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HEALTH

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Commissioner

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Therapeutic Substance Monitoring/Quantitative Toxicology Proficiency Testing – May 6, 2013

Enclosed is a statistical summary of participant data for the five Therapeutic Substance Monitoring proficiency survey specimens **(T81, T82, T83, T84, T85)** shipped May 6, 2013. Test specimens were prepared by the quantitative transfer of constituents to a pooled human serum base. This material was subsequently sterile-filtered, dispensed into aliquots, stored at –80°C and distributed to each participant 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 shown on the attached sheets are calculated by a robust statistical technique that does not assume a Gaussian distribution. These statistical reports are also available on the internet at:
http://www.wadsworth.org/chemheme

Outlined below is a description of the process utilized in the evaluation of your laboratory's proficiency test results. A summary of your laboratory's performance for the three most recent surveys is also included with your report.

Target value
In general, targets utilized are derived from all-participant mean values calculated by robust statistical technique. In some cases, however, it is recognized that reagent and/or instrument specific targets may be required and "peer group" specific targets are used where appropriate. Should an alternate target be required to evaluate your laboratory's data, an asterisk will be placed adjacent to the reagent and/or instrument listing(s) corresponding to the peer group utilized.

Acceptable ranges
Limits of acceptable performance were established using criteria specified by CLIA'88 regulations and the New York State Department of Health, allowing for rounding to appropriate significant digits. Results falling within acceptable range are scored as 100%. Laboratories must achieve an overall analyte score ≥ 80% in order to meet performance criteria for that analyte.

Range plots
Plots show relative distance of your laboratory's results (represented by an "x") from the target for each sample analyzed. Any result exceeding the high or low limit by > 20% of the acceptable range is indicated by an asterisk (*).

Disclaimer
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: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
157.64 ± 14.83	39.43 ± 5.85	55.26 ± 7.39	25.68 ± 5.38	76.34 ± 7.95	n = 211	[---] All Methods & Instruments
153.6	36.9	51.2	23.2	73.8		[---] Weigh-in value
						<Instruments>
142.28 ± 1.86	34.30 ± 0.89	48.41 ± 0.65	21.98 ± 1.14	67.80 ± 1.16	n = 16	[ABJ] Abbott Architect c System
151.58 ± 10.85	36.12 ± 1.94	50.94 ± 3.30	23.16 ± 1.80	72.02 ± 4.14	n = 25	[OLC] Beckman Coulter AU Chemistry System
165.05 ± 9.27	38.26 ± 1.73	54.37 ± 0.59	23.74 ± 1.26	81.30 ± 2.56	n = 3	[BCX] Beckman Coulter LX-20
159.51 ± 4.85	38.68 ± 2.20	52.66 ± 2.07	23.91 ± 1.80	77.04 ± 1.86	n = 8	[BCG] Beckman Coulter UniCel DxC 600
165.90 ± 5.39	38.69 ± 2.21	55.74 ± 3.03	24.00 ± 0.93	78.98 ± 1.81	n = 8	[BCH] Beckman Coulter UniCel DxC 800
173.80 ± 2.36	42.56 ± 1.02	60.84 ± 1.54	26.72 ± 0.51	84.00 ± 0.90	n = 3	[JJE] Ortho Vitros 250/350/950
173.79 ± 3.01	41.89 ± 0.64	60.73 ± 1.06	26.34 ± 0.52	82.98 ± 0.90	n = 15	[JJF] Ortho Vitros 5,1FS
173.38 ± 3.15	42.03 ± 0.44	60.61 ± 0.74	26.45 ± 0.50	82.81 ± 0.80	n = 17	[JJG] Ortho Vitros 5600
131.82 ± 3.12	27.54 ± 0.89	41.38 ± 1.01	15.96 ± 0.62	59.95 ± 1.85	n = 13	[ROC] Roche cobas c501
129.48 ± 2.15	29.79 ± 1.22	43.23 ± 1.21	18.52 ± 2.33	62.24 ± 8.65	n = 9	[ROT] Roche Cobas INTEGRA 800
118.56 ± 3.41	26.55 ± 1.04	39.67 ± 1.05	15.93 ± 0.66	55.90 ± 1.27	n = 10	[ROD] Roche MODULAR D/P
149.44 ± 2.15	35.97 ± 0.75	50.72 ± 0.69	23.15 ± 1.00	72.04 ± 1.20	n = 9	[BYE] Siemens ADVIA 1800
153.87 ± 8.25	37.33 ± 3.23	52.52 ± 3.51	24.08 ± 2.78	74.08 ± 4.61	n = 3	[BYB] Siemens ADVIA 2400
160.82 ± 1.45	43.14 ± 1.16	59.31 ± 0.82	30.23 ± 1.18	78.65 ± 1.08	n = 11	[DUE] Siemens Dimension EXL
161.26 ± 2.15	43.53 ± 0.90	59.97 ± 1.10	30.33 ± 0.73	79.22 ± 0.89	n = 12	[DUR] Siemens Dimension RxL
161.51 ± 3.08	45.02 ± 1.22	60.71 ± 1.66	32.08 ± 0.93	80.79 ± 1.58	n = 38	[DUT] Siemens Dimension Vista
161.01 ± 2.29	43.57 ± 0.78	59.92 ± 0.75	30.77 ± 0.81	79.44 ± 0.77	n = 8	[DUX] Siemens Dimension Xpand
						<Reagents>
142.28 ± 1.86	34.30 ± 0.89	48.41 ± 0.65	21.98 ± 1.14	67.80 ± 1.16	n = 16	[AB1] Abbott
162.67 ± 6.73	38.58 ± 2.07	54.18 ± 2.42	24.11 ± 1.34	78.65 ± 2.61	n = 20	[BC1] Beckman Coulter
153.03 ± 9.56	36.29 ± 1.65	50.86 ± 2.84	22.96 ± 1.75	72.01 ± 3.88	n = 18	[OL1] Beckman Coulter AU Series
173.62 ± 3.02	42.00 ± 0.55	60.64 ± 0.94	26.42 ± 0.52	82.97 ± 0.90	n = 35	[JJ1] Ortho Clinical Diagnostics
131.61 ± 3.00	27.59 ± 0.86	41.45 ± 0.96	15.96 ± 0.59	60.05 ± 1.75	n = 13	[RO4] Roche cobas c311/c501/c502/c701/c70
118.56 ± 3.41	26.55 ± 1.03	39.67 ± 1.05	15.93 ± 0.66	55.90 ± 1.27	n = 8	[RO2] Roche Hitachi and Modular D/P
129.48 ± 2.14	29.76 ± 1.12	43.22 ± 1.21	17.83 ± 0.78	60.83 ± 1.05	n = 8	[RO1] Roche Integra and MIRA
149.47 ± 1.51	35.97 ± 0.68	50.73 ± 0.59	23.21 ± 0.71	71.98 ± 1.02	n = 10	[BY1] Siemens ADVIA/ADVIA Centaur
161.18 ± 2.58	44.26 ± 1.39	60.16 ± 1.43	31.36 ± 1.26	79.91 ± 1.56	n = 69	[DA5] Siemens Dimension
154.31 ± 16.20	34.78 ± 1.66	52.61 ± 5.21	23.92 ± 1.40	72.61 ± 1.76	n = 4	[SY2] Syva Emit
152.20 ± 25.47	35.54 ± 2.65	48.96 ± 4.72	22.06 ± 0.72	68.44 ± 3.90	n = 4	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Carbamazepine (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
13.89 ± 1.19	3.34 ± 0.34	4.82 ± 0.52	5.18 ± 0.62	6.66 ± 0.62	n = 225	[---] All Methods & Instruments
14.1	3.6	5.0	5.5	7.1		[---] Weigh-in value
						<Instruments>
14.47 ± 0.85	3.53 ± 0.15	5.06 ± 0.27	5.45 ± 0.31	6.91 ± 0.18	n = 13	[ABJ] Abbott Architect c System
15.00 ± 0.76	3.52 ± 0.04	4.98 ± 0.15	5.52 ± 0.04	7.22 ± 0.13	n = 4	[ABH] Abbott Architect i System
