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## **Clinical Chemistry Proficiency Test Program**

### **Statistical Summary – May 2016 (Event 16-2)**

This statistical report summarizes participant data for the five Clinical Chemistry proficiency survey specimens shipped on 2 May 2016. Test samples (Vials C36, C37, C38, C39, C40) 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 ( $\pm 1$  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: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
42.1 ± 1.88	277.2 ± 7.19	130.2 ± 4.35	104.2 ± 2.65	81.3 ± 3.07	n = 206	[---] All Methods & Instruments
<Instruments>						
44.0 ± 0.00	272.2 ± 4.11	128.7 ± 0.51	104.0 ± 0.90	81.0 ± 0.00	n = 3	[AXA] Abaxis Piccolo
41.1 ± 0.65	281.7 ± 3.24	130.6 ± 3.28	103.6 ± 2.02	79.6 ± 1.26	n = 17	[ABJ] Abbott Architect c System
42.3 ± 1.21	279.0 ± 6.13	127.2 ± 2.58	103.5 ± 2.22	79.6 ± 1.72	n = 35	[OLC] Beckman Coulter AU Chemistry System
40.0 ± 1.27	273.4 ± 5.23	126.0 ± 2.23	101.0 ± 1.71	77.3 ± 1.64	n = 10	[BCG] Beckman Coulter UniCel DxC 600
40.8 ± 1.55	276.5 ± 3.81	127.5 ± 3.18	102.7 ± 2.18	78.6 ± 2.61	n = 5	[BCH] Beckman Coulter UniCel DxC 800
73.9 ± 3.71	313.6 ± 3.80	158.2 ± 4.04	130.0 ± 3.83	112.8 ± 3.72	n = 6	[HEC] HemoCue Glucose 201
39.4 ± 1.22	269.0 ± 2.70	130.0 ± 1.60	104.5 ± 1.86	82.3 ± 0.97	n = 6	[JJE] Ortho Vitros 250/350/950
39.0 ± 1.29	266.6 ± 3.98	128.1 ± 1.81	102.6 ± 1.33	80.5 ± 0.83	n = 10	[JJG] Ortho Vitros 5600
42.3 ± 0.51	281.3 ± 3.37	130.6 ± 1.02	104.6 ± 1.02	81.0 ± 0.90	n = 3	[ROJ] Roche cobas c311
43.6 ± 0.93	282.8 ± 4.16	131.3 ± 2.43	106.2 ± 2.05	82.2 ± 1.49	n = 11	[ROC] Roche cobas c501
43.3 ± 0.51	278.6 ± 7.08	128.2 ± 2.36	102.9 ± 2.86	79.0 ± 1.80	n = 3	[ROT] Roche Cobas INTEGRA 800
43.1 ± 1.27	282.8 ± 4.11	129.2 ± 2.43	106.8 ± 0.41	81.8 ± 1.28	n = 5	[ROD] Roche MODULAR D/P
41.3 ± 0.80	273.4 ± 7.96	126.4 ± 3.37	102.5 ± 2.06	78.7 ± 1.83	n = 10	[BYE] Siemens ADVIA 1800
44.1 ± 1.31	279.2 ± 4.74	136.2 ± 2.62	107.1 ± 2.03	86.6 ± 1.79	n = 23	[DUE] Siemens Dimension EXL
41.7 ± 0.90	272.6 ± 5.60	131.8 ± 2.98	103.6 ± 2.16	82.8 ± 1.30	n = 31	[DUT] Siemens Dimension Vista
43.5 ± 0.74	280.9 ± 3.95	138.2 ± 2.54	107.3 ± 1.43	86.1 ± 2.02	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
44.0 ± 0.00	272.2 ± 4.11	128.7 ± 0.51	104.0 ± 0.90	81.0 ± 0.00	n = 3	[AX1] Abaxis
41.1 ± 0.65	281.7 ± 3.24	130.6 ± 3.28	103.6 ± 2.02	79.6 ± 1.26	n = 17	[AB1] Abbott
40.5 ± 1.48	274.5 ± 4.49	126.2 ± 2.65	101.6 ± 1.79	77.8 ± 1.93	n = 17	[BC1] Beckman Coulter
42.3 ± 1.24	279.1 ± 6.21	127.3 ± 2.49	103.6 ± 2.24	79.6 ± 1.72	n = 34	[OL1] Beckman Coulter AU Series
73.9 ± 3.71	313.6 ± 3.80	158.2 ± 4.04	130.0 ± 3.83	112.8 ± 3.72	n = 6	[HE1] HemoCue
39.3 ± 1.32	268.5 ± 3.94	129.2 ± 2.08	103.7 ± 2.08	81.4 ± 1.33	n = 19	[JJ1] Ortho Clinical Diagnostics
43.2 ± 0.93	282.1 ± 3.95	130.7 ± 1.96	105.6 ± 1.94	81.6 ± 1.49	n = 17	[RO4] Roche cobas c311/c501/c502/c701/c702
43.1 ± 1.27	282.8 ± 4.11	129.2 ± 2.43	106.8 ± 0.41	81.8 ± 1.28	n = 5	[RO2] Roche Hitachi and Modular D/P
42.9 ± 1.13	276.0 ± 7.47	127.0 ± 2.88	102.3 ± 2.65	78.4 ± 1.80	n = 4	[RO1] Roche Integra and MIRA
41.4 ± 0.85	274.6 ± 7.85	126.8 ± 3.12	102.5 ± 1.85	78.7 ± 1.81	n = 12	[BY1] Siemens ADVIA/ADVIA Centaur
42.8 ± 1.64	276.5 ± 6.44	134.5 ± 3.95	105.5 ± 2.79	84.6 ± 2.52	n = 63	[DA5] Siemens Dimension

## Summary of Participant Performance (Mean and Standard Deviation)

## Urea Nitrogen (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
42.3 ± 1.66	10.7 ± 0.59	32.8 ± 1.51	27.6 ± 1.04	20.9 ± 1.02	n = 196	[---] All Methods & Instruments
<Instruments>						
39.3 ± 0.51	10.0 ± 0.00	31.0 ± 0.90	25.7 ± 0.51	20.0 ± 0.00	n = 3	[AXA] Abaxis Piccolo
42.7 ± 0.64	10.8 ± 0.44	33.0 ± 0.00	27.7 ± 0.68	21.0 ± 0.00	n = 16	[ABJ] Abbott Architect c System
42.5 ± 1.35	10.6 ± 0.65	33.2 ± 0.98	27.8 ± 0.58	21.1 ± 0.69	n = 34	[OLC] Beckman Coulter AU Chemistry System
43.3 ± 0.94	11.0 ± 0.00	34.0 ± 0.00	28.6 ± 0.81	22.1 ± 0.49	n = 10	[BCG] Beckman Coulter UniCel DxC 600
