

Clinical Chemistry Proficiency Test Program

Statistical Summary – September 2014 (Event 14-3)

This statistical report summarizes participant data for the five Clinical Chemistry proficiency survey specimens shipped 8 September 2014. Test samples (Vials C11, C12, C13, C14, C15) 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 Clinical Chemistry Section at (518) 474-5582.

Summary of Participant Performance (Mean and Standard Deviation)

Glucose (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
44.9 ± 2.77	291.3 ± 7.00	78.4 ± 2.04	101.9 ± 3.23	197.3 ± 5.09	n = 385	[---] All Methods & Instruments
<Instruments>						
50.3 ± 0.51	286.8 ± 2.36	83.3 ± 0.51	105.8 ± 1.54	197.0 ± 0.90	n = 3	[AXA] Abaxis Piccolo
44.2 ± 1.63	294.5 ± 4.68	78.2 ± 1.33	101.4 ± 1.51	197.2 ± 3.27	n = 22	[ABJ] Abbott Architect c System
48.4 ± 1.02	293.4 ± 1.02	80.0 ± 0.90	104.7 ± 0.51	198.7 ± 1.37	n = 3	[AWA] Alfa Wassermann ACE Alera
42.8 ± 1.11	289.7 ± 5.78	78.2 ± 1.76	100.8 ± 2.16	196.1 ± 4.37	n = 69	[OLC] Beckman Coulter AU Chemistry System
43.3 ± 3.46	290.5 ± 7.76	77.6 ± 2.05	100.6 ± 3.49	195.5 ± 5.42	n = 15	[BCG] Beckman Coulter UniCel DxC 600
40.7 ± 2.21	289.5 ± 5.86	77.2 ± 1.74	100.3 ± 3.04	196.1 ± 2.99	n = 8	[BCH] Beckman Coulter UniCel DxC 800
69.0 ± 0.90	323.3 ± 6.73	108.4 ± 6.14	136.7 ± 2.26	229.5 ± 2.74	n = 3	[HEC] HemoCue Glucose 201
43.4 ± 0.83	281.5 ± 3.61	77.7 ± 0.74	98.5 ± 1.49	191.6 ± 2.72	n = 7	[IAA] i-STAT
45.3 ± 1.56	291.5 ± 8.12	76.1 ± 3.34	98.7 ± 3.86	193.0 ± 7.39	n = 8	[JJE] Ortho Vitros 250/350/950
46.0 ± 0.90	291.3 ± 1.37	78.4 ± 1.02	100.0 ± 0.90	195.2 ± 2.36	n = 3	[JJH] Ortho Vitros 4600
45.9 ± 0.87	289.8 ± 4.32	76.8 ± 1.65	99.0 ± 1.48	193.8 ± 4.31	n = 12	[JJF] Ortho Vitros 5,1FS
45.3 ± 1.37	291.1 ± 4.99	77.2 ± 2.02	99.1 ± 2.18	194.6 ± 4.83	n = 20	[JJG] Ortho Vitros 5600
44.4 ± 1.02	291.0 ± 4.51	78.3 ± 1.37	102.7 ± 1.37	198.0 ± 2.70	n = 3	[ROK] Roche cobas c111
44.6 ± 0.55	295.6 ± 2.52	79.5 ± 0.83	102.7 ± 1.10	199.7 ± 2.57	n = 5	[ROJ] Roche cobas c311
44.5 ± 0.79	294.9 ± 5.75	79.5 ± 1.37	103.2 ± 1.81	200.0 ± 3.54	n = 31	[ROC] Roche cobas c501
44.0 ± 0.00	290.6 ± 3.24	78.1 ± 0.87	101.1 ± 1.48	196.0 ± 2.77	n = 8	[ROH] Roche cobas c701
44.2 ± 0.73	293.0 ± 5.01	79.0 ± 2.15	102.7 ± 1.69	198.7 ± 3.92	n = 6	[ROS] Roche Cobas INTEGRA 400
43.3 ± 0.90	287.3 ± 1.58	78.2 ± 0.41	101.2 ± 1.27	196.4 ± 1.90	n = 4	[ROT] Roche Cobas INTEGRA 800
43.7 ± 1.11	291.3 ± 6.74	78.9 ± 1.46	102.0 ± 2.06	198.2 ± 4.51	n = 22	[ROD] Roche MODULAR D/P
43.6 ± 0.88	288.0 ± 5.45	77.6 ± 1.29	100.3 ± 1.79	195.2 ± 3.29	n = 21	[BYE] Siemens ADVIA 1800
49.8 ± 1.56	297.7 ± 4.95	80.5 ± 1.56	106.7 ± 1.79	203.7 ± 3.18	n = 24	[DUE] Siemens Dimension EXL
49.9 ± 1.61	299.8 ± 5.66	80.8 ± 2.09	107.0 ± 2.28	203.2 ± 4.33	n = 14	[DUR] Siemens Dimension RxL
47.2 ± 1.11	286.7 ± 5.88	77.5 ± 1.71	102.8 ± 2.85	196.0 ± 4.18	n = 43	[DUT] Siemens Dimension Vista
49.3 ± 1.32	296.2 ± 5.75	79.9 ± 1.35	106.1 ± 1.53	202.6 ± 3.16	n = 12	[DUX] Siemens Dimension Xpand
<Reagents>						
50.3 ± 0.51	286.8 ± 2.36	83.3 ± 0.51	105.8 ± 1.54	197.0 ± 0.90	n = 3	[AX1] Abaxis
44.1 ± 1.61	294.1 ± 5.10	78.2 ± 1.29	101.3 ± 1.58	197.0 ± 3.35	n = 23	[AB1] Abbott
48.4 ± 1.02	293.4 ± 1.02	80.0 ± 0.90	104.7 ± 0.51	198.7 ± 1.37	n = 3	[AW1] Alfa Wassermann
42.6 ± 3.26	290.0 ± 6.96	77.4 ± 2.04	100.6 ± 3.38	195.9 ± 4.56	n = 26	[BC1] Beckman Coulter
42.8 ± 1.12	289.6 ± 5.66	78.2 ± 1.70	100.8 ± 2.13	196.1 ± 4.44	n = 67	[OL1] Beckman Coulter AU Series
66.3 ± 5.24	320.6 ± 7.12	103.2 ± 8.17	131.2 ± 8.58	226.5 ± 6.21	n = 5	[HE1] HemoCue
43.4 ± 0.94	281.1 ± 3.84	77.6 ± 0.79	98.4 ± 1.61	191.3 ± 2.86	n = 6	[IA1] i-STAT
45.5 ± 1.28	290.8 ± 5.24	77.0 ± 2.14	99.1 ± 2.18	194.2 ± 5.05	n = 43	[JJ1] Ortho Clinical Diagnostics
44.4 ± 1.02	291.0 ± 4.51	78.3 ± 1.37	102.7 ± 1.37	198.0 ± 2.70	n = 3	[RO8] Roche cobas c111
44.3 ± 0.75	293.8 ± 5.31	79.2 ± 1.36	102.7 ± 1.87	199.1 ± 3.65	n = 46	[RO4] Roche cobas c311/c501/c502/c701/c702
43.7 ± 1.11	291.3 ± 6.74	78.9 ± 1.46	102.0 ± 2.06	198.2 ± 4.51	n = 22	[RO2] Roche Hitachi and Modular D/P
43.9 ± 0.87	290.1 ± 4.61	78.5 ± 1.54	101.9 ± 1.84	197.7 ± 3.38	n = 10	[RO1] Roche Integra and MIRA
43.7 ± 0.87	288.0 ± 4.86	77.6 ± 1.32	100.3 ± 1.72	195.3 ± 3.05	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
48.4 ± 1.91	292.9 ± 8.36	79.1 ± 2.32	105.0 ± 3.02	200.0 ± 5.45	n = 93	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Urea Nitrogen (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
10.6 ± 0.62	50.9 ± 1.78	16.5 ± 0.80	24.5 ± 1.08	37.8 ± 1.45	n = 368	[---] All Methods & Instruments
<Instruments>						
10.0 ± 0.00	49.0 ± 0.90	15.7 ± 0.51	22.7 ± 0.51	35.7 ± 0.51	n = 3	[AXA] Abaxis Piccolo
10.6 ± 0.66	51.6 ± 0.62	16.4 ± 0.62	24.5 ± 0.63	38.1 ± 0.53	n = 21	[ABJ] Abbott Architect c System
10.3 ± 0.51	51.7 ± 1.37	16.7 ± 0.51	24.7 ± 0.51	36.7 ± 0.51	n = 3	[AWA] Alfa Wassermann ACE Alera
10.8 ± 0.41	50.8 ± 1.47	16.9 ± 0.59	24.7 ± 0.86	37.9 ± 1.20	n = 66	[OLC] Beckman Coulter AU Chemistry System
11.0 ± 0.00	51.5 ± 0.86	17.0 ± 0.00	24.9 ± 0.53	37.8 ± 0.83	n = 14	[BCG] Beckman Coulter UniCel DxC 600
9.2 ± 1.12	46.9 ± 2.13	15.0 ± 0.00	21.8 ± 1.40	34.4 ± 2.11	n = 9	[BCH] Beckman Coulter UniCel DxC 800
10.0 ± 0.00	57.4 ± 0.96	16.3 ± 0.74	27.2 ± 0.66	42.0 ± 0.00	n = 7	[IAA] i-STAT
10.0 ± 0.00	48.5 ± 1.29	16.0 ± 0.00	23.0 ± 0.00	36.0 ± 1.49	n = 9	[JJE] Ortho Vitros 250/350/950
10.0 ± 0.00	48.3 ± 0.51	15.7 ± 0.51	22.7 ± 0.51	36.0 ± 0.00	n = 3	[JJH] Ortho Vitros 4600
10.0 ± 0.00	48.7 ± 0.77	15.6 ± 0.56	23.0 ± 0.00	36.0 ± 0.00	n = 12	[JJF] Ortho Vitros 5,1FS
10.0 ± 0.00	48.9 ± 0.82	15.8 ± 0.54	23.2 ± 0.49	36.5 ± 0.83	n = 20	[JJG] Ortho Vitros 5600
10.3 ± 0.51	51.2 ± 1.54	16.0 ± 0.00	24.0 ± 0.90	37.4 ± 1.02	n = 3	[ROK] Roche cobas c111
11.0 ± 0.00	52.0 ± 0.00	17.0 ± 0.00	25.0 ± 0.00	38.6 ± 0.55	n = 5	[ROJ] Roche cobas c311
10.3 ± 0.52	50.7 ± 1.28	16.4 ± 0.60	24.4 ± 0.77	37.8 ± 1.16	n = 30	[ROC] Roche cobas c501
10.2 ± 0.41	49.6 ± 1.22	15.9 ± 0.85	23.8 ± 0.41	36.9 ± 1.13	n = 8	[ROH] Roche cobas c701
10.5 ± 0.83	51.6 ± 0.55	16.6 ± 0.55	25.0 ± 0.00	38.6 ± 0.55	n = 5	[ROS] Roche Cobas INTEGRA 400
10.5 ± 0.57	51.5 ± 2.17	16.3 ± 0.90	23.7 ± 0.90	38.0 ± 1.76	n = 4	[ROT] Roche Cobas INTEGRA 800
11.0 ± 0.00	51.9 ± 0.83	17.1 ± 0.55	24.9 ± 0.42	38.6 ± 0.79	n = 21	[ROD] Roche MODULAR D/P
11.0 ± 0.00	51.6 ± 1.20	17.2 ± 0.53	25.1 ± 0.61	38.5 ± 0.81	n = 21	[BYE] Siemens ADVIA 1800
10.7 ± 0.64	51.7 ± 1.72	16.7 ± 0.93	24.8 ± 1.01	38.5 ± 1.70	n = 24	[DUE] Siemens Dimension EXL
10.8 ± 0.56	52.0 ± 1.71	16.8 ± 0.56	25.2 ± 0.82	38.5 ± 1.70	n = 14	[DUR] Siemens Dimension RxL
10.6 ± 0.57	51.1 ± 1.65	16.5 ± 0.59	24.6 ± 0.70	37.8 ± 1.01	n = 43	[DUT] Siemens Dimension Vista
10.8 ± 0.76	51.5 ± 0.93	17.0 ± 0.86	25.0 ± 0.95	38.0 ± 0.85	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
10.0 ± 0.00	49.0 ± 0.90	15.7 ± 0.51	22.7 ± 0.51	35.7 ± 0.51	n = 3	[AX1] Abaxis
10.5 ± 0.65	51.6 ± 0.62	16.4 ± 0.61	24.5 ± 0.69	38.1 ± 0.53	n = 22	[AB1] Abbott
10.3 ± 0.51	51.7 ± 1.37	16.7 ± 0.51	24.7 ± 0.51	36.7 ± 0.51	n = 3	[AW1] Alfa Wassermann
10.5 ± 1.03	50.2 ± 2.36	16.2 ± 1.10	24.1 ± 1.69	36.9 ± 2.06	n = 27	[BC1] Beckman Coulter
10.8 ± 0.43	50.9 ± 1.51	16.9 ± 0.60	24.8 ± 0.86	37.9 ± 1.22	n = 63	[OL1] Beckman Coulter AU Series
10.0 ± 0.00	57.7 ± 0.72	16.4 ± 0.79	27.2 ± 0.73	42.3 ± 0.72	n = 6	[IA1] i-STAT
10.0 ± 0.00	48.7 ± 0.92	15.7 ± 0.53	23.0 ± 0.43	36.2 ± 0.84	n = 44	[JJ1] Ortho Clinical Diagnostics
10.3 ± 0.51	51.2 ± 1.54	16.0 ± 0.00	24.0 ± 0.90	37.4 ± 1.02	n = 3	[RO8] Roche cobas c111
10.4 ± 0.55	50.7 ± 1.32	16.4 ± 0.68	24.3 ± 0.74	37.8 ± 1.18	n = 45	[RO4] Roche cobas c311/c501/c502/c701/c702
11.0 ± 0.00	51.9 ± 0.83	17.1 ± 0.55	24.9 ± 0.42	38.6 ± 0.79	n = 21	[RO2] Roche Hitachi and Modular D/P
10.5 ± 0.70	51.8 ± 1.04	16.5 ± 0.70	24.4 ± 0.87	38.5 ± 1.16	n = 9	[RO1] Roche Integra and MIRA
11.0 ± 0.00	51.4 ± 1.40	17.1 ± 0.54	25.1 ± 0.63	38.4 ± 0.93	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
10.7 ± 0.61	51.4 ± 1.63	16.6 ± 0.71	24.8 ± 0.86	38.1 ± 1.34	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Creatinine (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
2.29 ± 0.13	5.11 ± 0.26	2.10 ± 0.10	1.09 ± 0.12	3.14 ± 0.17	n = 378	[---] All Methods & Instruments
2.29 ± 0.13	5.12 ± 0.26	2.10 ± 0.10	1.08 ± 0.10	3.13 ± 0.16	n = 215	[---] All IDMS Traceable Methods
2.31 ± 0.12	5.12 ± 0.24	2.10 ± 0.09	1.13 ± 0.14	3.16 ± 0.18	n = 156	[---] All Non-IDMS Traceable Methods
2.31 ± 0.09	5.13 ± 0.20	2.09 ± 0.08	1.16 ± 0.13	3.18 ± 0.17	n = 122	[-G-] Alkaline picrate/Jaffe
2.27 ± 0.09	5.07 ± 0.20	2.07 ± 0.08	1.09 ± 0.09	3.12 ± 0.14	n = 152	[-H-] Alkaline picrate/Jaffe-IDMS calibration
2.31 ± 0.23	5.11 ± 0.40	2.16 ± 0.11	1.02 ± 0.12	3.09 ± 0.24	n = 34	[-I-] Enzymatic
2.39 ± 0.22	5.27 ± 0.33	2.19 ± 0.11	1.04 ± 0.09	3.14 ± 0.19	n = 63	[-J-] Enzymatic-IDMS-traceable calibration
2.04 ± 0.14	4.81 ± 0.08	2.08 ± 0.06	0.92 ± 0.06	2.96 ± 0.17	n = 3	[AXA] Abaxis Piccolo
2.39 ± 0.03	5.43 ± 0.13	2.19 ± 0.03	1.16 ± 0.04	3.34 ± 0.07	n = 21	[ABJ] Abbott Architect c System
2.22 ± 0.15	4.77 ± 0.24	2.03 ± 0.12	1.08 ± 0.04	2.92 ± 0.14	n = 3	[AWA] Alfa Wassermann ACE Alera
2.27 ± 0.06	5.04 ± 0.12	2.08 ± 0.05	1.09 ± 0.03	3.09 ± 0.08	n = 67	[OLC] Beckman Coulter AU Chemistry System
2.26 ± 0.07	4.97 ± 0.11	2.03 ± 0.05	0.96 ± 0.05	3.02 ± 0.07	n = 16	[BCG] Beckman Coulter UniCel DxC 600
2.26 ± 0.05	5.08 ± 0.12	2.09 ± 0.07	1.03 ± 0.06	3.07 ± 0.15	n = 8	[BCH] Beckman Coulter UniCel DxC 800
2.00 ± 0.09	4.51 ± 0.07	1.92 ± 0.02	0.91 ± 0.05	2.84 ± 0.14	n = 6	[EPO] Epocal epoc
2.23 ± 0.07	5.31 ± 0.20	2.18 ± 0.10	1.02 ± 0.07	3.11 ± 0.13	n = 6	[IAA] i-STAT
2.58 ± 0.07	5.41 ± 0.17	2.24 ± 0.05	1.05 ± 0.06	3.31 ± 0.06	n = 10	[JJE] Ortho Vitros 250/350/950
2.64 ± 0.10	5.66 ± 0.12	2.32 ± 0.09	1.11 ± 0.03	3.32 ± 0.12	n = 3	[JJH] Ortho Vitros 4600
2.57 ± 0.09	5.54 ± 0.13	2.25 ± 0.06	1.10 ± 0.04	3.26 ± 0.09	n = 12	[JJF] Ortho Vitros 5,1FS
2.58 ± 0.07	5.54 ± 0.09	2.28 ± 0.07	1.10 ± 0.00	3.26 ± 0.09	n = 20	[JJG] Ortho Vitros 5600
2.14 ± 0.10	4.72 ± 0.11	2.07 ± 0.07	1.03 ± 0.10	2.94 ± 0.13	n = 3	[ROK] Roche cobas c111
2.20 ± 0.09	4.87 ± 0.14	2.05 ± 0.05	1.03 ± 0.11	2.99 ± 0.13	n = 5	[ROJ] Roche cobas c311
2.21 ± 0.08	4.88 ± 0.16	2.09 ± 0.09	0.98 ± 0.06	2.98 ± 0.11	n = 32	[ROC] Roche cobas c501
2.28 ± 0.08	4.99 ± 0.14	2.08 ± 0.10	1.10 ± 0.09	3.14 ± 0.07	n = 8	[ROH] Roche cobas c701
2.22 ± 0.09	4.85 ± 0.05	2.08 ± 0.06	1.10 ± 0.07	2.97 ± 0.10	n = 6	[ROS] Roche Cobas INTEGRA 400
2.13 ± 0.04	4.80 ± 0.01	2.08 ± 0.03	0.94 ± 0.07	2.91 ± 0.05	n = 4	[ROT] Roche Cobas INTEGRA 800
2.34 ± 0.09	5.13 ± 0.19	2.11 ± 0.05	1.16 ± 0.13	3.18 ± 0.16	n = 21	[ROD] Roche MODULAR D/P
2.23 ± 0.05	5.06 ± 0.17	2.02 ± 0.07	1.07 ± 0.10	3.11 ± 0.14	n = 21	[BYE] Siemens ADVIA 1800
2.34 ± 0.07	5.15 ± 0.08	2.08 ± 0.06	1.21 ± 0.07	3.23 ± 0.08	n = 24	[DUE] Siemens Dimension EXL
2.32 ± 0.10	5.21 ± 0.13	2.05 ± 0.09	1.17 ± 0.12	3.18 ± 0.15	n = 14	[DUR] Siemens Dimension RxL
2.26 ± 0.10	5.21 ± 0.17	2.09 ± 0.09	1.20 ± 0.18	3.21 ± 0.18	n = 43	[DUT] Siemens Dimension Vista
2.30 ± 0.12	5.17 ± 0.15	2.09 ± 0.13	1.18 ± 0.15	3.26 ± 0.15	n = 11	[DUX] Siemens Dimension Xpand
2.04 ± 0.14	4.81 ± 0.08	2.08 ± 0.06	0.92 ± 0.06	2.96 ± 0.17	n = 3	[AX1] Abaxis
2.39 ± 0.03	5.42 ± 0.13	2.18 ± 0.03	1.16 ± 0.05	3.34 ± 0.07	n = 22	[AB1] Abbott
2.22 ± 0.15	4.77 ± 0.24	2.03 ± 0.12	1.08 ± 0.04	2.92 ± 0.14	n = 3	[AW1] Alfa Wassermann
2.26 ± 0.06	5.01 ± 0.12	2.05 ± 0.06	0.98 ± 0.06	3.04 ± 0.09	n = 27	[BC1] Beckman Coulter
2.27 ± 0.06	5.04 ± 0.12	2.08 ± 0.05	1.09 ± 0.03	3.09 ± 0.07	n = 63	[OL1] Beckman Coulter AU Series
2.00 ± 0.09	4.51 ± 0.07	1.92 ± 0.02	0.91 ± 0.05	2.84 ± 0.14	n = 6	[EP1] Epocal epoc
2.25 ± 0.08	5.35 ± 0.22	2.20 ± 0.10	1.02 ± 0.08	3.14 ± 0.14	n = 5	[IA1] i-STAT
2.58 ± 0.08	5.53 ± 0.13	2.26 ± 0.07	1.10 ± 0.04	3.28 ± 0.09	n = 44	[JJ1] Ortho Clinical Diagnostics
2.14 ± 0.10	4.72 ± 0.11	2.07 ± 0.07	1.03 ± 0.10	2.94 ± 0.13	n = 3	[RO8] Roche cobas c111
2.22 ± 0.09	4.90 ± 0.16	2.08 ± 0.09	1.02 ± 0.09	3.01 ± 0.13	n = 47	[RO4] Roche cobas c311/c501/c502/c701/c70
2.34 ± 0.09	5.13 ± 0.19	2.11 ± 0.05	1.16 ± 0.13	3.18 ± 0.16	n = 21	[RO2] Roche Hitachi and Modular D/P
2.18 ± 0.07	4.82 ± 0.05	2.08 ± 0.04	1.04 ± 0.11	2.94 ± 0.09	n = 10	[RO1] Roche Integra and MIRA
2.24 ± 0.06	5.07 ± 0.17	2.02 ± 0.07	1.08 ± 0.09	3.12 ± 0.14	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
2.30 ± 0.10	5.19 ± 0.15	2.08 ± 0.09	1.20 ± 0.14	3.22 ± 0.15	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Estimated Glomerular Filtration Rate (mL/min/1.73 m²)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
23.8 ± 2.17	9.4 ± 0.81	26.5 ± 2.19	55.4 ± 7.84	16.6 ± 1.36	n = 310	[---] All Methods & Instruments
23.4 ± 2.16	9.2 ± 0.76	25.9 ± 1.94	54.9 ± 6.96	16.3 ± 1.26	n = 179	[-A-] IDMS-traceable MDRD Study Equation
23.8 ± 1.59	9.5 ± 0.69	26.9 ± 1.80	51.8 ± 6.48	16.5 ± 1.14	n = 79	[-B-] Original MDRD Study Equation (4-variable)
25.6 ± 1.81	9.9 ± 0.79	28.3 ± 2.01	62.5 ± 4.38	17.7 ± 1.22	n = 44	[-F-] CKD-EPI Equation
35.2 ± 8.14	15.5 ± 4.45	40.5 ± 7.98	90.4 ± 8.83	26.3 ± 6.43	n = 5	[-D-] Cockcroft-Gault Equation

