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Therapeutic Substance Monitoring/Quantitative Toxicology Proficiency Test Program

Statistical Summary - August 2015 (Event 15-3)

This statistical report summarizes participant data for the five Therapeutic Substance Monitoring proficiency survey specimens shipped 31 August 2015. Test samples (Vials T21, T22, T23, T24, T25) were prepared by the quantitative transfer of constituents to pooled human serum. The material was subsequently sterile filtered, dispensed into aliquots, stored at -80°C, and distributed to participants for analysis.

Results for individual instrument and reagent systems where the number of laboratories using those systems is three or greater are provided. Mean and Standard Deviation (± 1 SD) values are calculated by a robust statistical technique that does not assume a Gaussian distribution.

Disclaimer:

Note: The use of brand and/or trade names in this report does not constitute an endorsement of the products on the part of the Wadsworth Center or the New York State Department of Health

Should you have any questions regarding this report, please contact the Therapeutic Substance Monitoring Section at (518) 474-0005.

Summary of Participant Performance (Mean and Standard Deviation)

Acetaminophen (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
103.39 ± 8.12	31.61 ± 3.08	164.41 ± 10.73	69.56 ± 5.86	64.79 ± 5.87	n = 211	[---] All Methods & Instruments
102.3	31.1	162.6	68.2	62.2		[---] Weigh-in value
<Instruments>						
95.62 ± 1.46	29.19 ± 0.48	153.60 ± 3.31	64.32 ± 1.24	59.50 ± 0.92	n = 20	[ABJ] Abbott Architect c System
99.25 ± 5.67	30.97 ± 1.35	160.05 ± 7.72	67.10 ± 2.94	62.29 ± 3.97	n = 21	[OLC] Beckman Coulter AU Chemistry System
111.93 ± 3.66	34.98 ± 1.47	179.79 ± 5.16	74.87 ± 2.71	68.78 ± 2.86	n = 10	[BCG] Beckman Coulter UniCel Dx C 600
110.21 ± 4.03	34.75 ± 1.74	181.88 ± 8.35	75.57 ± 2.44	71.55 ± 0.42	n = 7	[BCH] Beckman Coulter UniCel Dx C 800
110.77 ± 2.40	32.00 ± 0.00	173.44 ± 2.73	73.64 ± 2.06	69.43 ± 1.30	n = 7	[JJF] Ortho Vitros 5,1FS
110.20 ± 1.17	31.83 ± 0.41	171.90 ± 2.29	73.49 ± 1.16	68.87 ± 0.98	n = 20	[JJG] Ortho Vitros 5600
90.22 ± 2.93	22.32 ± 0.79	150.92 ± 4.24	58.37 ± 1.79	53.94 ± 1.44	n = 20	[ROC] Roche cobas c501
96.33 ± 1.54	28.90 ± 2.97	155.99 ± 9.07	64.43 ± 0.57	59.56 ± 0.76	n = 6	[ROT] Roche Cobas INTEGRA 800
91.05 ± 4.08	25.01 ± 1.79	149.78 ± 8.36	60.39 ± 1.75	54.74 ± 3.37	n = 8	[ROD] Roche MODULAR D/P
98.47 ± 1.94	30.76 ± 1.28	155.14 ± 4.14	66.67 ± 1.26	61.56 ± 1.02	n = 8	[BYE] Siemens ADVIA 1800
106.77 ± 1.25	32.09 ± 0.93	169.84 ± 1.92	71.82 ± 0.94	67.64 ± 1.26	n = 18	[DUE] Siemens Dimension EXL
108.09 ± 2.94	32.39 ± 0.52	169.24 ± 4.06	71.66 ± 1.25	68.04 ± 1.43	n = 3	[DUR] Siemens Dimension RxL
106.23 ± 1.92	33.51 ± 0.88	167.53 ± 3.33	72.74 ± 1.83	67.87 ± 1.60	n = 46	[DUT] Siemens Dimension Vista
108.36 ± 0.39	32.38 ± 1.19	170.20 ± 2.76	72.92 ± 1.15	67.99 ± 2.08	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
95.62 ± 1.46	29.19 ± 0.48	153.60 ± 3.31	64.32 ± 1.24	59.50 ± 0.92	n = 20	[AB1] Abbott
111.07 ± 4.26	34.75 ± 1.78	180.32 ± 6.66	75.00 ± 2.91	69.80 ± 2.59	n = 18	[BC1] Beckman Coulter
100.05 ± 6.35	30.77 ± 1.54	160.75 ± 7.28	67.18 ± 3.00	61.97 ± 3.51	n = 15	[OL1] Beckman Coulter AU Series
110.08 ± 1.45	32.00 ± 0.00	172.15 ± 2.25	73.48 ± 1.31	68.97 ± 0.90	n = 30	[JJ1] Ortho Clinical Diagnostics
90.10 ± 2.60	22.29 ± 0.81	150.98 ± 4.29	58.40 ± 1.77	53.83 ± 1.46	n = 23	[RO4] Roche cobas c311/c501/c502/c701/c702
92.11 ± 3.21	24.64 ± 1.03	151.68 ± 5.60	60.97 ± 0.87	54.40 ± 3.03	n = 6	[RO2] Roche Hitachi and Modular D/P
96.01 ± 2.09	27.82 ± 2.04	155.35 ± 1.66	64.26 ± 0.84	59.20 ± 0.77	n = 5	[RO1] Roche Integra and MIRA
98.38 ± 2.57	30.70 ± 1.16	155.70 ± 4.20	66.46 ± 1.61	61.40 ± 1.45	n = 10	[BY1] Siemens ADVIA/ADVIA Centaur
106.60 ± 1.97	33.07 ± 1.12	168.54 ± 3.24	72.50 ± 1.68	67.84 ± 1.55	n = 73	[DA5] Siemens Dimension
93.96 ± 6.37	29.80 ± 2.36	146.05 ± 10.10	62.60 ± 2.56	59.78 ± 5.00	n = 3	[SY2] Syva Emit
106.30 ± 11.63	32.18 ± 1.43	166.98 ± 18.41	70.44 ± 3.63	62.18 ± 5.07	n = 4	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Carbamazepine (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
14.47 ± 1.30	3.67 ± 0.40	11.29 ± 1.00	9.78 ± 0.87	7.55 ± 0.71	n = 211	[---] All Methods & Instruments
14.8	3.8	11.7	9.9	7.6		[---] Weigh-in value
<Instruments>						
15.02 ± 1.24	3.89 ± 0.08	11.94 ± 1.15	9.92 ± 1.02	7.61 ± 0.56	n = 9	[ABJ] Abbott Architect c System
13.50 ± 0.25	3.48 ± 0.14	10.59 ± 0.28	9.50 ± 0.28	7.20 ± 0.23	n = 11	[ABH] Abbott Architect i System
14.80 ± 0.68	3.87 ± 0.24	11.59 ± 0.60	10.01 ± 0.56	7.99 ± 0.46	n = 22	[OLC] Beckman Coulter AU Chemistry System
14.16 ± 0.53	3.41 ± 0.16	11.19 ± 0.42	9.81 ± 0.17	7.65 ± 0.08	n = 10	[BCG] Beckman Coulter UniCel DxC 600
14.29 ± 0.58	3.33 ± 0.15	11.21 ± 0.30	9.59 ± 0.28	7.47 ± 0.29	n = 8	[BCH] Beckman Coulter UniCel DxC 800
11.90 ± 0.54	3.00 ± 0.00	9.00 ± 0.54	7.83 ± 0.58	5.99 ± 0.39	n = 5	[JJF] Ortho Vitros 5,1FS
11.69 ± 0.43	3.00 ± 0.00	8.84 ± 0.44	7.87 ± 0.47	5.99 ± 0.43	n = 20	[JJG] Ortho Vitros 5600
14.18 ± 1.19	3.56 ± 0.65	11.11 ± 1.07	9.71 ± 0.91	7.51 ± 0.92	n = 18	[ROC] Roche cobas c501
14.72 ± 1.58	3.67 ± 0.50	11.27 ± 0.60	9.85 ± 0.54	7.57 ± 0.50	n = 3	[ROG] Roche cobas c502
15.06 ± 0.29	3.58 ± 0.13	11.15 ± 0.28	9.69 ± 0.28	7.41 ± 0.17	n = 9	[ROT] Roche Cobas INTEGRA 800
14.89 ± 0.41	4.03 ± 0.32	11.62 ± 0.57	10.22 ± 0.36	8.01 ± 0.41	n = 8	[ROD] Roche MODULAR D/P
15.69 ± 0.46	4.21 ± 0.26	12.33 ± 0.42	10.65 ± 0.20	8.20 ± 0.49	n = 6	[BYE] Siemens ADVIA 1800
16.51 ± 1.26	3.97 ± 0.29	12.65 ± 0.73	11.10 ± 0.92	8.29 ± 0.48	n = 10	[COB] Siemens ADVIA Centaur
14.93 ± 0.49	3.86 ± 0.16	11.75 ± 0.43	10.17 ± 0.37	7.77 ± 0.35	n = 10	[DUE] Siemens Dimension EXL
15.14 ± 0.79	3.80 ± 0.09	11.67 ± 0.50	10.25 ± 0.54	7.46 ± 0.56	n = 3	[DUR] Siemens Dimension RxL
14.59 ± 0.56	3.74 ± 0.21	11.37 ± 0.52	9.86 ± 0.49	7.55 ± 0.35	n = 47	[DUT] Siemens Dimension Vista
14.98 ± 0.24	3.60 ± 0.09	11.57 ± 0.14	9.93 ± 0.05	7.54 ± 0.10	n = 3	[DUX] Siemens Dimension Xpand
<Reagents>						
14.15 ± 1.21	3.68 ± 0.28	10.92 ± 0.70	9.61 ± 0.62	7.34 ± 0.38	n = 20	[AB1] Abbott
14.32 ± 0.64	3.38 ± 0.17	11.19 ± 0.40	9.69 ± 0.33	7.58 ± 0.23	n = 20	[BC1] Beckman Coulter
14.63 ± 0.56	3.85 ± 0.15	11.45 ± 0.48	9.84 ± 0.50	7.79 ± 0.35	n = 10	[OL1] Beckman Coulter AU Series
14.44 ± 0.85	4.00 ± 0.45	11.42 ± 0.79	10.29 ± 0.51	7.87 ± 0.68	n = 7	[MG1] Microgenics CEDIA
11.73 ± 0.46	3.00 ± 0.00	8.87 ± 0.46	7.87 ± 0.48	5.98 ± 0.42	n = 25	[JJ1] Ortho Clinical Diagnostics
14.36 ± 1.26	3.64 ± 0.65	11.27 ± 1.01	9.75 ± 0.89	7.63 ± 0.86	n = 21	[RO4] Roche cobas c311/c501/c502/c701/c702
14.95 ± 0.26	4.01 ± 0.19	11.73 ± 0.30	10.29 ± 0.11	8.08 ± 0.18	n = 5	[RO2] Roche Hitachi and Modular D/P
15.02 ± 0.33	3.59 ± 0.13	11.12 ± 0.32	9.66 ± 0.29	7.38 ± 0.20	n = 11	[RO1] Roche Integra and MIRA
16.41 ± 1.09	4.02 ± 0.33	12.51 ± 0.66	11.15 ± 0.83	8.31 ± 0.48	n = 12	[BY1] Siemens ADVIA/ADVIA Centaur
15.67 ± 1.24	4.17 ± 0.26	12.18 ± 0.66	10.65 ± 0.20	8.13 ± 0.26	n = 7	[BY5] Siemens ADVIA/Syva Emit 2000
14.68 ± 0.58	3.76 ± 0.20	11.46 ± 0.52	9.93 ± 0.47	7.57 ± 0.36	n = 63	[DA5] Siemens Dimension
15.57 ± 1.29	3.92 ± 0.23	11.68 ± 0.88	9.94 ± 0.18	8.24 ± 0.30	n = 5	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Digoxin (µg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
