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Commissioner



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Therapeutic Substance Monitoring / Quantitative Toxicology Proficiency Test Program

Statistical Summary - January 2014 (Event 14-1)

This statistical report summarizes participant data for the five Therapeutic Substance Monitoring proficiency survey specimens shipped 27 January 2014. Test samples (Vials T91, T92, T93, T94, T95) 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: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
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35.78 ± 5.84 33.9	160.98 ± 15.12 157.0	80.47 ± 8.77 78.5	120.80 ± 12.86 115.7	73.84 ± 9.14 69.8	n = 214	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
31.54 ± 0.77	149.07 ± 2.10	73.86 ± 1.17	111.24 ± 1.49	66.43 ± 1.11	n = 16	[ABJ] Abbott Architect c System
33.67 ± 1.95	157.65 ± 6.73	75.94 ± 3.69	115.04 ± 7.27	69.98 ± 4.17	n = 25	[OLC] Beckman Coulter AU Chemistry System
34.37 ± 1.82	169.42 ± 4.13	85.14 ± 3.36	125.64 ± 4.50	76.09 ± 4.48	n = 9	[BCG] Beckman Coulter UniCel DxC 600
35.07 ± 1.75	165.82 ± 6.42	84.00 ± 2.39	125.64 ± 5.74	75.59 ± 1.75	n = 8	[BCH] Beckman Coulter UniCel DxC 800
38.19 ± 1.09	177.17 ± 2.62	87.57 ± 1.63	133.93 ± 2.40	81.93 ± 1.28	n = 10	[JJF] Ortho Vitros 5,1FS
38.22 ± 0.54	176.79 ± 1.71	87.71 ± 1.21	133.27 ± 1.71	81.87 ± 0.92	n = 18	[JJG] Ortho Vitros 5600
24.18 ± 0.96	135.43 ± 5.56	63.91 ± 3.10	99.39 ± 4.94	57.05 ± 2.08	n = 17	[ROC] Roche cobas c501
28.90 ± 3.44	138.22 ± 4.11	68.19 ± 4.37	102.95 ± 4.16	61.80 ± 4.12	n = 8	[ROT] Roche Cobas INTEGRA 800
24.09 ± 1.25	129.62 ± 6.28	62.48 ± 5.57	97.13 ± 7.76	56.56 ± 4.74	n = 10	[ROD] Roche MODULAR D/P
32.92 ± 1.53	151.82 ± 7.53	76.47 ± 2.78	112.93 ± 4.10	69.00 ± 2.52	n = 9	[BYE] Siemens ADVIA 1800
33.58 ± 0.32	153.47 ± 2.30	77.00 ± 0.36	115.42 ± 0.88	69.39 ± 0.74	n = 3	[BYB] Siemens ADVIA 2400
40.06 ± 1.00	165.65 ± 2.63	83.98 ± 1.40	125.89 ± 1.94	78.49 ± 1.19	n = 15	[DUE] Siemens Dimension EXL
40.09 ± 1.43	166.31 ± 2.02	83.79 ± 1.50	126.26 ± 2.59	78.15 ± 1.41	n = 9	[DUR] Siemens Dimension RxL
41.38 ± 0.98	168.41 ± 3.29	86.41 ± 1.78	128.65 ± 2.82	80.57 ± 1.77	n = 39	[DUT] Siemens Dimension Vista
39.91 ± 1.37	164.80 ± 1.71	83.58 ± 1.39	125.42 ± 2.07	77.69 ± 1.05	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
31.59 ± 0.74	149.01 ± 2.01	73.79 ± 1.16	111.14 ± 1.48	66.48 ± 1.08	n = 17	[AB1] Abbott
34.76 ± 2.48	166.93 ± 5.85	84.34 ± 3.80	125.06 ± 6.02	75.68 ± 3.58	n = 21	[BC1] Beckman Coulter
34.03 ± 1.80	158.56 ± 5.87	76.51 ± 4.27	115.97 ± 7.34	70.20 ± 2.92	n = 17	[OL1] Beckman Coulter AU Series
38.22 ± 0.72	176.93 ± 1.94	87.65 ± 1.41	133.45 ± 1.89	81.82 ± 1.07	n = 31	[JJ1] Ortho Clinical Diagnostics
24.38 ± 0.99	135.98 ± 4.66	64.14 ± 2.51	99.79 ± 3.97	57.42 ± 2.15	n = 19	[R04] Roche cobas c311/c501/c502/c701/c702
24.09 ± 1.24	129.05 ± 4.48	60.98 ± 2.82	95.28 ± 3.70	55.48 ± 1.98	n = 8	[R02] Roche Hitachi and Modular D/P
27.75 ± 1.79	136.91 ± 2.14	66.58 ± 1.98	101.32 ± 2.58	60.21 ± 1.90	n = 6	[R01] Roche Integra and MIRA
33.03 ± 1.46	152.58 ± 7.10	76.52 ± 2.48	113.21 ± 3.85	69.17 ± 2.31	n = 10	[BY1] Siemens ADVIA/ADVIA Centaur
40.83 ± 1.29	167.01 ± 3.27	85.18 ± 2.14	127.34 ± 2.90	79.46 ± 1.99	n = 70	[DA5] Siemens Dimension
33.36 ± 0.47	151.96 ± 6.50	74.74 ± 1.62	109.87 ± 2.48	68.69 ± 0.56	n = 3	[SY2] Syva Emit
34.46 ± 3.03	159.62 ± 11.60	75.16 ± 2.12	118.28 ± 4.46	67.56 ± 1.37	n = 5	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Carbamazepine (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
3.60 ± 0.44 3.7	11.73 ± 1.16 11.8	5.93 ± 0.65 5.9	13.65 ± 1.30 13.9	8.16 ± 0.88 8.4	n = 225	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
3.92 ± 0.28	12.33 ± 0.72	6.35 ± 0.45	14.67 ± 1.08	8.70 ± 0.56	n = 13	[ABJ] Abbott Architect c System
3.63 ± 0.10	11.49 ± 0.34	5.76 ± 0.20	13.62 ± 0.41	8.03 ± 0.28	n = 9	[ABH] Abbott Architect i System
3.73 ± 0.26	12.05 ± 0.74	6.11 ± 0.38	14.17 ± 0.77	8.43 ± 0.56	n = 22	[OLC] Beckman Coulter AU Chemistry System
3.28 ± 0.22	11.11 ± 0.37	5.59 ± 0.30	12.96 ± 0.48	7.77 ± 0.41	n = 9	[BCG] Beckman Coulter UniCel DxC 600
3.28 ± 0.14	11.31 ± 0.72	5.81 ± 0.35	13.08 ± 0.71	7.95 ± 0.26	n = 8	[BCH] Beckman Coulter UniCel DxC 800
3.00 ± 0.00	8.90 ± 0.53	4.58 ± 0.36	10.96 ± 0.54	6.19 ± 0.45	n = 10	[JJF] Ortho Vitros 5,1FS
3.00 ± 0.00	9.33 ± 0.50	4.52 ± 0.39	11.19 ± 0.63	6.27 ± 0.41	n = 17	[JJG] Ortho Vitros 5600
4.12 ± 0.40	12.57 ± 0.45	6.40 ± 0.39	14.44 ± 0.59	8.82 ± 0.43	n = 14	[ROC] Roche cobas c501
3.69 ± 0.15	12.01 ± 0.60	5.86 ± 0.25	14.89 ± 0.71	8.30 ± 0.43	n = 11	[ROT] Roche Cobas INTEGRA 800
4.48 ± 0.18	13.13 ± 0.29	6.85 ± 0.24	14.91 ± 0.33	9.27 ± 0.28	n = 12	[ROD] Roche MODULAR D/P
3.54 ± 0.21	12.15 ± 0.81	6.34 ± 0.38	13.64 ± 0.16	8.51 ± 0.66	n = 7	[BYE] Siemens ADVIA 1800
4.02 ± 0.37	12.99 ± 1.09	6.51 ± 0.47	15.01 ± 1.18	9.23 ± 0.69	n = 13	[COB] Siemens ADVIA Centaur
3.77 ± 0.16	11.34 ± 0.90	5.92 ± 0.31	13.21 ± 1.60	8.10 ± 0.74	n = 4	[BYP] Siemens ADVIA Centaur CP
3.40 ± 0.26	11.35 ± 0.32	5.65 ± 0.36	13.23 ± 0.33	7.82 ± 0.22	n = 9	[DUE] Siemens Dimension EXL
3.63 ± 0.17	11.62 ± 0.48	5.83 ± 0.26	13.53 ± 0.68	8.13 ± 0.37	n = 9	[DUR] Siemens Dimension RxL
3.54 ± 0.16	11.58 ± 0.47	5.84 ± 0.21	13.39 ± 0.61	7.94 ± 0.32	n = 40	[DUT] Siemens Dimension Vista
3.50 ± 0.11	11.81 ± 0.24	5.73 ± 0.09	13.57 ± 0.16	8.07 ± 0.16	n = 4	[DUX] Siemens Dimension Xpand
<Reagents>						
3.78 ± 0.29	11.92 ± 0.79	6.08 ± 0.52	14.13 ± 1.09	8.38 ± 0.62	n = 22	[AB1] Abbott
3.33 ± 0.23	11.30 ± 0.59	5.79 ± 0.42	13.15 ± 0.71	7.94 ± 0.42	n = 21	[BC1] Beckman Coulter