41.4 ± 0.55	8.5 ± 0.83	31.0 ± 0.00	25.5 ± 0.83	19.0 ± 0.64	n = 5	[BCH] Beckman Coulter UniCel DxC 800
39.7 ± 0.74	10.6 ± 0.56	30.0 ± 0.47	26.8 ± 0.92	19.4 ± 0.56	n = 7	[JJE] Ortho Vitros 250/350/950
39.0 ± 0.74	10.5 ± 0.57	29.4 ± 0.55	26.2 ± 0.61	19.0 ± 0.00	n = 10	[JJG] Ortho Vitros 5600
42.6 ± 0.82	10.3 ± 0.64	33.2 ± 0.48	28.0 ± 0.00	21.1 ± 0.49	n = 11	[ROC] Roche cobas c501
43.7 ± 0.51	10.7 ± 0.51	33.0 ± 0.90	27.3 ± 0.51	20.7 ± 0.51	n = 3	[ROT] Roche Cobas INTEGRA 800
43.0 ± 0.93	10.6 ± 0.55	31.8 ± 0.80	28.0 ± 0.00	21.2 ± 0.80	n = 5	[ROD] Roche MODULAR D/P
42.9 ± 0.49	11.0 ± 0.00	32.0 ± 0.00	28.2 ± 0.61	21.4 ± 0.55	n = 10	[BYE] Siemens ADVIA 1800
43.0 ± 1.40	10.8 ± 0.49	33.0 ± 0.96	27.8 ± 1.04	20.9 ± 0.86	n = 23	[DUE] Siemens Dimension EXL
42.4 ± 1.39	10.6 ± 0.59	33.2 ± 1.17	27.7 ± 0.96	21.1 ± 0.60	n = 31	[DUT] Siemens Dimension Vista
43.8 ± 1.94	10.8 ± 0.66	33.3 ± 1.48	27.8 ± 1.48	20.9 ± 1.11	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
39.3 ± 0.51	10.0 ± 0.00	31.0 ± 0.90	25.7 ± 0.51	20.0 ± 0.00	n = 3	[AX1] Abaxis
42.7 ± 0.64	10.8 ± 0.44	33.0 ± 0.00	27.7 ± 0.68	21.0 ± 0.00	n = 16	[AB1] Abbott
42.7 ± 1.17	10.6 ± 1.02	33.3 ± 1.47	27.8 ± 1.59	21.4 ± 1.54	n = 17	[BC1] Beckman Coulter
42.5 ± 1.38	10.6 ± 0.66	33.2 ± 1.01	27.8 ± 0.60	21.0 ± 0.67	n = 33	[OL1] Beckman Coulter AU Series
39.4 ± 0.85	10.6 ± 0.55	29.7 ± 0.65	26.6 ± 0.90	19.2 ± 0.49	n = 20	[JJ1] Ortho Clinical Diagnostics
42.6 ± 0.84	10.4 ± 0.63	33.3 ± 0.51	28.0 ± 0.00	21.2 ± 0.53	n = 16	[RO4] Roche cobas c311/c501/c502/c701/c702
43.0 ± 0.93	10.6 ± 0.55	31.8 ± 0.80	28.0 ± 0.00	21.2 ± 0.80	n = 5	[RO2] Roche Hitachi and Modular D/P
43.3 ± 0.90	10.8 ± 0.41	32.7 ± 0.90	27.2 ± 0.41	20.5 ± 0.57	n = 4	[RO1] Roche Integra and MIRA
43.0 ± 0.55	11.0 ± 0.00	32.6 ± 1.13	28.4 ± 0.65	21.4 ± 0.56	n = 12	[BY1] Siemens ADVIA/ADVIA Centaur
42.7 ± 1.61	10.7 ± 0.60	33.1 ± 1.15	27.7 ± 1.04	21.0 ± 0.83	n = 63	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Creatinine (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
4.47 ± 0.13	1.53 ± 0.07	1.94 ± 0.13	2.89 ± 0.11	1.04 ± 0.12	n = 199	[---] All Methods & Instruments
<Instruments>						
4.50 ± 0.09	1.53 ± 0.05	1.83 ± 0.05	2.87 ± 0.14	0.90 ± 0.09	n = 3	[AXA] Abaxis Piccolo
4.44 ± 0.09	1.58 ± 0.03	2.12 ± 0.03	2.93 ± 0.04	1.14 ± 0.08	n = 16	[ABJ] Abbott Architect c System
4.48 ± 0.09	1.51 ± 0.04	1.91 ± 0.05	2.85 ± 0.08	1.03 ± 0.04	n = 34	[OLC] Beckman Coulter AU Chemistry System
4.48 ± 0.12	1.39 ± 0.06	1.83 ± 0.05	2.85 ± 0.05	0.98 ± 0.04	n = 10	[BCG] Beckman Coulter UniCel DxC 600
4.60 ± 0.02	1.52 ± 0.04	1.89 ± 0.01	2.91 ± 0.01	1.00 ± 0.01	n = 5	[BCH] Beckman Coulter UniCel DxC 800
4.83 ± 0.09	1.48 ± 0.04	1.90 ± 0.00	2.65 ± 0.06	0.75 ± 0.06	n = 4	[IAA] i-STAT
4.42 ± 0.12	1.51 ± 0.02	2.01 ± 0.02	3.05 ± 0.04	1.00 ± 0.00	n = 8	[JJE] Ortho Vitros 250/350/950
4.46 ± 0.07	1.55 ± 0.05	2.06 ± 0.06	3.07 ± 0.08	1.02 ± 0.03	n = 10	[JJG] Ortho Vitros 5600
4.64 ± 0.09	1.40 ± 0.11	1.82 ± 0.06	2.88 ± 0.09	1.01 ± 0.09	n = 11	[ROC] Roche cobas c501
4.59 ± 0.07	1.50 ± 0.01	1.79 ± 0.01	2.81 ± 0.02	0.85 ± 0.05	n = 3	[ROT] Roche Cobas INTEGRA 800
4.55 ± 0.09	1.58 ± 0.02	1.97 ± 0.09	2.90 ± 0.07	1.09 ± 0.17	n = 5	[ROD] Roche MODULAR D/P
4.12 ± 0.14	1.48 ± 0.07	2.02 ± 0.14	2.72 ± 0.12	1.14 ± 0.14	n = 9	[BYE] Siemens ADVIA 1800
4.40 ± 0.11	1.51 ± 0.03	1.86 ± 0.09	2.84 ± 0.06	1.12 ± 0.18	n = 23	[DUE] Siemens Dimension EXL
4.40 ± 0.09	1.67 ± 0.24	1.76 ± 0.21	2.90 ± 0.01	1.13 ± 0.17	n = 3	[DUR] Siemens Dimension RxL
4.48 ± 0.07	1.58 ± 0.05	2.05 ± 0.06	2.92 ± 0.06	1.03 ± 0.06	n = 31	[DUT] Siemens Dimension Vista
4.41 ± 0.09	1.53 ± 0.07	1.93 ± 0.09	2.92 ± 0.05	1.17 ± 0.05	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
4.50 ± 0.09	1.53 ± 0.05	1.83 ± 0.05	2.87 ± 0.14	0.90 ± 0.09	n = 3	[AX1] Abaxis
4.44 ± 0.09	1.58 ± 0.03	2.12 ± 0.03	2.93 ± 0.04	1.13 ± 0.10	n = 17	[AB1] Abbott
4.54 ± 0.09	1.44 ± 0.08	1.84 ± 0.05	2.87 ± 0.05	0.98 ± 0.04	n = 17	[BC1] Beckman Coulter
4.47 ± 0.10	1.51 ± 0.04	1.91 ± 0.05	2.84 ± 0.09	1.03 ± 0.04	n = 34	[OL1] Beckman Coulter AU Series
