

Summary of Participant Performance (Mean and Standard Deviation)

Acetaminophen (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
56.65 ± 2.65 51.9	165.18 ± 10.82 159.9	76.70 ± 3.84 75.0	31.81 ± 1.92 29.6	29.78 ± 2.41 26.9	n = 216	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
48.11 ± 1.23	149.36 ± 1.61	68.00 ± 0.55	26.50 ± 1.40	24.50 ± 1.02	n = 6	[ABJ] Abbott Architect c System
52.45 ± 3.44	165.25 ± 11.14	75.28 ± 4.23	29.72 ± 2.07	27.40 ± 1.50	n = 10	[ABB] Abbott AxSym
51.30 ± 3.07	158.15 ± 8.27	73.21 ± 1.64	28.72 ± 1.08	26.78 ± 1.46	n = 12	[OLC] Beckman Coulter AU Chemistry System
57.91 ± 3.01	170.08 ± 7.79	81.43 ± 3.05	34.52 ± 1.17	30.50 ± 2.36	n = 8	[BCX] Beckman Coulter LX-20
56.68 ± 1.99	168.42 ± 5.66	79.57 ± 4.10	32.97 ± 1.29	29.66 ± 1.82	n = 11	[BCG] Beckman Coulter UniCel Dx C 600
55.36 ± 3.07	167.68 ± 6.34	78.54 ± 4.30	32.26 ± 2.07	29.23 ± 2.82	n = 17	[BCH] Beckman Coulter UniCel Dx C 800
59.53 ± 1.86	175.84 ± 1.54	79.28 ± 0.51	31.28 ± 0.51	29.72 ± 0.51	n = 3	[JJE] Ortho Vitros 250/350/950
58.27 ± 1.00	175.17 ± 2.06	79.22 ± 1.15	31.08 ± 0.59	29.00 ± 0.00	n = 20	[JJF] Ortho Vitros 5,1FS
57.83 ± 0.92	175.03 ± 1.50	78.95 ± 1.01	31.00 ± 0.00	29.00 ± 0.47	n = 7	[JJG] Ortho Vitros 5600
38.70 ± 0.93	134.22 ± 0.42	56.73 ± 1.04	18.97 ± 0.69	17.27 ± 0.91	n = 8	[ROC] Roche cobas c501
39.53 ± 1.55	132.60 ± 4.46	59.97 ± 1.75	20.73 ± 0.98	19.29 ± 0.72	n = 13	[ROT] Roche Cobas INTEGRA
34.08 ± 0.87	118.58 ± 2.11	51.20 ± 1.26	17.49 ± 0.49	15.98 ± 0.68	n = 11	[ROD] Roche MODULAR D/P
56.96 ± 3.14	174.24 ± 8.27	81.09 ± 3.88	32.82 ± 1.87	29.88 ± 1.78	n = 7	[BYE] Siemens ADVIA 1800
55.40 ± 3.54	167.47 ± 11.02	78.30 ± 3.56	31.00 ± 1.53	29.02 ± 1.33	n = 3	[BYB] Siemens ADVIA 2400
57.66 ± 1.02	165.31 ± 1.95	76.54 ± 0.76	33.02 ± 1.02	31.81 ± 0.65	n = 7	[DUE] Siemens Dimension EXL
57.53 ± 1.31	165.46 ± 2.36	75.92 ± 1.58	32.53 ± 1.06	31.50 ± 0.84	n = 30	[DUR] Siemens Dimension RxL
56.74 ± 1.24	164.09 ± 2.14	75.46 ± 1.52	32.29 ± 1.12	31.06 ± 0.82	n = 26	[DUT] Siemens Dimension Vista
56.86 ± 1.12	163.63 ± 2.10	75.05 ± 0.93	32.12 ± 0.72	31.13 ± 0.67	n = 10	[DUX] Siemens Dimension Xpand
<Reagents>						
50.47 ± 3.64	158.18 ± 11.35	72.17 ± 5.09	28.43 ± 2.45	26.34 ± 2.02	n = 16	[AB1] Abbott
56.05 ± 2.89	167.45 ± 6.80	79.02 ± 4.26	32.86 ± 2.01	29.50 ± 2.27	n = 40	[BC1] Beckman Coulter
50.64 ± 2.94	156.13 ± 8.86	73.28 ± 1.16	28.79 ± 0.97	26.40 ± 1.10	n = 7	[OL1] Beckman Coulter AU Series
58.21 ± 1.02	175.18 ± 1.92	79.16 ± 1.06	31.05 ± 0.51	29.09 ± 0.45	n = 30	[JJ1] Ortho Clinical Diagnostics
38.70 ± 0.93	134.22 ± 0.42	56.73 ± 1.04	18.97 ± 0.69	17.27 ± 0.91	n = 8	[RO4] Roche cobas c311/c501/c502/c701
34.08 ± 0.86	118.58 ± 2.11	51.21 ± 1.26	17.49 ± 0.49	15.98 ± 0.68	n = 10	[RO2] Roche Hitachi and Modular D/P
39.53 ± 1.55	132.60 ± 4.46	59.97 ± 1.75	20.73 ± 0.98	19.29 ± 0.72	n = 13	[RO1] Roche Integra and MIRA
56.37 ± 1.33	171.60 ± 2.25	79.85 ± 0.66	32.22 ± 1.29	29.27 ± 0.58	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
57.16 ± 1.30	164.71 ± 2.36	75.71 ± 1.46	32.44 ± 1.07	31.33 ± 0.85	n = 72	[DA5] Siemens Dimension
49.86 ± 3.61	157.88 ± 6.58	71.92 ± 4.37	28.71 ± 1.33	26.44 ± 1.02	n = 3	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Carbamazepine (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
8.15 ± 0.62 8.4	7.49 ± 0.57 7.9	14.37 ± 1.10 14.9	5.38 ± 0.46 5.6	4.93 ± 0.47 5.1	n = 244	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
8.59 ± 0.13	8.06 ± 0.13	15.22 ± 0.20	5.64 ± 0.13	5.10 ± 0.15	n = 5	[ABJ] Abbott Architect c System
8.04 ± 0.40	7.42 ± 0.34	14.31 ± 0.69	5.55 ± 0.22	5.05 ± 0.21	n = 12	[ABB] Abbott AxSym
8.50 ± 0.65	7.88 ± 0.46	15.46 ± 0.78	5.62 ± 0.36	5.15 ± 0.43	n = 15	[OLC] Beckman Coulter AU Chemistry System
8.32 ± 0.24	7.45 ± 0.19	13.87 ± 0.59	5.43 ± 0.14	4.96 ± 0.10	n = 3	[BCS] Beckman Coulter CX
8.10 ± 0.13	7.22 ± 0.23	13.64 ± 0.72	5.26 ± 0.20	4.84 ± 0.28	n = 8	[BCX] Beckman Coulter LX-20
8.03 ± 0.24	7.20 ± 0.17	13.40 ± 0.65	5.31 ± 0.16	4.92 ± 0.22	n = 9	[BCG] Beckman Coulter UniCel DxC 600
8.08 ± 0.23	7.23 ± 0.29	13.52 ± 0.55	5.35 ± 0.17	4.92 ± 0.15	n = 20	[BCH] Beckman Coulter UniCel DxC 800
5.91 ± 0.37	5.21 ± 0.33	11.76 ± 0.85	3.64 ± 0.13	3.35 ± 0.22	n = 15	[JJF] Ortho Vitros 5,1FS
5.95 ± 0.46	5.19 ± 0.44	11.86 ± 0.74	3.84 ± 0.32	3.30 ± 0.29	n = 7	[JJG] Ortho Vitros 5600
8.71 ± 0.47	8.12 ± 0.38	14.80 ± 0.56	5.79 ± 0.40	5.47 ± 0.28	n = 12	[ROC] Roche cobas c501
7.99 ± 0.22	7.42 ± 0.21	14.22 ± 0.55	5.19 ± 0.18	4.82 ± 0.10	n = 16	[ROT] Roche Cobas INTEGRA
8.89 ± 0.32	8.13 ± 0.42	15.07 ± 0.37	6.04 ± 0.31	5.59 ± 0.34	n = 16	[ROD] Roche MODULAR D/P
8.31 ± 0.68	7.97 ± 0.54	15.44 ± 1.14	5.60 ± 0.42	5.57 ± 0.59	n = 4	[BYE] Siemens ADVIA 1800
8.85 ± 0.63	7.94 ± 0.38	15.60 ± 1.09	5.72 ± 0.31	5.24 ± 0.32	n = 16	[COB] Siemens ADVIA Centaur
8.17 ± 0.23	7.46 ± 0.18	14.58 ± 0.41	5.35 ± 0.23	4.67 ± 0.21	n = 7	[DUE] Siemens Dimension EXL
7.89 ± 0.34	7.25 ± 0.28	14.33 ± 0.48	5.11 ± 0.25	4.62 ± 0.19	n = 32	[DUR] Siemens Dimension RxL
8.04 ± 0.35	7.36 ± 0.35	14.52 ± 0.54	5.26 ± 0.27	4.80 ± 0.24	n = 28	[DUT] Siemens Dimension Vista
7.82 ± 0.30	7.18 ± 0.35	14.38 ± 0.85	5.22 ± 0.25	4.86 ± 0.22	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
8.22 ± 0.43	7.62 ± 0.43	14.64 ± 0.86	5.59 ± 0.18	5.06 ± 0.19	n = 17	[AB1] Abbott
8.10 ± 0.25	7.24 ± 0.27	13.59 ± 0.69	5.34 ± 0.19	4.93 ± 0.17	n = 43	[BC1] Beckman Coulter
8.21 ± 0.80	7.61 ± 0.51	15.78 ± 0.53	5.47 ± 0.39	4.92 ± 0.35	n = 6	[OL1] Beckman Coulter AU Series
9.04 ± 0.33	8.31 ± 0.35	15.15 ± 0.45	6.19 ± 0.35	5.73 ± 0.30	n = 10	[MG1] Microgenics CEDIA
5.93 ± 0.40	5.20 ± 0.36	11.78 ± 0.82	3.73 ± 0.28	3.34 ± 0.25	n = 22	[JJ1] Ortho Clinical Diagnostics
8.61 ± 0.54	8.01 ± 0.47	14.71 ± 0.59	5.77 ± 0.42	5.38 ± 0.37	n = 12	[RO4] Roche cobas c311/c501/c502/c701
8.87 ± 0.30	8.12 ± 0.31	15.04 ± 0.12	5.99 ± 0.19	5.59 ± 0.26	n = 11	[RO2] Roche Hitachi and Modular D/P
7.99 ± 0.22	7.42 ± 0.21	14.22 ± 0.55	5.19 ± 0.18	4.82 ± 0.10	n = 16	[RO1] Roche Integra and MIRA
