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Therapeutic Substance Monitoring / Quantitative Toxicology Proficiency Test Program

Statistical Summary - May 2014 (Event 14-2)

This statistical report summarizes participant data for the five Therapeutic Substance Monitoring proficiency survey specimens shipped 5 May 2014. Test samples (Vials T01, T02, T03, T04, T05) 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: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
78.36 ± 8.72 76.0	153.22 ± 14.41 151.1	29.92 ± 4.63 28.9	102.98 ± 10.53 100.4	69.36 ± 7.53 67.0	n = 214	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
71.89 ± 1.02	143.09 ± 1.63	26.97 ± 0.68	94.94 ± 1.31	63.84 ± 0.94	n = 16	[ABJ] Abbott Architect c System
75.32 ± 4.23	146.93 ± 8.25	28.70 ± 1.48	99.51 ± 7.24	66.74 ± 4.27	n = 26	[OLC] Beckman Coulter AU Chemistry System
78.65 ± 3.16	154.81 ± 5.21	28.87 ± 1.14	107.25 ± 4.13	71.06 ± 0.11	n = 9	[BCG] Beckman Coulter UniCel DxC 600
79.82 ± 4.56	158.99 ± 6.93	29.44 ± 1.87	109.76 ± 5.47	74.91 ± 3.79	n = 7	[BCH] Beckman Coulter UniCel DxC 800
85.90 ± 0.96	169.66 ± 1.38	31.00 ± 0.00	112.93 ± 1.14	74.30 ± 0.76	n = 10	[JJF] Ortho Vitros 5,1FS
86.06 ± 0.63	168.34 ± 1.87	31.00 ± 0.55	111.91 ± 1.24	74.52 ± 1.24	n = 18	[JJG] Ortho Vitros 5600
64.15 ± 1.53	133.69 ± 3.64	20.35 ± 0.55	86.50 ± 2.15	55.39 ± 1.70	n = 20	[ROC] Roche cobas c501
65.97 ± 2.63	134.05 ± 1.04	26.15 ± 0.77	89.02 ± 4.48	59.36 ± 4.10	n = 8	[ROT] Roche Cobas INTEGRA 800
62.31 ± 3.29	127.61 ± 3.56	22.46 ± 2.05	82.10 ± 1.85	52.85 ± 1.84	n = 10	[ROD] Roche MODULAR D/P
73.43 ± 1.95	144.93 ± 4.98	28.26 ± 0.77	96.71 ± 3.36	65.86 ± 1.88	n = 10	[BYE] Siemens ADVIA 1800
83.39 ± 1.51	160.23 ± 2.40	34.08 ± 1.10	107.34 ± 1.67	73.02 ± 1.05	n = 15	[DUE] Siemens Dimension EXL
84.39 ± 1.61	161.29 ± 3.23	34.20 ± 0.78	109.24 ± 1.89	74.30 ± 1.69	n = 8	[DUR] Siemens Dimension RxL
84.13 ± 1.49	161.01 ± 2.11	34.34 ± 1.04	108.87 ± 1.44	74.23 ± 1.21	n = 39	[DUT] Siemens Dimension Vista
83.03 ± 1.50	159.09 ± 3.42	33.27 ± 1.05	106.88 ± 2.06	72.12 ± 1.40	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
71.91 ± 0.96	143.09 ± 1.57	27.04 ± 0.73	95.03 ± 1.29	63.85 ± 0.90	n = 17	[AB1] Abbott
78.53 ± 3.88	155.44 ± 6.27	28.89 ± 1.36	106.70 ± 5.99	71.81 ± 3.80	n = 19	[BC1] Beckman Coulter
75.20 ± 3.54	146.10 ± 10.54	28.45 ± 1.64	98.57 ± 7.06	66.86 ± 4.14	n = 17	[OL1] Beckman Coulter AU Series
86.11 ± 0.98	169.04 ± 1.79	31.03 ± 0.46	112.51 ± 1.53	74.58 ± 1.14	n = 31	[JJ1] Ortho Clinical Diagnostics
64.37 ± 1.45	133.99 ± 2.96	20.43 ± 0.64	86.76 ± 2.02	55.65 ± 1.67	n = 22	[R04] Roche cobas c311/c501/c502/c701/c702
61.44 ± 1.51	127.02 ± 2.91	21.88 ± 1.04	82.09 ± 1.83	52.83 ± 1.78	n = 8	[R02] Roche Hitachi and Modular D/P
65.59 ± 1.89	134.05 ± 1.03	25.95 ± 0.62	87.82 ± 2.68	58.35 ± 0.51	n = 6	[R01] Roche Integra and MIRA
73.43 ± 1.95	144.61 ± 4.73	28.18 ± 0.75	96.47 ± 2.97	65.75 ± 1.83	n = 10	[BY1] Siemens ADVIA/ADVIA Centaur
83.90 ± 1.58	160.76 ± 2.46	34.18 ± 1.08	108.44 ± 1.84	73.78 ± 1.44	n = 69	[DA5] Siemens Dimension
69.16 ± 1.54	131.11 ± 10.67	27.00 ± 0.90	95.35 ± 3.37	63.00 ± 1.80	n = 3	[SY2] Syva Emit
76.62 ± 6.05	154.57 ± 11.04	29.07 ± 1.77	101.83 ± 6.48	68.50 ± 2.19	n = 5	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Carbamazepine (mg/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
4.04 ± 0.54 4.2	13.95 ± 1.24 14.4	6.23 ± 0.63 6.8	11.41 ± 1.09 12.0	7.70 ± 0.74 8.0	n = 223	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
4.42 ± 0.19	14.41 ± 0.56	6.75 ± 0.11	11.88 ± 0.53	8.31 ± 0.25	n = 13	[ABJ] Abbott Architect c System
3.82 ± 0.27	13.52 ± 0.93	6.20 ± 0.35	10.94 ± 0.61	7.39 ± 0.47	n = 8	[ABH] Abbott Architect i System
4.28 ± 0.32	14.65 ± 0.76	6.55 ± 0.34	11.91 ± 0.71	7.96 ± 0.38	n = 23	[OLC] Beckman Coulter AU Chemistry System
3.69 ± 0.21	13.89 ± 0.18	5.91 ± 0.24	11.31 ± 0.25	7.66 ± 0.30	n = 9	[BCG] Beckman Coulter UniCel DxC 600
3.80 ± 0.14	14.06 ± 0.51	6.16 ± 0.19	11.60 ± 0.39	7.72 ± 0.35	n = 7	[BCH] Beckman Coulter UniCel DxC 800
3.00 ± 0.00	11.02 ± 0.61	4.57 ± 0.26	8.47 ± 0.54	5.83 ± 0.36	n = 9	[JJF] Ortho Vitros 5,1FS
3.08 ± 0.14	11.40 ± 0.68	4.70 ± 0.36	8.93 ± 0.45	6.12 ± 0.47	n = 18	[JJG] Ortho Vitros 5600
4.47 ± 0.42	14.55 ± 0.58	6.44 ± 0.43	11.88 ± 0.60	8.05 ± 0.43	n = 19	[ROC] Roche cobas c501
4.16 ± 0.10	14.93 ± 0.66	6.28 ± 0.12	11.51 ± 0.43	7.62 ± 0.18	n = 10	[ROT] Roche Cobas INTEGRA 800
4.88 ± 0.29	14.90 ± 0.40	6.90 ± 0.18	12.57 ± 0.39	8.57 ± 0.31	n = 10	[ROD] Roche MODULAR D/P
3.99 ± 0.83	14.11 ± 1.17	6.51 ± 0.75	11.50 ± 1.14	7.97 ± 0.75	n = 8	[BYE] Siemens ADVIA 1800
4.53 ± 0.29	15.69 ± 1.03	6.92 ± 0.56	12.81 ± 0.77	8.61 ± 0.56	n = 13	[COB] Siemens ADVIA Centaur
4.70 ± 0.53	15.91 ± 1.47	7.10 ± 0.62	12.91 ± 0.91	8.90 ± 0.91	n = 4	[BYP] Siemens ADVIA Centaur CP
3.96 ± 0.14	13.79 ± 0.16	6.11 ± 0.15	11.39 ± 0.22	7.75 ± 0.19	n = 9	[DUE] Siemens Dimension EXL
3.93 ± 0.12	13.83 ± 0.46	6.16 ± 0.16	11.32 ± 0.33	7.50 ± 0.18	n = 8	[DUR] Siemens Dimension RxL
3.95 ± 0.19	13.42 ± 0.48	6.03 ± 0.25	11.06 ± 0.47	7.47 ± 0.30	n = 40	[DUT] Siemens Dimension Vista
4.00 ± 0.08	13.75 ± 0.38	6.15 ± 0.23	11.25 ± 0.23	7.52 ± 0.15	n = 4	[DUX] Siemens Dimension Xpand
<Reagents>						
4.22 ± 0.37	14.15 ± 0.85	6.60 ± 0.36	11.56 ± 0.72	8.03 ± 0.55	n = 21	[AB1] Abbott
3.76 ± 0.19	13.96 ± 0.51	6.03 ± 0.30	11.45 ± 0.47	7.70 ± 0.33	n = 19	[BC1] Beckman Coulter