3.63 ± 0.13	11.69 ± 0.38	5.97 ± 0.31	13.89 ± 0.65	8.12 ± 0.47	n = 9	[OL1] Beckman Coulter AU Series
4.31 ± 0.28	12.75 ± 0.61	6.73 ± 0.40	14.66 ± 0.53	8.96 ± 0.39	n = 8	[MG1] Microgenics CEDIA
3.00 ± 0.00	9.18 ± 0.55	4.54 ± 0.38	11.09 ± 0.60	6.24 ± 0.43	n = 27	[JJ1] Ortho Clinical Diagnostics
4.16 ± 0.33	12.63 ± 0.42	6.48 ± 0.38	14.44 ± 0.59	8.89 ± 0.41	n = 17	[R04] Roche cobas c311/c501/c502/c701/c702
4.47 ± 0.19	13.14 ± 0.26	6.83 ± 0.20	14.90 ± 0.34	9.27 ± 0.22	n = 10	[R02] Roche Hitachi and Modular D/P
3.68 ± 0.13	12.06 ± 0.55	5.88 ± 0.22	14.77 ± 0.63	8.31 ± 0.39	n = 13	[R01] Roche Integra and MIRA
3.95 ± 0.34	12.66 ± 1.28	6.37 ± 0.50	14.73 ± 1.54	8.99 ± 0.85	n = 17	[BY1] Siemens ADVIA/ADVIA Centaur
3.69 ± 0.36	12.23 ± 0.74	6.23 ± 0.36	13.82 ± 0.66	8.42 ± 0.69	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
3.54 ± 0.18	11.57 ± 0.45	5.81 ± 0.24	13.40 ± 0.56	7.96 ± 0.32	n = 62	[DA5] Siemens Dimension
3.53 ± 0.25	12.05 ± 0.70	6.09 ± 0.24	13.87 ± 0.70	8.46 ± 0.45	n = 6	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Digoxin (µg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
0.829 ± 0.087 0.8	3.506 ± 0.230 3.6	1.762 ± 0.129 1.8	2.657 ± 0.184 2.7	1.673 ± 0.139 1.7	n = 275	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
0.842 ± 0.048	3.614 ± 0.106	1.838 ± 0.047	2.748 ± 0.078	1.741 ± 0.043	n = 5	[ABJ] Abbott Architect c System
0.779 ± 0.051	3.318 ± 0.134	1.659 ± 0.082	2.477 ± 0.094	1.555 ± 0.063	n = 18	[ABH] Abbott Architect i System
0.922 ± 0.036	3.657 ± 0.131	1.879 ± 0.055	2.766 ± 0.091	1.834 ± 0.040	n = 6	[SAA] Beckman Coulter ACCESS
0.791 ± 0.083	3.458 ± 0.161	1.714 ± 0.137	2.593 ± 0.146	1.604 ± 0.112	n = 25	[OLC] Beckman Coulter AU Chemistry System
0.820 ± 0.101	3.416 ± 0.135	1.756 ± 0.095	2.637 ± 0.094	1.691 ± 0.046	n = 10	[BCG] Beckman Coulter UniCel DxC 600
0.785 ± 0.156	3.478 ± 0.093	1.702 ± 0.192	2.586 ± 0.187	1.665 ± 0.196	n = 8	[BCH] Beckman Coulter UniCel DxC 800
0.882 ± 0.144	3.810 ± 0.350	1.805 ± 0.224	2.803 ± 0.344	1.729 ± 0.255	n = 4	[BCU] Beckman Coulter UniCel Dxi 800
0.771 ± 0.111	3.288 ± 0.152	1.626 ± 0.095	2.562 ± 0.112	1.549 ± 0.077	n = 12	[JJF] Ortho Vitros 5,1FS
0.774 ± 0.086	3.358 ± 0.166	1.653 ± 0.076	2.620 ± 0.126	1.584 ± 0.081	n = 18	[JJG] Ortho Vitros 5600
0.847 ± 0.049	3.362 ± 0.080	1.703 ± 0.057	2.499 ± 0.068	1.609 ± 0.060	n = 4	[ROJ] Roche cobas c311
0.801 ± 0.082	3.343 ± 0.125	1.683 ± 0.085	2.491 ± 0.100	1.588 ± 0.098	n = 19	[ROC] Roche cobas c501
0.809 ± 0.059	3.498 ± 0.004	1.741 ± 0.081	2.551 ± 0.145	1.587 ± 0.061	n = 6	[ROT] Roche Cobas INTEGRA 800
0.836 ± 0.087	3.205 ± 0.119	1.672 ± 0.069	2.479 ± 0.064	1.635 ± 0.099	n = 14	[ROD] Roche MODULAR D/P
0.761 ± 0.086	3.444 ± 0.138	1.813 ± 0.057	2.623 ± 0.103	1.724 ± 0.157	n = 8	[BYE] Siemens ADVIA 1800
0.967 ± 0.067	3.624 ± 0.288	1.965 ± 0.107	2.827 ± 0.169	1.867 ± 0.115	n = 19	[COB] Siemens ADVIA Centaur
0.819 ± 0.043	3.560 ± 0.257	1.880 ± 0.109	2.776 ± 0.220	1.801 ± 0.041	n = 5	[BYP] Siemens ADVIA Centaur CP
0.874 ± 0.051	3.687 ± 0.124	1.828 ± 0.082	2.798 ± 0.110	1.746 ± 0.110	n = 16	[DUE] Siemens Dimension EXL
0.852 ± 0.089	3.718 ± 0.103	1.836 ± 0.062	2.852 ± 0.064	1.784 ± 0.054	n = 11	[DUR] Siemens Dimension RxL
0.817 ± 0.023	3.653 ± 0.069	1.781 ± 0.036	2.700 ± 0.052	1.653 ± 0.043	n = 42	[DUT] Siemens Dimension Vista
0.916 ± 0.064	3.658 ± 0.047	1.851 ± 0.065	2.834 ± 0.047	1.816 ± 0.029	n = 7	[DUX] Siemens Dimension Xpand
0.881 ± 0.060	3.737 ± 0.210	1.841 ± 0.082	2.861 ± 0.027	1.843 ± 0.108	n = 5	[DPD] Siemens Immulite 2000
<Reagents>						
0.793 ± 0.057	3.383 ± 0.191	1.700 ± 0.113	2.535 ± 0.159	1.608 ± 0.116	n = 23	[AB1] Abbott
0.861 ± 0.107	3.498 ± 0.233	1.794 ± 0.150	2.667 ± 0.184	1.721 ± 0.157	n = 31	[BC1] Beckman Coulter
0.805 ± 0.050	3.487 ± 0.191	1.722 ± 0.133	2.607 ± 0.145	1.617 ± 0.086	n = 15	[OL1] Beckman Coulter AU Series
0.700 ± 0.000	3.363 ± 0.055	1.600 ± 0.000	2.500 ± 0.000	1.500 ± 0.000	n = 5	[MG2] Microgenics DRI
0.774 ± 0.094	3.336 ± 0.166	1.643 ± 0.084	2.601 ± 0.125	1.573 ± 0.082	n = 31	[JJ1] Ortho Clinical Diagnostics
0.810 ± 0.074	3.358 ± 0.118	1.690 ± 0.075	2.508 ± 0.108	1.594 ± 0.084	n = 25	[R04] Roche cobas c311/c501/c502/c701/c702
0.885 ± 0.041	4.173 ± 0.226	1.985 ± 0.041	3.100 ± 0.075	1.869 ± 0.090	n = 4	[R03] Roche Elecsys/Modular E/e601/e411
0.836 ± 0.114	3.235 ± 0.122	1.679 ± 0.100	2.468 ± 0.087	1.611 ± 0.130	n = 8	[R02] Roche Hitachi and Modular D/P
0.792 ± 0.071	3.469 ± 0.057	1.734 ± 0.076	2.562 ± 0.130	1.589 ± 0.055	n = 7	[R01] Roche Integra and MIRA
0.840 ± 0.054	3.160 ± 0.113	1.674 ± 0.046	2.498 ± 0.004	1.641 ± 0.061	n = 5	[R05] Roche Tina-quant
0.901 ± 0.112	3.562 ± 0.244	1.911 ± 0.117	2.769 ± 0.179	1.828 ± 0.121	n = 32	[BY1] Siemens ADVIA/ADVIA Centaur
0.862 ± 0.067	3.693 ± 0.098	1.824 ± 0.061	2.804 ± 0.089	1.757 ± 0.087	n = 43	[DA5] Siemens Dimension
0.813 ± 0.020	3.643 ± 0.070	1.773 ± 0.037	2.693 ± 0.056	1.642 ± 0.042	n = 33	[DA6] Siemens Dimension LOCI
0.902 ± 0.074	3.834 ± 0.302	1.876 ± 0.138	2.957 ± 0.169	1.874 ± 0.120	n = 6	[DP5] Siemens Immulite
0.814 ± 0.078	3.521 ± 0.113	1.796 ± 0.064	2.829 ± 0.313	1.664 ± 0.155	n = 4	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Ethanol (mg/dL)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
113.03 ± 4.94 115.2	172.45 ± 6.89 178.4	87.51 ± 3.47 89.2	146.43 ± 6.16 148.4	171.35 ± 7.36 175.5	n = 219	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
113.33 ± 3.16	171.44 ± 4.23	87.84 ± 2.39	146.52 ± 3.88	171.00 ± 4.08	n = 15	[ABJ] Abbott Architect c System
116.54 ± 5.45	176.96 ± 7.05	89.20 ± 4.56	149.49 ± 7.27	174.60 ± 6.63	n = 20	[OLC] Beckman Coulter AU Chemistry System