4.80 ± 0.09	1.50 ± 0.00	1.90 ± 0.00	2.63 ± 0.05	0.77 ± 0.05	n = 3	[IA1] i-STAT
4.45 ± 0.09	1.54 ± 0.05	2.05 ± 0.05	3.08 ± 0.07	1.01 ± 0.02	n = 20	[JJ1] Ortho Clinical Diagnostics
4.63 ± 0.08	1.44 ± 0.13	1.83 ± 0.06	2.89 ± 0.07	1.00 ± 0.11	n = 16	[RO4] Roche cobas c311/c501/c502/c701/c702
4.55 ± 0.09	1.58 ± 0.02	1.97 ± 0.09	2.90 ± 0.07	1.09 ± 0.17	n = 5	[RO2] Roche Hitachi and Modular D/P
4.59 ± 0.06	1.51 ± 0.04	1.83 ± 0.09	2.83 ± 0.04	0.91 ± 0.16	n = 4	[RO1] Roche Integra and MIRA
4.11 ± 0.13	1.49 ± 0.08	2.05 ± 0.13	2.72 ± 0.11	1.15 ± 0.14	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
4.44 ± 0.10	1.55 ± 0.06	1.95 ± 0.13	2.89 ± 0.08	1.07 ± 0.15	n = 64	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Uric Acid (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
6.67 ± 0.30	2.85 ± 0.12	4.63 ± 0.15	9.28 ± 0.40	3.10 ± 0.13	n = 176	[---] All Methods & Instruments
<b>&lt;Instruments&gt;</b>						
6.92 ± 0.06	2.94 ± 0.06	4.70 ± 0.00	9.59 ± 0.07	3.13 ± 0.05	n = 16	[ABJ] Abbott Architect c System
7.00 ± 0.19	2.94 ± 0.08	4.63 ± 0.12	9.50 ± 0.26	3.21 ± 0.11	n = 34	[OLC] Beckman Coulter AU Chemistry System
6.62 ± 0.09	2.96 ± 0.10	4.22 ± 0.07	9.02 ± 0.07	2.73 ± 0.07	n = 7	[BCG] Beckman Coulter UniCel DxC 600
6.67 ± 0.08	2.95 ± 0.06	4.18 ± 0.04	9.10 ± 0.17	2.78 ± 0.04	n = 4	[BCH] Beckman Coulter UniCel DxC 800
6.56 ± 0.06	2.80 ± 0.00	4.70 ± 0.00	9.33 ± 0.14	3.10 ± 0.00	n = 5	[JJE] Ortho Vitros 250/350/950
6.45 ± 0.09	2.72 ± 0.05	4.68 ± 0.05	9.18 ± 0.23	3.01 ± 0.09	n = 10	[JJG] Ortho Vitros 5600
6.93 ± 0.19	2.89 ± 0.12	4.65 ± 0.09	9.67 ± 0.31	3.10 ± 0.09	n = 11	[ROC] Roche cobas c501
6.78 ± 0.21	2.82 ± 0.08	4.54 ± 0.15	9.46 ± 0.30	3.02 ± 0.04	n = 5	[ROD] Roche MODULAR D/P
6.75 ± 0.12	2.87 ± 0.08	4.62 ± 0.07	9.43 ± 0.17	3.02 ± 0.07	n = 9	[BYE] Siemens ADVIA 1800
6.54 ± 0.11	2.84 ± 0.08	4.72 ± 0.09	9.19 ± 0.10	3.16 ± 0.10	n = 22	[DUE] Siemens Dimension EXL
6.28 ± 0.08	2.72 ± 0.06	4.57 ± 0.12	8.64 ± 0.13	3.07 ± 0.07	n = 30	[DUT] Siemens Dimension Vista
6.61 ± 0.34	2.83 ± 0.08	4.70 ± 0.15	9.24 ± 0.25	3.18 ± 0.08	n = 5	[DUX] Siemens Dimension Xpand
<b>&lt;Reagents&gt;</b>						
6.92 ± 0.06	2.94 ± 0.06	4.70 ± 0.00	9.59 ± 0.07	3.13 ± 0.05	n = 16	[AB1] Abbott
6.63 ± 0.09	2.95 ± 0.08	4.21 ± 0.07	9.04 ± 0.12	2.76 ± 0.06	n = 13	[BC1] Beckman Coulter
6.99 ± 0.19	2.94 ± 0.08	4.63 ± 0.13	9.50 ± 0.27	3.21 ± 0.11	n = 33	[OL1] Beckman Coulter AU Series
6.52 ± 0.13	2.77 ± 0.08	4.70 ± 0.06	9.30 ± 0.24	3.06 ± 0.09	n = 18	[JJ1] Ortho Clinical Diagnostics
6.88 ± 0.18	2.86 ± 0.11	4.63 ± 0.09	9.61 ± 0.28	3.06 ± 0.10	n = 16	[RO4] Roche cobas c311/c501/c502/c701/c702
6.78 ± 0.21	2.82 ± 0.08	4.54 ± 0.15	9.46 ± 0.30	3.02 ± 0.04	n = 5	[RO2] Roche Hitachi and Modular D/P
6.76 ± 0.12	2.87 ± 0.08	4.63 ± 0.06	9.45 ± 0.17	3.03 ± 0.06	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
6.39 ± 0.17	2.77 ± 0.09	4.64 ± 0.14	8.90 ± 0.35	3.12 ± 0.10	n = 59	[DA5] Siemens Dimension

## Summary of Participant Performance (Mean and Standard Deviation)

## Bilirubin (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
1.87 ± 0.14	4.95 ± 0.24	2.34 ± 0.13	0.77 ± 0.10	0.81 ± 0.09	n = 190	[---] All Methods & Instruments
<Instruments>						
1.93 ± 0.05	5.10 ± 0.09	2.40 ± 0.00	0.93 ± 0.05	0.80 ± 0.00	n = 3	[AXA] Abaxis Piccolo
1.99 ± 0.06	5.13 ± 0.20	2.42 ± 0.07	0.80 ± 0.06	0.82 ± 0.08	n = 16	[ABJ] Abbott Architect c System
1.90 ± 0.07	4.90 ± 0.13	2.30 ± 0.08	0.80 ± 0.00	0.87 ± 0.06	n = 35	[OLC] Beckman Coulter AU Chemistry System
1.96 ± 0.25	5.03 ± 0.22	2.46 ± 0.14	0.96 ± 0.14	0.93 ± 0.16	n = 9	[BCG] Beckman Coulter UniCel DxC 600
2.00 ± 0.10	5.02 ± 0.19	2.44 ± 0.06	0.90 ± 0.10	0.92 ± 0.08	n = 5	[BCH] Beckman Coulter UniCel DxC 800
1.99 ± 0.14	5.24 ± 0.22	2.47 ± 0.13	0.87 ± 0.07	0.80 ± 0.08	n = 7	[JJE] Ortho Vitros 250/350/950
1.94 ± 0.14	5.18 ± 0.14	2.42 ± 0.11	0.85 ± 0.09	0.81 ± 0.12	n = 10	[JJG] Ortho Vitros 5600
1.75 ± 0.07	4.61 ± 0.18	2.19 ± 0.04	0.67 ± 0.06	0.70 ± 0.00	n = 11	[ROC] Roche cobas c501