4.12 ± 0.27	14.46 ± 0.51	6.40 ± 0.35	11.57 ± 0.84	7.77 ± 0.45	n = 9	[OL1] Beckman Coulter AU Series
4.72 ± 0.34	14.66 ± 0.39	6.70 ± 0.25	12.22 ± 0.38	8.39 ± 0.49	n = 8	[MG1] Microgenics CEDIA
3.00 ± 0.00	11.28 ± 0.72	4.66 ± 0.34	8.77 ± 0.59	6.02 ± 0.47	n = 27	[JJ1] Ortho Clinical Diagnostics
4.43 ± 0.41	14.53 ± 0.65	6.42 ± 0.48	11.87 ± 0.63	8.03 ± 0.49	n = 22	[R04] Roche cobas c311/c501/c502/c701/c702
4.87 ± 0.25	14.86 ± 0.32	6.89 ± 0.15	12.58 ± 0.34	8.54 ± 0.27	n = 8	[R02] Roche Hitachi and Modular D/P
4.16 ± 0.10	14.77 ± 0.71	6.27 ± 0.11	11.46 ± 0.36	7.60 ± 0.17	n = 12	[R01] Roche Integra and MIRA
4.56 ± 0.36	15.78 ± 1.22	6.96 ± 0.57	12.83 ± 0.81	8.64 ± 0.61	n = 17	[BY1] Siemens ADVIA/ADVIA Centaur
3.95 ± 0.78	14.36 ± 1.21	6.46 ± 0.73	11.13 ± 0.62	7.83 ± 0.71	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
3.95 ± 0.16	13.57 ± 0.47	6.07 ± 0.22	11.19 ± 0.40	7.52 ± 0.28	n = 61	[DA5] Siemens Dimension
4.21 ± 0.20	14.22 ± 0.97	6.58 ± 0.37	11.95 ± 0.74	8.00 ± 0.16	n = 6	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Digoxin (µg/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
0.701 ± 0.090 0.7	1.314 ± 0.112 1.3	1.017 ± 0.111 1.0	2.412 ± 0.160 2.4	1.635 ± 0.122 1.6	n = 272	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
0.705 ± 0.051	1.357 ± 0.055	1.068 ± 0.038	2.499 ± 0.035	1.702 ± 0.004	n = 5	[ABJ] Abbott Architect c System
0.619 ± 0.032	1.186 ± 0.028	0.881 ± 0.048	2.249 ± 0.064	1.500 ± 0.000	n = 17	[ABH] Abbott Architect i System
0.798 ± 0.036	1.446 ± 0.050	1.105 ± 0.063	2.566 ± 0.092	1.783 ± 0.019	n = 6	[SAA] Beckman Coulter ACCESS
0.667 ± 0.109	1.238 ± 0.099	0.945 ± 0.085	2.275 ± 0.143	1.531 ± 0.101	n = 27	[OLC] Beckman Coulter AU Chemistry System
0.645 ± 0.068	1.252 ± 0.085	0.967 ± 0.088	2.327 ± 0.140	1.596 ± 0.073	n = 10	[BCG] Beckman Coulter UniCel Dx C 600
0.659 ± 0.056	1.300 ± 0.000	1.000 ± 0.000	2.339 ± 0.134	1.581 ± 0.086	n = 7	[BCH] Beckman Coulter UniCel Dx C 800
0.813 ± 0.014	1.516 ± 0.108	1.145 ± 0.054	2.639 ± 0.124	1.770 ± 0.092	n = 3	[BCU] Beckman Coulter UniCel Dx I 800
0.660 ± 0.113	1.269 ± 0.103	0.878 ± 0.101	2.322 ± 0.092	1.559 ± 0.084	n = 11	[JJF] Ortho Vitros 5,1FS
0.649 ± 0.088	1.273 ± 0.099	0.916 ± 0.100	2.302 ± 0.118	1.566 ± 0.083	n = 19	[JJG] Ortho Vitros 5600
0.692 ± 0.077	1.325 ± 0.054	1.025 ± 0.054	2.305 ± 0.045	1.580 ± 0.064	n = 3	[ROJ] Roche cobas c311
0.688 ± 0.051	1.254 ± 0.068	0.978 ± 0.053	2.347 ± 0.109	1.596 ± 0.074	n = 20	[ROC] Roche cobas c501
0.798 ± 0.004	1.465 ± 0.039	1.115 ± 0.052	2.883 ± 0.068	1.848 ± 0.070	n = 5	[ROA] Roche cobas e601
0.738 ± 0.099	1.298 ± 0.122	0.975 ± 0.160	2.469 ± 0.123	1.670 ± 0.105	n = 5	[ROT] Roche Cobas INTEGRA 800
0.736 ± 0.067	1.331 ± 0.116	1.057 ± 0.101	2.374 ± 0.100	1.654 ± 0.111	n = 12	[ROD] Roche MODULAR D/P
0.552 ± 0.094	1.324 ± 0.082	0.952 ± 0.113	2.455 ± 0.081	1.687 ± 0.087	n = 9	[BYE] Siemens ADVIA 1800
0.797 ± 0.064	1.469 ± 0.077	1.167 ± 0.080	2.577 ± 0.105	1.795 ± 0.077	n = 20	[COB] Siemens ADVIA Centaur
0.747 ± 0.083	1.390 ± 0.060	1.144 ± 0.050	2.608 ± 0.106	1.719 ± 0.170	n = 5	[BYP] Siemens ADVIA Centaur CP
0.788 ± 0.040	1.380 ± 0.063	1.068 ± 0.060	2.544 ± 0.098	1.733 ± 0.067	n = 16	[DUE] Siemens Dimension EXL
0.730 ± 0.073	1.391 ± 0.070	1.069 ± 0.049	2.528 ± 0.098	1.731 ± 0.085	n = 10	[DUR] Siemens Dimension RxL
0.689 ± 0.019	1.288 ± 0.026	1.038 ± 0.036	2.418 ± 0.047	1.606 ± 0.023	n = 42	[DUT] Siemens Dimension Vista
0.751 ± 0.067	1.339 ± 0.064	1.084 ± 0.062	2.497 ± 0.116	1.693 ± 0.082	n = 7	[DUX] Siemens Dimension Xpand
0.693 ± 0.088	1.337 ± 0.111	1.013 ± 0.084	2.528 ± 0.256	1.676 ± 0.135	n = 4	[DPD] Siemens Immulite 2000
<Reagents>						
0.636 ± 0.048	1.222 ± 0.100	0.924 ± 0.100	2.313 ± 0.130	1.550 ± 0.097	n = 22	[AB1] Abbott
0.716 ± 0.100	1.338 ± 0.126	1.025 ± 0.103	2.421 ± 0.181	1.652 ± 0.132	n = 29	[BC1] Beckman Coulter
0.688 ± 0.123	1.252 ± 0.102	0.963 ± 0.067	2.268 ± 0.170	1.553 ± 0.104	n = 16	[OL1] Beckman Coulter AU Series
0.600 ± 0.000	1.163 ± 0.055	0.837 ± 0.055	2.200 ± 0.000	1.500 ± 0.000	n = 5	[MG2] Microgenics DRI
0.650 ± 0.097	1.273 ± 0.098	0.901 ± 0.101	2.306 ± 0.104	1.563 ± 0.082	n = 31	[JJ1] Ortho Clinical Diagnostics
0.690 ± 0.055	1.267 ± 0.071	0.989 ± 0.058	2.344 ± 0.108	1.595 ± 0.080	n = 25	[R04] Roche cobas c311/c501/c502/c701/c702
0.782 ± 0.038	1.482 ± 0.055	1.150 ± 0.081	2.915 ± 0.104	1.895 ± 0.096	n = 7	[R03] Roche Elecsys/Modular E/e601/e411
0.728 ± 0.051	1.293 ± 0.118	1.034 ± 0.075	2.401 ± 0.021	1.633 ± 0.095	n = 6	[R02] Roche Hitachi and Modular D/P
0.769 ± 0.114	1.322 ± 0.124	1.002 ± 0.155	2.437 ± 0.130	1.661 ± 0.095	n = 6	[R01] Roche Integra and MIRA
0.722 ± 0.086	1.385 ± 0.041	1.063 ± 0.112	2.340 ± 0.136	1.608 ± 0.222	n = 5	[R05] Roche Tina-quant
0.747 ± 0.123	1.421 ± 0.101	1.123 ± 0.121	2.546 ± 0.116	1.760 ± 0.111	n = 33	[BY1] Siemens ADVIA/ADVIA Centaur
0.741 ± 0.070	1.347 ± 0.080	1.058 ± 0.054	2.497 ± 0.112	1.694 ± 0.092	n = 43	[DA5] Siemens Dimension
0.691 ± 0.017	1.294 ± 0.020	1.043 ± 0.040	2.425 ± 0.041	1.606 ± 0.022	n = 32	[DA6] Siemens Dimension LOCI
0.670 ± 0.087	1.389 ± 0.151	1.036 ± 0.087	2.576 ± 0.233	1.684 ± 0.118	n = 5	[DP5] Siemens Immulite
0.683 ± 0.045	1.250 ± 0.088	0.999 ± 0.056	2.341 ± 0.054	1.521 ± 0.081	n = 4	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Ethanol (mg/dL)