114.50 ± 2.64	170.74 ± 2.95	87.21 ± 1.99	146.84 ± 2.93	171.48 ± 4.44	n = 10	[BCG] Beckman Coulter UniCel DxC 600
113.46 ± 3.82	172.45 ± 5.90	88.09 ± 3.53	147.33 ± 4.95	170.07 ± 6.53	n = 7	[BCH] Beckman Coulter UniCel DxC 800
110.74 ± 4.39	169.87 ± 7.00	86.85 ± 3.23	144.83 ± 6.41	171.62 ± 8.14	n = 11	[GCC] Gas Chromatograph
105.89 ± 1.78	162.98 ± 6.35	83.65 ± 2.31	136.94 ± 5.05	159.23 ± 7.50	n = 10	[JJF] Ortho Vitros 5,1FS
108.20 ± 5.83	165.64 ± 8.66	84.86 ± 5.57	138.72 ± 7.91	162.71 ± 10.85	n = 18	[JJG] Ortho Vitros 5600
114.05 ± 2.73	173.54 ± 3.52	87.57 ± 1.69	147.66 ± 2.76	172.56 ± 4.02	n = 16	[ROC] Roche cobas c501
110.23 ± 1.71	167.40 ± 2.50	84.69 ± 0.87	142.81 ± 2.09	165.57 ± 2.09	n = 6	[ROT] Roche Cobas INTEGRA 800
112.61 ± 4.12	171.02 ± 4.46	87.13 ± 2.87	146.53 ± 4.77	171.15 ± 4.20	n = 11	[ROD] Roche MODULAR D/P
115.94 ± 1.50	177.78 ± 2.16	90.17 ± 1.11	149.87 ± 2.20	176.67 ± 1.82	n = 10	[BYE] Siemens ADVIA 1800
116.40 ± 2.56	176.53 ± 1.86	89.12 ± 2.05	151.26 ± 2.26	176.74 ± 1.37	n = 3	[BYB] Siemens ADVIA 2400
116.42 ± 5.53	176.30 ± 6.69	89.20 ± 3.03	149.82 ± 5.55	175.46 ± 6.19	n = 14	[DUE] Siemens Dimension EXL
114.18 ± 4.83	175.76 ± 5.52	89.13 ± 3.33	149.75 ± 5.86	175.20 ± 5.71	n = 9	[DUR] Siemens Dimension RxL
112.36 ± 3.86	172.49 ± 7.07	86.87 ± 3.41	145.85 ± 5.18	170.48 ± 6.55	n = 39	[DUT] Siemens Dimension Vista
116.47 ± 3.52	177.78 ± 5.70	89.44 ± 2.72	149.01 ± 3.32	176.13 ± 4.03	n = 8	[DUX] Siemens Dimension Xpand
<Reagents>						
113.29 ± 3.02	171.22 ± 4.11	88.02 ± 2.39	146.80 ± 3.87	171.08 ± 3.92	n = 16	[AB1] Abbott
113.86 ± 3.10	171.68 ± 4.61	87.60 ± 2.42	147.30 ± 3.49	171.39 ± 4.98	n = 21	[BC1] Beckman Coulter
117.66 ± 5.08	177.94 ± 6.10	90.15 ± 3.85	150.17 ± 5.66	174.97 ± 4.99	n = 15	[OL1] Beckman Coulter AU Series
110.30 ± 4.42	168.75 ± 6.35	86.56 ± 3.29	144.25 ± 6.54	170.87 ± 8.34	n = 10	[IH1] In-House
106.49 ± 4.42	164.39 ± 7.76	84.05 ± 4.18	137.29 ± 6.36	160.43 ± 9.18	n = 31	[JJ1] Ortho Clinical Diagnostics
113.66 ± 2.56	173.29 ± 3.47	87.48 ± 1.91	147.38 ± 3.01	172.12 ± 3.84	n = 19	[R04] Roche cobas c311/c501/c502/c701/c702
112.61 ± 4.12	171.02 ± 4.46	87.13 ± 2.87	146.53 ± 4.77	171.15 ± 4.20	n = 11	[R02] Roche Hitachi and Modular D/P
110.23 ± 1.71	167.40 ± 2.50	84.69 ± 0.87	142.81 ± 2.09	165.57 ± 2.09	n = 6	[R01] Roche Integra and MIRA
115.49 ± 1.46	177.84 ± 1.89	89.99 ± 1.37	149.37 ± 2.02	176.08 ± 1.66	n = 7	[BY1] Siemens ADVIA/ADVIA Centaur
116.06 ± 1.20	176.12 ± 2.04	90.08 ± 3.28	150.71 ± 1.73	177.33 ± 1.55	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
113.79 ± 4.66	174.40 ± 7.07	87.99 ± 3.50	147.53 ± 5.59	172.79 ± 6.73	n = 70	[DA5] Siemens Dimension
113.27 ± 5.84	173.46 ± 9.51	87.82 ± 4.15	146.46 ± 9.40	171.60 ± 8.02	n = 4	[SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Ethosuximide (mg/L)

Specimen: T91 -----	Specimen: T92 -----	Specimen: T93 -----	Specimen: T94 -----	Specimen: T95 -----	Number -----	[Code] Instrument or Reagent System -----
49.37 ± 5.34 48.1	81.10 ± 4.66 78.0	40.09 ± 4.10 39.0	100.56 ± 5.22 99.9	171.12 ± 15.51 165.0	n = 7	[---] All Methods & Instruments [---] Weigh-in value
50.00 ± 1.50	80.93 ± 2.72	40.73 ± 3.01	99.97 ± 4.04	175.22 ± 12.48	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
50.03 ± 5.92	82.04 ± 4.30	40.57 ± 4.34	100.93 ± 5.92	173.65 ± 15.70	n = 6	<Reagents> [SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Gentamicin (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
2.37 ± 0.20 2.5	7.19 ± 0.56 7.2	3.63 ± 0.28 3.6	13.04 ± 1.19 12.9	8.21 ± 0.64 8.1	n = 168	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
2.27 ± 0.09	6.45 ± 0.12	3.35 ± 0.06	11.75 ± 0.22	7.30 ± 0.11	n = 4	[ABJ] Abbott Architect c System
2.42 ± 0.11	7.57 ± 0.31	3.67 ± 0.19	12.90 ± 1.08	8.43 ± 0.42	n = 11	[ABH] Abbott Architect i System
2.63 ± 0.11	7.99 ± 0.60	4.01 ± 0.22	14.06 ± 0.87	9.15 ± 0.52	n = 14	[OLC] Beckman Coulter AU Chemistry System
2.43 ± 0.16	7.91 ± 0.31	3.86 ± 0.14	13.86 ± 0.73	8.96 ± 0.38	n = 8	[BCG] Beckman Coulter UniCel DxC 600
2.52 ± 0.09	7.96 ± 0.11	3.83 ± 0.13	14.65 ± 0.85	9.10 ± 0.14	n = 7	[BCH] Beckman Coulter UniCel DxC 800
2.49 ± 0.12	7.34 ± 0.31	3.85 ± 0.15	14.20 ± 0.65	8.41 ± 0.41	n = 7	[JJF] Ortho Vitros 5,1FS
2.57 ± 0.10	7.47 ± 0.34	3.90 ± 0.11	13.79 ± 0.68	8.47 ± 0.34	n = 13	[JJG] Ortho Vitros 5600
2.06 ± 0.21	6.53 ± 0.27	3.26 ± 0.28	11.70 ± 1.25	7.39 ± 0.30	n = 9	[ROC] Roche cobas c501
2.30 ± 0.09	6.77 ± 0.59	3.53 ± 0.14	12.56 ± 1.11	7.80 ± 0.55	n = 3	[ROS] Roche Cobas INTEGRA 400
2.37 ± 0.16	6.46 ± 0.21	3.55 ± 0.14	12.16 ± 0.51	7.59 ± 0.32	n = 12	[ROT] Roche Cobas INTEGRA 800
2.28 ± 0.12	6.92 ± 0.22	3.46 ± 0.20	12.42 ± 0.87	7.90 ± 0.40	n = 8	[ROD] Roche MODULAR D/P
2.29 ± 0.13	7.37 ± 0.49	3.59 ± 0.30	13.80 ± 1.47	8.26 ± 0.65	n = 13	[COB] Siemens ADVIA Centaur
2.35 ± 0.06	7.00 ± 0.17	3.65 ± 0.12	12.85 ± 0.39	8.05 ± 0.22	n = 4	[DUE] Siemens Dimension EXL
2.42 ± 0.11	7.11 ± 0.28	3.51 ± 0.13	12.99 ± 0.22	8.13 ± 0.24	n = 5	[DUR] Siemens Dimension RxL
2.27 ± 0.15	7.03 ± 0.26	3.47 ± 0.18	12.49 ± 0.67	8.03 ± 0.30	n = 41	[DUT] Siemens Dimension Vista
<Reagents>						
2.38 ± 0.13	7.31 ± 0.65	3.58 ± 0.22	12.51 ± 1.10	8.15 ± 0.66	n = 15	[AB1] Abbott
2.45 ± 0.17	7.89 ± 0.24	3.85 ± 0.12	14.13 ± 0.78	9.03 ± 0.25	n = 18	[BC1] Beckman Coulter
2.63 ± 0.09	7.98 ± 0.64	4.05 ± 0.26	14.60 ± 1.86	9.24 ± 0.46	n = 7	[OL1] Beckman Coulter AU Series
2.55 ± 0.11	7.42 ± 0.33	3.89 ± 0.12	13.94 ± 0.70	8.45 ± 0.37	n = 20	[JJ1] Ortho Clinical Diagnostics
2.17 ± 0.29	6.72 ± 0.31	3.44 ± 0.36	12.07 ± 1.33	7.64 ± 0.41	n = 5	[R04] Roche cobas c311/c501/c502/c701/c702
