



ANDREW M. CUOMO

Governor

HOWARD A. ZUCKER, M.D., J.D.

Commissioner

SALLY DRESLIN, M.S., R.N.

Executive Deputy Commissioner

Therapeutic Substance Monitoring / Quantitative Toxicology Proficiency Test Program

Statistical Summary - May 2015 (Event 15-2)

This statistical report summarizes participant data for the five Therapeutic Substance Monitoring proficiency survey specimens shipped 4 May 2015. Test samples (Vials T16, T17, T18, T19, T20) 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: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
79.47 ± 7.02 78.1	149.07 ± 12.11 145.7	120.24 ± 9.70 117.1	62.15 ± 6.68 60.6	37.85 ± 4.84 37.0	n = 211	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
74.19 ± 1.04	138.99 ± 2.05	112.26 ± 1.97	57.52 ± 0.70	34.85 ± 0.49	n = 19	[ABJ] Abbott Architect c System
76.00 ± 5.12	142.71 ± 8.68	114.12 ± 5.25	58.42 ± 3.03	36.35 ± 2.40	n = 22	[OLC] Beckman Coulter AU Chemistry System
82.94 ± 1.45	153.05 ± 2.61	125.62 ± 3.81	63.66 ± 0.88	38.64 ± 1.51	n = 10	[BCG] Beckman Coulter UniCel DxC 600
82.63 ± 2.28	152.63 ± 3.42	123.66 ± 3.42	63.16 ± 2.68	38.69 ± 1.14	n = 8	[BCH] Beckman Coulter UniCel DxC 800
84.29 ± 1.08	161.70 ± 1.49	129.23 ± 0.59	67.75 ± 1.13	40.15 ± 0.89	n = 7	[JJF] Ortho Vitros 5,1FS
83.50 ± 1.14	161.93 ± 1.90	128.78 ± 1.33	67.31 ± 1.16	39.93 ± 0.64	n = 18	[JJG] Ortho Vitros 5600
67.15 ± 1.74	132.27 ± 3.45	105.56 ± 2.22	50.25 ± 1.51	27.71 ± 0.79	n = 22	[ROC] Roche cobas c501
72.87 ± 2.59	138.30 ± 1.74	111.17 ± 3.05	57.16 ± 3.18	34.02 ± 2.90	n = 7	[ROT] Roche Cobas INTEGRA 800
69.76 ± 2.84	132.69 ± 4.94	107.39 ± 4.97	52.67 ± 2.63	30.05 ± 1.94	n = 8	[ROD] Roche MODULAR D/P
75.40 ± 1.34	139.13 ± 3.49	113.43 ± 2.43	58.44 ± 1.03	35.06 ± 0.76	n = 8	[BYE] Siemens ADVIA 1800
82.11 ± 1.88	154.96 ± 2.97	124.67 ± 1.73	65.44 ± 1.43	39.91 ± 0.68	n = 16	[DUE] Siemens Dimension EXL
82.00 ± 2.66	154.61 ± 2.66	124.35 ± 3.18	66.12 ± 0.83	41.24 ± 0.91	n = 7	[DUR] Siemens Dimension RxL
85.19 ± 1.73	157.38 ± 2.56	127.38 ± 2.19	67.81 ± 1.20	42.46 ± 0.99	n = 42	[DUT] Siemens Dimension Vista
82.99 ± 1.51	155.70 ± 1.43	124.68 ± 0.80	66.63 ± 1.30	41.13 ± 0.81	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
74.19 ± 1.04	138.99 ± 2.05	112.26 ± 1.97	57.52 ± 0.70	34.85 ± 0.49	n = 19	[AB1] Abbott
82.87 ± 1.82	152.87 ± 2.99	124.72 ± 3.76	63.67 ± 1.92	38.66 ± 1.36	n = 18	[BC1] Beckman Coulter
76.59 ± 4.73	142.92 ± 8.45	112.88 ± 5.46	58.95 ± 3.11	36.27 ± 2.35	n = 16	[OL1] Beckman Coulter AU Series
83.79 ± 1.20	161.90 ± 1.84	128.90 ± 1.27	67.50 ± 1.15	40.00 ± 0.84	n = 28	[JJ1] Ortho Clinical Diagnostics
67.17 ± 1.46	132.34 ± 2.81	105.72 ± 2.11	50.37 ± 1.40	27.83 ± 0.80	n = 24	[R04] Roche cobas c311/c501/c502/c701/c702
69.23 ± 2.16	134.94 ± 1.64	108.38 ± 1.62	52.70 ± 0.83	29.65 ± 1.16	n = 6	[R02] Roche Hitachi and Modular D/P
72.48 ± 1.36	138.00 ± 2.41	110.81 ± 2.34	55.76 ± 1.07	32.84 ± 0.40	n = 6	[R01] Roche Integra and MIRA
75.61 ± 1.24	139.66 ± 3.34	113.79 ± 2.38	58.63 ± 0.99	35.14 ± 0.67	n = 10	[BY1] Siemens ADVIA/ADVIA Centaur
84.07 ± 2.39	156.44 ± 2.79	126.27 ± 2.61	67.01 ± 1.63	41.67 ± 1.44	n = 71	[DA5] Siemens Dimension
73.78 ± 4.11	130.52 ± 5.43	111.26 ± 7.67	57.04 ± 4.60	36.68 ± 4.22	n = 3	[SY2] Syva Emit
78.57 ± 7.60	143.23 ± 12.16	116.51 ± 4.42	59.25 ± 1.14	35.48 ± 2.48	n = 5	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Carbamazepine (mg/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
6.51 ± 0.63 6.9	3.35 ± 0.33 3.7	10.00 ± 1.01 10.5	7.38 ± 0.73 7.8	13.11 ± 1.18 13.5	n = 217	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
5.86 ± 1.01	3.12 ± 0.42	8.67 ± 1.63	6.49 ± 1.27	11.47 ± 2.01	n = 9	[ABJ] Abbott Architect c System
6.43 ± 0.16	3.40 ± 0.11	9.74 ± 0.15	7.20 ± 0.23	12.87 ± 0.35	n = 11	[ABH] Abbott Architect i System
6.76 ± 0.37	3.52 ± 0.22	10.39 ± 0.48	7.65 ± 0.45	13.76 ± 0.81	n = 26	[OLC] Beckman Coulter AU Chemistry System
6.25 ± 0.33	3.00 ± 0.15	9.57 ± 0.11	7.15 ± 0.26	12.83 ± 0.43	n = 10	[BCG] Beckman Coulter UniCel DxC 600
6.03 ± 0.25	2.89 ± 0.16	9.57 ± 0.58	7.12 ± 0.34	12.75 ± 0.55	n = 9	[BCH] Beckman Coulter UniCel DxC 800
5.18 ± 0.19	3.00 ± 0.00	7.83 ± 0.53	5.66 ± 0.38	10.86 ± 0.59	n = 6	[JJF] Ortho Vitros 5,1FS
4.87 ± 0.29	3.00 ± 0.00	7.53 ± 0.39	5.24 ± 0.26	10.23 ± 0.44	n = 18	[JJG] Ortho Vitros 5600
6.70 ± 0.48	3.47 ± 0.37	10.41 ± 0.66	7.60 ± 0.48	13.22 ± 0.54	n = 21	[ROC] Roche cobas c501
6.61 ± 0.12	3.50 ± 0.10	10.14 ± 0.30	7.46 ± 0.12	13.80 ± 0.31	n = 10	[ROT] Roche Cobas INTEGRA 800
6.86 ± 0.11	3.64 ± 0.24	10.57 ± 0.07	7.83 ± 0.08	13.53 ± 0.27	n = 7	[ROD] Roche MODULAR D/P
7.10 ± 0.69	3.73 ± 0.15	10.78 ± 1.27	8.07 ± 0.64	13.94 ± 0.99	n = 6	[BYE] Siemens ADVIA 1800
7.10 ± 0.72	3.63 ± 0.28	11.58 ± 1.19	8.17 ± 0.79	14.90 ± 1.04	n = 11	[COB] Siemens ADVIA Centaur
6.56 ± 0.29	3.29 ± 0.14	10.13 ± 0.46	7.43 ± 0.33	13.14 ± 0.55	n = 9	[DUE] Siemens Dimension EXL
6.51 ± 0.13	3.30 ± 0.07	10.10 ± 0.38	7.43 ± 0.28	13.40 ± 0.60	n = 7	[DUR] Siemens Dimension RxL
6.58 ± 0.26	3.40 ± 0.20	10.07 ± 0.41	7.39 ± 0.33	13.06 ± 0.50	n = 43	[DUT] Siemens Dimension Vista
6.67 ± 0.14	3.33 ± 0.14	10.23 ± 0.31	7.65 ± 0.19	13.57 ± 0.34	n = 3	[DUX] Siemens Dimension Xpand
<Reagents>						
6.31 ± 0.76	3.34 ± 0.27	9.41 ± 1.10	6.98 ± 0.87	12.43 ± 1.44	n = 20	[AB1] Abbott
6.16 ± 0.33	2.97 ± 0.19	9.70 ± 0.50	7.13 ± 0.31	12.84 ± 0.50	n = 21	[BC1] Beckman Coulter
6.86 ± 0.35	3.56 ± 0.07	10.58 ± 0.54	7.77 ± 0.44	14.37 ± 0.92	n = 12	[OL1] Beckman Coulter AU Series
6.92 ± 0.27	3.82 ± 0.25	10.61 ± 0.26	7.81 ± 0.22	13.49 ± 0.45	n = 7	[MG1] Microgenics CEDIA
4.95 ± 0.31	3.00 ± 0.00	7.58 ± 0.42	5.33 ± 0.34	10.37 ± 0.53	n = 24	[JJ1] Ortho Clinical Diagnostics
6.72 ± 0.57	3.48 ± 0.47	10.42 ± 0.80	7.64 ± 0.64	13.24 ± 0.72	n = 22	[R04] Roche cobas c311/c501/c502/c701/c702
6.87 ± 0.05	3.58 ± 0.23	10.57 ± 0.08	7.84 ± 0.08	13.50 ± 0.27	n = 5	[R02] Roche Hitachi and Modular D/P
6.64 ± 0.12	3.50 ± 0.10	10.18 ± 0.31	7.48 ± 0.14	13.75 ± 0.29	n = 12	[R01] Roche Integra and MIRA
7.15 ± 0.67	3.64 ± 0.27	11.54 ± 1.21	8.23 ± 0.86	14.95 ± 1.25	n = 13	[BY1] Siemens ADVIA/ADVIA Centaur
7.08 ± 0.63	3.72 ± 0.27	10.51 ± 1.31	7.93 ± 0.68	13.83 ± 0.92	n = 7	[BY5] Siemens ADVIA/Syva Emit 2000
6.57 ± 0.24	3.36 ± 0.19	10.09 ± 0.41	7.42 ± 0.32	13.13 ± 0.53	n = 62	[DA5] Siemens Dimension
6.52 ± 0.34	3.30 ± 0.10	10.00 ± 0.48	7.48 ± 0.47	13.36 ± 0.34	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Digoxin (µg/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
1.722 ± 0.167 1.8	1.354 ± 0.143 1.4	2.672 ± 0.216 2.7	0.644 ± 0.114 0.7	1.421 ± 0.144 1.5	n = 272	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
1.661 ± 0.097	1.334 ± 0.080	2.630 ± 0.113	0.625 ± 0.092	1.375 ± 0.091	n = 8	[ABJ] Abbott Architect c System
1.540 ± 0.070	1.235 ± 0.050	2.415 ± 0.054	0.600 ± 0.000	1.322 ± 0.054	n = 15	[ABH] Abbott Architect i System
1.822 ± 0.146	1.459 ± 0.063	2.783 ± 0.117	0.698 ± 0.034	1.530 ± 0.072	n = 4	[SAA] Beckman Coulter ACCESS