3.280 ± 0.209	0.553 ± 0.103	1.439 ± 0.134	2.180 ± 0.167	1.111 ± 0.126	n = 268	[---] All Methods & Instruments
3.3	0.6	1.5	2.2	1.1		[---] Weigh-in value
<Instruments>						
3.088 ± 0.176	0.488 ± 0.046	1.366 ± 0.093	2.039 ± 0.126	1.046 ± 0.091	n = 8	[ABJ] Abbott Architect c System
2.939 ± 0.064	0.438 ± 0.049	1.355 ± 0.046	1.965 ± 0.052	1.002 ± 0.011	n = 15	[ABH] Abbott Architect i System
3.344 ± 0.045	0.577 ± 0.023	1.496 ± 0.034	2.205 ± 0.006	1.168 ± 0.020	n = 4	[SAA] Beckman Coulter ACCESS
3.244 ± 0.207	0.555 ± 0.096	1.398 ± 0.106	2.141 ± 0.153	1.069 ± 0.108	n = 32	[OLC] Beckman Coulter AU Chemistry System
3.283 ± 0.130	0.536 ± 0.064	1.429 ± 0.064	2.169 ± 0.127	1.061 ± 0.091	n = 11	[BCG] Beckman Coulter UniCel DxI 800
3.307 ± 0.113	0.521 ± 0.102	1.450 ± 0.057	2.242 ± 0.152	1.089 ± 0.101	n = 8	[BCH] Beckman Coulter UniCel DxI 800
3.484 ± 0.126	0.549 ± 0.037	1.514 ± 0.084	2.275 ± 0.153	1.186 ± 0.062	n = 3	[BCU] Beckman Coulter UniCel DxI 800
3.109 ± 0.207	0.400 ± 0.000	1.188 ± 0.109	1.935 ± 0.199	0.851 ± 0.108	n = 7	[JJF] Ortho Vitros 5,1FS
3.145 ± 0.106	0.400 ± 0.000	1.203 ± 0.083	2.035 ± 0.078	0.926 ± 0.111	n = 21	[JJG] Ortho Vitros 5600
3.229 ± 0.133	0.641 ± 0.108	1.480 ± 0.036	2.195 ± 0.099	1.178 ± 0.041	n = 3	[ROJ] Roche cobas c311
3.195 ± 0.132	0.616 ± 0.087	1.460 ± 0.091	2.144 ± 0.082	1.144 ± 0.061	n = 20	[ROC] Roche cobas c501
3.110 ± 0.109	0.600 ± 0.090	1.426 ± 0.137	2.028 ± 0.051	1.431 ± 0.509	n = 3	[ROG] Roche cobas c502
3.872 ± 0.051	0.600 ± 0.000	1.600 ± 0.090	2.500 ± 0.000	1.228 ± 0.051	n = 3	[ROA] Roche cobas e601
3.065 ± 0.116	0.575 ± 0.085	1.466 ± 0.150	2.104 ± 0.116	1.162 ± 0.078	n = 5	[ROT] Roche Cobas INTEGRA 800
3.118 ± 0.139	0.600 ± 0.000	1.428 ± 0.060	2.109 ± 0.082	1.062 ± 0.106	n = 8	[ROD] Roche MODULAR D/P
3.226 ± 0.076	0.460 ± 0.050	1.361 ± 0.056	2.102 ± 0.009	1.028 ± 0.041	n = 9	[BYE] Siemens ADVIA 1800
3.498 ± 0.182	0.712 ± 0.060	1.731 ± 0.113	2.443 ± 0.149	1.365 ± 0.112	n = 16	[COB] Siemens ADVIA Centaur
3.434 ± 0.115	0.572 ± 0.110	1.523 ± 0.089	2.311 ± 0.102	1.193 ± 0.074	n = 21	[DUE] Siemens Dimension EXL
3.263 ± 0.081	0.513 ± 0.043	1.431 ± 0.041	2.280 ± 0.095	1.151 ± 0.083	n = 4	[DUR] Siemens Dimension RxL
3.353 ± 0.056	0.586 ± 0.020	1.457 ± 0.042	2.212 ± 0.036	1.117 ± 0.032	n = 48	[DUT] Siemens Dimension Vista
3.383 ± 0.144	0.530 ± 0.052	1.467 ± 0.064	2.274 ± 0.137	1.163 ± 0.055	n = 6	[DUX] Siemens Dimension Xpand
3.481 ± 0.244	0.703 ± 0.052	1.743 ± 0.084	2.458 ± 0.199	1.281 ± 0.070	n = 4	[DPD] Siemens Immulite 2000
<Reagents>						
2.970 ± 0.118	0.456 ± 0.054	1.358 ± 0.061	1.974 ± 0.074	1.015 ± 0.059	n = 23	[AB1] Abbott
3.330 ± 0.151	0.551 ± 0.072	1.459 ± 0.079	2.222 ± 0.142	1.116 ± 0.108	n = 29	[BC1] Beckman Coulter
3.289 ± 0.182	0.584 ± 0.102	1.410 ± 0.108	2.153 ± 0.162	1.098 ± 0.120	n = 19	[OL1] Beckman Coulter AU Series
3.105 ± 0.093	0.500 ± 0.000	1.337 ± 0.055	2.049 ± 0.083	1.000 ± 0.000	n = 5	[MG2] Microgenics DRI
3.135 ± 0.148	0.400 ± 0.000	1.199 ± 0.091	2.015 ± 0.136	0.903 ± 0.114	n = 29	[JJ1] Ortho Clinical Diagnostics
3.195 ± 0.134	0.623 ± 0.089	1.463 ± 0.094	2.139 ± 0.094	1.152 ± 0.072	n = 25	[RO4] Roche cobas c311/c501/c502/c701/c702
3.876 ± 0.080	0.600 ± 0.000	1.651 ± 0.083	2.500 ± 0.000	1.237 ± 0.055	n = 5	[RO3] Roche Elecsys/Modular E/e601/e411
3.147 ± 0.105	0.625 ± 0.046	1.431 ± 0.056	2.095 ± 0.081	1.114 ± 0.091	n = 3	[RO2] Roche Hitachi and Modular D/P
3.105 ± 0.142	0.558 ± 0.081	1.432 ± 0.153	2.125 ± 0.114	1.149 ± 0.076	n = 6	[RO1] Roche Integra and MIRA
3.104 ± 0.157	0.590 ± 0.022	1.425 ± 0.061	2.119 ± 0.081	1.030 ± 0.101	n = 5	[RO5] Roche Tina-quant
3.412 ± 0.210	0.637 ± 0.139	1.607 ± 0.208	2.335 ± 0.204	1.253 ± 0.194	n = 26	[BY1] Siemens ADVIA/ADVIA Centaur
3.379 ± 0.114	0.556 ± 0.070	1.474 ± 0.064	2.269 ± 0.103	1.154 ± 0.069	n = 44	[DA5] Siemens Dimension
3.357 ± 0.056	0.591 ± 0.016	1.461 ± 0.046	2.209 ± 0.031	1.124 ± 0.037	n = 35	[DA6] Siemens Dimension LOCI
3.557 ± 0.262	0.705 ± 0.043	1.715 ± 0.097	2.467 ± 0.172	1.287 ± 0.062	n = 5	[DP5] Siemens Immulite
3.223 ± 0.247	0.498 ± 0.004	1.417 ± 0.090	2.150 ± 0.102	1.036 ± 0.071	n = 6	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Ethanol (mg/dL)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
216.57 ± 9.11	67.75 ± 3.00	161.55 ± 6.41	144.84 ± 6.00	132.20 ± 5.71	n = 218	[---] All Methods & Instruments
219.4	68.0	165.3	146.3	136.0		[---] Weigh-in value
<Instruments>						
213.86 ± 4.41	67.85 ± 1.57	161.13 ± 3.45	145.17 ± 3.63	133.02 ± 3.01	n = 18	[ABJ] Abbott Architect c System
219.12 ± 7.61	68.45 ± 4.42	163.04 ± 6.26	146.24 ± 6.07	134.24 ± 5.98	n = 20	[OLC] Beckman Coulter AU Chemistry System
220.55 ± 10.66	69.62 ± 4.95	161.98 ± 6.37	143.46 ± 8.82	132.14 ± 5.23	n = 11	[BCG] Beckman Coulter UniCel DxC 600
220.47 ± 8.18	67.23 ± 3.23	158.27 ± 9.33	142.68 ± 7.81	128.44 ± 8.65	n = 7	[BCH] Beckman Coulter UniCel DxC 800
214.14 ± 8.86	65.64 ± 2.77	157.74 ± 6.47	142.38 ± 5.02	128.81 ± 4.85	n = 9	[GCC] Gas Chromatograph
206.41 ± 15.43	66.15 ± 3.62	159.89 ± 8.55	136.87 ± 9.32	127.48 ± 6.59	n = 7	[JJF] Ortho Vitros 5,1FS
204.90 ± 8.74	65.87 ± 2.26	155.76 ± 5.38	138.92 ± 4.21	125.40 ± 3.38	n = 20	[JJG] Ortho Vitros 5600
217.19 ± 4.75	67.80 ± 1.72	162.46 ± 5.23	146.15 ± 3.91	132.22 ± 3.82	n = 18	[ROC] Roche cobas c501
212.93 ± 5.97	67.05 ± 1.59	158.79 ± 5.30	144.75 ± 3.03	131.40 ± 3.08	n = 6	[ROT] Roche Cobas INTEGRA 800
216.68 ± 5.21	67.84 ± 1.62	163.07 ± 3.79	146.81 ± 4.22	133.80 ± 3.11	n = 9	[ROD] Roche MODULAR D/P
230.85 ± 13.03	72.03 ± 3.67	171.96 ± 5.80	154.68 ± 8.11	140.39 ± 7.40	n = 8	[BYE] Siemens ADVIA 1800
215.79 ± 6.88	67.53 ± 2.04	160.94 ± 4.52	144.68 ± 4.48	132.23 ± 4.47	n = 18	[DUE] Siemens Dimension EXL
213.48 ± 2.74	64.95 ± 3.72	160.26 ± 1.37	141.53 ± 1.86	130.56 ± 1.02	n = 3	[DUR] Siemens Dimension RxL
219.78 ± 7.59	68.32 ± 2.74	163.40 ± 6.39	146.41 ± 5.66	134.07 ± 5.24	n = 45	[DUT] Siemens Dimension Vista
218.34 ± 1.69	68.08 ± 1.79	162.01 ± 2.39	145.58 ± 3.06	132.54 ± 3.37	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
213.61 ± 4.27	67.85 ± 1.45	160.95 ± 3.33	145.22 ± 3.46	132.99 ± 2.84	n = 19	[AB1] Abbott
220.62 ± 9.29	69.02 ± 4.70	161.10 ± 8.18	143.79 ± 8.67	131.49 ± 7.07	n = 19	[BC1] Beckman Coulter
220.92 ± 7.10	68.89 ± 3.73	163.27 ± 6.16	146.45 ± 5.38	134.51 ± 5.75	n = 14	[OL1] Beckman Coulter AU Series
213.13 ± 9.05	65.23 ± 2.69	157.01 ± 6.61	141.61 ± 4.85	127.68 ± 3.64	n = 8	[IH1] In-House
204.49 ± 11.20	65.82 ± 2.49	156.70 ± 6.51	138.44 ± 5.65	125.82 ± 4.21	n = 30	[JJ1] Ortho Clinical Diagnostics
216.93 ± 5.33	67.85 ± 2.10	162.37 ± 5.41	146.02 ± 4.30	132.26 ± 4.12	n = 22	[RO4] Roche cobas c311/c501/c502/c701/c702
216.68 ± 5.21	67.84 ± 1.62	163.07 ± 3.79	146.81 ± 4.22	133.80 ± 3.11	n = 9	[RO2] Roche Hitachi and Modular D/P
211.83 ± 5.93	66.71 ± 1.67	158.57 ± 4.80	144.03 ± 3.36	130.90 ± 2.87	n = 7	[RO1] Roche Integra and MIRA
232.93 ± 14.66	72.42 ± 3.26	171.00 ± 4.19	155.97 ± 6.65	142.03 ± 6.49	n = 6	[BY1] Siemens ADVIA/ADVIA Centaur
225.71 ± 7.05	70.42 ± 3.14	168.28 ± 9.34	150.21 ± 7.28	137.19 ± 5.65	n = 4	[BY5] Siemens ADVIA/Syva Emit 2000
218.33 ± 7.12	67.98 ± 2.50	162.29 ± 5.48	145.51 ± 4.96	133.29 ± 4.89	n = 72	[DA5] Siemens Dimension
207.52 ± 11.83	63.25 ± 5.36	153.63 ± 12.70	137.04 ± 11.01	124.70 ± 11.23	n = 3	[SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Ethosuximide (mg/L)