Specimen: T01 -----	Specimen: T02 -----	Specimen: T03 -----	Specimen: T04 -----	Specimen: T05 -----	Number -----	[Code] Instrument or Reagent System -----
105.63 ± 4.41 103.1	210.15 ± 7.92 209.6	139.92 ± 5.72 134.9	152.51 ± 5.80 157.7	103.09 ± 4.08 105.1	n = 218	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
105.09 ± 3.14	206.68 ± 6.10	139.27 ± 4.89	150.51 ± 4.88	102.40 ± 2.79	n = 15	[ABJ] Abbott Architect c System
107.74 ± 4.08	212.24 ± 6.35	141.01 ± 4.71	153.58 ± 5.46	103.84 ± 3.57	n = 21	[OLC] Beckman Coulter AU Chemistry System
105.72 ± 3.88	209.03 ± 5.84	140.01 ± 4.30	152.43 ± 5.88	102.45 ± 4.44	n = 10	[BCG] Beckman Coulter UniCel DxC 600
108.06 ± 2.64	211.72 ± 5.29	140.79 ± 4.52	152.83 ± 5.09	103.97 ± 3.52	n = 6	[BCH] Beckman Coulter UniCel DxC 800
104.18 ± 3.35	210.14 ± 6.15	139.63 ± 4.40	149.19 ± 7.67	102.40 ± 4.07	n = 10	[GCC] Gas Chromatograph
98.85 ± 3.35	195.98 ± 8.16	128.69 ± 4.29	146.20 ± 5.77	99.20 ± 2.47	n = 10	[JJF] Ortho Vitros 5,1FS
101.27 ± 3.33	201.26 ± 9.51	132.51 ± 4.81	149.60 ± 5.76	100.58 ± 3.35	n = 18	[JJG] Ortho Vitros 5600
107.18 ± 3.29	212.90 ± 6.23	142.45 ± 4.50	153.90 ± 4.89	104.07 ± 3.30	n = 20	[ROC] Roche cobas c501
105.86 ± 1.95	207.76 ± 4.03	140.41 ± 2.84	151.91 ± 3.10	102.92 ± 2.33	n = 6	[ROT] Roche Cobas INTEGRA 800
108.63 ± 2.46	214.97 ± 4.89	143.54 ± 3.50	156.32 ± 4.72	106.71 ± 4.49	n = 11	[ROD] Roche MODULAR D/P
109.21 ± 2.25	216.99 ± 3.18	144.36 ± 2.05	157.85 ± 2.72	106.44 ± 2.06	n = 11	[BYE] Siemens ADVIA 1800
105.42 ± 3.96	209.65 ± 8.33	139.55 ± 5.15	152.08 ± 6.51	103.37 ± 4.70	n = 15	[DUE] Siemens Dimension EXL
105.01 ± 4.60	211.51 ± 5.20	141.03 ± 5.08	151.33 ± 5.97	102.63 ± 4.79	n = 8	[DUR] Siemens Dimension RxL
105.03 ± 3.61	211.12 ± 6.52	140.25 ± 4.34	152.99 ± 4.39	102.96 ± 4.00	n = 39	[DUT] Siemens Dimension Vista
107.39 ± 3.17	210.10 ± 4.92	140.45 ± 4.75	153.24 ± 5.90	103.63 ± 2.69	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
105.21 ± 3.01	206.97 ± 5.94	139.31 ± 4.65	150.56 ± 4.68	102.38 ± 2.68	n = 16	[AB1] Abbott
106.38 ± 3.64	209.94 ± 5.70	140.19 ± 4.02	152.62 ± 5.06	102.72 ± 3.87	n = 19	[BC1] Beckman Coulter
109.00 ± 3.45	214.29 ± 5.70	142.64 ± 4.28	155.21 ± 4.95	105.17 ± 3.54	n = 15	[OL1] Beckman Coulter AU Series
103.85 ± 3.62	209.43 ± 6.60	139.03 ± 5.01	148.25 ± 7.89	102.13 ± 4.44	n = 9	[IH1] In-House
100.06 ± 3.56	198.80 ± 9.27	130.65 ± 5.06	147.92 ± 5.97	99.84 ± 3.08	n = 31	[JJ1] Ortho Clinical Diagnostics
106.82 ± 3.17	212.00 ± 6.17	141.72 ± 4.63	153.32 ± 4.81	103.68 ± 3.15	n = 23	[R04] Roche cobas c311/c501/c502/c701/c702
108.63 ± 2.46	214.97 ± 4.89	143.54 ± 3.50	156.32 ± 4.72	106.71 ± 4.49	n = 11	[R02] Roche Hitachi and Modular D/P
105.86 ± 1.95	207.76 ± 4.03	140.41 ± 2.84	151.91 ± 3.10	102.92 ± 2.33	n = 6	[R01] Roche Integra and MIRA
108.53 ± 1.47	215.54 ± 2.90	143.85 ± 1.26	157.09 ± 2.21	105.97 ± 0.90	n = 7	[BY1] Siemens ADVIA/ADVIA Centaur
112.15 ± 3.99	219.09 ± 2.01	147.56 ± 4.33	160.55 ± 5.11	109.07 ± 3.70	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
105.42 ± 3.88	210.94 ± 6.74	140.24 ± 4.64	152.68 ± 5.33	103.15 ± 4.24	n = 69	[DA5] Siemens Dimension
100.21 ± 3.97	206.44 ± 1.02	135.92 ± 1.04	148.23 ± 1.98	100.90 ± 0.91	n = 3	[SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Ethosuximide (mg/L)