1.646 ± 0.153	1.310 ± 0.109	2.614 ± 0.169	0.607 ± 0.090	1.385 ± 0.123	n = 33	[OLC] Beckman Coulter AU Chemistry System
1.610 ± 0.117	1.243 ± 0.136	2.540 ± 0.194	0.512 ± 0.136	1.324 ± 0.125	n = 11	[BCG] Beckman Coulter UniCel DxC 600
1.600 ± 0.152	1.263 ± 0.112	2.518 ± 0.192	0.495 ± 0.105	1.278 ± 0.126	n = 9	[BCH] Beckman Coulter UniCel DxC 800
1.756 ± 0.102	1.413 ± 0.113	2.690 ± 0.162	0.662 ± 0.086	1.427 ± 0.113	n = 3	[BCU] Beckman Coulter UniCel Dxi 800
1.518 ± 0.090	1.165 ± 0.073	2.412 ± 0.090	0.400 ± 0.000	1.204 ± 0.100	n = 7	[JJF] Ortho Vitros 5,1FS
1.543 ± 0.088	1.150 ± 0.091	2.434 ± 0.096	0.466 ± 0.091	1.233 ± 0.069	n = 19	[JJG] Ortho Vitros 5600
1.803 ± 0.005	1.416 ± 0.065	2.700 ± 0.090	0.728 ± 0.051	1.524 ± 0.093	n = 3	[ROJ] Roche cobas c311
1.705 ± 0.096	1.355 ± 0.077	2.641 ± 0.098	0.661 ± 0.061	1.435 ± 0.086	n = 21	[ROC] Roche cobas c501
1.740 ± 0.100	1.360 ± 0.046	2.428 ± 0.051	0.660 ± 0.046	1.392 ± 0.077	n = 3	[ROG] Roche cobas c502
1.902 ± 0.046	1.500 ± 0.000	3.132 ± 0.062	0.737 ± 0.055	1.584 ± 0.034	n = 5	[ROA] Roche cobas e601
1.800 ± 0.124	1.437 ± 0.065	2.747 ± 0.133	0.697 ± 0.111	1.527 ± 0.079	n = 5	[ROT] Roche Cobas INTEGRA 800
1.749 ± 0.092	1.391 ± 0.043	2.583 ± 0.081	0.682 ± 0.050	1.445 ± 0.100	n = 8	[ROD] Roche MODULAR D/P
1.669 ± 0.116	1.270 ± 0.110	2.628 ± 0.150	0.572 ± 0.081	1.373 ± 0.122	n = 9	[BYE] Siemens ADVIA 1800
2.045 ± 0.109	1.658 ± 0.091	2.996 ± 0.172	0.827 ± 0.085	1.734 ± 0.112	n = 18	[COB] Siemens ADVIA Centaur
1.813 ± 0.111	1.432 ± 0.112	2.815 ± 0.159	0.719 ± 0.071	1.488 ± 0.090	n = 19	[DUE] Siemens Dimension EXL
1.769 ± 0.152	1.372 ± 0.081	2.777 ± 0.192	0.589 ± 0.115	1.423 ± 0.140	n = 9	[DUR] Siemens Dimension RxL
1.764 ± 0.051	1.376 ± 0.043	2.748 ± 0.084	0.673 ± 0.033	1.443 ± 0.050	n = 44	[DUT] Siemens Dimension Vista
1.722 ± 0.033	1.363 ± 0.086	2.759 ± 0.085	0.692 ± 0.055	1.505 ± 0.054	n = 6	[DUX] Siemens Dimension Xpand
1.897 ± 0.090	1.532 ± 0.098	2.980 ± 0.253	0.814 ± 0.075	1.547 ± 0.092	n = 4	[DPD] Siemens Immulite 2000
<Reagents>						
1.582 ± 0.107	1.263 ± 0.074	2.472 ± 0.124	0.600 ± 0.000	1.337 ± 0.073	n = 23	[AB1] Abbott
1.667 ± 0.154	1.312 ± 0.148	2.602 ± 0.208	0.567 ± 0.139	1.364 ± 0.149	n = 29	[BC1] Beckman Coulter
1.660 ± 0.159	1.314 ± 0.116	2.627 ± 0.191	0.611 ± 0.089	1.396 ± 0.124	n = 20	[OL1] Beckman Coulter AU Series
1.537 ± 0.055	1.263 ± 0.055	2.500 ± 0.000	0.563 ± 0.055	1.300 ± 0.064	n = 5	[MG2] Microgenics DRI
1.540 ± 0.088	1.157 ± 0.084	2.432 ± 0.095	0.446 ± 0.084	1.226 ± 0.079	n = 27	[JJ1] Ortho Clinical Diagnostics
1.729 ± 0.098	1.361 ± 0.076	2.630 ± 0.125	0.672 ± 0.060	1.440 ± 0.093	n = 26	[R04] Roche cobas c311/c501/c502/c701/c702
1.891 ± 0.054	1.500 ± 0.000	3.109 ± 0.069	0.721 ± 0.047	1.573 ± 0.046	n = 7	[R03] Roche Elecsys/Modular E/e601/e411
1.703 ± 0.005	1.392 ± 0.015	2.555 ± 0.045	0.668 ± 0.049	1.390 ± 0.073	n = 3	[R02] Roche Hitachi and Modular D/P
1.778 ± 0.121	1.427 ± 0.059	2.735 ± 0.120	0.698 ± 0.099	1.493 ± 0.113	n = 6	[R01] Roche Integra and MIRA
1.809 ± 0.123	1.394 ± 0.065	2.608 ± 0.093	0.691 ± 0.054	1.485 ± 0.102	n = 5	[R05] Roche Tina-quant
1.939 ± 0.212	1.556 ± 0.207	2.887 ± 0.244	0.754 ± 0.148	1.638 ± 0.204	n = 28	[BY1] Siemens ADVIA/ADVIA Centaur
1.783 ± 0.104	1.392 ± 0.089	2.785 ± 0.138	0.685 ± 0.071	1.473 ± 0.081	n = 45	[DA5] Siemens Dimension
1.765 ± 0.055	1.375 ± 0.044	2.742 ± 0.084	0.671 ± 0.037	1.441 ± 0.055	n = 33	[DA6] Siemens Dimension LOCI
1.873 ± 0.091	1.567 ± 0.114	2.959 ± 0.225	0.789 ± 0.083	1.530 ± 0.077	n = 5	[DP5] Siemens Immulite
1.677 ± 0.151	1.328 ± 0.113	2.673 ± 0.148	0.619 ± 0.108	1.411 ± 0.118	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Ethanol (mg/dL)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
128.53 ± 5.38 129.1	108.81 ± 4.34 112.0	192.76 ± 7.56 193.7	231.66 ± 9.77 233.7	203.41 ± 8.68 206.1	n = 218	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
128.26 ± 2.07	108.81 ± 1.53	192.01 ± 2.36	229.89 ± 3.15	202.45 ± 2.83	n = 18	[ABJ] Abbott Architect c System
129.70 ± 4.69	109.86 ± 4.32	192.99 ± 6.07	232.50 ± 6.61	204.04 ± 7.36	n = 19	[OLC] Beckman Coulter AU Chemistry System
130.17 ± 6.23	110.53 ± 4.95	191.44 ± 8.37	228.06 ± 11.79	199.84 ± 10.28	n = 11	[BCG] Beckman Coulter UniCel DxC 600
130.43 ± 2.92	110.02 ± 3.15	194.67 ± 3.78	232.55 ± 5.12	202.26 ± 8.80	n = 8	[BCH] Beckman Coulter UniCel DxC 800
126.84 ± 5.24	106.55 ± 3.72	191.42 ± 8.28	231.74 ± 10.14	201.96 ± 9.06	n = 12	[GCC] Gas Chromatograph
117.91 ± 5.31	100.28 ± 4.96	181.60 ± 8.73	206.18 ± 3.84	186.23 ± 9.04	n = 7	[JJF] Ortho Vitros 5,1FS
121.27 ± 4.17	101.27 ± 3.05	178.75 ± 6.07	214.58 ± 10.77	189.88 ± 8.10	n = 18	[JJG] Ortho Vitros 5600
131.54 ± 3.57	110.88 ± 2.22	196.43 ± 4.57	236.52 ± 5.11	207.24 ± 5.52	n = 20	[ROC] Roche cobas c501
129.44 ± 2.41	109.53 ± 2.32	192.81 ± 3.90	233.13 ± 5.14	203.72 ± 5.02	n = 6	[ROT] Roche Cobas INTEGRA 800
132.71 ± 7.17	111.54 ± 5.69	199.81 ± 10.34	239.54 ± 11.98	210.64 ± 10.47	n = 8	[ROD] Roche MODULAR D/P
132.56 ± 3.38	112.88 ± 4.50	197.72 ± 7.11	239.62 ± 8.85	210.34 ± 7.43	n = 9	[BYE] Siemens ADVIA 1800
128.97 ± 3.97	108.60 ± 2.68	193.38 ± 4.95	232.69 ± 5.08	204.69 ± 4.15	n = 16	[DUE] Siemens Dimension EXL
127.72 ± 3.13	108.39 ± 2.73	191.78 ± 6.62	230.32 ± 8.76	203.03 ± 6.63	n = 7	[DUR] Siemens Dimension RxL
128.82 ± 5.09	109.77 ± 3.22	194.82 ± 5.24	232.73 ± 7.82	205.91 ± 6.99	n = 41	[DUT] Siemens Dimension Vista
128.27 ± 2.45	110.05 ± 2.27	195.38 ± 6.99	234.02 ± 2.70	206.94 ± 5.72	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
128.24 ± 1.99	108.76 ± 1.49	192.19 ± 2.43	230.07 ± 3.04	202.66 ± 2.90	n = 19	[AB1] Abbott
130.27 ± 4.61	110.11 ± 4.07	192.31 ± 7.63	229.65 ± 10.36	200.85 ± 9.77	n = 19	[BC1] Beckman Coulter
131.14 ± 5.54	110.67 ± 5.05	194.43 ± 7.27	234.07 ± 8.10	206.19 ± 8.22	n = 14	[OL1] Beckman Coulter AU Series
126.57 ± 5.47	106.24 ± 3.78	190.46 ± 8.02	230.19 ± 8.78	200.55 ± 8.11	n = 11	[IH1] In-House
119.80 ± 5.12	100.76 ± 3.85	179.54 ± 7.53	212.98 ± 10.94	188.71 ± 7.95	n = 28	[JJ1] Ortho Clinical Diagnostics
131.39 ± 3.58	110.79 ± 2.28	196.03 ± 4.93	236.30 ± 5.14	207.03 ± 5.72	n = 23	[R04] Roche cobas c311/c501/c502/c701/c702
132.71 ± 7.17	111.54 ± 5.69	199.81 ± 10.34	239.54 ± 11.98	210.64 ± 10.47	n = 8	[R02] Roche Hitachi and Modular D/P
128.60 ± 3.07	108.74 ± 3.30	192.11 ± 3.85	231.70 ± 5.94	202.28 ± 5.94	n = 7	[R01] Roche Integra and MIRA
133.59 ± 3.24	113.64 ± 3.63	199.67 ± 5.09	241.88 ± 7.33	212.34 ± 6.18	n = 7	[BY1] Siemens ADVIA/ADVIA Centaur
126.45 ± 6.62	107.74 ± 5.80	177.55 ± 30.33	232.26 ± 9.22	203.73 ± 8.67	n = 4	[BY5] Siemens ADVIA/Syva Emit 2000
128.61 ± 4.29	109.37 ± 3.01	194.22 ± 5.37	232.88 ± 6.98	205.46 ± 6.26	n = 70	[DA5] Siemens Dimension
126.41 ± 1.08	107.29 ± 1.33	190.21 ± 4.12	230.38 ± 4.15	198.55 ± 1.35	n = 3	[SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Ethosuximide (mg/L)

