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Therapeutic Substance Monitoring/Quantitative Toxicology Proficiency Test Program

Statistical Summary - September 2014 (Event 14-3)

This statistical report summarizes participant data for the five Therapeutic Substance Monitoring proficiency survey specimens shipped 8 September 2014. Test samples (Vials T06, T07, T08, T09, T10) 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: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
93.37 ± 8.36	30.09 ± 3.46	159.69 ± 13.19	87.91 ± 9.55	136.31 ± 11.37	n = 215	[---] All Methods & Instruments [---] Weigh-in value
92.0	30.6	157.2	86.0	134.9		
						<Instruments>
86.88 ± 1.15	28.12 ± 0.47	149.66 ± 2.18	81.73 ± 1.02	127.37 ± 1.77	n = 17	[ABJ] Abbott Architect c System
89.35 ± 8.34	29.47 ± 1.26	154.55 ± 9.13	83.73 ± 6.33	132.71 ± 9.57	n = 26	[OLC] Beckman Coulter AU Chemistry System
97.73 ± 4.35	31.43 ± 2.07	164.95 ± 6.16	93.98 ± 3.49	140.59 ± 6.52	n = 9	[BCG] Beckman Coulter UniCel DxC 600
95.28 ± 1.75	31.75 ± 0.90	163.03 ± 3.69	92.61 ± 2.87	139.81 ± 3.48	n = 7	[BCH] Beckman Coulter UniCel DxC 800
102.81 ± 1.61	30.71 ± 0.71	177.02 ± 2.90	98.07 ± 1.38	150.50 ± 1.15	n = 10	[JJF] Ortho Vitros 5,1FS
102.39 ± 1.12	30.71 ± 0.43	177.09 ± 1.98	97.31 ± 0.82	150.59 ± 1.24	n = 18	[JJG] Ortho Vitros 5600
80.33 ± 2.38	20.81 ± 0.67	142.01 ± 4.10	72.03 ± 2.29	120.33 ± 3.55	n = 21	[ROC] Roche cobas c501
86.49 ± 4.61	26.62 ± 4.26	146.51 ± 3.88	76.66 ± 5.36	127.15 ± 1.98	n = 8	[ROT] Roche Cobas INTEGRA 800
84.10 ± 5.47	23.50 ± 2.84	145.71 ± 13.78	69.27 ± 4.08	122.04 ± 5.45	n = 9	[ROD] Roche MODULAR D/P
88.60 ± 2.27	28.66 ± 1.57	151.00 ± 5.27	82.97 ± 1.81	128.73 ± 3.94	n = 10	[BYE] Siemens ADVIA 1800
96.88 ± 0.92	31.67 ± 0.99	165.26 ± 1.67	92.65 ± 1.23	141.35 ± 1.41	n = 15	[DUE] Siemens Dimension EXL
96.44 ± 1.36	31.28 ± 0.98	163.93 ± 1.99	91.95 ± 1.72	141.53 ± 1.93	n = 8	[DUR] Siemens Dimension RxL
98.29 ± 1.31	33.03 ± 0.97	165.57 ± 2.35	93.24 ± 1.54	141.65 ± 2.42	n = 39	[DUT] Siemens Dimension Vista
95.55 ± 1.39	30.92 ± 0.68	163.02 ± 2.90	91.29 ± 1.31	139.85 ± 1.76	n = 7	[DUX] Siemens Dimension Xpand
						<Reagents>
86.88 ± 1.15	28.12 ± 0.47	149.66 ± 2.18	81.73 ± 1.02	127.37 ± 1.77	n = 17	[AB1] Abbott
95.95 ± 3.66	31.42 ± 1.50	163.84 ± 5.41	93.39 ± 3.53	139.75 ± 5.03	n = 18	[BC1] Beckman Coulter
87.19 ± 7.09	29.54 ± 1.40	153.49 ± 9.28	82.81 ± 5.49	131.17 ± 9.08	n = 18	[OL1] Beckman Coulter AU Series
102.39 ± 1.33	30.70 ± 0.53	176.90 ± 2.36	97.35 ± 1.21	150.42 ± 1.34	n = 31	[JJ1] Ortho Clinical Diagnostics
80.42 ± 2.07	20.90 ± 0.66	142.02 ± 3.69	72.16 ± 2.06	120.32 ± 3.13	n = 23	[RO4] Roche cobas c311/c501/c502/c701/c702
82.35 ± 3.16	22.59 ± 1.80	142.19 ± 4.80	68.58 ± 2.85	122.74 ± 3.68	n = 7	[RO2] Roche Hitachi and Modular D/P
84.42 ± 3.24	25.11 ± 3.09	145.56 ± 5.47	74.23 ± 2.83	125.19 ± 4.68	n = 7	[RO1] Roche Integra and MIRA
88.30 ± 2.17	28.47 ± 1.55	150.45 ± 4.88	82.63 ± 1.69	128.23 ± 3.72	n = 10	[BY1] Siemens ADVIA/ADVISIA Centaur
97.51 ± 1.56	32.34 ± 1.30	165.10 ± 2.39	92.76 ± 1.61	141.36 ± 2.15	n = 69	[DAS] Siemens Dimension
90.56 ± 1.02	29.20 ± 2.36	154.84 ± 12.46	84.09 ± 4.38	121.04 ± 4.60	n = 3	[SY2] Syva Emit
93.37 ± 5.98	30.20 ± 1.64	155.46 ± 9.27	87.39 ± 8.33	137.16 ± 10.78	n = 5	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Carbamazepine (mg/L)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
15.55 ± 1.48	5.01 ± 0.54	3.71 ± 0.44	8.35 ± 0.83	10.03 ± 0.90	n = 223	[---] All Methods & Instruments
16.3	5.4	3.8	8.4	10.5		[---] Weigh-in value
						<Instruments>
16.58 ± 0.79	5.43 ± 0.24	3.96 ± 0.12	8.84 ± 0.28	10.73 ± 0.24	n = 13	[ABJ] Abbott Architect c System
15.46 ± 0.88	4.98 ± 0.16	3.61 ± 0.11	8.13 ± 0.33	9.90 ± 0.29	n = 7	[ABH] Abbott Architect i System
16.40 ± 1.09	5.08 ± 0.29	3.84 ± 0.25	8.49 ± 0.38	10.22 ± 0.42	n = 24	[OLC] Beckman Coulter AU Chemistry System
15.36 ± 0.34	4.77 ± 0.19	3.49 ± 0.09	8.28 ± 0.34	9.87 ± 0.34	n = 9	[BCG] Beckman Coulter UniCel DxC 600
15.21 ± 0.25	4.63 ± 0.15	3.26 ± 0.13	8.23 ± 0.25	9.81 ± 0.29	n = 8	[BCH] Beckman Coulter UniCel DxC 800
12.14 ± 0.56	3.84 ± 0.25	3.00 ± 0.00	6.61 ± 0.52	7.92 ± 0.47	n = 8	[JJF] Ortho Vitros 5,1FS
11.59 ± 0.53	3.66 ± 0.31	3.00 ± 0.00	6.39 ± 0.39	7.69 ± 0.35	n = 18	[JJG] Ortho Vitros 5600
15.44 ± 0.46	5.12 ± 0.31	3.93 ± 0.30	8.70 ± 0.30	10.13 ± 0.39	n = 19	[ROC] Roche cobas c501
16.39 ± 0.22	5.01 ± 0.18	3.72 ± 0.13	8.11 ± 0.14	9.87 ± 0.23	n = 10	[ROT] Roche Cobas INTEGRA 800
16.02 ± 0.24	5.36 ± 0.29	4.17 ± 0.21	9.09 ± 0.19	10.63 ± 0.34	n = 10	[ROD] Roche MODULAR D/P
16.74 ± 1.37	5.81 ± 0.35	4.28 ± 0.31	9.14 ± 0.68	10.66 ± 0.56	n = 8	[BYE] Siemens ADVIA 1800
17.59 ± 1.31	5.64 ± 0.46	4.25 ± 0.29	9.75 ± 0.60	11.56 ± 0.70	n = 13	[COB] Siemens ADVIA Centaur
17.80 ± 1.49	5.93 ± 0.27	4.62 ± 0.47	9.85 ± 0.39	11.72 ± 0.54	n = 4	[BYP] Siemens ADVIA Centaur CP
15.19 ± 0.41	4.88 ± 0.18	3.56 ± 0.13	8.09 ± 0.26	9.91 ± 0.26	n = 10	[DUE] Siemens Dimension EXL
15.65 ± 0.59	4.93 ± 0.11	3.63 ± 0.22	8.14 ± 0.32	10.02 ± 0.41	n = 8	[DUR] Siemens Dimension RxL
15.05 ± 0.68	5.00 ± 0.21	3.67 ± 0.21	8.17 ± 0.42	9.82 ± 0.48	n = 40	[DUT] Siemens Dimension Vista
15.59 ± 0.52	4.89 ± 0.20	3.59 ± 0.20	8.06 ± 0.39	10.02 ± 0.41	n = 3	[DUX] Siemens Dimension Xpand
						<Reagents>
16.21 ± 0.98	5.28 ± 0.32	3.84 ± 0.22	8.60 ± 0.46	10.46 ± 0.51	n = 20	[AB1] Abbott
15.27 ± 0.31	4.73 ± 0.24	3.39 ± 0.18	8.31 ± 0.34	9.90 ± 0.35	n = 19	[BC1] Beckman Coulter
16.48 ± 0.99	5.14 ± 0.33	3.77 ± 0.29	8.28 ± 0.54	10.17 ± 0.67	n = 10	[OL1] Beckman Coulter AU Series