Specimen: T21 -----	Specimen: T22 -----	Specimen: T23 -----	Specimen: T24 -----	Specimen: T25 -----	Number -----	[Code] Instrument or Reagent System -----
53.86 ± 5.18 53.7	88.18 ± 4.09 85.5	106.58 ± 8.40 110.7	35.47 ± 3.77 35.8	167.76 ± 18.57 171.0	n = 7	[---] All Methods & Instruments [---] Weigh-in value
52.78 ± 5.00	84.98 ± 10.94	104.46 ± 12.80	37.22 ± 3.23	164.07 ± 20.80	n = 3	<Instruments> [OLC] Beckman Coulter AU Chemistry System
53.25 ± 5.61	87.78 ± 6.19	108.56 ± 7.36	35.29 ± 4.16	166.98 ± 20.36	n = 6	<Reagents> [SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Gentamicin (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
7.20 ± 0.54 7.1	7.07 ± 0.48 6.8	9.46 ± 0.68 8.9	4.88 ± 0.34 4.8	14.10 ± 1.43 13.5	n = 167	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
7.17 ± 0.11	7.07 ± 0.15	9.34 ± 0.26	4.77 ± 0.14	13.77 ± 0.31	n = 6	[ABJ] Abbott Architect c System
7.33 ± 0.28	7.13 ± 0.26	9.56 ± 0.46	4.81 ± 0.17	13.48 ± 1.53	n = 11	[ABH] Abbott Architect i System
7.66 ± 0.39	7.48 ± 0.37	9.79 ± 0.43	5.17 ± 0.26	14.95 ± 1.03	n = 17	[OLC] Beckman Coulter AU Chemistry System
7.87 ± 0.10	7.79 ± 0.13	10.23 ± 0.05	5.29 ± 0.14	15.44 ± 0.39	n = 6	[BCG] Beckman Coulter UniCel DxC 600
7.92 ± 0.39	7.70 ± 0.18	10.21 ± 0.25	5.24 ± 0.13	15.62 ± 0.51	n = 7	[BCH] Beckman Coulter UniCel DxC 800
7.34 ± 0.31	7.17 ± 0.30	9.59 ± 0.73	5.03 ± 0.35	16.32 ± 0.88	n = 5	[JJF] Ortho Vitros 5,1FS
7.94 ± 0.36	7.73 ± 0.37	10.37 ± 0.58	5.37 ± 0.20	15.69 ± 0.99	n = 15	[JJG] Ortho Vitros 5600
6.56 ± 0.32	6.38 ± 0.15	8.51 ± 0.46	4.45 ± 0.22	12.33 ± 1.15	n = 12	[ROC] Roche cobas c501
6.77 ± 0.23	6.55 ± 0.45	9.16 ± 0.62	4.76 ± 0.26	12.02 ± 1.76	n = 3	[ROS] Roche Cobas INTEGRA 400
6.70 ± 0.31	6.71 ± 0.32	9.40 ± 0.54	4.69 ± 0.15	13.03 ± 0.36	n = 9	[ROT] Roche Cobas INTEGRA 800
7.19 ± 0.14	7.14 ± 0.14	9.19 ± 0.25	5.02 ± 0.20	14.50 ± 0.79	n = 7	[ROD] Roche MODULAR D/P
7.33 ± 0.50	7.14 ± 0.52	10.17 ± 1.06	4.77 ± 0.21	14.85 ± 1.86	n = 11	[COB] Siemens ADVIA Centaur
6.96 ± 0.09	6.95 ± 0.17	9.39 ± 0.15	4.83 ± 0.17	14.01 ± 0.53	n = 6	[DUE] Siemens Dimension EXL
6.94 ± 0.28	6.84 ± 0.24	9.12 ± 0.36	4.71 ± 0.23	13.46 ± 0.61	n = 46	[DUT] Siemens Dimension Vista
<Reagents>						
7.25 ± 0.24	7.11 ± 0.23	9.48 ± 0.41	4.79 ± 0.16	13.62 ± 0.69	n = 17	[AB1] Abbott
7.88 ± 0.22	7.76 ± 0.17	10.22 ± 0.17	5.28 ± 0.15	15.46 ± 0.53	n = 14	[BC1] Beckman Coulter
7.58 ± 0.49	7.39 ± 0.38	9.80 ± 0.37	5.10 ± 0.22	15.22 ± 1.04	n = 9	[OL1] Beckman Coulter AU Series
7.80 ± 0.44	7.59 ± 0.43	10.22 ± 0.70	5.31 ± 0.25	15.85 ± 0.99	n = 20	[JJ1] Ortho Clinical Diagnostics
6.68 ± 0.36	6.58 ± 0.41	8.72 ± 0.65	4.54 ± 0.29	12.34 ± 1.74	n = 9	[RO4] Roche cobas c311/c501/c502/c701/c702
7.19 ± 0.24	7.17 ± 0.04	9.24 ± 0.05	5.04 ± 0.09	14.33 ± 1.09	n = 5	[RO2] Roche Hitachi and Modular D/P
6.73 ± 0.27	6.67 ± 0.37	9.35 ± 0.55	4.71 ± 0.18	13.03 ± 0.51	n = 12	[RO1] Roche Integra and MIRA
7.33 ± 0.50	7.14 ± 0.52	10.17 ± 1.06	4.77 ± 0.21	14.85 ± 1.86	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
7.09 ± 0.44	6.85 ± 0.19	9.00 ± 0.27	5.09 ± 0.20	13.35 ± 0.82	n = 3	[BY5] Siemens ADVIA/Syva Emit 2000
6.95 ± 0.25	6.86 ± 0.23	9.17 ± 0.36	4.73 ± 0.23	13.55 ± 0.63	n = 53	[DA5] Siemens Dimension
7.67 ± 0.32	7.49 ± 0.31	9.79 ± 0.56	5.20 ± 0.25	14.57 ± 0.71	n = 7	[SY4] Syva Emit 2000
6.55 ± 0.39	6.37 ± 0.16	8.45 ± 0.34	4.45 ± 0.22	13.08 ± 0.53	n = 4	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Lithium (mmol/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
2.169 ± 0.098	0.366 ± 0.052	1.073 ± 0.056	1.479 ± 0.074	0.737 ± 0.055	n = 197	[---] All Methods & Instruments
2.4	0.4	1.2	1.6	0.8		[---] Weigh-in value
<Instruments>						
2.141 ± 0.073	0.393 ± 0.018	1.085 ± 0.038	1.482 ± 0.066	0.746 ± 0.048	n = 16	[ABJ] Abbott Architect c System
2.093 ± 0.053	0.349 ± 0.041	1.008 ± 0.022	1.400 ± 0.013	0.705 ± 0.015	n = 21	[OLC] Beckman Coulter AU Chemistry System
2.119 ± 0.034	0.320 ± 0.020	1.030 ± 0.034	1.472 ± 0.056	0.709 ± 0.019	n = 8	[BCG] Beckman Coulter UniCel DxC 600
2.100 ± 0.087	0.313 ± 0.021	1.016 ± 0.013	1.427 ± 0.059	0.695 ± 0.011	n = 9	[BCH] Beckman Coulter UniCel DxC 800
2.306 ± 0.067	0.336 ± 0.051	1.141 ± 0.056	1.570 ± 0.059	0.771 ± 0.047	n = 7	[JJF] Ortho Vitros 5,1FS
2.291 ± 0.073	0.345 ± 0.055	1.100 ± 0.000	1.559 ± 0.056	0.752 ± 0.056	n = 21	[JJG] Ortho Vitros 5600
2.132 ± 0.054	0.400 ± 0.000	1.079 ± 0.061	1.500 ± 0.000	0.753 ± 0.059	n = 19	[ROC] Roche cobas c501
2.128 ± 0.051	0.380 ± 0.018	1.070 ± 0.027	1.473 ± 0.023	0.722 ± 0.041	n = 3	[ROG] Roche cobas c502
2.200 ± 0.008	0.389 ± 0.017	1.060 ± 0.044	1.505 ± 0.029	0.754 ± 0.041	n = 5	[ROT] Roche Cobas INTEGRA 800
2.145 ± 0.104	0.407 ± 0.024	1.123 ± 0.064	1.494 ± 0.073	0.772 ± 0.056	n = 7	[ROD] Roche MODULAR D/P
2.242 ± 0.064	0.350 ± 0.059	1.101 ± 0.006	1.524 ± 0.038	0.754 ± 0.045	n = 9	[BYE] Siemens ADVIA 1800
2.088 ± 0.078	0.305 ± 0.043	1.011 ± 0.045	1.394 ± 0.006	0.662 ± 0.049	n = 7	[DUE] Siemens Dimension EXL
2.180 ± 0.039	0.385 ± 0.051	1.089 ± 0.027	1.483 ± 0.033	0.749 ± 0.045	n = 45	[DUT] Siemens Dimension Vista
2.126 ± 0.137	0.328 ± 0.051	1.064 ± 0.118	1.416 ± 0.118	0.700 ± 0.090	n = 3	[DUX] Siemens Dimension Xpand
<Reagents>						
2.146 ± 0.076	0.392 ± 0.019	1.083 ± 0.040	1.487 ± 0.063	0.750 ± 0.047	n = 15	[AB1] Abbott
2.117 ± 0.072	0.320 ± 0.025	1.026 ± 0.032	1.453 ± 0.061	0.703 ± 0.015	n = 16	[BC1] Beckman Coulter
2.103 ± 0.034	0.348 ± 0.040	1.012 ± 0.022	1.403 ± 0.013	0.709 ± 0.016	n = 16	[OL1] Beckman Coulter AU Series
2.038 ± 0.132	0.359 ± 0.029	1.090 ± 0.064	1.403 ± 0.069	0.701 ± 0.056	n = 3	[IH1] In-House
2.300 ± 0.078	0.345 ± 0.055	1.119 ± 0.051	1.564 ± 0.061	0.759 ± 0.054	n = 29	[JJ1] Ortho Clinical Diagnostics
2.138 ± 0.055	0.398 ± 0.011	1.080 ± 0.053	1.500 ± 0.000	0.745 ± 0.056	n = 23	[RO4] Roche cobas c311/c501/c502/c701/c702
2.200 ± 0.008	0.389 ± 0.017	1.060 ± 0.044	1.505 ± 0.029	0.754 ± 0.041	n = 5	[RO1] Roche Integra and MIRA
2.256 ± 0.063	0.350 ± 0.058	1.101 ± 0.005	1.528 ± 0.043	0.753 ± 0.047	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
2.166 ± 0.059	0.370 ± 0.062	1.075 ± 0.046	1.467 ± 0.058	0.734 ± 0.059	n = 57	[DA5] Siemens Dimension
2.088 ± 0.110	0.382 ± 0.057	1.069 ± 0.084	1.444 ± 0.070	0.742 ± 0.063	n = 12	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Phenobarbital (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
53.43 ± 2.80 55.3	13.64 ± 1.08 13.2	39.95 ± 2.12 40.4	36.24 ± 1.79 36.9	27.07 ± 1.66 26.5	n = 185	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
54.45 ± 1.23	13.74 ± 0.33	40.10 ± 0.87	35.98 ± 0.61	26.46 ± 0.66	n = 4	[ABJ] Abbott Architect c System
55.03 ± 1.99	13.69 ± 0.47	40.64 ± 1.55	37.24 ± 0.95	27.32 ± 1.07	n = 15	[ABH] Abbott Architect i System
52.80 ± 1.96	12.78 ± 0.27	38.48 ± 1.63	34.91 ± 0.95	25.92 ± 1.20	n = 21	[OLC] Beckman Coulter AU Chemistry System
51.00 ± 2.16	14.57 ± 0.84	38.88 ± 1.63	35.04 ± 1.45	27.85 ± 1.10	n = 10	[BCG] Beckman Coulter UniCel DxC 600
52.57 ± 2.90	14.84 ± 0.70	39.77 ± 1.68	35.67 ± 1.06	28.60 ± 1.48	n = 8	[BCH] Beckman Coulter UniCel DxC 800
59.90 ± 9.11	13.72 ± 2.58	47.61 ± 15.44	40.64 ± 9.11	28.70 ± 5.74	n = 3	[JJG] Ortho Vitros 5600