8.88 ± 0.64	7.97 ± 0.42	15.69 ± 1.11	5.74 ± 0.32	5.26 ± 0.32	n = 18	[BY1] Siemens ADVIA/ADVIA Centaur
8.25 ± 0.63	7.97 ± 0.65	15.05 ± 0.88	5.58 ± 0.38	5.33 ± 0.49	n = 8	[BY5] Siemens ADVIA/Syva Emit 2000
7.96 ± 0.35	7.31 ± 0.32	14.41 ± 0.53	5.20 ± 0.27	4.72 ± 0.24	n = 71	[DA5] Siemens Dimension
8.28 ± 0.53	7.97 ± 0.42	15.58 ± 0.87	5.53 ± 0.16	5.06 ± 0.30	n = 4	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Digoxin (µg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
1.117 ± 0.128 1.1	1.679 ± 0.141 1.7	1.938 ± 0.150 1.9	3.176 ± 0.202 3.3	2.927 ± 0.195 3.0	n = 291	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
1.209 ± 0.057	1.793 ± 0.061	2.051 ± 0.049	3.164 ± 0.069	2.948 ± 0.083	n = 4	[ABJ] Abbott Architect c System
1.090 ± 0.113	1.582 ± 0.075	1.869 ± 0.108	3.104 ± 0.132	2.785 ± 0.125	n = 5	[ABH] Abbott Architect i System
1.145 ± 0.128	1.716 ± 0.118	1.953 ± 0.125	3.203 ± 0.226	2.991 ± 0.177	n = 11	[ABB] Abbott AxSym
1.255 ± 0.082	1.654 ± 0.084	1.859 ± 0.097	3.100 ± 0.134	2.931 ± 0.139	n = 12	[SAA] Beckman Coulter ACCESS
0.991 ± 0.135	1.514 ± 0.171	1.747 ± 0.193	3.092 ± 0.254	2.785 ± 0.233	n = 17	[OLC] Beckman Coulter AU Chemistry System
1.100 ± 0.075	1.700 ± 0.075	1.915 ± 0.041	3.070 ± 0.082	2.784 ± 0.127	n = 4	[BCS] Beckman Coulter CX
1.059 ± 0.127	1.619 ± 0.061	1.751 ± 0.128	3.000 ± 0.329	2.766 ± 0.249	n = 6	[BCX] Beckman Coulter LX-20
1.101 ± 0.077	1.677 ± 0.120	1.947 ± 0.095	3.153 ± 0.108	2.924 ± 0.123	n = 13	[BCG] Beckman Coulter UniCel DxC 600
1.067 ± 0.064	1.590 ± 0.073	1.867 ± 0.076	3.054 ± 0.088	2.800 ± 0.083	n = 17	[BCH] Beckman Coulter UniCel DxC 800
1.174 ± 0.112	1.580 ± 0.150	1.784 ± 0.102	3.043 ± 0.186	2.831 ± 0.196	n = 4	[BCU] Beckman Coulter UniCel DxI 800
0.915 ± 0.041	1.400 ± 0.075	1.616 ± 0.127	2.913 ± 0.113	2.700 ± 0.150	n = 4	[JJE] Ortho Vitros 250/350/950
0.968 ± 0.119	1.491 ± 0.103	1.739 ± 0.095	2.990 ± 0.123	2.790 ± 0.126	n = 20	[JJF] Ortho Vitros 5,1FS
0.919 ± 0.073	1.400 ± 0.090	1.626 ± 0.097	2.860 ± 0.094	2.681 ± 0.073	n = 6	[JJG] Ortho Vitros 5600
1.138 ± 0.087	1.695 ± 0.064	1.941 ± 0.079	3.223 ± 0.098	2.964 ± 0.110	n = 15	[ROC] Roche cobas c501
1.143 ± 0.093	1.691 ± 0.099	1.959 ± 0.097	3.247 ± 0.144	2.998 ± 0.110	n = 10	[ROT] Roche Cobas INTEGRA
1.165 ± 0.099	1.736 ± 0.106	1.967 ± 0.118	3.216 ± 0.120	2.917 ± 0.113	n = 17	[ROD] Roche MODULAR D/P
1.202 ± 0.004	1.798 ± 0.004	1.997 ± 0.068	3.111 ± 0.105	2.907 ± 0.094	n = 4	[BYE] Siemens ADVIA 1800
1.217 ± 0.079	1.796 ± 0.081	2.055 ± 0.100	3.299 ± 0.090	3.062 ± 0.128	n = 20	[COB] Siemens ADVIA Centaur
1.114 ± 0.026	1.703 ± 0.050	1.981 ± 0.061	3.320 ± 0.253	3.009 ± 0.165	n = 3	[BYP] Siemens ADVIA Centaur CP
1.216 ± 0.083	1.757 ± 0.076	2.012 ± 0.082	3.308 ± 0.123	3.056 ± 0.123	n = 8	[DUE] Siemens Dimension EXL
1.172 ± 0.080	1.751 ± 0.080	2.022 ± 0.085	3.330 ± 0.112	3.070 ± 0.089	n = 33	[DUR] Siemens Dimension RxL
1.001 ± 0.024	1.646 ± 0.073	1.953 ± 0.067	3.037 ± 0.082	2.723 ± 0.062	n = 28	[DUT] Siemens Dimension Vista
1.069 ± 0.048	1.670 ± 0.095	1.993 ± 0.144	3.345 ± 0.136	3.096 ± 0.101	n = 14	[DUX] Siemens Dimension Xpand
1.231 ± 0.081	1.912 ± 0.123	2.149 ± 0.118	3.467 ± 0.173	3.145 ± 0.198	n = 6	[DPD] Siemens Immulite 2000
<Reagents>						
1.150 ± 0.122	1.712 ± 0.132	1.957 ± 0.129	3.169 ± 0.177	2.934 ± 0.172	n = 20	[AB1] Abbott
1.116 ± 0.114	1.629 ± 0.104	1.870 ± 0.107	3.083 ± 0.141	2.852 ± 0.150	n = 57	[BC1] Beckman Coulter
1.028 ± 0.164	1.531 ± 0.212	1.764 ± 0.216	3.125 ± 0.232	2.827 ± 0.234	n = 10	[OL1] Beckman Coulter AU Series
1.000 ± 0.100	1.536 ± 0.109	1.783 ± 0.107	2.979 ± 0.166	2.685 ± 0.041	n = 5	[MG2] Microgenics DRI
0.943 ± 0.093	1.459 ± 0.105	1.707 ± 0.111	2.956 ± 0.131	2.754 ± 0.128	n = 30	[JJ1] Ortho Clinical Diagnostics
1.144 ± 0.087	1.698 ± 0.062	1.945 ± 0.078	3.232 ± 0.100	2.970 ± 0.108	n = 16	[RO4] Roche cobas c311/c501/c502/c701
1.185 ± 0.041	1.900 ± 0.075	2.187 ± 0.113	3.667 ± 0.254	3.450 ± 0.122	n = 4	[RO3] Roche Elecsys/Modular E/e601/e411
1.152 ± 0.077	1.713 ± 0.099	1.923 ± 0.047	3.186 ± 0.122	2.900 ± 0.000	n = 9	[RO2] Roche Hitachi and Modular D/P
1.143 ± 0.093	1.691 ± 0.099	1.959 ± 0.097	3.247 ± 0.144	2.998 ± 0.110	n = 10	[RO1] Roche Integra and MIRA
1.100 ± 0.000	1.750 ± 0.102	2.009 ± 0.113	3.244 ± 0.122	2.900 ± 0.137	n = 6	[RO5] Roche Tina-quant
1.206 ± 0.078	1.790 ± 0.079	2.038 ± 0.097	3.259 ± 0.147	3.018 ± 0.148	n = 29	[BY1] Siemens ADVIA/ADVIA Centaur
1.136 ± 0.103	1.723 ± 0.094	2.007 ± 0.099	3.300 ± 0.161	3.054 ± 0.134	n = 67	[DA5] Siemens Dimension
1.002 ± 0.019	1.629 ± 0.049	1.937 ± 0.049	3.037 ± 0.069	2.728 ± 0.057	n = 15	[DA6] Siemens Dimension LOCI
1.225 ± 0.075	1.891 ± 0.122	2.136 ± 0.107	3.435 ± 0.168	3.175 ± 0.190	n = 7	[DP5] Siemens Immulite
0.928 ± 0.051	1.450 ± 0.092	1.626 ± 0.137	3.045 ± 0.359	2.705 ± 0.279	n = 3	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Ethanol (mg/dL)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
82.17 ± 4.21 85.5	249.03 ± 11.69 256.2	189.71 ± 8.63 195.9	140.79 ± 5.92 142.0	127.84 ± 5.71 131.0	n = 232	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
83.32 ± 1.10	249.24 ± 2.79	190.45 ± 1.30	142.41 ± 1.93	129.69 ± 1.95	n = 8	[ABJ] Abbott Architect c System
77.62 ± 6.58	261.65 ± 7.09	196.97 ± 4.98	138.36 ± 6.05	135.93 ± 3.18	n = 3	[ABB] Abbott AxSym
84.75 ± 2.72	255.19 ± 7.69	193.46 ± 5.79	144.49 ± 4.54	129.42 ± 4.34	n = 11	[OLC] Beckman Coulter AU Chemistry System
83.23 ± 2.22	252.54 ± 1.11	188.31 ± 1.36	139.28 ± 0.51	125.80 ± 2.73	n = 3	[BCS] Beckman Coulter CX
83.65 ± 3.08	248.79 ± 10.28	191.08 ± 6.75	141.51 ± 4.62	127.85 ± 5.99	n = 11	[BCX] Beckman Coulter LX-20
84.40 ± 4.24	250.72 ± 14.23	190.20 ± 9.44	139.44 ± 9.86	127.62 ± 6.93	n = 12	[BCG] Beckman Coulter UniCel DxC 600
83.82 ± 2.91	249.75 ± 7.21	190.57 ± 6.56	140.57 ± 5.99	127.17 ± 7.15	n = 16	[BCH] Beckman Coulter UniCel DxC 800
80.84 ± 3.82	251.49 ± 8.03	188.49 ± 8.77	140.90 ± 6.87	128.79 ± 4.66	n = 13	[GCC] Gas Chromatograph
76.74 ± 1.37	234.00 ± 6.31	183.02 ± 6.42	137.44 ± 1.02	121.74 ± 1.37	n = 3	[JJE] Ortho Vitros 250/350/950