Target values and allowable ranges for Estimated Glomerular Filtration Rate (eGFR):

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Method
23 (17-29)	9 (6-12)	26 (19-32)	55 (41-69)	16 (12-21)	IDMS-traceable MDRD Study Equation
24 (18-31)	10 (7-13)	27 (20-34)	56 (41-70)	17 (12-22)	Original MDRD Study Equation
25 (18-32)	10 (7-12)	28 (20-35)	62 (46-78)	17 (12-22)	CKD-EPI Equation
40 (29-50)	18 (13-23)	43 (32-54)	83 (62-104)	29 (21-37)	Cockcroft-Gault Equation

Laboratories were asked to report Estimated Glomerular Filtration Rate (eGFR) for samples C11-C15 for a 44-year-old non-African American woman weighing 80 kg.

Target values for eGFR calculated by the MDRD Study Equations were derived from participant mean values for serum creatinine for both conventional and isotope dilution mass spectroscopy (IDMS) calibration methods and application of the appropriate 4-variable MDRD Study equation.

Target values for eGFR calculated by the CKD-EPI equation were derived from participant mean values for IDMS-traceable serum creatinine methods and application of the CKD-EPI equation.

Target values for eGFR calculated by the Cockcroft-Gault equation were derived from all-method mean values for serum creatinine and application of the Cockcroft-Gault formula.

Allowable ranges are ± 25% of the target eGFR for all samples/equations.

Note: the NKDEP recommends reporting estimated GFR values greater than or equal to 60 mL/min/1.73 m² as "> 60 mL/min/1.73 m²" and not as an exact number. However, ranges exceeding 60 mL/min are provided as a relative indicator of acceptability for laboratories that report numeric results above that threshold. Note that some laboratories reported results as > 60 mL/min/1.73 m². These data were removed from the calculations of mean and standard deviation since their inclusion would have skewed results.

Summary of Participant Performance (Mean and Standard Deviation)

