51
Cycle Average Absolute SDI	0.53	0.71
Cycle Average Absolute %DEV	5.83	7.80









RIQAS

UKAS PROFICIENCY TESTING 0010

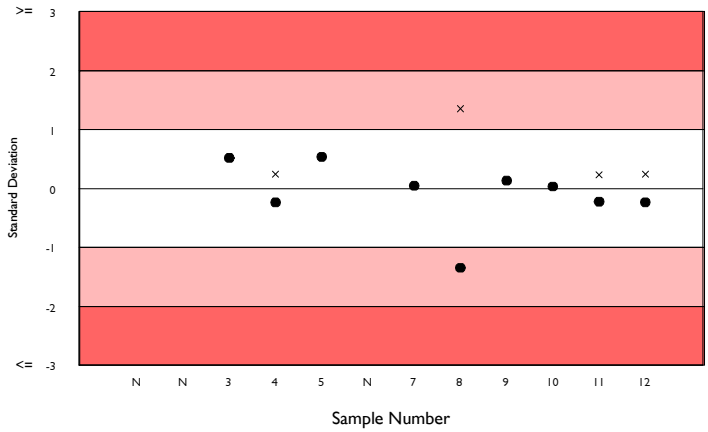
25-OH-Vitamin D, ng/ml

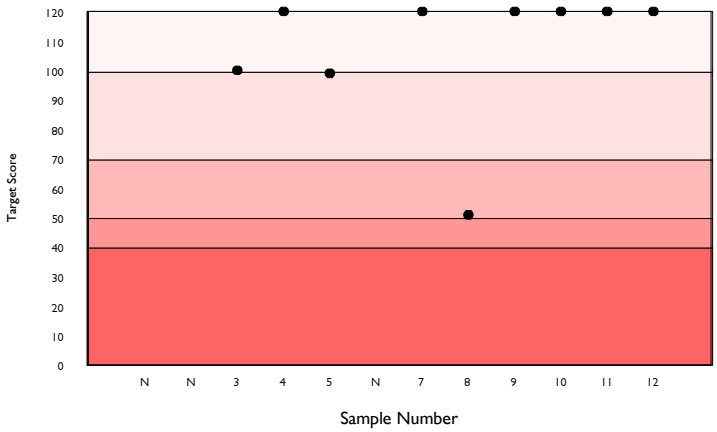
Method: Fujirebio Lumipulse G Series
Instrument: Fujirebio Lumipulse GSeries
Reagent: Fujirebio Inc.

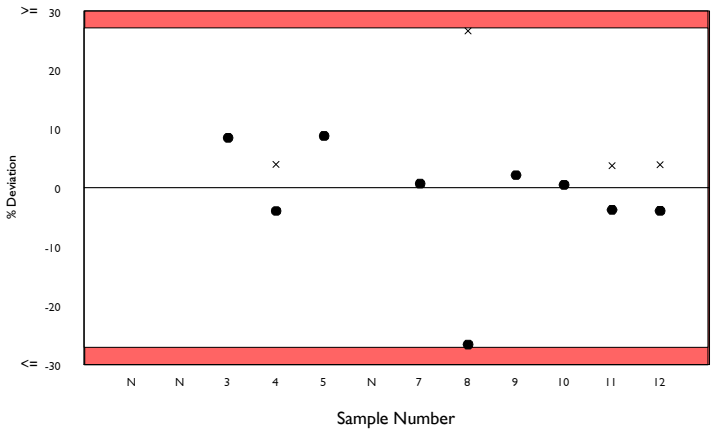
RIQAS TDPA: 27.1% **Biological Variation:** N/A

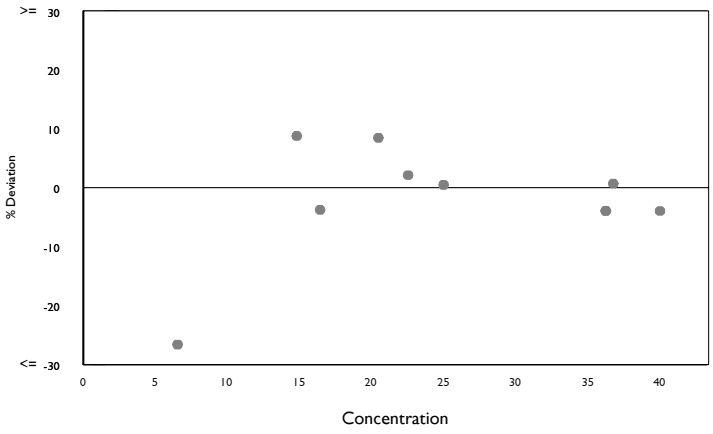
Sample	Result	Unit	N	Mean for Comparison	CV%	Um	SDPA	SDI	TS	%Deviation
1	No Result	ng/ml	3	M 8.133	23.6	1.39	1.93a			
2	No Result	ng/ml	7	M 30.914	1.6	0.24	5.09			
3	22.200	ng/ml	9	M 20.467	5.3	0.45	3.37	0.51	100	8.47
4	38.400	ng/ml	9	M 39.978	4.5	0.75	6.59	-0.24	120	-3.95
5	16.100	ng/ml	10	M 14.800	6.4	0.38	2.44	0.53	99	8.78
6	No Result	ng/ml	9	M 24.933	7.7	0.80	4.11			
7	37.000	ng/ml	9	M 36.744	5.9	0.91	6.05	0.04	120	0.70
8	4.800	ng/ml	10	M 6.540	27.5	0.71	1.29a	-1.35	51	-26.61
9	23.000	ng/ml	10	M 22.520	5.8	0.52	3.71	0.13	120	2.13
10	25.100	ng/ml	9	M 24.978	3.0	0.32	4.12	0.03	120	0.49
11	15.800	ng/ml	8	M 16.416	5.5	0.40	2.70	-0.23	120	-3.75
12	34.800	ng/ml	11	M 36.219	6.3	0.86	5.97	-0.24	120	-3.92