13.99 ± 0.43	3.40 ± 0.11	4.92 ± 0.20	5.32 ± 0.26	6.67 ± 0.38	n = 4	[ABB] Abbott AxSym
14.39 ± 0.48	3.50 ± 0.26	4.99 ± 0.33	5.33 ± 0.40	6.77 ± 0.38	n = 19	[OLC] Beckman Coulter AU Chemistry System
14.31 ± 0.92	3.38 ± 0.32	4.90 ± 0.09	5.20 ± 0.09	6.95 ± 0.19	n = 3	[BCX] Beckman Coulter LX-20
13.97 ± 0.30	3.10 ± 0.00	4.77 ± 0.25	5.17 ± 0.26	6.73 ± 0.25	n = 8	[BCG] Beckman Coulter UniCel DxC 600
14.10 ± 0.36	3.28 ± 0.24	4.81 ± 0.20	5.26 ± 0.30	6.73 ± 0.30	n = 9	[BCH] Beckman Coulter UniCel DxC 800
11.57 ± 0.52	3.00 ± 0.00	3.90 ± 0.21	3.87 ± 0.22	5.47 ± 0.26	n = 13	[JJF] Ortho Vitros 5,1FS
11.45 ± 0.53	3.00 ± 0.00	3.79 ± 0.28	3.77 ± 0.21	5.41 ± 0.29	n = 17	[JJG] Ortho Vitros 5600
14.61 ± 0.70	3.76 ± 0.40	5.33 ± 0.34	5.77 ± 0.45	7.26 ± 0.49	n = 14	[ROC] Roche cobas c501
14.78 ± 0.48	3.48 ± 0.08	5.03 ± 0.12	5.45 ± 0.11	6.78 ± 0.17	n = 10	[ROT] Roche Cobas INTEGRA 800
14.75 ± 0.38	3.97 ± 0.19	5.45 ± 0.24	5.91 ± 0.22	7.40 ± 0.20	n = 12	[ROD] Roche MODULAR D/P
14.05 ± 0.67	3.45 ± 0.19	5.13 ± 0.39	5.30 ± 0.40	6.81 ± 0.37	n = 8	[BYE] Siemens ADVIA 1800
14.96 ± 1.17	3.65 ± 0.47	5.30 ± 0.37	5.70 ± 0.38	7.21 ± 0.64	n = 12	[COB] Siemens ADVIA Centaur
15.21 ± 1.57	4.00 ± 0.46	5.57 ± 0.68	5.98 ± 0.68	7.66 ± 0.82	n = 3	[BYP] Siemens ADVIA Centaur CP
13.58 ± 0.56	3.20 ± 0.14	4.63 ± 0.12	5.04 ± 0.14	6.55 ± 0.23	n = 8	[DUE] Siemens Dimension EXL
13.96 ± 0.54	3.40 ± 0.11	4.88 ± 0.23	5.19 ± 0.16	6.75 ± 0.34	n = 13	[DUR] Siemens Dimension RxL
13.25 ± 0.58	3.18 ± 0.20	4.59 ± 0.21	4.94 ± 0.21	6.36 ± 0.29	n = 39	[DUT] Siemens Dimension Vista
13.86 ± 0.59	3.25 ± 0.12	4.67 ± 0.16	5.01 ± 0.11	6.54 ± 0.18	n = 4	[DUX] Siemens Dimension Xpand
						<Reagents>
14.46 ± 0.82	3.51 ± 0.14	5.01 ± 0.24	5.45 ± 0.27	6.94 ± 0.27	n = 21	[AB1] Abbott
14.00 ± 0.37	3.21 ± 0.22	4.81 ± 0.21	5.20 ± 0.25	6.76 ± 0.27	n = 21	[BC1] Beckman Coulter
14.35 ± 0.45	3.45 ± 0.14	4.91 ± 0.29	5.32 ± 0.34	6.70 ± 0.37	n = 11	[OL1] Beckman Coulter AU Series
14.45 ± 0.64	3.88 ± 0.32	5.34 ± 0.33	5.79 ± 0.47	7.18 ± 0.33	n = 8	[MG1] Microgenics CEDIA
11.50 ± 0.53	3.00 ± 0.00	3.84 ± 0.26	3.81 ± 0.22	5.44 ± 0.28	n = 30	[JJ1] Ortho Clinical Diagnostics
14.52 ± 0.76	3.69 ± 0.47	5.27 ± 0.42	5.67 ± 0.46	7.18 ± 0.55	n = 16	[RO4] Roche cobas c311/c501/c502/c701/c70
14.76 ± 0.32	3.97 ± 0.14	5.44 ± 0.19	5.91 ± 0.16	7.39 ± 0.21	n = 10	[RO2] Roche Hitachi and Modular D/P
14.83 ± 0.49	3.47 ± 0.08	5.05 ± 0.12	5.46 ± 0.12	6.83 ± 0.19	n = 12	[RO1] Roche Integra and MIRA
14.98 ± 1.24	3.72 ± 0.49	5.35 ± 0.45	5.74 ± 0.44	7.29 ± 0.69	n = 15	[BY1] Siemens ADVIA/ADVIA Centaur
14.13 ± 0.63	3.49 ± 0.25	5.08 ± 0.36	5.26 ± 0.38	6.84 ± 0.27	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
13.48 ± 0.64	3.24 ± 0.19	4.65 ± 0.22	5.01 ± 0.21	6.47 ± 0.32	n = 64	[DA5] Siemens Dimension
14.11 ± 0.43	3.27 ± 0.16	4.65 ± 0.34	4.87 ± 0.09	6.43 ± 0.16	n = 4	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Digoxin (µg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
3.147 ± 0.211	0.611 ± 0.085	1.057 ± 0.107	1.722 ± 0.137	1.238 ± 0.129	n = 277	[---] All Methods & Instruments
3.3	0.7	1.1	1.8	1.3		[---] Weigh-in value
						<Instruments>
3.254 ± 0.049	0.634 ± 0.058	1.130 ± 0.052	1.805 ± 0.056	1.329 ± 0.037	n = 5	[ABJ] Abbott Architect c System
3.204 ± 0.064	0.601 ± 0.018	1.026 ± 0.048	1.762 ± 0.048	1.277 ± 0.049	n = 15	[ABH] Abbott Architect i System
3.466 ± 0.125	0.680 ± 0.036	1.094 ± 0.010	1.872 ± 0.051	1.236 ± 0.047	n = 3	[ABB] Abbott AxSym
3.263 ± 0.329	0.690 ± 0.065	1.141 ± 0.133	1.837 ± 0.112	1.350 ± 0.185	n = 6	[SAA] Beckman Coulter ACCESS
2.987 ± 0.149	0.560 ± 0.087	0.968 ± 0.105	1.592 ± 0.108	1.126 ± 0.140	n = 25	[OLC] Beckman Coulter AU Chemistry System
3.065 ± 0.144	0.632 ± 0.121	1.113 ± 0.075	1.740 ± 0.149	1.298 ± 0.127	n = 12	[BCG] Beckman Coulter UniCel DxC 600
3.121 ± 0.102	0.572 ± 0.069	0.997 ± 0.091	1.731 ± 0.090	1.218 ± 0.131	n = 8	[BCH] Beckman Coulter UniCel DxC 800
3.471 ± 0.343	0.658 ± 0.258	1.101 ± 0.305	1.810 ± 0.292	1.288 ± 0.351	n = 3	[BCU] Beckman Coulter UniCel DxI 800
2.952 ± 0.110	0.567 ± 0.131	0.985 ± 0.119	1.676 ± 0.114	1.117 ± 0.150	n = 17	[JJF] Ortho Vitros 5,1FS
2.941 ± 0.147	0.536 ± 0.110	0.989 ± 0.118	1.644 ± 0.107	1.072 ± 0.173	n = 17	[JJG] Ortho Vitros 5600
3.032 ± 0.112	0.612 ± 0.056	1.029 ± 0.064	1.636 ± 0.058	1.200 ± 0.000	n = 19	[ROC] Roche cobas c501
3.051 ± 0.130	0.652 ± 0.105	1.017 ± 0.066	1.616 ± 0.025	1.159 ± 0.068	n = 5	[ROT] Roche Cobas INTEGRA 800
2.895 ± 0.104	0.600 ± 0.000	0.998 ± 0.043	1.600 ± 0.000	1.179 ± 0.065	n = 14	[ROD] Roche MODULAR D/P
3.110 ± 0.070	0.470 ± 0.134	1.071 ± 0.103	1.808 ± 0.042	1.306 ± 0.076	n = 9	[BYE] Siemens ADVIA 1800
3.376 ± 0.157	0.693 ± 0.062	1.222 ± 0.067	1.967 ± 0.094	1.444 ± 0.081	n = 18	[COB] Siemens ADVIA Centaur
3.289 ± 0.171	0.639 ± 0.038	1.142 ± 0.049	1.781 ± 0.130	1.340 ± 0.040	n = 4	[BYP] Siemens ADVIA Centaur CP
3.254 ± 0.132	0.605 ± 0.045	1.100 ± 0.068	1.731 ± 0.049	1.246 ± 0.053	n = 14	[DUE] Siemens Dimension EXL
3.304 ± 0.132	0.633 ± 0.050	1.128 ± 0.083	1.793 ± 0.088	1.274 ± 0.070	n = 14	[DUR] Siemens Dimension RxL
3.244 ± 0.072	0.601 ± 0.018	1.045 ± 0.042	1.690 ± 0.027	1.211 ± 0.027	n = 41	[DUT] Siemens Dimension Vista
3.285 ± 0.081	0.580 ± 0.046	1.065 ± 0.067	1.768 ± 0.068	1.281 ± 0.049	n = 9	[DUX] Siemens Dimension Xpand
3.475 ± 0.148	0.791 ± 0.053	1.296 ± 0.094	2.022 ± 0.110	1.526 ± 0.071	n = 6	[DPD] Siemens Immulite 2000
						<Reagents>
3.224 ± 0.073	0.617 ± 0.045	1.058 ± 0.063	1.785 ± 0.066	1.284 ± 0.056	n = 23	[AB1] Abbott
3.142 ± 0.242	0.637 ± 0.128	1.074 ± 0.139	1.755 ± 0.154	1.275 ± 0.177	n = 31	[BC1] Beckman Coulter
2.988 ± 0.168	0.585 ± 0.092	0.994 ± 0.101	1.615 ± 0.100	1.155 ± 0.141	n = 18	[OL1] Beckman Coulter AU Series
2.963 ± 0.055	0.500 ± 0.000	0.900 ± 0.000	1.500 ± 0.000	1.037 ± 0.055	n = 5	[MG2] Microgenics DRI
2.954 ± 0.130	0.545 ± 0.123	0.988 ± 0.116	1.662 ± 0.109	1.091 ± 0.163	n = 35	[JJ1] Ortho Clinical Diagnostics
3.027 ± 0.098	0.624 ± 0.064	1.023 ± 0.064	1.644 ± 0.062	1.200 ± 0.000	n = 24	[RO4] Roche cobas c311/c501/c502/c701/c70