Specimen: T01 -----	Specimen: T02 -----	Specimen: T03 -----	Specimen: T04 -----	Specimen: T05 -----	Number -----	[Code] Instrument or Reagent System -----
37.23 ± 2.38 35.9	58.49 ± 1.94 57.6	76.47 ± 5.90 74.6	161.13 ± 18.95 159.8	108.86 ± 9.49 106.5	n = 7	[---] All Methods & Instruments [---] Weigh-in value
38.25 ± 1.99	60.99 ± 3.31	79.38 ± 5.47	175.06 ± 19.46	115.50 ± 4.72	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
37.76 ± 1.83	59.23 ± 3.18	76.58 ± 6.51	164.53 ± 21.03	110.77 ± 9.09	n = 6	<Reagents> [SY2] Syva Emit

Summary of Participant Performance (Mean and Standard Deviation)

Gentamicin (mg/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
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4.12 ± 0.37 3.9	4.45 ± 0.38 4.1	7.57 ± 0.70 7.3	12.96 ± 1.45 12.6	8.87 ± 0.79 8.4	n = 167	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
3.62 ± 0.04	3.98 ± 0.20	6.78 ± 0.21	11.89 ± 0.44	7.90 ± 0.18	n = 4	[ABJ] Abbott Architect c System
4.16 ± 0.16	4.54 ± 0.12	7.93 ± 0.21	13.07 ± 0.55	9.15 ± 0.39	n = 11	[ABH] Abbott Architect i System
4.52 ± 0.23	4.87 ± 0.19	8.32 ± 0.41	14.26 ± 1.15	9.68 ± 0.87	n = 15	[OLC] Beckman Coulter AU Chemistry System
4.33 ± 0.19	4.68 ± 0.16	8.38 ± 0.44	13.77 ± 1.09	9.66 ± 0.33	n = 6	[BCG] Beckman Coulter UniCel DxC 600
4.46 ± 0.11	4.77 ± 0.13	8.22 ± 0.19	13.78 ± 0.68	9.60 ± 0.26	n = 7	[BCH] Beckman Coulter UniCel DxC 800
4.68 ± 0.30	5.03 ± 0.39	8.19 ± 0.70	15.62 ± 1.07	9.96 ± 1.34	n = 7	[JJF] Ortho Vitros 5,1FS
4.65 ± 0.11	5.05 ± 0.14	8.34 ± 0.41	15.15 ± 0.73	9.77 ± 0.26	n = 13	[JJG] Ortho Vitros 5600
3.64 ± 0.23	3.92 ± 0.23	6.80 ± 0.32	11.25 ± 1.57	7.95 ± 0.31	n = 11	[ROC] Roche cobas c501
3.80 ± 0.00	4.10 ± 0.09	6.67 ± 0.05	15.17 ± 6.71	7.88 ± 0.24	n = 3	[ROS] Roche Cobas INTEGRA 400
3.97 ± 0.10	4.23 ± 0.07	7.05 ± 0.34	11.74 ± 0.26	8.46 ± 0.68	n = 12	[ROT] Roche Cobas INTEGRA 800
4.05 ± 0.06	4.34 ± 0.15	7.20 ± 0.18	12.06 ± 0.64	8.39 ± 0.21	n = 8	[ROD] Roche MODULAR D/P
4.04 ± 0.32	4.31 ± 0.31	7.71 ± 0.90	13.66 ± 1.45	9.08 ± 0.99	n = 13	[COB] Siemens ADVIA Centaur
4.10 ± 0.08	4.35 ± 0.12	7.42 ± 0.13	13.01 ± 0.35	8.73 ± 0.16	n = 4	[DUE] Siemens Dimension EXL
3.93 ± 0.18	4.34 ± 0.14	7.29 ± 0.33	12.86 ± 0.23	8.59 ± 0.39	n = 5	[DUR] Siemens Dimension RxL
3.93 ± 0.18	4.27 ± 0.17	7.26 ± 0.30	12.38 ± 0.64	8.61 ± 0.26	n = 41	[DUT] Siemens Dimension Vista
<Reagents>						
4.04 ± 0.29	4.41 ± 0.28	7.67 ± 0.55	12.68 ± 0.92	8.86 ± 0.70	n = 15	[AB1] Abbott
4.45 ± 0.15	4.76 ± 0.15	8.22 ± 0.27	13.96 ± 0.89	9.59 ± 0.33	n = 16	[BC1] Beckman Coulter
4.47 ± 0.29	4.82 ± 0.22	8.55 ± 0.40	14.30 ± 1.28	10.31 ± 1.19	n = 7	[OL1] Beckman Coulter AU Series
4.66 ± 0.19	5.05 ± 0.22	8.30 ± 0.50	15.28 ± 0.87	9.85 ± 0.75	n = 20	[JJ1] Ortho Clinical Diagnostics
3.76 ± 0.29	4.05 ± 0.45	7.09 ± 0.64	11.79 ± 1.88	8.21 ± 0.42	n = 7	[R04] Roche cobas c311/c501/c502/c701/c702
4.02 ± 0.08	4.25 ± 0.29	7.13 ± 0.30	11.75 ± 0.98	8.22 ± 0.28	n = 6	[R02] Roche Hitachi and Modular D/P
3.93 ± 0.12	4.21 ± 0.09	6.95 ± 0.35	11.69 ± 0.26	8.30 ± 0.63	n = 15	[R01] Roche Integra and MIRA
4.05 ± 0.31	4.36 ± 0.36	7.79 ± 0.91	13.59 ± 1.40	9.08 ± 0.95	n = 14	[BY1] Siemens ADVIA/ADVIA Centaur
4.30 ± 0.18	4.52 ± 0.32	7.15 ± 0.27	12.46 ± 0.39	8.35 ± 1.18	n = 3	[BY5] Siemens ADVIA/Syva Emit 2000
3.95 ± 0.18	4.29 ± 0.16	7.29 ± 0.30	12.52 ± 0.63	8.62 ± 0.27	n = 51	[DA5] Siemens Dimension
4.53 ± 0.19	4.90 ± 0.20	8.17 ± 0.40	13.96 ± 1.16	9.49 ± 0.58	n = 6	[SY4] Syva Emit 2000
3.58 ± 0.20	3.98 ± 0.13	6.85 ± 0.22	11.44 ± 1.18	7.88 ± 0.15	n = 4	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Lithium (mmol/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
0.409 ± 0.040 0.4	0.663 ± 0.051 0.7	1.007 ± 0.062 1.0	2.051 ± 0.092 2.2	1.393 ± 0.059 1.5	n = 198	[---] All Methods & Instruments [---] Weigh-in value
						<Instruments>
0.416 ± 0.028	0.674 ± 0.036	1.007 ± 0.045	2.006 ± 0.071	1.382 ± 0.058	n = 14	[ABJ] Abbott Architect c System
0.400 ± 0.004	0.652 ± 0.050	0.997 ± 0.017	2.007 ± 0.025	1.380 ± 0.056	n = 18	[OLC] Beckman Coulter AU Chemistry System
0.394 ± 0.020	0.641 ± 0.039	0.962 ± 0.042	2.024 ± 0.041	1.387 ± 0.031	n = 8	[BCG] Beckman Coulter UniCel DxC 600
0.376 ± 0.038	0.606 ± 0.010	0.973 ± 0.034	1.998 ± 0.049	1.367 ± 0.048	n = 7	[BCH] Beckman Coulter UniCel DxC 800
0.455 ± 0.045	0.690 ± 0.046	1.079 ± 0.092	2.174 ± 0.137	1.463 ± 0.122	n = 3	[ICP] ICP/MS
0.400 ± 0.000	0.687 ± 0.050	1.086 ± 0.052	2.124 ± 0.096	1.439 ± 0.065	n = 10	[JJF] Ortho Vitros 5,1FS
0.403 ± 0.054	0.688 ± 0.042	1.058 ± 0.060	2.176 ± 0.077	1.452 ± 0.071	n = 19	[JJG] Ortho Vitros 5600
0.623 ± 0.225	0.692 ± 0.015	1.040 ± 0.046	2.009 ± 0.149	1.432 ± 0.049	n = 3	[ROY] Roche 9180/9181
0.400 ± 0.000	0.675 ± 0.048	1.001 ± 0.055	2.026 ± 0.085	1.400 ± 0.000	n = 21	[ROC] Roche cobas c501
0.400 ± 0.000	0.650 ± 0.045	0.999 ± 0.015	2.069 ± 0.073	1.400 ± 0.000	n = 7	[ROT] Roche Cobas INTEGRA 800
0.439 ± 0.024	0.664 ± 0.030	0.988 ± 0.047	1.950 ± 0.045	1.326 ± 0.034	n = 7	[ROD] Roche MODULAR D/P
0.428 ± 0.043	0.684 ± 0.055	1.050 ± 0.063	2.118 ± 0.033	1.452 ± 0.058	n = 13	[BYE] Siemens ADVIA 1800
0.325 ± 0.028	0.569 ± 0.026	0.893 ± 0.033	2.102 ± 0.041	1.377 ± 0.050	n = 6	[DUE] Siemens Dimension EXL
0.326 ± 0.048	0.582 ± 0.044	0.871 ± 0.072	2.042 ± 0.068	1.353 ± 0.041	n = 6	[DUR] Siemens Dimension RxL
0.421 ± 0.027	0.667 ± 0.033	1.005 ± 0.019	2.022 ± 0.040	1.387 ± 0.027	n = 40	[DUT] Siemens Dimension Vista
						<Reagents>
0.418 ± 0.029	0.672 ± 0.036	1.008 ± 0.047	2.006 ± 0.075	1.379 ± 0.062	n = 13	[AB1] Abbott
0.546 ± 0.206	0.695 ± 0.012	1.026 ± 0.042	2.048 ± 0.121	1.418 ± 0.040	n = 4	[AV1] AVL Scientific
0.385 ± 0.028	0.630 ± 0.040	0.974 ± 0.045	2.004 ± 0.020	1.390 ± 0.038	n = 15	[BC1] Beckman Coulter
0.399 ± 0.004	0.641 ± 0.041	0.995 ± 0.012	2.006 ± 0.020	1.369 ± 0.039	n = 12	[OL1] Beckman Coulter AU Series
0.442 ± 0.039	0.702 ± 0.046	1.057 ± 0.090	2.126 ± 0.085	1.421 ± 0.064	n = 4	[IH1] In-House
0.408 ± 0.044	0.684 ± 0.049	1.070 ± 0.057	2.160 ± 0.087	1.449 ± 0.068	n = 30	[JJ1] Ortho Clinical Diagnostics
0.403 ± 0.013	0.671 ± 0.048	1.001 ± 0.061	2.024 ± 0.087	1.387 ± 0.044	n = 24	[R04] Roche cobas c311/c501/c502/c701/c702
0.400 ± 0.000	0.650 ± 0.045	0.999 ± 0.015	2.069 ± 0.073	1.400 ± 0.000	n = 7	[R01] Roche Integra and MIRA
0.432 ± 0.045	0.690 ± 0.054	1.057 ± 0.061	2.122 ± 0.033	1.457 ± 0.059	n = 12	[BY1] Siemens ADVIA/ADVIA Centaur
0.406 ± 0.048	0.647 ± 0.051	0.992 ± 0.046	2.031 ± 0.049	1.382 ± 0.034	n = 54	[DA5] Siemens Dimension
0.414 ± 0.039	0.656 ± 0.038	0.978 ± 0.042	1.961 ± 0.069	1.330 ± 0.044	n = 13	[TH1] Thermo Scientific

Summary of Participant Performance (Mean and Standard Deviation)