75.54 ± 2.82	223.72 ± 11.72	171.88 ± 7.30	134.70 ± 5.99	119.57 ± 5.10	n = 19	[JJF] Ortho Vitros 5,1FS
75.48 ± 2.31	226.22 ± 5.99	172.34 ± 4.02	134.69 ± 3.16	118.77 ± 2.31	n = 6	[JJG] Ortho Vitros 5600
82.44 ± 2.84	248.88 ± 5.77	188.63 ± 5.40	140.29 ± 3.80	128.84 ± 1.83	n = 11	[ROC] Roche cobas c501
80.75 ± 1.83	244.34 ± 4.31	184.95 ± 3.60	137.62 ± 4.14	126.83 ± 1.75	n = 9	[ROT] Roche Cobas INTEGRA
82.36 ± 2.40	248.26 ± 7.48	189.16 ± 5.92	139.80 ± 4.53	128.08 ± 4.66	n = 14	[ROD] Roche MODULAR D/P
83.80 ± 1.93	256.21 ± 4.61	193.70 ± 3.89	144.20 ± 2.91	131.75 ± 3.12	n = 8	[BYE] Siemens ADVIA 1800
89.46 ± 4.18	268.09 ± 17.53	202.56 ± 13.40	149.16 ± 12.13	137.29 ± 9.18	n = 3	[BYB] Siemens ADVIA 2400
81.33 ± 2.30	247.93 ± 9.91	188.78 ± 6.69	141.45 ± 6.11	127.94 ± 3.83	n = 6	[DUE] Siemens Dimension EXL
83.75 ± 3.72	252.89 ± 9.75	193.58 ± 6.63	143.19 ± 4.92	130.38 ± 4.43	n = 31	[DUR] Siemens Dimension RxL
81.90 ± 3.99	251.69 ± 10.04	191.23 ± 5.91	142.53 ± 5.90	128.72 ± 5.07	n = 27	[DUT] Siemens Dimension Vista
81.18 ± 2.55	246.52 ± 7.15	187.69 ± 8.33	139.28 ± 3.72	125.02 ± 3.47	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
83.69 ± 1.59	251.04 ± 5.58	192.07 ± 3.60	142.11 ± 3.05	131.04 ± 3.40	n = 11	[AB1] Abbott
83.97 ± 3.25	250.35 ± 10.02	190.58 ± 7.44	140.83 ± 6.38	127.48 ± 6.41	n = 44	[BC1] Beckman Coulter
85.58 ± 2.07	257.29 ± 4.22	195.34 ± 2.91	146.74 ± 0.79	130.54 ± 3.08	n = 6	[OL1] Beckman Coulter AU Series
81.51 ± 3.38	252.80 ± 7.82	189.36 ± 8.60	142.06 ± 6.75	129.54 ± 4.53	n = 11	[IH1] In-House
75.68 ± 2.54	225.67 ± 10.44	173.25 ± 7.38	134.99 ± 4.65	119.69 ± 4.12	n = 28	[JJ1] Ortho Clinical Diagnostics
82.44 ± 2.84	248.88 ± 5.77	188.63 ± 5.40	140.29 ± 3.80	128.84 ± 1.83	n = 11	[RO4] Roche cobas c311/c501/c502/c701
82.36 ± 2.40	248.26 ± 7.48	189.16 ± 5.92	139.80 ± 4.53	128.08 ± 4.66	n = 14	[RO2] Roche Hitachi and Modular D/P
80.75 ± 1.83	244.34 ± 4.31	184.95 ± 3.60	137.62 ± 4.14	126.83 ± 1.75	n = 9	[RO1] Roche Integra and MIRA
83.37 ± 1.56	254.64 ± 4.66	192.48 ± 2.49	143.26 ± 2.57	130.88 ± 3.32	n = 9	[BY1] Siemens ADVIA/ADVIA Centaur
89.75 ± 3.82	270.47 ± 14.72	205.01 ± 11.50	151.35 ± 11.45	139.10 ± 7.91	n = 3	[BY5] Siemens ADVIA/Syva Emit 2000
82.47 ± 3.68	250.75 ± 10.02	191.73 ± 7.09	142.08 ± 5.45	128.69 ± 4.90	n = 75	[DA5] Siemens Dimension
82.82 ± 5.09	250.48 ± 17.40	190.12 ± 10.19	141.65 ± 9.34	127.87 ± 8.72	n = 5	[SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Ethosuximide (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
171.82 ± 7.23 166.4	122.73 ± 3.78 119.5	37.02 ± 2.31 35.0	47.98 ± 3.67 44.0	43.92 ± 4.33 40.0	n = 6	[---] All Methods & Instruments [---] Weigh-in value
172.92 ± 9.59	124.71 ± 3.47	36.78 ± 1.92	47.81 ± 3.14	43.06 ± 4.47	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
171.69 ± 1.52	122.09 ± 3.85	37.55 ± 2.27	49.00 ± 2.65	45.02 ± 3.03	n = 5	<Reagents> [SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Gentamicin (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
13.64 ± 1.49 13.9	5.54 ± 0.42 5.4	10.19 ± 0.78 10.4	3.20 ± 0.26 3.1	2.92 ± 0.24 2.8	n = 186	[---] All Methods & Instruments [---] Weigh-in value
						<Instruments>
11.62 ± 0.64	4.85 ± 0.18	8.79 ± 0.36	2.95 ± 0.06	2.75 ± 0.06	n = 5	[ABJ] Abbott Architect c System
12.83 ± 0.92	5.23 ± 0.34	9.63 ± 0.67	2.82 ± 0.19	2.53 ± 0.14	n = 9	[ABB] Abbott AxSym
14.18 ± 0.59	5.73 ± 0.28	10.00 ± 0.07	3.35 ± 0.21	3.03 ± 0.12	n = 8	[OLC] Beckman Coulter AU Chemistry System
14.42 ± 0.43	5.65 ± 0.28	10.79 ± 0.50	3.24 ± 0.19	2.86 ± 0.16	n = 10	[BCX] Beckman Coulter LX-20
14.26 ± 0.45	5.64 ± 0.20	10.70 ± 0.17	3.07 ± 0.15	2.84 ± 0.16	n = 10	[BCG] Beckman Coulter UniCel DxC 600
14.30 ± 1.17	5.78 ± 0.19	10.81 ± 0.25	3.32 ± 0.18	2.99 ± 0.17	n = 18	[BCH] Beckman Coulter UniCel DxC 800
16.53 ± 0.82	6.38 ± 0.23	12.54 ± 0.76	3.77 ± 0.17	3.40 ± 0.14	n = 11	[JJF] Ortho Vitros 5,1FS
15.62 ± 1.16	6.21 ± 0.32	11.72 ± 1.00	3.66 ± 0.21	3.33 ± 0.17	n = 6	[JJG] Ortho Vitros 5600
11.96 ± 0.71	5.04 ± 0.27	9.36 ± 0.57	3.09 ± 0.16	2.78 ± 0.13	n = 17	[ROT] Roche Cobas INTEGRA
13.34 ± 0.96	5.48 ± 0.25	9.73 ± 0.40	3.18 ± 0.20	2.93 ± 0.16	n = 10	[ROD] Roche MODULAR D/P
12.91 ± 0.80	5.70 ± 0.27	9.80 ± 0.09	3.13 ± 0.05	2.83 ± 0.05	n = 3	[BYE] Siemens ADVIA 1800
14.35 ± 1.42	5.84 ± 0.26	10.50 ± 0.71	3.31 ± 0.19	3.05 ± 0.20	n = 19	[COB] Siemens ADVIA Centaur
14.13 ± 0.20	5.48 ± 0.04	10.20 ± 0.08	3.32 ± 0.04	3.02 ± 0.04	n = 4	[DUE] Siemens Dimension EXL
13.83 ± 0.30	5.44 ± 0.13	10.02 ± 0.26	3.22 ± 0.10	2.97 ± 0.08	n = 22	[DUR] Siemens Dimension RxL
12.73 ± 0.77	5.30 ± 0.24	9.96 ± 0.47	3.04 ± 0.16	2.77 ± 0.15	n = 25	[DUT] Siemens Dimension Vista
13.68 ± 0.24	5.40 ± 0.09	10.00 ± 0.09	3.23 ± 0.05	2.96 ± 0.10	n = 3	[DUX] Siemens Dimension Xpand
						<Reagents>
12.36 ± 1.01	5.07 ± 0.33	9.28 ± 0.72	2.85 ± 0.20	2.59 ± 0.18	n = 14	[AB1] Abbott
14.32 ± 1.02	5.73 ± 0.24	10.76 ± 0.28	3.25 ± 0.23	2.93 ± 0.19	n = 40	[BC1] Beckman Coulter
13.47 ± 1.74	5.80 ± 0.24	10.08 ± 0.20	3.45 ± 0.19	3.05 ± 0.12	n = 4	[OL1] Beckman Coulter AU Series
12.94 ± 1.52	5.38 ± 0.32	9.62 ± 0.52	3.13 ± 0.27	2.87 ± 0.20	n = 4	[MG1] Microgenics CEDIA
16.27 ± 1.02	6.33 ± 0.27	12.30 ± 0.89	3.74 ± 0.19	3.37 ± 0.15	n = 17	[JJ1] Ortho Clinical Diagnostics
13.58 ± 0.70	5.55 ± 0.19	9.90 ± 0.26	3.23 ± 0.16	3.00 ± 0.13	n = 7	[RO2] Roche Hitachi and Modular D/P
11.98 ± 0.59	5.05 ± 0.28	9.32 ± 0.55	3.07 ± 0.16	2.77 ± 0.13	n = 16	[RO1] Roche Integra and MIRA
14.35 ± 1.42	5.84 ± 0.26	10.50 ± 0.71	3.31 ± 0.19	3.05 ± 0.20	n = 19	[BY1] Siemens ADVIA/ADVIA Centaur
12.67 ± 1.16	5.53 ± 0.27	9.79 ± 0.27	3.12 ± 0.11	2.78 ± 0.08	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
13.47 ± 0.72	5.39 ± 0.17	10.03 ± 0.32	3.15 ± 0.17	2.90 ± 0.15	n = 53	[DA5] Siemens Dimension
14.15 ± 0.84	5.64 ± 0.28	10.23 ± 0.51	3.26 ± 0.19	3.01 ± 0.11	n = 4	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Lithium (mmol/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
0.655 ± 0.065 0.7	1.287 ± 0.096 1.3	0.297 ± 0.064 0.3	0.873 ± 0.070 0.9	0.785 ± 0.067 0.8	n = 202	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