Specimen: T16 -----	Specimen: T17 -----	Specimen: T18 -----	Specimen: T19 -----	Specimen: T20 -----	Number -----	[Code] Instrument or Reagent System -----
104.25 ± 8.44 105.8	74.27 ± 5.36 77.8	152.23 ± 15.87 158.6	96.98 ± 2.70 100.4	31.12 ± 1.75 33.2	n = 7	[---] All Methods & Instruments [---] Weigh-in value
107.03 ± 11.73	74.65 ± 7.55	164.31 ± 17.83	98.90 ± 9.12	33.86 ± 4.67	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
105.47 ± 9.20	74.25 ± 5.33	155.55 ± 17.08	97.25 ± 3.07	31.46 ± 1.89	n = 6	<Reagents> [SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Gentamicin (mg/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
7.30 ± 0.56 6.9	13.03 ± 1.36 12.6	10.90 ± 0.97 10.3	6.69 ± 0.53 6.3	4.58 ± 0.36 4.2	n = 167	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
7.40 ± 0.31	13.11 ± 0.69	11.08 ± 0.72	6.80 ± 0.35	4.54 ± 0.32	n = 6	[ABJ] Abbott Architect c System
7.22 ± 0.36	13.26 ± 0.79	10.49 ± 0.43	6.62 ± 0.23	4.52 ± 0.17	n = 11	[ABH] Abbott Architect i System
7.85 ± 0.58	14.08 ± 1.07	12.12 ± 1.10	7.19 ± 0.55	4.95 ± 0.33	n = 17	[OLC] Beckman Coulter AU Chemistry System
7.91 ± 0.15	13.75 ± 0.50	11.34 ± 0.43	7.27 ± 0.22	4.91 ± 0.14	n = 6	[BCG] Beckman Coulter UniCel DxC 600
7.90 ± 0.14	13.39 ± 1.21	11.17 ± 0.37	7.24 ± 0.30	4.87 ± 0.27	n = 8	[BCH] Beckman Coulter UniCel DxC 800
7.84 ± 0.53	15.93 ± 1.14	13.24 ± 0.72	7.18 ± 0.39	4.95 ± 0.16	n = 5	[JJF] Ortho Vitros 5,1FS
8.02 ± 0.23	14.83 ± 0.59	12.31 ± 0.46	7.45 ± 0.31	5.05 ± 0.13	n = 14	[JJG] Ortho Vitros 5600
6.70 ± 0.27	11.86 ± 1.12	9.48 ± 0.37	6.08 ± 0.18	4.11 ± 0.27	n = 13	[ROC] Roche cobas c501
6.90 ± 0.09	12.41 ± 1.72	11.09 ± 1.24	6.46 ± 0.10	4.43 ± 0.05	n = 3	[ROS] Roche Cobas INTEGRA 400
6.65 ± 0.25	11.69 ± 0.83	10.04 ± 0.47	6.19 ± 0.39	4.36 ± 0.25	n = 10	[ROT] Roche Cobas INTEGRA 800
7.16 ± 0.09	12.78 ± 1.26	10.69 ± 0.65	6.76 ± 0.28	4.69 ± 0.16	n = 7	[ROD] Roche MODULAR D/P
7.48 ± 0.59	13.88 ± 1.38	11.19 ± 0.98	6.47 ± 0.47	4.51 ± 0.29	n = 11	[COB] Siemens ADVIA Centaur
7.05 ± 0.25	13.23 ± 0.16	10.64 ± 0.13	6.48 ± 0.08	4.55 ± 0.08	n = 5	[DUE] Siemens Dimension EXL
6.98 ± 0.21	12.61 ± 0.30	10.60 ± 0.32	6.40 ± 0.17	4.43 ± 0.16	n = 4	[DUR] Siemens Dimension RxL
7.10 ± 0.34	12.35 ± 0.60	10.68 ± 0.36	6.52 ± 0.33	4.38 ± 0.20	n = 43	[DUT] Siemens Dimension Vista
<Reagents>						
7.28 ± 0.35	13.20 ± 0.75	10.66 ± 0.60	6.68 ± 0.28	4.50 ± 0.18	n = 17	[AB1] Abbott
7.90 ± 0.15	13.64 ± 0.91	11.24 ± 0.40	7.25 ± 0.27	4.90 ± 0.20	n = 14	[BC1] Beckman Coulter
8.04 ± 0.69	14.63 ± 1.00	12.64 ± 1.00	7.36 ± 0.66	5.05 ± 0.38	n = 9	[OL1] Beckman Coulter AU Series
8.02 ± 0.31	15.00 ± 0.82	12.48 ± 0.61	7.39 ± 0.34	5.03 ± 0.14	n = 19	[JJ1] Ortho Clinical Diagnostics
6.80 ± 0.29	11.67 ± 1.37	9.58 ± 0.54	6.13 ± 0.23	4.22 ± 0.29	n = 9	[R04] Roche cobas c311/c501/c502/c701/c702
7.08 ± 0.43	11.84 ± 0.81	10.42 ± 0.85	6.53 ± 0.34	4.58 ± 0.31	n = 5	[R02] Roche Hitachi and Modular D/P
6.72 ± 0.25	11.79 ± 1.13	10.10 ± 0.50	6.27 ± 0.37	4.38 ± 0.22	n = 13	[R01] Roche Integra and MIRA
7.48 ± 0.59	13.88 ± 1.38	11.19 ± 0.98	6.47 ± 0.47	4.51 ± 0.29	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
7.47 ± 0.32	12.25 ± 1.46	10.45 ± 0.83	6.94 ± 0.39	4.83 ± 0.31	n = 3	[BY5] Siemens ADVIA/Syva Emit 2000
7.08 ± 0.33	12.44 ± 0.62	10.67 ± 0.33	6.51 ± 0.30	4.41 ± 0.20	n = 52	[DA5] Siemens Dimension
7.63 ± 0.17	13.57 ± 0.78	11.57 ± 0.89	7.01 ± 0.34	4.86 ± 0.23	n = 8	[SY4] Syva Emit 2000
6.69 ± 0.27	12.49 ± 0.25	9.67 ± 0.49	6.10 ± 0.23	4.02 ± 0.28	n = 4	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Lithium (mmol/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
0.912 ± 0.050 1.0	1.766 ± 0.092 2.0	1.364 ± 0.073 1.5	1.616 ± 0.084 1.8	0.313 ± 0.052 0.4	n = 201	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
0.916 ± 0.023	1.761 ± 0.063	1.370 ± 0.048	1.606 ± 0.065	0.321 ± 0.027	n = 16	[ABJ] Abbott Architect c System
0.894 ± 0.011	1.715 ± 0.025	1.310 ± 0.018	1.581 ± 0.033	0.300 ± 0.000	n = 23	[OLC] Beckman Coulter AU Chemistry System
0.891 ± 0.017	1.744 ± 0.038	1.352 ± 0.034	1.604 ± 0.006	0.305 ± 0.007	n = 8	[BCG] Beckman Coulter UniCel DxC 600
0.887 ± 0.019	1.714 ± 0.031	1.327 ± 0.046	1.592 ± 0.031	0.292 ± 0.016	n = 10	[BCH] Beckman Coulter UniCel DxC 800
0.954 ± 0.053	1.895 ± 0.074	1.477 ± 0.046	1.782 ± 0.051	0.325 ± 0.066	n = 7	[JJF] Ortho Vitros 5,1FS
0.975 ± 0.051	1.959 ± 0.060	1.462 ± 0.058	1.799 ± 0.065	0.351 ± 0.077	n = 19	[JJG] Ortho Vitros 5600
0.900 ± 0.000	1.745 ± 0.058	1.357 ± 0.063	1.608 ± 0.047	0.303 ± 0.038	n = 22	[ROC] Roche cobas c501
0.907 ± 0.011	1.765 ± 0.098	1.395 ± 0.048	1.578 ± 0.062	0.355 ± 0.040	n = 6	[ROT] Roche Cobas INTEGRA 800
0.933 ± 0.040	1.775 ± 0.023	1.360 ± 0.032	1.615 ± 0.023	0.337 ± 0.018	n = 6	[ROD] Roche MODULAR D/P
0.970 ± 0.056	1.884 ± 0.109	1.436 ± 0.074	1.699 ± 0.081	0.337 ± 0.068	n = 11	[BYE] Siemens ADVIA 1800
0.797 ± 0.051	1.696 ± 0.046	1.273 ± 0.030	1.541 ± 0.036	0.200 ± 0.000	n = 6	[DUE] Siemens Dimension EXL
0.803 ± 0.064	1.684 ± 0.034	1.284 ± 0.034	1.527 ± 0.079	0.225 ± 0.041	n = 5	[DUR] Siemens Dimension RxL
0.908 ± 0.018	1.770 ± 0.039	1.365 ± 0.035	1.611 ± 0.030	0.328 ± 0.034	n = 42	[DUT] Siemens Dimension Vista
0.800 ± 0.000	1.628 ± 0.051	1.200 ± 0.000	1.528 ± 0.051	0.200 ± 0.000	n = 3	[DUX] Siemens Dimension Xpand
<Reagents>						
0.918 ± 0.024	1.767 ± 0.061	1.375 ± 0.044	1.614 ± 0.059	0.323 ± 0.028	n = 15	[AB1] Abbott
0.887 ± 0.021	1.724 ± 0.038	1.336 ± 0.044	1.600 ± 0.019	0.299 ± 0.014	n = 17	[BC1] Beckman Coulter
0.894 ± 0.012	1.712 ± 0.021	1.309 ± 0.017	1.585 ± 0.029	0.300 ± 0.000	n = 18	[OL1] Beckman Coulter AU Series
0.887 ± 0.042	1.696 ± 0.082	1.330 ± 0.073	1.579 ± 0.089	0.308 ± 0.015	n = 3	[IH1] In-House
0.971 ± 0.052	1.946 ± 0.069	1.468 ± 0.055	1.794 ± 0.059	0.341 ± 0.074	n = 27	[JJ1] Ortho Clinical Diagnostics
0.900 ± 0.000	1.746 ± 0.056	1.354 ± 0.061	1.603 ± 0.036	0.302 ± 0.032	n = 25	[R04] Roche cobas c311/c501/c502/c701/c702
0.907 ± 0.011	1.765 ± 0.098	1.395 ± 0.048	1.578 ± 0.062	0.355 ± 0.040	n = 6	[R01] Roche Integra and MIRA
0.967 ± 0.056	1.866 ± 0.103	1.427 ± 0.066	1.697 ± 0.069	0.329 ± 0.063	n = 13	[BY1] Siemens ADVIA/ADVIA Centaur
0.893 ± 0.051	1.752 ± 0.056	1.346 ± 0.057	1.597 ± 0.050	0.306 ± 0.069	n = 56	[DA5] Siemens Dimension
0.900 ± 0.011	1.744 ± 0.055	1.353 ± 0.043	1.604 ± 0.029	0.315 ± 0.022	n = 12	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Phenobarbital (mg/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
33.27 ± 1.75 34.2	55.13 ± 3.41 57.3	49.98 ± 2.90 51.3	13.97 ± 0.97 14.0	26.25 ± 1.58 26.7	n = 191	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
33.00 ± 0.87	55.40 ± 2.45	50.75 ± 2.86	14.00 ± 0.43	26.10 ± 0.53	n = 4	[ABJ] Abbott Architect c System