1.60 ± 0.09	4.50 ± 0.18	2.10 ± 0.09	0.63 ± 0.05	0.67 ± 0.14	n = 3	[ROT] Roche Cobas INTEGRA 800
1.80 ± 0.00	4.82 ± 0.27	2.24 ± 0.06	0.70 ± 0.00	0.74 ± 0.06	n = 5	[ROD] Roche MODULAR D/P
1.97 ± 0.11	5.27 ± 0.20	2.47 ± 0.14	0.79 ± 0.08	0.78 ± 0.09	n = 9	[BYE] Siemens ADVIA 1800
1.80 ± 0.00	4.88 ± 0.10	2.33 ± 0.09	0.70 ± 0.00	0.80 ± 0.00	n = 23	[DUE] Siemens Dimension EXL
1.82 ± 0.08	4.87 ± 0.12	2.33 ± 0.07	0.75 ± 0.06	0.82 ± 0.05	n = 31	[DUT] Siemens Dimension Vista
1.80 ± 0.10	4.88 ± 0.08	2.28 ± 0.09	0.68 ± 0.07	0.80 ± 0.10	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
1.93 ± 0.05	5.10 ± 0.09	2.40 ± 0.00	0.93 ± 0.05	0.80 ± 0.00	n = 3	[AX1] Abaxis
1.99 ± 0.06	5.13 ± 0.20	2.42 ± 0.07	0.80 ± 0.06	0.82 ± 0.08	n = 16	[AB1] Abbott
1.98 ± 0.17	5.02 ± 0.20	2.45 ± 0.13	0.93 ± 0.13	0.94 ± 0.12	n = 16	[BC1] Beckman Coulter
1.90 ± 0.07	4.90 ± 0.14	2.30 ± 0.08	0.80 ± 0.00	0.87 ± 0.06	n = 34	[OL1] Beckman Coulter AU Series
1.97 ± 0.13	5.23 ± 0.18	2.45 ± 0.12	0.87 ± 0.09	0.82 ± 0.11	n = 20	[JJ1] Ortho Clinical Diagnostics
1.73 ± 0.08	4.63 ± 0.15	2.19 ± 0.06	0.67 ± 0.06	0.70 ± 0.00	n = 14	[RO4] Roche cobas c311/c501/c502/c701/c702
1.80 ± 0.00	4.82 ± 0.27	2.24 ± 0.06	0.70 ± 0.00	0.74 ± 0.06	n = 5	[RO2] Roche Hitachi and Modular D/P
1.65 ± 0.08	4.55 ± 0.16	2.10 ± 0.06	0.60 ± 0.00	0.70 ± 0.09	n = 5	[RO1] Roche Integra and MIRA
1.97 ± 0.10	5.26 ± 0.18	2.46 ± 0.13	0.79 ± 0.07	0.78 ± 0.08	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
1.81 ± 0.07	4.88 ± 0.11	2.33 ± 0.08	0.72 ± 0.05	0.81 ± 0.05	n = 63	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Phosphorus (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
2.61 ± 0.19	5.80 ± 0.25	3.62 ± 0.27	3.02 ± 0.22	5.26 ± 0.29	n = 167	[---] All Methods & Instruments
<Instruments>						
2.63 ± 0.07	5.78 ± 0.07	3.60 ± 0.07	3.02 ± 0.07	5.27 ± 0.07	n = 15	[ABJ] Abbott Architect c System
2.53 ± 0.07	5.64 ± 0.12	3.51 ± 0.06	2.93 ± 0.07	5.11 ± 0.09	n = 33	[OLC] Beckman Coulter AU Chemistry System
2.60 ± 0.00	5.96 ± 0.13	3.69 ± 0.10	3.05 ± 0.07	5.33 ± 0.11	n = 7	[BCG] Beckman Coulter UniCel DxC 600
2.70 ± 0.06	6.15 ± 0.08	3.78 ± 0.08	3.20 ± 0.00	5.34 ± 0.06	n = 5	[BCH] Beckman Coulter UniCel DxC 800
3.09 ± 0.13	6.24 ± 0.14	4.21 ± 0.13	3.54 ± 0.11	5.82 ± 0.04	n = 5	[JJE] Ortho Vitros 250/350/950
2.92 ± 0.11	6.04 ± 0.18	4.11 ± 0.16	3.37 ± 0.13	5.70 ± 0.12	n = 10	[JJG] Ortho Vitros 5600
2.63 ± 0.08	5.83 ± 0.09	3.67 ± 0.08	3.05 ± 0.06	5.34 ± 0.12	n = 11	[ROC] Roche cobas c501
2.58 ± 0.08	5.73 ± 0.16	3.54 ± 0.13	2.98 ± 0.08	5.25 ± 0.12	n = 5	[ROD] Roche MODULAR D/P
2.63 ± 0.08	5.87 ± 0.13	3.67 ± 0.16	3.05 ± 0.12	5.30 ± 0.14	n = 9	[BYE] Siemens ADVIA 1800
2.72 ± 0.13	5.96 ± 0.15	3.81 ± 0.21	3.21 ± 0.17	5.46 ± 0.21	n = 16	[DUE] Siemens Dimension EXL
2.36 ± 0.10	5.53 ± 0.16	3.30 ± 0.11	2.77 ± 0.11	4.94 ± 0.14	n = 30	[DUT] Siemens Dimension Vista
2.71 ± 0.13	5.95 ± 0.18	3.79 ± 0.21	3.16 ± 0.20	5.44 ± 0.21	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
2.63 ± 0.07	5.78 ± 0.07	3.60 ± 0.07	3.02 ± 0.07	5.27 ± 0.07	n = 15	[AB1] Abbott
2.64 ± 0.08	6.00 ± 0.19	3.71 ± 0.12	3.10 ± 0.12	5.31 ± 0.12	n = 14	[BC1] Beckman Coulter
2.53 ± 0.07	5.65 ± 0.12	3.51 ± 0.06	2.93 ± 0.07	5.11 ± 0.09	n = 32	[OL1] Beckman Coulter AU Series
2.96 ± 0.13	6.11 ± 0.18	4.13 ± 0.14	3.43 ± 0.14	5.76 ± 0.13	n = 18	[JJ1] Ortho Clinical Diagnostics
2.64 ± 0.09	5.85 ± 0.11	3.68 ± 0.12	3.06 ± 0.07	5.37 ± 0.14	n = 14	[RO4] Roche cobas c311/c501/c502/c701/c702
2.58 ± 0.08	5.73 ± 0.16	3.54 ± 0.13	2.98 ± 0.08	5.25 ± 0.12	n = 5	[RO2] Roche Hitachi and Modular D/P
2.63 ± 0.05	5.76 ± 0.10	3.63 ± 0.05	3.03 ± 0.05	5.23 ± 0.05	n = 3	[RO1] Roche Integra and MIRA
2.64 ± 0.09	5.88 ± 0.14	3.70 ± 0.16	3.06 ± 0.12	5.33 ± 0.17	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
2.51 ± 0.22	5.70 ± 0.28	3.50 ± 0.31	2.94 ± 0.27	5.16 ± 0.33	n = 53	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Calcium (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
6.99 ± 0.19	7.91 ± 0.23	13.52 ± 0.38	9.51 ± 0.28	8.61 ± 0.27	n = 189	[---] All Methods & Instruments