Phenobarbital (mg/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
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16.19 ± 1.22 16.0	29.83 ± 1.77 30.2	25.42 ± 1.53 25.4	55.36 ± 3.58 55.8	37.52 ± 2.34 37.2	n = 194	[---] All Methods & Instruments [---] Weigh-in value
						<Instruments>
16.46 ± 0.71	30.08 ± 0.86	25.56 ± 0.98	58.40 ± 2.60	38.87 ± 1.94	n = 3	[ABJ] Abbott Architect c System
17.13 ± 0.73	31.57 ± 1.02	26.55 ± 0.83	59.26 ± 1.36	40.03 ± 1.03	n = 19	[ABH] Abbott Architect i System
15.53 ± 0.66	29.14 ± 0.96	24.48 ± 1.19	55.52 ± 2.62	36.46 ± 1.52	n = 23	[OLC] Beckman Coulter AU Chemistry System
16.09 ± 0.75	28.24 ± 1.76	24.62 ± 1.27	50.86 ± 3.28	34.68 ± 1.41	n = 9	[BCG] Beckman Coulter UniCel DxC 600
15.49 ± 0.61	27.64 ± 0.94	24.18 ± 0.95	50.79 ± 2.25	34.81 ± 1.93	n = 7	[BCH] Beckman Coulter UniCel DxC 800
19.21 ± 9.65	28.28 ± 2.48	27.77 ± 8.09	56.89 ± 8.74	39.61 ± 6.40	n = 4	[ROJ] Roche cobas c311
15.30 ± 0.97	28.97 ± 1.09	24.48 ± 1.15	53.67 ± 2.61	35.85 ± 0.53	n = 21	[ROC] Roche cobas c501
15.47 ± 0.37	28.83 ± 0.70	24.35 ± 0.46	54.57 ± 1.65	36.11 ± 0.63	n = 10	[ROT] Roche Cobas INTEGRA 800
15.53 ± 0.83	29.70 ± 1.53	25.08 ± 1.03	53.89 ± 1.98	37.42 ± 1.27	n = 10	[ROD] Roche MODULAR D/P
18.07 ± 0.90	33.75 ± 2.30	27.63 ± 1.20	61.57 ± 3.59	41.07 ± 1.92	n = 14	[COB] Siemens ADVIA Centaur
17.62 ± 1.64	30.12 ± 0.93	26.13 ± 1.51	57.42 ± 2.13	39.12 ± 1.56	n = 8	[DUE] Siemens Dimension EXL
16.89 ± 0.61	30.82 ± 1.00	26.47 ± 1.24	55.47 ± 1.41	38.59 ± 1.13	n = 8	[DUR] Siemens Dimension RxL
16.38 ± 1.32	29.98 ± 1.43	25.86 ± 1.49	54.49 ± 2.67	37.50 ± 1.87	n = 40	[DUT] Siemens Dimension Vista
16.33 ± 0.38	30.12 ± 0.36	25.21 ± 0.80	55.14 ± 2.80	37.34 ± 1.90	n = 4	[DUX] Siemens Dimension Xpand
						<Reagents>
17.07 ± 0.78	31.40 ± 1.20	26.43 ± 0.97	59.18 ± 1.66	39.96 ± 1.22	n = 21	[AB1] Abbott
15.73 ± 0.64	28.12 ± 1.41	24.44 ± 1.03	51.19 ± 2.73	35.06 ± 1.77	n = 19	[BC1] Beckman Coulter
15.49 ± 0.64	28.82 ± 0.97	24.26 ± 1.03	55.48 ± 2.81	36.33 ± 1.36	n = 10	[OL1] Beckman Coulter AU Series
16.27 ± 0.42	30.28 ± 0.54	25.94 ± 0.65	57.33 ± 0.83	38.21 ± 1.28	n = 4	[MG1] Microgenics CEDIA
15.38 ± 0.98	28.96 ± 0.89	24.55 ± 1.05	53.58 ± 2.45	36.29 ± 1.24	n = 27	[R04] Roche cobas c311/c501/c502/c701/c702
15.67 ± 0.67	30.29 ± 1.80	25.36 ± 0.71	54.10 ± 0.82	37.51 ± 0.48	n = 3	[R02] Roche Hitachi and Modular D/P
15.56 ± 0.43	28.85 ± 0.62	24.35 ± 0.47	54.92 ± 1.68	35.95 ± 0.69	n = 12	[R01] Roche Integra and MIRA
15.45 ± 0.89	29.50 ± 1.38	24.97 ± 1.15	53.79 ± 2.53	37.39 ± 1.63	n = 7	[R06] Roche ONLINE
17.89 ± 1.00	33.61 ± 2.11	27.39 ± 1.37	61.65 ± 3.81	40.98 ± 1.83	n = 16	[BY1] Siemens ADVIA/ADVIA Centaur
16.06 ± 0.50	29.51 ± 1.31	25.61 ± 1.15	58.60 ± 3.79	37.16 ± 2.19	n = 4	[BY5] Siemens ADVIA/Syva Emit 2000
16.59 ± 1.28	30.15 ± 1.29	25.94 ± 1.45	55.12 ± 2.65	37.88 ± 1.87	n = 60	[DA5] Siemens Dimension
15.22 ± 0.56	29.07 ± 0.65	24.54 ± 1.12	55.38 ± 2.57	35.61 ± 1.76	n = 6	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Phenytoin (mg/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
8.18 ± 0.67 8.0	19.20 ± 1.37 19.0	13.97 ± 1.05 14.0	25.20 ± 2.31 25.2	16.92 ± 1.35 16.8	n = 258	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
7.93 ± 0.23	19.89 ± 1.38	13.52 ± 0.59	28.11 ± 1.70	17.08 ± 0.41	n = 3	[ABJ] Abbott Architect c System
8.19 ± 0.37	18.96 ± 1.02	13.92 ± 0.62	24.86 ± 1.48	16.75 ± 0.56	n = 19	[ABH] Abbott Architect i System
8.11 ± 0.44	19.15 ± 1.15	13.59 ± 0.85	25.12 ± 1.78	16.86 ± 1.17	n = 32	[OLC] Beckman Coulter AU Chemistry System
8.07 ± 0.28	18.32 ± 0.72	13.78 ± 0.43	23.91 ± 0.91	16.57 ± 0.55	n = 10	[BCG] Beckman Coulter UniCel DxC 600
8.04 ± 0.23	18.59 ± 1.30	14.05 ± 0.73	24.36 ± 1.73	16.87 ± 0.82	n = 8	[BCH] Beckman Coulter UniCel DxC 800
7.43 ± 0.35	18.16 ± 0.83	12.98 ± 0.31	22.14 ± 0.22	14.91 ± 0.55	n = 11	[JJF] Ortho Vitros 5,1FS
7.50 ± 0.38	18.17 ± 0.95	13.02 ± 0.65	22.24 ± 1.30	14.95 ± 0.77	n = 19	[JJG] Ortho Vitros 5600
8.04 ± 0.10	19.58 ± 0.86	13.69 ± 0.29	24.25 ± 0.99	16.62 ± 0.32	n = 3	[ROJ] Roche cobas c311
7.86 ± 0.51	18.30 ± 1.31	13.31 ± 0.90	23.42 ± 1.54	16.29 ± 0.72	n = 23	[ROC] Roche cobas c501
7.99 ± 0.35	18.66 ± 0.57	13.76 ± 0.49	25.46 ± 0.65	16.36 ± 0.19	n = 11	[ROT] Roche Cobas INTEGRA 800
7.97 ± 0.56	18.64 ± 1.08	13.69 ± 1.14	24.48 ± 1.58	16.69 ± 1.29	n = 12	[ROD] Roche MODULAR D/P
8.99 ± 0.42	20.13 ± 0.85	14.99 ± 1.04	27.08 ± 1.50	18.17 ± 1.28	n = 9	[BYE] Siemens ADVIA 1800
8.43 ± 0.69	21.34 ± 0.66	15.12 ± 0.89	29.08 ± 1.42	18.49 ± 1.15	n = 14	[COB] Siemens ADVIA Centaur
8.28 ± 0.55	21.44 ± 1.75	13.89 ± 1.24	27.32 ± 2.23	17.92 ± 1.63	n = 4	[BYP] Siemens ADVIA Centaur CP
8.43 ± 0.45	19.63 ± 0.39	14.66 ± 0.54	26.06 ± 1.00	17.51 ± 0.75	n = 15	[DUE] Siemens Dimension EXL
8.61 ± 0.57	19.66 ± 1.17	14.21 ± 0.84	26.04 ± 1.49	17.58 ± 0.62	n = 8	[DUR] Siemens Dimension RxL
8.95 ± 0.56	20.02 ± 0.98	14.93 ± 0.75	26.68 ± 1.29	18.00 ± 1.03	n = 41	[DUT] Siemens Dimension Vista
7.72 ± 0.99	18.75 ± 1.19	13.46 ± 1.08	25.35 ± 1.54	16.88 ± 1.28	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
8.14 ± 0.36	19.09 ± 1.15	13.87 ± 0.63	25.20 ± 1.82	16.81 ± 0.55	n = 22	[AB1] Abbott
8.03 ± 0.26	18.39 ± 1.01	13.82 ± 0.59	24.10 ± 1.37	16.69 ± 0.72	n = 21	[BC1] Beckman Coulter
8.11 ± 0.48	19.26 ± 1.35	13.74 ± 1.05	25.20 ± 2.37	16.70 ± 1.33	n = 16	[OL1] Beckman Coulter AU Series
8.10 ± 0.51	19.47 ± 0.79	13.55 ± 0.59	25.31 ± 0.91	17.34 ± 0.88	n = 6	[MG1] Microgenics CEDIA
7.49 ± 0.38	18.21 ± 0.97	12.99 ± 0.54	22.11 ± 1.10	14.94 ± 0.70	n = 31	[JJ1] Ortho Clinical Diagnostics
7.88 ± 0.46	18.40 ± 1.29	13.40 ± 0.79	23.67 ± 1.42	16.32 ± 0.66	n = 29	[R04] Roche cobas c311/c501/c502/c701/c702
7.91 ± 0.56	18.41 ± 0.25	13.49 ± 1.08	23.82 ± 1.45	16.44 ± 1.39	n = 4	[R02] Roche Hitachi and Modular D/P
7.94 ± 0.30	18.51 ± 0.72	13.69 ± 0.47	25.45 ± 0.95	16.38 ± 0.27	n = 13	[R01] Roche Integra and MIRA
8.00 ± 0.56	18.90 ± 1.39	13.81 ± 1.17	24.85 ± 1.58	16.78 ± 1.28	n = 8	[R06] Roche ONLINE
8.39 ± 0.66	21.43 ± 1.07	14.93 ± 1.07	28.74 ± 1.83	18.38 ± 1.28	n = 18	[BY1] Siemens ADVIA/ADVIA Centaur
9.00 ± 0.37	20.25 ± 0.70	15.14 ± 0.95	27.08 ± 1.50	18.16 ± 1.28	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
8.73 ± 0.67	19.81 ± 0.97	14.72 ± 0.82	26.38 ± 1.31	17.74 ± 0.96	n = 70	[DA5] Siemens Dimension
8.11 ± 0.55	19.15 ± 0.81	13.54 ± 0.42	25.89 ± 0.99	17.03 ± 0.53	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Free Phenytoin (mg/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
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1.47 ± 0.23	3.57 ± 0.44	2.01 ± 0.21	3.57 ± 0.44	2.36 ± 0.30	n = 21	[---] All Methods & Instruments
						<Instruments>
1.38 ± 0.27	3.36 ± 0.73	1.97 ± 0.23	3.74 ± 0.56	2.37 ± 0.35	n = 9	[OLC] Beckman Coulter AU Chemistry System
1.50 ± 0.06	3.58 ± 0.15	2.08 ± 0.07	3.62 ± 0.12	2.32 ± 0.10	n = 6	[ROT] Roche Cobas INTEGRA 800
						<Reagents>
1.10 ± 0.00	2.47 ± 0.05	1.80 ± 0.09	3.11 ± 0.20	2.00 ± 0.09	n = 3	[OL1] Beckman Coulter AU Series
1.50 ± 0.15	3.59 ± 0.26	2.08 ± 0.17	3.50 ± 0.28	2.32 ± 0.24	n = 8	[R01] Roche Integra and MIRA
1.60 ± 0.19	3.73 ± 0.29	2.02 ± 0.15	3.85 ± 0.32	2.53 ± 0.18	n = 6	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Primidone (mg/L)