0.706 ± 0.023	1.333 ± 0.054	0.306 ± 0.035	0.902 ± 0.034	0.832 ± 0.051	n = 7	[ABJ] Abbott Architect c System
0.675 ± 0.023	1.305 ± 0.034	0.312 ± 0.027	0.868 ± 0.020	0.809 ± 0.027	n = 4	[AAS] Atomic Absorption Spectrometer
0.686 ± 0.026	1.269 ± 0.047	0.294 ± 0.014	0.853 ± 0.047	0.796 ± 0.016	n = 14	[OLC] Beckman Coulter AU Chemistry System
0.655 ± 0.047	1.268 ± 0.030	0.253 ± 0.044	0.870 ± 0.045	0.786 ± 0.026	n = 7	[BCX] Beckman Coulter LX-20
0.637 ± 0.044	1.257 ± 0.063	0.255 ± 0.045	0.838 ± 0.078	0.759 ± 0.057	n = 7	[BCG] Beckman Coulter UniCel DxC 600
0.623 ± 0.044	1.237 ± 0.056	0.228 ± 0.043	0.805 ± 0.055	0.747 ± 0.042	n = 14	[BCH] Beckman Coulter UniCel DxC 800
0.714 ± 0.026	1.475 ± 0.054	0.406 ± 0.010	0.917 ± 0.031	0.820 ± 0.036	n = 3	[NOS] NOVA 13
0.672 ± 0.051	1.326 ± 0.137	0.328 ± 0.051	0.944 ± 0.102	0.844 ± 0.102	n = 3	[JJE] Ortho Vitros 250/350/950
0.689 ± 0.038	1.382 ± 0.083	0.357 ± 0.085	0.972 ± 0.047	0.851 ± 0.054	n = 17	[JJF] Ortho Vitros 5,1FS
0.679 ± 0.047	1.367 ± 0.074	0.321 ± 0.047	0.981 ± 0.076	0.841 ± 0.056	n = 7	[JJG] Ortho Vitros 5600
0.686 ± 0.069	1.363 ± 0.120	0.354 ± 0.069	0.855 ± 0.064	0.796 ± 0.045	n = 8	[ROY] Roche 9180/9181
0.700 ± 0.000	1.302 ± 0.044	0.306 ± 0.042	0.884 ± 0.054	0.823 ± 0.043	n = 11	[ROC] Roche cobas c501
0.655 ± 0.045	1.330 ± 0.045	0.334 ± 0.038	0.843 ± 0.046	0.755 ± 0.044	n = 12	[ROT] Roche Cobas INTEGRA
0.739 ± 0.055	1.364 ± 0.070	0.360 ± 0.060	0.934 ± 0.064	0.856 ± 0.046	n = 9	[ROD] Roche MODULAR D/P
0.659 ± 0.050	1.393 ± 0.027	0.307 ± 0.074	0.910 ± 0.024	0.833 ± 0.054	n = 8	[BYE] Siemens ADVIA 1800
0.571 ± 0.048	1.155 ± 0.052	0.245 ± 0.050	0.813 ± 0.055	0.699 ± 0.036	n = 26	[DUR] Siemens Dimension RxL
0.625 ± 0.038	1.262 ± 0.043	0.291 ± 0.022	0.886 ± 0.034	0.774 ± 0.033	n = 26	[DUT] Siemens Dimension Vista
0.545 ± 0.045	1.128 ± 0.051	0.240 ± 0.046	0.797 ± 0.005	0.694 ± 0.010	n = 3	[DUX] Siemens Dimension Xpand
<Reagents>						
0.705 ± 0.025	1.340 ± 0.056	0.302 ± 0.039	0.907 ± 0.035	0.838 ± 0.054	n = 6	[AB1] Abbott
0.690 ± 0.060	1.389 ± 0.087	0.372 ± 0.062	0.874 ± 0.048	0.806 ± 0.057	n = 8	[AV1] AVL Scientific
0.633 ± 0.052	1.244 ± 0.062	0.229 ± 0.046	0.818 ± 0.069	0.763 ± 0.051	n = 22	[BC1] Beckman Coulter
0.682 ± 0.030	1.275 ± 0.042	0.293 ± 0.014	0.848 ± 0.047	0.796 ± 0.017	n = 13	[OL1] Beckman Coulter AU Series
0.683 ± 0.021	1.294 ± 0.040	0.316 ± 0.017	0.870 ± 0.021	0.805 ± 0.023	n = 5	[IH1] In-House
0.714 ± 0.026	1.475 ± 0.054	0.406 ± 0.010	0.917 ± 0.031	0.820 ± 0.036	n = 3	[NO1] NOVA Biomedical
0.686 ± 0.041	1.371 ± 0.088	0.347 ± 0.073	0.969 ± 0.055	0.847 ± 0.059	n = 28	[JJ1] Ortho Clinical Diagnostics
0.700 ± 0.000	1.305 ± 0.044	0.311 ± 0.044	0.888 ± 0.056	0.830 ± 0.043	n = 11	[RO4] Roche cobas c311/c501/c502/c701
0.655 ± 0.045	1.330 ± 0.045	0.334 ± 0.038	0.843 ± 0.046	0.755 ± 0.044	n = 12	[RO1] Roche Integra and MIRA
0.679 ± 0.050	1.381 ± 0.037	0.304 ± 0.053	0.911 ± 0.032	0.830 ± 0.040	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
0.591 ± 0.059	1.200 ± 0.075	0.268 ± 0.051	0.846 ± 0.061	0.731 ± 0.056	n = 56	[DA5] Siemens Dimension
0.650 ± 0.057	1.292 ± 0.038	0.286 ± 0.037	0.885 ± 0.041	0.793 ± 0.034	n = 4	[TA1] Thermo Electron Corp
0.701 ± 0.051	1.316 ± 0.066	0.317 ± 0.065	0.896 ± 0.058	0.814 ± 0.062	n = 13	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Phenobarbital (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
13.60 ± 1.13 13.7	52.10 ± 4.04 54.6	19.39 ± 1.47 19.8	25.36 ± 1.60 25.8	23.42 ± 1.61 23.4	n = 244	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
14.15 ± 0.27	53.33 ± 1.85	19.65 ± 0.27	25.25 ± 0.54	23.16 ± 0.71	n = 3	[ABJ] Abbott Architect c System
13.49 ± 0.53	49.82 ± 1.34	18.11 ± 0.88	24.17 ± 0.78	22.60 ± 1.35	n = 13	[ABB] Abbott AxSym
13.04 ± 0.83	51.23 ± 3.46	18.15 ± 0.66	24.46 ± 0.97	22.33 ± 1.38	n = 14	[OLC] Beckman Coulter AU Chemistry System
13.16 ± 0.32	45.70 ± 1.36	18.82 ± 0.89	25.07 ± 1.25	22.58 ± 1.13	n = 4	[BCS] Beckman Coulter CX
13.57 ± 0.94	47.61 ± 2.30	19.67 ± 1.48	25.26 ± 0.98	23.16 ± 0.98	n = 9	[BCX] Beckman Coulter LX-20
13.12 ± 0.53	46.74 ± 2.41	19.17 ± 0.77	25.08 ± 0.84	23.58 ± 0.86	n = 12	[BCG] Beckman Coulter UniCel DxC 600
13.02 ± 0.46	46.70 ± 1.59	19.16 ± 0.55	25.32 ± 0.59	23.23 ± 0.62	n = 19	[BCH] Beckman Coulter UniCel DxC 800
13.46 ± 1.22	56.58 ± 1.77	20.46 ± 1.21	26.06 ± 1.00	24.64 ± 1.33	n = 19	[JJF] Ortho Vitros 5,1FS
13.31 ± 1.41	56.14 ± 3.17	20.40 ± 1.32	25.76 ± 0.49	24.13 ± 1.28	n = 7	[JJG] Ortho Vitros 5600
13.10 ± 0.62	50.79 ± 1.19	18.31 ± 0.74	24.43 ± 0.70	22.14 ± 0.84	n = 14	[ROC] Roche cobas c501
13.06 ± 0.26	51.02 ± 0.97	18.06 ± 0.24	24.01 ± 0.39	21.99 ± 0.35	n = 15	[ROT] Roche Cobas INTEGRA
13.09 ± 0.57	52.31 ± 1.85	18.61 ± 0.83	24.73 ± 0.60	22.59 ± 0.84	n = 17	[ROD] Roche MODULAR D/P
12.70 ± 0.36	51.89 ± 5.00	18.54 ± 1.08	24.10 ± 0.91	22.94 ± 0.82	n = 3	[BYE] Siemens ADVIA 1800
15.32 ± 0.86	55.14 ± 4.03	20.22 ± 1.14	27.60 ± 1.84	25.53 ± 1.72	n = 14	[COB] Siemens ADVIA Centaur
14.43 ± 1.29	54.65 ± 1.73	19.88 ± 1.76	27.25 ± 1.36	24.61 ± 1.02	n = 4	[DUE] Siemens Dimension EXL
14.24 ± 1.01	53.65 ± 2.57	20.17 ± 1.53	26.04 ± 1.63	23.96 ± 1.51	n = 28	[DUR] Siemens Dimension RxL
14.68 ± 1.33	53.95 ± 2.45	21.00 ± 1.15	27.10 ± 1.76	24.62 ± 1.72	n = 28	[DUT] Siemens Dimension Vista
14.19 ± 1.00	54.55 ± 2.47	20.13 ± 0.93	26.24 ± 1.18	23.76 ± 1.26	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
13.78 ± 0.69	51.02 ± 2.77	18.60 ± 1.12	24.53 ± 1.12	22.97 ± 1.41	n = 18	[AB1] Abbott
13.09 ± 0.58	46.66 ± 2.09	19.18 ± 0.80	25.16 ± 0.92	23.23 ± 0.85	n = 47	[BC1] Beckman Coulter
13.39 ± 0.98	51.22 ± 2.97	18.17 ± 0.67	24.56 ± 1.02	22.16 ± 1.18	n = 6	[OL1] Beckman Coulter AU Series
12.92 ± 1.29	53.92 ± 3.22	18.78 ± 1.48	25.23 ± 2.16	24.00 ± 2.05	n = 4	[MG1] Microgenics CEDIA
13.42 ± 1.28	56.55 ± 2.06	20.45 ± 1.23	25.90 ± 1.00	24.50 ± 1.33	n = 26	[JJ1] Ortho Clinical Diagnostics
13.07 ± 0.60	50.86 ± 1.16	18.26 ± 0.71	24.37 ± 0.69	22.07 ± 0.81	n = 15	[RO4] Roche cobas c311/c501/c502/c701