<Instruments>						
7.26 ± 0.26	7.83 ± 0.31	12.83 ± 0.14	9.62 ± 0.24	8.77 ± 0.23	n = 3	[AXA] Abaxis Piccolo
6.89 ± 0.09	7.91 ± 0.07	13.63 ± 0.10	9.57 ± 0.10	8.67 ± 0.07	n = 16	[ABJ] Abbott Architect c System
7.02 ± 0.16	8.07 ± 0.16	13.58 ± 0.31	9.64 ± 0.17	8.82 ± 0.17	n = 35	[OLC] Beckman Coulter AU Chemistry System
7.14 ± 0.13	7.86 ± 0.09	13.43 ± 0.05	9.46 ± 0.12	8.51 ± 0.11	n = 9	[BCG] Beckman Coulter UniCel DxC 600
7.23 ± 0.11	7.98 ± 0.17	13.69 ± 0.39	9.61 ± 0.21	8.70 ± 0.13	n = 5	[BCH] Beckman Coulter UniCel DxC 800
7.11 ± 0.23	8.01 ± 0.24	14.05 ± 0.22	9.77 ± 0.24	8.77 ± 0.21	n = 6	[JJE] Ortho Vitros 250/350/950
7.01 ± 0.20	7.85 ± 0.23	13.65 ± 0.38	9.57 ± 0.29	8.56 ± 0.26	n = 10	[JJG] Ortho Vitros 5600
7.03 ± 0.13	8.00 ± 0.16	13.82 ± 0.27	9.69 ± 0.19	8.74 ± 0.15	n = 11	[ROC] Roche cobas c501
7.12 ± 0.15	7.92 ± 0.15	13.85 ± 0.19	9.67 ± 0.14	8.57 ± 0.14	n = 3	[ROT] Roche Cobas INTEGRA 800
7.26 ± 0.14	8.12 ± 0.17	14.07 ± 0.09	9.80 ± 0.26	8.84 ± 0.32	n = 5	[ROD] Roche MODULAR D/P
7.04 ± 0.15	8.10 ± 0.25	13.60 ± 0.27	9.66 ± 0.26	8.81 ± 0.29	n = 9	[BYE] Siemens ADVIA 1800
6.92 ± 0.16	7.75 ± 0.20	13.28 ± 0.22	9.24 ± 0.17	8.36 ± 0.19	n = 23	[DUE] Siemens Dimension EXL
6.88 ± 0.21	7.70 ± 0.24	13.18 ± 0.33	9.25 ± 0.29	8.37 ± 0.25	n = 31	[DUT] Siemens Dimension Vista
7.00 ± 0.17	7.78 ± 0.18	13.39 ± 0.35	9.34 ± 0.18	8.44 ± 0.17	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
7.26 ± 0.26	7.83 ± 0.31	12.83 ± 0.14	9.62 ± 0.24	8.77 ± 0.23	n = 3	[AX1] Abaxis
6.89 ± 0.09	7.91 ± 0.07	13.63 ± 0.10	9.57 ± 0.10	8.67 ± 0.07	n = 16	[AB1] Abbott
7.16 ± 0.13	7.91 ± 0.12	13.46 ± 0.21	9.51 ± 0.14	8.61 ± 0.17	n = 16	[BC1] Beckman Coulter
7.02 ± 0.16	8.07 ± 0.16	13.58 ± 0.32	9.64 ± 0.17	8.81 ± 0.17	n = 34	[OL1] Beckman Coulter AU Series
7.05 ± 0.20	7.90 ± 0.23	13.80 ± 0.34	9.64 ± 0.25	8.63 ± 0.23	n = 19	[JJ1] Ortho Clinical Diagnostics
7.03 ± 0.14	8.02 ± 0.15	13.89 ± 0.21	9.73 ± 0.16	8.75 ± 0.16	n = 13	[RO4] Roche cobas c311/c501/c502/c701/c702
7.26 ± 0.14	8.12 ± 0.17	14.07 ± 0.09	9.80 ± 0.26	8.84 ± 0.32	n = 5	[RO2] Roche Hitachi and Modular D/P
7.05 ± 0.17	7.88 ± 0.15	13.75 ± 0.23	9.62 ± 0.15	8.55 ± 0.12	n = 4	[RO1] Roche Integra and MIRA
7.03 ± 0.14	8.10 ± 0.22	13.64 ± 0.24	9.66 ± 0.27	8.81 ± 0.31	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
6.90 ± 0.19	7.73 ± 0.22	13.26 ± 0.31	9.26 ± 0.22	8.37 ± 0.22	n = 63	[DA5] Siemens Dimension



Summary of Participant Performance (Mean and Standard Deviation)

Magnesium (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
3.58 ± 0.15	4.37 ± 0.18	1.18 ± 0.09	2.31 ± 0.09	1.78 ± 0.09	n = 171	[---] All Methods & Instruments
<Instruments>						
3.47 ± 0.08	4.33 ± 0.14	1.39 ± 0.10	2.44 ± 0.12	1.85 ± 0.08	n = 16	[ABJ] Abbott Architect c System
3.53 ± 0.09	4.34 ± 0.09	1.20 ± 0.00	2.28 ± 0.05	1.79 ± 0.05	n = 33	[OLC] Beckman Coulter AU Chemistry System
3.46 ± 0.06	4.18 ± 0.10	1.17 ± 0.06	2.28 ± 0.04	1.78 ± 0.05	n = 8	[BCG] Beckman Coulter UniCel DxC 600
3.40 ± 0.00	4.15 ± 0.11	1.19 ± 0.07	2.30 ± 0.04	1.80 ± 0.00	n = 5	[BCH] Beckman Coulter UniCel DxC 800
3.70 ± 0.08	4.23 ± 0.08	1.13 ± 0.09	2.28 ± 0.04	1.70 ± 0.08	n = 4	[JJE] Ortho Vitros 250/350/950
3.75 ± 0.12	4.29 ± 0.10	1.13 ± 0.05	2.28 ± 0.07	1.66 ± 0.06	n = 9	[JJG] Ortho Vitros 5600
3.60 ± 0.09	4.40 ± 0.10	1.20 ± 0.00	2.37 ± 0.06	1.80 ± 0.00	n = 11	[ROC] Roche cobas c501
3.62 ± 0.08	4.44 ± 0.11	1.20 ± 0.00	2.36 ± 0.06	1.86 ± 0.06	n = 5	[ROD] Roche MODULAR D/P
3.39 ± 0.17	4.15 ± 0.16	1.35 ± 0.15	2.30 ± 0.11	1.85 ± 0.09	n = 9	[BYE] Siemens ADVIA 1800
3.64 ± 0.08	4.50 ± 0.12	1.11 ± 0.05	2.31 ± 0.09	1.76 ± 0.08	n = 20	[DUE] Siemens Dimension EXL
3.70 ± 0.10	4.54 ± 0.14	1.15 ± 0.09	2.34 ± 0.11	1.79 ± 0.10	n = 31	[DUT] Siemens Dimension Vista
3.60 ± 0.09	4.49 ± 0.13	1.07 ± 0.05	2.23 ± 0.05	1.73 ± 0.05	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
3.47 ± 0.08	4.33 ± 0.14	1.39 ± 0.10	2.44 ± 0.12	1.85 ± 0.08	n = 16	[AB1] Abbott
3.43 ± 0.07	4.17 ± 0.11	1.18 ± 0.05	2.28 ± 0.05	1.79 ± 0.05	n = 15	[BC1] Beckman Coulter