2.898 ± 0.064	0.600 ± 0.000	0.989 ± 0.053	1.600 ± 0.000	1.173 ± 0.065	n = 8	[RO2] Roche Hitachi and Modular D/P
3.051 ± 0.130	0.652 ± 0.105	1.017 ± 0.066	1.616 ± 0.025	1.159 ± 0.068	n = 5	[RO1] Roche Integra and MIRA
2.856 ± 0.156	0.597 ± 0.008	0.998 ± 0.004	1.637 ± 0.055	1.184 ± 0.071	n = 5	[RO5] Roche Tina-quant
3.281 ± 0.191	0.648 ± 0.123	1.177 ± 0.104	1.905 ± 0.133	1.387 ± 0.104	n = 31	[BY1] Siemens ADVIA/ADVIA Centaur
3.273 ± 0.116	0.608 ± 0.044	1.091 ± 0.073	1.749 ± 0.077	1.254 ± 0.061	n = 47	[DA5] Siemens Dimension
3.241 ± 0.067	0.599 ± 0.017	1.038 ± 0.041	1.691 ± 0.024	1.209 ± 0.023	n = 31	[DA6] Siemens Dimension LOCI
3.520 ± 0.183	0.792 ± 0.048	1.279 ± 0.095	2.015 ± 0.099	1.540 ± 0.071	n = 7	[DP5] Siemens Immulite

Summary of Participant Performance (Mean and Standard Deviation)

Ethanol (mg/dL)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
181.79 ± 8.11	54.59 ± 2.85	62.04 ± 3.23	236.89 ± 11.29	107.92 ± 4.76	n = 219	[---] All Methods & Instruments
184.1	56.5	61.4	244.5	113.0		[---] Weigh-in value
						<Instruments>
182.98 ± 5.06	55.54 ± 1.79	63.26 ± 1.94	237.21 ± 6.13	109.37 ± 3.17	n = 15	[ABJ] Abbott Architect c System
183.62 ± 6.75	55.62 ± 2.17	63.31 ± 2.49	239.75 ± 6.76	108.46 ± 3.96	n = 21	[OLC] Beckman Coulter AU Chemistry System
185.44 ± 4.11	55.56 ± 1.48	62.10 ± 1.92	242.81 ± 7.03	108.07 ± 2.86	n = 3	[BCX] Beckman Coulter LX-20
180.33 ± 8.84	53.63 ± 4.15	61.83 ± 3.74	233.36 ± 13.17	106.33 ± 7.51	n = 9	[BCG] Beckman Coulter UniCel DxC 600
184.34 ± 3.09	57.13 ± 3.55	63.59 ± 4.74	237.95 ± 4.61	109.04 ± 4.48	n = 7	[BCH] Beckman Coulter UniCel DxC 800
183.94 ± 7.40	54.17 ± 2.36	61.33 ± 2.22	241.99 ± 8.85	108.13 ± 3.77	n = 12	[GCC] Gas Chromatograph
177.96 ± 9.06	54.74 ± 2.26	60.47 ± 1.86	218.69 ± 13.02	105.00 ± 5.41	n = 3	[JJE] Ortho Vitros 250/350/950
165.78 ± 9.24	51.11 ± 1.72	57.39 ± 2.46	206.63 ± 12.15	99.52 ± 5.02	n = 15	[JJF] Ortho Vitros 5,1FS
168.33 ± 7.63	51.08 ± 2.48	57.93 ± 2.35	211.67 ± 9.97	102.96 ± 5.04	n = 17	[JJG] Ortho Vitros 5600
185.15 ± 5.58	55.28 ± 2.64	63.06 ± 2.04	240.23 ± 4.17	109.49 ± 2.33	n = 13	[ROC] Roche cobas c501
176.56 ± 3.78	53.67 ± 1.28	60.90 ± 1.03	231.23 ± 3.23	105.56 ± 1.40	n = 5	[ROT] Roche Cobas INTEGRA 800
182.31 ± 5.74	55.31 ± 3.17	63.87 ± 3.98	239.09 ± 7.30	108.86 ± 3.77	n = 11	[ROD] Roche MODULAR D/P
188.57 ± 4.35	56.77 ± 2.05	64.02 ± 2.42	245.84 ± 5.68	111.82 ± 3.12	n = 10	[BYE] Siemens ADVIA 1800
189.22 ± 8.59	57.53 ± 1.86	65.53 ± 1.86	241.44 ± 10.01	111.52 ± 2.74	n = 3	[BYB] Siemens ADVIA 2400
182.39 ± 6.22	55.24 ± 2.44	62.67 ± 2.08	239.90 ± 8.03	109.01 ± 3.98	n = 11	[DUE] Siemens Dimension EXL
183.74 ± 6.13	54.96 ± 2.00	62.33 ± 1.72	240.50 ± 6.04	109.45 ± 2.28	n = 12	[DUR] Siemens Dimension RxL
182.70 ± 6.06	54.37 ± 2.40	62.06 ± 2.70	238.46 ± 8.97	108.36 ± 4.38	n = 38	[DUT] Siemens Dimension Vista
181.98 ± 6.06	54.89 ± 2.17	62.23 ± 2.45	235.56 ± 5.94	106.71 ± 2.93	n = 9	[DUX] Siemens Dimension Xpand
						<Reagents>
182.88 ± 4.76	55.47 ± 1.71	63.21 ± 1.85	236.69 ± 6.06	109.14 ± 3.09	n = 16	[AB1] Abbott
182.80 ± 6.49	55.32 ± 3.58	62.33 ± 3.79	237.31 ± 9.08	107.74 ± 5.73	n = 20	[BC1] Beckman Coulter
184.68 ± 5.85	56.38 ± 1.58	64.04 ± 2.26	241.46 ± 6.30	109.39 ± 3.81	n = 16	[OL1] Beckman Coulter AU Series
184.75 ± 7.62	54.45 ± 2.40	61.60 ± 2.15	242.94 ± 8.74	108.55 ± 3.81	n = 11	[IH1] In-House
168.05 ± 8.93	51.29 ± 2.41	57.91 ± 2.49	210.15 ± 11.44	101.66 ± 5.41	n = 35	[JJ1] Ortho Clinical Diagnostics
184.37 ± 5.99	55.10 ± 2.60	62.89 ± 2.03	239.80 ± 4.83	109.17 ± 2.65	n = 14	[RO4] Roche cobas c311/c501/c502/c701/c70
182.31 ± 5.74	55.31 ± 3.17	63.87 ± 3.98	239.09 ± 7.30	108.86 ± 3.77	n = 11	[RO2] Roche Hitachi and Modular D/P
176.56 ± 3.78	53.67 ± 1.28	60.90 ± 1.03	231.23 ± 3.23	105.56 ± 1.40	n = 5	[RO1] Roche Integra and MIRA
187.10 ± 4.19	56.04 ± 2.00	62.97 ± 1.78	244.22 ± 5.35	110.62 ± 2.77	n = 7	[BY1] Siemens ADVIA/ADVIA Centaur
192.16 ± 3.66	58.10 ± 1.64	66.38 ± 1.93	248.43 ± 4.79	113.92 ± 2.17	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
182.75 ± 6.11	54.70 ± 2.33	62.26 ± 2.47	238.61 ± 8.11	108.53 ± 3.92	n = 70	[DA5] Siemens Dimension
181.18 ± 8.33	53.51 ± 2.21	61.74 ± 2.39	236.26 ± 7.12	106.81 ± 4.19	n = 6	[SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Ethosuximide (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
52.01 ± 3.94	92.86 ± 6.49	18.86 ± 1.02	138.22 ± 5.73	183.89 ± 5.61	n = 6	[---] All Methods & Instruments
47.9	88.8	16.0	133.9	177.7		[---] Weigh-in value
						<Instruments>
52.31 ± 2.69	93.01 ± 6.72	18.57 ± 0.66	135.57 ± 4.26	183.52 ± 4.14	n = 4	[OLC] Beckman Coulter AU Chemistry System
						<Reagents>
52.01 ± 3.94	92.86 ± 6.49	18.86 ± 1.02	138.22 ± 5.73	183.89 ± 5.61	n = 6	[SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Gentamicin (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
13.69 ± 1.39	3.06 ± 0.24	4.70 ± 0.36	10.77 ± 0.99	6.05 ± 0.50	n = 171	[---] All Methods & Instruments
13.7	2.9	4.6	10.8	5.8		[---] Weigh-in value
						<Instruments>
12.26 ± 0.43	2.78 ± 0.04	4.29 ± 0.11	9.60 ± 0.17	5.31 ± 0.11	n = 4	[ABJ] Abbott Architect c System
12.67 ± 0.73	2.87 ± 0.08	4.49 ± 0.17	9.98 ± 0.33	5.72 ± 0.23	n = 9	[ABH] Abbott Architect i System
14.93 ± 0.73	3.38 ± 0.19	5.20 ± 0.22	11.72 ± 0.66	6.60 ± 0.27	n = 14	[OLC] Beckman Coulter AU Chemistry System
13.77 ± 0.59	3.10 ± 0.09	4.90 ± 0.00	11.53 ± 0.05	6.30 ± 0.00	n = 3	[BCX] Beckman Coulter LX-20
13.95 ± 0.84	3.18 ± 0.17	4.82 ± 0.19	11.34 ± 0.51	6.33 ± 0.27	n = 9	[BCG] Beckman Coulter UniCel DxC 600
14.34 ± 1.05	3.36 ± 0.14	5.05 ± 0.15	11.57 ± 0.45	6.52 ± 0.20	n = 7	[BCH] Beckman Coulter UniCel DxC 800
15.53 ± 1.19	3.29 ± 0.06	5.05 ± 0.16	12.32 ± 1.00	6.49 ± 0.30	n = 9	[JJF] Ortho Vitros 5,1FS
14.98 ± 1.12	3.40 ± 0.13	5.26 ± 0.27	11.81 ± 0.98	6.71 ± 0.31	n = 13	[JJG] Ortho Vitros 5600
12.16 ± 1.52	2.76 ± 0.16	4.32 ± 0.17	9.21 ± 0.37	5.48 ± 0.23	n = 6	[ROC] Roche cobas c501