13.26 ± 1.26	52.76 ± 3.27	18.94 ± 1.77	25.02 ± 1.92	23.30 ± 1.93	n = 5	[RO2] Roche Hitachi and Modular D/P
13.06 ± 0.26	51.02 ± 0.97	18.06 ± 0.24	24.01 ± 0.39	21.99 ± 0.35	n = 15	[RO1] Roche Integra and MIRA
13.06 ± 0.47	52.22 ± 1.17	18.59 ± 0.37	24.68 ± 0.47	22.48 ± 0.57	n = 13	[RO6] Roche ONLINE
15.27 ± 0.98	54.98 ± 4.13	20.23 ± 1.11	27.48 ± 1.97	25.36 ± 1.81	n = 16	[BY1] Siemens ADVIA/ADVIA Centaur
12.76 ± 0.69	53.93 ± 3.85	18.39 ± 0.86	24.29 ± 1.47	22.59 ± 0.79	n = 6	[BY5] Siemens ADVIA/Syva Emit 2000
14.40 ± 1.20	53.89 ± 2.46	20.51 ± 1.41	26.53 ± 1.72	24.23 ± 1.61	n = 65	[DA5] Siemens Dimension
12.90 ± 0.08	49.27 ± 2.46	17.98 ± 0.27	24.16 ± 0.32	21.59 ± 0.71	n = 4	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Phenytoin (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
23.71 ± 2.18 24.2	8.85 ± 0.76 9.1	12.78 ± 1.25 12.9	16.84 ± 1.63 17.0	15.42 ± 1.37 15.5	n = 278	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
23.83 ± 0.67	9.13 ± 0.23	13.35 ± 0.46	16.72 ± 0.94	15.59 ± 0.80	n = 3	[ABJ] Abbott Architect c System
23.23 ± 0.70	8.64 ± 0.36	12.54 ± 0.54	16.40 ± 0.90	15.16 ± 0.88	n = 5	[ABH] Abbott Architect i System
23.25 ± 0.63	9.14 ± 0.24	13.06 ± 0.34	16.74 ± 0.51	15.41 ± 0.41	n = 12	[ABB] Abbott AxSym
22.95 ± 1.86	8.69 ± 0.59	12.48 ± 1.02	16.37 ± 1.51	15.44 ± 1.17	n = 24	[OLC] Beckman Coulter AU Chemistry System
22.08 ± 0.64	8.80 ± 0.17	12.57 ± 0.16	16.27 ± 0.09	14.83 ± 0.43	n = 4	[BCS] Beckman Coulter CX
22.46 ± 1.00	8.75 ± 0.22	12.40 ± 0.49	16.26 ± 0.69	15.09 ± 0.62	n = 9	[BCX] Beckman Coulter LX-20
22.49 ± 0.99	8.39 ± 0.23	12.07 ± 0.37	16.11 ± 0.57	14.71 ± 0.47	n = 13	[BCG] Beckman Coulter UniCel Dx C 600
22.71 ± 1.17	8.60 ± 0.28	12.42 ± 0.36	16.22 ± 0.62	14.78 ± 0.57	n = 20	[BCH] Beckman Coulter UniCel Dx C 800
21.34 ± 0.69	7.85 ± 0.30	10.75 ± 0.33	14.33 ± 0.53	13.50 ± 0.44	n = 20	[JJF] Ortho Vitros 5,1FS
22.16 ± 0.42	8.12 ± 0.23	11.04 ± 0.43	14.62 ± 0.34	13.65 ± 0.59	n = 7	[JJG] Ortho Vitros 5600
22.90 ± 0.96	8.37 ± 0.35	11.99 ± 0.53	16.21 ± 0.81	14.85 ± 0.64	n = 15	[ROC] Roche cobas c501
23.24 ± 1.00	8.76 ± 0.31	12.63 ± 0.50	16.65 ± 0.58	15.10 ± 0.57	n = 16	[ROT] Roche Cobas INTEGRA
23.93 ± 1.20	8.88 ± 0.47	12.66 ± 0.64	17.10 ± 0.64	15.58 ± 0.85	n = 19	[ROD] Roche MODULAR D/P
25.70 ± 2.80	9.87 ± 0.86	13.74 ± 1.20	18.08 ± 0.51	17.58 ± 0.87	n = 4	[BYE] Siemens ADVIA 1800
29.36 ± 1.38	10.39 ± 0.49	15.30 ± 0.47	21.20 ± 1.46	19.54 ± 1.23	n = 14	[COB] Siemens ADVIA Centaur
26.15 ± 0.97	9.73 ± 0.65	14.20 ± 0.92	18.65 ± 1.14	17.00 ± 1.04	n = 6	[DUE] Siemens Dimension EXL
25.82 ± 1.64	9.28 ± 0.71	13.59 ± 0.80	18.11 ± 1.01	16.28 ± 1.03	n = 32	[DUR] Siemens Dimension RxL
24.84 ± 0.82	9.44 ± 0.55	13.75 ± 0.60	17.72 ± 0.64	16.28 ± 0.66	n = 28	[DUT] Siemens Dimension Vista
25.11 ± 1.31	8.99 ± 0.48	13.25 ± 0.80	17.98 ± 1.04	16.02 ± 0.80	n = 12	[DUX] Siemens Dimension Xpand
<Reagents>						
23.33 ± 0.69	9.05 ± 0.32	13.01 ± 0.46	16.69 ± 0.69	15.39 ± 0.58	n = 20	[AB1] Abbott
22.51 ± 1.15	8.59 ± 0.29	12.36 ± 0.42	16.21 ± 0.59	14.82 ± 0.56	n = 49	[BC1] Beckman Coulter
22.25 ± 1.61	8.70 ± 0.55	12.51 ± 1.05	15.79 ± 1.41	15.28 ± 1.18	n = 10	[OL1] Beckman Coulter AU Series
24.72 ± 0.96	9.14 ± 0.56	12.65 ± 0.75	17.87 ± 0.91	16.46 ± 0.64	n = 6	[MG1] Microgenics CEDIA
21.49 ± 0.86	7.90 ± 0.30	10.81 ± 0.37	14.39 ± 0.51	13.56 ± 0.53	n = 28	[JJ1] Ortho Clinical Diagnostics
22.67 ± 1.11	8.32 ± 0.36	11.91 ± 0.62	16.04 ± 0.95	14.69 ± 0.78	n = 17	[RO4] Roche cobas c311/c501/c502/c701
24.25 ± 1.51	9.10 ± 0.40	12.71 ± 0.55	17.18 ± 0.79	15.78 ± 0.82	n = 6	[RO2] Roche Hitachi and Modular D/P
23.24 ± 1.00	8.76 ± 0.31	12.63 ± 0.50	16.65 ± 0.58	15.10 ± 0.57	n = 16	[RO1] Roche Integra and MIRA
23.85 ± 1.06	8.77 ± 0.46	12.63 ± 0.70	17.14 ± 0.46	15.48 ± 0.84	n = 13	[RO6] Roche ONLINE
29.37 ± 2.13	10.34 ± 0.74	15.39 ± 0.75	21.18 ± 1.77	19.41 ± 1.42	n = 18	[BY1] Siemens ADVIA/ADVIA Centaur
26.45 ± 1.85	9.87 ± 0.11	14.13 ± 0.87	18.82 ± 0.61	17.39 ± 0.83	n = 6	[BY5] Siemens ADVIA/Syva Emit 2000
25.33 ± 1.40	9.31 ± 0.67	13.61 ± 0.77	17.92 ± 0.94	16.24 ± 0.90	n = 77	[DA5] Siemens Dimension
22.72 ± 2.28	8.45 ± 0.59	12.16 ± 1.16	16.04 ± 1.33	14.76 ± 1.16	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Free Phenytoin (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
5.37 ± 0.41	1.26 ± 0.15	1.30 ± 0.13	3.14 ± 0.50	3.20 ± 0.20	n = 31	[---] All Methods & Instruments
						<Instruments>
5.33 ± 0.51	1.27 ± 0.15	1.31 ± 0.18	3.25 ± 0.39	3.23 ± 0.24	n = 10	[ABG] Abbott TDx FLX
5.52 ± 0.47	1.34 ± 0.18	1.32 ± 0.14	3.25 ± 0.45	3.24 ± 0.11	n = 6	[OLC] Beckman Coulter AU Chemistry System
5.15 ± 0.18	1.30 ± 0.00	1.26 ± 0.08	3.13 ± 0.17	3.11 ± 0.12	n = 6	[ROT] Roche Cobas INTEGRA
						<Reagents>
5.42 ± 0.43	1.27 ± 0.12	1.29 ± 0.16	3.24 ± 0.28	3.22 ± 0.24	n = 14	[AB1] Abbott
2.70 ± 0.08	0.98 ± 0.04	1.32 ± 0.04	1.78 ± 0.04	1.78 ± 0.04	n = 4	[BC1] Beckman Coulter
5.15 ± 0.18	1.30 ± 0.00	1.26 ± 0.08	3.13 ± 0.17	3.11 ± 0.12	n = 6	[RO1] Roche Integra and MIRA
5.61 ± 0.49	1.38 ± 0.19	1.30 ± 0.15	3.19 ± 0.47	3.33 ± 0.28	n = 5	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Primidone (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
15.50 ± 0.49 16.0	5.46 ± 0.38 4.9	6.68 ± 0.29 6.6	9.47 ± 0.33 9.3	8.61 ± 0.31 8.5	n = 15	[---] All Methods & Instruments [---] Weigh-in value
15.21 ± 0.37 15.99 ± 0.16	5.61 ± 0.26 5.14 ± 0.15	6.87 ± 0.13 6.49 ± 0.21	9.58 ± 0.27 9.22 ± 0.33	8.69 ± 0.30 8.56 ± 0.28	n = 9 n = 5	<Instruments> [OLC] Beckman Coulter AU Chemistry System [ROT] Roche Cobas INTEGRA
15.99 ± 0.16 15.30 ± 0.36	5.14 ± 0.15 5.66 ± 0.37	6.49 ± 0.21 6.81 ± 0.24	9.22 ± 0.33 9.58 ± 0.27	8.56 ± 0.28 8.61 ± 0.33	n = 5 n = 9	<Reagents> [R01] Roche Integra and MIRA [SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Procainamide (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
4.44 ± 0.22 4.5	4.07 ± 0.15 3.9	16.16 ± 1.42 16.8	6.05 ± 0.25 6.3	5.59 ± 0.30 5.8	n = 21	[---] All Methods & Instruments [---] Weigh-in value