53.89 ± 1.77	13.10 ± 0.49	40.26 ± 0.98	36.71 ± 1.27	26.84 ± 1.24	n = 22	[ROC] Roche cobas c501
53.57 ± 1.22	12.98 ± 0.24	40.57 ± 1.94	37.32 ± 0.41	26.62 ± 0.77	n = 3	[ROG] Roche cobas c502
53.57 ± 0.70	12.94 ± 0.26	38.82 ± 1.15	35.49 ± 0.47	25.36 ± 0.68	n = 9	[ROT] Roche Cobas INTEGRA 800
53.56 ± 1.70	13.42 ± 0.95	40.37 ± 1.81	36.87 ± 1.44	26.99 ± 1.79	n = 8	[ROD] Roche MODULAR D/P
59.52 ± 3.18	15.28 ± 0.88	45.28 ± 3.35	40.49 ± 3.17	31.10 ± 1.98	n = 10	[COB] Siemens ADVIA Centaur
57.88 ± 3.34	14.31 ± 0.93	42.23 ± 2.01	38.23 ± 1.63	29.08 ± 1.12	n = 9	[DUE] Siemens Dimension EXL
57.23 ± 3.04	14.21 ± 0.37	42.72 ± 1.13	39.63 ± 2.33	28.82 ± 3.13	n = 3	[DUR] Siemens Dimension RxL
51.79 ± 2.43	14.11 ± 1.21	39.57 ± 2.04	36.23 ± 1.92	27.13 ± 1.41	n = 47	[DUT] Siemens Dimension Vista
55.01 ± 3.28	13.61 ± 0.56	40.03 ± 3.11	36.23 ± 1.61	27.42 ± 0.94	n = 3	[DUX] Siemens Dimension Xpand
<Reagents>						
54.87 ± 1.83	13.70 ± 0.44	40.50 ± 1.32	36.89 ± 1.16	27.11 ± 1.06	n = 19	[AB1] Abbott
51.66 ± 2.29	14.51 ± 0.97	39.11 ± 1.80	35.17 ± 1.35	28.02 ± 1.35	n = 20	[BC1] Beckman Coulter
52.08 ± 1.97	12.65 ± 0.22	38.26 ± 1.02	34.97 ± 0.78	25.40 ± 0.76	n = 11	[OL1] Beckman Coulter AU Series
53.83 ± 0.68	13.13 ± 0.05	40.65 ± 0.72	35.93 ± 0.41	27.60 ± 0.18	n = 3	[MG1] Microgenics CEDIA
53.71 ± 1.68	13.07 ± 0.45	40.32 ± 1.08	36.78 ± 1.26	26.75 ± 1.17	n = 26	[RO4] Roche cobas c311/c501/c502/c701/c702
53.80 ± 1.80	12.88 ± 0.27	38.71 ± 1.30	35.58 ± 0.55	25.36 ± 0.84	n = 11	[RO1] Roche Integra and MIRA
53.23 ± 1.57	12.98 ± 0.47	39.54 ± 0.60	36.59 ± 1.00	26.33 ± 0.80	n = 7	[RO6] Roche ONLINE
59.52 ± 3.18	15.28 ± 0.88	45.28 ± 3.35	40.49 ± 3.17	31.10 ± 1.98	n = 10	[BY1] Siemens ADVIA/ADVIA Centaur
52.89 ± 1.59	12.56 ± 0.19	39.48 ± 1.36	35.05 ± 0.70	25.75 ± 0.45	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
52.79 ± 3.33	14.12 ± 1.11	40.13 ± 2.36	36.65 ± 2.08	27.43 ± 1.55	n = 62	[DA5] Siemens Dimension
55.35 ± 4.80	12.86 ± 0.16	38.39 ± 2.51	34.50 ± 0.58	25.61 ± 0.43	n = 5	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Phenytoin (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
11.40 ± 0.95 11.4	12.93 ± 1.12 12.7	18.95 ± 1.75 19.0	7.66 ± 0.70 7.6	26.12 ± 2.33 26.3	n = 253	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
11.69 ± 0.39	12.90 ± 0.00	19.65 ± 0.67	7.90 ± 0.32	26.62 ± 0.67	n = 5	[ABJ] Abbott Architect c System
11.13 ± 0.36	12.54 ± 0.40	18.37 ± 0.43	7.58 ± 0.24	25.51 ± 0.59	n = 17	[ABH] Abbott Architect i System
11.21 ± 0.73	12.50 ± 0.80	18.52 ± 1.05	7.51 ± 0.33	25.31 ± 1.77	n = 34	[OLC] Beckman Coulter AU Chemistry System
10.96 ± 0.38	12.41 ± 0.38	17.84 ± 0.78	7.64 ± 0.25	24.01 ± 1.05	n = 11	[BCG] Beckman Coulter UniCel DxC 600
10.99 ± 0.12	12.35 ± 0.32	18.16 ± 0.47	7.52 ± 0.17	24.03 ± 0.66	n = 9	[BCH] Beckman Coulter UniCel DxC 800
10.34 ± 0.33	11.86 ± 0.48	16.44 ± 1.06	6.88 ± 0.39	23.37 ± 0.95	n = 7	[JJF] Ortho Vitros 5,1FS
10.42 ± 0.43	11.89 ± 0.51	16.44 ± 0.69	7.00 ± 0.23	23.81 ± 0.78	n = 21	[JJG] Ortho Vitros 5600
10.93 ± 0.14	12.25 ± 0.36	18.20 ± 0.46	7.44 ± 0.10	25.77 ± 1.39	n = 3	[ROJ] Roche cobas c311
10.99 ± 0.80	12.27 ± 0.85	18.16 ± 0.94	7.25 ± 0.50	25.24 ± 1.81	n = 22	[ROC] Roche cobas c501
11.14 ± 0.73	12.58 ± 0.46	17.85 ± 1.02	7.32 ± 0.21	24.87 ± 1.37	n = 4	[ROG] Roche cobas c502
11.11 ± 0.30	12.63 ± 0.42	19.10 ± 0.41	7.44 ± 0.24	27.36 ± 1.14	n = 10	[ROT] Roche Cobas INTEGRA 800
11.22 ± 0.68	12.51 ± 0.43	18.66 ± 0.91	7.60 ± 0.63	24.91 ± 0.63	n = 8	[ROD] Roche MODULAR D/P
11.17 ± 0.85	12.73 ± 0.66	19.59 ± 2.13	7.39 ± 0.89	25.91 ± 3.82	n = 8	[BYE] Siemens ADVIA 1800
12.26 ± 0.79	14.04 ± 0.95	21.15 ± 1.77	8.20 ± 0.62	30.44 ± 3.30	n = 11	[COB] Siemens ADVIA Centaur
11.67 ± 0.69	13.95 ± 0.71	20.21 ± 1.19	7.84 ± 0.50	27.92 ± 1.54	n = 18	[DUE] Siemens Dimension EXL
12.28 ± 0.77	13.61 ± 0.29	20.80 ± 0.64	8.22 ± 0.24	28.70 ± 1.45	n = 3	[DUR] Siemens Dimension RxL
12.53 ± 0.69	14.19 ± 0.69	20.60 ± 0.81	8.63 ± 0.59	28.02 ± 1.11	n = 48	[DUT] Siemens Dimension Vista
11.71 ± 0.82	13.49 ± 1.16	19.91 ± 1.67	7.51 ± 0.84	27.34 ± 1.95	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
11.26 ± 0.45	12.67 ± 0.45	18.55 ± 0.68	7.64 ± 0.27	25.74 ± 0.77	n = 22	[AB1] Abbott
10.96 ± 0.42	12.33 ± 0.41	17.90 ± 0.72	7.59 ± 0.21	23.92 ± 0.92	n = 22	[BC1] Beckman Coulter
11.34 ± 0.64	12.74 ± 0.72	18.61 ± 1.07	7.52 ± 0.28	25.60 ± 2.13	n = 19	[OL1] Beckman Coulter AU Series
11.47 ± 0.81	12.62 ± 0.70	18.67 ± 0.94	7.46 ± 0.61	25.83 ± 0.76	n = 4	[MG1] Microgenics CEDIA
10.41 ± 0.41	11.89 ± 0.49	16.47 ± 0.76	6.97 ± 0.26	23.72 ± 0.84	n = 29	[JJ1] Ortho Clinical Diagnostics
11.03 ± 0.74	12.32 ± 0.78	18.09 ± 0.80	7.26 ± 0.36	25.24 ± 1.70	n = 29	[RO4] Roche cobas c311/c501/c502/c701/c702
11.08 ± 0.31	12.60 ± 0.44	19.08 ± 0.62	7.44 ± 0.26	27.22 ± 1.29	n = 12	[RO1] Roche Integra and MIRA
11.03 ± 0.18	12.43 ± 0.34	18.70 ± 1.11	7.69 ± 0.67	25.36 ± 1.31	n = 7	[RO6] Roche ONLINE
12.37 ± 0.69	14.29 ± 1.13	21.53 ± 1.84	8.31 ± 0.66	30.82 ± 3.14	n = 13	[BY1] Siemens ADVIA/ADVIA Centaur
11.25 ± 0.76	12.95 ± 0.42	19.74 ± 1.65	7.46 ± 0.71	26.38 ± 2.90	n = 8	[BY5] Siemens ADVIA/Syva Emit 2000
12.28 ± 0.81	14.08 ± 0.72	20.51 ± 1.00	8.37 ± 0.68	27.98 ± 1.28	n = 74	[DA5] Siemens Dimension
10.67 ± 0.36	12.09 ± 0.59	18.26 ± 1.27	7.10 ± 0.69	25.01 ± 1.22	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Free Phenytoin (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
1.49 ± 0.20	1.42 ± 0.25	2.33 ± 0.38	1.01 ± 0.20	3.27 ± 0.38	n = 20	[---] All Methods & Instruments
1.36 ± 0.17	1.35 ± 0.26	2.14 ± 0.34	0.77 ± 0.21	3.19 ± 0.42	n = 6	<Instruments> [OLC] Beckman Coulter AU Chemistry System
1.58 ± 0.08	1.50 ± 0.01	2.48 ± 0.12	1.05 ± 0.05	3.34 ± 0.16	n = 5	[ROT] Roche Cobas INTEGRA 800
1.30 ± 0.00	1.33 ± 0.05	2.06 ± 0.10	0.80 ± 0.00	3.07 ± 0.31	n = 3	<Reagents> [OL1] Beckman Coulter AU Series
1.58 ± 0.07	1.45 ± 0.09	2.44 ± 0.15	1.05 ± 0.05	3.31 ± 0.25	n = 7	[RO1] Roche Integra and MIRA
1.47 ± 0.23	1.35 ± 0.27	2.24 ± 0.47	0.75 ± 0.27	3.31 ± 0.37	n = 3	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Primidone (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
7.77 ± 0.25 7.4	9.12 ± 0.32 9.2	13.26 ± 0.35 13.1	5.34 ± 0.19 5.0	18.29 ± 0.74 18.3	n = 13	[---] All Methods & Instruments [---] Weigh-in value
7.77 ± 0.27	8.95 ± 0.39	13.13 ± 0.35	5.27 ± 0.24	18.07 ± 0.47	n = 5	<Instruments> [OLC] Beckman Coulter AU Chemistry System
7.70 ± 0.27	9.08 ± 0.15	13.02 ± 0.24	5.26 ± 0.10	18.65 ± 0.54	n = 3	[ROT] Roche Cobas INTEGRA 800
7.70 ± 0.27	9.08 ± 0.15	13.02 ± 0.24	5.26 ± 0.10	18.65 ± 0.54	n = 3	<Reagents> [RO1] Roche Integra and MIRA
7.86 ± 0.21	9.07 ± 0.47	13.33 ± 0.35	5.37 ± 0.24	18.21 ± 0.48	n = 7	[SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Procainamide (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
16.49 ± 0.62 16.6	7.10 ± 0.33 7.1	4.09 ± 0.11 4.1	10.98 ± 0.78 11.1	14.74 ± 0.68 14.2	n = 10	[---] All Methods & Instruments [---] Weigh-in value
16.93 ± 0.42	7.12 ± 0.44	4.12 ± 0.06	10.86 ± 0.81	14.86 ± 0.56	n = 3	<Instruments> [OLC] Beckman Coulter AU Chemistry System
18.89 ± 7.07	7.07 ± 0.32	4.13 ± 0.14	11.27 ± 1.22	14.66 ± 1.26	n = 3	<Reagents> [R04] Roche cobas c311/c501/c502/c701/c702