Uric Acid (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
5.79 ± 0.20	3.00 ± 0.13	4.43 ± 0.20	10.99 ± 0.43	6.98 ± 0.25	n = 330	[---] All Methods & Instruments
<Instruments>						
5.90 ± 0.09	2.99 ± 0.05	4.46 ± 0.07	11.45 ± 0.26	7.17 ± 0.12	n = 21	[ABJ] Abbott Architect c System
5.81 ± 0.10	3.01 ± 0.07	4.67 ± 0.11	11.29 ± 0.21	7.13 ± 0.13	n = 65	[OLC] Beckman Coulter AU Chemistry System
5.46 ± 0.06	2.78 ± 0.04	4.30 ± 0.00	10.29 ± 0.04	6.45 ± 0.08	n = 12	[BCG] Beckman Coulter UniCel DxC 600
5.44 ± 0.10	2.76 ± 0.06	4.30 ± 0.05	10.25 ± 0.17	6.50 ± 0.00	n = 7	[BCH] Beckman Coulter UniCel DxC 800
5.83 ± 0.12	2.98 ± 0.10	4.39 ± 0.11	10.74 ± 0.16	6.88 ± 0.14	n = 6	[JJE] Ortho Vitros 250/350/950
5.77 ± 0.05	2.97 ± 0.05	4.37 ± 0.05	10.67 ± 0.14	6.84 ± 0.10	n = 3	[JJH] Ortho Vitros 4600
5.83 ± 0.14	2.98 ± 0.08	4.38 ± 0.13	10.82 ± 0.26	6.91 ± 0.13	n = 12	[JJF] Ortho Vitros 5,1FS
5.77 ± 0.09	2.95 ± 0.07	4.33 ± 0.07	10.66 ± 0.20	6.82 ± 0.11	n = 20	[JJG] Ortho Vitros 5600
5.89 ± 0.11	3.00 ± 0.08	4.53 ± 0.09	11.22 ± 0.13	7.12 ± 0.13	n = 4	[ROJ] Roche cobas c311
5.87 ± 0.14	2.99 ± 0.09	4.53 ± 0.10	11.21 ± 0.26	7.08 ± 0.19	n = 30	[ROC] Roche cobas c501
5.76 ± 0.09	2.90 ± 0.06	4.37 ± 0.10	10.92 ± 0.18	6.95 ± 0.17	n = 6	[ROH] Roche cobas c701
5.67 ± 0.05	2.87 ± 0.05	4.30 ± 0.09	10.77 ± 0.23	6.77 ± 0.14	n = 3	[ROT] Roche Cobas INTEGRA 800
5.82 ± 0.11	2.96 ± 0.07	4.47 ± 0.08	11.12 ± 0.25	6.99 ± 0.14	n = 20	[ROD] Roche MODULAR D/P
5.85 ± 0.07	3.00 ± 0.08	4.51 ± 0.13	11.12 ± 0.12	7.06 ± 0.12	n = 21	[BYE] Siemens ADVIA 1800
5.94 ± 0.12	3.23 ± 0.09	4.37 ± 0.08	11.04 ± 0.17	7.11 ± 0.11	n = 24	[DUE] Siemens Dimension EXL
5.90 ± 0.14	3.16 ± 0.10	4.36 ± 0.12	11.03 ± 0.20	7.00 ± 0.12	n = 12	[DUR] Siemens Dimension RxL
5.42 ± 0.14	3.06 ± 0.08	4.13 ± 0.07	10.44 ± 0.21	6.69 ± 0.11	n = 41	[DUT] Siemens Dimension Vista
5.93 ± 0.14	3.25 ± 0.15	4.40 ± 0.14	11.10 ± 0.25	7.16 ± 0.16	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
5.90 ± 0.09	2.99 ± 0.05	4.46 ± 0.07	11.45 ± 0.26	7.17 ± 0.12	n = 21	[AB1] Abbott
5.47 ± 0.07	2.78 ± 0.05	4.31 ± 0.05	10.28 ± 0.12	6.45 ± 0.07	n = 23	[BC1] Beckman Coulter
5.82 ± 0.10	3.01 ± 0.07	4.68 ± 0.11	11.30 ± 0.21	7.13 ± 0.13	n = 64	[OL1] Beckman Coulter AU Series
5.79 ± 0.11	2.96 ± 0.08	4.36 ± 0.10	10.72 ± 0.22	6.85 ± 0.13	n = 41	[JJ1] Ortho Clinical Diagnostics
5.86 ± 0.14	2.97 ± 0.09	4.50 ± 0.12	11.15 ± 0.26	7.06 ± 0.19	n = 43	[RO4] Roche cobas c311/c501/c502/c701/c702
5.82 ± 0.11	2.96 ± 0.07	4.47 ± 0.08	11.12 ± 0.25	6.99 ± 0.14	n = 20	[RO2] Roche Hitachi and Modular D/P
5.70 ± 0.06	2.86 ± 0.06	4.36 ± 0.11	10.86 ± 0.25	6.83 ± 0.14	n = 5	[RO1] Roche Integra and MIRA
5.86 ± 0.07	2.99 ± 0.10	4.50 ± 0.13	11.12 ± 0.11	7.05 ± 0.12	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
5.68 ± 0.32	3.13 ± 0.13	4.25 ± 0.16	10.76 ± 0.39	6.90 ± 0.26	n = 84	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Bilirubin (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
1.51 ± 0.13	4.56 ± 0.29	0.84 ± 0.12	1.70 ± 0.16	3.10 ± 0.22	n = 351	[---] All Methods & Instruments
<Instruments>						
1.60 ± 0.09	4.57 ± 0.14	0.94 ± 0.10	1.62 ± 0.15	2.99 ± 0.20	n = 3	[AXA] Abaxis Piccolo
1.68 ± 0.08	4.77 ± 0.13	0.93 ± 0.06	1.86 ± 0.10	3.29 ± 0.10	n = 21	[ABJ] Abbott Architect c System
2.00 ± 0.09	5.37 ± 0.14	1.00 ± 0.00	2.10 ± 0.09	3.67 ± 0.14	n = 3	[AWA] Alfa Wassermann ACE Alera
1.53 ± 0.08	4.30 ± 0.17	0.94 ± 0.07	1.70 ± 0.08	2.97 ± 0.14	n = 67	[OLC] Beckman Coulter AU Chemistry System
1.79 ± 0.14	4.71 ± 0.13	0.97 ± 0.13	1.93 ± 0.18	3.25 ± 0.17	n = 15	[BCG] Beckman Coulter UniCel DxC 600
1.68 ± 0.09	4.63 ± 0.19	0.93 ± 0.13	1.80 ± 0.17	3.15 ± 0.18	n = 7	[BCH] Beckman Coulter UniCel DxC 800
1.44 ± 0.05	4.82 ± 0.05	0.84 ± 0.07	1.82 ± 0.06	3.28 ± 0.09	n = 9	[JJE] Ortho Vitros 250/350/950
1.40 ± 0.09	4.83 ± 0.14	0.83 ± 0.05	1.83 ± 0.05	3.27 ± 0.05	n = 3	[JJH] Ortho Vitros 4600
1.46 ± 0.06	4.88 ± 0.06	0.78 ± 0.07	1.85 ± 0.06	3.32 ± 0.12	n = 12	[JJF] Ortho Vitros 5,1FS
1.45 ± 0.07	4.87 ± 0.11	0.83 ± 0.07	1.80 ± 0.00	3.32 ± 0.10	n = 20	[JJG] Ortho Vitros 5600
1.40 ± 0.06	4.32 ± 0.04	0.70 ± 0.00	1.48 ± 0.08	2.82 ± 0.17	n = 5	[ROJ] Roche cobas c311
1.35 ± 0.08	4.30 ± 0.13	0.68 ± 0.06	1.45 ± 0.11	2.83 ± 0.13	n = 30	[ROC] Roche cobas c501
1.33 ± 0.14	4.19 ± 0.12	0.64 ± 0.12	1.39 ± 0.17	2.77 ± 0.12	n = 6	[ROH] Roche cobas c701
1.40 ± 0.06	4.25 ± 0.10	0.70 ± 0.00	1.53 ± 0.12	2.89 ± 0.11	n = 6	[ROS] Roche Cobas INTEGRA 400
1.35 ± 0.06	4.05 ± 0.12	0.68 ± 0.04	1.47 ± 0.08	2.73 ± 0.09	n = 4	[ROT] Roche Cobas INTEGRA 800
1.47 ± 0.05	4.51 ± 0.11	0.78 ± 0.05	1.58 ± 0.08	3.03 ± 0.08	n = 20	[ROD] Roche MODULAR D/P
1.65 ± 0.07	4.84 ± 0.15	0.88 ± 0.07	1.77 ± 0.08	3.27 ± 0.11	n = 21	[BYE] Siemens ADVIA 1800
1.50 ± 0.00	4.60 ± 0.14	0.80 ± 0.00	1.70 ± 0.11	3.12 ± 0.11	n = 24	[DUE] Siemens Dimension EXL
1.52 ± 0.12	4.66 ± 0.16	0.78 ± 0.04	1.70 ± 0.11	3.16 ± 0.12	n = 14	[DUR] Siemens Dimension RxL
1.52 ± 0.06	4.57 ± 0.11	0.81 ± 0.05	1.72 ± 0.08	3.11 ± 0.11	n = 42	[DUT] Siemens Dimension Vista
1.51 ± 0.05	4.57 ± 0.08	0.80 ± 0.00	1.69 ± 0.05	3.09 ± 0.11	n = 10	[DUX] Siemens Dimension Xpand
<Reagents>						
1.60 ± 0.09	4.57 ± 0.14	0.94 ± 0.10	1.62 ± 0.15	2.99 ± 0.20	n = 3	[AX1] Abaxis
1.68 ± 0.08	4.77 ± 0.13	0.93 ± 0.06	1.86 ± 0.10	3.29 ± 0.10	n = 21	[AB1] Abbott
2.00 ± 0.09	5.37 ± 0.14	1.00 ± 0.00	2.10 ± 0.09	3.67 ± 0.14	n = 3	[AW1] Alfa Wassermann
1.74 ± 0.14	4.67 ± 0.16	0.97 ± 0.13	1.89 ± 0.19	3.23 ± 0.20	n = 25	[BC1] Beckman Coulter
1.53 ± 0.08	4.30 ± 0.17	0.94 ± 0.07	1.70 ± 0.08	2.97 ± 0.13	n = 65	[OL1] Beckman Coulter AU Series
1.45 ± 0.07	4.86 ± 0.10	0.82 ± 0.07	1.82 ± 0.06	3.31 ± 0.10	n = 44	[JJ1] Ortho Clinical Diagnostics
1.35 ± 0.09	4.28 ± 0.15	0.68 ± 0.07	1.44 ± 0.12	2.82 ± 0.14	n = 42	[RO4] Roche cobas c311/c501/c502/c701/c702
1.47 ± 0.05	4.51 ± 0.11	0.78 ± 0.05	1.58 ± 0.08	3.03 ± 0.08	n = 20	[RO2] Roche Hitachi and Modular D/P
1.38 ± 0.06	4.18 ± 0.15	0.70 ± 0.00	1.50 ± 0.11	2.82 ± 0.13	n = 10	[RO1] Roche Integra and MIRA
1.65 ± 0.07	4.85 ± 0.15	0.88 ± 0.07	1.77 ± 0.09	3.28 ± 0.12	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
1.52 ± 0.07	4.59 ± 0.13	0.80 ± 0.00	1.71 ± 0.09	3.12 ± 0.11	n = 90	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Phosphorus (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
8.81 ± 0.31	6.13 ± 0.25	2.66 ± 0.14	3.43 ± 0.19	4.84 ± 0.22	n = 331	[---] All Methods & Instruments
<Instruments>						
8.76 ± 0.12	6.06 ± 0.08	2.65 ± 0.06	3.40 ± 0.09	4.79 ± 0.08	n = 20	[ABJ] Abbott Architect c System
8.59 ± 0.26	5.98 ± 0.21	2.60 ± 0.10	3.34 ± 0.13	4.72 ± 0.16	n = 63	[OLC] Beckman Coulter AU Chemistry System
8.77 ± 0.26	6.26 ± 0.14	2.74 ± 0.09	3.55 ± 0.08	4.96 ± 0.15	n = 13	[BCG] Beckman Coulter UniCel DxC 600
9.39 ± 0.28	6.46 ± 0.26	2.80 ± 0.09	3.52 ± 0.14	5.07 ± 0.21	n = 8	[BCH] Beckman Coulter UniCel DxC 800
9.36 ± 0.32	6.61 ± 0.26	3.10 ± 0.15	3.82 ± 0.08	5.25 ± 0.15	n = 8	[JJE] Ortho Vitros 250/350/950
9.43 ± 0.05	6.57 ± 0.05	3.13 ± 0.05	3.87 ± 0.05	5.33 ± 0.05	n = 3	[JJH] Ortho Vitros 4600
9.43 ± 0.35	6.63 ± 0.25	3.09 ± 0.13	3.87 ± 0.14	5.30 ± 0.00	n = 12	[JJF] Ortho Vitros 5,1FS
9.36 ± 0.29	6.62 ± 0.22	3.06 ± 0.11	3.84 ± 0.12	5.26 ± 0.19	n = 20	[JJG] Ortho Vitros 5600
9.05 ± 0.19	6.27 ± 0.14	2.73 ± 0.05	3.54 ± 0.10	4.94 ± 0.10	n = 3	[ROJ] Roche cobas c311
8.96 ± 0.19	6.25 ± 0.19	2.69 ± 0.07	3.48 ± 0.11	4.92 ± 0.15	n = 30	[ROC] Roche cobas c501
8.79 ± 0.14	5.97 ± 0.11	2.53 ± 0.07	3.32 ± 0.09	4.76 ± 0.09	n = 7	[ROH] Roche cobas c701
8.95 ± 0.12	6.10 ± 0.11	2.65 ± 0.06	3.45 ± 0.06	4.88 ± 0.04	n = 4	[ROS] Roche Cobas INTEGRA 400
8.62 ± 0.32	6.07 ± 0.05	2.63 ± 0.05	3.40 ± 0.00	4.80 ± 0.00	n = 3	[ROT] Roche Cobas INTEGRA 800
8.92 ± 0.17	6.23 ± 0.09	2.72 ± 0.09	3.48 ± 0.07	4.92 ± 0.09	n = 20	[ROD] Roche MODULAR D/P
8.76 ± 0.17	6.16 ± 0.11	2.68 ± 0.09	3.43 ± 0.09	4.83 ± 0.11	n = 21	[BYE] Siemens ADVIA 1800
8.74 ± 0.16	6.01 ± 0.09	2.61 ± 0.07	3.33 ± 0.07	4.73 ± 0.08	n = 23	[DUE] Siemens Dimension EXL
8.83 ± 0.11	6.07 ± 0.15	2.67 ± 0.06	3.42 ± 0.11	4.80 ± 0.11	n = 13	[DUR] Siemens Dimension RxL
8.65 ± 0.22	5.96 ± 0.16	2.57 ± 0.08	3.27 ± 0.10	4.65 ± 0.15	n = 42	[DUT] Siemens Dimension Vista
8.79 ± 0.11	6.00 ± 0.09	2.63 ± 0.09	3.31 ± 0.08	4.72 ± 0.11	n = 8	[DUX] Siemens Dimension Xpand
<Reagents>						
8.76 ± 0.12	6.06 ± 0.08	2.65 ± 0.06	3.40 ± 0.09	4.79 ± 0.08	n = 20	[AB1] Abbott
8.96 ± 0.43	6.31 ± 0.26	2.75 ± 0.10	3.53 ± 0.13	4.98 ± 0.18	n = 24	[BC1] Beckman Coulter
8.60 ± 0.26	5.99 ± 0.21	2.61 ± 0.10	3.35 ± 0.13	4.73 ± 0.15	n = 61	[OL1] Beckman Coulter AU Series
9.38 ± 0.30	6.61 ± 0.22	3.08 ± 0.12	3.85 ± 0.12	5.28 ± 0.17	n = 43	[JJ1] Ortho Clinical Diagnostics
8.94 ± 0.20	6.21 ± 0.21	2.68 ± 0.08	3.46 ± 0.14	4.90 ± 0.16	n = 42	[RO4] Roche cobas c311/c501/c502/c701/c702
8.92 ± 0.17	6.23 ± 0.09	2.72 ± 0.09	3.48 ± 0.07	4.92 ± 0.09	n = 20	[RO2] Roche Hitachi and Modular D/P
8.89 ± 0.17	6.08 ± 0.09	2.64 ± 0.06	3.42 ± 0.05	4.84 ± 0.06	n = 7	[RO1] Roche Integra and MIRA
8.77 ± 0.17	6.15 ± 0.12	2.66 ± 0.09	3.42 ± 0.09	4.81 ± 0.12	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
8.72 ± 0.19	5.99 ± 0.14	2.60 ± 0.08	3.32 ± 0.11	4.71 ± 0.14	n = 86	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Calcium (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
6.80 ± 0.27	13.48 ± 0.32	10.50 ± 0.26	8.62 ± 0.18	11.12 ± 0.25	n = 360	[---] All Methods & Instruments
<Instruments>						
6.63 ± 0.23	13.18 ± 0.15	10.65 ± 0.19	8.67 ± 0.05	11.07 ± 0.14	n = 3	[AXA] Abaxis Piccolo
6.95 ± 0.08	13.55 ± 0.15	10.47 ± 0.11	8.48 ± 0.12	11.08 ± 0.13	n = 21	[ABJ] Abbott Architect c System
6.96 ± 0.10	13.25 ± 0.19	10.47 ± 0.42	8.73 ± 0.14	10.84 ± 0.47	n = 3	[AWA] Alfa Wassermann ACE Alera
7.17 ± 0.13	13.31 ± 0.23	10.36 ± 0.19	8.63 ± 0.13	11.01 ± 0.18	n = 67	[OLC] Beckman Coulter AU Chemistry System
6.61 ± 0.11	13.25 ± 0.24	10.34 ± 0.10	8.51 ± 0.09	10.93 ± 0.12	n = 15	[BCG] Beckman Coulter UniCel DxC 600
6.66 ± 0.14	13.30 ± 0.24	10.44 ± 0.18	8.68 ± 0.20	11.13 ± 0.25	n = 8	[BCH] Beckman Coulter UniCel DxC 800
6.69 ± 0.11	13.76 ± 0.18	10.84 ± 0.14	8.83 ± 0.15	11.56 ± 0.21	n = 8	[JJE] Ortho Vitros 250/350/950
6.60 ± 0.09	13.40 ± 0.09	10.63 ± 0.14	8.70 ± 0.09	11.30 ± 0.09	n = 3	[JJH] Ortho Vitros 4600
6.62 ± 0.08	13.59 ± 0.16	10.63 ± 0.13	8.71 ± 0.12	11.34 ± 0.16	n = 12	[JJF] Ortho Vitros 5,1FS
6.64 ± 0.15	13.63 ± 0.30	10.68 ± 0.30	8.72 ± 0.22	11.39 ± 0.28	n = 20	[JJG] Ortho Vitros 5600
6.70 ± 0.09	13.60 ± 0.09	10.64 ± 0.10	8.63 ± 0.05	11.10 ± 0.00	n = 3	[ROK] Roche cobas c111
6.86 ± 0.11	13.78 ± 0.08	10.77 ± 0.09	8.68 ± 0.04	11.30 ± 0.08	n = 5	[ROJ] Roche cobas c311
6.85 ± 0.15	13.77 ± 0.25	10.74 ± 0.20	8.71 ± 0.18	11.29 ± 0.14	n = 31	[ROC] Roche cobas c501
6.75 ± 0.11	13.48 ± 0.18	10.50 ± 0.22	8.56 ± 0.13	11.11 ± 0.14	n = 7	[ROH] Roche cobas c701
6.80 ± 0.06	13.77 ± 0.17	10.72 ± 0.07	8.63 ± 0.05	11.30 ± 0.06	n = 6	[ROS] Roche Cobas INTEGRA 400
6.71 ± 0.11	13.52 ± 0.13	10.58 ± 0.15	8.60 ± 0.18	11.13 ± 0.16	n = 4	[ROT] Roche Cobas INTEGRA 800
6.85 ± 0.17	13.70 ± 0.34	10.71 ± 0.20	8.75 ± 0.20	11.34 ± 0.21	n = 20	[ROD] Roche MODULAR D/P
6.88 ± 0.19	13.33 ± 0.33	10.48 ± 0.30	8.59 ± 0.20	11.07 ± 0.25	n = 21	[BYE] Siemens ADVIA 1800
6.66 ± 0.12	13.52 ± 0.24	10.45 ± 0.14	8.60 ± 0.12	11.07 ± 0.17	n = 24	[DUE] Siemens Dimension EXL
6.58 ± 0.26	13.68 ± 0.10	10.50 ± 0.15	8.62 ± 0.13	11.13 ± 0.07	n = 14	[DUR] Siemens Dimension RxL
6.62 ± 0.17	13.35 ± 0.34	10.36 ± 0.27	8.52 ± 0.20	10.97 ± 0.25	n = 42	[DUT] Siemens Dimension Vista
6.57 ± 0.14	13.57 ± 0.26	10.39 ± 0.22	8.54 ± 0.12	11.09 ± 0.21	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
6.63 ± 0.23	13.18 ± 0.15	10.65 ± 0.19	8.67 ± 0.05	11.07 ± 0.14	n = 3	[AX1] Abaxis
6.95 ± 0.08	13.55 ± 0.15	10.47 ± 0.11	8.48 ± 0.12	11.08 ± 0.13	n = 21	[AB1] Abbott
6.96 ± 0.10	13.25 ± 0.19	10.47 ± 0.42	8.73 ± 0.14	10.84 ± 0.47	n = 3	[AW1] Alfa Wassermann
6.62 ± 0.12	13.24 ± 0.22	10.35 ± 0.11	8.54 ± 0.12	10.96 ± 0.14	n = 27	[BC1] Beckman Coulter
7.17 ± 0.14	13.32 ± 0.23	10.36 ± 0.19	8.63 ± 0.13	11.01 ± 0.19	n = 65	[OL1] Beckman Coulter AU Series
6.64 ± 0.12	13.62 ± 0.25	10.69 ± 0.22	8.74 ± 0.18	11.40 ± 0.24	n = 43	[JJ1] Ortho Clinical Diagnostics
6.70 ± 0.09	13.60 ± 0.09	10.64 ± 0.10	8.63 ± 0.05	11.10 ± 0.00	n = 3	[RO8] Roche cobas c111
6.83 ± 0.14	13.71 ± 0.23	10.71 ± 0.21	8.67 ± 0.16	11.26 ± 0.16	n = 43	[RO4] Roche cobas c311/c501/c502/c701/c702
6.86 ± 0.17	13.73 ± 0.30	10.73 ± 0.18	8.77 ± 0.18	11.35 ± 0.19	n = 19	[RO2] Roche Hitachi and Modular D/P
6.77 ± 0.10	13.66 ± 0.20	10.68 ± 0.11	8.63 ± 0.11	11.26 ± 0.10	n = 10	[RO1] Roche Integra and MIRA
6.86 ± 0.35	12.90 ± 0.34	10.35 ± 0.34	8.48 ± 0.20	10.63 ± 0.32	n = 4	[GZ1] Sekisui Diagnostics
6.89 ± 0.18	13.28 ± 0.33	10.44 ± 0.31	8.58 ± 0.21	11.04 ± 0.25	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
6.62 ± 0.17	13.49 ± 0.31	10.41 ± 0.23	8.56 ± 0.16	11.04 ± 0.21	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Magnesium (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
4.34 ± 0.14	2.23 ± 0.11	1.09 ± 0.09	3.20 ± 0.12	2.72 ± 0.11	n = 334	[---] All Methods & Instruments
<Instruments>						
4.40 ± 0.00	2.10 ± 0.07	1.02 ± 0.05	3.02 ± 0.07	2.58 ± 0.10	n = 20	[ABJ] Abbott Architect c System
4.33 ± 0.11	2.25 ± 0.07	1.10 ± 0.00	3.17 ± 0.08	2.71 ± 0.09	n = 64	[OLC] Beckman Coulter AU Chemistry System
4.29 ± 0.09	2.22 ± 0.07	1.10 ± 0.00	3.15 ± 0.09	2.67 ± 0.07	n = 15	[BCG] Beckman Coulter UniCel DxC 600
4.28 ± 0.10	2.21 ± 0.04	1.10 ± 0.00	3.13 ± 0.07	2.69 ± 0.09	n = 8	[BCH] Beckman Coulter UniCel DxC 800
4.26 ± 0.14	2.22 ± 0.07	1.10 ± 0.09	3.24 ± 0.16	2.75 ± 0.12	n = 6	[JJE] Ortho Vitros 250/350/950
4.20 ± 0.00	2.20 ± 0.00	1.13 ± 0.05	3.27 ± 0.05	2.73 ± 0.05	n = 3	[JJH] Ortho Vitros 4600
4.20 ± 0.10	2.19 ± 0.07	1.14 ± 0.06	3.26 ± 0.10	2.73 ± 0.08	n = 12	[JJF] Ortho Vitros 5,1FS
4.18 ± 0.09	2.17 ± 0.06	1.12 ± 0.05	3.23 ± 0.07	2.71 ± 0.08	n = 19	[JJG] Ortho Vitros 5600
4.37 ± 0.10	2.30 ± 0.07	1.12 ± 0.04	3.25 ± 0.08	2.77 ± 0.07	n = 28	[ROC] Roche cobas c501
4.20 ± 0.14	2.23 ± 0.10	1.10 ± 0.00	3.17 ± 0.18	2.68 ± 0.07	n = 6	[ROH] Roche cobas c701
4.27 ± 0.05	2.27 ± 0.05	1.20 ± 0.00	3.17 ± 0.05	2.70 ± 0.09	n = 3	[ROS] Roche Cobas INTEGRA 400
4.25 ± 0.19	2.23 ± 0.05	1.17 ± 0.05	3.20 ± 0.09	2.66 ± 0.10	n = 3	[ROT] Roche Cobas INTEGRA 800
4.33 ± 0.10	2.30 ± 0.08	1.11 ± 0.05	3.21 ± 0.07	2.79 ± 0.07	n = 20	[ROD] Roche MODULAR D/P
4.44 ± 0.12	2.49 ± 0.07	1.25 ± 0.07	3.35 ± 0.11	2.91 ± 0.07	n = 21	[BYE] Siemens ADVIA 1800
4.47 ± 0.12	2.24 ± 0.07	1.03 ± 0.07	3.24 ± 0.07	2.73 ± 0.07	n = 22	[DUE] Siemens Dimension EXL
4.47 ± 0.11	2.26 ± 0.06	1.01 ± 0.07	3.26 ± 0.09	2.78 ± 0.08	n = 14	[DUR] Siemens Dimension RxL
4.37 ± 0.14	2.17 ± 0.11	0.94 ± 0.12	3.21 ± 0.14	2.69 ± 0.12	n = 42	[DUT] Siemens Dimension Vista
4.44 ± 0.07	2.20 ± 0.07	1.03 ± 0.06	3.24 ± 0.08	2.70 ± 0.00	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
4.40 ± 0.00	2.10 ± 0.07	1.02 ± 0.05	3.02 ± 0.07	2.58 ± 0.10	n = 20	[AB1] Abbott
4.27 ± 0.10	2.20 ± 0.07	1.10 ± 0.00	3.13 ± 0.08	2.67 ± 0.07	n = 26	[BC1] Beckman Coulter
4.34 ± 0.11	2.25 ± 0.08	1.10 ± 0.00	3.17 ± 0.08	2.71 ± 0.09	n = 61	[OL1] Beckman Coulter AU Series
4.20 ± 0.10	2.18 ± 0.06	1.12 ± 0.06	3.24 ± 0.09	2.72 ± 0.08	n = 40	[JJ1] Ortho Clinical Diagnostics
4.33 ± 0.13	2.28 ± 0.08	1.10 ± 0.00	3.24 ± 0.10	2.75 ± 0.07	n = 39	[RO4] Roche cobas c311/c501/c502/c701/c702
4.33 ± 0.10	2.30 ± 0.08	1.11 ± 0.05	3.21 ± 0.07	2.79 ± 0.07	n = 20	[RO2] Roche Hitachi and Modular D/P
4.27 ± 0.11	2.25 ± 0.06	1.20 ± 0.00	3.18 ± 0.07	2.68 ± 0.10	n = 6	[RO1] Roche Integra and MIRA
4.45 ± 0.12	2.50 ± 0.07	1.24 ± 0.07	3.36 ± 0.11	2.91 ± 0.07	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
4.42 ± 0.13	2.21 ± 0.09	0.99 ± 0.10	3.23 ± 0.11	2.72 ± 0.10	n = 89	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Iron (µg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
103.5 ± 5.60	112.8 ± 9.18	73.7 ± 3.20	93.4 ± 5.43	104.1 ± 6.60	n = 263	[---] All Methods & Instruments
<Instruments>						
104.0 ± 3.09	108.7 ± 3.82	74.7 ± 2.81	89.4 ± 4.07	99.7 ± 3.99	n = 15	[ABJ] Abbott Architect c System
107.2 ± 3.55	117.5 ± 3.45	75.7 ± 2.45	96.8 ± 2.95	108.2 ± 2.99	n = 57	[OLC] Beckman Coulter AU Chemistry System
99.6 ± 2.86	105.6 ± 1.64	70.3 ± 1.95	90.1 ± 1.81	100.9 ± 2.77	n = 8	[BCG] Beckman Coulter UniCel DxC 600
101.0 ± 2.96	108.4 ± 2.97	73.1 ± 2.56	91.7 ± 2.66	103.6 ± 3.50	n = 7	[BCH] Beckman Coulter UniCel DxC 800
121.5 ± 2.74	133.9 ± 5.63	75.3 ± 3.16	94.7 ± 1.37	112.6 ± 2.56	n = 3	[JJH] Ortho Vitros 4600
121.9 ± 7.21	132.6 ± 6.38	72.3 ± 4.17	98.1 ± 4.70	113.2 ± 6.16	n = 10	[JJF] Ortho Vitros 5,1FS
122.7 ± 7.29	134.5 ± 7.37	73.9 ± 5.27	100.0 ± 5.06	113.8 ± 5.93	n = 20	[JJG] Ortho Vitros 5600
105.0 ± 2.30	118.0 ± 1.65	76.4 ± 1.95	97.8 ± 2.70	108.5 ± 2.55	n = 19	[ROC] Roche cobas c501
105.3 ± 2.54	115.9 ± 2.33	75.3 ± 1.58	96.6 ± 1.80	107.1 ± 2.33	n = 4	[ROG] Roche cobas c502
102.5 ± 0.57	112.0 ± 0.00	72.5 ± 2.30	93.9 ± 1.13	104.1 ± 1.13	n = 4	[ROH] Roche cobas c701
102.4 ± 1.96	115.5 ± 2.15	73.8 ± 1.41	94.9 ± 1.68	105.7 ± 1.74	n = 19	[ROD] Roche MODULAR D/P
101.6 ± 1.73	104.0 ± 3.53	74.1 ± 1.56	86.4 ± 2.14	96.4 ± 2.23	n = 20	[BYE] Siemens ADVIA 1800
97.9 ± 1.21	104.7 ± 1.42	71.1 ± 0.85	89.0 ± 1.39	98.3 ± 1.41	n = 12	[DUE] Siemens Dimension EXL
98.0 ± 1.46	104.9 ± 2.40	70.6 ± 2.12	87.5 ± 2.57	97.6 ± 1.96	n = 8	[DUR] Siemens Dimension RxL
99.6 ± 2.27	106.6 ± 2.02	71.6 ± 1.97	90.1 ± 2.39	99.7 ± 2.10	n = 38	[DUT] Siemens Dimension Vista
<Reagents>						
103.4 ± 2.96	108.0 ± 3.13	74.2 ± 2.28	88.5 ± 3.58	98.8 ± 3.58	n = 13	[AB3] Abbott-Iron/6K95
100.7 ± 2.99	107.4 ± 3.22	72.1 ± 2.77	91.1 ± 2.33	102.4 ± 3.26	n = 18	[BC1] Beckman Coulter
108.2 ± 2.91	118.1 ± 3.20	75.9 ± 2.34	97.2 ± 2.88	108.8 ± 2.76	n = 47	[OL1] Beckman Coulter AU Series
122.1 ± 6.72	133.9 ± 6.82	73.4 ± 4.79	98.7 ± 4.88	113.5 ± 5.45	n = 34	[JJ1] Ortho Clinical Diagnostics
104.6 ± 2.39	117.1 ± 2.75	75.8 ± 2.14	97.0 ± 2.70	107.7 ± 2.83	n = 30	[RO4] Roche cobas c311/c501/c502/c701/c702
102.4 ± 1.96	115.5 ± 2.15	73.8 ± 1.41	94.9 ± 1.68	105.7 ± 1.74	n = 19	[RO2] Roche Hitachi and Modular D/P
104.3 ± 1.58	116.4 ± 1.80	76.1 ± 2.45	97.8 ± 4.67	106.1 ± 1.13	n = 4	[RO1] Roche Integra and MIRA
103.1 ± 2.47	115.2 ± 4.40	75.5 ± 3.45	96.1 ± 3.51	106.2 ± 4.60	n = 9	[GZ1] Sekisui Diagnostics
101.4 ± 2.00	104.1 ± 3.66	73.9 ± 1.66	86.5 ± 2.38	96.5 ± 2.34	n = 22	[BY1] Siemens ADVIA/ADVIA Centaur
98.9 ± 2.13	105.9 ± 2.21	71.3 ± 1.78	89.4 ± 2.33	99.1 ± 2.11	n = 60	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Sodium (mmol/L)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
159.3 ± 3.59	155.9 ± 2.42	135.0 ± 1.69	127.4 ± 1.76	141.9 ± 1.92	n = 372	[---] All Methods & Instruments
<Instruments>						
152.5 ± 1.86	154.3 ± 0.51	131.7 ± 1.37	126.0 ± 0.90	138.7 ± 1.37	n = 3	[AXA] Abaxis Piccolo
161.5 ± 1.46	157.3 ± 1.19	135.4 ± 1.05	126.9 ± 1.06	142.3 ± 1.00	n = 21	[ABJ] Abbott Architect c System
164.9 ± 2.05	159.3 ± 1.37	133.0 ± 0.90	126.0 ± 0.00	142.3 ± 0.51	n = 3	[AWA] Alfa Wassermann ACE Alera
158.4 ± 2.08	155.0 ± 1.35	134.9 ± 1.00	126.3 ± 1.08	140.8 ± 1.06	n = 67	[OLC] Beckman Coulter AU Chemistry System
157.4 ± 1.65	155.5 ± 1.35	134.6 ± 1.35	127.1 ± 1.17	141.3 ± 1.50	n = 16	[BCG] Beckman Coulter UniCel DxC 600
158.4 ± 2.05	157.0 ± 1.25	135.0 ± 0.91	127.8 ± 2.39	142.7 ± 2.61	n = 8	[BCH] Beckman Coulter UniCel DxC 800
155.7 ± 0.69	153.3 ± 0.54	131.0 ± 0.00	126.5 ± 0.90	139.5 ± 0.90	n = 8	[IAA] i-STAT
165.9 ± 3.18	162.1 ± 3.09	136.0 ± 2.91	130.2 ± 2.34	146.4 ± 3.03	n = 8	[JJE] Ortho Vitros 250/350/950
165.1 ± 1.90	160.0 ± 1.53	133.8 ± 0.90	128.3 ± 1.60	144.7 ± 0.78	n = 13	[JFF] Ortho Vitros 5,1FS
164.5 ± 2.44	160.4 ± 1.94	134.1 ± 1.61	128.6 ± 1.47	144.7 ± 1.20	n = 20	[JJG] Ortho Vitros 5600
159.5 ± 4.53	153.2 ± 1.54	133.7 ± 0.51	126.0 ± 0.00	139.7 ± 0.51	n = 3	[ROK] Roche cobas c111
160.9 ± 2.33	156.8 ± 2.85	135.5 ± 2.33	127.6 ± 2.30	142.4 ± 2.05	n = 5	[ROJ] Roche cobas c311
159.1 ± 1.13	155.4 ± 1.48	134.3 ± 1.04	126.0 ± 1.14	140.9 ± 1.12	n = 30	[ROC] Roche cobas c501
161.5 ± 1.66	156.1 ± 2.02	136.6 ± 1.66	126.8 ± 2.38	142.4 ± 0.94	n = 7	[ROH] Roche cobas c701
158.3 ± 1.59	154.8 ± 0.80	134.3 ± 1.10	125.9 ± 1.27	140.1 ± 1.27	n = 5	[ROS] Roche Cobas INTEGRA 400
158.2 ± 1.27	154.3 ± 1.58	134.7 ± 1.51	126.7 ± 1.51	139.8 ± 1.46	n = 4	[ROT] Roche Cobas INTEGRA 800
161.8 ± 1.50	157.4 ± 1.78	135.8 ± 1.47	127.2 ± 1.24	142.3 ± 1.41	n = 20	[ROD] Roche MODULAR D/P
161.8 ± 1.59	157.6 ± 1.70	137.1 ± 1.21	128.9 ± 1.16	143.9 ± 1.33	n = 21	[BYE] Siemens ADVIA 1800
159.2 ± 1.20	156.1 ± 0.92	136.3 ± 0.77	128.1 ± 0.78	142.2 ± 0.93	n = 24	[DUE] Siemens Dimension EXL
157.0 ± 2.34	154.0 ± 2.17	134.2 ± 1.18	126.9 ± 1.42	141.0 ± 1.63	n = 14	[DUR] Siemens Dimension RxL
154.4 ± 1.48	153.6 ± 1.46	135.4 ± 1.26	129.1 ± 1.18	141.6 ± 1.34	n = 43	[DUT] Siemens Dimension Vista
160.2 ± 0.74	156.9 ± 0.49	137.3 ± 2.08	128.8 ± 1.29	143.3 ± 1.50	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
152.5 ± 1.86	154.3 ± 0.51	131.7 ± 1.37	126.0 ± 0.90	138.7 ± 1.37	n = 3	[AX1] Abaxis
161.5 ± 1.60	157.2 ± 1.36	135.3 ± 1.17	126.9 ± 1.09	142.1 ± 1.16	n = 21	[AB1] Abbott
164.9 ± 2.05	159.3 ± 1.37	133.0 ± 0.90	126.0 ± 0.00	142.3 ± 0.51	n = 3	[AW1] Alfa Wassermann
157.8 ± 1.86	155.9 ± 1.48	134.8 ± 1.26	127.2 ± 1.34	141.5 ± 1.59	n = 29	[BC1] Beckman Coulter
158.3 ± 2.06	155.0 ± 1.34	134.8 ± 0.97	126.3 ± 1.06	140.8 ± 1.03	n = 65	[OL1] Beckman Coulter AU Series
155.9 ± 0.67	153.4 ± 0.57	131.9 ± 1.60	126.8 ± 1.02	139.5 ± 1.20	n = 8	[IA1] i-STAT
165.1 ± 2.55	160.5 ± 2.11	134.2 ± 1.86	128.8 ± 1.82	144.9 ± 1.65	n = 43	[JJ1] Ortho Clinical Diagnostics
159.5 ± 4.53	153.2 ± 1.54	133.7 ± 0.51	126.0 ± 0.00	139.7 ± 0.51	n = 3	[RO8] Roche cobas c111
159.7 ± 0.90	155.6 ± 1.45	134.8 ± 1.43	126.0 ± 1.44	141.2 ± 1.81	n = 12	[RO4] Roche c311/501/502/701/702 w/o compensation
159.7 ± 2.16	155.7 ± 1.85	134.8 ± 1.77	126.4 ± 1.69	141.3 ± 1.32	n = 32	[RP4] Roche c311/501/502/701/702 w/ compensation
163.3 ± 1.37	159.3 ± 0.51	137.7 ± 0.51	128.3 ± 0.51	145.0 ± 0.90	n = 3	[RO2] Roche Modular D/P w/o compensation
161.5 ± 1.33	157.0 ± 1.59	135.5 ± 1.16	127.0 ± 1.15	141.9 ± 0.84	n = 17	[RP2] Roche Modular D/P w/ compensation
158.2 ± 1.44	154.7 ± 1.11	134.5 ± 1.31	126.2 ± 1.47	140.0 ± 1.36	n = 9	[RO1] Roche Integra and MIRA
161.8 ± 1.42	157.4 ± 1.58	136.9 ± 1.05	128.9 ± 1.19	143.7 ± 1.25	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
156.6 ± 3.05	154.7 ± 2.02	135.6 ± 1.47	128.5 ± 1.33	141.8 ± 1.45	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Potassium (mmol/L)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
2.56 ± 0.12	5.92 ± 0.13	4.43 ± 0.09	3.38 ± 0.09	4.65 ± 0.10	n = 373	[---] All Methods & Instruments
<Instruments>						
2.73 ± 0.05	6.05 ± 0.19	4.47 ± 0.05	3.43 ± 0.23	4.77 ± 0.05	n = 3	[AXA] Abaxis Piccolo
2.61 ± 0.08	5.98 ± 0.06	4.48 ± 0.06	3.41 ± 0.06	4.69 ± 0.05	n = 21	[ABJ] Abbott Architect c System
2.63 ± 0.05	6.20 ± 0.00	4.50 ± 0.00	3.43 ± 0.05	4.80 ± 0.00	n = 3	[AWA] Alfa Wassermann ACE Alera
2.64 ± 0.06	5.90 ± 0.06	4.42 ± 0.05	3.40 ± 0.00	4.65 ± 0.06	n = 67	[OLC] Beckman Coulter AU Chemistry System
2.46 ± 0.06	5.98 ± 0.08	4.39 ± 0.06	3.33 ± 0.06	4.64 ± 0.06	n = 16	[BCG] Beckman Coulter UniCel DxC 600
2.50 ± 0.00	6.00 ± 0.00	4.41 ± 0.06	3.37 ± 0.07	4.69 ± 0.10	n = 8	[BCH] Beckman Coulter UniCel DxC 800
2.40 ± 0.00	5.72 ± 0.04	4.25 ± 0.06	3.32 ± 0.04	4.51 ± 0.06	n = 8	[IAA] i-STAT
2.67 ± 0.05	6.15 ± 0.09	4.55 ± 0.09	3.54 ± 0.07	4.88 ± 0.12	n = 8	[JJE] Ortho Vitros 250/350/950
2.67 ± 0.05	6.20 ± 0.09	4.57 ± 0.05	3.57 ± 0.05	4.90 ± 0.09	n = 3	[JJH] Ortho Vitros 4600
2.64 ± 0.07	6.07 ± 0.13	4.49 ± 0.09	3.50 ± 0.08	4.82 ± 0.12	n = 12	[JJF] Ortho Vitros 5,1FS
2.64 ± 0.06	6.11 ± 0.09	4.50 ± 0.06	3.50 ± 0.00	4.83 ± 0.09	n = 20	[JJG] Ortho Vitros 5600
2.50 ± 0.00	5.87 ± 0.05	4.47 ± 0.05	3.40 ± 0.00	4.67 ± 0.05	n = 3	[ROK] Roche cobas c111
2.49 ± 0.14	5.92 ± 0.16	4.44 ± 0.11	3.36 ± 0.13	4.66 ± 0.13	n = 5	[ROJ] Roche cobas c311
2.40 ± 0.00	5.84 ± 0.06	4.33 ± 0.07	3.26 ± 0.09	4.57 ± 0.08	n = 30	[ROC] Roche cobas c501
2.62 ± 0.08	5.95 ± 0.07	4.47 ± 0.14	3.38 ± 0.09	4.69 ± 0.10	n = 7	[ROH] Roche cobas c701
2.50 ± 0.00	5.90 ± 0.00	4.46 ± 0.06	3.40 ± 0.00	4.64 ± 0.06	n = 5	[ROS] Roche Cobas INTEGRA 400
2.52 ± 0.04	5.90 ± 0.00	4.48 ± 0.04	3.42 ± 0.04	4.65 ± 0.06	n = 4	[ROT] Roche Cobas INTEGRA 800
2.51 ± 0.07	5.90 ± 0.09	4.40 ± 0.06	3.30 ± 0.00	4.60 ± 0.00	n = 20	[ROD] Roche MODULAR D/P
2.70 ± 0.00	6.04 ± 0.10	4.50 ± 0.00	3.45 ± 0.07	4.74 ± 0.08	n = 21	[BYE] Siemens ADVIA 1800
2.47 ± 0.05	5.92 ± 0.06	4.44 ± 0.06	3.33 ± 0.05	4.65 ± 0.06	n = 24	[DUE] Siemens Dimension EXL
2.49 ± 0.08	5.87 ± 0.07	4.40 ± 0.00	3.32 ± 0.05	4.62 ± 0.05	n = 14	[DUR] Siemens Dimension RxL
2.50 ± 0.00	5.79 ± 0.05	4.40 ± 0.00	3.38 ± 0.04	4.60 ± 0.00	n = 43	[DUT] Siemens Dimension Vista
2.48 ± 0.04	5.97 ± 0.05	4.47 ± 0.06	3.37 ± 0.05	4.70 ± 0.00	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
2.73 ± 0.05	6.05 ± 0.19	4.47 ± 0.05	3.43 ± 0.23	4.77 ± 0.05	n = 3	[AX1] Abaxis
2.61 ± 0.10	5.97 ± 0.08	4.46 ± 0.08	3.41 ± 0.07	4.67 ± 0.07	n = 21	[AB1] Abbott
2.63 ± 0.05	6.20 ± 0.00	4.50 ± 0.00	3.43 ± 0.05	4.80 ± 0.00	n = 3	[AW1] Alfa Wassermann
2.48 ± 0.06	5.97 ± 0.07	4.39 ± 0.07	3.35 ± 0.07	4.64 ± 0.07	n = 29	[BC1] Beckman Coulter
2.65 ± 0.06	5.90 ± 0.06	4.42 ± 0.05	3.40 ± 0.00	4.65 ± 0.06	n = 65	[OL1] Beckman Coulter AU Series
2.40 ± 0.00	5.72 ± 0.05	4.26 ± 0.06	3.32 ± 0.05	4.52 ± 0.07	n = 7	[IA1] i-STAT
2.40 ± 0.00	5.86 ± 0.10	4.33 ± 0.05	3.30 ± 0.00	4.57 ± 0.05	n = 3	[IL1] Instrumentation Lab
2.65 ± 0.06	6.12 ± 0.11	4.51 ± 0.08	3.51 ± 0.06	4.84 ± 0.11	n = 43	[JJ1] Ortho Clinical Diagnostics
2.50 ± 0.00	5.87 ± 0.05	4.47 ± 0.05	3.40 ± 0.00	4.67 ± 0.05	n = 3	[RO8] Roche cobas c111
2.50 ± 0.12	5.89 ± 0.11	4.40 ± 0.13	3.30 ± 0.11	4.63 ± 0.14	n = 12	[RO4] Roche c311/501/502/701/702 w/o compensation
2.44 ± 0.10	5.87 ± 0.08	4.37 ± 0.11	3.30 ± 0.11	4.59 ± 0.10	n = 33	[RP4] Roche c311/501/502/701/702 w/ compensation
2.70 ± 0.09	6.10 ± 0.00	4.53 ± 0.05	3.57 ± 0.05	4.80 ± 0.09	n = 3	[RO2] Roche Modular D/P w/o compensation
2.49 ± 0.05	5.88 ± 0.05	4.40 ± 0.00	3.30 ± 0.00	4.60 ± 0.00	n = 16	[RP2] Roche Modular D/P w/ compensation
2.50 ± 0.00	5.90 ± 0.00	4.47 ± 0.05	3.40 ± 0.00	4.64 ± 0.06	n = 9	[RO1] Roche Integra and MIRA
2.70 ± 0.04	6.04 ± 0.10	4.50 ± 0.00	3.45 ± 0.07	4.73 ± 0.07	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
2.49 ± 0.04	5.85 ± 0.10	4.41 ± 0.05	3.36 ± 0.06	4.62 ± 0.05	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Chloride (mmol/L)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
104.0 ± 2.97	114.0 ± 1.97	87.5 ± 2.53	94.2 ± 1.81	104.2 ± 1.92	n = 367	[---] All Methods & Instruments
<Instruments>						
102.8 ± 2.36	112.6 ± 3.87	87.0 ± 0.90	94.2 ± 2.36	103.8 ± 3.23	n = 3	[AXA] Abaxis Piccolo
104.3 ± 0.80	113.9 ± 0.90	88.0 ± 1.03	95.2 ± 0.80	104.7 ± 0.77	n = 20	[ABJ] Abbott Architect c System
110.3 ± 0.51	117.3 ± 0.51	88.7 ± 0.51	95.7 ± 0.51	106.3 ± 0.51	n = 3	[AWA] Alfa Wassermann ACE Alera
101.9 ± 1.12	113.0 ± 1.12	86.7 ± 0.80	93.8 ± 0.91	103.5 ± 0.86	n = 66	[OLC] Beckman Coulter AU Chemistry System
104.0 ± 1.57	114.0 ± 1.37	87.6 ± 1.33	95.1 ± 1.19	104.6 ± 1.23	n = 16	[BCG] Beckman Coulter UniCel DxC 600
104.3 ± 1.63	114.2 ± 0.88	88.1 ± 1.12	95.7 ± 1.12	104.6 ± 1.35	n = 8	[BCH] Beckman Coulter UniCel DxC 800
111.5 ± 1.14	119.4 ± 1.49	86.0 ± 0.47	96.3 ± 0.74	108.4 ± 0.94	n = 7	[IAA] i-STAT
104.4 ± 1.69	114.9 ± 1.91	87.4 ± 1.37	95.4 ± 1.07	105.4 ± 1.69	n = 8	[JJE] Ortho Vitros 250/350/950
106.3 ± 0.51	116.0 ± 0.00	88.4 ± 1.02	96.0 ± 0.90	105.7 ± 0.51	n = 3	[JJH] Ortho Vitros 4600
104.3 ± 1.10	113.9 ± 1.18	86.6 ± 0.90	94.0 ± 0.85	104.3 ± 1.19	n = 12	[JJF] Ortho Vitros 5,1FS
104.3 ± 1.12	114.0 ± 1.30	86.7 ± 0.82	94.4 ± 0.81	104.8 ± 0.94	n = 20	[JJG] Ortho Vitros 5600
115.5 ± 17.44	113.7 ± 0.51	88.7 ± 0.51	94.4 ± 1.02	104.0 ± 0.00	n = 3	[ROK] Roche cobas c111
100.1 ± 1.27	111.5 ± 1.07	84.1 ± 1.27	90.4 ± 1.09	101.0 ± 0.64	n = 5	[ROJ] Roche cobas c311
99.4 ± 0.80	111.5 ± 0.84	84.2 ± 0.52	90.0 ± 1.02	100.9 ± 1.01	n = 30	[ROC] Roche cobas c501
100.8 ± 1.31	112.0 ± 0.82	83.9 ± 2.05	91.1 ± 1.11	101.6 ± 0.96	n = 7	[ROH] Roche cobas c701
105.8 ± 3.60	113.6 ± 0.55	87.8 ± 0.80	93.5 ± 0.83	103.0 ± 0.00	n = 5	[ROS] Roche Cobas INTEGRA 400
105.1 ± 1.13	113.7 ± 0.90	87.8 ± 0.41	94.9 ± 1.88	103.5 ± 1.22	n = 4	[ROT] Roche Cobas INTEGRA 800
102.0 ± 1.34	113.6 ± 0.89	85.4 ± 0.92	92.5 ± 1.00	103.0 ± 1.00	n = 20	[ROD] Roche MODULAR D/P
104.5 ± 1.12	114.2 ± 1.06	87.1 ± 0.99	94.3 ± 1.26	104.0 ± 1.23	n = 21	[BYE] Siemens ADVIA 1800
106.5 ± 0.87	114.9 ± 1.18	92.5 ± 0.66	94.2 ± 0.72	104.8 ± 0.80	n = 24	[DUE] Siemens Dimension EXL
107.2 ± 1.31	115.8 ± 1.68	91.3 ± 1.40	93.5 ± 1.02	104.9 ± 1.53	n = 14	[DUR] Siemens Dimension RxL
106.7 ± 1.17	116.4 ± 1.23	89.6 ± 1.37	95.7 ± 0.90	106.1 ± 0.85	n = 43	[DUT] Siemens Dimension Vista
107.0 ± 1.21	115.2 ± 0.89	92.8 ± 1.25	94.3 ± 0.63	105.0 ± 0.74	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
102.8 ± 2.36	112.6 ± 3.87	87.0 ± 0.90	94.2 ± 2.36	103.8 ± 3.23	n = 3	[AX1] Abaxis
104.3 ± 0.80	113.9 ± 0.86	88.0 ± 1.03	95.3 ± 0.87	104.7 ± 0.79	n = 21	[AB1] Abbott
110.3 ± 0.51	117.3 ± 0.51	88.7 ± 0.51	95.7 ± 0.51	106.3 ± 0.51	n = 3	[AW1] Alfa Wassermann
104.0 ± 1.53	114.1 ± 1.16	87.6 ± 1.26	95.2 ± 1.26	104.7 ± 1.39	n = 29	[BC1] Beckman Coulter
101.8 ± 1.13	112.9 ± 1.11	86.7 ± 0.80	93.8 ± 0.90	103.5 ± 0.84	n = 64	[OL1] Beckman Coulter AU Series
111.3 ± 0.97	119.1 ± 1.43	86.0 ± 0.00	96.2 ± 0.73	108.3 ± 0.97	n = 6	[IA1] i-STAT
104.5 ± 1.21	114.3 ± 1.47	86.9 ± 1.02	94.6 ± 1.04	104.8 ± 1.22	n = 42	[JJ1] Ortho Clinical Diagnostics
106.0 ± 1.41	113.7 ± 0.51	88.7 ± 0.51	94.4 ± 1.02	104.0 ± 0.00	n = 3	[RO8] Roche cobas c111
99.1 ± 0.47	111.0 ± 0.76	84.0 ± 0.49	89.8 ± 0.76	100.6 ± 0.86	n = 11	[RO4] Roche c311/501/502/701/702 w/o compensation
100.1 ± 1.44	111.8 ± 1.05	84.4 ± 1.08	90.5 ± 1.23	101.1 ± 1.01	n = 33	[RP4] Roche c311/501/502/701/702 w/ compensation
100.8 ± 1.27	112.3 ± 0.90	85.2 ± 0.41	91.2 ± 1.27	102.8 ± 1.46	n = 4	[RO2] Roche Modular D/P w/o compensation
102.1 ± 1.17	113.7 ± 0.87	85.4 ± 0.91	92.8 ± 1.02	103.0 ± 0.86	n = 15	[RP2] Roche Modular D/P w/ compensation
104.9 ± 1.41	113.6 ± 0.70	87.8 ± 0.65	94.0 ± 1.49	103.4 ± 0.99	n = 9	[RO1] Roche Integra and MIRA
104.5 ± 1.10	114.1 ± 0.99	87.0 ± 0.92	94.2 ± 1.20	104.0 ± 1.28	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
106.7 ± 1.15	115.7 ± 1.43	91.1 ± 1.94	94.8 ± 1.26	105.4 ± 1.20	n = 93	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Albumin (g/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
6.09 ± 0.36	4.51 ± 0.21	3.15 ± 0.17	3.63 ± 0.21	4.09 ± 0.18	n = 358	[---] All Methods & Instruments
<Instruments>						
5.87 ± 0.05	4.87 ± 0.05	3.33 ± 0.05	4.06 ± 0.10	4.50 ± 0.09	n = 3	[AXA] Abaxis Piccolo
5.82 ± 0.13	4.32 ± 0.14	3.03 ± 0.10	3.51 ± 0.12	3.94 ± 0.12	n = 21	[ABJ] Abbott Architect c System
5.80 ± 0.09	4.44 ± 0.10	3.23 ± 0.05	3.63 ± 0.05	4.04 ± 0.10	n = 3	[AWA] Alfa Wassermann ACE Alera
5.96 ± 0.08	4.49 ± 0.07	3.13 ± 0.07	3.63 ± 0.07	4.07 ± 0.07	n = 69	[OLC] Beckman Coulter AU Chemistry System
6.16 ± 0.13	4.22 ± 0.06	3.03 ± 0.06	3.47 ± 0.11	3.90 ± 0.06	n = 15	[BCG] Beckman Coulter UniCel DxC 600
6.29 ± 0.07	4.35 ± 0.10	3.08 ± 0.06	3.55 ± 0.12	4.00 ± 0.12	n = 8	[BCH] Beckman Coulter UniCel DxC 800
5.73 ± 0.14	4.40 ± 0.12	3.00 ± 0.09	3.37 ± 0.09	3.97 ± 0.11	n = 8	[JJE] Ortho Vitros 250/350/950
5.62 ± 0.15	4.23 ± 0.05	2.90 ± 0.09	3.27 ± 0.05	3.84 ± 0.10	n = 3	[JJH] Ortho Vitros 4600
5.70 ± 0.16	4.42 ± 0.10	2.98 ± 0.08	3.38 ± 0.09	3.93 ± 0.11	n = 12	[JJF] Ortho Vitros 5,1FS
5.74 ± 0.16	4.35 ± 0.12	2.92 ± 0.10	3.31 ± 0.11	3.88 ± 0.13	n = 20	[JJG] Ortho Vitros 5600
6.02 ± 0.19	4.62 ± 0.13	3.25 ± 0.11	3.73 ± 0.14	4.22 ± 0.11	n = 5	[ROJ] Roche cobas c311
6.26 ± 0.32	4.76 ± 0.11	3.32 ± 0.09	3.85 ± 0.09	4.30 ± 0.11	n = 29	[ROC] Roche cobas c501
6.25 ± 0.46	4.70 ± 0.20	3.26 ± 0.19	3.80 ± 0.19	4.33 ± 0.22	n = 8	[ROH] Roche cobas c701
5.81 ± 0.41	4.60 ± 0.00	3.30 ± 0.09	3.72 ± 0.04	4.24 ± 0.14	n = 5	[ROS] Roche Cobas INTEGRA 400
5.90 ± 0.08	4.60 ± 0.00	3.22 ± 0.04	3.75 ± 0.06	4.20 ± 0.08	n = 4	[ROT] Roche Cobas INTEGRA 800
6.16 ± 0.10	4.74 ± 0.09	3.29 ± 0.10	3.84 ± 0.10	4.31 ± 0.10	n = 21	[ROD] Roche MODULAR D/P
5.83 ± 0.11	4.58 ± 0.10	3.21 ± 0.06	3.72 ± 0.07	4.17 ± 0.08	n = 21	[BYE] Siemens ADVIA 1800
6.48 ± 0.11	4.53 ± 0.06	3.15 ± 0.06	3.64 ± 0.07	4.11 ± 0.07	n = 24	[DUE] Siemens Dimension EXL
6.43 ± 0.12	4.52 ± 0.11	3.14 ± 0.08	3.65 ± 0.08	4.09 ± 0.07	n = 14	[DUR] Siemens Dimension RxL
6.36 ± 0.14	4.50 ± 0.10	3.17 ± 0.07	3.64 ± 0.07	4.09 ± 0.08	n = 42	[DUT] Siemens Dimension Vista
6.44 ± 0.09	4.50 ± 0.06	3.16 ± 0.06	3.62 ± 0.04	4.10 ± 0.06	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
5.87 ± 0.05	4.87 ± 0.05	3.33 ± 0.05	4.06 ± 0.10	4.50 ± 0.09	n = 3	[AX1] Abaxis
5.82 ± 0.13	4.32 ± 0.14	3.03 ± 0.10	3.51 ± 0.12	3.94 ± 0.12	n = 21	[AB1] Abbott
5.80 ± 0.09	4.44 ± 0.10	3.23 ± 0.05	3.63 ± 0.05	4.04 ± 0.10	n = 3	[AW1] Alfa Wassermann
6.20 ± 0.13	4.28 ± 0.12	3.06 ± 0.06	3.50 ± 0.10	3.92 ± 0.08	n = 25	[BC1] Beckman Coulter
5.96 ± 0.08	4.49 ± 0.07	3.13 ± 0.07	3.63 ± 0.07	4.07 ± 0.07	n = 66	[OL1] Beckman Coulter AU Series
5.72 ± 0.16	4.36 ± 0.13	2.95 ± 0.10	3.34 ± 0.11	3.90 ± 0.13	n = 43	[JJ1] Ortho Clinical Diagnostics
6.21 ± 0.34	4.73 ± 0.14	3.30 ± 0.12	3.83 ± 0.12	4.29 ± 0.13	n = 44	[RO4] Roche cobas c311/c501/c502/c701/c702
6.15 ± 0.10	4.74 ± 0.08	3.29 ± 0.10	3.85 ± 0.09	4.31 ± 0.09	n = 20	[RO2] Roche Hitachi and Modular D/P
5.85 ± 0.27	4.60 ± 0.00	3.26 ± 0.07	3.73 ± 0.05	4.21 ± 0.10	n = 9	[RO1] Roche Integra and MIRA
6.28 ± 0.24	4.56 ± 0.10	3.26 ± 0.10	3.70 ± 0.09	4.13 ± 0.14	n = 3	[GZ1] Sekisui Diagnostics
5.83 ± 0.11	4.57 ± 0.10	3.21 ± 0.07	3.72 ± 0.08	4.17 ± 0.08	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
6.41 ± 0.13	4.51 ± 0.09	3.16 ± 0.07	3.64 ± 0.07	4.09 ± 0.07	n = 90	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Total Protein (g/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
8.42 ± 0.26	7.53 ± 0.19	5.12 ± 0.14	6.07 ± 0.16	6.83 ± 0.18	n = 353	[---] All Methods & Instruments
<Instruments>						
8.20 ± 0.00	7.47 ± 0.05	5.13 ± 0.05	6.03 ± 0.05	6.80 ± 0.00	n = 3	[AXA] Abaxis Piccolo
8.39 ± 0.12	7.52 ± 0.11	5.01 ± 0.08	6.03 ± 0.10	6.80 ± 0.09	n = 22	[ABJ] Abbott Architect c System
8.20 ± 0.00	7.37 ± 0.05	5.00 ± 0.09	5.93 ± 0.05	6.70 ± 0.09	n = 3	[AWA] Alfa Wassermann ACE Alera
8.24 ± 0.15	7.41 ± 0.12	5.05 ± 0.11	5.97 ± 0.09	6.70 ± 0.12	n = 67	[OLC] Beckman Coulter AU Chemistry System
8.36 ± 0.15	7.44 ± 0.14	5.03 ± 0.10	5.98 ± 0.14	6.76 ± 0.13	n = 15	[BCG] Beckman Coulter UniCel DxC 600
8.09 ± 0.18	7.35 ± 0.09	4.99 ± 0.08	5.89 ± 0.15	6.70 ± 0.22	n = 8	[BCH] Beckman Coulter UniCel DxC 800
8.69 ± 0.15	7.47 ± 0.09	5.03 ± 0.12	6.01 ± 0.11	6.78 ± 0.10	n = 8	[JJE] Ortho Vitros 250/350/950
8.60 ± 0.09	7.36 ± 0.10	4.88 ± 0.15	5.86 ± 0.10	6.60 ± 0.09	n = 3	[JJH] Ortho Vitros 4600
8.85 ± 0.17	7.57 ± 0.14	5.09 ± 0.10	6.07 ± 0.12	6.83 ± 0.12	n = 12	[JJF] Ortho Vitros 5,1FS
8.84 ± 0.18	7.55 ± 0.12	5.09 ± 0.12	6.05 ± 0.12	6.83 ± 0.13	n = 20	[JJG] Ortho Vitros 5600
8.21 ± 0.13	7.46 ± 0.06	5.10 ± 0.00	6.06 ± 0.11	6.81 ± 0.13	n = 5	[ROJ] Roche cobas c311
8.29 ± 0.14	7.49 ± 0.15	5.12 ± 0.11	6.06 ± 0.13	6.80 ± 0.12	n = 29	[ROC] Roche cobas c501
8.25 ± 0.15	7.44 ± 0.13	5.07 ± 0.11	6.10 ± 0.00	6.75 ± 0.15	n = 7	[ROH] Roche cobas c701
8.10 ± 0.08	7.27 ± 0.11	5.00 ± 0.06	6.00 ± 0.06	6.60 ± 0.00	n = 5	[ROS] Roche Cobas INTEGRA 400
8.21 ± 0.23	7.37 ± 0.23	4.97 ± 0.16	5.83 ± 0.16	6.58 ± 0.20	n = 4	[ROT] Roche Cobas INTEGRA 800
8.34 ± 0.14	7.51 ± 0.10	5.16 ± 0.06	6.08 ± 0.08	6.83 ± 0.10	n = 20	[ROD] Roche MODULAR D/P
8.42 ± 0.07	7.66 ± 0.10	5.17 ± 0.07	6.14 ± 0.10	6.92 ± 0.09	n = 21	[BYE] Siemens ADVIA 1800
8.68 ± 0.10	7.79 ± 0.08	5.30 ± 0.07	6.28 ± 0.06	7.06 ± 0.07	n = 24	[DUE] Siemens Dimension EXL
8.70 ± 0.13	7.81 ± 0.13	5.33 ± 0.08	6.31 ± 0.10	7.08 ± 0.12	n = 14	[DUR] Siemens Dimension RxL
8.52 ± 0.15	7.64 ± 0.13	5.19 ± 0.09	6.16 ± 0.12	6.90 ± 0.16	n = 42	[DUT] Siemens Dimension Vista
8.61 ± 0.11	7.73 ± 0.10	5.26 ± 0.08	6.26 ± 0.08	7.04 ± 0.10	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
8.20 ± 0.00	7.47 ± 0.05	5.13 ± 0.05	6.03 ± 0.05	6.80 ± 0.00	n = 3	[AX1] Abaxis
8.39 ± 0.12	7.52 ± 0.11	5.01 ± 0.08	6.03 ± 0.10	6.80 ± 0.09	n = 22	[AB1] Abbott
8.20 ± 0.00	7.37 ± 0.05	5.00 ± 0.09	5.93 ± 0.05	6.70 ± 0.09	n = 3	[AW1] Alfa Wassermann
8.29 ± 0.20	7.42 ± 0.13	5.01 ± 0.10	5.97 ± 0.15	6.75 ± 0.17	n = 26	[BC1] Beckman Coulter
8.24 ± 0.16	7.41 ± 0.13	5.05 ± 0.11	5.97 ± 0.09	6.71 ± 0.12	n = 65	[OL1] Beckman Coulter AU Series
8.80 ± 0.19	7.52 ± 0.13	5.07 ± 0.13	6.04 ± 0.13	6.81 ± 0.13	n = 43	[JJ1] Ortho Clinical Diagnostics
8.26 ± 0.16	7.47 ± 0.14	5.11 ± 0.11	6.05 ± 0.13	6.79 ± 0.14	n = 42	[RO4] Roche cobas c311/c501/c502/c701/c702
8.34 ± 0.14	7.51 ± 0.10	5.16 ± 0.06	6.08 ± 0.08	6.83 ± 0.10	n = 20	[RO2] Roche Hitachi and Modular D/P
8.17 ± 0.23	7.32 ± 0.17	4.99 ± 0.11	5.95 ± 0.12	6.60 ± 0.11	n = 9	[RO1] Roche Integra and MIRA
8.43 ± 0.09	7.67 ± 0.12	5.17 ± 0.08	6.15 ± 0.11	6.93 ± 0.09	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
8.60 ± 0.15	7.72 ± 0.14	5.25 ± 0.09	6.23 ± 0.11	7.00 ± 0.14	n = 90	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Cholesterol (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
250.2 ± 8.98	199.3 ± 7.82	115.5 ± 4.00	154.3 ± 6.41	179.5 ± 7.30	n = 320	[---] All Methods & Instruments
<Instruments>						
258.5 ± 2.68	204.4 ± 2.05	121.4 ± 1.96	160.8 ± 2.05	185.4 ± 2.53	n = 18	[ABJ] Abbott Architect c System
249.5 ± 4.81	194.5 ± 4.32	114.2 ± 2.88	152.2 ± 3.73	176.2 ± 3.93	n = 71	[OLC] Beckman Coulter AU Chemistry System
250.1 ± 2.92	199.1 ± 3.09	113.9 ± 1.89	152.7 ± 2.35	178.7 ± 1.49	n = 11	[BCG] Beckman Coulter UniCel DxC 600
248.6 ± 3.63	201.3 ± 7.28	115.2 ± 0.91	152.2 ± 1.67	177.3 ± 2.50	n = 7	[BCH] Beckman Coulter UniCel DxC 800
250.8 ± 10.38	206.3 ± 5.09	114.7 ± 3.37	158.5 ± 1.86	184.7 ± 7.75	n = 3	[JJE] Ortho Vitros 250/350/950
264.2 ± 8.32	212.3 ± 4.39	115.6 ± 1.99	160.5 ± 2.77	191.9 ± 4.07	n = 11	[JJF] Ortho Vitros 5,1FS
261.3 ± 10.32	212.6 ± 6.77	115.6 ± 4.16	162.2 ± 5.36	191.1 ± 7.26	n = 20	[JJG] Ortho Vitros 5600
258.2 ± 5.15	206.3 ± 3.81	120.7 ± 2.96	162.0 ± 3.77	186.4 ± 3.42	n = 26	[ROC] Roche cobas c501
253.1 ± 5.16	202.4 ± 2.34	116.0 ± 2.74	157.0 ± 3.39	181.9 ± 3.37	n = 8	[ROH] Roche cobas c701
253.8 ± 3.44	200.7 ± 2.18	116.8 ± 0.41	156.2 ± 0.41	182.7 ± 1.99	n = 5	[ROS] Roche Cobas INTEGRA 400
250.5 ± 3.63	198.2 ± 2.36	115.5 ± 1.86	154.5 ± 2.74	177.9 ± 3.72	n = 3	[ROT] Roche Cobas INTEGRA 800
254.8 ± 6.75	202.5 ± 3.39	117.6 ± 2.48	157.9 ± 3.03	183.0 ± 4.33	n = 22	[ROD] Roche MODULAR D/P
247.1 ± 4.44	202.7 ± 3.74	114.8 ± 2.41	153.7 ± 3.44	181.0 ± 3.47	n = 21	[BYE] Siemens ADVIA 1800
240.4 ± 4.12	192.6 ± 4.33	111.7 ± 3.09	146.3 ± 3.68	171.4 ± 3.09	n = 21	[DUE] Siemens Dimension EXL
239.3 ± 7.19	193.5 ± 5.16	111.7 ± 3.09	147.6 ± 3.72	171.4 ± 3.87	n = 10	[DUR] Siemens Dimension RxL
242.2 ± 5.64	192.8 ± 4.98	113.7 ± 3.40	149.2 ± 3.28	174.5 ± 4.07	n = 38	[DUT] Siemens Dimension Vista
240.7 ± 3.84	194.7 ± 4.30	114.0 ± 3.03	148.5 ± 3.19	173.3 ± 3.35	n = 8	[DUX] Siemens Dimension Xpand
<Reagents>						
258.5 ± 2.68	204.4 ± 2.05	121.4 ± 1.96	160.8 ± 2.05	185.4 ± 2.53	n = 18	[AB1] Abbott
249.2 ± 3.95	199.6 ± 4.18	114.2 ± 1.58	152.1 ± 2.24	178.0 ± 2.86	n = 22	[BC1] Beckman Coulter
249.8 ± 4.69	194.6 ± 4.14	114.3 ± 2.82	152.3 ± 3.68	176.3 ± 3.79	n = 67	[OL1] Beckman Coulter AU Series
261.3 ± 10.10	211.8 ± 6.03	115.4 ± 3.40	161.1 ± 4.30	190.9 ± 6.25	n = 35	[JJ1] Ortho Clinical Diagnostics
256.7 ± 5.43	205.2 ± 3.94	119.9 ± 3.44	160.6 ± 4.19	185.5 ± 3.76	n = 36	[RO4] Roche cobas c311/c501/c502/c701/c702
255.8 ± 6.67	202.9 ± 3.35	117.6 ± 2.48	158.0 ± 2.48	183.4 ± 3.71	n = 22	[RO2] Roche Hitachi and Modular D/P
252.4 ± 3.77	199.8 ± 2.45	116.7 ± 0.51	156.2 ± 2.23	181.4 ± 3.13	n = 8	[RO1] Roche Integra and MIRA
247.1 ± 4.64	202.8 ± 4.10	114.9 ± 2.75	153.7 ± 3.63	181.0 ± 3.41	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
241.1 ± 5.29	193.0 ± 4.81	112.9 ± 3.33	148.2 ± 3.73	173.1 ± 4.08	n = 77	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