4.35 ± 0.19	4.04 ± 0.10	16.65 ± 1.46	6.10 ± 0.18	5.40 ± 0.27	n = 3	<Instruments> [ABB] Abbott AxSym
4.52 ± 0.13	4.13 ± 0.09	15.90 ± 1.67	5.92 ± 0.52	5.50 ± 0.56	n = 5	[OLC] Beckman Coulter AU Chemistry System
4.27 ± 0.23	4.07 ± 0.05	16.86 ± 2.32	6.00 ± 0.00	5.65 ± 0.27	n = 3	[ROC] Roche cobas c501
4.38 ± 0.27	3.98 ± 0.12	16.00 ± 0.54	6.02 ± 0.19	5.52 ± 0.33	n = 6	[ROT] Roche Cobas INTEGRA
4.35 ± 0.19	4.04 ± 0.10	16.65 ± 1.46	6.10 ± 0.18	5.40 ± 0.27	n = 3	<Reagents> [AB1] Abbott
4.27 ± 0.23	4.07 ± 0.05	16.86 ± 2.32	6.00 ± 0.00	5.65 ± 0.27	n = 3	[RO4] Roche cobas c311/c501/c502/c701
4.38 ± 0.27	3.98 ± 0.12	16.00 ± 0.54	6.02 ± 0.19	5.52 ± 0.33	n = 6	[RO1] Roche Integra and MIRA
4.33 ± 0.55	4.09 ± 0.39	16.11 ± 0.81	6.00 ± 0.60	5.46 ± 0.65	n = 4	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

N-Acetyl-Procaïnamide (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
16.44 ± 0.95 16.5	20.53 ± 1.14 20.7	11.76 ± 0.77 11.8	6.14 ± 0.29 6.0	5.60 ± 0.29 5.5	n = 21	[---] All Methods & Instruments [---] Weigh-in value
16.55 ± 0.54	21.88 ± 0.32	12.35 ± 0.27	6.33 ± 0.05	5.77 ± 0.14	n = 3	<Instruments> [ABB] Abbott AxSym
16.62 ± 0.93	20.16 ± 1.84	11.73 ± 0.49	6.19 ± 0.29	5.60 ± 0.36	n = 5	[OLC] Beckman Coulter AU Chemistry System
16.43 ± 0.76	20.09 ± 1.51	11.36 ± 0.98	6.28 ± 0.32	5.47 ± 0.41	n = 3	[ROC] Roche cobas c501
15.53 ± 0.57	19.86 ± 0.56	11.16 ± 0.11	5.94 ± 0.06	5.53 ± 0.11	n = 6	[ROT] Roche Cobas INTEGRA
16.55 ± 0.54	21.88 ± 0.32	12.35 ± 0.27	6.33 ± 0.05	5.77 ± 0.14	n = 3	<Reagents> [AB1] Abbott
16.43 ± 0.76	20.09 ± 1.51	11.36 ± 0.98	6.28 ± 0.32	5.47 ± 0.41	n = 3	[RO4] Roche cobas c311/c501/c502/c701
15.53 ± 0.57	19.86 ± 0.56	11.16 ± 0.11	5.94 ± 0.06	5.53 ± 0.11	n = 6	[RO1] Roche Integra and MIRA
16.96 ± 0.62	20.80 ± 0.76	12.00 ± 0.83	6.15 ± 0.23	5.52 ± 0.27	n = 4	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Quinidine (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
1.33 ± 0.08 1.5	6.19 ± 0.24 6.3	2.01 ± 0.14 2.3	3.69 ± 0.20 3.8	3.37 ± 0.26 3.5	n = 19	[---] All Methods & Instruments [---] Weigh-in value
1.40 ± 0.00	6.40 ± 0.17	2.15 ± 0.06	3.77 ± 0.09	3.43 ± 0.16	n = 4	<Instruments> [ABB] Abbott AxSym
1.29 ± 0.11	5.98 ± 0.26	1.90 ± 0.18	3.44 ± 0.23	3.24 ± 0.45	n = 4	[OLC] Beckman Coulter AU Chemistry System
1.33 ± 0.05	6.23 ± 0.23	1.95 ± 0.06	3.65 ± 0.10	3.28 ± 0.09	n = 6	[ROT] Roche Cobas INTEGRA
1.40 ± 0.00	6.34 ± 0.23	2.12 ± 0.13	3.72 ± 0.21	3.35 ± 0.23	n = 5	<Reagents> [AB1] Abbott
1.27 ± 0.05	6.13 ± 0.14	2.07 ± 0.05	3.87 ± 0.05	3.57 ± 0.05	n = 3	[R04] Roche cobas c311/c501/c502/c701
1.33 ± 0.05	6.23 ± 0.23	1.95 ± 0.06	3.65 ± 0.10	3.28 ± 0.09	n = 6	[R01] Roche Integra and MIRA

Summary of Participant Performance (Mean and Standard Deviation)

Salicylate (mg/dL)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
29.34 ± 1.32 28.5	45.62 ± 1.29 44.4	81.57 ± 3.49 79.9	52.75 ± 1.65 51.4	47.99 ± 1.42 46.7	n = 215	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
28.80 ± 0.41	46.04 ± 0.59	84.25 ± 2.11	53.19 ± 1.02	48.27 ± 0.78	n = 6	[ABJ] Abbott Architect c System
28.52 ± 1.46	44.70 ± 1.47	77.56 ± 3.91	51.74 ± 3.97	46.57 ± 2.37	n = 10	[ABB] Abbott AxSym
31.03 ± 1.80	46.73 ± 2.69	81.93 ± 4.28	55.09 ± 1.55	50.76 ± 2.73	n = 10	[OLC] Beckman Coulter AU Chemistry System
28.15 ± 0.81	46.18 ± 1.14	84.45 ± 1.33	52.27 ± 1.35	47.42 ± 0.94	n = 10	[BCX] Beckman Coulter LX-20
27.96 ± 1.43	45.15 ± 1.68	85.81 ± 4.24	52.23 ± 2.01	47.31 ± 1.96	n = 10	[BCG] Beckman Coulter UniCel DxC 600
28.09 ± 0.63	45.88 ± 1.18	85.60 ± 1.75	52.54 ± 1.09	47.91 ± 0.71	n = 17	[BCH] Beckman Coulter UniCel DxC 800
31.84 ± 1.54	48.68 ± 4.22	85.78 ± 5.00	56.74 ± 2.26	50.47 ± 1.86	n = 3	[JJE] Ortho Vitros 250/350/950
31.47 ± 0.53	46.02 ± 1.04	79.18 ± 3.11	53.42 ± 1.30	49.02 ± 1.19	n = 20	[JJF] Ortho Vitros 5,1FS
31.40 ± 0.52	46.22 ± 0.52	80.21 ± 3.26	53.43 ± 0.77	49.35 ± 0.83	n = 7	[JJG] Ortho Vitros 5600
28.95 ± 0.72	46.67 ± 0.98	83.41 ± 2.39	55.05 ± 1.17	49.94 ± 1.03	n = 8	[ROC] Roche cobas c501
28.08 ± 0.49	43.45 ± 0.86	77.17 ± 1.24	50.38 ± 0.69	46.21 ± 0.71	n = 12	[ROT] Roche Cobas INTEGRA
29.41 ± 0.54	45.14 ± 0.50	79.87 ± 0.78	52.55 ± 0.92	47.45 ± 0.79	n = 11	[ROD] Roche MODULAR D/P
29.87 ± 1.31	46.80 ± 2.40	86.34 ± 3.27	54.38 ± 1.80	49.79 ± 1.85	n = 7	[BYE] Siemens ADVIA 1800
29.85 ± 0.63	47.94 ± 0.62	85.90 ± 2.07	52.14 ± 5.93	48.83 ± 2.12	n = 3	[BYB] Siemens ADVIA 2400
29.77 ± 0.35	45.89 ± 0.33	81.13 ± 0.82	52.61 ± 0.57	48.02 ± 0.40	n = 7	[DUE] Siemens Dimension EXL
29.63 ± 0.37	45.73 ± 0.59	81.27 ± 0.62	52.72 ± 0.55	47.92 ± 0.63	n = 30	[DUR] Siemens Dimension RxL
29.10 ± 0.49	44.94 ± 0.80	79.97 ± 1.16	51.80 ± 0.70	47.32 ± 0.70	n = 27	[DUT] Siemens Dimension Vista
29.53 ± 0.50	45.79 ± 0.68	80.97 ± 0.81	52.73 ± 0.65	48.04 ± 0.51	n = 9	[DUX] Siemens Dimension Xpand
<Reagents>						
28.72 ± 1.04	45.22 ± 1.32	80.20 ± 4.67	52.31 ± 2.96	47.38 ± 1.99	n = 17	[AB1] Abbott
28.02 ± 0.90	45.77 ± 1.30	85.12 ± 2.18	52.44 ± 1.42	47.65 ± 1.06	n = 41	[BC1] Beckman Coulter
30.53 ± 1.29	46.22 ± 2.28	80.05 ± 3.86	54.52 ± 1.78	50.41 ± 2.71	n = 7	[OL1] Beckman Coulter AU Series
31.42 ± 0.54	46.08 ± 1.09	79.91 ± 3.62	53.56 ± 1.33	49.21 ± 1.25	n = 30	[JJ1] Ortho Clinical Diagnostics
28.95 ± 0.72	46.67 ± 0.98	83.41 ± 2.39	55.05 ± 1.17	49.94 ± 1.03	n = 8	[RO4] Roche cobas c311/c501/c502/c701
29.41 ± 0.54	45.14 ± 0.50	79.87 ± 0.78	52.55 ± 0.92	47.45 ± 0.79	n = 11	[RO2] Roche Hitachi and Modular D/P
28.08 ± 0.49	43.45 ± 0.86	77.17 ± 1.24	50.38 ± 0.69	46.21 ± 0.71	n = 12	[RO1] Roche Integra and MIRA
29.93 ± 0.86	47.54 ± 1.84	86.34 ± 2.83	54.75 ± 1.63	49.55 ± 1.78	n = 12	[BY1] Siemens ADVIA/ADVIA Centaur
29.45 ± 0.51	45.50 ± 0.79	80.84 ± 1.02	52.40 ± 0.78	47.75 ± 0.70	n = 71	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Theophylline (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
32.66 ± 2.23 33.2	8.77 ± 0.42 9.0	21.21 ± 1.00 22.0	7.79 ± 0.53 7.7	7.10 ± 0.50 7.0	n = 224	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
32.46 ± 1.16	8.74 ± 0.24	21.09 ± 0.47	7.61 ± 0.27	7.02 ± 0.26	n = 10	[ABB] Abbott AxSym