12.64 ± 0.56	2.87 ± 0.05	4.30 ± 0.00	10.26 ± 0.73	5.27 ± 0.05	n = 3	[ROS] Roche Cobas INTEGRA 400
12.38 ± 0.59	2.98 ± 0.15	4.35 ± 0.11	9.84 ± 0.40	5.26 ± 0.17	n = 13	[ROT] Roche Cobas INTEGRA 800
12.31 ± 0.82	3.04 ± 0.10	4.62 ± 0.25	10.12 ± 0.70	5.88 ± 0.23	n = 8	[ROD] Roche MODULAR D/P
12.40 ± 0.89	2.88 ± 0.20	4.42 ± 0.28	9.09 ± 0.78	5.44 ± 0.19	n = 4	[BYE] Siemens ADVIA 1800
13.82 ± 1.49	3.11 ± 0.16	4.79 ± 0.25	10.97 ± 0.64	6.05 ± 0.23	n = 12	[COB] Siemens ADVIA Centaur
13.74 ± 0.67	3.00 ± 0.08	4.62 ± 0.13	10.73 ± 0.47	5.86 ± 0.18	n = 4	[DUE] Siemens Dimension EXL
14.10 ± 0.63	3.05 ± 0.12	4.75 ± 0.09	10.56 ± 0.35	5.99 ± 0.09	n = 8	[DUR] Siemens Dimension RxL
13.73 ± 0.98	2.96 ± 0.13	4.60 ± 0.19	10.78 ± 0.48	6.07 ± 0.24	n = 40	[DUT] Siemens Dimension Vista
						<Reagents>
12.59 ± 0.78	2.84 ± 0.08	4.42 ± 0.17	9.85 ± 0.30	5.60 ± 0.27	n = 14	[AB1] Abbott
14.02 ± 0.85	3.23 ± 0.18	4.92 ± 0.18	11.47 ± 0.43	6.40 ± 0.23	n = 19	[BC1] Beckman Coulter
15.02 ± 0.91	3.42 ± 0.19	5.28 ± 0.27	11.80 ± 0.69	6.71 ± 0.38	n = 9	[OL1] Beckman Coulter AU Series
15.20 ± 1.18	3.34 ± 0.12	5.16 ± 0.25	12.01 ± 1.03	6.62 ± 0.33	n = 22	[JJ1] Ortho Clinical Diagnostics
11.70 ± 0.73	2.90 ± 0.09	4.35 ± 0.19	9.57 ± 0.69	5.50 ± 0.18	n = 3	[RO4] Roche cobas c311/c501/c502/c701/c70
11.75 ± 1.06	2.91 ± 0.31	4.47 ± 0.33	9.93 ± 0.80	5.77 ± 0.26	n = 6	[RO2] Roche Hitachi and Modular D/P
12.43 ± 0.61	2.95 ± 0.13	4.34 ± 0.09	9.89 ± 0.49	5.26 ± 0.14	n = 16	[RO1] Roche Integra and MIRA
13.82 ± 1.49	3.11 ± 0.16	4.79 ± 0.25	10.97 ± 0.64	6.05 ± 0.23	n = 12	[BY1] Siemens ADVIA/ADVIA Centaur
11.88 ± 1.57	2.85 ± 0.16	4.41 ± 0.24	9.12 ± 0.68	5.38 ± 0.04	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
13.80 ± 0.88	2.98 ± 0.12	4.63 ± 0.17	10.74 ± 0.46	6.05 ± 0.22	n = 54	[DA5] Siemens Dimension
14.81 ± 0.49	3.28 ± 0.13	5.12 ± 0.08	11.52 ± 0.47	6.52 ± 0.18	n = 5	[SY4] Syva Emit 2000
13.37 ± 0.50	2.77 ± 0.14	4.43 ± 0.05	9.19 ± 0.29	5.65 ± 0.19	n = 3	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Lithium (mmol/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
0.533 ± 0.086	1.097 ± 0.102	0.200 ± 0.000	1.550 ± 0.148	2.201 ± 0.172	n = 201	[---] All Methods & Instruments
0.6	1.2	0.2	1.6	2.3		[---] Weigh-in value
						<Instruments>
0.540 ± 0.009	1.118 ± 0.047	0.185 ± 0.010	1.558 ± 0.063	2.148 ± 0.087	n = 14	[ABJ] Abbott Architect c System
0.504 ± 0.010	1.082 ± 0.032	0.190 ± 0.015	1.500 ± 0.019	2.120 ± 0.040	n = 17	[OLC] Beckman Coulter AU Chemistry System
0.480 ± 0.061	1.070 ± 0.063	0.167 ± 0.059	1.498 ± 0.067	2.118 ± 0.095	n = 7	[BCG] Beckman Coulter UniCel DxC 600
0.473 ± 0.061	1.035 ± 0.051	0.132 ± 0.040	1.498 ± 0.023	2.135 ± 0.037	n = 7	[BCH] Beckman Coulter UniCel DxC 800
0.518 ± 0.032	1.060 ± 0.092	0.178 ± 0.024	1.486 ± 0.119	2.123 ± 0.167	n = 3	[ICP] ICP/MS
0.602 ± 0.065	1.219 ± 0.085	0.200 ± 0.000	1.770 ± 0.065	2.473 ± 0.101	n = 15	[JJF] Ortho Vitros 5,1FS
0.600 ± 0.000	1.205 ± 0.048	0.200 ± 0.000	1.800 ± 0.000	2.485 ± 0.086	n = 17	[JJG] Ortho Vitros 5600
0.619 ± 0.047	1.165 ± 0.038	0.257 ± 0.092	1.604 ± 0.075	2.314 ± 0.152	n = 4	[ROY] Roche 9180/9181
0.538 ± 0.050	1.089 ± 0.065	0.200 ± 0.000	1.527 ± 0.064	2.163 ± 0.058	n = 16	[ROC] Roche cobas c501
0.594 ± 0.071	1.105 ± 0.009	0.195 ± 0.024	1.583 ± 0.064	2.318 ± 0.089	n = 9	[ROT] Roche Cobas INTEGRA 800
0.615 ± 0.067	1.175 ± 0.088	0.248 ± 0.043	1.594 ± 0.094	2.159 ± 0.027	n = 7	[ROD] Roche MODULAR D/P
0.545 ± 0.058	1.132 ± 0.045	0.194 ± 0.047	1.601 ± 0.007	2.254 ± 0.054	n = 12	[BYE] Siemens ADVIA 1800
0.364 ± 0.023	0.864 ± 0.036	0.200 ± 0.000	1.246 ± 0.069	1.870 ± 0.093	n = 5	[DUE] Siemens Dimension EXL
0.390 ± 0.030	0.882 ± 0.062	0.200 ± 0.000	1.267 ± 0.095	1.943 ± 0.081	n = 9	[DUR] Siemens Dimension RxL
0.492 ± 0.091	1.037 ± 0.089	0.200 ± 0.000	1.483 ± 0.099	2.143 ± 0.073	n = 38	[DUT] Siemens Dimension Vista
						<Reagents>
0.541 ± 0.008	1.119 ± 0.050	0.186 ± 0.011	1.561 ± 0.068	2.153 ± 0.093	n = 13	[AB1] Abbott
0.610 ± 0.036	1.175 ± 0.035	0.239 ± 0.081	1.603 ± 0.064	2.340 ± 0.135	n = 5	[AV1] AVL Scientific
0.483 ± 0.057	1.056 ± 0.056	0.152 ± 0.060	1.508 ± 0.032	2.139 ± 0.063	n = 16	[BC1] Beckman Coulter
0.500 ± 0.000	1.083 ± 0.029	0.189 ± 0.015	1.504 ± 0.029	2.125 ± 0.046	n = 14	[OL1] Beckman Coulter AU Series
0.527 ± 0.033	1.057 ± 0.054	0.180 ± 0.018	1.495 ± 0.088	2.133 ± 0.117	n = 4	[IH1] In-House
0.597 ± 0.049	1.206 ± 0.068	0.200 ± 0.000	1.784 ± 0.047	2.477 ± 0.092	n = 34	[JJ1] Ortho Clinical Diagnostics
0.536 ± 0.045	1.094 ± 0.059	0.200 ± 0.000	1.534 ± 0.059	2.167 ± 0.048	n = 19	[RO4] Roche cobas c311/c501/c502/c701/c70
0.594 ± 0.071	1.105 ± 0.009	0.195 ± 0.024	1.583 ± 0.064	2.318 ± 0.089	n = 9	[RO1] Roche Integra and MIRA
0.551 ± 0.058	1.128 ± 0.046	0.194 ± 0.047	1.602 ± 0.040	2.260 ± 0.053	n = 12	[BY1] Siemens ADVIA/ADVIA Centaur
0.453 ± 0.094	0.988 ± 0.111	0.200 ± 0.000	1.422 ± 0.140	2.090 ± 0.128	n = 54	[DA5] Siemens Dimension
0.579 ± 0.074	1.134 ± 0.069	0.212 ± 0.053	1.543 ± 0.078	2.135 ± 0.039	n = 11	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Phenobarbital (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
53.89 ± 3.71	13.50 ± 1.14	18.49 ± 1.37	46.10 ± 3.08	27.07 ± 1.93	n = 190	[---] All Methods & Instruments
54.9	13.4	18.3	47.0	26.9		[---] Weigh-in value
						<Instruments>
54.28 ± 3.96	13.43 ± 0.50	18.51 ± 0.80	46.13 ± 3.48	26.16 ± 0.97	n = 3	[ABJ] Abbott Architect c System
55.53 ± 2.98	13.71 ± 0.73	18.71 ± 0.88	47.74 ± 1.81	27.75 ± 1.08	n = 14	[ABH] Abbott Architect i System
52.98 ± 3.74	12.76 ± 0.60	17.71 ± 0.88	45.27 ± 2.43	25.60 ± 1.45	n = 21	[OLC] Beckman Coulter AU Chemistry System
51.02 ± 1.41	14.63 ± 0.59	19.79 ± 1.30	43.21 ± 1.38	28.01 ± 1.53	n = 3	[BCX] Beckman Coulter LX-20
49.43 ± 3.62	14.61 ± 0.79	18.30 ± 0.91	41.93 ± 2.45	27.64 ± 2.09	n = 10	[BCG] Beckman Coulter UniCel DxC 600
49.22 ± 1.19	13.78 ± 0.57	17.73 ± 0.73	40.88 ± 0.98	26.65 ± 0.85	n = 9	[BCH] Beckman Coulter UniCel DxC 800
51.17 ± 1.95	11.81 ± 0.44	16.75 ± 0.45	44.42 ± 1.94	24.65 ± 0.27	n = 3	[ROJ] Roche cobas c311