	Cycle 16	Cycle 17
Cycle Average SDI	0.43	-0.09
Cycle Average TS	96	108
Cycle Average %DEV	7.93	-1.96
Cycle Average Absolute SDI	0.71	0.37
Cycle Average Absolute %DEV	13.02	6.53









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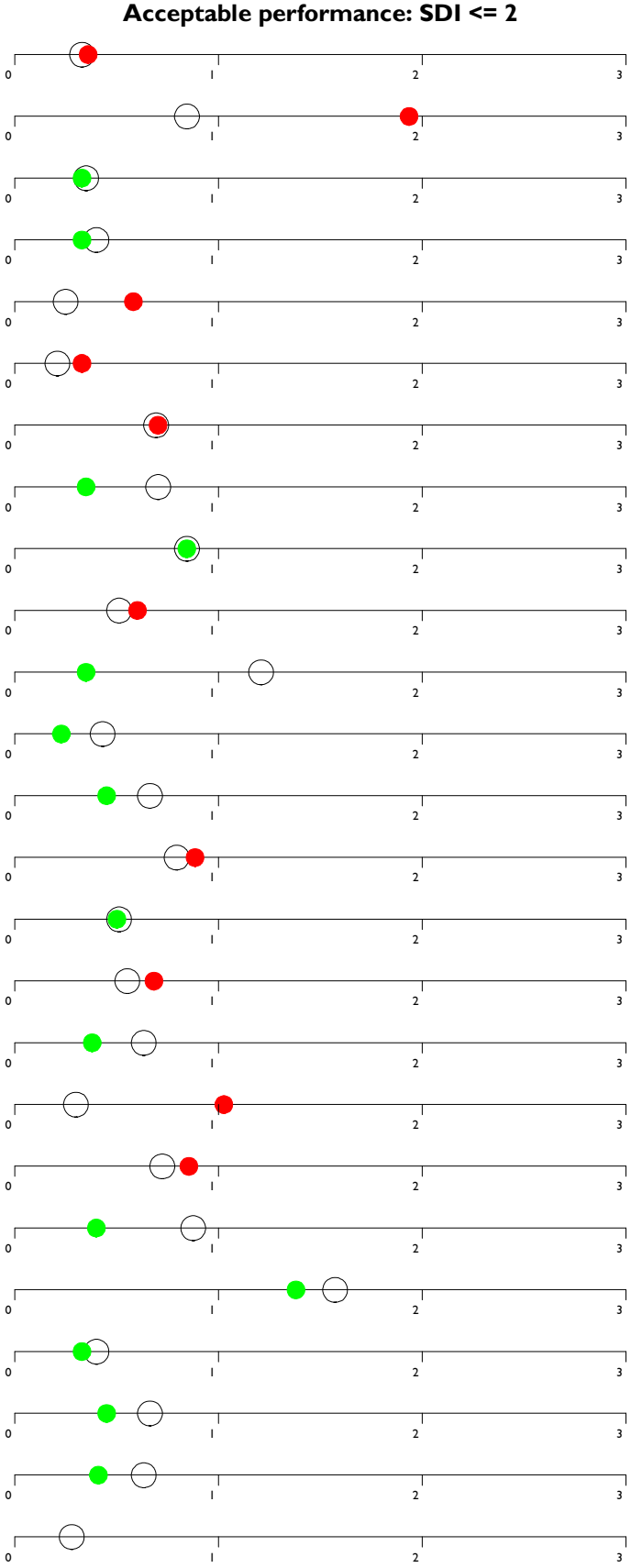
Cycle Average Absolute SDI