15.65 ± 0.56	5.25 ± 0.35	4.11 ± 0.19	8.80 ± 0.27	10.43 ± 0.22	n = 8	[MG1] Microgenics CEDIA
11.75 ± 0.61	3.72 ± 0.30	3.00 ± 0.00	6.44 ± 0.45	7.74 ± 0.41	n = 26	[JJ1] Ortho Clinical Diagnostics
15.42 ± 0.44	5.12 ± 0.30	3.94 ± 0.34	8.72 ± 0.36	10.17 ± 0.44	n = 22	[RO4] Roche cobas c311/c501/c502/c701/c702
16.02 ± 0.27	5.29 ± 0.26	4.15 ± 0.20	9.09 ± 0.21	10.63 ± 0.40	n = 8	[RO2] Roche Hitachi and Modular D/P
16.36 ± 0.33	4.99 ± 0.18	3.70 ± 0.12	8.11 ± 0.19	9.87 ± 0.20	n = 12	[RO1] Roche Integra and MIRA
17.64 ± 1.37	5.71 ± 0.45	4.32 ± 0.37	9.76 ± 0.55	11.60 ± 0.66	n = 17	[BY1] Siemens ADVIA/ADvia Centaur
16.48 ± 1.48	5.69 ± 0.54	4.14 ± 0.38	8.75 ± 0.87	10.32 ± 0.79	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
15.19 ± 0.65	4.97 ± 0.21	3.64 ± 0.20	8.14 ± 0.38	9.87 ± 0.43	n = 61	[DA5] Siemens Dimension
16.83 ± 0.99	4.93 ± 0.43	3.77 ± 0.16	8.62 ± 0.39	10.24 ± 0.41	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Digoxin ($\mu\text{g/L}$)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
2.943 \pm 0.231 3.0	0.940 \pm 0.123 1.0	2.324 \pm 0.186 2.3	3.608 \pm 0.256 3.7	0.641 \pm 0.098 0.7	n = 269	[---] All Methods & Instruments [---] Weigh-in value
						<Instruments>
2.865 \pm 0.052	0.907 \pm 0.072	2.276 \pm 0.039	3.554 \pm 0.044	0.605 \pm 0.012	n = 5	[ABJ] Abbott Architect c System
2.630 \pm 0.056	0.804 \pm 0.021	2.091 \pm 0.069	3.271 \pm 0.133	0.576 \pm 0.054	n = 16	[ABH] Abbott Architect i System
3.013 \pm 0.196	0.987 \pm 0.049	2.406 \pm 0.065	3.812 \pm 0.168	0.635 \pm 0.039	n = 5	[SAA] Beckman Coulter ACCESS
2.868 \pm 0.161	0.878 \pm 0.082	2.251 \pm 0.149	3.610 \pm 0.270	0.638 \pm 0.084	n = 28	[OLC] Beckman Coulter AU Chemistry System
2.866 \pm 0.106	0.927 \pm 0.080	2.271 \pm 0.090	3.461 \pm 0.153	0.615 \pm 0.065	n = 10	[BCG] Beckman Coulter UniCel DxC 600
2.832 \pm 0.087	0.944 \pm 0.072	2.232 \pm 0.087	3.487 \pm 0.075	0.600 \pm 0.000	n = 8	[BCH] Beckman Coulter UniCel DxC 800
3.198 \pm 0.231	1.014 \pm 0.091	2.496 \pm 0.143	3.777 \pm 0.141	0.614 \pm 0.026	n = 3	[BCU] Beckman Coulter UniCel DxI 800
2.700 \pm 0.069	0.700 \pm 0.000	2.090 \pm 0.097	3.262 \pm 0.070	0.434 \pm 0.054	n = 9	[JJF] Ortho Vitros 5,1FS
2.694 \pm 0.097	0.741 \pm 0.081	2.102 \pm 0.095	3.291 \pm 0.115	0.487 \pm 0.064	n = 19	[JJG] Ortho Vitros 5600
2.879 \pm 0.138	0.958 \pm 0.077	2.264 \pm 0.098	3.540 \pm 0.190	0.683 \pm 0.031	n = 3	[ROJ] Roche cobas c311
2.809 \pm 0.076	0.913 \pm 0.119	2.217 \pm 0.092	3.539 \pm 0.096	0.645 \pm 0.078	n = 20	[ROC] Roche cobas c501
3.553 \pm 0.077	1.050 \pm 0.050	2.810 \pm 0.089	4.310 \pm 0.089	0.700 \pm 0.000	n = 5	[ROA] Roche cobas e601
2.945 \pm 0.091	0.951 \pm 0.135	2.287 \pm 0.148	3.590 \pm 0.189	0.646 \pm 0.049	n = 5	[ROT] Roche Cobas INTEGRA 800
2.787 \pm 0.104	0.985 \pm 0.119	2.263 \pm 0.119	3.460 \pm 0.131	0.686 \pm 0.083	n = 12	[ROD] Roche MODULAR D/P
2.828 \pm 0.077	0.843 \pm 0.059	2.256 \pm 0.066	3.524 \pm 0.101	0.515 \pm 0.051	n = 9	[BYE] Siemens ADVIA 1800
3.141 \pm 0.170	1.108 \pm 0.076	2.544 \pm 0.097	3.774 \pm 0.145	0.773 \pm 0.070	n = 19	[COB] Siemens ADVIA Centaur
3.151 \pm 0.074	1.030 \pm 0.043	2.498 \pm 0.060	3.936 \pm 0.230	0.674 \pm 0.026	n = 5	[BYP] Siemens ADVIA Centaur CP
3.102 \pm 0.069	0.974 \pm 0.058	2.493 \pm 0.074	3.782 \pm 0.055	0.674 \pm 0.074	n = 17	[DUE] Siemens Dimension EXL
3.146 \pm 0.096	0.981 \pm 0.062	2.493 \pm 0.113	3.830 \pm 0.130	0.682 \pm 0.078	n = 10	[DUR] Siemens Dimension RxL
3.099 \pm 0.055	0.996 \pm 0.015	2.379 \pm 0.044	3.720 \pm 0.065	0.654 \pm 0.035	n = 42	[DUT] Siemens Dimension Vista
3.099 \pm 0.135	0.980 \pm 0.050	2.422 \pm 0.040	3.753 \pm 0.059	0.712 \pm 0.032	n = 6	[DUX] Siemens Dimension Xpand
3.070 \pm 0.261	1.048 \pm 0.116	2.455 \pm 0.135	3.697 \pm 0.260	0.699 \pm 0.056	n = 4	[DPD] Siemens Immulite 2000
						<Reagents>
2.685 \pm 0.135	0.824 \pm 0.057	2.136 \pm 0.116	3.347 \pm 0.183	0.581 \pm 0.052	n = 21	[AB1] Abbott
2.907 \pm 0.157	0.952 \pm 0.076	2.311 \pm 0.123	3.584 \pm 0.222	0.626 \pm 0.055	n = 28	[BC1] Beckman Coulter
2.911 \pm 0.160	0.903 \pm 0.084	2.305 \pm 0.145	3.669 \pm 0.255	0.657 \pm 0.064	n = 17	[OL1] Beckman Coulter AU Series
2.700 \pm 0.000	0.800 \pm 0.000	2.100 \pm 0.000	3.400 \pm 0.000	0.563 \pm 0.055	n = 5	[MG2] Microgenics DRI
2.691 \pm 0.092	0.731 \pm 0.076	2.094 \pm 0.096	3.275 \pm 0.106	0.472 \pm 0.064	n = 29	[JJ1] Ortho Clinical Diagnostics
2.828 \pm 0.104	0.926 \pm 0.114	2.240 \pm 0.108	3.544 \pm 0.119	0.662 \pm 0.070	n = 24	[RO4] Roche cobas c311/c501/c502/c701/c702
3.553 \pm 0.071	1.044 \pm 0.070	2.823 \pm 0.082	4.323 \pm 0.082	0.721 \pm 0.047	n = 7	[RO3] Roche Elecsys/Modular E/e601/e411
2.799 \pm 0.129	0.997 \pm 0.152	2.262 \pm 0.126	3.454 \pm 0.146	0.697 \pm 0.112	n = 7	[RO2] Roche Hitachi and Modular D/P
2.920 \pm 0.101	0.938 \pm 0.122	2.269 \pm 0.139	3.633 \pm 0.192	0.657 \pm 0.050	n = 6	[RO1] Roche Integra and MIRA
2.774 \pm 0.072	0.972 \pm 0.069	2.264 \pm 0.109	3.465 \pm 0.112	0.665 \pm 0.057	n = 5	[RO5] Roche Tina-quant
3.064 \pm 0.200	1.040 \pm 0.132	2.479 \pm 0.161	3.725 \pm 0.210	0.700 \pm 0.127	n = 32	[BY1] Siemens ADVIA/ADVISIA Centaur
3.110 \pm 0.090	0.982 \pm 0.051	2.460 \pm 0.093	3.772 \pm 0.104	0.681 \pm 0.060	n = 43	[DA5] Siemens Dimension
3.102 \pm 0.049	0.996 \pm 0.012	2.375 \pm 0.045	3.726 \pm 0.066	0.649 \pm 0.038	n = 32	[DA6] Siemens Dimension LOCI
3.130 \pm 0.256	1.084 \pm 0.118	2.508 \pm 0.162	3.791 \pm 0.297	0.723 \pm 0.069	n = 5	[DP5] Siemens Immulite
2.864 \pm 0.078	0.900 \pm 0.000	2.195 \pm 0.012	3.618 \pm 0.265	0.644 \pm 0.106	n = 5	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Ethanol (mg/dL)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