2.30 ± 0.11	6.94 ± 0.23	3.45 ± 0.19	12.28 ± 0.91	7.88 ± 0.34	n = 6	[R02] Roche Hitachi and Modular D/P
2.35 ± 0.14	6.50 ± 0.30	3.55 ± 0.14	12.15 ± 0.59	7.62 ± 0.36	n = 15	[R01] Roche Integra and MIRA
2.28 ± 0.11	7.39 ± 0.47	3.61 ± 0.30	13.94 ± 1.50	8.30 ± 0.63	n = 14	[BY1] Siemens ADVIA/ADVIA Centaur
2.51 ± 0.29	6.92 ± 0.32	3.68 ± 0.24	13.13 ± 1.04	8.03 ± 0.77	n = 3	[BY5] Siemens ADVIA/Syva Emit 2000
2.30 ± 0.15	7.04 ± 0.26	3.50 ± 0.17	12.62 ± 0.67	8.05 ± 0.28	n = 52	[DA5] Siemens Dimension
2.62 ± 0.16	8.08 ± 0.57	4.00 ± 0.19	14.04 ± 0.47	9.11 ± 0.58	n = 6	[SY4] Syva Emit 2000
2.03 ± 0.09	6.39 ± 0.24	3.18 ± 0.13	11.75 ± 1.28	7.31 ± 0.25	n = 4	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Lithium (mmol/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
0.402 ± 0.040 0.4	2.342 ± 0.100 2.5	1.179 ± 0.061 1.2	0.681 ± 0.047 0.7	1.456 ± 0.077 1.6	n = 197	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
0.410 ± 0.031	2.315 ± 0.083	1.204 ± 0.074	0.707 ± 0.045	1.451 ± 0.064	n = 14	[ABJ] Abbott Architect c System
0.390 ± 0.017	2.262 ± 0.087	1.132 ± 0.054	0.658 ± 0.048	1.410 ± 0.052	n = 17	[OLC] Beckman Coulter AU Chemistry System
0.386 ± 0.042	2.309 ± 0.034	1.161 ± 0.055	0.652 ± 0.042	1.453 ± 0.049	n = 7	[BCG] Beckman Coulter UniCel DxC 600
0.395 ± 0.023	2.311 ± 0.030	1.147 ± 0.039	0.694 ± 0.071	1.434 ± 0.047	n = 7	[BCH] Beckman Coulter UniCel DxC 800
0.405 ± 0.036	2.244 ± 0.135	1.126 ± 0.082	0.671 ± 0.020	1.423 ± 0.077	n = 3	[ICP] ICP/MS
0.400 ± 0.000	2.477 ± 0.091	1.213 ± 0.059	0.700 ± 0.000	1.500 ± 0.000	n = 12	[JJF] Ortho Vitros 5,1FS
0.408 ± 0.071	2.461 ± 0.061	1.236 ± 0.060	0.704 ± 0.045	1.530 ± 0.057	n = 18	[JJG] Ortho Vitros 5600
0.487 ± 0.069	2.521 ± 0.138	1.289 ± 0.020	0.711 ± 0.020	1.588 ± 0.205	n = 3	[ROY] Roche 9180/9181
0.417 ± 0.014	2.370 ± 0.027	1.206 ± 0.010	0.697 ± 0.014	1.497 ± 0.005	n = 3	[ROJ] Roche cobas c311
0.400 ± 0.000	2.328 ± 0.074	1.184 ± 0.040	0.700 ± 0.000	1.460 ± 0.062	n = 16	[ROC] Roche cobas c501
0.402 ± 0.006	2.371 ± 0.072	1.186 ± 0.045	0.672 ± 0.047	1.455 ± 0.056	n = 8	[ROT] Roche Cobas INTEGRA 800
0.359 ± 0.033	2.209 ± 0.077	1.132 ± 0.021	0.651 ± 0.043	1.395 ± 0.065	n = 8	[ROD] Roche MODULAR D/P
0.417 ± 0.043	2.391 ± 0.082	1.222 ± 0.054	0.713 ± 0.030	1.518 ± 0.043	n = 12	[BYE] Siemens ADVIA 1800
0.304 ± 0.037	2.328 ± 0.053	1.121 ± 0.055	0.603 ± 0.045	1.361 ± 0.025	n = 6	[DUE] Siemens Dimension EXL
0.349 ± 0.049	2.347 ± 0.049	1.141 ± 0.048	0.600 ± 0.000	1.402 ± 0.047	n = 7	[DUR] Siemens Dimension RxL
0.417 ± 0.027	2.312 ± 0.041	1.176 ± 0.033	0.684 ± 0.028	1.440 ± 0.041	n = 39	[DUT] Siemens Dimension Vista
<Reagents>						
0.412 ± 0.034	2.317 ± 0.091	1.212 ± 0.068	0.711 ± 0.039	1.458 ± 0.066	n = 13	[AB1] Abbott
0.461 ± 0.073	2.479 ± 0.126	1.269 ± 0.043	0.706 ± 0.016	1.562 ± 0.180	n = 4	[AV1] AVL Scientific
0.396 ± 0.031	2.317 ± 0.044	1.147 ± 0.043	0.674 ± 0.054	1.452 ± 0.064	n = 16	[BC1] Beckman Coulter
0.398 ± 0.005	2.264 ± 0.088	1.133 ± 0.058	0.661 ± 0.045	1.403 ± 0.015	n = 12	[OL1] Beckman Coulter AU Series
0.407 ± 0.030	2.259 ± 0.115	1.114 ± 0.068	0.664 ± 0.019	1.412 ± 0.060	n = 4	[IH1] In-House
0.401 ± 0.057	2.467 ± 0.069	1.226 ± 0.060	0.700 ± 0.000	1.529 ± 0.056	n = 31	[JJ1] Ortho Clinical Diagnostics
0.400 ± 0.000	2.319 ± 0.079	1.180 ± 0.044	0.700 ± 0.000	1.457 ± 0.061	n = 20	[R04] Roche cobas c311/c501/c502/c701/c702
0.402 ± 0.006	2.371 ± 0.072	1.186 ± 0.045	0.672 ± 0.047	1.455 ± 0.056	n = 8	[R01] Roche Integra and MIRA
0.424 ± 0.038	2.389 ± 0.085	1.227 ± 0.056	0.709 ± 0.016	1.522 ± 0.055	n = 12	[BY1] Siemens ADVIA/ADVIA Centaur
0.400 ± 0.048	2.320 ± 0.046	1.168 ± 0.041	0.665 ± 0.047	1.425 ± 0.049	n = 54	[DA5] Siemens Dimension
0.368 ± 0.032	2.221 ± 0.084	1.119 ± 0.044	0.647 ± 0.042	1.406 ± 0.037	n = 12	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Phenobarbital (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
14.39 ± 1.12 14.4	48.27 ± 2.95 49.1	24.34 ± 1.69 24.5	13.68 ± 1.26 13.2	30.85 ± 1.95 30.8	n = 195	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
14.95 ± 0.19	53.34 ± 1.47	25.24 ± 0.71	13.78 ± 0.15	32.23 ± 1.06	n = 3	[ABJ] Abbott Architect c System
14.76 ± 0.61	49.74 ± 1.01	25.06 ± 0.69	13.83 ± 0.36	31.64 ± 0.95	n = 20	[ABH] Abbott Architect i System
13.70 ± 0.62	47.12 ± 1.95	23.25 ± 0.91	12.75 ± 0.63	29.48 ± 0.88	n = 22	[OLC] Beckman Coulter AU Chemistry System
14.07 ± 0.67	43.90 ± 1.90	22.76 ± 0.95	14.85 ± 0.89	28.19 ± 1.57	n = 9	[BCG] Beckman Coulter UniCel DxC 600
14.23 ± 0.95	43.02 ± 0.71	22.74 ± 0.44	15.11 ± 1.12	28.58 ± 1.60	n = 8	[BCH] Beckman Coulter UniCel DxC 800
13.68 ± 0.36	46.99 ± 0.62	23.82 ± 0.15	12.47 ± 0.20	30.25 ± 0.68	n = 4	[ROJ] Roche cobas c311
13.54 ± 0.67	47.10 ± 1.16	23.86 ± 1.10	12.96 ± 0.60	30.45 ± 1.19	n = 17	[ROC] Roche cobas c501
13.81 ± 0.35	47.12 ± 1.09	23.24 ± 0.57	12.66 ± 0.33	29.58 ± 0.48	n = 11	[ROT] Roche Cobas INTEGRA 800
14.01 ± 0.78	47.90 ± 2.11	24.13 ± 1.09	12.88 ± 0.78	31.12 ± 1.27	n = 12	[ROD] Roche MODULAR D/P
15.75 ± 0.82	53.90 ± 2.15	27.62 ± 0.86	15.04 ± 0.79	35.31 ± 1.80	n = 15	[COB] Siemens ADVIA Centaur
14.69 ± 0.81	48.76 ± 1.78	24.97 ± 1.21	14.39 ± 1.49	31.17 ± 1.04	n = 8	[DUE] Siemens Dimension EXL
14.91 ± 1.13	48.29 ± 1.67	23.74 ± 1.18	13.28 ± 0.71	30.08 ± 0.72	n = 8	[DUR] Siemens Dimension RxL
14.94 ± 1.26	48.67 ± 1.88	25.18 ± 1.34	14.32 ± 1.19	31.73 ± 1.50	n = 40	[DUT] Siemens Dimension Vista
15.98 ± 0.68	52.20 ± 2.26	25.94 ± 1.20	14.51 ± 1.10	31.36 ± 1.14	n = 4	[DUX] Siemens Dimension Xpand
<Reagents>						
14.82 ± 0.57	49.89 ± 1.30	25.04 ± 0.68	13.85 ± 0.30	31.71 ± 0.99	n = 22	[AB1] Abbott