L Laboratory
C Country
W World

Better
Worse

Parameter	Cycle 16 L	Cycle 16 C	Cycle 16 W	Cycle 17 L	Cycle 17 C	Cycle 17 W
AFP	0.33	0.78	0.69	0.37	0.87	0.77
Beta-2-Microglobulin	0.85	0.78	0.66	1.94	0.95	0.74
CA 125	0.35	0.82	0.76	0.33	0.88	0.81
CA 15-3	0.40	0.90	0.81	0.34	0.85	0.81
CA 19-9	0.25	0.84	0.77	0.59	0.89	0.81
CEA	0.21	0.73	0.67	0.34	0.87	0.79
Cortisol	0.70	1.08	0.82	0.71	0.98	0.78
DHEA-S	0.71	0.98	0.70	0.36	0.86	0.70
Digoxin	0.85	0.59	0.65	0.85	0.59	0.63
Ferritin	0.52	0.88	0.83	0.61	0.79	0.72
Folate	1.22	1.07	0.93	0.36	1.04	0.89
FSH	0.44	0.85	0.75	0.23	0.91	0.79
hCG	0.67	0.85	0.78	0.45	0.91	0.81
IgE	0.80	1.04	0.83	0.89	0.88	0.76
LH	0.52	0.98	0.86	0.50	0.88	0.75
Oestradiol	0.56	0.84	0.77	0.69	0.72	0.62
Progesterone	0.64	0.85	0.77	0.38	0.73	0.66
Prolactin	0.30	1.17	0.80	1.03	1.43	0.96
PSA, Free	0.73	0.88	0.86	0.86	0.86	0.80
PSA, Total	0.88	0.85	0.81	0.41	0.83	0.76
Parathyroid hormone	1.58	1.11	1.11	1.38	1.09	1.12
Free T3	0.41	0.92	0.82	0.34	0.72	0.69
Free T4	0.67	0.94	0.83	0.46	0.91	0.83
Testosterone	0.64	0.78	0.69	0.42	0.80	0.69
Thyroglobulin	0.29	0.63	0.56	N/A	0.60	0.56



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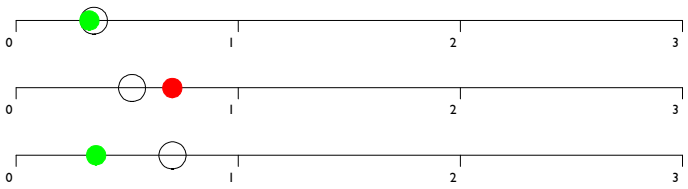
Cycle Average Absolute SDI

L Laboratory
C Country
W World

Cycle 16 ○ Cycle 17 ● Better ● Worse

Parameter	Cycle 16 L	Cycle 16 C	Cycle 16 W	Cycle 17 L	Cycle 17 C	Cycle 17 W
TSH	0.35	0.83	0.75	0.34	0.81	0.69
Vitamin B12	0.53	0.82	0.77	0.71	0.84	0.74
25-OH-Vitamin D	0.71	0.64	0.65	0.37	0.68	0.65

Acceptable performance: SDI <= 2



END OF REPORT

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RIQAS RANDOX INTERNATIONAL QUALITY ASSESSMENT SCHEME

CERTIFICATE OF ACCEPTABLE PERFORMANCE

Biolab SRL
Via Igea 12C
ROMA
00135
ITALY

LABORATORY REF. NO. 260037/E

MONTHLY IMMUNOASSAY - CYCLE 17

30/12/2019

This is to certify that the above participant took part in a cycle of external quality assessment and achieved an acceptable level of performance (Cycle Average Absolute SDI <=2) for the following parameters:

	Cycle Average Absolute SDI
AFP - Fujirebio Lumipulse G Series	0.37
Beta-2-Microglobulin - bioMerieux, VIDAS	1.94
CA 125 - Fujirebio Lumipulse G Series	0.33
CA 15-3 - Fujirebio Lumipulse G Series	0.34
CA 19-9 - Fujirebio Lumipulse G Series	0.59
CEA - Fujirebio Lumipulse G Series	0.34
Cortisol - Siemens Atellica IM	0.71
DHEA-S - Siemens Atellica IM	0.36
Digoxin - bioMerieux, VIDAS	0.85
Ferritin - Siemens Atellica IM	0.61
Folate - Siemens Atellica IM	0.36
FSH - Fujirebio Lumipulse G Series	0.23
hCG - Siemens Atellica IM	0.45
IgE - Siemens Centaur XP/XPT/Classic	0.89
LH - Siemens Centaur XP/XPT/Classic	0.50
Oestradiol - Fujirebio Lumipulse G Series	0.69
Progesterone - Siemens Atellica IM	0.38
Prolactin - Siemens Atellica IM	1.03
PSA, Free - Siemens Atellica IM	0.86
PSA, Total - Siemens Atellica IM	0.41
Parathyroid hormone - Siemens Atellica IM	1.38
Free T3 - Siemens Atellica IM	0.34
Free T4 - Siemens Atellica IM	0.46
Testosterone - Siemens Atellica IM	0.42
TSH - Siemens Atellica IM	0.34
Vitamin B12 - Siemens Atellica IM	0.71
25-OH-Vitamin D - Fujirebio Lumipulse G Series	0.37

This certificate is valid until 24/01/2021

Authorised by:
Stephen Doherty, RIQAS Manager

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