219.57 ± 10.09	72.64 ± 3.20	116.38 ± 5.44	169.95 ± 7.44	145.75 ± 6.61	n = 219	[---] All Methods & Instruments
227.3	75.8	118.6	174.7	153.9		[---] Weigh-in value
						<Instruments>
215.44 ± 3.60	72.51 ± 1.27	115.59 ± 2.60	167.93 ± 2.39	144.58 ± 2.62	n = 15	[ABJ] Abbott Architect c System
220.69 ± 10.35	72.08 ± 3.95	115.40 ± 5.36	168.98 ± 8.02	144.76 ± 6.75	n = 20	[OLC] Beckman Coulter AU Chemistry System
216.34 ± 16.20	72.48 ± 5.82	114.91 ± 7.69	169.68 ± 6.68	146.35 ± 3.74	n = 10	[BCG] Beckman Coulter UniCel DxC 600
226.78 ± 6.66	75.14 ± 1.98	120.22 ± 3.49	174.33 ± 4.90	151.53 ± 6.15	n = 6	[BCH] Beckman Coulter UniCel DxC 800
221.01 ± 8.68	71.81 ± 4.87	116.23 ± 5.38	170.01 ± 8.59	146.02 ± 7.34	n = 12	[GCC] Gas Chromatograph
200.89 ± 6.88	69.49 ± 1.05	107.00 ± 3.79	158.27 ± 6.45	135.03 ± 3.58	n = 10	[JJF] Ortho Vitros 5,1FS
200.99 ± 7.48	68.50 ± 1.50	106.88 ± 3.53	158.35 ± 5.26	134.64 ± 4.18	n = 18	[JJG] Ortho Vitros 5600
223.89 ± 3.43	74.29 ± 1.75	118.30 ± 2.81	173.99 ± 3.76	149.17 ± 2.92	n = 20	[ROC] Roche cobas c501
215.42 ± 3.38	71.20 ± 0.73	114.47 ± 1.88	166.72 ± 1.84	144.16 ± 1.80	n = 6	[ROT] Roche Cobas INTEGRA 800
224.20 ± 4.00	73.53 ± 1.89	118.46 ± 2.41	172.11 ± 3.49	148.53 ± 2.22	n = 10	[ROD] Roche MODULAR D/P
227.76 ± 2.22	74.90 ± 1.62	119.67 ± 2.25	176.80 ± 3.45	151.17 ± 3.52	n = 11	[BYE] Siemens ADVIA 1800
221.83 ± 5.87	74.06 ± 2.06	118.07 ± 2.65	171.72 ± 3.49	147.93 ± 3.08	n = 15	[DUE] Siemens Dimension EXL
224.10 ± 8.96	74.60 ± 3.19	120.36 ± 3.57	172.41 ± 8.45	148.29 ± 6.63	n = 8	[DUR] Siemens Dimension RxL
220.82 ± 7.30	72.67 ± 2.78	117.38 ± 5.08	170.62 ± 6.39	146.33 ± 5.89	n = 39	[DUT] Siemens Dimension Vista
218.97 ± 6.87	72.00 ± 0.90	116.21 ± 3.19	170.77 ± 1.45	145.67 ± 2.31	n = 7	[DUX] Siemens Dimension Xpand
						<Reagents>
215.19 ± 3.46	72.40 ± 1.31	115.51 ± 2.46	167.91 ± 2.24	144.41 ± 2.49	n = 16	[AB1] Abbott
223.29 ± 10.40	73.52 ± 4.05	117.81 ± 5.82	171.47 ± 7.44	147.39 ± 7.28	n = 18	[BC1] Beckman Coulter
222.53 ± 10.90	72.75 ± 3.77	116.53 ± 5.23	170.80 ± 7.75	146.40 ± 5.95	n = 16	[OL1] Beckman Coulter AU Series
220.66 ± 9.28	71.91 ± 5.21	116.18 ± 5.81	169.70 ± 9.14	146.03 ± 7.83	n = 11	[IH1] In-House
201.54 ± 7.73	68.84 ± 1.57	107.27 ± 3.48	158.80 ± 5.48	135.24 ± 4.14	n = 31	[JJ1] Ortho Clinical Diagnostics
223.32 ± 3.88	74.00 ± 1.73	117.79 ± 3.01	173.28 ± 4.00	148.61 ± 3.14	n = 23	[R04] Roche cobas c311/c501/c502/c701/c702
224.20 ± 4.00	73.53 ± 1.89	118.46 ± 2.41	172.11 ± 3.49	148.53 ± 2.22	n = 10	[R02] Roche Hitachi and Modular D/P
216.04 ± 3.42	71.34 ± 0.74	114.81 ± 1.74	167.11 ± 1.87	144.52 ± 1.72	n = 7	[R01] Roche Integra and MIRA
227.12 ± 3.33	75.08 ± 2.12	119.88 ± 2.50	177.50 ± 4.33	151.14 ± 4.57	n = 7	[BY1] Siemens ADVIA/ADVIS Centaur
228.57 ± 0.85	75.25 ± 1.53	120.32 ± 2.58	177.14 ± 3.62	152.34 ± 3.19	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
221.12 ± 7.22	73.16 ± 2.76	117.85 ± 4.41	171.10 ± 5.64	146.94 ± 5.18	n = 69	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)**Ethosuximide (mg/L)**

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
181.32 ± 21.03	56.33 ± 4.42	37.80 ± 3.54	90.90 ± 8.71	140.51 ± 6.86	n = 7	[---] All Methods & Instruments [---] Weigh-in value
179.0	58.7	36.0	88.1	138.3		
194.08 ± 14.64	57.57 ± 4.08	39.45 ± 2.27	95.49 ± 6.35	142.86 ± 5.58	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
186.08 ± 17.32	57.36 ± 3.53	38.64 ± 2.70	92.88 ± 7.59	141.32 ± 4.67	n = 6	<Reagents> [SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Gentamicin (mg/L)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
6.17 ± 0.51	1.99 ± 0.20	13.04 ± 1.34	8.50 ± 0.68	16.79 ± 1.79	n = 167	[---] All Methods & Instruments
5.9	2.0	13.1	8.0	16.3		[---] Weigh-in value
						<Instruments>
5.65 ± 0.06	1.90 ± 0.17	11.67 ± 0.16	7.70 ± 0.18	15.04 ± 0.38	n = 4	[ABJ] Abbott Architect c System
6.15 ± 0.27	2.04 ± 0.08	12.66 ± 0.89	8.41 ± 0.41	15.68 ± 0.99	n = 11	[ABH] Abbott Architect i System
6.62 ± 0.40	2.20 ± 0.14	14.19 ± 1.48	9.12 ± 0.69	18.63 ± 1.50	n = 15	[OLC] Beckman Coulter AU Chemistry System
6.76 ± 0.30	1.95 ± 0.10	14.00 ± 0.39	9.25 ± 0.19	18.11 ± 0.73	n = 6	[BCG] Beckman Coulter UniCel DxC 600
6.70 ± 0.24	2.13 ± 0.16	13.53 ± 1.02	9.33 ± 0.22	16.67 ± 2.63	n = 8	[BCH] Beckman Coulter UniCel DxC 800
6.52 ± 0.27	2.19 ± 0.08	14.80 ± 0.90	9.10 ± 0.47	18.55 ± 1.50	n = 7	[JJF] Ortho Vitros 5,1FS
6.59 ± 0.20	2.21 ± 0.10	14.01 ± 0.45	9.24 ± 0.32	17.86 ± 1.07	n = 13	[JJG] Ortho Vitros 5600
5.51 ± 0.27	1.69 ± 0.11	11.45 ± 1.10	7.74 ± 0.33	14.24 ± 2.45	n = 12	[ROC] Roche cobas c501
5.35 ± 0.19	1.36 ± 0.90	11.69 ± 2.16	7.60 ± 0.64	13.29 ± 2.47	n = 3	[ROS] Roche Cobas INTEGRA 400
5.49 ± 0.21	1.92 ± 0.08	12.08 ± 0.71	7.66 ± 0.54	14.57 ± 3.82	n = 11	[ROT] Roche Cobas INTEGRA 800
6.02 ± 0.20	1.92 ± 0.20	12.59 ± 1.29	8.26 ± 0.22	16.49 ± 1.06	n = 8	[ROD] Roche MODULAR D/P
6.12 ± 0.45	1.92 ± 0.12	13.37 ± 1.48	8.31 ± 0.37	17.26 ± 1.64	n = 13	[COB] Siemens ADVIA Centaur
6.00 ± 0.11	1.88 ± 0.04	13.20 ± 0.35	8.37 ± 0.09	17.19 ± 0.80	n = 4	[DUE] Siemens Dimension EXL
6.15 ± 0.11	2.10 ± 0.09	13.15 ± 0.47	8.41 ± 0.14	17.36 ± 1.36	n = 5	[DUR] Siemens Dimension RxL
6.11 ± 0.28	1.91 ± 0.13	12.70 ± 0.67	8.48 ± 0.32	16.57 ± 1.06	n = 41	[DUT] Siemens Dimension Vista
						<Reagents>
6.01 ± 0.33	2.02 ± 0.09	12.33 ± 0.92	8.22 ± 0.50	15.46 ± 0.90	n = 15	[AB1] Abbott
6.78 ± 0.30	2.07 ± 0.17	13.82 ± 0.79	9.27 ± 0.23	18.05 ± 0.62	n = 16	[BC1] Beckman Coulter
6.62 ± 0.30	2.16 ± 0.10	14.25 ± 0.76	9.09 ± 0.48	18.94 ± 1.16	n = 8	[OL1] Beckman Coulter AU Series