52.51 ± 1.99	12.57 ± 0.59	17.55 ± 0.68	45.62 ± 1.11	25.73 ± 1.15	n = 17	[ROC] Roche cobas c501
52.75 ± 1.95	12.53 ± 0.55	17.31 ± 0.39	44.39 ± 1.59	25.17 ± 0.70	n = 10	[ROT] Roche Cobas INTEGRA 800
52.54 ± 1.27	12.86 ± 0.15	18.05 ± 0.60	46.21 ± 1.29	26.53 ± 0.75	n = 12	[ROD] Roche MODULAR D/P
59.21 ± 3.72	14.43 ± 1.20	20.24 ± 1.63	50.92 ± 3.58	29.68 ± 2.61	n = 15	[COB] Siemens ADVIA Centaur
56.70 ± 2.79	13.90 ± 1.25	18.88 ± 1.43	47.49 ± 2.28	27.34 ± 1.63	n = 7	[DUE] Siemens Dimension EXL
56.27 ± 2.66	14.20 ± 0.90	19.37 ± 1.05	46.94 ± 2.56	27.63 ± 1.43	n = 12	[DUR] Siemens Dimension RxL
55.22 ± 2.54	14.10 ± 1.08	19.57 ± 1.09	47.42 ± 2.39	28.53 ± 1.48	n = 39	[DUT] Siemens Dimension Vista
54.23 ± 3.09	13.47 ± 1.22	18.57 ± 1.35	45.06 ± 1.36	27.24 ± 0.58	n = 4	[DUX] Siemens Dimension Xpand
						<Reagents>
55.02 ± 3.51	13.67 ± 0.71	18.59 ± 0.99	47.69 ± 2.26	27.35 ± 1.16	n = 18	[AB1] Abbott
49.36 ± 2.26	14.22 ± 0.74	18.11 ± 1.05	41.41 ± 1.54	27.09 ± 1.50	n = 23	[BC1] Beckman Coulter
52.96 ± 3.96	12.87 ± 0.54	17.76 ± 0.79	44.54 ± 2.65	25.41 ± 1.37	n = 13	[OL1] Beckman Coulter AU Series
52.90 ± 2.37	11.95 ± 0.82	16.50 ± 1.19	45.22 ± 1.97	26.22 ± 1.46	n = 4	[MG1] Microgenics CEDIA
52.19 ± 1.94	12.41 ± 0.61	17.39 ± 0.72	45.49 ± 1.29	25.51 ± 1.12	n = 22	[RO4] Roche cobas c311/c501/c502/c701/c70
52.71 ± 2.06	12.62 ± 0.81	18.24 ± 0.92	42.13 ± 11.90	26.82 ± 0.57	n = 4	[RO2] Roche Hitachi and Modular D/P
52.45 ± 2.12	12.57 ± 0.51	17.36 ± 0.41	44.18 ± 1.52	25.23 ± 0.61	n = 11	[RO1] Roche Integra and MIRA
52.54 ± 0.92	12.84 ± 0.11	17.83 ± 0.22	46.03 ± 1.36	26.39 ± 0.77	n = 8	[RO6] Roche ONLINE
59.02 ± 3.56	14.46 ± 1.11	20.14 ± 1.56	50.74 ± 3.23	29.65 ± 2.47	n = 16	[BY1] Siemens ADVIA/ADVIA Centaur
55.53 ± 2.70	14.07 ± 1.08	19.41 ± 1.18	47.15 ± 2.44	28.13 ± 1.57	n = 62	[DA5] Siemens Dimension
56.07 ± 3.08	13.35 ± 0.51	18.35 ± 0.79	47.74 ± 1.84	26.84 ± 1.51	n = 4	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Phenytoin (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
10.92 ± 1.01	12.75 ± 0.80	3.81 ± 0.39	17.69 ± 1.15	25.52 ± 1.72	n = 259	[---] All Methods & Instruments
11.3	13.0	3.8	18.0	26.0		[---] Weigh-in value
						<Instruments>
11.20 ± 0.49	13.20 ± 0.58	3.82 ± 0.21	18.43 ± 1.12	27.26 ± 1.33	n = 4	[ABJ] Abbott Architect c System
11.20 ± 0.51	13.21 ± 0.47	3.89 ± 0.09	18.43 ± 0.51	26.16 ± 1.01	n = 16	[ABH] Abbott Architect i System
10.72 ± 0.73	12.62 ± 0.79	3.81 ± 0.28	17.55 ± 1.16	25.55 ± 1.67	n = 31	[OLC] Beckman Coulter AU Chemistry System
11.00 ± 0.09	12.80 ± 0.18	3.89 ± 0.29	17.25 ± 0.27	25.15 ± 0.19	n = 3	[BCX] Beckman Coulter LX-20
10.79 ± 0.25	12.56 ± 0.26	3.56 ± 0.19	17.16 ± 0.64	24.94 ± 1.49	n = 10	[BCG] Beckman Coulter UniCel DxC 600
11.02 ± 0.17	12.60 ± 0.30	3.74 ± 0.19	17.14 ± 0.48	24.21 ± 0.80	n = 9	[BCH] Beckman Coulter UniCel DxC 800
9.43 ± 0.31	12.59 ± 0.56	3.79 ± 0.17	17.12 ± 0.74	23.87 ± 1.13	n = 17	[JJF] Ortho Vitros 5,1FS
9.19 ± 0.43	12.44 ± 0.52	3.61 ± 0.23	16.43 ± 0.72	24.08 ± 1.04	n = 17	[JJG] Ortho Vitros 5600
10.65 ± 0.40	12.05 ± 0.40	3.56 ± 0.36	17.50 ± 0.77	24.63 ± 0.90	n = 17	[ROC] Roche cobas c501
10.78 ± 0.18	12.18 ± 0.27	3.59 ± 0.11	16.95 ± 0.32	25.26 ± 0.57	n = 11	[ROT] Roche Cobas INTEGRA 800
11.12 ± 0.62	12.89 ± 0.66	3.70 ± 0.27	18.30 ± 0.85	25.90 ± 1.13	n = 14	[ROD] Roche MODULAR D/P
11.09 ± 0.59	13.41 ± 0.82	4.08 ± 0.34	18.15 ± 0.90	24.98 ± 1.92	n = 8	[BYE] Siemens ADVIA 1800
13.35 ± 1.10	15.74 ± 1.05	4.70 ± 0.46	21.47 ± 1.17	31.31 ± 1.66	n = 13	[COB] Siemens ADVIA Centaur
14.75 ± 1.28	17.64 ± 1.17	5.05 ± 0.46	24.58 ± 2.48	34.96 ± 1.45	n = 3	[BYP] Siemens ADVIA Centaur CP
11.12 ± 0.57	12.57 ± 0.53	3.97 ± 0.63	17.64 ± 0.84	26.14 ± 1.28	n = 12	[DUE] Siemens Dimension EXL
11.24 ± 1.08	12.98 ± 0.98	4.00 ± 0.35	18.02 ± 0.95	26.41 ± 1.73	n = 13	[DUR] Siemens Dimension RxL
11.69 ± 0.53	13.28 ± 0.64	4.08 ± 0.44	18.29 ± 0.82	26.52 ± 1.24	n = 40	[DUT] Siemens Dimension Vista
10.53 ± 0.60	12.37 ± 0.91	3.50 ± 0.43	17.22 ± 1.13	25.44 ± 0.90	n = 7	[DUX] Siemens Dimension Xpand
						<Reagents>
11.20 ± 0.49	13.16 ± 0.53	3.88 ± 0.13	18.40 ± 0.68	26.27 ± 1.16	n = 21	[AB1] Abbott
10.89 ± 0.28	12.59 ± 0.31	3.65 ± 0.26	17.21 ± 0.54	24.67 ± 1.09	n = 23	[BC1] Beckman Coulter
10.65 ± 0.62	12.49 ± 0.74	3.76 ± 0.23	17.35 ± 0.93	25.31 ± 1.36	n = 18	[OL1] Beckman Coulter AU Series
11.47 ± 0.64	13.51 ± 0.74	4.04 ± 0.31	18.73 ± 0.92	26.57 ± 1.25	n = 6	[MG1] Microgenics CEDIA
9.31 ± 0.43	12.51 ± 0.53	3.70 ± 0.23	16.81 ± 0.83	23.96 ± 1.07	n = 35	[JJ1] Ortho Clinical Diagnostics
10.61 ± 0.38	12.04 ± 0.37	3.58 ± 0.36	17.39 ± 0.79	24.62 ± 0.81	n = 22	[RO4] Roche cobas c311/c501/c502/c701/c70
11.26 ± 0.44	13.06 ± 0.82	3.77 ± 0.35	18.74 ± 1.07	26.14 ± 1.05	n = 5	[RO2] Roche Hitachi and Modular D/P
10.82 ± 0.18	12.18 ± 0.29	3.58 ± 0.10	16.95 ± 0.31	25.32 ± 0.67	n = 13	[RO1] Roche Integra and MIRA
11.05 ± 0.71	12.76 ± 0.45	3.64 ± 0.14	18.12 ± 0.63	25.77 ± 1.06	n = 9	[RO6] Roche ONLINE
13.57 ± 1.21	16.04 ± 1.28	4.76 ± 0.47	21.83 ± 1.56	32.15 ± 2.46	n = 16	[BY1] Siemens ADVIA/ADVIA Centaur
11.29 ± 0.50	13.41 ± 0.96	4.16 ± 0.40	18.40 ± 0.95	25.53 ± 2.34	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
11.42 ± 0.74	13.04 ± 0.79	3.99 ± 0.50	18.05 ± 0.94	26.31 ± 1.33	n = 72	[DA5] Siemens Dimension
10.42 ± 0.43	12.48 ± 0.69	3.81 ± 0.22	17.42 ± 0.99	25.98 ± 1.94	n = 6	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Free Phenytoin (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
1.17 ± 0.10	2.26 ± 0.30	0.64 ± 0.13	2.62 ± 0.23	3.36 ± 0.35	n = 22	[---] All Methods & Instruments
						<Instruments>
1.22 ± 0.11	2.34 ± 0.46	0.65 ± 0.17	2.59 ± 0.18	3.50 ± 0.44	n = 10	[OLC] Beckman Coulter AU Chemistry System
1.20 ± 0.00	2.30 ± 0.06	0.67 ± 0.05	2.70 ± 0.00	3.45 ± 0.11	n = 6	[ROT] Roche Cobas INTEGRA 800
						<Reagents>
1.30 ± 0.00	1.73 ± 0.05	0.50 ± 0.00	2.40 ± 0.09	3.07 ± 0.05	n = 3	[OL1] Beckman Coulter AU Series
1.20 ± 0.00	2.27 ± 0.09	0.65 ± 0.06	2.66 ± 0.26	3.33 ± 0.30	n = 8	[RO1] Roche Integra and MIRA