HDL-Cholesterol (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
67.7 ± 9.00	56.2 ± 5.83	31.4 ± 3.82	34.3 ± 3.67	45.3 ± 4.79	n = 305	[---] All Methods & Instruments
73.7 ± 12.08	60.5 ± 6.19	29.9 ± 3.46	36.4 ± 2.43	48.0 ± 5.22	n = 20	[---] All Precipitation Methods
67.3 ± 8.66	55.9 ± 5.65	31.5 ± 3.82	34.1 ± 3.67	45.1 ± 4.68	n = 285	[---] All Homogeneous (Direct) Methods
73.3 ± 2.57	54.1 ± 1.55	35.2 ± 1.37	34.2 ± 1.00	44.2 ± 1.47	n = 16	[AB1] Abbott
47.5 ± 5.13	46.0 ± 1.14	17.0 ± 1.14	27.5 ± 1.71	37.5 ± 0.57	n = 2	[AX1] Abaxis
79.7 ± 2.97	64.7 ± 3.00	35.2 ± 1.17	41.3 ± 1.47	53.6 ± 1.29	n = 20	[BC1] Beckman Coulter
73.1 ± 3.09	52.9 ± 2.32	34.6 ± 1.74	32.7 ± 1.62	43.0 ± 2.12	n = 48	[OL1] Beckman Coulter AU Series
82.8 ± 3.06	64.8 ± 2.14	27.6 ± 1.29	37.8 ± 1.67	51.2 ± 1.61	n = 27	[JJ1] Ortho Clinical Diagnostics
59.1 ± 1.46	54.3 ± 1.58	28.7 ± 0.94	32.2 ± 1.19	43.3 ± 1.40	n = 33	[RO4] Roche cobas c311/c501/c502/c701/c702
62.4 ± 2.49	56.3 ± 2.41	30.1 ± 1.30	33.0 ± 1.26	44.7 ± 1.78	n = 20	[RO2] Roche Hitachi and Modular D/P
62.7 ± 2.46	57.0 ± 1.31	30.4 ± 0.72	34.2 ± 1.02	45.9 ± 1.13	n = 8	[RO1] Roche Integra and MIRA
75.3 ± 3.42	55.4 ± 3.39	35.3 ± 2.70	33.9 ± 2.56	44.5 ± 2.34	n = 4	[GZ1] Sekisui Diagnostics
60.6 ± 2.28	39.8 ± 1.69	25.4 ± 0.94	24.2 ± 1.07	32.1 ± 1.31	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
63.9 ± 2.47	57.3 ± 2.29	33.0 ± 2.06	35.4 ± 2.05	46.4 ± 2.30	n = 67	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