Summary of Participant Performance (Mean and Standard Deviation)

N-Acetyl-Procaïnamide (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
18.32 ± 0.92 18.4	4.65 ± 0.27 4.4	10.09 ± 0.56 10.0	12.29 ± 1.03 12.3	9.11 ± 0.47 9.0	n = 10	[---] All Methods & Instruments [---] Weigh-in value
18.82 ± 0.68	4.45 ± 0.27	10.03 ± 0.34	13.10 ± 0.72	9.05 ± 0.83	n = 3	<Instruments> [OLC] Beckman Coulter AU Chemistry System
18.91 ± 2.49	4.67 ± 0.14	10.22 ± 0.77	11.22 ± 0.32	9.00 ± 0.09	n = 3	<Reagents> [R04] Roche cobas c311/c501/c502/c701/c702

Summary of Participant Performance (Mean and Standard Deviation)

Quinidine (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
6.18 ± 0.25 6.3	4.04 ± 0.14 3.9	1.53 ± 0.10 1.7	4.24 ± 0.23 4.2	7.36 ± 0.46 7.8	n = 9	[---] All Methods & Instruments [---] Weigh-in value
6.28 ± 0.15	4.13 ± 0.05	1.60 ± 0.00	4.45 ± 0.19	7.63 ± 0.32	n = 3	<Reagents> [R04] Roche cobas c311/c501/c502/c701/c702

Summary of Participant Performance (Mean and Standard Deviation)