3.52 ± 0.10	4.34 ± 0.09	1.20 ± 0.00	2.28 ± 0.06	1.79 ± 0.05	n = 32	[OL1] Beckman Coulter AU Series
3.75 ± 0.11	4.29 ± 0.10	1.15 ± 0.06	2.28 ± 0.05	1.68 ± 0.06	n = 16	[JJ1] Ortho Clinical Diagnostics
3.60 ± 0.08	4.40 ± 0.08	1.20 ± 0.00	2.36 ± 0.06	1.80 ± 0.00	n = 13	[RO4] Roche cobas c311/c501/c502/c701/c702
3.62 ± 0.08	4.44 ± 0.11	1.20 ± 0.00	2.36 ± 0.06	1.86 ± 0.06	n = 5	[RO2] Roche Hitachi and Modular D/P
3.43 ± 0.18	4.19 ± 0.12	1.38 ± 0.16	2.31 ± 0.10	1.86 ± 0.07	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
3.67 ± 0.10	4.52 ± 0.13	1.12 ± 0.08	2.32 ± 0.10	1.77 ± 0.09	n = 59	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Iron (µg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
42.8 ± 2.15	77.4 ± 3.50	119.6 ± 6.60	89.1 ± 4.01	155.6 ± 9.54	n = 133	[---] All Methods & Instruments
43.5 ± 1.37	75.3 ± 1.25	109.5 ± 2.70	86.7 ± 1.49	145.8 ± 3.57	n = 11	[ABJ] Abbott Architect c System
43.6 ± 1.86	79.9 ± 2.44	124.9 ± 2.87	92.0 ± 2.85	165.0 ± 3.54	n = 30	[OLC] Beckman Coulter AU Chemistry System
42.4 ± 1.37	77.6 ± 1.52	118.2 ± 1.55	87.0 ± 0.00	150.8 ± 3.31	n = 5	[BCG] Beckman Coulter UniCel DxC 600
41.5 ± 2.32	77.0 ± 3.16	117.5 ± 2.83	87.3 ± 3.89	151.4 ± 2.31	n = 4	[BCH] Beckman Coulter UniCel DxC 800
38.9 ± 3.28	84.1 ± 5.91	137.7 ± 5.94	101.0 ± 4.08	174.7 ± 6.45	n = 10	[JJG] Ortho Vitros 5600
45.8 ± 2.10	80.0 ± 1.81	123.4 ± 2.11	91.7 ± 2.70	161.9 ± 2.16	n = 7	[ROC] Roche cobas c501
44.0 ± 0.75	78.8 ± 1.27	119.8 ± 2.04	89.8 ± 1.27	159.1 ± 3.69	n = 4	[ROD] Roche MODULAR D/P
43.7 ± 1.27	77.0 ± 1.43	119.9 ± 2.26	89.9 ± 1.59	150.8 ± 2.45	n = 9	[BYE] Siemens ADVIA 1800
41.2 ± 0.76	74.1 ± 1.59	115.5 ± 1.51	86.0 ± 1.70	148.2 ± 1.56	n = 12	[DUE] Siemens Dimension EXL
42.3 ± 1.40	75.0 ± 1.56	117.1 ± 2.28	86.7 ± 1.54	150.5 ± 3.29	n = 26	[DUT] Siemens Dimension Vista
<Reagents>						
43.7 ± 1.49	75.3 ± 1.37	109.6 ± 3.05	86.8 ± 1.68	145.8 ± 3.93	n = 9	[AB3] Abbott-Iron/6K95
42.3 ± 2.21	77.7 ± 2.45	118.0 ± 2.09	87.4 ± 2.75	151.2 ± 2.77	n = 11	[BC1] Beckman Coulter
43.5 ± 1.84	80.0 ± 2.47	125.2 ± 2.35	92.3 ± 2.29	165.4 ± 2.98	n = 27	[OL1] Beckman Coulter AU Series
39.6 ± 4.29	84.7 ± 5.26	138.5 ± 5.38	101.0 ± 3.77	174.9 ± 6.41	n = 13	[JJ1] Ortho Clinical Diagnostics
45.2 ± 1.81	79.9 ± 2.00	123.0 ± 2.31	91.2 ± 2.82	161.4 ± 2.31	n = 10	[RO4] Roche cobas c311/c501/c502/c701/c702
44.0 ± 0.75	78.8 ± 1.27	119.8 ± 2.04	89.8 ± 1.27	159.1 ± 3.69	n = 4	[RO2] Roche Hitachi and Modular D/P
43.5 ± 1.17	77.1 ± 1.30	120.4 ± 2.03	89.8 ± 1.45	151.1 ± 2.29	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
41.8 ± 1.29	74.6 ± 1.60	116.4 ± 2.14	86.5 ± 1.57	149.7 ± 2.76	n = 41	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Sodium (mmol/L)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
130.5 ± 3.19	152.1 ± 1.81	144.0 ± 1.97	161.2 ± 2.10	141.8 ± 1.99	n = 194	[---] All Methods & Instruments
<Instruments>						
123.0 ± 1.80	148.2 ± 2.36	139.7 ± 1.37	159.3 ± 1.37	139.9 ± 2.05	n = 3	[AXA] Abaxis Piccolo
129.0 ± 0.87	151.8 ± 0.95	144.5 ± 0.64	161.7 ± 1.37	142.7 ± 0.80	n = 16	[ABJ] Abbott Architect c System
128.7 ± 1.23	150.7 ± 1.38	142.4 ± 1.28	159.9 ± 1.15	140.8 ± 1.06	n = 35	[OLC] Beckman Coulter AU Chemistry System
128.0 ± 1.44	149.8 ± 1.76	143.3 ± 1.67	160.0 ± 1.12	140.4 ± 2.01	n = 9	[BCG] Beckman Coulter UniCel DxC 600
129.0 ± 0.64	150.8 ± 0.80	143.2 ± 0.80	160.5 ± 0.83	141.7 ± 1.10	n = 5	[BCH] Beckman Coulter UniCel DxC 800
131.7 ± 0.51	151.0 ± 0.00	143.3 ± 0.51	159.3 ± 0.51	138.7 ± 0.51	n = 3	[IAA] i-STAT
126.8 ± 1.59	153.0 ± 1.60	151.3 ± 2.74	164.5 ± 2.78	147.8 ± 2.69	n = 6	[JJE] Ortho Vitros 250/350/950
131.3 ± 0.51	155.7 ± 0.51	154.0 ± 0.00	167.3 ± 1.37	150.0 ± 0.00	n = 3	[JJF] Ortho Vitros 5,1FS
127.3 ± 1.84	152.9 ± 2.11	150.5 ± 2.42	163.9 ± 2.29	146.3 ± 1.86	n = 10	[JJG] Ortho Vitros 5600
130.2 ± 1.21	153.1 ± 1.20	145.5 ± 1.42	163.7 ± 1.82	142.5 ± 1.83	n = 11	[ROC] Roche cobas c501
128.7 ± 1.37	149.8 ± 1.54	142.5 ± 1.86	159.8 ± 1.54	140.3 ± 1.37	n = 3	[ROT] Roche Cobas INTEGRA 800