LDL-Cholesterol (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
148.8 ± 18.14	120.4 ± 13.01	68.7 ± 10.82	98.7 ± 11.29	112.4 ± 12.62	n = 293	[---] All Methods & Instruments
157.0 ± 11.32	122.3 ± 9.55	73.5 ± 5.59	102.2 ± 8.01	116.0 ± 8.87	n = 146	[-A-] Calculated Results Friedewald formula [LDL=TC-HDL-(Trigs+5)]
137.6 ± 18.60	118.2 ± 16.44	61.7 ± 11.71	94.1 ± 12.69	107.6 ± 14.53	n = 143	[---] All Homogeneous (Direct) Methods
126.2 ± 4.11	109.5 ± 3.63	55.9 ± 2.05	88.7 ± 3.16	100.5 ± 2.74	n = 3	[AB1] Abbott
127.3 ± 4.64	110.1 ± 4.83	54.7 ± 3.18	89.3 ± 5.00	102.1 ± 5.00	n = 11	[BC1] Beckman Coulter
116.4 ± 5.52	103.1 ± 5.44	51.8 ± 3.93	83.4 ± 3.98	94.7 ± 5.68	n = 26	[OL1] Beckman Coulter AU Series
135.4 ± 5.12	116.1 ± 2.76	53.8 ± 1.66	89.2 ± 2.93	103.8 ± 2.67	n = 15	[JJ1] Ortho Clinical Diagnostics
167.4 ± 5.23	150.3 ± 3.40	80.8 ± 1.82	117.8 ± 3.03	135.1 ± 3.99	n = 15	[RO4] Roche cobas c311/c501/c502/c701/c702
164.2 ± 3.45	149.9 ± 3.10	80.2 ± 1.52	118.6 ± 2.58	135.6 ± 2.92	n = 11	[RO2] Roche Hitachi and Modular D/P
150.5 ± 3.42	134.0 ± 4.35	67.2 ± 1.46	104.8 ± 1.96	122.2 ± 3.07	n = 4	[RO1] Roche Integra and MIRA
116.5 ± 4.53	103.4 ± 4.48	51.3 ± 2.81	83.6 ± 3.36	95.3 ± 2.77	n = 9	[GZ1] Sekisui Diagnostics
140.5 ± 4.97	118.3 ± 4.96	57.7 ± 2.86	91.2 ± 4.06	105.6 ± 3.93	n = 13	[BY1] Siemens ADVIA/ADVIA Centaur
142.0 ± 4.66	120.5 ± 4.03	67.5 ± 2.68	96.5 ± 3.29	109.8 ± 2.96	n = 33	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Triglycerides (mg/dL)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
122.0 ± 6.99	107.6 ± 6.54	54.1 ± 3.41	92.0 ± 5.65	96.2 ± 5.62	n = 312	[---] All Methods & Instruments
<Instruments>						
119.3 ± 1.55	108.0 ± 1.71	54.0 ± 0.85	91.1 ± 1.54	96.7 ± 1.63	n = 18	[ABJ] Abbott Architect c System
122.1 ± 3.51	103.8 ± 4.27	53.0 ± 1.65	89.6 ± 3.47	93.2 ± 3.63	n = 67	[OLC] Beckman Coulter AU Chemistry System
126.2 ± 3.46	115.5 ± 2.95	54.9 ± 1.77	96.7 ± 2.33	102.1 ± 2.08	n = 11	[BCG] Beckman Coulter UniCel DxC 600
122.9 ± 4.39	113.1 ± 3.55	53.8 ± 1.31	94.9 ± 1.90	101.1 ± 3.53	n = 7	[BCH] Beckman Coulter UniCel DxC 800
137.8 ± 3.23	122.5 ± 4.53	57.3 ± 2.26	104.2 ± 2.36	107.9 ± 3.72	n = 3	[JJE] Ortho Vitros 250/350/950
132.7 ± 3.39	114.3 ± 3.45	53.2 ± 1.60	97.0 ± 3.04	100.0 ± 2.82	n = 11	[JJF] Ortho Vitros 5,1FS
131.5 ± 2.03	113.5 ± 2.72	53.6 ± 1.23	97.6 ± 2.67	100.0 ± 2.54	n = 20	[JJG] Ortho Vitros 5600
118.3 ± 2.92	107.2 ± 3.05	57.9 ± 2.00	94.8 ± 2.73	97.2 ± 2.75	n = 25	[ROC] Roche cobas c501
117.5 ± 1.87	104.9 ± 1.60	55.8 ± 1.65	91.7 ± 1.25	95.2 ± 1.72	n = 8	[ROH] Roche cobas c701
114.4 ± 5.90	100.1 ± 3.04	54.2 ± 1.66	89.0 ± 2.41	91.2 ± 2.67	n = 5	[ROS] Roche Cobas INTEGRA 400
111.4 ± 1.02	100.5 ± 2.74	54.7 ± 1.37	90.7 ± 2.26	92.1 ± 3.72	n = 3	[ROT] Roche Cobas INTEGRA 800
116.7 ± 3.81	106.8 ± 4.56	54.3 ± 1.68	91.0 ± 3.55	95.8 ± 4.26	n = 22	[ROD] Roche MODULAR D/P
121.7 ± 2.22	107.3 ± 2.74	52.9 ± 1.52	89.4 ± 2.02	95.0 ± 1.89	n = 21	[BYE] Siemens ADVIA 1800
114.4 ± 3.39	100.1 ± 4.82	44.3 ± 3.04	82.3 ± 3.56	87.7 ± 4.28	n = 21	[DUE] Siemens Dimension EXL
113.3 ± 4.39	99.6 ± 4.66	44.8 ± 2.34	82.5 ± 5.27	87.0 ± 4.44	n = 10	[DUR] Siemens Dimension RxL
129.0 ± 3.30	113.2 ± 3.23	57.0 ± 2.02	96.2 ± 3.00	100.7 ± 2.98	n = 39	[DUT] Siemens Dimension Vista
116.7 ± 6.44	103.7 ± 8.02	47.4 ± 7.25	85.0 ± 6.76	90.9 ± 7.20	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
119.3 ± 1.55	108.0 ± 1.71	54.0 ± 0.85	91.1 ± 1.54	96.7 ± 1.63	n = 18	[AB1] Abbott
125.1 ± 3.90	114.3 ± 3.52	54.4 ± 1.70	95.8 ± 2.42	101.5 ± 2.85	n = 21	[BC1] Beckman Coulter
122.3 ± 3.49	104.1 ± 3.94	53.0 ± 1.75	89.6 ± 3.41	93.4 ± 3.45	n = 63	[OL1] Beckman Coulter AU Series
132.1 ± 2.96	114.1 ± 3.42	53.7 ± 1.61	97.8 ± 3.19	100.3 ± 3.02	n = 35	[JJ1] Ortho Clinical Diagnostics
117.9 ± 2.55	106.5 ± 3.01	57.2 ± 1.95	93.8 ± 2.86	96.6 ± 2.77	n = 36	[RO4] Roche cobas c311/c501/c502/c701/c702
116.7 ± 3.81	106.8 ± 4.56	54.3 ± 1.68	91.0 ± 3.55	95.8 ± 4.26	n = 22	[RO2] Roche Hitachi and Modular D/P
112.0 ± 2.89	100.3 ± 2.93	54.4 ± 1.52	89.6 ± 2.51	91.4 ± 3.02	n = 8	[RO1] Roche Integra and MIRA
121.5 ± 2.20	107.3 ± 2.52	53.1 ± 1.44	89.5 ± 1.87	95.0 ± 1.84	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
122.1 ± 9.48	107.6 ± 8.33	51.3 ± 7.66	90.1 ± 8.35	95.2 ± 8.34	n = 75	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Homocysteine (µmol/L)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
14.86 ± 1.48	19.72 ± 1.65	8.42 ± 0.82	23.64 ± 1.78	21.85 ± 1.60	n = 118	[---] All Methods & Instruments
<Instruments>						
13.90 ± 0.65	18.92 ± 1.06	8.02 ± 0.28	23.58 ± 1.32	21.28 ± 1.12	n = 14	[ABH] Abbott Architect i System
16.00 ± 1.01	20.77 ± 1.30	8.96 ± 0.62	25.15 ± 1.19	23.06 ± 1.14	n = 22	[OLC] Beckman Coulter AU Chemistry System
15.72 ± 0.38	20.95 ± 0.23	8.23 ± 0.41	24.93 ± 0.49	22.72 ± 0.64	n = 4	[JYG] Ortho Vitros 5600
14.20 ± 0.23	19.11 ± 0.94	7.97 ± 0.08	23.23 ± 1.33	21.14 ± 1.31	n = 5	[ROC] Roche cobas c501
14.36 ± 0.84	19.96 ± 1.02	8.19 ± 0.52	23.30 ± 1.62	21.55 ± 1.74	n = 3	[ROG] Roche cobas c502
15.10 ± 0.72	20.39 ± 0.57	8.70 ± 0.09	23.15 ± 0.63	20.97 ± 1.04	n = 3	[ROT] Roche Cobas INTEGRA 800
14.90 ± 1.56	20.80 ± 1.53	8.58 ± 1.23	23.33 ± 1.87	21.63 ± 1.34	n = 3	[ROD] Roche MODULAR D/P
16.49 ± 0.56	21.31 ± 0.89	9.32 ± 1.04	25.47 ± 1.22	23.54 ± 0.74	n = 3	[BYE] Siemens ADVIA 1800
14.69 ± 0.84	19.19 ± 1.00	8.44 ± 0.47	22.78 ± 1.10	21.56 ± 0.99	n = 25	[COB] Siemens ADVIA Centaur
12.56 ± 0.74	17.20 ± 1.18	7.85 ± 0.69	22.18 ± 1.42	20.20 ± 0.78	n = 9	[DUT] Siemens Dimension Vista
14.80 ± 1.36	19.61 ± 1.37	8.12 ± 0.93	23.02 ± 1.28	21.37 ± 1.06	n = 13	[DPD] Siemens Immulite 2000
<Reagents>						
13.90 ± 0.65	18.92 ± 1.06	8.02 ± 0.28	23.58 ± 1.32	21.28 ± 1.12	n = 14	[AB1] Abbott
15.53 ± 1.04	20.85 ± 0.27	8.38 ± 0.59	24.21 ± 1.16	22.60 ± 1.35	n = 3	[AS1] Axis-Shield
15.86 ± 1.14	21.33 ± 0.99	8.49 ± 0.68	24.72 ± 1.31	22.95 ± 1.26	n = 4	[CR1] Carolina
15.91 ± 1.34	20.59 ± 1.59	9.10 ± 0.75	24.98 ± 1.75	22.80 ± 1.73	n = 28	[DZ1] Diazyme
15.54 ± 0.68	20.82 ± 0.53	8.06 ± 0.61	24.65 ± 0.89	22.44 ± 1.03	n = 5	[JJ1] Ortho Clinical Diagnostics
14.34 ± 0.59	19.25 ± 0.17	7.90 ± 0.11	23.34 ± 1.19	20.89 ± 0.40	n = 5	[RO4] Roche cobas c311/c501/c502/c701/c702
16.26 ± 0.53	21.39 ± 0.38	9.30 ± 0.60	25.23 ± 0.51	23.50 ± 0.62	n = 4	[GZ1] Sekisui Diagnostics
14.69 ± 0.84	19.19 ± 1.00	8.44 ± 0.47	22.78 ± 1.10	21.56 ± 0.99	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
12.41 ± 0.63	16.84 ± 0.83	7.75 ± 0.72	21.45 ± 1.63	19.88 ± 0.90	n = 5	[DA5] Siemens Dimension
12.78 ± 0.81	17.81 ± 1.26	7.95 ± 0.64	22.92 ± 0.81	20.50 ± 0.39	n = 4	[DA6] Siemens Dimension LOCI
14.91 ± 1.33	19.65 ± 1.30	8.08 ± 0.90	23.04 ± 1.20	21.45 ± 1.04	n = 14	[DP5] Siemens Immulite