Salicylate (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
65.09 ± 2.62 63.2	27.39 ± 1.05 26.2	84.80 ± 4.21 82.0	43.92 ± 1.55 42.1	55.67 ± 2.32 52.4	n = 209	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
65.43 ± 1.62	26.69 ± 0.78	86.69 ± 2.46	43.88 ± 1.06	55.68 ± 1.50	n = 20	[ABJ] Abbott Architect c System
64.93 ± 4.46	26.97 ± 1.43	83.27 ± 6.77	43.14 ± 2.70	54.91 ± 4.12	n = 19	[OLC] Beckman Coulter AU Chemistry System
66.57 ± 2.37	27.34 ± 0.87	87.94 ± 2.44	44.99 ± 1.20	56.81 ± 1.89	n = 10	[BCG] Beckman Coulter UniCel DxC 600
67.10 ± 0.73	27.29 ± 0.61	89.28 ± 3.11	45.09 ± 0.67	57.32 ± 1.52	n = 8	[BCH] Beckman Coulter UniCel DxC 800
68.13 ± 2.92	30.22 ± 2.42	88.63 ± 5.65	43.64 ± 4.88	58.46 ± 3.69	n = 7	[JFF] Ortho Vitros 5,1FS
66.88 ± 2.49	30.07 ± 1.71	85.94 ± 5.54	45.27 ± 1.31	58.19 ± 2.10	n = 20	[JJG] Ortho Vitros 5600
65.84 ± 1.99	26.94 ± 0.61	84.14 ± 4.19	44.22 ± 1.12	56.42 ± 1.49	n = 20	[ROC] Roche cobas c501
61.33 ± 0.46	25.57 ± 0.47	79.18 ± 0.37	41.25 ± 0.33	52.20 ± 0.56	n = 5	[ROT] Roche Cobas INTEGRA 800
62.21 ± 1.08	26.35 ± 0.65	81.30 ± 1.82	41.79 ± 0.70	53.03 ± 0.94	n = 7	[ROD] Roche MODULAR D/P
67.57 ± 1.19	27.68 ± 0.60	87.48 ± 1.06	45.01 ± 0.98	57.27 ± 0.73	n = 8	[BYE] Siemens ADVIA 1800
63.95 ± 0.40	27.54 ± 0.27	83.70 ± 0.53	43.35 ± 0.45	54.61 ± 0.37	n = 18	[DUE] Siemens Dimension EXL
64.20 ± 0.45	27.68 ± 0.15	83.92 ± 0.15	43.57 ± 0.05	54.75 ± 0.19	n = 3	[DUR] Siemens Dimension RxL
64.01 ± 0.82	27.51 ± 0.41	83.79 ± 1.06	43.53 ± 0.75	54.72 ± 0.70	n = 46	[DUT] Siemens Dimension Vista
64.09 ± 0.43	27.64 ± 0.30	83.58 ± 0.63	43.60 ± 0.61	54.66 ± 0.32	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
65.43 ± 1.62	26.69 ± 0.78	86.69 ± 2.46	43.88 ± 1.06	55.68 ± 1.50	n = 20	[AB1] Abbott
66.77 ± 2.11	27.31 ± 0.75	88.49 ± 2.60	45.05 ± 0.98	57.01 ± 1.82	n = 18	[BC1] Beckman Coulter
64.92 ± 4.47	27.08 ± 1.34	84.17 ± 6.68	43.05 ± 2.88	55.52 ± 4.21	n = 15	[OL1] Beckman Coulter AU Series
67.05 ± 2.56	30.11 ± 1.86	86.47 ± 5.78	45.25 ± 1.45	58.32 ± 2.36	n = 30	[JJ1] Ortho Clinical Diagnostics
65.73 ± 2.45	26.95 ± 0.70	83.61 ± 5.24	44.14 ± 1.32	56.33 ± 1.79	n = 24	[RO4] Roche cobas c311/c501/c502/c701/c702
62.21 ± 1.08	26.35 ± 0.65	81.30 ± 1.82	41.79 ± 0.70	53.03 ± 0.94	n = 7	[RO2] Roche Hitachi and Modular D/P
61.17 ± 0.63	25.39 ± 0.61	79.07 ± 0.39	41.13 ± 0.49	51.99 ± 0.78	n = 6	[RO1] Roche Integra and MIRA
67.59 ± 1.25	27.65 ± 0.72	88.05 ± 1.47	45.17 ± 1.07	57.37 ± 0.96	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
64.01 ± 0.66	27.54 ± 0.36	83.80 ± 0.83	43.49 ± 0.66	54.70 ± 0.58	n = 72	[DA5] Siemens Dimension
63.34 ± 4.29	27.06 ± 1.00	82.17 ± 6.08	42.66 ± 1.80	54.47 ± 1.06	n = 3	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Theophylline (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
20.69 ± 1.33 21.1	16.60 ± 1.12 16.4	8.13 ± 0.50 8.5	14.01 ± 0.98 14.0	33.42 ± 2.91 32.7	n = 181	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
20.73 ± 0.51	16.12 ± 0.88	8.27 ± 0.14	14.13 ± 0.32	33.13 ± 0.76	n = 3	[ABJ] Abbott Architect c System
20.95 ± 0.72	16.29 ± 0.50	8.29 ± 0.44	14.08 ± 0.73	33.06 ± 1.68	n = 9	[ABH] Abbott Architect i System
20.19 ± 1.78	15.76 ± 1.00	7.80 ± 0.42	13.41 ± 0.75	30.40 ± 4.03	n = 18	[OLC] Beckman Coulter AU Chemistry System
19.18 ± 0.39	15.46 ± 0.29	7.78 ± 0.14	13.04 ± 0.21	31.17 ± 0.82	n = 9	[BCG] Beckman Coulter UniCel DxC 600
19.51 ± 0.92	15.21 ± 0.46	7.79 ± 0.23	13.04 ± 0.29	31.23 ± 0.75	n = 8	[BCH] Beckman Coulter UniCel DxC 800
27.62 ± 2.05	19.32 ± 1.45	11.43 ± 1.13	17.44 ± 1.45	40.38 ± 3.13	n = 5	[JJF] Ortho Vitros 5,1FS
26.75 ± 0.81	18.69 ± 0.51	11.00 ± 0.49	17.42 ± 0.60	40.11 ± 1.29	n = 18	[JJG] Ortho Vitros 5600
20.76 ± 0.46	16.53 ± 0.53	8.08 ± 0.29	13.98 ± 0.41	33.29 ± 0.73	n = 17	[ROC] Roche cobas c501
20.82 ± 0.32	16.58 ± 0.32	8.14 ± 0.10	14.03 ± 0.14	34.25 ± 1.35	n = 3	[ROG] Roche cobas c502
20.89 ± 0.52	16.75 ± 0.37	8.40 ± 0.23	14.11 ± 0.21	34.20 ± 0.57	n = 5	[ROT] Roche Cobas INTEGRA 800
20.54 ± 0.88	16.52 ± 0.74	8.14 ± 0.21	13.85 ± 0.64	33.30 ± 1.15	n = 9	[ROD] Roche MODULAR D/P
19.15 ± 1.12	16.60 ± 1.22	7.02 ± 0.52	13.20 ± 0.57	32.46 ± 2.74	n = 10	[COB] Siemens ADVIA Centaur
21.11 ± 1.05	16.64 ± 0.87	8.14 ± 0.39	14.02 ± 0.58	34.37 ± 2.00	n = 7	[DUE] Siemens Dimension EXL
21.01 ± 0.78	16.67 ± 0.57	8.40 ± 0.34	14.25 ± 0.54	33.28 ± 1.36	n = 46	[DUT] Siemens Dimension Vista
19.40 ± 0.92	15.09 ± 0.80	7.62 ± 0.41	11.66 ± 1.39	29.35 ± 1.45	n = 3	[DPD] Siemens Immulite 2000
<Reagents>						
20.89 ± 0.67	16.31 ± 0.59	8.29 ± 0.37	14.08 ± 0.63	33.11 ± 1.42	n = 12	[AB1] Abbott
19.23 ± 0.53	15.33 ± 0.46	7.80 ± 0.17	13.04 ± 0.27	31.20 ± 0.78	n = 17	[BC1] Beckman Coulter
20.36 ± 1.75	15.78 ± 1.28	7.86 ± 0.46	13.35 ± 0.66	30.71 ± 4.38	n = 12	[OL1] Beckman Coulter AU Series
26.88 ± 1.15	18.77 ± 0.74	11.07 ± 0.63	17.42 ± 0.75	40.09 ± 1.72	n = 23	[JJ1] Ortho Clinical Diagnostics
20.76 ± 0.45	16.56 ± 0.50	8.07 ± 0.27	13.96 ± 0.34	33.38 ± 0.86	n = 19	[RO4] Roche cobas c311/c501/c502/c701/c702
20.55 ± 0.39	16.81 ± 0.49	8.28 ± 0.20	14.12 ± 0.83	33.24 ± 0.84	n = 4	[RO2] Roche Hitachi and Modular D/P
21.20 ± 0.67	16.87 ± 0.50	8.44 ± 0.20	14.22 ± 0.29	34.60 ± 1.32	n = 7	[RO1] Roche Integra and MIRA
20.49 ± 1.20	16.15 ± 0.83	8.09 ± 0.19	13.87 ± 0.53	33.07 ± 1.69	n = 6	[RO6] Roche ONLINE
19.15 ± 1.12	16.60 ± 1.22	7.02 ± 0.52	13.20 ± 0.57	32.46 ± 2.74	n = 10	[BY1] Siemens ADVIA/ADVIA Centaur
22.04 ± 1.48	17.38 ± 0.40	8.44 ± 0.81	14.41 ± 0.53	34.53 ± 0.59	n = 4	[BY5] Siemens ADVIA/Syva Emit 2000
21.04 ± 0.84	16.64 ± 0.61	8.36 ± 0.36	14.21 ± 0.55	33.43 ± 1.49	n = 57	[DA5] Siemens Dimension