34.33 ± 1.48	57.58 ± 1.74	52.11 ± 1.99	14.39 ± 0.60	26.95 ± 1.09	n = 15	[ABH] Abbott Architect i System
32.66 ± 1.06	54.89 ± 3.23	49.71 ± 2.07	13.46 ± 0.44	25.30 ± 0.96	n = 25	[OLC] Beckman Coulter AU Chemistry System
31.68 ± 0.44	52.33 ± 1.51	47.28 ± 0.96	14.21 ± 0.19	26.63 ± 0.52	n = 10	[BCG] Beckman Coulter UniCel DxC 600
32.53 ± 1.04	51.85 ± 1.51	48.05 ± 2.24	14.65 ± 0.91	26.97 ± 0.91	n = 9	[BCH] Beckman Coulter UniCel DxC 800
31.06 ± 5.63	52.72 ± 8.63	47.01 ± 6.72	11.76 ± 2.82	23.76 ± 4.45	n = 3	[ROJ] Roche cobas c311
33.12 ± 1.40	55.65 ± 2.28	50.52 ± 2.08	13.57 ± 0.57	25.34 ± 0.83	n = 23	[ROC] Roche cobas c501
32.58 ± 0.72	56.53 ± 1.40	50.13 ± 1.45	13.51 ± 0.35	25.11 ± 0.30	n = 10	[ROT] Roche Cobas INTEGRA 800
34.03 ± 1.50	55.71 ± 1.85	50.94 ± 0.79	13.90 ± 0.61	26.46 ± 1.00	n = 7	[ROD] Roche MODULAR D/P
38.05 ± 3.79	62.34 ± 6.41	56.79 ± 5.67	15.66 ± 1.11	29.98 ± 2.47	n = 11	[COB] Siemens ADVIA Centaur
35.51 ± 1.51	58.37 ± 3.29	52.04 ± 2.51	14.77 ± 0.59	27.92 ± 1.84	n = 8	[DUE] Siemens Dimension EXL
35.70 ± 3.30	58.45 ± 4.40	53.82 ± 4.42	15.87 ± 1.95	28.40 ± 2.00	n = 7	[DUR] Siemens Dimension RxL
33.65 ± 1.70	53.44 ± 2.32	48.65 ± 2.58	14.08 ± 1.23	26.62 ± 1.51	n = 43	[DUT] Siemens Dimension Vista
33.79 ± 1.99	57.37 ± 3.31	50.06 ± 2.30	13.40 ± 1.44	25.59 ± 2.95	n = 3	[DUX] Siemens Dimension Xpand
<Reagents>						
34.01 ± 1.45	57.21 ± 2.15	51.91 ± 2.24	14.31 ± 0.59	26.72 ± 1.01	n = 19	[AB1] Abbott
31.92 ± 0.90	52.12 ± 1.56	47.59 ± 1.63	14.38 ± 0.68	26.72 ± 0.76	n = 20	[BC1] Beckman Coulter
32.76 ± 1.14	55.54 ± 2.64	50.23 ± 2.09	13.52 ± 0.42	25.47 ± 0.65	n = 13	[OL1] Beckman Coulter AU Series
33.16 ± 0.47	55.83 ± 1.61	50.60 ± 1.01	13.53 ± 0.51	26.42 ± 0.86	n = 3	[MG1] Microgenics CEDIA
33.27 ± 1.33	55.65 ± 2.20	50.56 ± 2.15	13.53 ± 0.51	25.46 ± 0.82	n = 27	[R04] Roche cobas c311/c501/c502/c701/c702
32.44 ± 0.79	56.70 ± 1.35	50.32 ± 1.53	13.57 ± 0.33	25.11 ± 0.27	n = 12	[R01] Roche Integra and MIRA
33.58 ± 1.38	55.77 ± 1.92	51.12 ± 0.48	13.93 ± 0.62	26.11 ± 1.18	n = 7	[R06] Roche ONLINE
38.05 ± 3.79	62.34 ± 6.41	56.79 ± 5.67	15.66 ± 1.11	29.98 ± 2.47	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
31.27 ± 1.89	49.44 ± 0.25	47.28 ± 3.29	13.44 ± 1.02	25.16 ± 2.52	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
34.00 ± 1.88	54.57 ± 3.33	49.57 ± 3.10	14.32 ± 1.40	26.93 ± 1.83	n = 61	[DA5] Siemens Dimension
32.30 ± 0.37	52.61 ± 2.60	48.60 ± 1.13	13.40 ± 0.40	24.90 ± 1.00	n = 9	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Phenytoin (mg/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
15.32 ± 1.25 16.0	12.57 ± 0.93 13.0	23.74 ± 2.01 24.0	6.82 ± 0.59 7.0	12.78 ± 0.92 13.0	n = 257	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
15.52 ± 0.30	12.85 ± 0.32	24.35 ± 0.51	7.12 ± 0.11	13.11 ± 0.16	n = 5	[ABJ] Abbott Architect c System
15.24 ± 0.48	12.55 ± 0.43	23.08 ± 0.68	6.88 ± 0.20	12.89 ± 0.47	n = 17	[ABH] Abbott Architect i System
14.65 ± 1.05	12.06 ± 0.81	22.47 ± 1.85	6.58 ± 0.46	12.27 ± 0.73	n = 37	[OLC] Beckman Coulter AU Chemistry System
14.69 ± 0.33	12.21 ± 0.15	21.99 ± 0.81	6.85 ± 0.12	12.32 ± 0.27	n = 11	[BCG] Beckman Coulter UniCel DxC 600
14.74 ± 0.36	12.20 ± 0.41	22.17 ± 0.39	6.77 ± 0.27	12.46 ± 0.29	n = 10	[BCH] Beckman Coulter UniCel DxC 800
14.49 ± 0.25	11.94 ± 0.43	22.32 ± 0.76	6.36 ± 0.30	12.37 ± 0.50	n = 7	[JJF] Ortho Vitros 5,1FS
14.46 ± 0.72	11.80 ± 0.43	22.13 ± 1.13	6.28 ± 0.31	12.13 ± 0.46	n = 19	[JJG] Ortho Vitros 5600
15.02 ± 0.32	12.44 ± 0.10	24.13 ± 1.61	6.88 ± 0.24	12.67 ± 0.23	n = 3	[ROJ] Roche cobas c311
14.96 ± 0.90	12.30 ± 0.75	23.18 ± 1.47	6.69 ± 0.33	12.44 ± 0.62	n = 24	[ROC] Roche cobas c501
15.15 ± 1.17	12.57 ± 0.77	23.97 ± 0.59	6.77 ± 0.05	12.00 ± 0.72	n = 3	[ROG] Roche cobas c502
15.10 ± 0.43	12.08 ± 0.23	24.37 ± 0.87	6.46 ± 0.23	12.29 ± 0.34	n = 11	[ROT] Roche Cobas INTEGRA 800
15.43 ± 0.66	12.88 ± 0.65	23.93 ± 1.24	7.15 ± 0.46	13.09 ± 0.64	n = 8	[ROD] Roche MODULAR D/P
14.21 ± 1.21	12.11 ± 1.34	21.85 ± 2.06	6.43 ± 0.85	12.23 ± 0.82	n = 8	[BYE] Siemens ADVIA 1800
15.88 ± 1.15	13.30 ± 1.12	25.84 ± 2.45	7.09 ± 0.68	13.84 ± 1.06	n = 12	[COB] Siemens ADVIA Centaur
16.07 ± 1.11	13.33 ± 0.79	25.20 ± 1.20	6.95 ± 0.66	13.30 ± 0.87	n = 17	[DUE] Siemens Dimension EXL
16.90 ± 1.13	13.63 ± 1.27	26.79 ± 1.62	7.60 ± 1.05	13.85 ± 1.26	n = 7	[DUR] Siemens Dimension RxL
16.92 ± 0.95	13.55 ± 0.56	25.48 ± 0.85	7.57 ± 0.63	13.86 ± 0.65	n = 44	[DUT] Siemens Dimension Vista
14.96 ± 0.66	12.26 ± 0.32	24.19 ± 1.22	6.42 ± 0.59	12.51 ± 0.52	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
15.32 ± 0.45	12.63 ± 0.43	23.36 ± 0.86	6.94 ± 0.21	12.96 ± 0.43	n = 22	[AB1] Abbott
14.73 ± 0.34	12.18 ± 0.30	22.09 ± 0.58	6.82 ± 0.21	12.41 ± 0.32	n = 22	[BC1] Beckman Coulter
14.81 ± 1.03	12.24 ± 0.78	22.49 ± 1.83	6.67 ± 0.32	12.39 ± 0.70	n = 20	[OL1] Beckman Coulter AU Series
14.97 ± 1.03	12.54 ± 0.61	23.08 ± 1.56	5.89 ± 0.72	12.44 ± 0.43	n = 4	[MG1] Microgenics CEDIA
14.48 ± 0.60	11.84 ± 0.42	22.20 ± 1.00	6.30 ± 0.30	12.19 ± 0.47	n = 27	[JJ1] Ortho Clinical Diagnostics
14.99 ± 0.88	12.34 ± 0.70	23.38 ± 1.45	6.72 ± 0.31	12.48 ± 0.62	n = 30	[R04] Roche cobas c311/c501/c502/c701/c702
14.95 ± 0.53	12.09 ± 0.27	24.05 ± 1.16	6.46 ± 0.23	12.22 ± 0.35	n = 13	[R01] Roche Integra and MIRA
15.41 ± 0.79	12.86 ± 0.75	24.06 ± 1.29	7.19 ± 0.50	13.13 ± 0.84	n = 7	[R06] Roche ONLINE
16.23 ± 1.53	13.36 ± 1.06	25.92 ± 2.18	7.19 ± 0.67	13.97 ± 1.07	n = 14	[BY1] Siemens ADVIA/ADVIA Centaur
14.16 ± 1.23	12.18 ± 1.22	22.41 ± 2.04	6.66 ± 0.57	12.37 ± 0.74	n = 8	[BY5] Siemens ADVIA/Syva Emit 2000
16.61 ± 1.14	13.42 ± 0.76	25.43 ± 1.13	7.36 ± 0.77	13.67 ± 0.87	n = 73	[DA5] Siemens Dimension
14.27 ± 0.70	11.42 ± 0.65	22.04 ± 1.18	6.51 ± 0.27	11.83 ± 0.59	n = 10	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Free Phenytoin (mg/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
-----	-----	-----	-----	-----	-----	-----
2.10 ± 0.28	2.07 ± 0.27	3.53 ± 0.44	1.02 ± 0.15	1.86 ± 0.25	n = 20	[---] All Methods & Instruments
1.93 ± 0.27	1.95 ± 0.32	3.20 ± 0.56	0.95 ± 0.25	1.77 ± 0.31	n = 8	<Instruments>
2.35 ± 0.11	2.26 ± 0.11	3.84 ± 0.17	1.09 ± 0.07	1.98 ± 0.12	n = 5	[OLC] Beckman Coulter AU Chemistry System
						[ROT] Roche Cobas INTEGRA 800
1.70 ± 0.09	1.63 ± 0.05	2.67 ± 0.14	0.83 ± 0.05	1.50 ± 0.00	n = 3	<Reagents>
2.30 ± 0.12	2.20 ± 0.12	3.76 ± 0.18	1.06 ± 0.07	1.93 ± 0.13	n = 7	[OL1] Beckman Coulter AU Series
2.03 ± 0.28	2.04 ± 0.31	3.32 ± 0.04	0.88 ± 0.53	2.01 ± 0.31	n = 5	[R01] Roche Integra and MIRA
						[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Primidone (mg/L)