Summary of Participant Performance (Mean and Standard Deviation)

Troponin I (µg/L)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
0.560 ± 0.315	2.657 ± 2.370	1.304 ± 0.812	0.130 ± 0.066	0.524 ± 0.260	n = 224	[---] All Methods & Instruments
<Instruments>						
2.097 ± 0.074	15.355 ± 0.423	5.092 ± 0.156	0.473 ± 0.039	2.499 ± 0.136	n = 21	[ABH] Abbott Architect i System
0.344 ± 0.022	1.026 ± 0.062	0.688 ± 0.060	0.060 ± 0.006	0.251 ± 0.020	n = 21	[SAA] Beckman Coulter ACCESS
0.283 ± 0.016	0.872 ± 0.028	0.573 ± 0.038	0.058 ± 0.004	0.203 ± 0.008	n = 4	[BCV] Beckman Coulter UniCel DxI 600
0.264 ± 0.017	0.819 ± 0.051	0.532 ± 0.038	0.051 ± 0.009	0.196 ± 0.016	n = 8	[BCU] Beckman Coulter UniCel DxI 800
0.111 ± 0.044	4.215 ± 1.562	0.169 ± 0.138	< 0.050	0.117 ± 0.051	n = 3	[BSA] BioSite Triage
0.699 ± 0.088	5.023 ± 0.495	1.706 ± 0.203	0.166 ± 0.037	0.619 ± 0.072	n = 8	[IAA] i-STAT
1.051 ± 0.075	10.371 ± 0.417	2.416 ± 0.089	0.212 ± 0.017	1.021 ± 0.058	n = 18	[JJG] Ortho Vitros 5600
0.997 ± 0.049	9.857 ± 0.641	2.391 ± 0.111	0.203 ± 0.007	0.997 ± 0.036	n = 6	[JJC] Ortho Vitros Eci/ECiQ
0.328 ± 0.051	0.986 ± 0.084	0.573 ± 0.161	< 0.300	0.300 ± 0.000	n = 3	[ROA] Roche cobas e601
0.779 ± 0.065	3.992 ± 0.238	1.894 ± 0.128	0.112 ± 0.016	0.670 ± 0.054	n = 44	[COB] Siemens ADVIA Centaur
0.714 ± 0.093	3.692 ± 0.401	1.729 ± 0.209	0.117 ± 0.014	0.626 ± 0.074	n = 3	[BYP] Siemens ADVIA Centaur CP
0.402 ± 0.022	1.671 ± 0.092	0.940 ± 0.036	0.160 ± 0.017	0.508 ± 0.038	n = 17	[DUE] Siemens Dimension EXL
0.292 ± 0.033	1.386 ± 0.089	0.553 ± 0.044	0.062 ± 0.017	0.325 ± 0.026	n = 8	[DUR] Siemens Dimension RxL
0.412 ± 0.026	1.633 ± 0.092	0.918 ± 0.055	0.148 ± 0.013	0.489 ± 0.032	n = 42	[DUT] Siemens Dimension Vista
0.305 ± 0.041	1.330 ± 0.114	0.595 ± 0.057	0.072 ± 0.031	0.262 ± 0.107	n = 6	[DUX] Siemens Dimension Xpand
1.396 ± 0.114	12.764 ± 0.451	3.371 ± 0.148	0.351 ± 0.011	1.474 ± 0.090	n = 4	[TOM] Tosoh Bioscience
<Reagents>						
2.093 ± 0.075	15.324 ± 0.485	5.082 ± 0.172	0.471 ± 0.039	2.490 ± 0.140	n = 26	[AB1] Abbott
0.318 ± 0.044	0.960 ± 0.115	0.638 ± 0.093	0.058 ± 0.007	0.233 ± 0.033	n = 33	[BC1] Beckman Coulter
0.111 ± 0.044	4.215 ± 1.562	0.169 ± 0.138	< 0.050	0.117 ± 0.051	n = 3	[BS1] Biosite Diagnostics
0.722 ± 0.084	4.947 ± 0.484	1.737 ± 0.212	0.170 ± 0.032	0.619 ± 0.069	n = 4	[IA1] i-STAT
1.036 ± 0.074	10.273 ± 0.479	2.407 ± 0.100	0.209 ± 0.014	1.013 ± 0.053	n = 24	[JJ1] Ortho Clinical Diagnostics
0.316 ± 0.034	1.026 ± 0.089	0.586 ± 0.122	< 0.300	0.300 ± 0.000	n = 5	[RO3] Roche Elecsys/Modular E/e601/e411
0.777 ± 0.067	3.982 ± 0.250	1.888 ± 0.134	0.112 ± 0.016	0.667 ± 0.057	n = 47	[BY1] Siemens ADVIA/ADVIA Centaur
0.301 ± 0.042	1.374 ± 0.126	0.568 ± 0.054	0.069 ± 0.027	0.317 ± 0.058	n = 15	[DA5] Siemens Dimension
0.409 ± 0.025	1.646 ± 0.095	0.928 ± 0.052	0.151 ± 0.015	0.494 ± 0.035	n = 58	[DA6] Siemens Dimension LOCI
1.350 ± 0.054	12.691 ± 0.562	3.319 ± 0.142	0.356 ± 0.010	1.440 ± 0.018	n = 3	[TO2] Tosoh ST AIA

Summary of Participant Performance (Mean and Standard Deviation)

Troponin T (µg/L)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
0.078 ± 0.007	0.222 ± 0.017	0.144 ± 0.011	0.015 ± 0.007	0.072 ± 0.008	n = 44	[---] All Methods & Instruments
						<Instruments>
0.084 ± 0.014	0.232 ± 0.004	0.148 ± 0.017	0.024 ± 0.011	0.080 ± 0.006	n = 5	[ROF] Roche cobas e411
0.076 ± 0.007	0.212 ± 0.019	0.142 ± 0.012	0.013 ± 0.005	0.069 ± 0.009	n = 21	[ROA] Roche cobas e601
0.085 ± 0.007	0.233 ± 0.016	0.151 ± 0.014	0.022 ± 0.005	0.078 ± 0.009	n = 7	[BME] Roche Elecsys
0.079 ± 0.006	0.227 ± 0.009	0.145 ± 0.006	0.013 ± 0.005	0.072 ± 0.004	n = 8	[ROE] Roche MODULAR E
						<Reagents>
0.078 ± 0.007	0.220 ± 0.017	0.144 ± 0.010	0.015 ± 0.007	0.072 ± 0.008	n = 41	[RO3] Roche Elecsys/Modular E/e601/e411

Summary of Participant Performance (Mean and Standard Deviation)