131.4 ± 1.09	154.4 ± 1.09	145.9 ± 1.27	164.6 ± 1.37	143.2 ± 0.41	n = 5	[ROD] Roche MODULAR D/P
131.2 ± 0.65	153.5 ± 1.03	145.6 ± 0.88	162.9 ± 0.92	143.8 ± 0.65	n = 9	[BYE] Siemens ADVIA 1800
132.2 ± 0.95	152.6 ± 0.77	144.5 ± 1.07	161.3 ± 1.16	142.1 ± 0.81	n = 23	[DUE] Siemens Dimension EXL
136.4 ± 1.12	153.0 ± 1.30	143.8 ± 1.30	160.6 ± 1.45	140.5 ± 1.16	n = 31	[DUT] Siemens Dimension Vista
132.5 ± 1.49	152.8 ± 1.49	144.5 ± 1.64	161.8 ± 1.49	141.9 ± 1.11	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
123.0 ± 1.80	148.2 ± 2.36	139.7 ± 1.37	159.3 ± 1.37	139.9 ± 2.05	n = 3	[AX1] Abaxis
129.0 ± 0.87	151.8 ± 0.95	144.5 ± 0.64	161.7 ± 1.37	142.7 ± 0.80	n = 16	[AB1] Abbott
128.6 ± 1.17	150.5 ± 1.63	143.2 ± 1.25	160.4 ± 1.05	141.2 ± 1.77	n = 17	[BC1] Beckman Coulter
128.7 ± 1.25	150.6 ± 1.37	142.4 ± 1.31	159.8 ± 1.10	140.8 ± 1.08	n = 34	[OL1] Beckman Coulter AU Series
131.7 ± 0.51	151.0 ± 0.00	143.3 ± 0.51	159.3 ± 0.51	138.7 ± 0.51	n = 3	[IA1] i-STAT
127.7 ± 2.27	153.4 ± 2.08	151.4 ± 2.69	164.6 ± 2.66	147.4 ± 2.52	n = 19	[JJ1] Ortho Clinical Diagnostics
130.2 ± 1.02	153.1 ± 1.01	145.3 ± 1.32	163.8 ± 1.73	142.7 ± 1.85	n = 14	[RO4] Roche cobas c311/c501/c502/c701/c702
131.4 ± 1.09	154.4 ± 1.09	145.9 ± 1.27	164.6 ± 1.37	143.2 ± 0.41	n = 5	[RO2] Roche Hitachi and Modular D/P
128.9 ± 1.13	150.2 ± 1.46	142.7 ± 1.58	160.2 ± 1.46	140.1 ± 1.13	n = 4	[RO1] Roche Integra and MIRA
131.2 ± 0.57	153.4 ± 0.90	145.3 ± 1.10	162.7 ± 0.87	143.6 ± 0.80	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
134.3 ± 2.55	152.7 ± 1.17	144.1 ± 1.37	160.9 ± 1.48	141.2 ± 1.33	n = 63	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Potassium (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
2.47 ± 0.07	5.59 ± 0.09	3.85 ± 0.09	6.43 ± 0.13	4.03 ± 0.10	n = 194	[---] All Methods & Instruments
<Instruments>						
2.50 ± 0.18	5.95 ± 0.19	3.96 ± 0.10	6.78 ± 0.24	4.37 ± 0.14	n = 3	[AXA] Abaxis Piccolo
2.50 ± 0.00	5.60 ± 0.00	3.90 ± 0.00	6.47 ± 0.05	4.10 ± 0.00	n = 16	[ABJ] Abbott Architect c System
2.50 ± 0.00	5.54 ± 0.06	3.82 ± 0.04	6.37 ± 0.06	4.01 ± 0.04	n = 35	[OLC] Beckman Coulter AU Chemistry System
2.37 ± 0.05	5.54 ± 0.07	3.80 ± 0.00	6.40 ± 0.00	4.00 ± 0.00	n = 9	[BCG] Beckman Coulter UniCel Dx C 600
2.40 ± 0.00	5.60 ± 0.00	3.80 ± 0.00	6.46 ± 0.06	4.00 ± 0.00	n = 5	[BCH] Beckman Coulter UniCel Dx C 800
2.40 ± 0.00	5.50 ± 0.00	3.80 ± 0.00	6.30 ± 0.00	3.90 ± 0.00	n = 3	[IAA] i-STAT
2.40 ± 0.00	5.65 ± 0.06	4.04 ± 0.08	6.50 ± 0.06	4.25 ± 0.06	n = 6	[JJE] Ortho Vitros 250/350/950
2.45 ± 0.06	5.64 ± 0.08	4.06 ± 0.07	6.57 ± 0.08	4.21 ± 0.05	n = 10	[JJG] Ortho Vitros 5600
2.48 ± 0.07	5.70 ± 0.00	3.92 ± 0.05	6.58 ± 0.09	4.10 ± 0.00	n = 11	[ROC] Roche cobas c501
2.50 ± 0.00	5.63 ± 0.05	3.90 ± 0.00	6.43 ± 0.05	4.10 ± 0.09	n = 3	[ROT] Roche Cobas INTEGRA 800
2.54 ± 0.06	5.70 ± 0.00	3.94 ± 0.06	6.62 ± 0.08	4.10 ± 0.00	n = 5	[ROD] Roche MODULAR D/P
2.54 ± 0.06	5.67 ± 0.05	3.95 ± 0.06	6.54 ± 0.07	4.10 ± 0.00	n = 9	[BYE] Siemens ADVIA 1800
2.40 ± 0.00	5.60 ± 0.00	3.80 ± 0.00	6.47 ± 0.06	4.00 ± 0.00	n = 23	[DUE] Siemens Dimension EXL
2.54 ± 0.05	5.50 ± 0.06	3.80 ± 0.00	6.27 ± 0.07	3.93 ± 0.05	n = 31	[DUT] Siemens Dimension Vista
2.40 ± 0.00	5.62 ± 0.05	3.80 ± 0.00	6.48 ± 0.07	4.00 ± 0.05	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
2.50 ± 0.18	5.95 ± 0.19	3.96 ± 0.10	6.78 ± 0.24	4.37 ± 0.14	n = 3	[AX1] Abaxis
2.50 ± 0.00	5.60 ± 0.00	3.90 ± 0.00	6.47 ± 0.05	4.10 ± 0.00	n = 16	[AB1] Abbott
2.40 ± 0.04	5.56 ± 0.06	3.80 ± 0.00	6.42 ± 0.06	4.00 ± 0.00	n = 18	[BC1] Beckman Coulter
2.50 ± 0.00	5.54 ± 0.06	3.82 ± 0.04	6.37 ± 0.06	4.02 ± 0.05	n = 33	[OL1] Beckman Coulter AU Series
2.40 ± 0.00	5.50 ± 0.00	3.80 ± 0.00	6.30 ± 0.00	3.90 ± 0.00	n = 3	[IA1] i-STAT
2.45 ± 0.06	5.65 ± 0.08	4.06 ± 0.07	6.55 ± 0.09	4.23 ± 0.06	n = 19	[JJ1] Ortho Clinical Diagnostics
2.50 ± 0.00	5.70 ± 0.00	3.93 ± 0.07	6.57 ± 0.09	4.10 ± 0.00	n = 14	[RO4] Roche cobas c311/c501/c502/c701/c702
2.54 ± 0.06	5.70 ± 0.00	3.94 ± 0.06	6.62 ± 0.08	4.10 ± 0.00	n = 5	[RO2] Roche Hitachi and Modular D/P