Specimen: T16 -----	Specimen: T17 -----	Specimen: T18 -----	Specimen: T19 -----	Specimen: T20 -----	Number -----	[Code] Instrument or Reagent System -----
9.77 ± 0.56 10.0	12.50 ± 0.78 12.8	14.64 ± 1.09 15.1	5.08 ± 0.38 5.1	5.04 ± 0.33 4.9	n = 13	[---] All Methods & Instruments [---] Weigh-in value
9.58 ± 0.60 9.87 ± 0.05	12.23 ± 0.91 12.40 ± 0.18	14.38 ± 1.25 14.67 ± 0.69	5.05 ± 0.48 5.09 ± 0.20	4.99 ± 0.44 4.97 ± 0.05	n = 7 n = 3	<Instruments> [OLC] Beckman Coulter AU Chemistry System [ROT] Roche Cobas INTEGRA 800
9.87 ± 0.05 9.63 ± 0.57	12.40 ± 0.18 12.29 ± 0.85	14.67 ± 0.69 14.39 ± 1.18	5.09 ± 0.20 5.10 ± 0.48	4.97 ± 0.05 5.04 ± 0.41	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: T16 -----	Specimen: T17 -----	Specimen: T18 -----	Specimen: T19 -----	Specimen: T20 -----	Number -----	[Code] Instrument or Reagent System -----
5.73 ± 0.18 5.8	3.48 ± 0.16 3.4	8.33 ± 0.32 8.6	15.11 ± 0.68 16.2	11.81 ± 1.12 12.3	n = 10	[---] All Methods & Instruments [---] Weigh-in value
5.85 ± 0.12	3.47 ± 0.16	9.46 ± 2.61	14.37 ± 3.32	12.13 ± 1.35	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
5.77 ± 0.14	3.47 ± 0.05	8.33 ± 0.32	15.08 ± 0.68	11.50 ± 1.28	n = 3	<Reagents> [SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