6.57 ± 0.24	2.20 ± 0.09	14.35 ± 0.84	9.20 ± 0.38	18.07 ± 1.20	n = 20	[JJ1] Ortho Clinical Diagnostics
5.43 ± 0.20	1.71 ± 0.10	11.37 ± 1.33	7.69 ± 0.32	13.64 ± 2.88	n = 7	[RO4] Roche cobas c311/c501/c502/c701/c702
5.92 ± 0.24	2.00 ± 0.06	12.29 ± 1.37	8.25 ± 0.27	16.09 ± 1.62	n = 6	[RO2] Roche Hitachi and Modular D/P
5.46 ± 0.22	1.91 ± 0.08	11.84 ± 1.45	7.63 ± 0.57	14.28 ± 3.57	n = 14	[R01] Roche Integra and MIRA
6.20 ± 0.53	1.92 ± 0.11	13.41 ± 1.40	8.37 ± 0.43	17.24 ± 1.53	n = 14	[BY1] Siemens ADVIA/ADVIS Centaur
6.53 ± 0.32	2.25 ± 0.19	13.29 ± 1.08	8.43 ± 0.69	12.25 ± 8.75	n = 3	[BY5] Siemens ADVIA/Syva Emit 2000
6.11 ± 0.25	1.92 ± 0.14	12.80 ± 0.66	8.46 ± 0.28	16.68 ± 1.08	n = 50	[DA5] Siemens Dimension
6.43 ± 0.24	2.23 ± 0.17	13.88 ± 1.53	9.14 ± 1.02	18.12 ± 1.30	n = 6	[SY4] Syva Emit 2000
5.54 ± 0.29	1.66 ± 0.06	11.76 ± 0.97	7.70 ± 0.24	15.28 ± 1.07	n = 5	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Lithium (mmol/L)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
2.549 ± 0.125 2.8	0.833 ± 0.056 0.9	0.462 ± 0.058 0.5	1.326 ± 0.071 1.5	1.760 ± 0.090 2.0	n = 198	[---] All Methods & Instruments [---] Weigh-in value
						<Instruments>
2.473 ± 0.073	0.838 ± 0.053	0.474 ± 0.035	1.325 ± 0.045	1.742 ± 0.058	n = 14	[ABJ] Abbott Architect c System
2.492 ± 0.086	0.805 ± 0.013	0.454 ± 0.042	1.311 ± 0.053	1.731 ± 0.059	n = 19	[OLC] Beckman Coulter AU Chemistry System
2.531 ± 0.081	0.797 ± 0.005	0.408 ± 0.033	1.287 ± 0.072	1.719 ± 0.063	n = 8	[BCG] Beckman Coulter UniCel DxC 600
2.562 ± 0.041	0.836 ± 0.040	0.447 ± 0.036	1.321 ± 0.022	1.771 ± 0.046	n = 8	[BCH] Beckman Coulter UniCel DxC 800
2.404 ± 0.234	0.792 ± 0.086	0.456 ± 0.039	1.256 ± 0.137	1.654 ± 0.162	n = 3	[ICP] ICP/MS
2.711 ± 0.101	0.866 ± 0.054	0.450 ± 0.057	1.411 ± 0.101	1.856 ± 0.072	n = 8	[JJF] Ortho Vitros 5,1FS
2.721 ± 0.093	0.876 ± 0.067	0.482 ± 0.073	1.437 ± 0.073	1.914 ± 0.109	n = 19	[JJG] Ortho Vitros 5600
2.491 ± 0.055	0.819 ± 0.041	0.485 ± 0.035	1.321 ± 0.051	1.764 ± 0.060	n = 21	[ROC] Roche cobas c501
2.630 ± 0.072	0.825 ± 0.029	0.489 ± 0.013	1.314 ± 0.032	1.757 ± 0.052	n = 6	[ROT] Roche Cobas INTEGRA 800
2.405 ± 0.069	0.778 ± 0.063	0.442 ± 0.068	1.276 ± 0.057	1.671 ± 0.071	n = 8	[ROD] Roche MODULAR D/P
2.698 ± 0.108	0.869 ± 0.048	0.464 ± 0.071	1.398 ± 0.072	1.876 ± 0.092	n = 14	[BYE] Siemens ADVIA 1800
2.547 ± 0.034	0.786 ± 0.056	0.379 ± 0.045	1.263 ± 0.041	1.706 ± 0.030	n = 5	[DUE] Siemens Dimension EXL
2.500 ± 0.058	0.801 ± 0.041	0.400 ± 0.000	1.276 ± 0.056	1.700 ± 0.049	n = 6	[DUR] Siemens Dimension RxL
2.527 ± 0.050	0.835 ± 0.038	0.476 ± 0.041	1.312 ± 0.029	1.735 ± 0.035	n = 40	[DUT] Siemens Dimension Vista
2.572 ± 0.051	0.728 ± 0.051	0.372 ± 0.051	1.300 ± 0.000	1.700 ± 0.000	n = 3	[DUX] Siemens Dimension Xpand
						<Reagents>
2.480 ± 0.072	0.842 ± 0.053	0.471 ± 0.036	1.327 ± 0.047	1.747 ± 0.059	n = 13	[AB1] Abbott
2.581 ± 0.061	0.855 ± 0.045	0.508 ± 0.015	1.306 ± 0.010	1.803 ± 0.005	n = 3	[AV1] AVL Scientific
2.550 ± 0.085	0.824 ± 0.044	0.435 ± 0.042	1.316 ± 0.050	1.752 ± 0.069	n = 14	[BC1] Beckman Coulter
2.514 ± 0.109	0.824 ± 0.040	0.451 ± 0.040	1.324 ± 0.051	1.744 ± 0.050	n = 13	[OL1] Beckman Coulter AU Series
2.423 ± 0.270	0.809 ± 0.116	0.473 ± 0.069	1.251 ± 0.127	1.684 ± 0.218	n = 3	[IH1] In-House
2.718 ± 0.092	0.870 ± 0.063	0.468 ± 0.069	1.427 ± 0.083	1.891 ± 0.102	n = 28	[JJ1] Ortho Clinical Diagnostics
2.493 ± 0.061	0.832 ± 0.049	0.500 ± 0.000	1.317 ± 0.042	1.766 ± 0.056	n = 24	[RO4] Roche cobas c311/c501/c502/c701/c702
2.630 ± 0.072	0.825 ± 0.029	0.489 ± 0.013	1.314 ± 0.032	1.757 ± 0.052	n = 6	[RO1] Roche Integra and MIRA
2.718 ± 0.104	0.874 ± 0.049	0.480 ± 0.069	1.405 ± 0.059	1.888 ± 0.084	n = 14	[BY1] Siemens ADVIA/ADVISIA Centaur
2.529 ± 0.052	0.824 ± 0.046	0.454 ± 0.058	1.307 ± 0.032	1.727 ± 0.037	n = 54	[DA5] Siemens Dimension
2.440 ± 0.072	0.789 ± 0.036	0.440 ± 0.052	1.273 ± 0.048	1.691 ± 0.050	n = 14	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Phenobarbital (mg/L)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
48.98 ± 2.80 50.0	16.18 ± 1.13 16.7	13.69 ± 1.34 13.2	56.27 ± 3.77 58.1	36.82 ± 2.16 37.8	n = 193	[---] All Methods & Instruments [---] Weigh-in value
						<Instruments>
50.25 ± 1.46	16.96 ± 0.39	13.87 ± 0.50	60.82 ± 1.05	37.87 ± 0.68	n = 3	[ABJ] Abbott Architect c System
50.60 ± 1.53	16.83 ± 0.47	14.07 ± 0.41	59.97 ± 1.74	38.35 ± 0.68	n = 17	[ABH] Abbott Architect i System
48.26 ± 2.77	15.42 ± 0.53	12.86 ± 0.51	55.72 ± 3.51	35.85 ± 1.88	n = 24	[OLC] Beckman Coulter AU Chemistry System
45.23 ± 2.32	16.18 ± 0.67	15.41 ± 0.53	51.54 ± 2.39	34.05 ± 0.91	n = 9	[BCG] Beckman Coulter UniCel DxC 600
45.45 ± 1.93	15.83 ± 1.08	14.78 ± 0.88	51.98 ± 2.80	34.11 ± 1.33	n = 8	[BCH] Beckman Coulter UniCel DxC 800
48.23 ± 0.73	15.08 ± 0.15	12.32 ± 0.20	55.23 ± 0.20	36.79 ± 0.91	n = 4	[ROJ] Roche cobas c311
48.71 ± 1.59	15.69 ± 0.66	12.80 ± 0.76	55.67 ± 1.99	36.33 ± 1.27	n = 21	[ROC] Roche cobas c501
47.68 ± 1.11	15.16 ± 0.39	12.61 ± 0.40	56.07 ± 1.72	35.93 ± 1.19	n = 10	[ROT] Roche Cobas INTEGRA 800
50.21 ± 2.48	16.22 ± 1.35	13.28 ± 1.04	58.35 ± 1.25	38.28 ± 2.05	n = 10	[ROD] Roche MODULAR D/P
52.92 ± 2.74	17.65 ± 0.72	15.37 ± 0.66	63.72 ± 4.99	41.15 ± 2.62	n = 13	[COB] Siemens ADVIA Centaur
50.83 ± 2.20	16.45 ± 1.04	14.45 ± 0.53	56.49 ± 2.48	36.91 ± 1.38	n = 8	[DUE] Siemens Dimension EXL
52.08 ± 2.74	17.09 ± 0.68	14.58 ± 0.80	58.36 ± 2.75	38.64 ± 1.67	n = 8	[DUR] Siemens Dimension RxL
48.44 ± 1.43	16.47 ± 1.11	13.96 ± 1.28	54.95 ± 2.40	36.85 ± 1.42	n = 40	[DUT] Siemens Dimension Vista