14.06 ± 0.85	43.73 ± 1.94	22.84 ± 0.72	14.74 ± 1.15	28.34 ± 1.55	n = 21	[BC1] Beckman Coulter
13.64 ± 0.62	46.80 ± 0.77	23.17 ± 0.83	12.71 ± 0.16	29.51 ± 0.40	n = 10	[OL1] Beckman Coulter AU Series
13.59 ± 1.36	48.54 ± 1.18	23.35 ± 1.20	13.18 ± 1.36	30.35 ± 1.50	n = 4	[MG1] Microgenics CEDIA
13.65 ± 0.65	47.01 ± 1.14	23.78 ± 1.00	12.80 ± 0.56	30.33 ± 1.07	n = 23	[R04] Roche cobas c311/c501/c502/c701/c702
12.66 ± 2.12	43.96 ± 5.06	22.99 ± 1.00	12.23 ± 0.41	28.30 ± 3.68	n = 4	[R02] Roche Hitachi and Modular D/P
13.81 ± 0.31	47.14 ± 1.07	23.25 ± 0.51	12.70 ± 0.30	29.64 ± 0.50	n = 13	[R01] Roche Integra and MIRA
14.27 ± 0.77	48.64 ± 1.68	24.59 ± 0.76	13.23 ± 0.68	31.64 ± 0.94	n = 8	[R06] Roche ONLINE
15.78 ± 0.94	53.73 ± 2.41	27.65 ± 0.81	15.09 ± 0.93	35.36 ± 2.09	n = 17	[BY1] Siemens ADVIA/ADVIA Centaur
14.95 ± 1.21	48.81 ± 2.02	25.02 ± 1.45	14.20 ± 1.25	31.43 ± 1.52	n = 60	[DA5] Siemens Dimension
13.76 ± 0.40	46.83 ± 3.08	23.75 ± 0.74	12.74 ± 0.26	29.82 ± 1.21	n = 6	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Phenytoin (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
7.90 ± 0.63 8.0	26.21 ± 2.08 26.7	13.15 ± 0.95 13.3	18.07 ± 1.06 18.0	11.95 ± 0.83 12.0	n = 260	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
8.47 ± 0.32	29.67 ± 1.05	14.12 ± 1.22	19.76 ± 2.05	12.93 ± 1.40	n = 3	[ABJ] Abbott Architect c System
7.95 ± 0.32	26.35 ± 1.51	13.29 ± 0.58	18.16 ± 0.69	12.29 ± 0.43	n = 19	[ABH] Abbott Architect i System
7.83 ± 0.48	26.56 ± 1.60	12.94 ± 0.64	17.82 ± 0.88	11.89 ± 0.58	n = 31	[OLC] Beckman Coulter AU Chemistry System
7.62 ± 0.30	24.67 ± 0.76	12.73 ± 0.38	17.11 ± 0.38	11.68 ± 0.19	n = 10	[BCG] Beckman Coulter UniCel DxC 600
7.70 ± 0.00	25.00 ± 1.02	13.08 ± 0.45	17.82 ± 0.51	11.85 ± 0.30	n = 9	[BCH] Beckman Coulter UniCel DxC 800
7.52 ± 0.45	22.87 ± 1.03	11.67 ± 0.49	17.50 ± 0.62	11.00 ± 0.65	n = 12	[JJF] Ortho Vitros 5,1FS
7.53 ± 0.36	23.75 ± 1.06	12.00 ± 0.53	18.11 ± 0.65	11.19 ± 0.58	n = 18	[JJG] Ortho Vitros 5600
7.72 ± 0.20	25.80 ± 0.47	12.79 ± 0.74	17.81 ± 0.59	11.62 ± 0.57	n = 4	[ROJ] Roche cobas c311
7.52 ± 0.52	25.06 ± 1.18	12.43 ± 0.61	17.28 ± 0.91	11.34 ± 0.60	n = 18	[ROC] Roche cobas c501
7.76 ± 0.32	27.03 ± 1.12	13.20 ± 0.42	17.95 ± 0.81	11.80 ± 0.48	n = 12	[ROT] Roche Cobas INTEGRA 800
7.68 ± 0.59	25.65 ± 1.34	12.91 ± 1.06	17.87 ± 0.92	11.84 ± 0.85	n = 14	[ROD] Roche MODULAR D/P
8.80 ± 0.58	28.47 ± 2.27	14.46 ± 1.01	20.42 ± 1.63	13.13 ± 0.84	n = 8	[BYE] Siemens ADVIA 1800
8.14 ± 0.72	29.63 ± 1.85	13.78 ± 1.02	19.47 ± 1.39	12.81 ± 1.00	n = 14	[COB] Siemens ADVIA Centaur
8.88 ± 0.15	31.93 ± 2.52	15.12 ± 0.46	20.95 ± 1.89	14.09 ± 0.98	n = 4	[BYP] Siemens ADVIA Centaur CP
7.69 ± 0.48	26.71 ± 1.04	13.31 ± 0.43	18.15 ± 0.84	11.70 ± 0.54	n = 15	[DUE] Siemens Dimension EXL
7.40 ± 0.81	26.50 ± 0.68	13.22 ± 0.57	18.33 ± 0.96	11.69 ± 0.77	n = 9	[DUR] Siemens Dimension RxL
8.66 ± 0.60	27.04 ± 1.22	13.97 ± 0.54	18.59 ± 1.01	12.64 ± 0.78	n = 41	[DUT] Siemens Dimension Vista
7.90 ± 0.23	26.87 ± 1.07	13.32 ± 0.36	18.55 ± 0.61	11.96 ± 0.23	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
8.01 ± 0.37	26.74 ± 1.84	13.34 ± 0.68	18.21 ± 0.90	12.29 ± 0.51	n = 22	[AB1] Abbott
7.70 ± 0.23	24.90 ± 0.95	12.94 ± 0.43	17.47 ± 0.67	11.78 ± 0.30	n = 23	[BC1] Beckman Coulter
7.88 ± 0.33	26.88 ± 1.67	12.91 ± 0.55	17.96 ± 0.64	11.96 ± 0.48	n = 16	[OL1] Beckman Coulter AU Series
7.64 ± 0.62	26.56 ± 0.75	13.39 ± 0.75	18.02 ± 0.86	12.07 ± 0.72	n = 6	[MG1] Microgenics CEDIA
7.53 ± 0.39	23.46 ± 1.15	11.87 ± 0.52	17.83 ± 0.70	11.12 ± 0.60	n = 31	[JJ1] Ortho Clinical Diagnostics
7.55 ± 0.49	25.28 ± 1.05	12.55 ± 0.70	17.46 ± 1.01	11.46 ± 0.66	n = 25	[R04] Roche cobas c311/c501/c502/c701/c702
7.24 ± 0.20	24.51 ± 0.11	11.98 ± 1.11	17.09 ± 0.41	11.35 ± 0.60	n = 5	[R02] Roche Hitachi and Modular D/P
7.71 ± 0.27	26.77 ± 1.24	13.20 ± 0.44	17.79 ± 0.82	11.79 ± 0.48	n = 14	[R01] Roche Integra and MIRA
7.99 ± 0.51	26.30 ± 0.94	13.36 ± 0.67	18.30 ± 0.68	12.18 ± 0.81	n = 9	[R06] Roche ONLINE
8.35 ± 0.72	30.07 ± 2.18	14.14 ± 1.14	19.78 ± 1.64	13.10 ± 1.16	n = 18	[BY1] Siemens ADVIA/ADVIA Centaur
8.73 ± 0.58	28.74 ± 2.12	14.22 ± 1.10	19.91 ± 2.16	13.06 ± 0.87	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
8.25 ± 0.76	26.86 ± 1.07	13.66 ± 0.61	18.45 ± 0.93	12.25 ± 0.83	n = 71	[DA5] Siemens Dimension
8.08 ± 0.54	25.70 ± 2.25	12.95 ± 0.73	18.18 ± 1.35	11.95 ± 0.61	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Free Phenytoin (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
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1.39 ± 0.24	3.89 ± 0.54	1.80 ± 0.21	3.25 ± 0.46	2.03 ± 0.31	n = 21	[---] All Methods & Instruments
						<Instruments>
1.39 ± 0.32	3.80 ± 0.65	1.86 ± 0.40	3.12 ± 0.73	2.02 ± 0.53	n = 9	[OLC] Beckman Coulter AU Chemistry System
1.37 ± 0.06	3.96 ± 0.16	1.84 ± 0.07	3.28 ± 0.07	2.08 ± 0.08	n = 6	[ROT] Roche Cobas INTEGRA 800
						<Reagents>
1.00 ± 0.00	3.17 ± 0.31	1.50 ± 0.09	2.24 ± 0.10	1.53 ± 0.05	n = 3	[OL1] Beckman Coulter AU Series
1.38 ± 0.08	3.98 ± 0.33	1.85 ± 0.11	3.30 ± 0.08	2.08 ± 0.07	n = 8	[R01] Roche Integra and MIRA
1.63 ± 0.14	4.44 ± 0.80	2.05 ± 0.37	3.59 ± 0.38	2.34 ± 0.43	n = 6	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Primidone (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
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5.65 ± 0.18 5.8	13.27 ± 0.48 13.4	6.80 ± 0.37 6.7	16.53 ± 0.73 17.1	7.22 ± 0.36 7.0	n = 13	[---] All Methods & Instruments [---] Weigh-in value