N-Acetyl-Procaïnamide (mg/L)

Specimen: T16 -----	Specimen: T17 -----	Specimen: T18 -----	Specimen: T19 -----	Specimen: T20 -----	Number -----	[Code] Instrument or Reagent System -----
11.39 ± 0.42 11.3	7.18 ± 0.36 7.1	17.26 ± 1.42 17.0	4.47 ± 0.17 4.4	14.30 ± 0.57 14.5	n = 10	[---] All Methods & Instruments [---] Weigh-in value
11.61 ± 0.40	6.94 ± 0.48	18.02 ± 1.49	4.45 ± 0.12	14.57 ± 0.39	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
11.13 ± 0.60	6.75 ± 0.54	16.71 ± 1.38	4.30 ± 0.09	14.55 ± 0.45	n = 3	<Reagents> [SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Quinidine (mg/L)

Specimen: T16 -----	Specimen: T17 -----	Specimen: T18 -----	Specimen: T19 -----	Specimen: T20 -----	Number -----	[Code] Instrument or Reagent System -----
4.20 ± 0.25 4.4	5.01 ± 0.29 5.4	6.21 ± 0.29 6.6	1.69 ± 0.10 1.9	3.77 ± 0.32 3.9	n = 9	[---] All Methods & Instruments [---] Weigh-in value
3.98 ± 0.15	4.96 ± 0.26	4.88 ± 2.41	2.90 ± 2.20	3.57 ± 0.32	n = 3	<Instruments> [OLC] Beckman Coulter AU Chemistry System

Summary of Participant Performance (Mean and Standard Deviation)