50.15 ± 4.92	16.63 ± 2.31	14.56 ± 1.89	58.09 ± 5.30	36.96 ± 2.89	n = 3	[DUX] Siemens Dimension Xpand
						<Reagents>
50.43 ± 1.41	16.88 ± 0.45	14.05 ± 0.45	60.06 ± 1.72	38.21 ± 0.61	n = 19	[AB1] Abbott
45.24 ± 2.14	16.10 ± 0.87	15.14 ± 0.85	51.82 ± 2.71	34.11 ± 1.13	n = 19	[BC1] Beckman Coulter
48.11 ± 2.62	15.53 ± 0.49	12.90 ± 0.18	55.21 ± 3.73	35.93 ± 1.75	n = 11	[OL1] Beckman Coulter AU Series
50.90 ± 1.52	16.20 ± 0.98	14.27 ± 0.72	57.81 ± 1.28	38.26 ± 1.36	n = 4	[MG1] Microgenics CEDIA
48.66 ± 1.44	15.53 ± 0.71	12.61 ± 0.78	55.52 ± 1.71	36.37 ± 1.19	n = 26	[RO4] Roche cobas c311/c501/c502/c701/c702
50.72 ± 3.29	14.80 ± 2.38	11.89 ± 2.47	58.49 ± 1.91	37.39 ± 1.61	n = 3	[RO2] Roche Hitachi and Modular D/P
47.75 ± 1.45	15.23 ± 0.46	12.67 ± 0.46	55.80 ± 1.65	35.92 ± 1.40	n = 12	[R01] Roche Integra and MIRA
50.21 ± 1.21	16.43 ± 1.12	13.22 ± 0.94	57.99 ± 1.34	38.23 ± 2.29	n = 8	[R06] Roche ONLINE
52.89 ± 2.83	17.49 ± 0.88	15.26 ± 0.89	62.63 ± 5.62	40.60 ± 2.95	n = 15	[BY1] Siemens ADVIA/ADVISIA Centaur
45.90 ± 4.32	15.18 ± 0.69	12.14 ± 0.35	54.67 ± 4.36	35.68 ± 2.70	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
49.10 ± 2.34	16.60 ± 1.14	14.17 ± 1.26	55.69 ± 2.94	37.09 ± 1.64	n = 59	[DA5] Siemens Dimension
46.94 ± 2.72	15.06 ± 0.48	12.65 ± 0.53	54.49 ± 4.43	34.54 ± 1.54	n = 8	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Phenytoin (mg/L)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
25.18 ± 1.95	8.18 ± 0.75	11.07 ± 0.92	14.20 ± 1.03	21.51 ± 1.57	n = 257	[---] All Methods & Instruments
25.5	8.5	11.0	14.0	22.0		[---] Weigh-in value
						<Instruments>
25.17 ± 2.93	7.75 ± 0.19	10.75 ± 0.36	13.78 ± 0.50	21.30 ± 1.17	n = 3	[ABJ] Abbott Architect c System
24.68 ± 0.96	8.20 ± 0.25	11.02 ± 0.39	14.11 ± 0.59	20.96 ± 0.81	n = 18	[ABH] Abbott Architect i System
25.07 ± 1.18	7.76 ± 0.56	10.77 ± 0.44	14.12 ± 0.72	21.38 ± 1.24	n = 33	[OLC] Beckman Coulter AU Chemistry System
25.11 ± 1.05	8.05 ± 0.24	11.05 ± 0.21	14.14 ± 0.36	21.58 ± 0.66	n = 10	[BCG] Beckman Coulter UniCel DxC 600
24.10 ± 0.83	8.10 ± 0.35	11.04 ± 0.43	13.93 ± 0.55	21.30 ± 0.77	n = 9	[BCH] Beckman Coulter UniCel DxC 800
22.95 ± 1.23	7.69 ± 0.49	10.18 ± 0.42	13.54 ± 0.83	19.94 ± 1.36	n = 9	[JJF] Ortho Vitros 5,1FS
22.83 ± 1.00	7.59 ± 0.39	10.17 ± 0.47	13.35 ± 0.48	20.16 ± 0.88	n = 19	[JJG] Ortho Vitros 5600
24.73 ± 1.34	7.46 ± 0.26	10.35 ± 0.54	13.11 ± 0.72	20.44 ± 1.28	n = 3	[ROJ] Roche cobas c311
23.81 ± 1.51	7.74 ± 0.54	10.39 ± 0.64	13.45 ± 0.73	20.64 ± 1.19	n = 23	[ROC] Roche cobas c501
24.78 ± 1.25	7.75 ± 0.33	10.33 ± 0.41	13.45 ± 0.51	20.82 ± 1.07	n = 11	[ROT] Roche Cobas INTEGRA 800
25.33 ± 1.17	7.98 ± 0.52	11.04 ± 0.57	14.10 ± 0.67	21.46 ± 1.17	n = 12	[ROD] Roche MODULAR D/P
26.00 ± 2.59	8.72 ± 0.71	12.29 ± 0.80	15.05 ± 1.45	22.18 ± 1.97	n = 9	[BYE] Siemens ADVIA 1800
28.85 ± 2.88	8.72 ± 0.62	12.29 ± 0.99	15.88 ± 1.10	24.32 ± 2.37	n = 14	[COB] Siemens ADVIA Centaur
30.98 ± 1.34	9.07 ± 0.58	12.69 ± 0.67	17.41 ± 0.84	25.75 ± 1.15	n = 4	[BYP] Siemens ADVIA Centaur CP
26.40 ± 1.03	8.43 ± 0.52	11.26 ± 0.73	14.47 ± 0.53	22.16 ± 1.16	n = 16	[DUE] Siemens Dimension EXL
26.13 ± 1.82	8.60 ± 0.62	11.42 ± 0.64	14.55 ± 0.65	22.00 ± 1.23	n = 8	[DUR] Siemens Dimension RxL
26.75 ± 1.04	9.19 ± 0.61	12.10 ± 0.65	15.30 ± 0.83	22.78 ± 1.10	n = 41	[DUT] Siemens Dimension Vista
25.41 ± 1.57	8.97 ± 0.42	11.30 ± 0.56	14.07 ± 0.75	22.14 ± 1.25	n = 5	[DUX] Siemens Dimension Xpand
						<Reagents>
24.68 ± 1.15	8.15 ± 0.29	10.98 ± 0.40	14.06 ± 0.59	21.03 ± 0.90	n = 21	[AB1] Abbott
24.62 ± 0.99	8.07 ± 0.30	11.01 ± 0.32	14.07 ± 0.44	21.43 ± 0.75	n = 21	[BC1] Beckman Coulter
25.17 ± 0.97	7.91 ± 0.35	10.73 ± 0.50	14.03 ± 0.61	21.57 ± 1.40	n = 17	[OL1] Beckman Coulter AU Series
25.19 ± 0.89	7.36 ± 0.75	11.01 ± 0.51	14.88 ± 0.65	21.66 ± 0.88	n = 6	[MG1] Microgenetics CEDIA
22.84 ± 1.09	7.61 ± 0.42	10.17 ± 0.44	13.38 ± 0.59	20.08 ± 0.98	n = 29	[JJ1] Ortho Clinical Diagnostics
23.91 ± 1.42	7.66 ± 0.47	10.32 ± 0.55	13.41 ± 0.70	20.62 ± 1.19	n = 28	[RO4] Roche cobas c311/c501/c502/c701/c702
24.81 ± 1.55	8.09 ± 0.64	10.98 ± 0.45	14.18 ± 0.63	21.45 ± 0.98	n = 4	[RO2] Roche Hitachi and Modular D/P
24.71 ± 1.24	7.75 ± 0.30	10.35 ± 0.39	13.41 ± 0.55	20.75 ± 1.06	n = 13	[RO1] Roche Integra and MIRA
25.66 ± 0.81	7.97 ± 0.42	11.05 ± 0.57	13.98 ± 0.66	21.48 ± 1.16	n = 9	[RO6] Roche ONLINE
29.48 ± 2.86	8.80 ± 0.64	12.38 ± 0.94	16.29 ± 1.29	24.74 ± 2.25	n = 18	[BY1] Siemens ADVIA/ADVISIA Centaur
25.79 ± 2.88	8.71 ± 0.71	12.28 ± 0.81	14.59 ± 1.12	21.74 ± 2.30	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
26.53 ± 1.23	8.93 ± 0.68	11.76 ± 0.78	14.93 ± 0.89	22.52 ± 1.18	n = 70	[DAS] Siemens Dimension
24.70 ± 1.54	7.86 ± 0.58	10.84 ± 0.36	13.85 ± 0.90	21.27 ± 1.16	n = 8	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)**Free Phenytoin (mg/L)**

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
3.73 ± 0.46	1.07 ± 0.14	1.58 ± 0.17	2.63 ± 0.42	3.43 ± 0.50	n = 21	[---] All Methods & Instruments
3.77 ± 0.64	1.03 ± 0.17	1.60 ± 0.18	2.54 ± 0.63	3.33 ± 0.62	n = 9	<Instruments>
3.87 ± 0.34	1.12 ± 0.08	1.60 ± 0.15	2.74 ± 0.23	3.55 ± 0.32	n = 5	[OLC] Beckman Coulter AU Chemistry System [ROT] Roche Cobas INTEGRA 800
3.07 ± 0.05	0.90 ± 0.00	1.43 ± 0.05	1.80 ± 0.00	2.68 ± 0.24	n = 3	<Reagents>
3.89 ± 0.26	1.11 ± 0.06	1.58 ± 0.13	2.74 ± 0.18	3.55 ± 0.26	n = 7	[OL1] Beckman Coulter AU Series [RO1] Roche Integra and MIRA
3.92 ± 0.20	1.10 ± 0.13	1.72 ± 0.15	2.82 ± 0.24	3.64 ± 0.46	n = 6	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)**Primidone (mg/L)**

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