32.96 ± 2.58	8.68 ± 0.46	21.09 ± 1.37	7.57 ± 0.31	6.98 ± 0.33	n = 12	[OLC] Beckman Coulter AU Chemistry System
33.78 ± 1.52	9.35 ± 0.36	21.46 ± 0.71	9.03 ± 0.60	8.40 ± 1.09	n = 3	[BCS] Beckman Coulter CX
32.26 ± 0.59	8.61 ± 0.21	20.53 ± 0.31	7.79 ± 0.24	7.10 ± 0.17	n = 7	[BCX] Beckman Coulter LX-20
32.62 ± 0.90	8.75 ± 0.24	20.85 ± 0.54	8.04 ± 0.30	7.41 ± 0.31	n = 13	[BCG] Beckman Coulter UniCel DxC 600
32.36 ± 0.64	8.78 ± 0.27	20.66 ± 0.53	8.06 ± 0.27	7.38 ± 0.27	n = 18	[BCH] Beckman Coulter UniCel DxC 800
38.92 ± 1.04	11.24 ± 0.63	28.98 ± 1.05	9.77 ± 0.61	8.91 ± 0.43	n = 18	[JJF] Ortho Vitros 5,1FS
39.23 ± 0.68	11.40 ± 0.20	29.05 ± 0.48	9.85 ± 0.20	9.05 ± 0.35	n = 7	[JJG] Ortho Vitros 5600
32.71 ± 0.61	8.79 ± 0.32	21.18 ± 0.59	7.69 ± 0.30	6.95 ± 0.25	n = 13	[ROC] Roche cobas c501
32.34 ± 0.97	8.87 ± 0.24	21.29 ± 0.76	7.89 ± 0.19	7.19 ± 0.30	n = 12	[ROT] Roche Cobas INTEGRA
32.57 ± 1.36	8.80 ± 0.30	21.46 ± 0.42	7.68 ± 0.20	7.04 ± 0.21	n = 14	[ROD] Roche MODULAR D/P
32.15 ± 0.63	9.15 ± 0.54	21.39 ± 0.61	8.02 ± 0.49	7.37 ± 0.05	n = 3	[BYE] Siemens ADVIA 1800
29.73 ± 1.95	8.31 ± 0.71	20.63 ± 1.60	6.91 ± 0.55	6.18 ± 0.57	n = 16	[COB] Siemens ADVIA Centaur
34.83 ± 0.96	9.18 ± 0.53	22.24 ± 0.74	8.18 ± 0.57	7.15 ± 0.55	n = 4	[DUE] Siemens Dimension EXL
33.53 ± 1.58	9.01 ± 0.37	22.00 ± 0.98	7.87 ± 0.44	7.14 ± 0.30	n = 25	[DUR] Siemens Dimension RxL
31.49 ± 1.45	8.56 ± 0.31	20.88 ± 1.07	7.51 ± 0.33	6.93 ± 0.29	n = 29	[DUT] Siemens Dimension Vista
32.31 ± 1.07	8.97 ± 0.22	22.01 ± 0.16	7.84 ± 0.28	7.10 ± 0.22	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
32.40 ± 1.21	8.75 ± 0.26	21.32 ± 0.61	7.69 ± 0.27	7.02 ± 0.33	n = 14	[AB1] Abbott
32.45 ± 0.77	8.75 ± 0.30	20.70 ± 0.58	8.01 ± 0.33	7.34 ± 0.33	n = 42	[BC1] Beckman Coulter
31.98 ± 2.88	8.55 ± 0.32	20.83 ± 1.61	7.50 ± 0.28	6.83 ± 0.23	n = 7	[OL1] Beckman Coulter AU Series
39.02 ± 0.87	11.27 ± 0.52	28.97 ± 0.85	9.79 ± 0.51	8.96 ± 0.41	n = 25	[JJ1] Ortho Clinical Diagnostics
32.77 ± 0.59	8.78 ± 0.30	21.23 ± 0.59	7.67 ± 0.29	6.94 ± 0.23	n = 14	[RO4] Roche cobas c311/c501/c502/c701
33.15 ± 0.55	8.78 ± 0.04	21.80 ± 0.11	7.70 ± 0.08	7.11 ± 0.11	n = 4	[RO2] Roche Hitachi and Modular D/P
32.34 ± 0.97	8.87 ± 0.24	21.29 ± 0.76	7.89 ± 0.19	7.19 ± 0.30	n = 12	[RO1] Roche Integra and MIRA
32.03 ± 1.46	8.83 ± 0.39	21.27 ± 0.45	7.68 ± 0.26	7.03 ± 0.22	n = 9	[RO6] Roche ONLINE
30.10 ± 2.11	8.38 ± 0.71	20.83 ± 1.65	7.02 ± 0.63	6.28 ± 0.63	n = 18	[BY1] Siemens ADVIA/ADVIA Centaur
31.70 ± 2.36	9.42 ± 0.30	22.29 ± 1.12	8.03 ± 0.36	7.41 ± 0.09	n = 6	[BY5] Siemens ADVIA/Syva Emit 2000
32.57 ± 1.75	8.81 ± 0.39	21.54 ± 1.11	7.71 ± 0.44	7.03 ± 0.32	n = 62	[DA5] Siemens Dimension
34.25 ± 1.35	8.90 ± 0.55	21.30 ± 1.10	7.68 ± 0.33	7.24 ± 0.34	n = 5	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Tobramycin (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
4.87 ± 0.70 4.6	13.05 ± 1.94 13.3	6.87 ± 0.90 6.8	3.37 ± 0.53 3.5	3.07 ± 0.47 3.2	n = 86	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
5.56 ± 0.33	15.26 ± 1.53	7.98 ± 0.55	3.88 ± 0.31	3.52 ± 0.25	n = 10	[ABB] Abbott AxSym
4.56 ± 0.21	12.01 ± 0.83	6.61 ± 0.25	3.00 ± 0.15	2.72 ± 0.17	n = 8	[OLC] Beckman Coulter AU Chemistry System
5.68 ± 0.21	15.08 ± 0.89	7.98 ± 0.15	3.99 ± 0.11	3.57 ± 0.09	n = 4	[BCG] Beckman Coulter UniCel DxC 600
5.83 ± 0.18	15.53 ± 0.49	8.10 ± 0.19	4.12 ± 0.10	3.73 ± 0.12	n = 6	[BCH] Beckman Coulter UniCel DxC 800
4.55 ± 0.19	14.59 ± 0.93	6.58 ± 0.15	3.03 ± 0.05	2.77 ± 0.05	n = 3	[JJF] Ortho Vitros 5,1FS
4.92 ± 0.13	12.67 ± 1.42	6.90 ± 0.17	3.08 ± 0.13	2.98 ± 0.04	n = 4	[ROC] Roche cobas c501
4.32 ± 0.19	12.38 ± 0.83	6.16 ± 0.24	3.08 ± 0.11	2.79 ± 0.11	n = 10	[ROT] Roche Cobas INTEGRA
4.90 ± 0.26	11.72 ± 1.32	6.98 ± 0.04	3.59 ± 0.38	3.11 ± 0.26	n = 5	[ROD] Roche MODULAR D/P
5.53 ± 0.49	15.34 ± 2.30	7.50 ± 0.86	3.99 ± 0.41	3.64 ± 0.49	n = 6	[COB] Siemens ADVIA Centaur
4.72 ± 0.13	12.95 ± 0.32	6.54 ± 0.14	3.34 ± 0.11	3.09 ± 0.14	n = 8	[DUR] Siemens Dimension RxL
4.06 ± 0.23	11.33 ± 0.41	5.95 ± 0.39	2.93 ± 0.19	2.64 ± 0.16	n = 13	[DUT] Siemens Dimension Vista
<Reagents>						
5.56 ± 0.33	15.26 ± 1.53	7.98 ± 0.55	3.88 ± 0.31	3.52 ± 0.25	n = 10	[AB1] Abbott
5.80 ± 0.19	15.46 ± 0.47	8.04 ± 0.16	4.07 ± 0.12	3.71 ± 0.17	n = 12	[BC1] Beckman Coulter
4.43 ± 0.14	11.30 ± 1.17	6.57 ± 0.23	2.93 ± 0.05	2.64 ± 0.10	n = 3	[OL1] Beckman Coulter AU Series
4.98 ± 1.21	11.34 ± 1.39	6.90 ± 1.37	3.69 ± 0.85	3.22 ± 0.69	n = 3	[MG1] Microgenics CEDIA
4.65 ± 0.18	14.10 ± 0.94	6.69 ± 0.17	3.04 ± 0.06	2.80 ± 0.06	n = 5	[JJ1] Ortho Clinical Diagnostics
4.92 ± 0.13	12.67 ± 1.42	6.90 ± 0.17	3.08 ± 0.13	2.98 ± 0.04	n = 4	[RO4] Roche cobas c311/c501/c502/c701
4.32 ± 0.19	12.38 ± 0.83	6.16 ± 0.24	3.08 ± 0.11	2.79 ± 0.11	n = 10	[RO1] Roche Integra and MIRA
4.81 ± 0.11	11.53 ± 1.46	6.98 ± 0.04	3.45 ± 0.28	3.01 ± 0.20	n = 4	[RO6] Roche ONLINE
5.53 ± 0.49	15.34 ± 2.30	7.50 ± 0.86	3.99 ± 0.41	3.64 ± 0.49	n = 6	[BY1] Siemens ADVIA/ADVIA Centaur
4.40 ± 0.40	12.10 ± 0.99	6.27 ± 0.36	3.11 ± 0.29	2.85 ± 0.27	n = 22	[DA5] Siemens Dimension
4.66 ± 0.20	12.26 ± 0.52	6.63 ± 0.26	3.06 ± 0.17	2.79 ± 0.18	n = 5	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Valproic Acid (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
38.32 ± 4.51 37.7	55.12 ± 3.64 53.6	105.20 ± 5.14 105.9	135.36 ± 18.50 138.0	124.05 ± 15.63 125.5	n = 250	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
37.38 ± 2.05	54.27 ± 3.30	105.35 ± 2.62	124.99 ± 2.86	116.15 ± 3.00	n = 3	[ABJ] Abbott Architect c System
57.62 ± 4.77	71.02 ± 6.68	126.19 ± 12.50	183.69 ± 14.18	156.78 ± 19.44	n = 4	[ABH] Abbott Architect i System
37.38 ± 1.98	54.37 ± 2.19	104.89 ± 2.39	140.21 ± 6.90	128.20 ± 4.78	n = 14	[ABB] Abbott AxSym
42.45 ± 2.08	59.23 ± 3.07	112.97 ± 7.48	148.43 ± 7.56	136.82 ± 8.52	n = 23	[OLC] Beckman Coulter AU Chemistry System
25.17 ± 8.96	51.39 ± 5.08	102.44 ± 7.15	88.21 ± 10.52	82.31 ± 6.78	n = 4	[BCS] Beckman Coulter CX
27.71 ± 4.97	52.70 ± 2.15	103.88 ± 3.39	88.59 ± 13.12	87.20 ± 12.06	n = 11	[BCX] Beckman Coulter LX-20