Specimen: T01 -----	Specimen: T02 -----	Specimen: T03 -----	Specimen: T04 -----	Specimen: T05 -----	Number -----	[Code] Instrument or Reagent System -----
14.68 ± 0.71 14.8	6.14 ± 0.29 5.8	8.67 ± 0.17 8.6	11.12 ± 0.49 10.8	7.71 ± 0.31 7.3	n = 13	[---] All Methods & Instruments [---] Weigh-in value
14.42 ± 0.53 15.23 ± 0.23	6.20 ± 0.07 5.83 ± 0.14	8.72 ± 0.23 8.60 ± 0.09	11.17 ± 0.51 10.72 ± 0.24	7.75 ± 0.25 7.36 ± 0.26	n = 7 n = 3	<Instruments> [OLC] Beckman Coulter AU Chemistry System [ROT] Roche Cobas INTEGRA 800
15.23 ± 0.23 14.38 ± 0.45	5.83 ± 0.14 6.29 ± 0.26	8.60 ± 0.09 8.73 ± 0.21	10.72 ± 0.24 11.29 ± 0.38	7.36 ± 0.26 7.86 ± 0.21	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: T01 -----	Specimen: T02 -----	Specimen: T03 -----	Specimen: T04 -----	Specimen: T05 -----	Number -----	[Code] Instrument or Reagent System -----
5.04 ± 0.17 4.9	7.27 ± 0.23 7.2	7.58 ± 0.31 7.3	14.50 ± 0.63 14.5	9.53 ± 0.29 9.7	n = 13	[---] All Methods & Instruments [---] Weigh-in value
5.14 ± 0.16	7.15 ± 0.06	7.59 ± 0.11	14.50 ± 0.64	9.39 ± 0.30	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
5.17 ± 0.15	7.23 ± 0.24	7.77 ± 0.33	14.72 ± 0.86	9.82 ± 0.61	n = 4	<Reagents> [SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

N-Acetyl-Procaïnamide (mg/L)

Specimen: T01 -----	Specimen: T02 -----	Specimen: T03 -----	Specimen: T04 -----	Specimen: T05 -----	Number -----	[Code] Instrument or Reagent System -----
26.38 ± 1.55 25.9	6.29 ± 0.22 6.0	15.31 ± 0.39 15.2	12.27 ± 0.61 12.0	8.46 ± 0.25 8.0	n = 12	[---] All Methods & Instruments [---] Weigh-in value
25.49 ± 1.45	6.23 ± 0.09	15.11 ± 0.24	12.32 ± 0.64	8.43 ± 0.25	n = 4	<Instruments> [OLC] Beckman Coulter AU Chemistry System
26.68 ± 0.50	6.24 ± 0.10	15.22 ± 0.32	12.72 ± 0.68	8.63 ± 0.31	n = 3	<Reagents> [SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Quinidine (mg/L)

Specimen: T01 -----	Specimen: T02 -----	Specimen: T03 -----	Specimen: T04 -----	Specimen: T05 -----	Number -----	[Code] Instrument or Reagent System -----
2.03 ± 0.13 2.2	1.41 ± 0.08 1.5	2.79 ± 0.19 3.0	6.45 ± 0.28 7.0	4.64 ± 0.38 4.7	n = 11	[---] All Methods & Instruments [---] Weigh-in value
2.02 ± 0.15 2.00 ± 0.00	1.37 ± 0.05 1.37 ± 0.05	2.61 ± 0.20 2.80 ± 0.00	6.22 ± 0.41 6.37 ± 0.05	4.28 ± 0.41 4.73 ± 0.05	n = 3 n = 3	<Instruments> [OLC] Beckman Coulter AU Chemistry System [ROT] Roche Cobas INTEGRA 800
2.00 ± 0.00	1.37 ± 0.05	2.80 ± 0.00	6.37 ± 0.05	4.73 ± 0.05	n = 3	<Reagents> [R01] Roche Integra and MIRA

Summary of Participant Performance (Mean and Standard Deviation)

Salicylate (mg/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
-----	-----	-----	-----	-----	-----	-----
39.79 ± 1.38 38.0	23.86 ± 1.17 23.1	41.98 ± 1.47 40.6	78.64 ± 3.24 77.4	53.32 ± 1.79 51.6	n = 210	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
40.08 ± 0.88	23.40 ± 0.70	42.25 ± 0.91	80.66 ± 1.79	53.76 ± 1.15	n = 16	[ABJ] Abbott Architect c System
42.72 ± 2.57	25.28 ± 1.47	43.65 ± 2.14	82.56 ± 5.13	56.52 ± 2.25	n = 23	[OLC] Beckman Coulter AU Chemistry System
40.51 ± 1.16	23.85 ± 0.61	43.32 ± 1.34	82.95 ± 1.10	54.72 ± 1.06	n = 9	[BCG] Beckman Coulter UniCel DxC 600
40.13 ± 0.65	22.98 ± 0.46	42.55 ± 0.66	82.30 ± 1.20	54.38 ± 0.86	n = 7	[BCH] Beckman Coulter UniCel DxC 800
40.56 ± 1.25	25.12 ± 0.65	42.42 ± 1.11	76.97 ± 2.43	52.42 ± 1.36	n = 10	[JJF] Ortho Vitros 5,1FS
40.63 ± 1.55	25.17 ± 0.85	42.44 ± 1.76	76.94 ± 3.05	53.01 ± 1.39	n = 18	[JJG] Ortho Vitros 5600
39.60 ± 0.70	22.73 ± 0.46	42.06 ± 0.82	77.49 ± 4.17	53.80 ± 0.99	n = 21	[ROC] Roche cobas c501
37.99 ± 0.70	22.73 ± 0.41	40.16 ± 0.89	76.14 ± 2.88	51.16 ± 1.10	n = 7	[ROT] Roche Cobas INTEGRA 800
38.26 ± 0.38	22.98 ± 0.42	39.99 ± 0.57	76.54 ± 0.82	51.08 ± 1.05	n = 8	[ROD] Roche MODULAR D/P
40.74 ± 1.25	23.44 ± 0.96	43.35 ± 0.95	83.25 ± 2.41	55.06 ± 1.50	n = 10	[BYE] Siemens ADVIA 1800
39.75 ± 0.47	24.22 ± 0.33	41.88 ± 0.71	78.05 ± 0.56	52.93 ± 0.60	n = 15	[DUE] Siemens Dimension EXL
39.85 ± 0.74	24.35 ± 0.43	41.98 ± 0.68	78.45 ± 0.65	53.31 ± 0.47	n = 8	[DUR] Siemens Dimension RxL
39.18 ± 0.63	23.84 ± 0.42	41.30 ± 0.68	77.27 ± 0.91	52.37 ± 0.77	n = 39	[DUT] Siemens Dimension Vista
39.62 ± 0.59	24.18 ± 0.40	41.66 ± 0.53	78.22 ± 0.97	52.78 ± 0.69	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
39.99 ± 1.02	23.32 ± 0.75	42.16 ± 1.04	80.52 ± 2.03	53.65 ± 1.31	n = 17	[AB1] Abbott
40.37 ± 1.11	23.46 ± 1.00	42.88 ± 1.55	82.37 ± 1.85	54.66 ± 1.19	n = 20	[BC1] Beckman Coulter
42.98 ± 2.68	25.40 ± 1.44	43.92 ± 2.06	83.80 ± 5.41	56.65 ± 2.29	n = 16	[OL1] Beckman Coulter AU Series
40.55 ± 1.51	25.09 ± 0.88	42.42 ± 1.52	77.20 ± 2.98	52.95 ± 1.63	n = 31	[JJ1] Ortho Clinical Diagnostics
39.48 ± 0.82	22.74 ± 0.51	41.91 ± 1.01	76.96 ± 4.15	53.76 ± 1.20	n = 23	[R04] Roche cobas c311/c501/c502/c701/c702
38.26 ± 0.38	22.98 ± 0.42	39.99 ± 0.57	76.54 ± 0.82	51.08 ± 1.05	n = 8	[R02] Roche Hitachi and Modular D/P
37.99 ± 0.70	22.73 ± 0.41	40.16 ± 0.89	76.14 ± 2.88	51.16 ± 1.10	n = 7	[R01] Roche Integra and MIRA
40.80 ± 1.22	23.63 ± 1.17	43.34 ± 0.94	83.04 ± 2.39	55.20 ± 1.66	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
39.44 ± 0.68	24.02 ± 0.46	41.54 ± 0.73	77.70 ± 0.97	52.67 ± 0.77	n = 68	[DA5] Siemens Dimension
41.29 ± 0.74	24.64 ± 1.19	42.29 ± 1.07	78.13 ± 3.50	55.52 ± 1.76	n = 3	[SY5] Syva Emit tox

Summary of Participant Performance (Mean and Standard Deviation)