16.99 ± 0.80	5.77 ± 0.24	12.76 ± 0.53	6.04 ± 0.42	10.49 ± 0.49	n = 13	[---] All Methods & Instruments
17.5	5.8	13.4	6.2	10.4		[---] Weigh-in value
						<Instruments>
16.85 ± 0.77	5.74 ± 0.15	12.54 ± 0.36	6.16 ± 0.22	10.52 ± 0.34	n = 7	[OLC] Beckman Coulter AU Chemistry System
17.02 ± 0.49	5.71 ± 0.20	13.37 ± 0.68	5.57 ± 0.14	10.29 ± 0.29	n = 3	[ROT] Roche Cobas INTEGRA 800
						<Reagents>
17.02 ± 0.49	5.71 ± 0.20	13.37 ± 0.68	5.57 ± 0.14	10.29 ± 0.29	n = 3	[RO1] Roche Integra and MIRA
17.16 ± 0.90	5.85 ± 0.19	12.75 ± 0.40	6.30 ± 0.25	10.72 ± 0.45	n = 8	[SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)**Procainamide (mg/L)**

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
15.76 ± 0.75	5.25 ± 0.09	8.57 ± 0.30	4.87 ± 0.24	12.70 ± 0.68	n = 12	[---] All Methods & Instruments
16.1	5.4	8.1	4.2	12.9		[---] Weigh-in value
16.51 ± 0.34	5.27 ± 0.08	8.54 ± 0.48	4.98 ± 0.29	12.89 ± 0.65	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
13.85 ± 6.69	4.52 ± 2.18	7.24 ± 3.49	4.24 ± 2.05	10.89 ± 5.30	n = 4	<Reagents> [SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)**N-Acetyl-Procainamide (mg/L)**

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
12.33 ± 0.75	4.09 ± 0.19	20.19 ± 2.33	9.55 ± 0.36	5.66 ± 0.13	n = 12	[---] All Methods & Instruments
12.6	4.2	20.2	9.6	5.6		[---] Weigh-in value
11.91 ± 0.42	4.03 ± 0.15	20.96 ± 1.87	9.67 ± 0.47	5.84 ± 0.34	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
12.65 ± 1.20	4.02 ± 0.04	20.07 ± 2.14	9.54 ± 0.33	5.62 ± 0.15	n = 4	<Reagents> [SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)**Quinidine (mg/L)**

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
6.24 ± 0.41 6.5	2.03 ± 0.15 2.2	5.23 ± 0.36 5.3	1.37 ± 0.10 1.3	3.68 ± 0.18 4.0	n = 11	[---] All Methods & Instruments [---] Weigh-in value
5.95 ± 0.62 6.57 ± 0.14	1.88 ± 0.09 2.13 ± 0.05	4.80 ± 0.35 5.60 ± 0.18	1.27 ± 0.05 1.47 ± 0.05	3.35 ± 0.32 3.84 ± 0.10	n = 3 n = 3	<Instruments> [OLC] Beckman Coulter AU Chemistry System [ROC] Roche cobas c501

Summary of Participant Performance (Mean and Standard Deviation)

Salicylate (mg/L)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
81.20 ± 3.89	26.15 ± 0.84	44.83 ± 1.61	19.83 ± 1.05	58.22 ± 2.14	n = 211	[---] All Methods & Instruments [---] Weigh-in value
79.1	26.4	43.5	19.3	57.0		
						<Instruments>
83.39 ± 1.36	25.48 ± 0.73	44.81 ± 0.92	18.84 ± 0.71	58.68 ± 0.99	n = 17	[ABJ] Abbott Architect c System
84.16 ± 5.77	26.55 ± 1.27	46.60 ± 2.01	20.85 ± 1.16	60.33 ± 3.11	n = 23	[OLC] Beckman Coulter AU Chemistry System
85.57 ± 3.25	26.25 ± 1.16	45.77 ± 1.49	19.18 ± 0.93	60.77 ± 2.07	n = 9	[BCG] Beckman Coulter UniCel DxC 600
84.80 ± 1.03	25.45 ± 0.71	45.19 ± 0.50	19.04 ± 0.56	59.75 ± 0.78	n = 7	[BCH] Beckman Coulter UniCel DxC 800
81.97 ± 5.43	26.61 ± 0.65	45.73 ± 1.92	20.98 ± 0.78	58.42 ± 2.20	n = 10	[JJF] Ortho Vitros 5,1FS
80.15 ± 4.69	26.56 ± 0.73	46.28 ± 1.74	21.24 ± 0.83	58.04 ± 1.73	n = 18	[JTG] Ortho Vitros 5600
80.50 ± 4.00	25.84 ± 0.60	45.03 ± 1.06	18.76 ± 0.58	59.16 ± 1.55	n = 21	[ROC] Roche cobas c501
77.03 ± 1.88	24.58 ± 0.34	42.53 ± 0.93	18.74 ± 0.47	55.31 ± 0.72	n = 7	[ROT] Roche Cobas INTEGRA 800
79.62 ± 2.71	25.67 ± 0.80	43.19 ± 1.22	19.35 ± 0.64	56.89 ± 1.24	n = 8	[ROD] Roche MODULAR D/P
87.50 ± 1.54	27.13 ± 1.05	47.22 ± 1.30	19.77 ± 0.86	61.80 ± 1.17	n = 10	[BYE] Siemens ADVIA 1800
79.84 ± 0.60	26.28 ± 0.29	44.15 ± 0.30	20.10 ± 0.28	57.09 ± 0.58	n = 15	[DUE] Siemens Dimension EXL
79.71 ± 0.72	26.40 ± 0.40	44.12 ± 0.52	20.07 ± 0.29	57.28 ± 0.62	n = 8	[DUR] Siemens Dimension RxL
79.80 ± 1.07	26.31 ± 0.41	44.13 ± 0.81	19.97 ± 0.41	57.13 ± 0.89	n = 39	[DUT] Siemens Dimension Vista
79.62 ± 1.37	26.18 ± 0.37	44.01 ± 0.44	19.90 ± 0.07	57.00 ± 0.96	n = 6	[DUX] Siemens Dimension Xpand
						<Reagents>
83.39 ± 1.36	25.48 ± 0.73	44.81 ± 0.92	18.84 ± 0.71	58.68 ± 0.99	n = 17	[AB1] Abbott
85.19 ± 1.93	25.97 ± 0.95	45.37 ± 0.92	19.24 ± 0.93	60.27 ± 1.60	n = 19	[BC1] Beckman Coulter
83.60 ± 5.32	26.62 ± 1.41	46.50 ± 1.47	20.80 ± 1.09	60.48 ± 3.03	n = 17	[OL1] Beckman Coulter AU Series
81.01 ± 4.91	26.67 ± 0.74	45.92 ± 1.80	21.18 ± 0.78	58.11 ± 1.79	n = 31	[JJ1] Ortho Clinical Diagnostics
80.26 ± 4.36	25.80 ± 0.62	44.97 ± 1.35	18.82 ± 0.56	58.96 ± 1.89	n = 23	[RO4] Roche cobas c311/c501/c502/c701/c702
79.62 ± 2.71	25.67 ± 0.80	43.19 ± 1.22	19.35 ± 0.64	56.89 ± 1.24	n = 8	[RO2] Roche Hitachi and Modular D/P
76.91 ± 1.49	24.60 ± 0.32	42.53 ± 0.84	18.66 ± 0.48	55.33 ± 0.66	n = 8	[R01] Roche Integra and MIRA
87.47 ± 2.02	27.00 ± 1.12	47.08 ± 1.60	19.71 ± 0.90	61.73 ± 1.50	n = 11	[BY1] Siemens ADVIA/ADVISIA Centaur
79.78 ± 0.94	26.30 ± 0.38	44.12 ± 0.61	20.02 ± 0.34	57.12 ± 0.79	n = 68	[DAS] Siemens Dimension
85.55 ± 4.75	26.83 ± 1.23	46.01 ± 2.71	20.72 ± 0.87	60.92 ± 4.04	n = 3	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Theophylline (mg/L)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
32.17 ± 2.77	10.58 ± 0.78	7.05 ± 0.40	27.48 ± 2.14	18.16 ± 1.00	n = 192	[---] All Methods & Instruments
33.0	11.0	7.5	27.9	18.8		[---] Weigh-in value
						<Instruments>
30.66 ± 1.52	10.48 ± 0.74	7.10 ± 0.28	26.60 ± 1.69	18.31 ± 1.05	n = 9	[ABH] Abbott Architect i System
31.10 ± 3.48	10.22 ± 0.78	6.87 ± 0.35	27.03 ± 1.94	17.78 ± 1.34	n = 23	[OLC] Beckman Coulter AU Chemistry System
30.76 ± 0.46	9.94 ± 0.33	6.67 ± 0.23	26.95 ± 0.72	17.56 ± 0.27	n = 8	[BCG] Beckman Coulter UniCel DxC 600
30.54 ± 0.52	9.84 ± 0.10	6.72 ± 0.13	26.07 ± 1.04	17.26 ± 0.37	n = 7	[BCH] Beckman Coulter UniCel DxC 800
39.70 ± 1.34	12.38 ± 0.62	9.58 ± 0.78	33.08 ± 0.64	23.73 ± 0.77	n = 9	[JJF] Ortho Vitros 5,1FS