19.40 ± 0.92	15.09 ± 0.80	7.62 ± 0.41	11.66 ± 1.39	29.35 ± 1.45	n = 3	[DP5] Siemens Immulite
19.82 ± 1.90	15.91 ± 0.59	7.71 ± 0.32	13.50 ± 0.90	29.89 ± 3.32	n = 6	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Tobramycin (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
12.68 ± 1.53 13.3	2.21 ± 0.25 2.4	9.68 ± 0.76 10.1	8.72 ± 0.63 8.9	4.44 ± 0.34 4.8	n = 70	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
13.18 ± 1.85	2.29 ± 0.09	10.16 ± 0.57	8.97 ± 0.36	4.55 ± 0.10	n = 8	[ABJ] Abbott Architect c System
11.70 ± 0.83	2.06 ± 0.11	9.44 ± 0.27	8.47 ± 0.27	4.35 ± 0.14	n = 8	[OLC] Beckman Coulter AU Chemistry System
16.12 ± 0.50	2.80 ± 0.08	11.47 ± 0.27	10.57 ± 0.27	5.87 ± 0.27	n = 4	[BCH] Beckman Coulter UniCel DxC 800
13.66 ± 0.96	2.16 ± 0.06	9.37 ± 0.21	8.40 ± 0.26	4.38 ± 0.11	n = 5	[JJG] Ortho Vitros 5600
13.09 ± 0.51	2.25 ± 0.10	9.82 ± 0.52	8.94 ± 0.24	4.72 ± 0.17	n = 6	[ROC] Roche cobas c501
12.60 ± 0.40	2.18 ± 0.04	9.80 ± 0.08	8.73 ± 0.16	4.32 ± 0.04	n = 4	[ROT] Roche Cobas INTEGRA 800
12.68 ± 0.41	2.35 ± 0.28	9.86 ± 0.09	9.15 ± 0.23	4.76 ± 0.05	n = 4	[ROD] Roche MODULAR D/P
13.80 ± 1.03	2.67 ± 0.10	11.00 ± 0.46	9.83 ± 0.66	5.10 ± 0.14	n = 5	[COB] Siemens ADVIA Centaur
12.65 ± 0.81	2.08 ± 0.15	9.36 ± 0.10	8.50 ± 0.09	4.20 ± 0.09	n = 3	[DUE] Siemens Dimension EXL
11.66 ± 0.37	2.03 ± 0.12	9.07 ± 0.26	8.27 ± 0.31	4.19 ± 0.14	n = 17	[DUT] Siemens Dimension Vista
<Reagents>						
13.18 ± 1.85	2.29 ± 0.09	10.16 ± 0.57	8.97 ± 0.36	4.55 ± 0.10	n = 8	[AB1] Abbott
16.22 ± 0.47	2.83 ± 0.10	11.57 ± 0.27	10.66 ± 0.25	5.84 ± 0.25	n = 6	[BC1] Beckman Coulter
11.56 ± 1.20	2.00 ± 0.08	9.48 ± 0.15	8.40 ± 0.17	4.42 ± 0.13	n = 4	[OL1] Beckman Coulter AU Series
13.82 ± 0.93	2.14 ± 0.07	9.30 ± 0.30	8.32 ± 0.45	4.35 ± 0.18	n = 6	[JJ1] Ortho Clinical Diagnostics
13.26 ± 0.46	2.25 ± 0.10	9.94 ± 0.30	8.89 ± 0.20	4.69 ± 0.18	n = 6	[RO4] Roche cobas c311/c501/c502/c701/c702
12.56 ± 0.62	2.23 ± 0.11	9.78 ± 0.08	8.75 ± 0.27	4.34 ± 0.06	n = 6	[RO1] Roche Integra and MIRA
12.71 ± 0.36	2.30 ± 0.24	9.86 ± 0.09	9.15 ± 0.19	4.74 ± 0.05	n = 5	[RO6] Roche ONLINE
13.80 ± 1.03	2.67 ± 0.10	11.00 ± 0.46	9.83 ± 0.66	5.10 ± 0.14	n = 5	[BY1] Siemens ADVIA/ADVIA Centaur
11.71 ± 0.43	2.03 ± 0.13	9.12 ± 0.27	8.32 ± 0.30	4.19 ± 0.13	n = 20	[DA5] Siemens Dimension
11.77 ± 0.49	2.13 ± 0.09	9.38 ± 0.37	8.58 ± 0.37	4.30 ± 0.11	n = 4	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Valproic Acid (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
49.96 ± 3.04 48.7	83.70 ± 4.29 80.4	110.11 ± 5.30 107.5	33.84 ± 2.41 32.4	165.95 ± 12.01 160.9	n = 242	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
48.32 ± 1.66	80.93 ± 0.67	113.31 ± 1.47	32.31 ± 2.82	150.93 ± 6.29	n = 5	[ABJ] Abbott Architect c System
48.93 ± 2.06	80.86 ± 2.49	109.48 ± 3.42	32.97 ± 1.35	165.29 ± 8.79	n = 17	[ABH] Abbott Architect i System
51.31 ± 1.98	86.05 ± 2.95	113.67 ± 5.17	34.68 ± 2.02	175.08 ± 9.91	n = 32	[OLC] Beckman Coulter AU Chemistry System
46.48 ± 2.04	79.53 ± 2.59	105.19 ± 3.18	30.99 ± 2.12	148.03 ± 11.95	n = 10	[BCG] Beckman Coulter UniCel DxC 600
46.25 ± 2.70	77.76 ± 1.72	105.68 ± 5.79	29.85 ± 3.08	153.23 ± 9.98	n = 8	[BCH] Beckman Coulter UniCel DxC 800
48.98 ± 2.67	81.71 ± 3.67	109.71 ± 3.77	33.28 ± 1.60	186.85 ± 6.74	n = 6	[JJF] Ortho Vitros 5,1FS
51.25 ± 3.36	84.59 ± 4.02	113.24 ± 5.67	35.17 ± 2.73	173.00 ± 11.73	n = 20	[JJG] Ortho Vitros 5600
48.70 ± 2.97	84.32 ± 5.69	110.26 ± 3.59	33.19 ± 1.87	166.78 ± 11.44	n = 22	[ROC] Roche cobas c501
51.53 ± 0.34	84.71 ± 3.76	113.27 ± 3.83	34.74 ± 2.26	174.33 ± 6.40	n = 3	[ROG] Roche cobas c502
46.68 ± 0.73	79.55 ± 1.04	107.35 ± 1.39	31.61 ± 0.72	162.78 ± 7.00	n = 7	[ROT] Roche Cobas INTEGRA 800
46.57 ± 2.62	78.75 ± 5.56	102.15 ± 5.35	30.39 ± 1.75	157.57 ± 11.49	n = 9	[ROD] Roche MODULAR D/P
51.83 ± 1.93	86.57 ± 2.87	119.72 ± 4.81	34.76 ± 1.19	172.35 ± 7.79	n = 8	[BYE] Siemens ADVIA 1800
48.35 ± 3.24	83.44 ± 4.82	105.36 ± 3.90	32.90 ± 2.21	166.05 ± 11.95	n = 16	[COB] Siemens ADVIA Centaur
49.97 ± 1.34	83.73 ± 2.55	108.18 ± 2.36	33.58 ± 1.35	159.49 ± 5.49	n = 14	[DUE] Siemens Dimension EXL
49.82 ± 1.96	83.00 ± 0.83	108.12 ± 2.36	33.86 ± 2.42	157.69 ± 6.54	n = 4	[DUR] Siemens Dimension RxL
52.03 ± 2.01	85.41 ± 3.21	110.94 ± 3.55	35.73 ± 1.32	164.75 ± 5.10	n = 48	[DUT] Siemens Dimension Vista
51.00 ± 2.71	83.49 ± 1.11	110.43 ± 3.76	33.88 ± 1.72	160.80 ± 10.94	n = 4	[DUX] Siemens Dimension Xpand
<Reagents>						
48.73 ± 1.94	80.64 ± 2.24	110.16 ± 4.12	32.99 ± 1.45	162.38 ± 11.46	n = 22	[AB1] Abbott
46.57 ± 2.24	79.00 ± 2.86	105.29 ± 4.20	30.83 ± 2.59	152.24 ± 12.01	n = 20	[BC1] Beckman Coulter
51.25 ± 1.83	85.67 ± 2.98	114.16 ± 4.24	34.34 ± 1.85	175.62 ± 9.10	n = 20	[OL1] Beckman Coulter AU Series
50.58 ± 3.15	83.93 ± 3.90	112.18 ± 5.07	34.63 ± 2.51	177.18 ± 12.64	n = 27	[JJ1] Ortho Clinical Diagnostics
49.19 ± 3.01	84.57 ± 5.36	110.42 ± 3.53	33.38 ± 1.98	167.24 ± 10.83	n = 25	[RO4] Roche cobas c311/c501/c502/c701/c702
46.44 ± 0.77	80.10 ± 2.73	107.72 ± 3.01	31.62 ± 1.01	159.58 ± 9.06	n = 9	[RO1] Roche Integra and MIRA
47.25 ± 2.59	80.00 ± 4.57	102.93 ± 6.98	30.76 ± 1.29	159.37 ± 14.38	n = 7	[RO6] Roche ONLINE
48.52 ± 3.28	83.85 ± 4.95	106.24 ± 5.04	32.79 ± 2.26	166.65 ± 11.14	n = 18	[BY1] Siemens ADVIA/ADVIA Centaur
51.46 ± 2.43	84.89 ± 3.87	115.35 ± 8.31	34.44 ± 1.72	171.83 ± 8.59	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
51.40 ± 2.15	84.69 ± 3.00	110.15 ± 3.57	35.16 ± 1.70	163.14 ± 6.19	n = 70	[DA5] Siemens Dimension
51.96 ± 1.52	87.27 ± 2.59	114.94 ± 6.51	35.55 ± 1.32	175.53 ± 10.20	n = 10	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Vancomycin (mg/L)