5.62 ± 0.13 5.70 ± 0.09	13.25 ± 0.35 13.52 ± 0.41	6.90 ± 0.25 6.73 ± 0.14	16.22 ± 0.27 17.63 ± 0.05	7.28 ± 0.32 7.20 ± 0.09	n = 7 n = 3	<Instruments> [OLC] Beckman Coulter AU Chemistry System [ROT] Roche Cobas INTEGRA 800
5.70 ± 0.09 5.67 ± 0.19	13.52 ± 0.41 13.31 ± 0.47	6.73 ± 0.14 6.91 ± 0.42	17.63 ± 0.05 16.21 ± 0.35	7.20 ± 0.09 7.23 ± 0.47	n = 3 n = 8	<Reagents> [R01] Roche Integra and MIRA [SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Procainamide (mg/L)

Specimen: T91 -----	Specimen: T92 -----	Specimen: T93 -----	Specimen: T94 -----	Specimen: T95 -----	Number -----	[Code] Instrument or Reagent System -----
6.69 ± 0.26 6.8	10.79 ± 1.00 11.2	5.70 ± 0.23 5.6	3.82 ± 0.14 3.7	14.09 ± 0.58 14.5	n = 11	[---] All Methods & Instruments [---] Weigh-in value
6.70 ± 0.00	11.24 ± 0.65	5.79 ± 0.20	3.90 ± 0.09	14.40 ± 0.54	n = 3	<Instruments> [OLC] Beckman Coulter AU Chemistry System
6.81 ± 0.20	11.67 ± 1.04	5.93 ± 0.05	3.97 ± 0.14	14.40 ± 0.54	n = 3	<Reagents> [SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

N-Acetyl-Procaïnamide (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
7.68 ± 0.40 7.7	19.31 ± 1.85 19.2	9.92 ± 0.46 9.6	5.82 ± 0.31 5.4	14.94 ± 1.04 14.8	n = 12	[---] All Methods & Instruments [---] Weigh-in value
8.03 ± 0.43	20.48 ± 2.87	10.08 ± 0.63	5.86 ± 0.34	15.57 ± 1.78	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
7.69 ± 0.52	18.38 ± 0.88	9.78 ± 0.24	5.53 ± 0.23	14.29 ± 0.20	n = 3	<Reagents> [SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Quinidine (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
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3.24 ± 0.26 3.3	6.96 ± 0.20 6.7	3.76 ± 0.17 3.3	1.83 ± 0.13 2.0	6.23 ± 0.40 6.7	n = 12	[---] All Methods & Instruments [---] Weigh-in value
2.83 ± 0.37 3.17 ± 0.05	6.79 ± 0.95 6.77 ± 0.14	3.56 ± 0.23 3.73 ± 0.05	1.74 ± 0.18 1.70 ± 0.00	5.68 ± 0.72 6.06 ± 0.10	n = 3 n = 3	<Instruments> [OLC] Beckman Coulter AU Chemistry System [ROT] Roche Cobas INTEGRA 800
3.41 ± 0.07 3.17 ± 0.05	7.05 ± 0.05 6.77 ± 0.14	3.87 ± 0.05 3.73 ± 0.05	1.90 ± 0.01 1.70 ± 0.00	6.49 ± 0.10 6.06 ± 0.10	n = 3 n = 3	<Reagents> [R04] Roche cobas c311/c501/c502/c701/c702 [R01] Roche Integra and MIRA

Summary of Participant Performance (Mean and Standard Deviation)

Salicylate (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
27.20 ± 1.18 26.0	78.79 ± 3.09 76.3	39.59 ± 1.22 38.1	20.29 ± 1.06 19.3	59.72 ± 2.31 57.1	n = 210	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
26.37 ± 0.76	79.83 ± 2.09	39.17 ± 1.07	19.29 ± 0.44	59.75 ± 1.34	n = 16	[ABJ] Abbott Architect c System
28.44 ± 1.94	82.55 ± 6.06	41.61 ± 2.22	21.35 ± 1.15	63.17 ± 3.44	n = 22	[OLC] Beckman Coulter AU Chemistry System
26.71 ± 0.85	82.01 ± 3.69	40.04 ± 1.37	19.61 ± 0.90	61.47 ± 2.77	n = 9	[BCG] Beckman Coulter UniCel DxC 600
26.95 ± 0.65	81.85 ± 2.19	39.75 ± 0.60	19.57 ± 0.72	62.15 ± 1.61	n = 8	[BCH] Beckman Coulter UniCel DxC 800
28.39 ± 0.59	76.90 ± 1.33	39.54 ± 0.52	21.21 ± 0.67	57.76 ± 0.74	n = 10	[JJF] Ortho Vitros 5,1FS
28.44 ± 0.76	77.46 ± 2.45	40.28 ± 1.30	21.30 ± 0.70	58.35 ± 1.78	n = 18	[JJG] Ortho Vitros 5600
26.14 ± 0.60	79.69 ± 2.40	39.14 ± 1.15	19.00 ± 0.50	60.78 ± 1.79	n = 17	[ROC] Roche cobas c501
25.54 ± 0.28	73.66 ± 2.88	37.54 ± 0.60	19.07 ± 0.30	56.43 ± 0.32	n = 7	[ROT] Roche Cobas INTEGRA 800
25.60 ± 0.69	74.39 ± 2.80	37.57 ± 0.89	19.20 ± 0.63	56.64 ± 1.51	n = 9	[ROD] Roche MODULAR D/P
27.71 ± 0.90	82.17 ± 1.31	40.35 ± 0.72	20.12 ± 0.32	61.88 ± 1.45	n = 9	[BYE] Siemens ADVIA 1800
28.35 ± 1.37	83.66 ± 2.26	41.08 ± 1.31	20.70 ± 1.08	63.32 ± 1.87	n = 3	[BYB] Siemens ADVIA 2400
27.39 ± 0.37	78.12 ± 0.71	39.55 ± 0.45	20.87 ± 0.29	59.16 ± 0.47	n = 15	[DUE] Siemens Dimension EXL
27.64 ± 0.29	78.72 ± 0.64	39.80 ± 0.23	20.83 ± 0.08	59.51 ± 0.68	n = 9	[DUR] Siemens Dimension RxL
27.22 ± 0.42	78.22 ± 1.40	39.59 ± 0.66	20.46 ± 0.43	59.26 ± 0.85	n = 39	[DUT] Siemens Dimension Vista
27.51 ± 0.34	78.52 ± 0.54	39.85 ± 0.39	20.76 ± 0.31	59.64 ± 0.66	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
26.37 ± 0.76	79.61 ± 2.24	39.07 ± 1.17	19.27 ± 0.42	59.77 ± 1.28	n = 17	[AB1] Abbott
26.81 ± 0.87	81.41 ± 3.50	39.88 ± 1.12	19.61 ± 0.82	62.21 ± 2.23	n = 22	[BC1] Beckman Coulter
28.84 ± 2.05	83.52 ± 6.20	41.98 ± 2.21	21.65 ± 1.28	63.55 ± 3.71	n = 16	[OL1] Beckman Coulter AU Series
28.45 ± 0.69	77.27 ± 2.03	39.83 ± 1.16	21.25 ± 0.65	58.19 ± 1.64	n = 31	[JJ1] Ortho Clinical Diagnostics
26.07 ± 0.56	79.19 ± 3.11	38.90 ± 1.27	19.01 ± 0.51	60.44 ± 2.34	n = 19	[R04] Roche cobas c311/c501/c502/c701/c702
25.60 ± 0.69	74.39 ± 2.80	37.57 ± 0.89	19.20 ± 0.63	56.64 ± 1.51	n = 9	[R02] Roche Hitachi and Modular D/P
25.54 ± 0.28	73.66 ± 2.88	37.54 ± 0.60	19.07 ± 0.30	56.43 ± 0.32	n = 7	[R01] Roche Integra and MIRA
27.95 ± 1.23	82.68 ± 1.76	40.33 ± 0.81	20.08 ± 0.40	62.26 ± 1.75	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
27.35 ± 0.41	78.34 ± 1.06	39.65 ± 0.53	20.65 ± 0.40	59.32 ± 0.73	n = 69	[DA5] Siemens Dimension
28.54 ± 0.88	84.68 ± 2.30	41.49 ± 2.20	21.10 ± 0.45	62.01 ± 2.68	n = 3	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Theophylline (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
6.74 ± 0.51 6.8	16.31 ± 0.84 16.8	8.18 ± 0.51 8.4	12.84 ± 0.82 13.1	26.54 ± 1.68 27.5	n = 199	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
6.75 ± 0.40	16.65 ± 0.63	8.35 ± 0.41	12.86 ± 0.56	27.21 ± 1.23	n = 12	[ABH] Abbott Architect i System
6.71 ± 0.35	16.20 ± 0.84	8.08 ± 0.43	12.87 ± 0.69	26.35 ± 2.40	n = 20	[OLC] Beckman Coulter AU Chemistry System
6.62 ± 0.13	15.74 ± 0.09	7.96 ± 0.18	12.35 ± 0.25	25.85 ± 0.56	n = 8	[BCG] Beckman Coulter UniCel DxC 600