Alanine Aminotransferase (U/L 37°C)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
201.8 ± 11.66	223.6 ± 16.24	99.1 ± 8.97	38.0 ± 2.61	132.0 ± 10.85	n = 355	[---] All Methods & Instruments
<Instruments>						
180.2 ± 5.12	198.5 ± 1.86	89.6 ± 2.56	40.0 ± 0.90	115.8 ± 4.10	n = 3	[AXA] Abaxis Piccolo
213.6 ± 5.34	229.7 ± 5.50	99.9 ± 2.41	38.1 ± 1.24	134.2 ± 3.61	n = 21	[ABJ] Abbott Architect c System
179.5 ± 2.74	196.0 ± 0.00	83.2 ± 1.54	29.0 ± 0.90	113.6 ± 2.56	n = 3	[AWA] Alfa Wassermann ACE Alera
182.2 ± 4.55	198.8 ± 4.13	86.0 ± 2.14	35.2 ± 1.18	117.7 ± 3.39	n = 68	[OLC] Beckman Coulter AU Chemistry System
203.4 ± 3.24	219.6 ± 3.44	100.2 ± 1.80	40.2 ± 1.22	130.5 ± 2.99	n = 15	[BCG] Beckman Coulter UniCel DxC 600
201.1 ± 2.40	218.7 ± 2.13	99.2 ± 1.92	39.7 ± 0.87	130.9 ± 2.52	n = 8	[BCH] Beckman Coulter UniCel DxC 800
203.1 ± 6.21	249.0 ± 6.55	112.3 ± 3.61	56.9 ± 3.63	153.1 ± 5.22	n = 8	[JJE] Ortho Vitros 250/350/950
202.2 ± 5.90	248.2 ± 5.00	112.7 ± 3.07	61.2 ± 2.36	152.7 ± 3.16	n = 3	[JJH] Ortho Vitros 4600
203.9 ± 5.17	246.9 ± 3.96	111.7 ± 2.20	57.1 ± 3.77	153.0 ± 4.61	n = 12	[JJF] Ortho Vitros 5,1FS
203.6 ± 4.89	250.2 ± 5.87	114.0 ± 3.70	60.6 ± 3.19	154.2 ± 4.86	n = 20	[JJG] Ortho Vitros 5600
199.7 ± 1.93	217.9 ± 1.83	95.6 ± 1.09	37.8 ± 1.07	129.0 ± 1.54	n = 5	[ROJ] Roche cobas c311
201.5 ± 5.29	222.3 ± 4.98	96.6 ± 2.67	37.7 ± 1.09	130.8 ± 3.08	n = 30	[ROC] Roche cobas c501
196.4 ± 0.56	217.0 ± 2.41	93.6 ± 3.39	35.8 ± 1.18	127.7 ± 0.73	n = 7	[ROH] Roche cobas c701
204.3 ± 10.62	222.3 ± 9.70	96.8 ± 3.84	36.1 ± 1.13	129.9 ± 5.70	n = 6	[ROS] Roche Cobas INTEGRA 400
194.6 ± 6.24	214.4 ± 5.28	94.5 ± 2.17	36.9 ± 1.13	126.7 ± 4.21	n = 4	[ROT] Roche Cobas INTEGRA 800
200.1 ± 6.10	219.8 ± 6.43	96.1 ± 2.49	37.3 ± 1.36	128.9 ± 4.43	n = 21	[ROD] Roche MODULAR D/P
215.0 ± 3.64	237.3 ± 4.66	104.9 ± 2.18	40.9 ± 2.42	139.4 ± 2.77	n = 21	[BYE] Siemens ADVIA 1800
209.3 ± 4.25	229.8 ± 4.12	102.8 ± 3.21	39.2 ± 1.26	135.4 ± 2.70	n = 24	[DUE] Siemens Dimension EXL
210.7 ± 6.01	231.2 ± 4.71	107.2 ± 4.71	44.6 ± 5.40	139.3 ± 5.65	n = 14	[DUR] Siemens Dimension RxL
204.5 ± 3.65	226.8 ± 3.55	101.1 ± 1.87	39.4 ± 1.51	133.6 ± 2.18	n = 42	[DUT] Siemens Dimension Vista
208.9 ± 4.43	230.7 ± 4.63	106.8 ± 4.26	42.9 ± 6.35	139.4 ± 4.74	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
180.2 ± 5.12	198.5 ± 1.86	89.6 ± 2.56	40.0 ± 0.90	115.8 ± 4.10	n = 3	[AX1] Abaxis
213.6 ± 5.34	229.7 ± 5.50	99.9 ± 2.41	38.1 ± 1.24	134.2 ± 3.61	n = 21	[AB1] Abbott
179.5 ± 2.74	196.0 ± 0.00	83.2 ± 1.54	29.0 ± 0.90	113.6 ± 2.56	n = 3	[AW1] Alfa Wassermann
202.3 ± 3.60	219.1 ± 3.30	99.6 ± 1.89	40.0 ± 1.26	130.6 ± 3.02	n = 27	[BC1] Beckman Coulter
182.2 ± 4.63	198.9 ± 4.22	86.0 ± 2.18	35.1 ± 1.16	117.7 ± 3.40	n = 65	[OL1] Beckman Coulter AU Series
203.6 ± 5.25	248.9 ± 5.25	112.9 ± 3.41	59.1 ± 3.83	153.6 ± 4.75	n = 43	[JJ1] Ortho Clinical Diagnostics
200.5 ± 5.10	220.9 ± 5.27	96.0 ± 2.76	37.5 ± 1.39	130.0 ± 3.07	n = 44	[RO4] Roche cobas c311/c501/c502/c701/c702
200.1 ± 6.10	219.8 ± 6.43	96.1 ± 2.49	37.3 ± 1.36	128.9 ± 4.43	n = 21	[RO2] Roche Hitachi and Modular D/P
199.6 ± 10.03	218.3 ± 8.50	95.5 ± 3.20	36.4 ± 1.22	128.3 ± 5.16	n = 10	[RO1] Roche Integra and MIRA
214.8 ± 3.65	236.9 ± 4.73	104.5 ± 2.57	40.7 ± 2.32	138.9 ± 3.21	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
207.0 ± 5.10	228.6 ± 4.48	102.6 ± 3.51	39.3 ± 1.33	135.1 ± 3.67	n = 90	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Aspartate Aminotransferase (U/L 37°C)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
308.8 ± 26.19	526.7 ± 44.72	136.3 ± 8.73	58.4 ± 4.22	295.6 ± 21.71	n = 354	[---] All Methods & Instruments
<Instruments>						
297.5 ± 1.86	503.2 ± 4.89	133.8 ± 1.54	60.0 ± 0.90	280.9 ± 2.05	n = 3	[AXA] Abaxis Piccolo
313.5 ± 7.50	534.2 ± 11.33	137.5 ± 2.96	58.4 ± 1.29	298.0 ± 5.76	n = 21	[ABJ] Abbott Architect c System
296.7 ± 4.06	499.0 ± 18.11	132.3 ± 0.51	53.0 ± 1.80	280.2 ± 4.11	n = 3	[AWA] Alfa Wassermann ACE Alera
275.9 ± 9.73	468.1 ± 15.93	121.0 ± 4.49	52.6 ± 2.11	261.0 ± 8.66	n = 67	[OLC] Beckman Coulter AU Chemistry System
306.4 ± 7.04	506.4 ± 12.36	134.8 ± 2.90	57.9 ± 1.40	289.2 ± 4.81	n = 15	[BCG] Beckman Coulter UniCel DxC 600
303.0 ± 5.89	504.2 ± 22.78	134.4 ± 3.01	56.8 ± 1.20	289.1 ± 5.83	n = 8	[BCH] Beckman Coulter UniCel DxC 800
376.1 ± 10.92	661.2 ± 25.33	146.5 ± 5.64	65.7 ± 2.64	327.9 ± 2.21	n = 8	[JJE] Ortho Vitros 250/350/950
372.9 ± 2.86	659.2 ± 10.38	145.8 ± 1.54	66.0 ± 0.90	333.3 ± 6.73	n = 3	[JJH] Ortho Vitros 4600
378.9 ± 8.00	660.6 ± 14.10	147.1 ± 5.02	66.6 ± 1.97	333.9 ± 7.24	n = 12	[JJF] Ortho Vitros 5,1FS
382.5 ± 10.87	662.2 ± 16.44	146.4 ± 3.90	65.8 ± 1.55	336.0 ± 7.65	n = 20	[JJG] Ortho Vitros 5600
316.6 ± 6.92	539.3 ± 8.81	138.1 ± 1.27	58.5 ± 0.83	300.2 ± 3.40	n = 5	[ROJ] Roche cobas c311
319.1 ± 9.34	547.5 ± 10.77	140.2 ± 3.74	59.1 ± 1.22	302.9 ± 6.57	n = 30	[ROC] Roche cobas c501
317.6 ± 7.38	542.4 ± 14.99	137.8 ± 5.50	57.9 ± 1.59	302.7 ± 7.09	n = 7	[ROH] Roche cobas c701
319.6 ± 12.11	541.4 ± 8.03	139.2 ± 3.00	57.7 ± 1.21	301.3 ± 4.89	n = 6	[ROS] Roche Cobas INTEGRA 400
309.3 ± 6.48	533.4 ± 9.35	136.3 ± 2.26	56.5 ± 1.22	294.0 ± 7.58	n = 4	[ROT] Roche Cobas INTEGRA 800
308.4 ± 7.41	521.9 ± 11.26	135.7 ± 2.52	57.8 ± 1.37	290.6 ± 6.43	n = 21	[ROD] Roche MODULAR D/P
330.9 ± 6.09	565.4 ± 10.63	147.2 ± 3.15	62.8 ± 2.50	315.1 ± 5.44	n = 21	[BYE] Siemens ADVIA 1800
298.9 ± 10.80	516.8 ± 8.52	134.1 ± 3.29	57.9 ± 1.58	292.1 ± 7.12	n = 24	[DUE] Siemens Dimension EXL
308.1 ± 12.03	529.2 ± 14.25	137.2 ± 4.43	60.1 ± 3.66	299.3 ± 10.97	n = 14	[DUR] Siemens Dimension RxL
310.4 ± 9.25	534.6 ± 9.90	136.2 ± 2.94	58.4 ± 1.62	298.3 ± 5.80	n = 42	[DUT] Siemens Dimension Vista
308.9 ± 7.93	530.6 ± 9.26	138.7 ± 3.56	60.0 ± 2.04	297.9 ± 6.74	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
297.5 ± 1.86	503.2 ± 4.89	133.8 ± 1.54	60.0 ± 0.90	280.9 ± 2.05	n = 3	[AX1] Abaxis
313.5 ± 7.50	534.2 ± 11.33	137.5 ± 2.96	58.4 ± 1.29	298.0 ± 5.76	n = 21	[AB1] Abbott
296.7 ± 4.06	499.0 ± 18.11	132.3 ± 0.51	53.0 ± 1.80	280.2 ± 4.11	n = 3	[AW1] Alfa Wassermann
305.3 ± 7.40	506.1 ± 20.33	134.8 ± 2.94	57.4 ± 1.52	289.2 ± 5.16	n = 27	[BC1] Beckman Coulter
276.0 ± 9.66	468.1 ± 16.02	121.1 ± 4.49	52.6 ± 2.07	261.1 ± 8.69	n = 64	[OL1] Beckman Coulter AU Series
379.2 ± 10.84	660.6 ± 17.25	146.5 ± 4.34	66.0 ± 1.84	334.2 ± 8.04	n = 43	[JJ1] Ortho Clinical Diagnostics
318.4 ± 8.64	545.4 ± 11.58	139.5 ± 3.71	58.8 ± 1.40	302.1 ± 6.62	n = 44	[RO4] Roche cobas c311/c501/c502/c701/c702
308.4 ± 7.41	521.9 ± 11.26	135.7 ± 2.52	57.8 ± 1.37	290.6 ± 6.43	n = 21	[RO2] Roche Hitachi and Modular D/P
313.7 ± 8.12	538.5 ± 8.49	138.0 ± 3.07	57.2 ± 1.33	298.8 ± 6.91	n = 10	[RO1] Roche Integra and MIRA
330.9 ± 5.99	564.2 ± 11.22	146.9 ± 3.37	62.5 ± 2.55	314.6 ± 5.52	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
307.0 ± 11.04	529.1 ± 13.23	136.1 ± 3.77	58.7 ± 2.19	296.9 ± 7.46	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

α-Amylase (U/L 37°C)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
346.1 ± 63.23	143.9 ± 18.93	180.2 ± 32.76	44.5 ± 6.83	95.1 ± 10.25	n = 311	[---] All Methods & Instruments
<Instruments>						
396.8 ± 6.32	162.9 ± 3.29	205.1 ± 3.66	47.4 ± 1.20	104.4 ± 2.20	n = 19	[ABJ] Abbott Architect c System
293.0 ± 14.82	117.6 ± 6.35	151.1 ± 8.96	34.1 ± 2.12	76.0 ± 4.21	n = 55	[OLC] Beckman Coulter AU Chemistry System
373.4 ± 7.33	158.8 ± 3.12	194.8 ± 6.46	52.0 ± 1.26	105.0 ± 2.58	n = 12	[BCG] Beckman Coulter UniCel DxC 600
372.3 ± 5.63	157.2 ± 3.79	195.6 ± 2.68	51.6 ± 1.69	104.4 ± 1.85	n = 8	[BCH] Beckman Coulter UniCel DxC 800
221.1 ± 2.74	119.2 ± 1.08	118.3 ± 5.43	49.1 ± 3.36	84.7 ± 5.05	n = 6	[JJE] Ortho Vitros 250/350/950
227.0 ± 0.90	121.3 ± 1.37	117.5 ± 1.86	50.8 ± 2.36	85.2 ± 1.54	n = 3	[JJH] Ortho Vitros 4600
230.6 ± 10.77	118.6 ± 5.81	115.1 ± 5.74	48.7 ± 5.85	86.0 ± 5.66	n = 11	[JJF] Ortho Vitros 5,1FS
229.5 ± 8.15	119.7 ± 6.13	115.5 ± 4.38	48.9 ± 4.33	85.7 ± 4.81	n = 20	[JJG] Ortho Vitros 5600
337.4 ± 6.89	144.8 ± 3.10	177.3 ± 2.69	49.0 ± 0.75	96.9 ± 1.88	n = 4	[ROJ] Roche cobas c311
340.2 ± 5.71	145.3 ± 2.30	178.4 ± 3.41	49.1 ± 1.04	97.6 ± 1.63	n = 27	[ROC] Roche cobas c501
333.0 ± 4.60	142.5 ± 2.74	175.7 ± 3.16	48.4 ± 1.02	95.7 ± 1.37	n = 3	[ROG] Roche cobas c502
335.5 ± 1.86	142.2 ± 1.54	173.7 ± 1.37	47.7 ± 0.51	94.3 ± 1.37	n = 3	[ROH] Roche cobas c701
340.3 ± 2.54	146.2 ± 0.94	180.4 ± 1.02	49.8 ± 0.41	98.1 ± 0.20	n = 4	[ROS] Roche Cobas INTEGRA 400
331.9 ± 2.63	141.9 ± 1.88	175.7 ± 2.43	48.7 ± 0.82	95.8 ± 1.46	n = 4	[ROT] Roche Cobas INTEGRA 800
336.4 ± 5.39	144.6 ± 2.69	176.1 ± 3.06	48.9 ± 0.68	96.7 ± 2.00	n = 19	[ROD] Roche MODULAR D/P
355.2 ± 5.72	150.7 ± 2.76	186.5 ± 3.49	49.6 ± 1.18	100.2 ± 1.68	n = 21	[BYE] Siemens ADVIA 1800
411.4 ± 8.87	159.7 ± 4.01	212.3 ± 3.79	40.8 ± 1.17	101.0 ± 2.44	n = 20	[DUE] Siemens Dimension EXL
412.9 ± 8.35	159.8 ± 3.27	213.1 ± 2.88	41.6 ± 0.97	101.0 ± 1.93	n = 12	[DUR] Siemens Dimension RxL
405.8 ± 5.80	156.6 ± 2.83	209.7 ± 3.77	39.6 ± 0.94	99.0 ± 1.74	n = 42	[DUT] Siemens Dimension Vista
418.6 ± 4.25	161.7 ± 2.71	215.3 ± 3.06	41.1 ± 1.87	102.0 ± 2.00	n = 8	[DUX] Siemens Dimension Xpand
<Reagents>						
396.8 ± 6.32	162.9 ± 3.29	205.1 ± 3.66	47.4 ± 1.20	104.4 ± 2.20	n = 19	[AB1] Abbott
374.3 ± 5.87	159.1 ± 2.40	194.7 ± 6.85	52.1 ± 1.48	104.5 ± 2.62	n = 8	[BC1] Beckman Coulter
292.8 ± 14.05	117.6 ± 6.34	151.0 ± 8.49	34.2 ± 2.03	76.0 ± 4.09	n = 52	[OL1] Beckman Coulter AU Series
370.8 ± 6.07	156.5 ± 3.60	195.0 ± 3.24	51.6 ± 1.36	104.3 ± 1.83	n = 14	[BC2] Beckman Coulter IFCC Standardized
228.1 ± 9.00	119.1 ± 5.47	116.0 ± 5.03	48.9 ± 4.45	85.7 ± 4.90	n = 41	[JJ1] Ortho Clinical Diagnostics
338.9 ± 5.75	144.8 ± 2.54	177.6 ± 3.47	48.9 ± 1.04	97.1 ± 1.85	n = 38	[RO4] Roche cobas c311/c501/c502/c701/c702
336.8 ± 5.70	144.8 ± 2.82	176.4 ± 3.36	48.9 ± 0.80	96.8 ± 2.13	n = 20	[RO2] Roche Hitachi and Modular D/P
335.9 ± 5.23	144.2 ± 2.76	178.2 ± 3.00	49.3 ± 0.67	97.2 ± 1.51	n = 8	[RO1] Roche Integra and MIRA
354.9 ± 6.03	150.4 ± 3.09	186.1 ± 3.78	49.3 ± 1.39	100.1 ± 1.76	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
409.2 ± 8.18	158.2 ± 3.66	211.4 ± 4.07	40.3 ± 1.36	100.0 ± 2.23	n = 82	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Alkaline Phosphatase (U/L 37°C)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
452.1 ± 41.92	53.3 ± 7.96	291.0 ± 34.36	206.7 ± 18.91	130.6 ± 12.72	n = 354	[---] All Methods & Instruments
<Instruments>						
372.9 ± 2.86	45.2 ± 3.23	250.0 ± 7.27	173.9 ± 2.05	108.5 ± 3.63	n = 3	[AXA] Abaxis Piccolo
462.9 ± 15.42	53.1 ± 1.81	300.8 ± 9.40	210.0 ± 6.96	131.6 ± 3.71	n = 21	[ABJ] Abbott Architect c System
434.5 ± 16.23	48.7 ± 3.37	292.7 ± 9.73	202.0 ± 6.42	123.4 ± 6.66	n = 3	[AWA] Alfa Wassermann ACE Alera
411.6 ± 23.21	46.4 ± 2.72	268.7 ± 15.84	187.2 ± 10.75	116.4 ± 6.30	n = 67	[OLC] Beckman Coulter AU Chemistry System
409.5 ± 10.23	46.0 ± 1.93	263.7 ± 6.63	186.1 ± 4.89	114.4 ± 3.46	n = 15	[BCG] Beckman Coulter UniCel DxC 600
395.8 ± 13.83	45.1 ± 1.78	258.4 ± 9.46	179.2 ± 7.76	112.4 ± 4.55	n = 8	[BCH] Beckman Coulter UniCel DxC 800
446.0 ± 12.60	71.2 ± 3.52	250.4 ± 8.95	210.4 ± 4.62	142.7 ± 5.50	n = 8	[JJE] Ortho Vitros 250/350/950
417.8 ± 7.82	67.1 ± 2.05	230.5 ± 6.32	193.6 ± 7.34	136.2 ± 5.12	n = 3	[JJH] Ortho Vitros 4600
446.3 ± 11.97	70.9 ± 2.71	239.7 ± 7.66	205.1 ± 5.81	142.5 ± 4.61	n = 12	[JJF] Ortho Vitros 5,1FS
430.5 ± 16.52	68.2 ± 3.28	232.1 ± 8.16	197.7 ± 7.32	135.2 ± 6.14	n = 20	[JJG] Ortho Vitros 5600
447.2 ± 7.33	51.5 ± 1.07	295.0 ± 5.94	206.7 ± 4.02	129.0 ± 3.03	n = 5	[ROJ] Roche cobas c311
449.1 ± 7.32	53.0 ± 1.45	294.6 ± 5.67	206.9 ± 3.82	129.5 ± 3.00	n = 30	[ROC] Roche cobas c501
445.3 ± 7.57	50.6 ± 1.83	287.8 ± 9.21	202.6 ± 5.41	127.2 ± 1.48	n = 7	[ROH] Roche cobas c701
461.7 ± 15.97	52.1 ± 1.38	301.6 ± 4.17	210.5 ± 3.12	130.8 ± 2.77	n = 5	[ROS] Roche Cobas INTEGRA 400
459.3 ± 17.38	49.7 ± 0.90	301.3 ± 6.10	209.5 ± 6.51	128.6 ± 2.64	n = 4	[ROT] Roche Cobas INTEGRA 800
437.0 ± 9.09	51.5 ± 1.26	287.7 ± 6.84	201.9 ± 4.61	126.5 ± 2.86	n = 20	[ROD] Roche MODULAR D/P
493.4 ± 19.07	55.1 ± 2.32	321.0 ± 11.74	223.8 ± 8.78	138.7 ± 5.60	n = 21	[BYE] Siemens ADVIA 1800
494.4 ± 18.56	56.1 ± 5.52	322.1 ± 11.77	223.7 ± 9.71	137.6 ± 4.32	n = 24	[DUE] Siemens Dimension EXL
515.6 ± 24.66	66.8 ± 9.59	340.6 ± 15.20	238.9 ± 14.18	150.8 ± 12.58	n = 14	[DUR] Siemens Dimension RxL
501.6 ± 15.53	56.9 ± 4.99	327.2 ± 9.98	227.9 ± 6.71	141.8 ± 6.10	n = 42	[DUT] Siemens Dimension Vista
478.7 ± 15.29	56.4 ± 6.75	316.1 ± 8.94	220.1 ± 5.45	139.9 ± 10.34	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
372.9 ± 2.86	45.2 ± 3.23	250.0 ± 7.27	173.9 ± 2.05	108.5 ± 3.63	n = 3	[AX1] Abaxis
462.9 ± 15.42	53.1 ± 1.81	300.8 ± 9.40	210.0 ± 6.96	131.6 ± 3.71	n = 21	[AB1] Abbott
434.5 ± 16.23	48.7 ± 3.37	292.7 ± 9.73	202.0 ± 6.42	123.4 ± 6.66	n = 3	[AW1] Alfa Wassermann
406.5 ± 12.64	45.8 ± 2.03	263.4 ± 8.36	184.8 ± 6.87	114.2 ± 4.08	n = 27	[BC1] Beckman Coulter
411.2 ± 23.04	46.3 ± 2.69	268.6 ± 15.77	187.1 ± 10.64	116.3 ± 6.31	n = 64	[OL1] Beckman Coulter AU Series
437.5 ± 16.92	69.5 ± 3.39	237.1 ± 10.73	202.1 ± 8.80	138.9 ± 6.77	n = 43	[JJ1] Ortho Clinical Diagnostics
448.0 ± 7.38	52.4 ± 1.66	294.0 ± 5.77	206.1 ± 4.27	128.9 ± 2.96	n = 44	[RO4] Roche cobas c311/c501/c502/c701/c702
437.0 ± 9.09	51.5 ± 1.26	287.7 ± 6.84	201.9 ± 4.61	126.5 ± 2.86	n = 20	[RO2] Roche Hitachi and Modular D/P
458.8 ± 16.35	50.8 ± 1.65	300.6 ± 5.55	210.0 ± 4.40	129.3 ± 3.18	n = 10	[RO1] Roche Integra and MIRA
492.0 ± 19.84	55.0 ± 2.89	320.1 ± 12.48	223.2 ± 9.18	138.4 ± 5.84	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
499.1 ± 20.37	57.9 ± 6.77	326.4 ± 13.19	227.3 ± 10.19	142.1 ± 8.67	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