Specimen: T21	Specimen: T22	Specimen: T23	Specimen: T24	Specimen: T25	Number	[Code] Instrument or Reagent System
35.26 ± 4.23 38.0	5.35 ± 0.58 5.6	18.68 ± 2.13 19.5	24.00 ± 2.91 25.3	10.86 ± 1.10 11.1	n = 219	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
37.03 ± 2.27	5.62 ± 0.19	19.79 ± 0.71	25.52 ± 0.90	11.47 ± 0.39	n = 5	[ABJ] Abbott Architect c System
40.54 ± 2.02	5.90 ± 0.22	21.22 ± 0.82	27.35 ± 1.02	12.33 ± 0.33	n = 15	[ABH] Abbott Architect i System
32.46 ± 1.42	5.44 ± 0.25	16.79 ± 0.40	21.39 ± 0.84	10.15 ± 0.40	n = 25	[OLC] Beckman Coulter AU Chemistry System
39.81 ± 1.33	5.93 ± 0.51	19.84 ± 0.51	27.11 ± 1.01	11.52 ± 0.61	n = 8	[BCG] Beckman Coulter UniCel DxC 600
41.70 ± 1.65	5.83 ± 0.60	20.89 ± 0.52	27.83 ± 1.02	11.77 ± 0.47	n = 9	[BCH] Beckman Coulter UniCel DxC 800
32.77 ± 1.12	5.06 ± 0.09	17.21 ± 0.28	21.93 ± 0.50	10.06 ± 0.31	n = 6	[JJF] Ortho Vitros 5,1FS
32.36 ± 1.16	5.12 ± 0.16	17.05 ± 0.54	21.95 ± 0.78	9.97 ± 0.35	n = 18	[JJG] Ortho Vitros 5600
37.55 ± 3.54	5.41 ± 0.56	20.13 ± 1.45	25.86 ± 2.34	11.32 ± 0.87	n = 20	[ROC] Roche cobas c501
39.56 ± 4.01	5.83 ± 0.14	19.56 ± 1.03	25.92 ± 1.50	11.40 ± 0.64	n = 3	[ROG] Roche cobas c502
44.55 ± 1.12	6.16 ± 0.23	22.89 ± 0.43	29.25 ± 0.27	12.52 ± 0.33	n = 7	[ROT] Roche Cobas INTEGRA 800
41.47 ± 2.58	6.20 ± 0.74	22.08 ± 1.30	27.70 ± 1.72	12.22 ± 0.94	n = 7	[ROD] Roche MODULAR D/P
34.05 ± 0.53	5.88 ± 0.39	18.30 ± 1.19	24.20 ± 1.77	10.82 ± 1.13	n = 5	[BYE] Siemens ADVIA 1800
30.23 ± 1.65	4.39 ± 0.35	15.30 ± 0.76	20.08 ± 0.64	8.87 ± 0.60	n = 16	[COB] Siemens ADVIA Centaur
35.35 ± 1.25	5.04 ± 0.27	18.59 ± 0.70	23.74 ± 0.86	10.66 ± 0.44	n = 15	[DUE] Siemens Dimension EXL
34.44 ± 1.33	5.24 ± 0.37	18.77 ± 0.83	23.85 ± 1.00	11.00 ± 0.53	n = 47	[DUT] Siemens Dimension Vista
34.09 ± 0.79	4.95 ± 0.19	18.09 ± 0.56	22.97 ± 1.17	10.42 ± 0.48	n = 4	[DUX] Siemens Dimension Xpand
<Reagents>						
39.80 ± 2.49	5.83 ± 0.24	20.83 ± 1.04	26.91 ± 1.27	12.17 ± 0.49	n = 20	[AB1] Abbott
40.71 ± 1.90	5.85 ± 0.55	20.34 ± 0.85	27.50 ± 1.10	11.57 ± 0.63	n = 19	[BC1] Beckman Coulter
32.41 ± 1.16	5.46 ± 0.19	16.73 ± 0.42	21.53 ± 0.72	10.07 ± 0.33	n = 14	[OL1] Beckman Coulter AU Series
32.45 ± 1.14	5.09 ± 0.14	17.07 ± 0.46	21.97 ± 0.70	9.99 ± 0.33	n = 25	[JJ1] Ortho Clinical Diagnostics
37.94 ± 3.37	5.47 ± 0.55	20.06 ± 1.41	25.92 ± 2.17	11.34 ± 0.81	n = 23	[RO4] Roche cobas c311/c501/c502/c701/c702
40.71 ± 1.53	5.91 ± 0.61	21.84 ± 0.10	27.70 ± 0.46	12.05 ± 0.46	n = 3	[RO2] Roche Hitachi and Modular D/P
45.33 ± 1.99	6.27 ± 0.48	22.99 ± 0.52	29.45 ± 0.71	12.49 ± 0.45	n = 9	[RO1] Roche Integra and MIRA
40.89 ± 4.86	6.18 ± 0.89	21.70 ± 2.16	26.86 ± 3.07	12.01 ± 1.53	n = 5	[RO6] Roche ONLINE
29.91 ± 1.83	4.35 ± 0.34	15.25 ± 0.70	19.97 ± 0.52	8.81 ± 0.59	n = 18	[BY1] Siemens ADVIA/ADVIA Centaur
34.04 ± 1.66	5.71 ± 0.52	18.03 ± 1.22	23.77 ± 1.82	10.27 ± 0.39	n = 6	[BY5] Siemens ADVIA/Syva Emit 2000
34.66 ± 1.34	5.16 ± 0.37	18.68 ± 0.78	23.76 ± 0.99	10.88 ± 0.55	n = 68	[DA5] Siemens Dimension
32.62 ± 1.80	5.41 ± 0.26	16.89 ± 0.40	21.39 ± 0.92	10.21 ± 0.44	n = 9	[SY4] Syva Emit 2000