6.55 ± 0.20	15.99 ± 0.26	7.89 ± 0.39	12.47 ± 0.49	26.56 ± 0.52	n = 8	[BCH] Beckman Coulter UniCel DxC 800
8.39 ± 0.38	22.62 ± 0.56	10.51 ± 0.28	16.03 ± 0.48	36.11 ± 1.33	n = 10	[JJF] Ortho Vitros 5,1FS
8.76 ± 0.69	22.91 ± 0.90	10.79 ± 0.70	16.18 ± 0.77	36.14 ± 2.01	n = 17	[JJG] Ortho Vitros 5600
6.78 ± 0.17	16.40 ± 0.30	8.15 ± 0.21	12.78 ± 0.44	26.52 ± 0.67	n = 14	[ROC] Roche cobas c501
7.18 ± 0.12	17.03 ± 0.57	8.61 ± 0.22	13.41 ± 0.21	27.64 ± 0.83	n = 8	[ROT] Roche Cobas INTEGRA 800
6.85 ± 0.26	16.87 ± 0.44	8.36 ± 0.25	13.03 ± 0.26	27.38 ± 0.62	n = 11	[ROD] Roche MODULAR D/P
6.55 ± 0.45	16.87 ± 0.77	8.23 ± 0.23	12.93 ± 0.95	29.97 ± 3.87	n = 3	[BYE] Siemens ADVIA 1800
6.03 ± 0.41	14.72 ± 0.64	7.42 ± 0.38	11.72 ± 0.56	23.90 ± 1.12	n = 14	[COB] Siemens ADVIA Centaur
6.64 ± 0.48	17.02 ± 1.09	8.15 ± 0.50	12.86 ± 0.88	27.14 ± 1.00	n = 7	[DUE] Siemens Dimension EXL
6.74 ± 0.29	16.57 ± 0.56	8.31 ± 0.37	12.93 ± 0.57	27.04 ± 0.53	n = 7	[DUR] Siemens Dimension RxL
6.73 ± 0.40	16.37 ± 0.73	8.25 ± 0.44	12.86 ± 0.61	26.32 ± 1.51	n = 41	[DUT] Siemens Dimension Vista
6.79 ± 0.60	17.22 ± 1.32	8.45 ± 0.45	13.25 ± 0.46	26.47 ± 0.41	n = 3	[DPD] Siemens Immulite 2000
<Reagents>						
6.79 ± 0.40	16.63 ± 0.59	8.40 ± 0.43	12.89 ± 0.54	27.38 ± 1.31	n = 13	[AB1] Abbott
6.56 ± 0.17	15.79 ± 0.37	7.91 ± 0.30	12.40 ± 0.31	25.95 ± 1.01	n = 20	[BC1] Beckman Coulter
6.61 ± 0.27	15.94 ± 0.73	8.05 ± 0.40	12.78 ± 0.64	26.39 ± 2.35	n = 13	[OL1] Beckman Coulter AU Series
8.59 ± 0.57	22.78 ± 0.77	10.67 ± 0.53	16.12 ± 0.64	36.14 ± 1.72	n = 27	[JJ1] Ortho Clinical Diagnostics
6.77 ± 0.18	16.37 ± 0.29	8.13 ± 0.21	12.71 ± 0.42	26.51 ± 0.68	n = 17	[R04] Roche cobas c311/c501/c502/c701/c702
6.88 ± 0.34	16.60 ± 0.47	8.20 ± 0.17	13.02 ± 0.28	27.19 ± 0.57	n = 4	[R02] Roche Hitachi and Modular D/P
7.13 ± 0.26	16.95 ± 0.53	8.53 ± 0.29	13.33 ± 0.29	27.76 ± 0.61	n = 10	[R01] Roche Integra and MIRA
6.84 ± 0.20	16.99 ± 0.37	8.45 ± 0.25	13.03 ± 0.22	27.49 ± 0.61	n = 7	[R06] Roche ONLINE
6.11 ± 0.45	14.87 ± 0.84	7.55 ± 0.54	11.90 ± 0.78	24.17 ± 1.42	n = 16	[BY1] Siemens ADVIA/ADVIA Centaur
6.86 ± 0.18	16.83 ± 0.61	8.24 ± 0.23	13.13 ± 0.73	28.60 ± 3.48	n = 4	[BY5] Siemens ADVIA/Syva Emit 2000
6.72 ± 0.39	16.43 ± 0.76	8.24 ± 0.44	12.86 ± 0.63	26.55 ± 1.54	n = 57	[DA5] Siemens Dimension
6.79 ± 0.60	17.22 ± 1.32	8.45 ± 0.45	13.25 ± 0.46	26.47 ± 0.41	n = 3	[DP5] Siemens Immulite
6.92 ± 0.35	16.76 ± 0.81	8.23 ± 0.35	12.70 ± 0.45	27.00 ± 2.14	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Tobramycin (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
2.35 ± 0.28 2.6	9.94 ± 1.02 9.9	4.98 ± 0.53 4.9	12.52 ± 1.57 12.9	4.54 ± 0.43 4.5	n = 78	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
2.38 ± 0.08	9.67 ± 0.14	5.07 ± 0.36	12.86 ± 1.34	4.51 ± 0.14	n = 7	[ABJ] Abbott Architect c System
2.26 ± 0.12	9.72 ± 0.18	4.87 ± 0.13	12.29 ± 0.62	4.50 ± 0.10	n = 11	[OLC] Beckman Coulter AU Chemistry System
2.90 ± 0.09	12.39 ± 0.57	6.32 ± 0.15	15.05 ± 0.19	5.72 ± 0.15	n = 3	[BCG] Beckman Coulter UniCel DxC 600
3.00 ± 0.11	11.92 ± 0.21	6.32 ± 0.20	14.70 ± 1.33	5.88 ± 0.28	n = 4	[BCH] Beckman Coulter UniCel DxC 800
2.35 ± 0.12	10.70 ± 0.69	5.13 ± 0.15	13.88 ± 0.83	4.78 ± 0.13	n = 4	[JJG] Ortho Vitros 5600
2.40 ± 0.08	9.99 ± 0.47	5.03 ± 0.09	12.46 ± 1.36	4.54 ± 0.08	n = 4	[ROC] Roche cobas c501
2.34 ± 0.10	9.68 ± 0.17	4.84 ± 0.06	12.25 ± 0.91	4.45 ± 0.19	n = 7	[ROT] Roche Cobas INTEGRA 800
2.33 ± 0.16	10.09 ± 0.73	5.23 ± 0.43	12.91 ± 1.53	4.65 ± 0.27	n = 4	[ROD] Roche MODULAR D/P
2.81 ± 0.14	11.10 ± 0.33	5.70 ± 0.28	13.58 ± 1.02	5.08 ± 0.21	n = 6	[COB] Siemens ADVIA Centaur
2.08 ± 0.12	9.05 ± 0.36	4.51 ± 0.14	11.11 ± 0.39	4.15 ± 0.16	n = 17	[DUT] Siemens Dimension Vista
<Reagents>						
2.38 ± 0.08	9.67 ± 0.14	5.07 ± 0.36	12.86 ± 1.34	4.51 ± 0.14	n = 7	[AB1] Abbott
2.98 ± 0.14	12.03 ± 0.42	6.35 ± 0.19	15.18 ± 0.30	5.79 ± 0.22	n = 8	[BC1] Beckman Coulter
2.30 ± 0.08	9.78 ± 0.20	4.82 ± 0.20	11.76 ± 1.02	4.39 ± 0.27	n = 4	[OL1] Beckman Coulter AU Series
2.32 ± 0.03	10.79 ± 0.73	5.10 ± 0.14	14.37 ± 0.94	4.72 ± 0.13	n = 6	[JJ1] Ortho Clinical Diagnostics
2.40 ± 0.08	9.99 ± 0.47	5.03 ± 0.09	12.46 ± 1.36	4.54 ± 0.08	n = 4	[R04] Roche cobas c311/c501/c502/c701/c702
2.37 ± 0.12	9.73 ± 0.28	5.00 ± 0.28	12.55 ± 0.99	4.50 ± 0.23	n = 9	[R01] Roche Integra and MIRA
2.33 ± 0.16	10.09 ± 0.73	5.23 ± 0.43	12.91 ± 1.53	4.65 ± 0.27	n = 4	[R06] Roche ONLINE
2.81 ± 0.14	11.10 ± 0.33	5.70 ± 0.28	13.58 ± 1.02	5.08 ± 0.21	n = 6	[BY1] Siemens ADVIA/ADVIA Centaur
2.12 ± 0.13	9.13 ± 0.37	4.53 ± 0.14	11.27 ± 0.51	4.20 ± 0.17	n = 22	[DA5] Siemens Dimension
2.23 ± 0.13	9.70 ± 0.18	4.86 ± 0.13	12.41 ± 0.59	4.51 ± 0.10	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Valproic Acid (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
77.02 ± 6.19 73.6	97.67 ± 8.48 94.3	49.50 ± 4.28 47.2	129.43 ± 10.55 125.4	53.64 ± 4.44 50.8	n = 242	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
71.83 ± 0.98	92.09 ± 1.84	46.72 ± 1.67	121.95 ± 3.11	49.86 ± 2.13	n = 4	[ABJ] Abbott Architect c System
88.00 ± 5.20	113.50 ± 4.83	60.02 ± 3.63	143.85 ± 6.95	64.55 ± 4.13	n = 19	[ABH] Abbott Architect i System
81.64 ± 2.93	103.22 ± 3.58	52.00 ± 1.89	137.00 ± 4.83	56.14 ± 2.97	n = 26	[OLC] Beckman Coulter AU Chemistry System
62.19 ± 4.61	78.23 ± 5.58	38.64 ± 4.49	104.77 ± 5.35	41.16 ± 4.68	n = 9	[BCG] Beckman Coulter UniCel DxC 600
65.43 ± 2.24	81.81 ± 3.87	41.80 ± 2.41	108.22 ± 7.63	46.00 ± 2.61	n = 8	[BCH] Beckman Coulter UniCel DxC 800
75.78 ± 3.10	98.71 ± 6.18	48.67 ± 1.74	133.92 ± 6.27	53.86 ± 1.69	n = 7	[JJF] Ortho Vitros 5,1FS