Theophylline (mg/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
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9.30 ± 0.52 9.5	15.72 ± 0.95 15.7	13.06 ± 0.74 13.4	27.87 ± 1.57 28.9	18.88 ± 0.99 19.3	n = 196	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
9.39 ± 0.38	15.84 ± 0.66	13.23 ± 0.53	28.38 ± 0.82	19.21 ± 0.98	n = 11	[ABH] Abbott Architect i System
9.28 ± 0.54	15.65 ± 0.89	13.05 ± 0.87	27.53 ± 1.76	19.15 ± 0.94	n = 22	[OLC] Beckman Coulter AU Chemistry System
8.86 ± 0.33	15.00 ± 0.30	12.33 ± 0.16	27.32 ± 0.75	18.24 ± 0.30	n = 8	[BCG] Beckman Coulter UniCel DxC 600
9.01 ± 0.16	15.16 ± 0.34	12.59 ± 0.28	27.50 ± 0.53	18.44 ± 0.37	n = 7	[BCH] Beckman Coulter UniCel DxC 800
12.79 ± 0.35	19.93 ± 0.55	17.13 ± 0.69	37.93 ± 1.14	24.88 ± 0.78	n = 9	[JJF] Ortho Vitros 5,1FS
12.22 ± 0.57	19.41 ± 0.84	16.69 ± 0.70	38.13 ± 1.52	24.52 ± 0.79	n = 17	[JJG] Ortho Vitros 5600
9.26 ± 0.30	15.53 ± 0.50	12.97 ± 0.42	27.81 ± 0.72	18.73 ± 0.48	n = 18	[ROC] Roche cobas c501
9.65 ± 0.14	16.05 ± 0.36	13.31 ± 0.30	28.38 ± 0.72	19.20 ± 0.61	n = 6	[ROT] Roche Cobas INTEGRA 800
9.13 ± 0.30	15.51 ± 0.41	12.81 ± 0.63	27.73 ± 0.94	18.80 ± 0.57	n = 10	[ROD] Roche MODULAR D/P
9.35 ± 0.36	15.92 ± 0.77	12.88 ± 0.86	26.84 ± 2.89	18.95 ± 0.99	n = 3	[BYE] Siemens ADVIA 1800
8.02 ± 0.55	14.63 ± 1.11	12.59 ± 0.71	25.29 ± 1.05	17.12 ± 0.69	n = 14	[COB] Siemens ADVIA Centaur
9.34 ± 0.26	15.95 ± 0.46	13.13 ± 0.41	29.16 ± 1.02	19.21 ± 0.59	n = 7	[DUE] Siemens Dimension EXL
9.61 ± 0.25	15.81 ± 0.57	13.11 ± 0.13	28.13 ± 1.65	18.83 ± 0.81	n = 6	[DUR] Siemens Dimension RxL
9.50 ± 0.41	15.77 ± 0.67	13.29 ± 0.58	28.26 ± 1.48	19.20 ± 0.89	n = 41	[DUT] Siemens Dimension Vista
9.45 ± 0.32	16.74 ± 0.79	12.60 ± 0.36	29.91 ± 1.81	19.93 ± 1.34	n = 3	[DPD] Siemens Immulite 2000
<Reagents>						
9.44 ± 0.43	15.91 ± 0.67	13.30 ± 0.59	28.47 ± 1.00	19.27 ± 0.93	n = 12	[AB1] Abbott
8.98 ± 0.30	15.10 ± 0.35	12.47 ± 0.33	27.43 ± 0.60	18.39 ± 0.55	n = 18	[BC1] Beckman Coulter
9.31 ± 0.54	15.81 ± 0.78	12.87 ± 0.73	27.64 ± 2.06	19.34 ± 0.91	n = 13	[OL1] Beckman Coulter AU Series
12.44 ± 0.59	19.62 ± 0.80	16.84 ± 0.73	38.04 ± 1.39	24.65 ± 0.80	n = 26	[JJ1] Ortho Clinical Diagnostics
9.28 ± 0.30	15.58 ± 0.47	12.98 ± 0.40	27.82 ± 0.68	18.77 ± 0.51	n = 21	[R04] Roche cobas c311/c501/c502/c701/c702
9.17 ± 0.20	15.59 ± 0.42	12.89 ± 0.79	28.21 ± 0.94	18.88 ± 0.29	n = 4	[R02] Roche Hitachi and Modular D/P
9.60 ± 0.20	16.18 ± 0.37	13.36 ± 0.27	28.58 ± 0.71	19.12 ± 0.61	n = 8	[R01] Roche Integra and MIRA
9.10 ± 0.37	15.47 ± 0.39	12.76 ± 0.52	27.42 ± 0.79	18.82 ± 0.75	n = 6	[R06] Roche ONLINE
8.18 ± 0.71	14.91 ± 1.30	12.77 ± 0.87	25.53 ± 1.50	17.32 ± 0.93	n = 16	[BY1] Siemens ADVIA/ADVIA Centaur
9.48 ± 0.36	16.02 ± 0.96	13.39 ± 0.69	27.91 ± 3.77	18.98 ± 1.11	n = 5	[BY5] Siemens ADVIA/Syva Emit 2000
9.49 ± 0.37	15.82 ± 0.62	13.27 ± 0.53	28.40 ± 1.47	19.18 ± 0.84	n = 56	[DA5] Siemens Dimension
9.45 ± 0.32	16.74 ± 0.79	12.60 ± 0.36	29.91 ± 1.81	19.93 ± 1.34	n = 3	[DP5] Siemens Immulite
8.96 ± 0.24	15.28 ± 1.28	12.95 ± 1.09	27.71 ± 1.44	18.77 ± 0.99	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Tobramycin (mg/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
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12.81 ± 1.52 13.0	2.40 ± 0.23 2.5	9.90 ± 0.73 10.1	9.10 ± 0.81 9.8	6.12 ± 0.49 6.5	n = 76	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
13.73 ± 1.02	2.44 ± 0.06	9.60 ± 0.00	8.89 ± 0.41	6.08 ± 0.30	n = 7	[ABJ] Abbott Architect c System
12.47 ± 0.68	2.35 ± 0.10	9.61 ± 0.31	9.03 ± 0.35	6.11 ± 0.17	n = 11	[OLC] Beckman Coulter AU Chemistry System
16.12 ± 0.50	3.02 ± 0.15	11.90 ± 0.09	10.93 ± 0.05	7.70 ± 0.09	n = 3	[BCG] Beckman Coulter UniCel DxC 600
14.96 ± 1.50	3.10 ± 0.11	11.86 ± 0.35	11.08 ± 0.36	7.65 ± 0.34	n = 4	[BCH] Beckman Coulter UniCel DxC 800
14.27 ± 0.70	2.46 ± 0.05	10.53 ± 0.75	9.80 ± 0.50	6.51 ± 0.05	n = 4	[JJG] Ortho Vitros 5600
12.41 ± 2.12	2.42 ± 0.13	9.97 ± 0.08	9.47 ± 0.28	6.21 ± 0.21	n = 5	[ROC] Roche cobas c501
13.24 ± 0.27	2.41 ± 0.14	10.21 ± 0.21	8.99 ± 0.42	6.12 ± 0.32	n = 6	[ROT] Roche Cobas INTEGRA 800
12.57 ± 1.31	2.48 ± 0.08	9.91 ± 0.40	9.69 ± 0.19	6.38 ± 0.28	n = 4	[ROD] Roche MODULAR D/P
13.63 ± 1.00	3.06 ± 0.24	11.35 ± 0.93	10.38 ± 1.02	6.92 ± 0.60	n = 6	[COB] Siemens ADVIA Centaur
11.58 ± 0.43	2.20 ± 0.11	9.35 ± 0.24	8.40 ± 0.25	5.70 ± 0.21	n = 16	[DUT] Siemens Dimension Vista
<Reagents>						
13.73 ± 1.02	2.44 ± 0.06	9.60 ± 0.00	8.89 ± 0.41	6.08 ± 0.30	n = 7	[AB1] Abbott
15.78 ± 0.50	3.07 ± 0.13	11.91 ± 0.22	10.93 ± 0.10	7.68 ± 0.26	n = 7	[BC1] Beckman Coulter
12.06 ± 0.58	2.27 ± 0.08	9.65 ± 0.22	8.95 ± 0.30	6.03 ± 0.08	n = 4	[OL1] Beckman Coulter AU Series
14.41 ± 0.65	2.43 ± 0.06	10.20 ± 0.65	9.55 ± 0.51	6.45 ± 0.12	n = 6	[JJ1] Ortho Clinical Diagnostics
12.41 ± 2.12	2.42 ± 0.13	9.97 ± 0.08	9.47 ± 0.28	6.21 ± 0.21	n = 5	[R04] Roche cobas c311/c501/c502/c701/c702
12.55 ± 1.16	2.37 ± 0.13	10.09 ± 0.28	8.95 ± 0.41	6.05 ± 0.34	n = 8	[R01] Roche Integra and MIRA
12.57 ± 1.31	2.48 ± 0.08	9.91 ± 0.40	9.69 ± 0.19	6.38 ± 0.28	n = 4	[R06] Roche ONLINE
13.63 ± 1.00	3.06 ± 0.24	11.35 ± 0.93	10.38 ± 1.02	6.92 ± 0.60	n = 6	[BY1] Siemens ADVIA/ADVIA Centaur
11.75 ± 0.59	2.24 ± 0.13	9.43 ± 0.27	8.40 ± 0.25	5.74 ± 0.20	n = 21	[DA5] Siemens Dimension
12.72 ± 0.63	2.40 ± 0.08	9.55 ± 0.37	9.08 ± 0.38	6.16 ± 0.19	n = 7	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Valproic Acid (mg/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
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46.42 ± 4.20 43.4	52.36 ± 4.66 49.8	75.36 ± 4.63 72.9	154.92 ± 15.24 151.1	106.48 ± 9.33 100.1	n = 241	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
42.75 ± 1.58	47.94 ± 1.56	68.60 ± 2.22	140.53 ± 8.53	98.56 ± 3.93	n = 4	[ABJ] Abbott Architect c System
56.22 ± 2.82	63.24 ± 3.02	76.36 ± 3.42	169.62 ± 12.70	121.96 ± 5.65	n = 19	[ABH] Abbott Architect i System
48.34 ± 2.54	53.98 ± 2.13	77.85 ± 3.33	164.05 ± 10.07	110.86 ± 4.49	n = 27	[OLC] Beckman Coulter AU Chemistry System
36.07 ± 3.31	41.87 ± 3.52	66.60 ± 4.14	117.19 ± 8.46	83.93 ± 4.89	n = 9	[BCG] Beckman Coulter UniCel DxC 600
38.57 ± 2.16	42.62 ± 2.47	67.99 ± 2.90	126.79 ± 8.14	86.91 ± 3.73	n = 7	[BCH] Beckman Coulter UniCel DxC 800
49.60 ± 4.81	55.01 ± 5.32	78.85 ± 5.34	180.12 ± 10.07	114.55 ± 8.36	n = 8	[JJF] Ortho Vitros 5,1FS
48.38 ± 2.88	55.18 ± 2.80	78.33 ± 3.66	164.90 ± 10.47	113.65 ± 5.66	n = 18	[JJG] Ortho Vitros 5600
45.10 ± 2.04	50.76 ± 2.92	75.22 ± 3.54	147.43 ± 9.88	107.05 ± 3.59	n = 24	[ROC] Roche cobas c501
43.10 ± 1.07	48.46 ± 0.88	72.22 ± 2.19	150.78 ± 2.81	103.69 ± 2.23	n = 8	[ROT] Roche Cobas INTEGRA 800
44.72 ± 3.48	49.46 ± 3.32	74.19 ± 5.96	151.21 ± 16.56	104.47 ± 4.83	n = 11	[ROD] Roche MODULAR D/P
49.34 ± 4.50	53.57 ± 4.18	78.29 ± 5.84	166.94 ± 15.86	115.70 ± 11.06	n = 8	[BYE] Siemens ADVIA 1800
44.06 ± 2.11	51.79 ± 4.23	73.52 ± 4.14	155.34 ± 12.41	100.23 ± 4.98	n = 18	[COB] Siemens ADVIA Centaur
44.81 ± 1.28	50.60 ± 1.51	73.06 ± 3.91	158.78 ± 3.05	103.76 ± 5.25	n = 4	[BYP] Siemens ADVIA Centaur CP
45.84 ± 1.11	51.66 ± 0.82	73.53 ± 2.57	149.82 ± 7.67	100.66 ± 5.45	n = 10	[DUE] Siemens Dimension EXL
45.88 ± 1.20	51.74 ± 0.97	73.64 ± 2.16	148.65 ± 6.78	97.86 ± 3.11	n = 9	[DUR] Siemens Dimension RxL
47.10 ± 2.21	52.99 ± 2.23	76.84 ± 3.01	152.45 ± 6.56	105.28 ± 4.48	n = 42	[DUT] Siemens Dimension Vista
45.92 ± 1.08	51.64 ± 1.15	73.29 ± 3.07	145.67 ± 4.97	102.51 ± 5.74	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
55.08 ± 5.34	62.07 ± 5.36	75.31 ± 4.52	165.90 ± 18.21	119.86 ± 10.29	n = 23	[AB1] Abbott
37.45 ± 4.41	42.47 ± 4.60	67.61 ± 4.25	121.49 ± 12.33	85.22 ± 5.46	n = 19	[BC1] Beckman Coulter
48.05 ± 2.73	54.25 ± 1.69	76.95 ± 3.04	165.30 ± 11.41	110.51 ± 4.22	n = 14	[OL1] Beckman Coulter AU Series
48.72 ± 3.42	55.19 ± 3.57	78.48 ± 4.09	169.55 ± 12.54	113.91 ± 6.35	n = 27	[JJ1] Ortho Clinical Diagnostics
45.14 ± 2.09	50.76 ± 2.98	75.22 ± 3.78	147.92 ± 11.00	106.78 ± 3.85	n = 27	[R04] Roche cobas c311/c501/c502/c701/c702
44.25 ± 2.09	48.36 ± 1.94	74.46 ± 7.82	152.47 ± 10.07	104.22 ± 5.02	n = 4	[R02] Roche Hitachi and Modular D/P
43.14 ± 1.02	48.40 ± 0.91	72.44 ± 1.96	150.76 ± 2.64	103.77 ± 2.02	n = 10	[R01] Roche Integra and MIRA
44.94 ± 4.75	49.73 ± 2.47	73.63 ± 4.01	146.28 ± 13.87	104.39 ± 0.71	n = 6	[R06] Roche ONLINE
44.17 ± 1.99	51.35 ± 3.52	73.42 ± 4.08	156.11 ± 11.05	100.95 ± 5.32	n = 22	[BY1] Siemens ADVIA/ADVIA Centaur
48.86 ± 4.46	54.91 ± 3.82	78.86 ± 4.99	165.62 ± 13.90	116.12 ± 9.81	n = 9	[BY5] Siemens ADVIA/Syva Emit 2000
46.58 ± 1.96	52.37 ± 1.86	75.59 ± 3.23	151.00 ± 7.08	103.41 ± 5.50	n = 66	[DA5] Siemens Dimension
48.33 ± 2.20	53.26 ± 2.88	78.87 ± 4.07	162.49 ± 9.73	110.99 ± 4.30	n = 11	[SY4] Syva Emit 2000