Salicylate (mg/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
24.11 ± 0.75 24.0	53.39 ± 1.67 52.2	36.34 ± 0.93 35.5	75.50 ± 2.88 74.0	54.03 ± 1.61 52.6	n = 209	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
23.49 ± 0.57	53.99 ± 1.05	36.26 ± 0.77	76.96 ± 1.42	54.35 ± 1.09	n = 19	[ABJ] Abbott Architect c System
24.22 ± 0.93	54.14 ± 2.89	36.71 ± 1.60	76.36 ± 4.32	54.88 ± 2.24	n = 20	[OLC] Beckman Coulter AU Chemistry System
23.94 ± 0.40	55.05 ± 0.87	36.58 ± 0.90	78.95 ± 1.37	55.03 ± 0.83	n = 10	[BCG] Beckman Coulter UniCel DxC 600
24.11 ± 0.68	54.24 ± 1.86	36.61 ± 0.97	78.51 ± 1.89	55.37 ± 1.20	n = 8	[BCH] Beckman Coulter UniCel DxC 800
24.94 ± 0.48	52.76 ± 1.03	36.43 ± 0.87	74.07 ± 2.48	53.92 ± 1.26	n = 7	[JJF] Ortho Vitros 5,1FS
24.81 ± 0.69	53.95 ± 2.04	36.11 ± 1.34	74.52 ± 3.46	54.90 ± 1.80	n = 18	[JJG] Ortho Vitros 5600
23.17 ± 0.34	49.90 ± 1.00	34.74 ± 0.47	68.20 ± 1.62	50.63 ± 0.86	n = 3	[ROJ] Roche cobas c311
23.69 ± 0.48	54.39 ± 1.17	36.61 ± 0.54	75.01 ± 3.63	54.73 ± 1.29	n = 23	[ROC] Roche cobas c501
22.89 ± 0.65	51.01 ± 1.44	34.75 ± 0.87	72.91 ± 1.77	51.16 ± 0.95	n = 6	[ROT] Roche Cobas INTEGRA 800
23.32 ± 0.42	51.70 ± 1.12	35.35 ± 0.77	73.30 ± 1.64	52.12 ± 1.28	n = 6	[ROD] Roche MODULAR D/P
23.91 ± 1.09	54.69 ± 0.95	36.65 ± 1.12	78.61 ± 1.99	55.25 ± 1.20	n = 8	[BYE] Siemens ADVIA 1800
24.48 ± 0.21	52.96 ± 0.38	36.48 ± 0.31	75.01 ± 0.54	53.49 ± 0.38	n = 16	[DUE] Siemens Dimension EXL
24.38 ± 0.26	52.82 ± 0.39	36.31 ± 0.45	74.95 ± 0.90	53.42 ± 0.61	n = 7	[DUR] Siemens Dimension RxL
24.26 ± 0.37	52.72 ± 0.62	36.34 ± 0.57	74.54 ± 1.12	53.21 ± 0.73	n = 42	[DUT] Siemens Dimension Vista
24.73 ± 0.41	52.88 ± 0.81	36.69 ± 0.52	75.14 ± 0.92	53.89 ± 0.72	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
23.49 ± 0.57	53.99 ± 1.05	36.26 ± 0.77	76.96 ± 1.42	54.35 ± 1.09	n = 19	[AB1] Abbott
24.03 ± 0.55	54.70 ± 1.42	36.59 ± 0.92	78.75 ± 1.63	55.20 ± 1.02	n = 18	[BC1] Beckman Coulter
24.24 ± 1.08	54.00 ± 2.72	36.26 ± 1.51	76.81 ± 4.44	54.89 ± 2.25	n = 15	[OL1] Beckman Coulter AU Series
24.81 ± 0.61	53.36 ± 1.65	36.14 ± 1.13	74.19 ± 3.01	54.51 ± 1.65	n = 28	[JJ1] Ortho Clinical Diagnostics
23.65 ± 0.51	54.20 ± 1.59	36.51 ± 0.86	74.36 ± 4.38	54.52 ± 1.90	n = 27	[R04] Roche cobas c311/c501/c502/c701/c702
23.32 ± 0.42	51.70 ± 1.12	35.35 ± 0.77	73.30 ± 1.64	52.12 ± 1.28	n = 6	[R02] Roche Hitachi and Modular D/P
22.80 ± 0.64	50.70 ± 1.51	34.65 ± 0.84	73.25 ± 2.63	51.12 ± 0.86	n = 7	[R01] Roche Integra and MIRA
24.10 ± 1.11	54.92 ± 1.64	36.95 ± 1.30	78.84 ± 2.19	55.58 ± 1.46	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
24.35 ± 0.36	52.82 ± 0.55	36.39 ± 0.50	74.75 ± 0.97	53.35 ± 0.67	n = 70	[DA5] Siemens Dimension
24.27 ± 0.66	55.43 ± 3.21	37.84 ± 1.20	75.08 ± 4.26	55.40 ± 2.20	n = 4	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Theophylline (mg/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
19.44 ± 1.43 19.8	8.31 ± 0.46 8.7	29.37 ± 2.74 29.6	24.48 ± 1.74 25.4	9.95 ± 0.57 10.3	n = 186	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
21.06 ± 1.54	9.32 ± 0.41	32.22 ± 2.79	27.38 ± 2.69	11.16 ± 0.90	n = 3	[ABJ] Abbott Architect c System
19.57 ± 0.79	8.46 ± 0.30	29.12 ± 0.99	25.34 ± 1.55	10.26 ± 0.33	n = 9	[ABH] Abbott Architect i System
19.19 ± 1.17	8.27 ± 0.43	28.01 ± 3.27	23.37 ± 2.18	9.58 ± 0.50	n = 23	[OLC] Beckman Coulter AU Chemistry System
17.69 ± 0.54	7.76 ± 0.22	26.96 ± 0.51	22.96 ± 0.51	9.29 ± 0.26	n = 9	[BCG] Beckman Coulter UniCel DxC 600
17.69 ± 0.46	7.75 ± 0.28	27.18 ± 0.80	22.93 ± 0.53	9.46 ± 0.06	n = 8	[BCH] Beckman Coulter UniCel DxC 800
23.69 ± 0.54	11.71 ± 0.61	36.50 ± 0.54	34.16 ± 0.59	13.73 ± 0.54	n = 6	[JJF] Ortho Vitros 5,1FS
23.09 ± 1.14	11.44 ± 0.60	36.23 ± 1.21	33.56 ± 1.37	13.47 ± 0.78	n = 16	[JJG] Ortho Vitros 5600
19.33 ± 0.57	8.25 ± 0.23	29.57 ± 0.72	24.88 ± 0.60	10.01 ± 0.28	n = 19	[ROC] Roche cobas c501
19.28 ± 0.36	8.52 ± 0.20	29.29 ± 1.21	25.03 ± 0.63	10.21 ± 0.11	n = 6	[ROT] Roche Cobas INTEGRA 800
19.31 ± 1.06	8.09 ± 0.51	29.49 ± 1.68	23.88 ± 1.49	9.67 ± 0.72	n = 8	[ROD] Roche MODULAR D/P
19.47 ± 0.96	7.66 ± 0.39	28.40 ± 1.44	23.44 ± 1.21	9.56 ± 0.44	n = 10	[COB] Siemens ADVIA Centaur
19.62 ± 0.54	8.52 ± 0.35	30.40 ± 1.45	25.27 ± 0.21	10.15 ± 0.32	n = 7	[DUE] Siemens Dimension EXL
20.02 ± 0.78	8.61 ± 0.26	31.31 ± 1.48	26.27 ± 1.32	10.49 ± 0.41	n = 5	[DUR] Siemens Dimension RxL
19.37 ± 0.80	8.39 ± 0.29	28.91 ± 1.15	24.65 ± 0.97	10.15 ± 0.34	n = 43	[DUT] Siemens Dimension Vista
17.76 ± 0.26	8.12 ± 0.84	25.80 ± 0.36	21.61 ± 0.29	8.95 ± 0.54	n = 3	[DPD] Siemens Immulite 2000
<Reagents>						
19.79 ± 1.34	8.62 ± 0.46	29.37 ± 1.73	25.75 ± 2.09	10.34 ± 0.57	n = 12	[AB1] Abbott
17.70 ± 0.49	7.76 ± 0.25	27.03 ± 0.64	22.94 ± 0.52	9.37 ± 0.20	n = 17	[BC1] Beckman Coulter
19.37 ± 1.46	8.30 ± 0.45	28.53 ± 3.79	23.34 ± 2.56	9.59 ± 0.60	n = 14	[OL1] Beckman Coulter AU Series
23.32 ± 0.99	11.51 ± 0.61	36.40 ± 0.92	33.78 ± 1.18	13.55 ± 0.71	n = 22	[JJ1] Ortho Clinical Diagnostics
19.31 ± 0.58	8.23 ± 0.22	29.50 ± 0.81	24.98 ± 0.60	10.01 ± 0.30	n = 20	[R04] Roche cobas c311/c501/c502/c701/c702
19.27 ± 0.05	8.23 ± 0.05	30.23 ± 0.41	24.28 ± 0.15	10.00 ± 0.18	n = 3	[R02] Roche Hitachi and Modular D/P
19.45 ± 0.51	8.60 ± 0.22	29.49 ± 1.00	25.22 ± 0.64	10.19 ± 0.10	n = 8	[R01] Roche Integra and MIRA
19.24 ± 1.30	8.00 ± 0.62	28.82 ± 1.85	23.64 ± 1.71	9.48 ± 0.78	n = 6	[R06] Roche ONLINE
19.47 ± 0.96	7.66 ± 0.39	28.40 ± 1.44	23.44 ± 1.21	9.56 ± 0.44	n = 10	[BY1] Siemens ADVIA/ADVIA Centaur
18.39 ± 4.27	11.14 ± 6.68	29.29 ± 5.72	27.13 ± 1.68	10.12 ± 0.97	n = 4	[BY5] Siemens ADVIA/Syva Emit 2000
19.44 ± 0.78	8.43 ± 0.31	29.24 ± 1.33	24.87 ± 1.03	10.17 ± 0.37	n = 57	[DA5] Siemens Dimension
17.76 ± 0.26	8.12 ± 0.84	25.80 ± 0.36	21.61 ± 0.29	8.95 ± 0.54	n = 3	[DP5] Siemens Immulite
18.94 ± 0.38	8.21 ± 0.40	26.79 ± 0.87	23.17 ± 0.92	9.54 ± 0.17	n = 9	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Tobramycin (mg/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
6.45 ± 0.53 6.8	12.96 ± 1.55 13.1	9.38 ± 0.53 10.2	3.97 ± 0.25 4.4	9.98 ± 0.58 10.4	n = 72	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
6.32 ± 0.15	13.78 ± 0.26	9.37 ± 0.23	4.03 ± 0.07	9.94 ± 0.09	n = 8	[ABJ] Abbott Architect c System
6.50 ± 0.23	13.09 ± 0.80	9.37 ± 0.38	4.00 ± 0.20	9.94 ± 0.50	n = 11	[OLC] Beckman Coulter AU Chemistry System
8.06 ± 0.23	16.19 ± 0.52	11.61 ± 0.41	5.36 ± 0.18	12.42 ± 0.45	n = 4	[BCH] Beckman Coulter UniCel DxC 800
6.43 ± 0.16	13.66 ± 0.90	9.51 ± 0.19	3.89 ± 0.11	10.18 ± 0.81	n = 4	[JJG] Ortho Vitros 5600
6.87 ± 0.14	12.33 ± 1.83	9.92 ± 0.08	4.19 ± 0.19	10.38 ± 0.38	n = 6	[ROC] Roche cobas c501
6.38 ± 0.17	12.88 ± 1.18	9.50 ± 0.49	3.90 ± 0.15	10.17 ± 0.35	n = 5	[ROT] Roche Cobas INTEGRA 800
6.88 ± 0.48	12.62 ± 0.97	9.60 ± 0.31	4.25 ± 0.27	10.06 ± 0.48	n = 4	[ROD] Roche MODULAR D/P
7.17 ± 0.56	14.03 ± 1.23	10.80 ± 0.95	4.62 ± 0.36	11.69 ± 1.24	n = 5	[COB] Siemens ADVIA Centaur
5.99 ± 0.29	12.35 ± 0.27	9.10 ± 0.09	3.86 ± 0.10	9.98 ± 0.32	n = 3	[DUE] Siemens Dimension EXL
6.00 ± 0.29	11.72 ± 0.44	8.85 ± 0.22	3.77 ± 0.16	9.53 ± 0.38	n = 16	[DUT] Siemens Dimension Vista
<Reagents>						
6.32 ± 0.15	13.78 ± 0.26	9.37 ± 0.23	4.03 ± 0.07	9.94 ± 0.09	n = 8	[AB1] Abbott
8.04 ± 0.23	16.19 ± 0.44	11.68 ± 0.39	5.32 ± 0.19	12.57 ± 0.58	n = 6	[BC1] Beckman Coulter
6.57 ± 0.15	12.68 ± 1.64	9.41 ± 0.38	4.10 ± 0.18	10.27 ± 0.49	n = 4	[OL1] Beckman Coulter AU Series
6.41 ± 0.15	14.00 ± 1.03	9.46 ± 0.19	3.90 ± 0.09	9.81 ± 0.22	n = 5	[JJ1] Ortho Clinical Diagnostics
6.99 ± 0.36	12.22 ± 2.04	9.93 ± 0.09	4.22 ± 0.21	10.26 ± 0.33	n = 5	[R04] Roche cobas c311/c501/c502/c701/c702
6.32 ± 0.13	13.27 ± 0.54	9.53 ± 0.42	3.94 ± 0.17	10.22 ± 0.43	n = 7	[R01] Roche Integra and MIRA
6.85 ± 0.42	12.60 ± 0.84	9.67 ± 0.30	4.21 ± 0.24	10.25 ± 0.57	n = 5	[R06] Roche ONLINE
7.17 ± 0.56	14.03 ± 1.23	10.80 ± 0.95	4.62 ± 0.36	11.69 ± 1.24	n = 5	[BY1] Siemens ADVIA/ADVIA Centaur
6.00 ± 0.28	11.86 ± 0.54	8.93 ± 0.26	3.80 ± 0.16	9.64 ± 0.42	n = 20	[DA5] Siemens Dimension
6.46 ± 0.27	13.05 ± 0.64	9.34 ± 0.38	3.94 ± 0.19	9.76 ± 0.43	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Valproic Acid (mg/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
59.30 ± 3.83 57.8	41.00 ± 2.86 40.4	88.19 ± 5.13 86.6	72.79 ± 4.26 72.0	128.19 ± 7.31 127.9	n = 248	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
56.18 ± 0.37	39.39 ± 2.06	84.85 ± 3.94	70.07 ± 2.07	121.94 ± 5.15	n = 5	[ABJ] Abbott Architect c System
56.91 ± 3.37	39.76 ± 1.80	87.54 ± 4.05	72.24 ± 3.56	130.01 ± 6.56	n = 17	[ABH] Abbott Architect i System
61.09 ± 2.62	42.17 ± 1.94	91.36 ± 3.92	74.31 ± 2.98	133.32 ± 5.74	n = 36	[OLC] Beckman Coulter AU Chemistry System
50.79 ± 2.69	32.99 ± 2.97	77.07 ± 2.96	62.28 ± 3.27	114.73 ± 4.64	n = 10	[BCG] Beckman Coulter UniCel DxC 600
52.87 ± 1.11	36.13 ± 1.71	78.51 ± 1.91	64.85 ± 1.93	114.42 ± 6.44	n = 9	[BCH] Beckman Coulter UniCel DxC 800
61.23 ± 5.13	39.89 ± 2.53	90.71 ± 6.28	75.67 ± 5.26	130.70 ± 7.25	n = 6	[JJF] Ortho Vitros 5,1FS
62.13 ± 3.44	43.38 ± 2.74	92.68 ± 4.40	75.96 ± 3.95	134.32 ± 6.13	n = 18	[JJG] Ortho Vitros 5600
58.37 ± 2.64	39.81 ± 2.09	88.71 ± 4.53	72.07 ± 3.69	130.72 ± 5.00	n = 24	[ROC] Roche cobas c501
55.66 ± 1.08	38.01 ± 1.11	86.05 ± 3.24	70.02 ± 1.12	128.75 ± 4.24	n = 8	[ROT] Roche Cobas INTEGRA 800
57.94 ± 1.92	39.28 ± 2.03	88.78 ± 5.51	70.97 ± 2.47	128.68 ± 7.90	n = 10	[ROD] Roche MODULAR D/P
60.26 ± 2.68	41.77 ± 2.70	90.12 ± 2.51	74.04 ± 2.72	128.93 ± 7.70	n = 8	[BYE] Siemens ADVIA 1800
58.71 ± 2.41	40.57 ± 2.43	85.75 ± 3.07	72.26 ± 3.84	124.88 ± 4.44	n = 17	[COB] Siemens ADVIA Centaur
59.98 ± 1.78	42.35 ± 1.08	87.48 ± 1.72	72.65 ± 2.03	124.80 ± 3.37	n = 12	[DUE] Siemens Dimension EXL
59.21 ± 1.30	40.88 ± 1.05	85.40 ± 4.21	72.14 ± 2.71	122.88 ± 4.73	n = 9	[DUR] Siemens Dimension RxL
61.89 ± 2.24	42.75 ± 1.91	89.18 ± 3.37	74.38 ± 2.77	127.61 ± 4.35	n = 44	[DUT] Siemens Dimension Vista
58.17 ± 1.31	40.51 ± 1.02	85.17 ± 1.34	70.35 ± 1.42	123.07 ± 4.01	n = 4	[DUX] Siemens Dimension Xpand
<Reagents>						
56.47 ± 3.00	39.70 ± 1.84	86.91 ± 4.14	71.59 ± 3.37	128.09 ± 7.07	n = 22	[AB1] Abbott
52.15 ± 2.56	34.85 ± 3.25	77.92 ± 2.50	63.82 ± 3.27	114.91 ± 6.07	n = 20	[BC1] Beckman Coulter
61.28 ± 2.53	42.05 ± 2.01	91.14 ± 3.94	73.61 ± 2.49	131.46 ± 5.29	n = 21	[OL1] Beckman Coulter AU Series
62.13 ± 3.88	42.77 ± 3.12	92.55 ± 4.79	76.27 ± 4.43	133.97 ± 6.87	n = 25	[JJ1] Ortho Clinical Diagnostics
58.76 ± 2.71	39.77 ± 2.03	88.80 ± 4.44	72.31 ± 3.90	130.92 ± 5.35	n = 26	[R04] Roche cobas c311/c501/c502/c701/c702
58.81 ± 2.00	40.14 ± 1.81	87.50 ± 4.17	72.33 ± 3.66	132.65 ± 3.37	n = 3	[R02] Roche Hitachi and Modular D/P
55.69 ± 0.94	38.08 ± 0.98	86.34 ± 2.70	70.23 ± 1.47	128.02 ± 3.93	n = 10	[R01] Roche Integra and MIRA
56.89 ± 1.66	38.59 ± 1.12	88.18 ± 5.04	70.83 ± 1.43	125.40 ± 5.95	n = 7	[R06] Roche ONLINE
58.27 ± 2.69	40.46 ± 2.37	85.74 ± 3.01	72.03 ± 3.88	124.36 ± 4.53	n = 19	[BY1] Siemens ADVIA/ADVIA Centaur
60.41 ± 1.81	42.31 ± 2.29	90.24 ± 3.04	74.39 ± 3.07	132.58 ± 7.06	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
60.90 ± 2.42	42.24 ± 1.78	88.13 ± 3.44	73.49 ± 2.86	126.20 ± 4.63	n = 69	[DA5] Siemens Dimension
61.34 ± 2.77	42.26 ± 2.02	91.09 ± 3.92	74.68 ± 4.29	134.64 ± 6.82	n = 13	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Vancomycin (mg/L)