1.14 ± 0.11	2.46 ± 0.24	0.73 ± 0.16	2.74 ± 0.23	3.64 ± 0.40	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Primidone (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
7.67 ± 0.47	8.90 ± 0.23	2.62 ± 0.14	13.69 ± 0.31	17.13 ± 0.54	n = 14	[---] All Methods & Instruments
7.0	8.9	2.3	13.8	17.8		[---] Weigh-in value
						<Instruments>
7.73 ± 0.30	8.84 ± 0.28	2.63 ± 0.14	13.73 ± 0.28	17.07 ± 0.60	n = 9	[OLC] Beckman Coulter AU Chemistry System
7.10 ± 0.09	9.00 ± 0.09	2.50 ± 0.09	13.47 ± 0.14	17.15 ± 0.27	n = 3	[ROT] Roche Cobas INTEGRA 800
						<Reagents>
7.10 ± 0.09	9.00 ± 0.09	2.50 ± 0.09	13.47 ± 0.14	17.15 ± 0.27	n = 3	[RO1] Roche Integra and MIRA
7.87 ± 0.38	8.86 ± 0.26	2.67 ± 0.13	13.81 ± 0.27	17.22 ± 0.56	n = 10	[SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Procainamide (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
12.55 ± 0.67	7.48 ± 0.35	4.42 ± 0.21	3.83 ± 0.18	15.04 ± 0.66	n = 12	[---] All Methods & Instruments
12.9	7.7	4.3	3.6	15.4		[---] Weigh-in value
						<Instruments>
12.55 ± 0.46	7.60 ± 0.18	4.47 ± 0.14	3.90 ± 0.00	15.11 ± 0.20	n = 3	[OLC] Beckman Coulter AU Chemistry System
12.43 ± 0.32	7.47 ± 0.05	4.28 ± 0.15	3.63 ± 0.05	14.95 ± 0.36	n = 3	[ROT] Roche Cobas INTEGRA 800
						<Reagents>
12.43 ± 0.32	7.47 ± 0.05	4.28 ± 0.15	3.63 ± 0.05	14.95 ± 0.36	n = 3	[RO1] Roche Integra and MIRA
12.61 ± 0.52	7.63 ± 0.23	4.60 ± 0.09	3.96 ± 0.10	15.40 ± 0.36	n = 3	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

N-Acetyl-Procainamide (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
20.60 ± 1.38	5.22 ± 0.33	7.19 ± 0.32	7.65 ± 0.31	10.16 ± 0.63	n = 12	[---] All Methods & Instruments
20.6	5.0	6.9	7.4	9.9		[---] Weigh-in value
						<Instruments>
20.08 ± 0.50	4.96 ± 0.10	7.05 ± 0.19	7.47 ± 0.05	10.10 ± 0.27	n = 3	[OLC] Beckman Coulter AU Chemistry System
20.15 ± 0.54	5.27 ± 0.05	7.25 ± 0.27	7.69 ± 0.20	10.21 ± 0.29	n = 3	[ROT] Roche Cobas INTEGRA 800
						<Reagents>
20.15 ± 0.54	5.27 ± 0.05	7.25 ± 0.27	7.69 ± 0.20	10.21 ± 0.29	n = 3	[RO1] Roche Integra and MIRA
21.07 ± 1.30	5.15 ± 0.27	7.17 ± 0.14	7.53 ± 0.14	10.40 ± 0.27	n = 3	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Quinidine (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
2.15 ± 0.15	3.21 ± 0.16	0.77 ± 0.10	4.68 ± 0.21	6.17 ± 0.41	n = 12	[---] All Methods & Instruments
2.4	3.5	0.8	4.8	6.4		[---] Weigh-in value
						<Instruments>
2.10 ± 0.06	3.15 ± 0.08	0.80 ± 0.06	4.56 ± 0.06	6.11 ± 0.18	n = 5	[ROT] Roche Cobas INTEGRA 800
						<Reagents>
2.10 ± 0.06	3.15 ± 0.08	0.80 ± 0.06	4.56 ± 0.06	6.11 ± 0.18	n = 5	[RO1] Roche Integra and MIRA

Summary of Participant Performance (Mean and Standard Deviation)

Salicylate (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
87.85 ± 5.00	15.82 ± 0.98	29.66 ± 1.02	67.37 ± 3.41	31.41 ± 1.28	n = 207	[---] All Methods & Instruments
85.6	15.3	28.5	65.6	30.5		[---] Weigh-in value
						<Instruments>
89.18 ± 1.08	15.08 ± 0.44	29.55 ± 0.41	67.78 ± 0.81	31.19 ± 0.42	n = 16	[ABJ] Abbott Architect c System
94.25 ± 8.74	16.60 ± 0.98	31.16 ± 2.13	71.12 ± 5.82	32.95 ± 1.95	n = 22	[OLC] Beckman Coulter AU Chemistry System
89.30 ± 0.55	13.97 ± 0.50	28.37 ± 1.22	66.29 ± 0.44	30.48 ± 0.41	n = 3	[BCX] Beckman Coulter LX-20
90.71 ± 2.62	14.94 ± 0.70	29.79 ± 1.22	69.90 ± 2.41	31.68 ± 1.02	n = 8	[BCG] Beckman Coulter UniCel DxC 600
92.85 ± 2.08	15.07 ± 0.65	30.05 ± 0.72	70.82 ± 2.48	31.19 ± 0.84	n = 8	[BCH] Beckman Coulter UniCel DxC 800
93.68 ± 4.22	17.00 ± 0.00	33.20 ± 2.36	70.32 ± 4.22	35.93 ± 2.86	n = 3	[JJE] Ortho Vitros 250/350/950
79.41 ± 7.13	16.82 ± 0.60	29.50 ± 1.24	61.58 ± 4.01	30.49 ± 1.98	n = 15	[JJF] Ortho Vitros 5,1FS
82.37 ± 7.10	16.93 ± 0.39	29.83 ± 1.53	65.82 ± 5.63	31.64 ± 3.07	n = 17	[JJG] Ortho Vitros 5600
86.86 ± 3.79	14.30 ± 0.56	28.99 ± 0.91	68.66 ± 1.93	30.66 ± 0.40	n = 14	[ROC] Roche cobas c501
83.49 ± 2.71	14.85 ± 0.34	28.40 ± 0.30	64.24 ± 2.07	29.71 ± 0.37	n = 9	[ROT] Roche Cobas INTEGRA 800
87.19 ± 2.04	14.96 ± 0.29	29.02 ± 0.72	65.94 ± 1.67	30.83 ± 0.89	n = 8	[ROD] Roche MODULAR D/P
94.14 ± 1.94	16.25 ± 0.67	31.02 ± 0.60	72.00 ± 1.69	32.33 ± 0.93	n = 9	[BYE] Siemens ADVIA 1800
96.25 ± 2.63	17.00 ± 0.64	32.44 ± 0.91	73.62 ± 2.79	34.44 ± 1.31	n = 3	[BYB] Siemens ADVIA 2400
87.26 ± 0.73	15.97 ± 0.12	29.86 ± 0.29	66.57 ± 0.69	31.72 ± 0.29	n = 11	[DUE] Siemens Dimension EXL
86.96 ± 0.62	16.07 ± 0.19	29.91 ± 0.26	66.59 ± 0.56	31.75 ± 0.30	n = 12	[DUR] Siemens Dimension RxL
86.70 ± 1.10	15.78 ± 0.28	29.69 ± 0.39	66.64 ± 0.73	31.69 ± 0.53	n = 38	[DUT] Siemens Dimension Vista
86.95 ± 0.62	16.13 ± 0.11	29.79 ± 0.34	66.55 ± 0.44	31.69 ± 0.37	n = 7	[DUX] Siemens Dimension Xpand
						<Reagents>
89.18 ± 1.08	15.08 ± 0.44	29.55 ± 0.41	67.78 ± 0.81	31.19 ± 0.42	n = 16	[AB1] Abbott
91.39 ± 2.64	14.93 ± 0.82	29.88 ± 1.13	70.08 ± 3.00	31.24 ± 1.01	n = 21	[BC1] Beckman Coulter
92.50 ± 8.82	16.41 ± 0.94	31.22 ± 2.15	71.09 ± 5.85	32.89 ± 1.90	n = 17	[OL1] Beckman Coulter AU Series
82.10 ± 7.98	16.90 ± 0.45	29.83 ± 1.63	64.25 ± 5.65	31.28 ± 2.79	n = 35	[JJ1] Ortho Clinical Diagnostics
86.55 ± 3.62	14.27 ± 0.52	28.91 ± 0.81	68.58 ± 1.79	30.65 ± 0.50	n = 14	[RO4] Roche cobas c311/c501/c502/c701/c70
87.19 ± 2.04	14.96 ± 0.29	29.02 ± 0.72	65.94 ± 1.67	30.83 ± 0.89	n = 8	[RO2] Roche Hitachi and Modular D/P
83.49 ± 2.71	14.85 ± 0.34	28.40 ± 0.30	64.24 ± 2.07	29.71 ± 0.37	n = 9	[RO1] Roche Integra and MIRA
94.85 ± 2.37	16.44 ± 0.78	31.35 ± 0.92	72.60 ± 2.01	32.85 ± 1.42	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
86.89 ± 0.88	15.92 ± 0.28	29.78 ± 0.35	66.61 ± 0.66	31.72 ± 0.43	n = 68	[DA5] Siemens Dimension
97.60 ± 7.65	17.06 ± 1.11	31.75 ± 1.35	71.91 ± 1.81	33.18 ± 0.15	n = 3	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Theophylline (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
9.44 ± 0.41	14.29 ± 0.70	3.18 ± 0.22	21.73 ± 1.22	28.54 ± 1.56	n = 203	[---] All Methods & Instruments
9.6	14.8	3.2	22.4	29.5		[---] Weigh-in value
						<Instruments>