Summary of Participant Performance (Mean and Standard Deviation)

Vancomycin (mg/L)

Specimen: T01	Specimen: T02	Specimen: T03	Specimen: T04	Specimen: T05	Number	[Code] Instrument or Reagent System
7.07 ± 0.78 7.8	5.47 ± 0.63 6.2	15.60 ± 1.49 16.9	30.24 ± 3.31 32.9	20.51 ± 2.07 21.9	n = 221	[---] All Methods & Instruments [---] Weigh-in value
<Instruments>						
7.26 ± 0.35	5.47 ± 0.16	16.57 ± 0.94	31.93 ± 0.43	21.88 ± 1.14	n = 4	[ABJ] Abbott Architect c System
7.57 ± 0.19	5.85 ± 0.14	15.99 ± 0.44	30.70 ± 1.06	21.21 ± 0.65	n = 16	[ABH] Abbott Architect i System
6.85 ± 0.39	5.42 ± 0.31	14.70 ± 0.47	28.65 ± 0.87	19.40 ± 0.71	n = 23	[OLC] Beckman Coulter AU Chemistry System
7.20 ± 0.47	5.67 ± 0.42	16.39 ± 0.98	35.75 ± 3.17	22.30 ± 1.56	n = 7	[BCG] Beckman Coulter UniCel DxC 600
7.21 ± 0.59	6.03 ± 0.62	16.55 ± 0.71	36.08 ± 2.64	22.28 ± 0.98	n = 8	[BCH] Beckman Coulter UniCel DxC 800
6.78 ± 0.40	5.35 ± 0.36	14.58 ± 0.30	28.16 ± 0.42	19.25 ± 0.68	n = 7	[JJF] Ortho Vitros 5,1FS
7.16 ± 0.46	5.72 ± 0.44	14.98 ± 0.65	29.89 ± 1.32	19.95 ± 0.86	n = 16	[JJG] Ortho Vitros 5600
7.56 ± 0.68	5.82 ± 0.54	17.05 ± 0.49	33.51 ± 1.53	22.60 ± 0.70	n = 21	[ROC] Roche cobas c501
8.24 ± 0.19	6.35 ± 0.33	19.26 ± 0.72	37.44 ± 1.47	25.44 ± 0.79	n = 8	[ROT] Roche Cobas INTEGRA 800
7.90 ± 0.48	6.06 ± 0.51	17.48 ± 1.04	33.84 ± 2.15	23.28 ± 1.99	n = 11	[ROD] Roche MODULAR D/P
7.38 ± 0.29	5.29 ± 0.55	15.92 ± 0.94	29.70 ± 1.68	20.40 ± 0.69	n = 6	[BYE] Siemens ADVIA 1800
5.41 ± 0.47	4.48 ± 0.35	12.40 ± 0.73	25.00 ± 1.65	16.69 ± 0.80	n = 18	[COB] Siemens ADVIA Centaur
5.76 ± 0.43	4.48 ± 0.32	12.46 ± 0.72	24.82 ± 1.24	16.44 ± 1.04	n = 4	[BYP] Siemens ADVIA Centaur CP
6.81 ± 0.41	4.88 ± 0.39	15.29 ± 0.57	29.46 ± 0.74	20.04 ± 0.62	n = 11	[DUE] Siemens Dimension EXL
6.52 ± 0.30	5.00 ± 0.24	15.19 ± 0.60	29.37 ± 1.07	19.53 ± 0.70	n = 6	[DUR] Siemens Dimension RxL
6.90 ± 0.45	5.29 ± 0.34	15.50 ± 0.59	29.11 ± 1.00	20.04 ± 0.76	n = 42	[DUT] Siemens Dimension Vista
6.56 ± 0.26	4.92 ± 0.29	15.60 ± 0.46	29.19 ± 0.87	19.88 ± 0.31	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
7.54 ± 0.19	5.79 ± 0.20	16.04 ± 0.55	31.00 ± 1.12	21.30 ± 0.78	n = 20	[AB1] Abbott
7.14 ± 0.50	5.78 ± 0.54	16.33 ± 0.99	35.40 ± 3.60	22.00 ± 1.48	n = 18	[BC1] Beckman Coulter
7.06 ± 0.38	5.55 ± 0.39	14.82 ± 0.46	28.99 ± 0.87	19.62 ± 0.89	n = 12	[OL1] Beckman Coulter AU Series
7.06 ± 0.47	5.62 ± 0.44	14.87 ± 0.61	29.48 ± 1.45	19.80 ± 0.91	n = 24	[JJ1] Ortho Clinical Diagnostics
7.60 ± 0.65	5.86 ± 0.51	17.09 ± 0.43	33.67 ± 1.50	22.60 ± 0.80	n = 24	[R04] Roche cobas c311/c501/c502/c701/c702
7.73 ± 0.35	5.95 ± 0.29	17.30 ± 0.66	33.54 ± 1.23	22.58 ± 0.84	n = 6	[R02] Roche Hitachi and Modular D/P
8.36 ± 0.31	6.51 ± 0.53	19.39 ± 0.90	37.87 ± 1.70	25.42 ± 0.82	n = 10	[R01] Roche Integra and MIRA
8.19 ± 0.56	6.26 ± 0.71	18.04 ± 1.42	34.71 ± 2.79	24.71 ± 2.50	n = 5	[R06] Roche ONLINE
5.48 ± 0.48	4.48 ± 0.34	12.41 ± 0.73	24.95 ± 1.59	16.67 ± 0.84	n = 22	[BY1] Siemens ADVIA/ADVIA Centaur
7.22 ± 0.50	5.32 ± 0.50	15.65 ± 0.96	29.20 ± 1.64	20.33 ± 0.89	n = 8	[BY5] Siemens ADVIA/Syva Emit 2000
6.81 ± 0.42	5.17 ± 0.37	15.45 ± 0.59	29.21 ± 0.96	19.98 ± 0.72	n = 64	[DA5] Siemens Dimension
6.72 ± 0.24	5.33 ± 0.16	14.61 ± 0.62	28.37 ± 0.76	19.32 ± 0.53	n = 8	[SY4] Syva Emit 2000