 γ -Glutamyltransferase (U/L 37°C)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
228.6 ± 52.74	27.9 ± 6.00	73.0 ± 17.60	202.9 ± 47.77	115.8 ± 27.01	n = 289	[---] All Methods & Instruments
<Instruments>						
234.8 ± 15.36	28.3 ± 1.85	73.8 ± 4.75	208.4 ± 13.20	117.7 ± 7.54	n = 15	[ABJ] Abbott Architect c System
176.8 ± 7.57	23.2 ± 1.32	56.7 ± 2.79	157.3 ± 7.26	90.4 ± 4.31	n = 59	[OLC] Beckman Coulter AU Chemistry System
235.3 ± 8.85	22.4 ± 1.46	73.3 ± 2.63	210.6 ± 7.88	116.1 ± 4.20	n = 12	[BCG] Beckman Coulter UniCel DxC 600
235.9 ± 7.80	33.2 ± 0.73	73.8 ± 2.21	209.5 ± 6.03	116.6 ± 3.21	n = 7	[BCH] Beckman Coulter UniCel DxC 800
368.8 ± 5.05	33.4 ± 1.09	117.5 ± 1.61	337.5 ± 3.18	182.6 ± 2.30	n = 5	[JJE] Ortho Vitros 250/350/950
355.2 ± 15.79	31.7 ± 1.37	116.0 ± 2.70	327.1 ± 6.58	179.7 ± 4.22	n = 3	[JJH] Ortho Vitros 4600
353.4 ± 9.76	32.9 ± 1.75	115.5 ± 2.46	329.0 ± 8.25	178.0 ± 3.51	n = 11	[JJF] Ortho Vitros 5,1FS
357.5 ± 11.14	32.7 ± 1.53	114.5 ± 2.62	328.1 ± 9.30	177.4 ± 3.99	n = 20	[JJG] Ortho Vitros 5600
200.2 ± 4.24	24.2 ± 0.80	63.9 ± 1.13	179.1 ± 3.82	101.1 ± 1.75	n = 24	[ROC] Roche cobas c501
200.0 ± 1.80	24.0 ± 0.90	63.7 ± 1.37	180.0 ± 0.90	100.5 ± 1.86	n = 3	[ROG] Roche cobas c502
196.4 ± 4.19	23.5 ± 0.57	61.2 ± 1.46	171.3 ± 4.41	99.9 ± 2.04	n = 4	[ROH] Roche cobas c701
200.2 ± 4.11	23.4 ± 1.02	63.0 ± 1.80	178.0 ± 3.61	101.0 ± 2.70	n = 3	[ROS] Roche Cobas INTEGRA 400
197.9 ± 5.63	23.7 ± 0.51	62.5 ± 2.74	177.1 ± 6.08	98.9 ± 2.86	n = 3	[ROT] Roche Cobas INTEGRA 800
204.5 ± 3.62	23.6 ± 0.77	64.6 ± 0.96	181.3 ± 2.83	102.5 ± 1.82	n = 19	[ROD] Roche MODULAR D/P
219.7 ± 6.39	28.0 ± 1.52	69.9 ± 2.81	196.2 ± 5.20	111.5 ± 3.35	n = 21	[BYE] Siemens ADVIA 1800
259.1 ± 4.87	38.4 ± 1.97	86.0 ± 2.68	232.2 ± 3.64	134.1 ± 3.19	n = 18	[DUE] Siemens Dimension EXL
261.7 ± 4.28	38.2 ± 1.20	86.4 ± 1.66	232.6 ± 3.10	133.2 ± 2.84	n = 8	[DUR] Siemens Dimension RxL
265.3 ± 4.86	34.1 ± 1.98	84.1 ± 2.05	236.1 ± 4.05	134.1 ± 2.60	n = 39	[DUT] Siemens Dimension Vista
264.7 ± 3.17	39.7 ± 1.58	87.7 ± 1.58	234.7 ± 4.41	135.1 ± 2.86	n = 4	[DUX] Siemens Dimension Xpand
<Reagents>						
233.2 ± 14.39	28.1 ± 1.85	73.4 ± 4.62	207.1 ± 12.76	116.9 ± 7.06	n = 14	[AB1] Abbott
234.5 ± 8.60	22.6 ± 1.49	73.2 ± 2.64	209.1 ± 7.52	115.8 ± 4.08	n = 22	[BC1] Beckman Coulter
176.7 ± 7.58	23.3 ± 1.35	56.6 ± 2.77	157.1 ± 7.22	90.3 ± 4.28	n = 57	[OL1] Beckman Coulter AU Series
357.9 ± 11.75	32.8 ± 1.56	115.4 ± 2.87	329.6 ± 8.94	178.6 ± 4.33	n = 39	[JJ1] Ortho Clinical Diagnostics
199.5 ± 4.42	24.1 ± 0.83	63.6 ± 1.55	178.3 ± 4.52	100.8 ± 2.02	n = 34	[RO4] Roche cobas c311/c501/c502/c701/c702
204.5 ± 3.62	23.6 ± 0.77	64.6 ± 0.96	181.3 ± 2.83	102.5 ± 1.82	n = 19	[RO2] Roche Hitachi and Modular D/P
199.3 ± 4.80	23.7 ± 0.72	62.8 ± 2.26	177.8 ± 4.77	100.0 ± 2.88	n = 6	[RO1] Roche Integra and MIRA
219.3 ± 6.56	27.9 ± 1.66	69.5 ± 2.86	196.1 ± 5.43	111.1 ± 3.72	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
263.3 ± 5.45	36.0 ± 3.04	85.1 ± 2.49	234.6 ± 4.22	134.0 ± 2.82	n = 69	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Creatine Kinase (U/L 37°C)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
64.5 ± 4.93	354.2 ± 31.49	68.1 ± 5.00	280.2 ± 24.14	239.3 ± 20.96	n = 322	[---] All Methods & Instruments
<Instruments>						
68.8 ± 1.83	373.7 ± 7.76	70.8 ± 2.12	293.9 ± 9.83	253.8 ± 6.53	n = 21	[ABJ] Abbott Architect c System
55.7 ± 2.33	318.9 ± 12.44	59.5 ± 2.70	249.4 ± 18.12	212.4 ± 14.22	n = 61	[OLC] Beckman Coulter AU Chemistry System
66.9 ± 1.99	387.2 ± 7.28	70.8 ± 2.93	310.7 ± 11.60	263.3 ± 6.91	n = 12	[BCG] Beckman Coulter UniCel DxC 600
67.1 ± 1.11	386.3 ± 3.51	72.5 ± 1.03	290.9 ± 32.62	254.1 ± 23.00	n = 8	[BCH] Beckman Coulter UniCel DxC 800
70.1 ± 5.45	328.6 ± 19.59	71.9 ± 5.98	306.7 ± 23.60	238.2 ± 9.67	n = 5	[JJE] Ortho Vitros 250/350/950
70.7 ± 4.96	321.7 ± 5.09	71.5 ± 3.63	297.1 ± 16.45	226.7 ± 6.93	n = 3	[JJH] Ortho Vitros 4600
65.9 ± 3.85	296.2 ± 11.03	66.0 ± 3.67	294.1 ± 21.15	223.1 ± 13.55	n = 11	[JJF] Ortho Vitros 5,1FS
64.5 ± 4.20	303.3 ± 13.89	65.4 ± 3.98	288.5 ± 17.59	223.0 ± 12.82	n = 20	[JJG] Ortho Vitros 5600
63.9 ± 3.69	378.7 ± 10.72	69.0 ± 4.43	284.9 ± 57.82	244.7 ± 44.40	n = 4	[ROJ] Roche cobas c311
66.3 ± 1.79	392.1 ± 9.82	70.8 ± 2.16	295.8 ± 21.93	255.7 ± 16.22	n = 30	[ROC] Roche cobas c501
66.6 ± 1.02	391.6 ± 11.05	70.7 ± 1.37	297.3 ± 24.68	258.2 ± 15.87	n = 3	[ROG] Roche cobas c502
67.0 ± 0.93	362.9 ± 3.94	70.0 ± 0.93	272.3 ± 9.98	245.1 ± 4.74	n = 5	[ROH] Roche cobas c701
73.0 ± 0.00	390.3 ± 3.37	75.0 ± 0.90	313.7 ± 8.64	265.5 ± 4.53	n = 3	[ROS] Roche Cobas INTEGRA 400
59.3 ± 1.37	382.5 ± 17.41	65.0 ± 0.90	302.4 ± 29.29	250.9 ± 18.46	n = 3	[ROT] Roche Cobas INTEGRA 800
67.1 ± 2.05	370.3 ± 5.48	72.0 ± 1.43	285.2 ± 10.41	249.6 ± 6.50	n = 20	[ROD] Roche MODULAR D/P
62.2 ± 1.22	349.5 ± 6.68	66.6 ± 1.89	273.8 ± 12.95	233.5 ± 6.20	n = 21	[BYE] Siemens ADVIA 1800
65.1 ± 1.62	360.4 ± 6.47	69.2 ± 1.64	280.4 ± 9.20	246.0 ± 8.87	n = 20	[DUE] Siemens Dimension EXL
65.0 ± 2.77	362.0 ± 8.37	69.6 ± 1.71	281.8 ± 12.47	245.7 ± 10.71	n = 14	[DUR] Siemens Dimension RxL
66.1 ± 1.43	360.9 ± 6.17	69.7 ± 1.55	279.5 ± 8.73	245.0 ± 7.63	n = 41	[DUT] Siemens Dimension Vista
65.4 ± 1.42	365.4 ± 5.27	70.3 ± 2.04	279.5 ± 14.33	241.3 ± 9.64	n = 8	[DUX] Siemens Dimension Xpand
<Reagents>						
68.8 ± 1.83	373.7 ± 7.76	70.8 ± 2.12	293.9 ± 9.83	253.8 ± 6.53	n = 21	[AB1] Abbott
66.8 ± 1.70	385.5 ± 7.21	70.9 ± 3.28	301.5 ± 24.59	262.0 ± 10.13	n = 25	[BC1] Beckman Coulter
55.8 ± 2.25	319.2 ± 12.21	59.6 ± 2.60	250.2 ± 17.77	212.6 ± 13.89	n = 57	[OL1] Beckman Coulter AU Series
66.0 ± 4.90	305.0 ± 16.34	66.6 ± 4.72	292.7 ± 20.49	225.4 ± 13.12	n = 39	[JJ1] Ortho Clinical Diagnostics
66.4 ± 1.58	387.3 ± 14.42	70.7 ± 1.85	292.9 ± 22.68	254.3 ± 15.37	n = 43	[RO4] Roche cobas c311/c501/c502/c701/c702
67.1 ± 2.05	370.3 ± 5.48	72.0 ± 1.43	285.2 ± 10.41	249.6 ± 6.50	n = 20	[RO2] Roche Hitachi and Modular D/P
66.2 ± 7.83	391.1 ± 2.69	70.0 ± 5.74	316.1 ± 7.46	263.3 ± 4.16	n = 6	[RO1] Roche Integra and MIRA
62.2 ± 1.43	349.6 ± 7.75	66.5 ± 1.99	273.9 ± 12.47	232.7 ± 6.05	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
65.6 ± 1.66	361.5 ± 6.44	69.6 ± 1.59	280.5 ± 9.77	245.2 ± 8.50	n = 79	[DA5] Siemens Dimension
66.6 ± 1.80	359.3 ± 10.04	70.9 ± 2.04	262.9 ± 14.23	247.9 ± 19.56	n = 4	[DA6] Siemens Dimension LOCI

Summary of Participant Performance (Mean and Standard Deviation)

Creatine Kinase-MB (ng/ml, U/L 37°C, %)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
0.75 ± 0.30	67.23 ± 10.17	0.88 ± 0.42	0.70 ± 0.30	43.01 ± 6.02	n = 189	[-A-] All Methods - Results reported as ng/mL
1.15 ± 1.23	60.47 ± 4.91	1.13 ± 1.23	1.01 ± 1.28	38.21 ± 3.10	n = 21	[AB1] Abbott
0.94 ± 0.06	81.66 ± 3.89	0.94 ± 0.06	0.76 ± 0.06	51.41 ± 2.18	n = 14	[SAA] Beckman Coulter ACCESS
0.97 ± 0.06	82.64 ± 2.47	0.98 ± 0.06	0.77 ± 0.06	51.41 ± 1.69	n = 11	[BC1] Beckman Coulter UniCel
0.60 ± 0.09	50.70 ± 2.46	0.63 ± 0.11	0.43 ± 0.12	32.71 ± 1.45	n = 22	[JJ1] Ortho Clinical Diagnostics
1.12 ± 0.09	66.83 ± 2.11	1.66 ± 0.18	1.07 ± 0.08	43.88 ± 1.37	n = 30	[RO3] Roche Elecsys/Modular E/e601/e411
0.46 ± 0.25	70.96 ± 4.82	0.52 ± 0.22	0.39 ± 0.26	45.05 ± 2.57	n = 31	[BY1] Siemens ADVIA/ADVIA Centaur
0.57 ± 0.23	71.96 ± 6.52	0.68 ± 0.27	0.59 ± 0.23	44.82 ± 3.48	n = 26	[DA5] Siemens Dimension
0.59 ± 0.15	62.26 ± 0.84	1.08 ± 0.21	0.83 ± 0.21	39.81 ± 0.98	n = 24	[DA6] Siemens Dimension LOCI
0.90 ± 0.11	78.35 ± 0.63	1.05 ± 0.06	0.95 ± 0.17	50.85 ± 1.54	n = 2	[TO2] Tosoh ST AIA

2.19 ± 1.04	67.49 ± 12.67	3.02 ± 1.37	2.59 ± 1.55	39.58 ± 7.26	n = 6	[---] All Methods - Results reported as U/L

0.00 ± 0.00	20.78 ± 3.07	0.00 ± 0.00	0.00 ± 0.00	16.72 ± 5.74	n = 4	[-P-] All Methods - Results reported as %
0.00 ± 0.00	21.04 ± 3.58	0.00 ± 0.00	0.00 ± 0.00	16.71 ± 6.93	n = 3	[HL1] Helena Laboratories

Summary of Participant Performance (Mean and Standard Deviation)

Lactate Dehydrogenase (U/L 37°C)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
81.9 ± 7.72	265.2 ± 26.02	84.0 ± 8.33	332.6 ± 31.32	266.7 ± 24.58	n = 261	[-A-] All Methods - Lactate to Pyruvate
242.5 ± 18.23	668.4 ± 19.27	211.6 ± 9.70	831.0 ± 23.22	671.6 ± 20.92	n = 40	[-B-] All Methods - Pyruvate to Lactate
<Instruments>						
88.4 ± 3.80	272.4 ± 7.91	88.2 ± 5.06	348.4 ± 6.86	277.2 ± 6.66	n = 20	[ABJ] Abbott Architect c System
73.4 ± 4.10	233.5 ± 12.10	74.7 ± 4.63	295.6 ± 15.27	236.5 ± 11.97	n = 60	[OLC] Beckman Coulter AU Chemistry System
70.4 ± 1.81	220.2 ± 5.46	72.6 ± 2.04	279.2 ± 5.64	225.6 ± 4.23	n = 13	[BCG] Beckman Coulter UniCel DxC 600
71.1 ± 1.24	224.2 ± 4.06	72.5 ± 2.92	278.4 ± 6.53	227.6 ± 2.24	n = 8	[BCH] Beckman Coulter UniCel DxC 800
244.2 ± 21.21	678.8 ± 9.48	210.8 ± 4.16	847.6 ± 19.64	696.7 ± 5.30	n = 6	[JJE] Ortho Vitros 250/350/950
237.4 ± 6.66	662.8 ± 4.11	217.2 ± 2.36	826.7 ± 10.51	654.5 ± 2.74	n = 3	[JXH] Ortho Vitros 4600
240.3 ± 8.27	672.1 ± 17.51	211.1 ± 9.48	828.6 ± 9.91	670.7 ± 16.80	n = 12	[JXF] Ortho Vitros 5,1FS
242.0 ± 21.68	662.7 ± 23.93	211.4 ± 12.40	827.3 ± 29.28	667.1 ± 21.20	n = 20	[JYG] Ortho Vitros 5600
84.5 ± 2.83	277.6 ± 6.06	88.2 ± 1.96	345.1 ± 7.68	279.4 ± 5.10	n = 4	[ROJ] Roche cobas c311
84.9 ± 2.54	279.4 ± 6.54	88.5 ± 2.77	347.8 ± 9.17	277.8 ± 6.84	n = 26	[ROC] Roche cobas c501
82.7 ± 0.51	276.3 ± 4.22	88.0 ± 0.90	345.5 ± 4.61	276.2 ± 1.54	n = 3	[ROG] Roche cobas c502
83.7 ± 1.51	270.3 ± 3.15	84.8 ± 2.80	339.4 ± 6.89	275.1 ± 2.33	n = 4	[ROH] Roche cobas c701
86.0 ± 0.90	277.0 ± 3.58	90.0 ± 0.90	346.4 ± 6.23	278.2 ± 2.36	n = 3	[ROT] Roche Cobas INTEGRA 800
84.4 ± 2.69	278.3 ± 5.02	87.5 ± 2.94	347.3 ± 5.76	277.1 ± 5.26	n = 21	[ROD] Roche MODULAR D/P
86.7 ± 1.84	273.6 ± 5.85	88.8 ± 2.54	345.4 ± 9.64	276.9 ± 5.44	n = 21	[BYE] Siemens ADVIA 1800
81.7 ± 5.47	283.2 ± 8.12	85.0 ± 6.01	356.2 ± 12.13	285.3 ± 11.60	n = 17	[DUE] Siemens Dimension EXL
86.8 ± 3.17	283.8 ± 7.85	90.0 ± 5.37	358.2 ± 12.18	286.2 ± 8.90	n = 7	[DUR] Siemens Dimension RxL
87.0 ± 3.91	283.2 ± 7.12	89.5 ± 4.75	351.2 ± 6.92	282.4 ± 6.20	n = 42	[DUT] Siemens Dimension Vista
82.2 ± 3.87	277.6 ± 3.05	85.5 ± 3.90	347.6 ± 4.54	279.7 ± 2.65	n = 4	[DUX] Siemens Dimension Xpand
<Reagents>						
88.4 ± 3.80	272.4 ± 7.91	88.2 ± 5.06	348.4 ± 6.86	277.2 ± 6.66	n = 20	[AB1] Abbott
70.8 ± 1.89	222.3 ± 5.34	72.6 ± 2.36	279.8 ± 6.32	226.8 ± 4.38	n = 24	[BC1] Beckman Coulter
73.5 ± 4.01	233.5 ± 11.81	74.7 ± 4.52	295.6 ± 14.92	236.7 ± 11.56	n = 57	[OL1] Beckman Coulter AU Series
241.1 ± 17.00	668.4 ± 19.92	212.1 ± 9.49	830.6 ± 22.62	670.9 ± 21.01	n = 41	[JJ1] Ortho Clinical Diagnostics
84.4 ± 2.59	277.5 ± 7.05	87.9 ± 2.86	345.7 ± 9.16	277.0 ± 6.31	n = 38	[RO4] Roche cobas c311/c501/c502/c701/c702
84.4 ± 2.69	278.3 ± 5.02	87.5 ± 2.94	347.3 ± 5.76	277.1 ± 5.26	n = 21	[RO2] Roche Hitachi and Modular D/P
87.7 ± 3.14	280.4 ± 4.89	90.9 ± 1.27	348.6 ± 5.56	280.6 ± 3.64	n = 5	[RO1] Roche Integra and MIRA
86.4 ± 2.15	272.8 ± 6.44	88.4 ± 2.80	343.6 ± 10.76	276.0 ± 6.27	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
85.5 ± 4.95	282.7 ± 7.46	88.3 ± 5.49	352.1 ± 8.55	282.8 ± 7.84	n = 68	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

LDH Isoenzyme 1 (%)

Specimen: C11	Specimen: C12	Specimen: C13	Specimen: C14	Specimen: C15	Number	[Code] Instrument or Reagent System
32.3 ± 3.59	56.0 ± 1.47	31.5 ± 2.54	33.4 ± 2.03	34.2 ± 2.01	n = 8	[-P-] All Methods - Results reported as %
34.7 ± 1.51	56.3 ± 0.90	32.7 ± 1.58	35.0 ± 1.76	35.8 ± 1.46	n = 4	<Instruments>
29.4 ± 2.96	55.5 ± 1.93	29.7 ± 2.80	32.1 ± 1.03	32.9 ± 1.13	n = 4	[HLS] Helena SPIFE
						[SEE] Sebia Electrophoresis
34.7 ± 1.51	56.3 ± 0.90	32.7 ± 1.58	35.0 ± 1.76	35.8 ± 1.46	n = 4	<Reagents>
29.4 ± 2.96	55.5 ± 1.93	29.7 ± 2.80	32.1 ± 1.03	32.9 ± 1.13	n = 4	[HL1] Helena Laboratories
						[SE1] Sebia