28.42 ± 3.49	53.05 ± 2.10	105.51 ± 3.02	88.70 ± 4.66	85.71 ± 5.60	n = 10	[BCG] Beckman Coulter UniCel Dx C 600
27.28 ± 4.88	53.64 ± 1.91	102.28 ± 3.33	85.86 ± 7.34	83.27 ± 6.57	n = 18	[BCH] Beckman Coulter UniCel Dx C 800
41.21 ± 6.04	57.35 ± 8.29	110.20 ± 8.64	151.55 ± 10.96	137.72 ± 6.11	n = 9	[JJF] Ortho Vitros 5,1FS
38.71 ± 5.84	54.69 ± 6.74	109.58 ± 5.81	146.03 ± 2.64	135.41 ± 3.24	n = 5	[JJG] Ortho Vitros 5600
37.49 ± 0.84	55.01 ± 3.86	106.70 ± 5.35	142.09 ± 5.96	131.33 ± 5.17	n = 15	[ROC] Roche cobas c501
36.71 ± 0.68	52.91 ± 1.74	104.00 ± 3.54	137.43 ± 3.17	125.35 ± 4.02	n = 14	[ROT] Roche Cobas INTEGRA
37.88 ± 2.68	53.71 ± 4.61	106.57 ± 5.23	135.12 ± 6.26	124.16 ± 5.86	n = 15	[ROD] Roche MODULAR D/P
44.11 ± 1.95	64.49 ± 3.14	116.39 ± 5.28	152.50 ± 5.71	138.86 ± 5.09	n = 4	[BYE] Siemens ADVIA 1800
38.46 ± 1.80	53.55 ± 2.27	104.21 ± 3.38	134.19 ± 5.00	123.10 ± 4.90	n = 18	[COB] Siemens ADVIA Centaur
39.39 ± 1.27	54.53 ± 2.23	99.74 ± 4.54	126.03 ± 5.45	115.12 ± 3.85	n = 5	[DUE] Siemens Dimension EXL
39.11 ± 1.59	54.93 ± 1.83	102.67 ± 3.27	132.30 ± 6.65	122.12 ± 4.68	n = 30	[DUR] Siemens Dimension RxL
39.58 ± 1.65	56.31 ± 2.03	104.27 ± 1.82	136.52 ± 5.96	124.45 ± 6.00	n = 28	[DUT] Siemens Dimension Vista
39.08 ± 1.68	55.40 ± 1.56	103.87 ± 3.14	136.47 ± 5.43	123.50 ± 4.34	n = 8	[DUX] Siemens Dimension Xpand
<Reagents>						
37.38 ± 2.00	54.43 ± 2.74	105.44 ± 3.34	140.95 ± 15.00	128.05 ± 8.94	n = 21	[AB1] Abbott
27.86 ± 4.65	53.27 ± 2.12	103.65 ± 3.72	87.06 ± 7.26	84.03 ± 6.94	n = 45	[BC1] Beckman Coulter
42.22 ± 2.09	59.33 ± 3.04	112.89 ± 6.76	148.78 ± 6.50	134.90 ± 7.63	n = 12	[OL1] Beckman Coulter AU Series
40.25 ± 6.17	56.33 ± 7.91	110.05 ± 7.61	148.75 ± 8.46	136.69 ± 5.32	n = 14	[JJ1] Ortho Clinical Diagnostics
37.53 ± 0.80	55.02 ± 3.68	106.86 ± 5.16	142.14 ± 5.63	131.30 ± 4.96	n = 16	[RO4] Roche cobas c311/c501/c502/c701
37.79 ± 1.33	54.21 ± 3.76	109.72 ± 3.88	139.06 ± 3.92	126.12 ± 4.01	n = 4	[RO2] Roche Hitachi and Modular D/P
36.71 ± 0.68	52.91 ± 1.74	104.00 ± 3.54	137.43 ± 3.17	125.35 ± 4.02	n = 14	[RO1] Roche Integra and MIRA
37.72 ± 3.18	53.52 ± 5.00	105.21 ± 5.27	133.31 ± 6.02	123.06 ± 6.56	n = 11	[RO6] Roche ONLINE
38.51 ± 1.84	53.88 ± 2.42	104.68 ± 3.53	134.78 ± 5.52	123.52 ± 5.16	n = 20	[BY1] Siemens ADVIA/ADVIA Centaur
43.50 ± 2.19	62.48 ± 3.52	113.46 ± 5.05	147.18 ± 8.09	134.16 ± 6.10	n = 8	[BY5] Siemens ADVIA/Syva Emit 2000
39.32 ± 1.63	55.50 ± 2.05	103.49 ± 3.03	134.23 ± 6.86	122.76 ± 5.50	n = 70	[DA5] Siemens Dimension
42.80 ± 2.15	59.30 ± 3.29	113.67 ± 7.97	150.46 ± 11.41	140.16 ± 9.79	n = 10	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Vancomycin (mg/L)

Specimen: T51	Specimen: T52	Specimen: T53	Specimen: T54	Specimen: T55	Number	[Code] Instrument or Reagent System
6.90 ± 0.89 7.1	11.53 ± 1.23 11.6	41.80 ± 4.70 44.5	33.02 ± 4.20 34.6	0 0.0	n = 215	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
6.68 ± 0.41	11.00 ± 0.18	44.77 ± 0.76	34.85 ± 1.08	0	n = 3	[ABJ] Abbott Architect c System
7.11 ± 0.11	12.33 ± 0.16	42.00 ± 1.47	33.08 ± 0.88	0	n = 4	[ABH] Abbott Architect i System
7.16 ± 0.84	11.94 ± 0.76	41.79 ± 2.19	32.18 ± 1.45	0	n = 11	[ABB] Abbott AxSym
6.60 ± 0.29	10.96 ± 0.51	38.71 ± 1.50	30.35 ± 1.17	0	n = 12	[OLC] Beckman Coulter AU Chemistry System
7.72 ± 0.37	12.32 ± 1.00	47.00 ± 3.51	38.32 ± 1.53	0	n = 8	[BCX] Beckman Coulter LX-20
7.75 ± 0.73	12.95 ± 0.53	46.38 ± 1.88	37.17 ± 1.20	0	n = 9	[BCG] Beckman Coulter UniCel DxC 600
7.79 ± 0.79	12.59 ± 1.12	47.12 ± 2.01	37.67 ± 1.35	0	n = 16	[BCH] Beckman Coulter UniCel DxC 800
7.13 ± 0.56	11.61 ± 0.71	40.08 ± 1.84	32.66 ± 1.54	0	n = 11	[JJF] Ortho Vitros 5,1FS
7.30 ± 0.55	11.75 ± 0.63	41.15 ± 1.13	33.10 ± 1.31	0	n = 6	[JJG] Ortho Vitros 5600
7.44 ± 0.38	12.85 ± 0.47	46.20 ± 1.72	37.03 ± 0.84	0	n = 10	[ROC] Roche cobas c501
7.25 ± 0.40	12.07 ± 0.32	45.05 ± 1.25	35.74 ± 1.05	0	n = 15	[ROT] Roche Cobas INTEGRA
7.95 ± 0.51	13.24 ± 0.68	48.55 ± 1.94	39.08 ± 2.03	0	n = 12	[ROD] Roche MODULAR D/P
6.41 ± 0.20	10.90 ± 0.64	36.77 ± 1.13	30.67 ± 2.04	0	n = 3	[BYE] Siemens ADVIA 1800
5.21 ± 0.51	9.05 ± 0.63	34.91 ± 1.80	25.58 ± 1.64	0	n = 21	[COB] Siemens ADVIA Centaur
6.47 ± 0.52	11.05 ± 0.12	39.66 ± 1.34	31.26 ± 0.84	0	n = 5	[DUE] Siemens Dimension EXL
6.59 ± 0.44	11.09 ± 0.41	40.62 ± 1.18	31.81 ± 0.92	0	n = 24	[DUR] Siemens Dimension RxL
6.58 ± 0.37	11.06 ± 0.53	39.24 ± 2.08	30.88 ± 1.47	0	n = 28	[DUT] Siemens Dimension Vista
6.52 ± 0.32	11.05 ± 0.72	40.31 ± 1.07	31.25 ± 0.69	0	n = 8	[DUX] Siemens Dimension Xpand
<Reagents>						
7.04 ± 0.52	11.88 ± 0.76	42.39 ± 2.22	32.85 ± 1.63	0	n = 18	[AB1] Abbott
7.74 ± 0.65	12.53 ± 1.00	46.92 ± 2.21	37.58 ± 1.46	0	n = 35	[BC1] Beckman Coulter
6.51 ± 0.25	10.94 ± 0.48	38.95 ± 1.23	30.69 ± 0.96	0	n = 6	[OL1] Beckman Coulter AU Series
7.19 ± 0.56	11.66 ± 0.68	40.54 ± 1.66	32.82 ± 1.48	0	n = 17	[JJ1] Ortho Clinical Diagnostics
7.47 ± 0.37	12.83 ± 0.44	46.04 ± 1.45	37.12 ± 0.83	0	n = 11	[RO4] Roche cobas c311/c501/c502/c701
7.77 ± 0.26	13.11 ± 0.41	48.27 ± 1.29	38.80 ± 1.64	0	n = 5	[RO2] Roche Hitachi and Modular D/P
7.25 ± 0.40	12.07 ± 0.32	45.05 ± 1.25	35.74 ± 1.05	0	n = 15	[RO1] Roche Integra and MIRA
8.15 ± 0.64	13.42 ± 0.83	48.89 ± 2.35	39.36 ± 2.25	0	n = 7	[RO6] Roche ONLINE
5.23 ± 0.49	9.03 ± 0.59	34.82 ± 1.74	25.57 ± 1.56	0	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
6.28 ± 0.30	10.65 ± 0.67	36.68 ± 1.53	29.57 ± 1.93	0	n = 6	[BY5] Siemens ADVIA/Syva Emit 2000
6.56 ± 0.39	11.07 ± 0.50	40.02 ± 1.60	31.34 ± 1.20	0	n = 64	[DA5] Siemens Dimension
6.69 ± 0.30	10.97 ± 0.53	38.42 ± 1.65	29.86 ± 1.43	0	n = 6	[SY4] Syva Emit 2000

* Sample T55 was prepared without addition of Vancomycin, thus a target value of 0.0 mg/L was assigned for all instruments and reagents. Please note that participant statistics are not listed for sample T55, as most laboratories reported Vancomycin results for that sample as less than (<) the lower limit of detection and an appropriate mean and SD could not be calculated.