78.30 ± 3.87	101.04 ± 4.69	50.12 ± 3.06	134.42 ± 5.92	54.19 ± 3.00	n = 18	[JJG] Ortho Vitros 5600
78.17 ± 3.98	99.83 ± 5.75	49.76 ± 2.40	131.69 ± 5.28	53.47 ± 3.23	n = 19	[ROC] Roche cobas c501
73.45 ± 1.81	94.96 ± 2.04	46.26 ± 1.08	128.82 ± 3.59	50.77 ± 1.01	n = 9	[ROT] Roche Cobas INTEGRA 800
75.54 ± 3.68	94.46 ± 6.96	47.54 ± 2.73	128.37 ± 7.83	51.64 ± 4.01	n = 12	[ROD] Roche MODULAR D/P
79.55 ± 3.20	103.25 ± 5.01	53.95 ± 4.63	137.69 ± 9.39	54.98 ± 2.35	n = 7	[BYE] Siemens ADVIA 1800
73.90 ± 3.24	90.89 ± 2.98	47.45 ± 2.14	119.87 ± 6.32	51.83 ± 2.19	n = 18	[COB] Siemens ADVIA Centaur
75.40 ± 2.42	91.40 ± 4.47	46.46 ± 2.78	123.94 ± 8.54	50.87 ± 5.42	n = 4	[BYP] Siemens ADVIA Centaur CP
74.16 ± 2.74	92.57 ± 4.77	48.20 ± 1.43	122.75 ± 3.91	52.70 ± 1.96	n = 10	[DUE] Siemens Dimension EXL
74.16 ± 3.61	93.04 ± 5.30	48.16 ± 2.80	122.84 ± 6.21	51.70 ± 2.24	n = 10	[DUR] Siemens Dimension RxL
77.94 ± 3.68	98.36 ± 3.54	50.87 ± 1.99	128.77 ± 5.29	55.57 ± 2.00	n = 42	[DUT] Siemens Dimension Vista
73.05 ± 2.70	93.35 ± 3.24	48.04 ± 2.03	123.10 ± 0.86	51.70 ± 1.80	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
85.84 ± 7.82	111.44 ± 8.34	58.58 ± 5.99	141.02 ± 10.58	62.96 ± 6.62	n = 23	[AB1] Abbott
63.83 ± 3.96	80.52 ± 5.71	40.27 ± 3.98	105.92 ± 5.13	43.77 ± 4.42	n = 21	[BC1] Beckman Coulter
81.64 ± 2.82	103.45 ± 3.03	51.89 ± 1.75	138.94 ± 3.89	56.21 ± 2.96	n = 14	[OL1] Beckman Coulter AU Series
77.73 ± 3.86	100.60 ± 5.07	49.71 ± 2.76	134.32 ± 5.84	54.15 ± 2.68	n = 26	[JJ1] Ortho Clinical Diagnostics
78.56 ± 3.79	99.68 ± 5.45	49.53 ± 2.33	131.72 ± 6.15	53.55 ± 3.01	n = 23	[R04] Roche cobas c311/c501/c502/c701/c702
76.49 ± 2.55	95.18 ± 6.71	47.95 ± 2.41	133.45 ± 8.69	51.12 ± 5.56	n = 4	[R02] Roche Hitachi and Modular D/P
73.56 ± 1.61	94.96 ± 2.10	46.36 ± 1.06	128.52 ± 3.47	50.64 ± 1.08	n = 11	[R01] Roche Integra and MIRA
74.25 ± 4.52	92.75 ± 6.21	46.77 ± 2.49	124.97 ± 3.81	51.10 ± 2.61	n = 7	[R06] Roche ONLINE
74.19 ± 3.15	91.06 ± 3.23	47.30 ± 2.29	120.80 ± 7.37	52.02 ± 2.12	n = 22	[BY1] Siemens ADVIA/ADVIA Centaur
79.36 ± 2.38	102.76 ± 2.77	52.79 ± 3.82	137.19 ± 3.87	55.03 ± 2.29	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
76.39 ± 3.96	96.64 ± 4.60	49.93 ± 2.35	126.50 ± 5.97	54.29 ± 2.66	n = 67	[DA5] Siemens Dimension
82.12 ± 2.75	103.37 ± 4.09	52.62 ± 2.28	134.77 ± 5.48	55.94 ± 2.53	n = 11	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Vancomycin (mg/L)

Specimen: T91	Specimen: T92	Specimen: T93	Specimen: T94	Specimen: T95	Number	[Code] Instrument or Reagent System
28.40 ± 3.27 30.8	18.68 ± 2.10 20.7	9.29 ± 1.07 10.3	35.03 ± 3.94 37.6	7.59 ± 0.89 7.9	n = 220	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
30.31 ± 0.83	19.85 ± 0.49	9.64 ± 0.59	37.26 ± 0.91	7.90 ± 0.40	n = 4	[ABJ] Abbott Architect c System
29.99 ± 0.90	20.18 ± 0.73	10.23 ± 0.49	36.92 ± 1.75	8.30 ± 0.27	n = 16	[ABH] Abbott Architect i System
27.01 ± 1.38	17.77 ± 0.90	8.81 ± 0.46	33.56 ± 1.73	7.29 ± 0.51	n = 22	[OLC] Beckman Coulter AU Chemistry System
31.12 ± 1.28	19.71 ± 0.87	9.39 ± 0.54	38.34 ± 1.05	7.79 ± 0.38	n = 8	[BCG] Beckman Coulter UniCel DxC 600
31.66 ± 1.90	19.60 ± 0.84	9.58 ± 0.62	38.33 ± 1.45	8.04 ± 0.28	n = 9	[BCH] Beckman Coulter UniCel DxC 800
27.30 ± 2.69	17.86 ± 1.83	8.87 ± 0.99	33.63 ± 3.69	7.18 ± 0.86	n = 6	[JJF] Ortho Vitros 5,1FS
27.61 ± 1.14	18.16 ± 0.66	9.11 ± 0.48	34.96 ± 1.63	7.57 ± 0.42	n = 16	[JJG] Ortho Vitros 5600
31.71 ± 2.09	20.79 ± 1.27	10.48 ± 0.83	38.46 ± 1.51	8.33 ± 0.71	n = 17	[ROC] Roche cobas c501
34.60 ± 1.27	22.56 ± 0.97	10.86 ± 0.49	42.99 ± 1.36	8.68 ± 0.39	n = 9	[ROT] Roche Cobas INTEGRA 800
32.23 ± 2.52	21.22 ± 1.84	10.46 ± 0.74	39.75 ± 2.52	8.69 ± 0.67	n = 11	[ROD] Roche MODULAR D/P
27.70 ± 0.23	18.41 ± 1.11	8.85 ± 0.50	33.49 ± 1.33	7.34 ± 0.65	n = 5	[BYE] Siemens ADVIA 1800
23.97 ± 1.30	15.24 ± 1.00	7.82 ± 0.53	29.34 ± 2.21	6.11 ± 0.55	n = 18	[COB] Siemens ADVIA Centaur
21.41 ± 1.40	13.18 ± 1.30	6.63 ± 0.64	26.06 ± 3.07	5.20 ± 0.87	n = 4	[BYP] Siemens ADVIA Centaur CP
27.06 ± 0.90	17.58 ± 0.77	8.51 ± 0.48	33.75 ± 1.17	7.06 ± 0.37	n = 11	[DUE] Siemens Dimension EXL
26.92 ± 0.98	17.84 ± 0.72	8.77 ± 0.63	33.59 ± 1.27	7.02 ± 0.63	n = 7	[DUR] Siemens Dimension RxL
27.01 ± 1.61	18.03 ± 1.05	9.13 ± 0.60	33.16 ± 1.59	7.35 ± 0.57	n = 42	[DUT] Siemens Dimension Vista
26.84 ± 0.78	17.65 ± 0.43	8.72 ± 0.40	33.26 ± 0.68	7.10 ± 0.34	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
30.05 ± 0.88	20.11 ± 0.69	10.12 ± 0.57	37.03 ± 1.53	8.21 ± 0.36	n = 20	[AB1] Abbott
31.52 ± 1.85	19.77 ± 1.09	9.52 ± 0.73	38.58 ± 1.42	7.99 ± 0.46	n = 20	[BC1] Beckman Coulter
27.35 ± 1.52	18.08 ± 0.82	8.91 ± 0.37	33.98 ± 1.57	7.37 ± 0.60	n = 12	[OL1] Beckman Coulter AU Series
27.56 ± 1.52	18.12 ± 0.93	9.03 ± 0.64	34.80 ± 2.29	7.49 ± 0.57	n = 23	[JJ1] Ortho Clinical Diagnostics
31.94 ± 1.97	20.91 ± 1.18	10.54 ± 0.76	38.84 ± 1.80	8.38 ± 0.65	n = 20	[R04] Roche cobas c311/c501/c502/c701/c702
31.44 ± 1.69	20.64 ± 1.76	10.40 ± 0.82	39.24 ± 1.51	8.56 ± 0.82	n = 6	[R02] Roche Hitachi and Modular D/P
34.96 ± 1.49	22.56 ± 0.84	10.85 ± 0.48	43.28 ± 1.36	8.82 ± 0.53	n = 11	[R01] Roche Integra and MIRA
33.67 ± 3.07	21.86 ± 1.59	10.51 ± 0.64	40.80 ± 3.41	8.83 ± 0.41	n = 5	[R06] Roche ONLINE
23.63 ± 1.60	14.96 ± 1.29	7.66 ± 0.69	28.96 ± 2.58	6.00 ± 0.64	n = 22	[BY1] Siemens ADVIA/ADVIA Centaur
28.27 ± 1.37	18.48 ± 0.84	9.00 ± 0.61	33.88 ± 1.41	7.50 ± 0.61	n = 8	[BY5] Siemens ADVIA/Syva Emit 2000
27.00 ± 1.36	17.88 ± 0.93	8.94 ± 0.62	33.35 ± 1.39	7.25 ± 0.55	n = 65	[DA5] Siemens Dimension
26.61 ± 0.90	17.28 ± 0.53	8.69 ± 0.44	33.06 ± 1.44	7.24 ± 0.23	n = 8	[SY4] Syva Emit 2000