40.40 ± 1.07	12.18 ± 0.53	9.34 ± 0.44	33.10 ± 1.18	23.68 ± 0.91	n = 16	[JTG] Ortho Vitros 5600
32.29 ± 0.84	10.41 ± 0.38	7.07 ± 0.26	27.32 ± 0.52	18.17 ± 0.56	n = 18	[ROC] Roche cobas c501
32.95 ± 1.66	10.54 ± 0.26	7.22 ± 0.16	27.23 ± 1.61	18.39 ± 0.71	n = 6	[ROT] Roche Cobas INTEGRA 800
32.69 ± 1.18	10.55 ± 0.35	7.15 ± 0.22	27.57 ± 1.00	18.41 ± 0.25	n = 10	[ROD] Roche MODULAR D/P
34.22 ± 2.05	11.19 ± 0.61	7.92 ± 0.68	29.45 ± 1.62	19.57 ± 0.76	n = 3	[BYE] Siemens ADVIA 1800
29.46 ± 2.05	10.55 ± 1.17	6.13 ± 0.59	25.02 ± 1.04	16.96 ± 0.51	n = 13	[COB] Siemens ADVIA Centaur
31.52 ± 1.75	10.24 ± 0.59	6.98 ± 0.22	26.72 ± 0.29	17.91 ± 0.80	n = 6	[DUE] Siemens Dimension EXL
33.19 ± 2.43	10.95 ± 0.54	7.30 ± 0.34	28.57 ± 1.08	18.89 ± 0.74	n = 6	[DUR] Siemens Dimension RxL
32.30 ± 1.01	10.67 ± 0.39	7.25 ± 0.28	27.47 ± 1.14	18.60 ± 0.70	n = 41	[DUT] Siemens Dimension Vista
32.28 ± 0.41	8.84 ± 2.29	6.17 ± 1.79	24.69 ± 7.97	17.51 ± 0.83	n = 3	[DPD] Siemens Immulite 2000
						<Reagents>
30.78 ± 1.47	10.52 ± 0.69	7.11 ± 0.26	26.67 ± 1.59	18.26 ± 0.98	n = 10	[AB1] Abbott
30.76 ± 0.57	9.92 ± 0.28	6.74 ± 0.22	26.70 ± 0.98	17.47 ± 0.40	n = 17	[BC1] Beckman Coulter
31.67 ± 4.11	10.24 ± 1.01	6.90 ± 0.34	27.21 ± 2.28	17.66 ± 1.60	n = 13	[OL1] Beckman Coulter AU Series
40.20 ± 1.25	12.25 ± 0.55	9.41 ± 0.55	33.10 ± 0.97	23.69 ± 0.86	n = 25	[JJ1] Ortho Clinical Diagnostics
32.58 ± 1.00	10.40 ± 0.37	7.10 ± 0.24	27.44 ± 0.52	18.17 ± 0.53	n = 20	[RO4] Roche cobas c311/c501/c502/c701/c702
33.93 ± 4.11	10.72 ± 0.26	7.15 ± 0.12	27.39 ± 0.57	18.48 ± 0.46	n = 4	[RO2] Roche Hitachi and Modular D/P
32.77 ± 1.54	10.53 ± 0.25	7.13 ± 0.20	27.61 ± 2.01	18.34 ± 0.70	n = 8	[R01] Roche Integra and MIRA
32.70 ± 1.32	10.35 ± 0.34	7.06 ± 0.33	27.43 ± 1.26	18.38 ± 0.26	n = 7	[R06] Roche ONLINE
29.82 ± 2.06	10.66 ± 1.13	6.22 ± 0.64	25.33 ± 1.49	17.19 ± 1.10	n = 15	[BY1] Siemens ADVIA/ADVIS Centaur
31.22 ± 3.71	10.69 ± 1.06	7.03 ± 0.16	27.11 ± 2.28	18.25 ± 1.47	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
32.21 ± 1.34	10.63 ± 0.44	7.21 ± 0.31	27.44 ± 1.23	18.52 ± 0.76	n = 55	[DA5] Siemens Dimension
32.28 ± 0.41	8.84 ± 2.29	6.17 ± 1.79	24.69 ± 7.97	17.51 ± 0.83	n = 3	[DP5] Siemens Immulite
31.21 ± 2.34	10.28 ± 0.51	6.89 ± 0.50	27.19 ± 1.81	18.14 ± 1.11	n = 9	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Tobramycin (mg/L)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
11.60 ± 1.08	3.64 ± 0.29	7.08 ± 0.47	5.11 ± 0.23	1.80 ± 0.20	n = 76	[---] All Methods & Instruments
12.3	4.1	7.7	5.7	1.9		[---] Weigh-in value
						<Instruments>
11.65 ± 0.62	3.75 ± 0.07	6.84 ± 0.11	5.04 ± 0.13	1.75 ± 0.07	n = 7	[ABJ] Abbott Architect c System
11.00 ± 0.43	3.45 ± 0.09	7.12 ± 0.16	5.10 ± 0.00	1.80 ± 0.07	n = 11	[OLC] Beckman Coulter AU Chemistry System
14.55 ± 0.19	4.87 ± 0.23	8.66 ± 0.26	6.60 ± 0.18	2.20 ± 0.09	n = 3	[BCG] Beckman Coulter UniCel DxC 600
13.17 ± 1.04	4.72 ± 0.08	8.50 ± 0.15	6.52 ± 0.08	2.16 ± 0.06	n = 5	[BCH] Beckman Coulter UniCel DxC 800
12.14 ± 0.35	3.42 ± 0.04	7.20 ± 0.17	5.23 ± 0.09	1.88 ± 0.04	n = 4	[JJG] Ortho Vitros 5600
11.29 ± 1.23	3.58 ± 0.21	7.32 ± 0.22	5.30 ± 0.24	1.87 ± 0.07	n = 6	[ROC] Roche cobas c501
11.75 ± 0.82	3.60 ± 0.10	6.62 ± 0.15	4.96 ± 0.18	1.66 ± 0.08	n = 5	[ROT] Roche Cobas INTEGRA 800
11.46 ± 0.61	3.70 ± 0.08	7.45 ± 0.23	5.30 ± 0.18	1.88 ± 0.04	n = 4	[ROD] Roche MODULAR D/P
12.78 ± 0.58	4.32 ± 0.14	7.45 ± 0.11	5.92 ± 0.09	2.12 ± 0.08	n = 6	[COB] Siemens ADVIA Centaur
11.04 ± 0.28	3.61 ± 0.21	6.83 ± 0.24	5.03 ± 0.18	1.62 ± 0.09	n = 16	[DUT] Siemens Dimension Vista
						<Reagents>
11.65 ± 0.62	3.75 ± 0.07	6.84 ± 0.11	5.04 ± 0.13	1.75 ± 0.07	n = 7	[AB1] Abbott
13.80 ± 1.05	4.76 ± 0.15	8.55 ± 0.21	6.54 ± 0.12	2.17 ± 0.07	n = 8	[BC1] Beckman Coulter
10.98 ± 0.60	3.45 ± 0.06	7.07 ± 0.08	5.07 ± 0.08	1.80 ± 0.08	n = 4	[OL1] Beckman Coulter AU Series
12.50 ± 0.60	3.45 ± 0.06	7.26 ± 0.07	5.24 ± 0.09	1.88 ± 0.04	n = 6	[JJ1] Ortho Clinical Diagnostics
11.11 ± 1.31	3.63 ± 0.20	7.33 ± 0.24	5.33 ± 0.26	1.90 ± 0.00	n = 5	[RO4] Roche cobas c311/c501/c502/c701/c702
11.81 ± 0.85	3.63 ± 0.09	6.65 ± 0.14	4.93 ± 0.15	1.65 ± 0.07	n = 7	[RO1] Roche Integra and MIRA
11.61 ± 0.51	3.66 ± 0.14	7.41 ± 0.21	5.27 ± 0.16	1.85 ± 0.08	n = 5	[RO6] Roche ONLINE
12.78 ± 0.58	4.32 ± 0.14	7.45 ± 0.11	5.92 ± 0.09	2.12 ± 0.08	n = 6	[BY1] Siemens ADVIA/ADVIa Centaur
11.11 ± 0.28	3.63 ± 0.21	6.83 ± 0.22	5.05 ± 0.16	1.63 ± 0.11	n = 20	[DA5] Siemens Dimension
10.99 ± 0.36	3.43 ± 0.11	7.16 ± 0.19	5.10 ± 0.06	1.80 ± 0.00	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Valproic Acid (mg/L)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
160.45 ± 12.34	53.44 ± 4.08	118.67 ± 8.39	37.30 ± 3.62	78.76 ± 4.93	n = 243	[---] All Methods & Instruments
161.1	53.7	117.5	35.4	77.8		[---] Weigh-in value
						<Instruments>
143.78 ± 3.63	46.26 ± 2.11	110.77 ± 5.58	31.89 ± 2.31	71.90 ± 3.94	n = 4	[ABJ] Abbott Architect c System
163.19 ± 15.35	51.44 ± 2.77	125.13 ± 7.94	44.68 ± 2.45	78.39 ± 3.89	n = 18	[ABH] Abbott Architect i System
169.75 ± 11.20	55.32 ± 2.38	124.08 ± 4.88	38.10 ± 1.97	82.01 ± 3.16	n = 31	[OLC] Beckman Coulter AU Chemistry System
140.88 ± 8.87	45.19 ± 2.56	100.15 ± 5.60	24.39 ± 3.73	66.96 ± 2.99	n = 9	[BCG] Beckman Coulter UniCel DxC 600
135.00 ± 8.09	45.46 ± 1.95	98.52 ± 3.35	23.28 ± 3.54	67.18 ± 0.94	n = 8	[BCH] Beckman Coulter UniCel DxC 800
176.28 ± 14.70	54.33 ± 1.12	121.39 ± 2.20	40.16 ± 0.36	80.84 ± 3.01	n = 6	[JJF] Ortho Vitros 5,1FS
163.15 ± 11.88	53.04 ± 4.22	121.37 ± 6.60	37.98 ± 2.23	80.22 ± 5.18	n = 18	[JJG] Ortho Vitros 5600