Specimen: T16	Specimen: T17	Specimen: T18	Specimen: T19	Specimen: T20	Number	[Code] Instrument or Reagent System
22.30 ± 2.69 23.2	6.49 ± 0.78 7.1	33.38 ± 4.17 34.8	38.54 ± 4.95 40.4	17.30 ± 2.00 18.2	n = 220	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
22.70 ± 0.34	6.34 ± 0.20	34.81 ± 0.41	39.30 ± 1.07	17.61 ± 0.37	n = 5	[ABJ] Abbott Architect c System
24.31 ± 1.06	7.14 ± 0.33	36.54 ± 1.65	42.14 ± 1.13	19.00 ± 0.63	n = 15	[ABH] Abbott Architect i System
19.81 ± 0.61	6.17 ± 0.46	29.74 ± 1.44	34.25 ± 1.17	15.41 ± 0.61	n = 25	[OLC] Beckman Coulter AU Chemistry System
25.11 ± 1.77	6.56 ± 0.69	38.02 ± 1.76	45.10 ± 3.87	18.34 ± 1.12	n = 8	[BCG] Beckman Coulter UniCel DxC 600
24.84 ± 0.33	7.06 ± 0.55	37.46 ± 1.55	45.07 ± 1.34	18.56 ± 0.71	n = 10	[BCH] Beckman Coulter UniCel DxC 800
19.76 ± 0.46	5.80 ± 0.43	30.03 ± 0.93	35.02 ± 1.60	15.25 ± 0.47	n = 6	[JJF] Ortho Vitros 5,1FS
20.43 ± 0.93	5.99 ± 0.64	30.45 ± 1.31	35.24 ± 1.63	15.86 ± 0.81	n = 16	[JJG] Ortho Vitros 5600
24.68 ± 1.01	7.07 ± 0.43	37.66 ± 1.77	43.85 ± 1.79	19.28 ± 0.74	n = 22	[ROC] Roche cobas c501
27.07 ± 1.49	7.47 ± 0.54	39.88 ± 1.96	46.11 ± 2.30	20.49 ± 0.91	n = 8	[ROT] Roche Cobas INTEGRA 800
25.81 ± 1.24	7.53 ± 0.65	38.02 ± 1.72	44.05 ± 2.24	20.05 ± 0.97	n = 7	[ROD] Roche MODULAR D/P
20.65 ± 1.39	6.10 ± 0.60	29.47 ± 1.36	34.77 ± 1.69	16.32 ± 1.20	n = 6	[BYE] Siemens ADVIA 1800
17.82 ± 1.11	4.95 ± 0.20	27.33 ± 0.76	32.28 ± 1.46	13.61 ± 0.62	n = 16	[COB] Siemens ADVIA Centaur
22.58 ± 0.74	6.52 ± 0.37	34.03 ± 1.28	38.85 ± 1.81	17.51 ± 0.76	n = 14	[DUE] Siemens Dimension EXL
22.07 ± 0.90	6.67 ± 0.35	33.28 ± 0.76	37.87 ± 0.81	17.31 ± 0.41	n = 5	[DUR] Siemens Dimension RxL
22.13 ± 0.92	6.40 ± 0.39	32.44 ± 1.44	37.25 ± 1.95	17.21 ± 0.75	n = 44	[DUT] Siemens Dimension Vista
21.96 ± 0.39	6.47 ± 0.08	33.30 ± 0.39	38.26 ± 0.57	16.94 ± 0.19	n = 4	[DUX] Siemens Dimension Xpand
<Reagents>						
23.86 ± 1.23	6.96 ± 0.48	35.98 ± 1.69	41.40 ± 1.94	18.63 ± 0.90	n = 20	[AB1] Abbott
24.92 ± 1.37	6.87 ± 0.66	37.58 ± 1.98	45.13 ± 3.01	18.41 ± 0.95	n = 19	[BC1] Beckman Coulter
19.71 ± 0.59	6.12 ± 0.41	29.27 ± 1.16	34.45 ± 1.04	15.42 ± 0.50	n = 14	[OL1] Beckman Coulter AU Series
20.15 ± 0.83	5.88 ± 0.58	30.24 ± 1.17	35.18 ± 1.56	15.62 ± 0.71	n = 23	[JJ1] Ortho Clinical Diagnostics
24.68 ± 0.99	7.06 ± 0.44	37.72 ± 1.71	43.77 ± 1.89	19.28 ± 0.80	n = 24	[R04] Roche cobas c311/c501/c502/c701/c702
26.31 ± 0.56	7.77 ± 0.32	38.47 ± 1.48	43.62 ± 2.65	20.05 ± 0.99	n = 3	[R02] Roche Hitachi and Modular D/P
27.10 ± 1.32	7.63 ± 0.59	40.25 ± 1.83	46.68 ± 2.29	20.63 ± 0.80	n = 10	[R01] Roche Integra and MIRA
24.85 ± 1.12	7.26 ± 0.68	36.81 ± 0.34	43.73 ± 1.97	19.86 ± 0.92	n = 5	[R06] Roche ONLINE
17.78 ± 1.11	4.93 ± 0.30	27.33 ± 0.74	32.25 ± 1.67	13.61 ± 0.72	n = 19	[BY1] Siemens ADVIA/ADVIA Centaur
20.77 ± 1.21	6.13 ± 0.58	29.97 ± 1.21	34.13 ± 2.39	16.65 ± 0.97	n = 6	[BY5] Siemens ADVIA/Syva Emit 2000
22.22 ± 0.87	6.45 ± 0.38	32.92 ± 1.50	37.72 ± 1.88	17.25 ± 0.71	n = 67	[DA5] Siemens Dimension
20.04 ± 0.53	6.17 ± 0.47	30.29 ± 1.21	33.99 ± 1.50	15.31 ± 0.60	n = 10	[SY4] Syva Emit 2000