9.31 ± 0.53	14.27 ± 0.89	3.14 ± 0.16	21.40 ± 1.31	28.29 ± 1.59	n = 12	[ABH] Abbott Architect i System
9.46 ± 0.46	14.35 ± 0.85	3.22 ± 0.14	21.96 ± 1.76	28.40 ± 2.82	n = 19	[OLC] Beckman Coulter AU Chemistry System
9.17 ± 0.14	13.57 ± 0.34	3.18 ± 0.24	21.81 ± 1.49	28.32 ± 0.32	n = 3	[BCX] Beckman Coulter LX-20
9.31 ± 0.27	13.99 ± 0.27	3.10 ± 0.14	21.28 ± 0.38	28.55 ± 0.71	n = 9	[BCG] Beckman Coulter UniCel DxC 600
9.52 ± 0.13	14.33 ± 0.34	3.24 ± 0.10	21.67 ± 0.52	28.41 ± 0.62	n = 9	[BCH] Beckman Coulter UniCel DxC 800
15.83 ± 0.79	19.37 ± 0.83	4.99 ± 0.49	32.74 ± 2.04	38.03 ± 1.07	n = 14	[JJF] Ortho Vitros 5,1FS
15.45 ± 0.64	18.99 ± 0.63	4.84 ± 0.48	32.49 ± 0.97	37.92 ± 0.93	n = 16	[JJG] Ortho Vitros 5600
9.56 ± 0.26	14.48 ± 0.29	3.34 ± 0.08	22.39 ± 0.41	29.36 ± 0.63	n = 15	[ROC] Roche cobas c501
9.91 ± 0.12	14.99 ± 0.48	3.37 ± 0.16	22.29 ± 0.93	29.36 ± 1.02	n = 7	[ROT] Roche Cobas INTEGRA 800
9.52 ± 0.25	14.43 ± 0.34	3.24 ± 0.19	22.19 ± 0.65	28.73 ± 0.69	n = 11	[ROD] Roche MODULAR D/P
9.94 ± 0.66	14.45 ± 0.81	3.05 ± 0.64	21.87 ± 1.57	28.62 ± 1.44	n = 4	[BYE] Siemens ADVIA 1800
8.47 ± 0.98	13.74 ± 0.80	2.75 ± 0.38	19.80 ± 0.95	27.94 ± 1.64	n = 13	[COB] Siemens ADVIA Centaur
9.56 ± 0.31	14.28 ± 0.54	3.24 ± 0.22	21.49 ± 1.19	28.10 ± 1.94	n = 7	[DUE] Siemens Dimension EXL
9.66 ± 0.24	14.81 ± 0.54	3.22 ± 0.14	22.14 ± 0.86	29.59 ± 1.16	n = 9	[DUR] Siemens Dimension RxL
9.31 ± 0.36	14.05 ± 0.67	3.07 ± 0.22	21.61 ± 1.19	27.91 ± 1.37	n = 40	[DUT] Siemens Dimension Vista
9.33 ± 0.32	14.20 ± 0.72	3.10 ± 0.09	21.67 ± 1.39	28.22 ± 1.50	n = 3	[DUX] Siemens Dimension Xpand
						<Reagents>
9.37 ± 0.56	14.36 ± 0.90	3.16 ± 0.17	21.53 ± 1.32	28.49 ± 1.67	n = 13	[AB1] Abbott
9.38 ± 0.24	14.10 ± 0.39	3.17 ± 0.15	21.46 ± 0.53	28.46 ± 0.60	n = 22	[BC1] Beckman Coulter
9.45 ± 0.46	14.37 ± 0.82	3.22 ± 0.15	21.93 ± 1.63	28.41 ± 2.45	n = 15	[OL1] Beckman Coulter AU Series
15.62 ± 0.72	19.15 ± 0.73	4.91 ± 0.49	32.61 ± 1.35	37.97 ± 0.98	n = 30	[JJ1] Ortho Clinical Diagnostics
9.50 ± 0.28	14.44 ± 0.29	3.30 ± 0.13	22.36 ± 0.44	29.25 ± 0.70	n = 18	[RO4] Roche cobas c311/c501/c502/c701/c70
9.56 ± 0.19	14.43 ± 0.41	3.18 ± 0.26	22.20 ± 0.42	28.55 ± 0.56	n = 4	[RO2] Roche Hitachi and Modular D/P
9.86 ± 0.18	14.98 ± 0.43	3.34 ± 0.16	22.25 ± 0.83	29.49 ± 0.71	n = 8	[RO1] Roche Integra and MIRA
9.51 ± 0.28	14.44 ± 0.31	3.25 ± 0.13	22.14 ± 0.85	28.85 ± 0.74	n = 7	[RO6] Roche ONLINE
8.51 ± 0.95	13.84 ± 0.85	2.79 ± 0.38	20.00 ± 1.16	28.11 ± 1.68	n = 14	[BY1] Siemens ADVIA/ADVIA Centaur
9.83 ± 0.67	14.91 ± 0.74	3.15 ± 0.58	22.39 ± 1.31	28.39 ± 0.98	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
9.40 ± 0.37	14.21 ± 0.69	3.12 ± 0.21	21.70 ± 1.17	28.22 ± 1.54	n = 59	[DA5] Siemens Dimension
9.64 ± 0.48	14.19 ± 0.83	3.17 ± 0.14	21.89 ± 2.08	28.68 ± 3.57	n = 5	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Tobramycin (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
11.44 ± 1.15	2.15 ± 0.29	3.77 ± 0.40	13.28 ± 1.61	4.25 ± 0.51	n = 79	[---] All Methods & Instruments
11.8	2.2	3.9	13.9	4.5		[---] Weigh-in value
						<Instruments>
10.26 ± 1.03	1.90 ± 0.00	3.20 ± 0.00	12.40 ± 0.89	3.45 ± 0.08	n = 6	[ABJ] Abbott Architect c System
10.93 ± 0.53	2.09 ± 0.13	3.59 ± 0.07	12.77 ± 1.33	4.03 ± 0.20	n = 10	[OLC] Beckman Coulter AU Chemistry System
13.45 ± 0.19	2.70 ± 0.09	4.90 ± 0.00	16.40 ± 0.09	5.37 ± 0.14	n = 3	[BCG] Beckman Coulter UniCel DxC 600
13.67 ± 0.86	2.77 ± 0.08	5.00 ± 0.08	15.50 ± 1.76	5.50 ± 0.08	n = 4	[BCH] Beckman Coulter UniCel DxC 800
13.04 ± 0.82	2.17 ± 0.14	3.63 ± 0.14	15.37 ± 0.77	4.08 ± 0.15	n = 3	[JJF] Ortho Vitros 5,1FS
11.86 ± 0.56	2.08 ± 0.04	3.72 ± 0.04	13.84 ± 0.69	4.18 ± 0.04	n = 4	[JJG] Ortho Vitros 5600
10.63 ± 0.56	2.18 ± 0.28	3.79 ± 0.11	11.90 ± 1.64	4.27 ± 0.15	n = 4	[ROC] Roche cobas c501
11.77 ± 0.66	2.08 ± 0.05	3.79 ± 0.10	13.87 ± 0.55	4.27 ± 0.28	n = 9	[ROT] Roche Cobas INTEGRA 800
11.56 ± 1.01	2.45 ± 0.22	3.93 ± 0.15	13.52 ± 1.96	4.51 ± 0.39	n = 4	[ROD] Roche MODULAR D/P
12.76 ± 0.38	2.66 ± 0.16	4.48 ± 0.25	14.50 ± 1.60	5.00 ± 0.00	n = 6	[COB] Siemens ADVIA Centaur
10.67 ± 0.05	1.94 ± 0.10	3.57 ± 0.05	12.82 ± 0.51	3.97 ± 0.05	n = 3	[DUR] Siemens Dimension RxL
11.04 ± 0.40	1.99 ± 0.12	3.68 ± 0.13	12.26 ± 0.80	4.18 ± 0.24	n = 17	[DUT] Siemens Dimension Vista
						<Reagents>
10.26 ± 1.03	1.90 ± 0.00	3.20 ± 0.00	12.40 ± 0.89	3.45 ± 0.08	n = 6	[AB1] Abbott
13.75 ± 0.38	2.76 ± 0.11	4.97 ± 0.09	16.38 ± 0.18	5.47 ± 0.09	n = 8	[BC1] Beckman Coulter
10.62 ± 0.66	2.12 ± 0.13	3.77 ± 0.27	11.68 ± 1.74	3.93 ± 0.33	n = 4	[OL1] Beckman Coulter AU Series
12.32 ± 0.89	2.11 ± 0.10	3.69 ± 0.10	14.47 ± 1.05	4.15 ± 0.11	n = 7	[JJ1] Ortho Clinical Diagnostics
10.63 ± 0.56	2.18 ± 0.28	3.79 ± 0.11	11.90 ± 1.64	4.27 ± 0.15	n = 4	[RO4] Roche cobas c311/c501/c502/c701/c70
11.68 ± 0.77	2.07 ± 0.05	3.80 ± 0.10	13.75 ± 0.66	4.27 ± 0.25	n = 11	[RO1] Roche Integra and MIRA
11.56 ± 1.01	2.45 ± 0.22	3.93 ± 0.15	13.52 ± 1.96	4.51 ± 0.39	n = 4	[RO6] Roche ONLINE
12.76 ± 0.38	2.66 ± 0.16	4.48 ± 0.25	14.50 ± 1.60	5.00 ± 0.00	n = 6	[BY1] Siemens ADVIA/ADVIA Centaur
11.01 ± 0.40	1.99 ± 0.11	3.67 ± 0.13	12.48 ± 0.86	4.14 ± 0.23	n = 22	[DA5] Siemens Dimension
11.07 ± 0.38	2.08 ± 0.12	3.60 ± 0.06	13.21 ± 0.81	4.06 ± 0.12	n = 6	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Valproic Acid (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
144.09 ± 13.08	78.87 ± 5.95	51.11 ± 4.37	39.28 ± 3.62	154.01 ± 15.11	n = 239	[---] All Methods & Instruments
142.3	76.9	47.4	37.8	153.0		[---] Weigh-in value
						<Instruments>
159.40 ± 14.64	91.02 ± 4.23	59.70 ± 2.08	49.54 ± 2.36	172.25 ± 11.43	n = 15	[ABH] Abbott Architect i System
143.03 ± 4.84	78.52 ± 3.86	52.13 ± 1.70	38.81 ± 2.80	158.31 ± 7.63	n = 3	[ABB] Abbott AxSym
153.98 ± 11.24	81.66 ± 3.70	53.04 ± 2.70	40.89 ± 2.30	166.99 ± 10.40	n = 25	[OLC] Beckman Coulter AU Chemistry System
119.13 ± 3.69	64.53 ± 0.05	39.67 ± 2.75	29.70 ± 2.34	118.07 ± 3.56	n = 3	[BCX] Beckman Coulter LX-20
113.49 ± 0.90	65.01 ± 4.11	40.81 ± 1.28	31.17 ± 2.35	117.71 ± 6.74	n = 9	[BCG] Beckman Coulter UniCel DxC 600