156.08 ± 12.04	51.79 ± 3.27	116.55 ± 6.14	35.24 ± 2.56	78.32 ± 3.28	n = 24	[ROC] Roche cobas c501
158.13 ± 6.96	50.74 ± 1.44	116.38 ± 4.60	33.98 ± 0.85	75.39 ± 1.96	n = 8	[ROT] Roche Cobas INTEGRA 800
153.32 ± 12.10	51.11 ± 4.93	113.72 ± 8.30	34.10 ± 3.18	75.53 ± 6.14	n = 11	[ROD] Roche MODULAR D/P
175.07 ± 6.06	57.86 ± 2.24	130.92 ± 3.18	39.99 ± 1.60	83.85 ± 1.07	n = 8	[BYE] Siemens ADVIA 1800
163.30 ± 8.18	53.11 ± 2.60	115.82 ± 6.56	36.65 ± 1.64	77.25 ± 3.27	n = 18	[COB] Siemens ADVIA Centaur
163.88 ± 2.04	53.44 ± 1.39	119.18 ± 2.88	35.51 ± 1.68	78.58 ± 1.63	n = 4	[BYP] Siemens ADVIA Centaur CP
156.78 ± 5.21	54.41 ± 2.28	115.85 ± 4.66	36.67 ± 1.28	77.58 ± 1.82	n = 11	[DUE] Siemens Dimension EXL
157.41 ± 5.38	54.47 ± 1.74	113.49 ± 2.65	36.98 ± 1.52	77.08 ± 1.42	n = 9	[DUR] Siemens Dimension RxL
162.16 ± 4.38	56.45 ± 1.56	119.34 ± 3.38	38.38 ± 1.59	81.10 ± 2.62	n = 42	[DUT] Siemens Dimension Vista
151.84 ± 6.57	53.90 ± 1.13	112.35 ± 3.51	37.43 ± 1.13	77.22 ± 2.03	n = 4	[DUX] Siemens Dimension Xpand
						<Reagents>
159.06 ± 16.10	50.57 ± 3.42	122.89 ± 9.42	43.63 ± 4.51	77.34 ± 4.72	n = 22	[AB1] Abbott
139.59 ± 10.36	45.46 ± 2.32	99.77 ± 5.09	23.95 ± 3.83	67.29 ± 2.62	n = 19	[BC1] Beckman Coulter
171.77 ± 11.88	55.09 ± 2.77	123.08 ± 5.47	38.11 ± 2.17	81.76 ± 3.57	n = 18	[OL1] Beckman Coulter AU Series
166.11 ± 14.17	52.84 ± 4.21	120.69 ± 6.15	38.17 ± 2.74	79.83 ± 5.26	n = 25	[JJ1] Ortho Clinical Diagnostics
157.12 ± 11.84	51.63 ± 3.14	116.53 ± 6.61	35.12 ± 2.68	78.05 ± 4.20	n = 26	[R04] Roche cobas c311/c501/c502/c701/c702
152.17 ± 11.58	51.41 ± 3.92	112.90 ± 5.52	34.80 ± 2.68	75.83 ± 6.24	n = 4	[R02] Roche Hitachi and Modular D/P
157.11 ± 7.33	50.72 ± 1.17	115.87 ± 5.56	34.12 ± 0.78	75.98 ± 2.17	n = 10	[R01] Roche Integra and MIRA
153.99 ± 12.42	50.81 ± 4.93	113.98 ± 9.10	33.24 ± 2.20	74.81 ± 5.00	n = 7	[R06] Roche ONLINE
163.51 ± 7.03	53.15 ± 2.31	116.44 ± 6.03	36.45 ± 1.74	77.46 ± 3.02	n = 22	[BY1] Siemens ADVIA/ADVIS Centaur
172.59 ± 8.15	57.73 ± 1.72	129.37 ± 4.26	40.44 ± 0.92	83.92 ± 1.27	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
160.11 ± 5.55	55.74 ± 2.00	117.70 ± 4.51	37.89 ± 1.71	79.65 ± 3.06	n = 66	[DA5] Siemens Dimension
168.20 ± 9.65	55.31 ± 1.97	125.13 ± 3.89	38.00 ± 1.78	81.39 ± 2.77	n = 12	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Vancomycin (mg/L)

Specimen: T06	Specimen: T07	Specimen: T08	Specimen: T09	Specimen: T10	Number	[Code] Instrument or Reagent System
39.18 ± 4.65	12.87 ± 1.21	7.76 ± 0.83	4.20 ± 0.64	19.38 ± 1.95	n = 221	[---] All Methods & Instruments [---] Weigh-in value
41.0	13.5	7.9	4.4	20.3		
						<Instruments>
39.92 ± 1.40	13.09 ± 0.62	7.86 ± 0.18	4.18 ± 0.15	19.46 ± 1.03	n = 4	[ABJ] Abbott Architect c System
43.55 ± 1.53	14.39 ± 0.36	8.69 ± 0.23	4.38 ± 0.33	21.69 ± 0.66	n = 16	[ABH] Abbott Architect i System
36.45 ± 1.98	11.84 ± 0.48	7.18 ± 0.42	4.48 ± 0.59	17.80 ± 0.78	n = 23	[OLC] Beckman Coulter AU Chemistry System
46.07 ± 1.50	13.66 ± 0.54	8.25 ± 0.47	4.47 ± 0.57	20.70 ± 0.48	n = 7	[BCG] Beckman Coulter UniCel DxC 600
44.96 ± 1.95	13.55 ± 0.69	8.14 ± 0.56	4.20 ± 0.38	20.72 ± 0.46	n = 9	[BCH] Beckman Coulter UniCel DxC 800
37.05 ± 1.47	12.39 ± 0.87	8.04 ± 0.68	5.00 ± 0.00	18.59 ± 0.99	n = 5	[JJF] Ortho Vitros 5,1FS
38.14 ± 0.84	12.50 ± 0.63	7.77 ± 0.54	5.00 ± 0.00	18.94 ± 0.80	n = 16	[JJG] Ortho Vitros 5600
43.16 ± 2.37	13.57 ± 0.57	8.20 ± 0.57	4.31 ± 0.27	20.91 ± 0.99	n = 22	[ROC] Roche cobas c501
46.88 ± 2.05	14.33 ± 0.21	8.51 ± 0.34	4.75 ± 0.30	21.96 ± 0.31	n = 8	[ROT] Roche Cobas INTEGRA 800
43.47 ± 2.01	13.82 ± 0.68	8.23 ± 0.53	4.43 ± 0.41	20.61 ± 0.56	n = 10	[ROD] Roche MODULAR D/P
35.72 ± 1.81	12.93 ± 0.79	7.82 ± 0.59	3.94 ± 0.33	19.20 ± 0.78	n = 7	[BYE] Siemens ADVIA 1800
32.51 ± 1.45	10.22 ± 0.67	5.95 ± 0.38	3.20 ± 0.37	15.05 ± 0.62	n = 18	[COB] Siemens ADVIA Centaur
31.55 ± 1.70	10.03 ± 0.57	5.80 ± 0.30	3.34 ± 0.50	15.46 ± 0.61	n = 4	[BYP] Siemens ADVIA Centaur CP
38.46 ± 0.72	12.75 ± 0.43	7.53 ± 0.34	3.78 ± 0.23	19.13 ± 0.41	n = 12	[DUE] Siemens Dimension EXL
39.57 ± 0.41	12.90 ± 0.67	7.72 ± 0.47	3.89 ± 0.41	19.41 ± 0.85	n = 6	[DUR] Siemens Dimension RxL
37.31 ± 1.45	12.83 ± 0.58	7.62 ± 0.45	3.88 ± 0.41	19.14 ± 0.87	n = 42	[DUT] Siemens Dimension Vista
38.86 ± 0.76	12.65 ± 0.46	7.45 ± 0.30	3.68 ± 0.15	19.09 ± 0.82	n = 4	[DUX] Siemens Dimension Xpand
						<Reagents>
42.49 ± 2.72	13.93 ± 0.91	8.49 ± 0.47	4.33 ± 0.30	21.07 ± 1.41	n = 20	[AB1] Abbott
45.57 ± 2.16	13.58 ± 0.68	8.22 ± 0.49	4.34 ± 0.49	20.70 ± 0.50	n = 18	[BC1] Beckman Coulter
36.44 ± 1.76	11.90 ± 0.47	7.24 ± 0.40	4.25 ± 0.54	17.84 ± 0.80	n = 13	[OL1] Beckman Coulter AU Series
38.00 ± 0.92	12.40 ± 0.75	7.79 ± 0.58	5.00 ± 0.00	18.81 ± 0.87	n = 22	[JJ1] Ortho Clinical Diagnostics
43.47 ± 2.33	13.67 ± 0.58	8.21 ± 0.55	4.32 ± 0.29	21.05 ± 0.95	n = 24	[R04] Roche cobas c311/c501/c502/c701/c702
42.66 ± 0.84	13.67 ± 0.15	8.17 ± 0.44	4.43 ± 0.41	20.55 ± 0.47	n = 6	[R02] Roche Hitachi and Modular D/P
47.44 ± 2.09	14.30 ± 0.44	8.63 ± 0.44	4.92 ± 0.48	22.12 ± 0.64	n = 10	[R01] Roche Integra and MIRA
45.50 ± 3.56	14.29 ± 0.98	8.46 ± 0.68	4.29 ± 0.11	21.42 ± 1.70	n = 5	[R06] Roche ONLINE
32.47 ± 1.66	10.19 ± 0.68	5.92 ± 0.37	3.26 ± 0.42	15.12 ± 0.64	n = 23	[BY1] Siemens ADVIA/ADVIS Centaur
35.89 ± 2.57	12.44 ± 0.96	7.45 ± 0.78	4.00 ± 0.54	18.74 ± 1.12	n = 8	[BY5] Siemens ADVIA/Syva Emit 2000
37.87 ± 1.49	12.81 ± 0.55	7.59 ± 0.42	3.85 ± 0.40	19.16 ± 0.77	n = 64	[DA5] Siemens Dimension
35.79 ± 1.74	11.67 ± 0.42	7.08 ± 0.36	4.68 ± 0.52	17.57 ± 0.71	n = 8	[SY4] Syva Emit 2000