112.63 ± 5.68	65.80 ± 1.84	41.15 ± 2.66	32.08 ± 2.84	121.46 ± 7.56	n = 9	[BCH] Beckman Coulter UniCel DxC 800
161.84 ± 16.35	82.32 ± 6.84	52.32 ± 5.07	40.92 ± 4.65	176.21 ± 14.98	n = 11	[JJF] Ortho Vitros 5,1FS
150.39 ± 10.14	81.55 ± 5.57	52.65 ± 4.21	40.94 ± 3.63	158.78 ± 12.00	n = 17	[JJG] Ortho Vitros 5600
144.18 ± 5.14	80.98 ± 3.05	51.98 ± 2.69	39.44 ± 2.43	154.31 ± 7.55	n = 18	[ROC] Roche cobas c501
138.13 ± 2.99	74.96 ± 2.45	47.07 ± 1.12	36.13 ± 0.24	148.20 ± 6.75	n = 8	[ROT] Roche Cobas INTEGRA 800
142.55 ± 9.63	77.83 ± 3.64	49.52 ± 3.61	37.68 ± 1.94	149.06 ± 5.87	n = 12	[ROD] Roche MODULAR D/P
148.01 ± 7.25	80.44 ± 2.83	52.25 ± 2.73	40.15 ± 1.76	162.72 ± 13.90	n = 8	[BYE] Siemens ADVIA 1800
137.64 ± 5.94	77.53 ± 2.34	50.05 ± 1.33	38.15 ± 1.63	152.98 ± 8.41	n = 17	[COB] Siemens ADVIA Centaur
145.26 ± 19.32	76.56 ± 3.06	47.60 ± 3.46	36.17 ± 1.22	151.63 ± 10.28	n = 3	[BYP] Siemens ADVIA Centaur CP
143.19 ± 5.99	78.29 ± 3.12	50.85 ± 1.03	40.97 ± 1.62	148.42 ± 4.96	n = 8	[DUE] Siemens Dimension EXL
143.11 ± 6.93	78.44 ± 3.60	52.22 ± 2.65	40.01 ± 1.67	148.58 ± 7.43	n = 14	[DUR] Siemens Dimension RxL
141.03 ± 6.37	77.92 ± 3.68	51.02 ± 2.32	39.37 ± 1.70	149.61 ± 6.20	n = 41	[DUT] Siemens Dimension Vista
142.72 ± 4.61	77.08 ± 2.39	51.07 ± 1.68	39.15 ± 1.24	148.15 ± 5.43	n = 5	[DUX] Siemens Dimension Xpand
						<Reagents>
154.11 ± 15.04	88.18 ± 7.65	58.09 ± 4.78	47.44 ± 5.53	167.21 ± 14.34	n = 20	[AB1] Abbott
113.30 ± 5.74	64.87 ± 3.57	40.74 ± 1.89	31.06 ± 2.98	119.56 ± 6.77	n = 22	[BC1] Beckman Coulter
154.76 ± 12.62	81.46 ± 4.41	52.42 ± 3.12	40.53 ± 2.54	167.32 ± 11.54	n = 16	[OL1] Beckman Coulter AU Series
154.14 ± 13.61	81.79 ± 5.89	52.50 ± 4.45	40.89 ± 3.95	164.98 ± 15.79	n = 28	[JJ1] Ortho Clinical Diagnostics
145.48 ± 5.99	80.71 ± 3.11	51.50 ± 2.81	39.32 ± 2.22	155.93 ± 8.11	n = 22	[RO4] Roche cobas c311/c501/c502/c701/c70
137.23 ± 5.46	74.42 ± 2.46	46.67 ± 1.50	35.97 ± 1.45	145.94 ± 5.28	n = 4	[RO2] Roche Hitachi and Modular D/P
138.79 ± 3.32	75.09 ± 2.26	47.28 ± 1.25	36.19 ± 0.34	148.43 ± 6.32	n = 9	[RO1] Roche Integra and MIRA
147.57 ± 9.83	79.00 ± 2.12	49.90 ± 1.72	38.48 ± 1.25	150.15 ± 6.00	n = 7	[RO6] Roche ONLINE
137.26 ± 5.81	77.38 ± 2.52	49.95 ± 1.88	37.83 ± 1.74	152.74 ± 8.73	n = 20	[BY1] Siemens ADVIA/ADVIA Centaur
146.27 ± 7.21	81.51 ± 2.77	52.30 ± 3.16	39.88 ± 1.68	157.01 ± 8.56	n = 10	[BY5] Siemens ADVIA/Syva Emit 2000
141.86 ± 6.37	78.03 ± 3.52	51.27 ± 2.35	39.68 ± 1.72	149.22 ± 6.35	n = 68	[DA5] Siemens Dimension
150.95 ± 5.78	81.22 ± 2.91	53.95 ± 1.83	41.36 ± 1.70	167.32 ± 12.58	n = 9	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Vancomycin (mg/L)

Specimen: T81	Specimen: T82	Specimen: T83	Specimen: T84	Specimen: T85	Number	[Code] Instrument or Reagent System
39.28 ± 4.57	4.78 ± 0.57	13.24 ± 1.24	16.78 ± 1.75	9.52 ± 0.96	n = 214	[---] All Methods & Instruments
43.9	5.2	14.6	17.6	10.4		[---] Weigh-in value
						<Instruments>
43.24 ± 1.17	4.49 ± 0.43	13.20 ± 0.40	16.81 ± 0.41	9.33 ± 0.43	n = 4	[ABJ] Abbott Architect c System
39.17 ± 1.27	4.86 ± 0.17	13.75 ± 0.33	17.28 ± 0.47	9.87 ± 0.18	n = 15	[ABH] Abbott Architect i System
37.02 ± 1.97	4.73 ± 0.39	12.37 ± 0.40	15.51 ± 0.49	8.82 ± 0.35	n = 20	[OLC] Beckman Coulter AU Chemistry System
47.47 ± 1.77	5.28 ± 0.94	13.50 ± 0.64	17.95 ± 1.35	10.67 ± 0.42	n = 3	[BCX] Beckman Coulter LX-20
46.46 ± 1.93	5.18 ± 0.72	13.83 ± 0.98	17.88 ± 1.21	9.86 ± 0.74	n = 8	[BCG] Beckman Coulter UniCel DxC 600
47.02 ± 2.76	5.30 ± 0.47	14.01 ± 0.68	18.11 ± 0.63	10.04 ± 0.60	n = 8	[BCH] Beckman Coulter UniCel DxC 800
37.50 ± 1.34	5.00 ± 0.00	12.38 ± 0.40	15.63 ± 0.42	8.85 ± 0.29	n = 9	[JJF] Ortho Vitros 5,1FS
38.34 ± 1.12	5.00 ± 0.00	12.60 ± 0.58	16.05 ± 0.76	9.16 ± 0.61	n = 16	[JJG] Ortho Vitros 5600
42.66 ± 2.17	4.86 ± 0.67	14.09 ± 0.57	18.23 ± 1.00	9.90 ± 0.38	n = 14	[ROC] Roche cobas c501
47.80 ± 1.15	5.43 ± 0.14	15.18 ± 0.48	19.90 ± 0.49	10.71 ± 0.31	n = 9	[ROT] Roche Cobas INTEGRA 800
44.27 ± 3.36	5.50 ± 0.49	14.51 ± 0.96	19.08 ± 1.54	10.84 ± 0.46	n = 10	[ROD] Roche MODULAR D/P
37.04 ± 1.34	4.40 ± 0.42	12.48 ± 0.48	16.07 ± 1.16	9.04 ± 0.45	n = 6	[BYE] Siemens ADVIA 1800
32.99 ± 1.37	4.05 ± 0.30	10.87 ± 0.67	13.41 ± 0.63	7.65 ± 0.53	n = 17	[COB] Siemens ADVIA Centaur
31.49 ± 2.59	3.94 ± 0.10	11.13 ± 0.69	12.95 ± 0.54	7.69 ± 0.44	n = 3	[BYP] Siemens ADVIA Centaur CP
39.42 ± 1.52	4.62 ± 0.33	13.27 ± 0.85	16.75 ± 0.96	9.33 ± 0.52	n = 10	[DUE] Siemens Dimension EXL
39.75 ± 1.89	4.58 ± 0.25	13.51 ± 0.78	16.95 ± 0.57	9.69 ± 0.59	n = 9	[DUR] Siemens Dimension RxL
37.23 ± 1.88	4.66 ± 0.46	13.39 ± 0.73	16.90 ± 0.73	9.75 ± 0.68	n = 41	[DUT] Siemens Dimension Vista
38.07 ± 1.26	4.26 ± 0.19	12.92 ± 0.04	16.48 ± 0.19	9.18 ± 0.16	n = 5	[DUX] Siemens Dimension Xpand
						<Reagents>
39.84 ± 2.07	4.83 ± 0.18	13.66 ± 0.41	17.18 ± 0.49	9.83 ± 0.21	n = 19	[AB1] Abbott
46.87 ± 2.31	5.26 ± 0.64	13.82 ± 0.84	17.93 ± 1.15	10.08 ± 0.69	n = 19	[BC1] Beckman Coulter
36.93 ± 1.82	4.67 ± 0.39	12.38 ± 0.43	15.44 ± 0.44	8.73 ± 0.38	n = 13	[OL1] Beckman Coulter AU Series
38.06 ± 1.26	5.00 ± 0.00	12.50 ± 0.50	15.84 ± 0.63	8.99 ± 0.48	n = 25	[JJ1] Ortho Clinical Diagnostics
43.17 ± 2.28	4.90 ± 0.57	14.18 ± 0.56	18.31 ± 0.90	10.04 ± 0.49	n = 17	[RO4] Roche cobas c311/c501/c502/c701/c70
44.53 ± 0.93	5.30 ± 0.46	14.20 ± 0.52	18.71 ± 1.47	10.70 ± 0.17	n = 5	[RO2] Roche Hitachi and Modular D/P
48.08 ± 1.20	5.45 ± 0.18	15.34 ± 0.61	19.97 ± 0.55	10.75 ± 0.29	n = 11	[RO1] Roche Integra and MIRA
45.12 ± 3.63	5.72 ± 0.47	15.04 ± 1.10	19.43 ± 1.48	11.02 ± 0.53	n = 5	[RO6] Roche ONLINE
32.85 ± 1.66	4.02 ± 0.28	10.91 ± 0.67	13.33 ± 0.65	7.66 ± 0.51	n = 20	[BY1] Siemens ADVIA/ADVIA Centaur
37.37 ± 2.37	4.27 ± 0.37	12.26 ± 0.94	15.68 ± 1.17	8.90 ± 0.51	n = 8	[BY5] Siemens ADVIA/Syva Emit 2000
38.00 ± 2.09	4.60 ± 0.40	13.35 ± 0.74	16.84 ± 0.73	9.61 ± 0.64	n = 65	[DA5] Siemens Dimension
37.44 ± 2.50	4.84 ± 0.37	12.36 ± 0.36	15.64 ± 0.52	8.88 ± 0.08	n = 7	[SY4] Syva Emit 2000