2.50 ± 0.00	5.65 ± 0.06	3.90 ± 0.00	6.45 ± 0.06	4.10 ± 0.08	n = 4	[RO1] Roche Integra and MIRA
2.54 ± 0.06	5.66 ± 0.06	3.94 ± 0.06	6.53 ± 0.06	4.10 ± 0.00	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
2.46 ± 0.08	5.56 ± 0.08	3.80 ± 0.00	6.37 ± 0.13	3.97 ± 0.06	n = 62	[DA5] Siemens Dimension

## Summary of Participant Performance (Mean and Standard Deviation)

## Chloride (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
110.1 ± 2.48	115.6 ± 1.72	107.3 ± 2.46	117.0 ± 2.21	97.5 ± 2.00	n = 191	[---] All Methods & Instruments
<Instruments>						
110.3 ± 2.26	113.5 ± 1.86	108.0 ± 0.90	114.1 ± 2.05	98.0 ± 0.90	n = 3	[AXA] Abaxis Piccolo
112.5 ± 0.81	116.4 ± 0.78	108.6 ± 0.72	117.0 ± 0.82	97.9 ± 0.74	n = 16	[ABJ] Abbott Architect c System
110.1 ± 1.08	114.9 ± 0.94	105.9 ± 0.67	115.1 ± 0.91	95.8 ± 0.76	n = 34	[OLC] Beckman Coulter AU Chemistry System
110.8 ± 1.33	114.8 ± 1.20	107.9 ± 1.24	115.3 ± 0.69	96.5 ± 1.30	n = 9	[BCG] Beckman Coulter UniCel DxC 600
112.2 ± 0.80	115.6 ± 1.09	108.0 ± 1.54	116.7 ± 1.61	97.6 ± 1.33	n = 5	[BCH] Beckman Coulter UniCel DxC 800
110.9 ± 1.23	116.2 ± 1.67	109.3 ± 0.97	117.8 ± 1.00	98.6 ± 0.79	n = 6	[JJE] Ortho Vitros 250/350/950
109.7 ± 1.23	114.4 ± 1.09	107.8 ± 1.05	116.0 ± 1.00	97.4 ± 0.97	n = 10	[JJG] Ortho Vitros 5600
105.3 ± 1.74	112.7 ± 1.36	102.3 ± 1.99	114.7 ± 1.60	91.9 ± 1.74	n = 11	[ROC] Roche cobas c501
111.2 ± 1.54	115.4 ± 1.02	107.4 ± 1.02	116.6 ± 1.02	98.0 ± 0.00	n = 3	[ROT] Roche Cobas INTEGRA 800
107.6 ± 1.37	114.4 ± 1.09	104.0 ± 0.93	115.0 ± 0.93	93.7 ± 2.15	n = 5	[ROD] Roche MODULAR D/P
111.0 ± 0.90	116.1 ± 0.60	107.9 ± 0.85	117.1 ± 1.05	97.2 ± 0.94	n = 9	[BYE] Siemens ADVIA 1800
107.4 ± 0.91	115.7 ± 0.85	105.8 ± 0.99	119.1 ± 0.82	98.2 ± 0.57	n = 22	[DUE] Siemens Dimension EXL
106.7 ± 0.51	116.3 ± 1.37	105.0 ± 0.90	117.7 ± 2.26	96.8 ± 1.54	n = 3	[DUR] Siemens Dimension RxL
111.7 ± 0.92	117.7 ± 1.33	110.0 ± 1.01	119.5 ± 1.15	99.4 ± 1.25	n = 31	[DUT] Siemens Dimension Vista
106.9 ± 1.11	115.8 ± 0.92	105.6 ± 0.96	119.0 ± 1.23	98.2 ± 0.66	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
110.3 ± 2.26	113.5 ± 1.86	108.0 ± 0.90	114.1 ± 2.05	98.0 ± 0.90	n = 3	[AX1] Abaxis
112.5 ± 0.81	116.4 ± 0.78	108.6 ± 0.72	117.0 ± 0.82	97.9 ± 0.74	n = 16	[AB1] Abbott
111.3 ± 1.29	115.4 ± 1.34	107.8 ± 1.36	115.9 ± 1.31	96.9 ± 1.34	n = 18	[BC1] Beckman Coulter
110.0 ± 1.02	114.8 ± 0.86	105.8 ± 0.66	115.0 ± 0.81	95.8 ± 0.80	n = 32	[OL1] Beckman Coulter AU Series
110.7 ± 1.75	115.3 ± 1.70	108.7 ± 1.39	117.0 ± 1.40	98.1 ± 1.15	n = 19	[JJ1] Ortho Clinical Diagnostics
105.7 ± 1.60	113.0 ± 1.43	102.7 ± 1.88	114.9 ± 1.63	92.4 ± 1.85	n = 14	[RO4] Roche cobas c311/c501/c502/c701/c702
107.6 ± 1.37	114.4 ± 1.09	104.0 ± 0.93	115.0 ± 0.93	93.7 ± 2.15	n = 5	[RO2] Roche Hitachi and Modular D/P
111.5 ± 1.23	115.7 ± 0.82	107.7 ± 0.82	116.3 ± 0.82	98.0 ± 0.00	n = 4	[RO1] Roche Integra and MIRA
111.1 ± 0.87	116.1 ± 0.49	107.9 ± 0.74	116.9 ± 0.98	97.1 ± 0.81	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
109.3 ± 2.66	116.6 ± 1.54	107.7 ± 2.60	119.2 ± 1.10	98.7 ± 1.18	n = 63	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Albumin (g/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
1.97 ± 0.12	3.63 ± 0.14	5.55 ± 0.19	4.13 ± 0.14	5.04 ± 0.18	n = 190	[---] All Methods & Instruments
<Instruments>						
2.10 ± 0.00	3.83 ± 0.05	5.57 ± 0.05	4.27 ± 0.05	5.37 ± 0.05	n = 3	[AXA] Abaxis Piccolo
2.03 ± 0.09	3.71 ± 0.13	5.46 ± 0.15	4.15 ± 0.14	4.94 ± 0.15	n = 16	[ABJ] Abbott Architect c System
1.92 ± 0.09	3.63 ± 0.10	5.44 ± 0.13	4.08 ± 0.12	4.94 ± 0.14	n = 35	[OLC] Beckman Coulter AU Chemistry System
2.03 ± 0.05	3.64 ± 0.09	5.52 ± 0.19	4.11 ± 0.11	4.90 ± 0.11	n = 9	[BCG] Beckman Coulter UniCel DxC 600
2.00 ± 0.00	3.62 ± 0.08	5.60 ± 0.10	4.14 ± 0.06	4.99 ± 0.13	n = 5	[BCH] Beckman Coulter UniCel DxC 800
1.53 ± 0.05	3.47 ± 0.05	5.39 ± 0.14	4.29 ± 0.11	5.01 ± 0.11	n = 6	[JJE] Ortho Vitros 250/350/950
1.60 ± 0.00	3.42 ± 0.07	5.30 ± 0.10	4.21 ± 0.08	4.85 ± 0.09	n = 10	[JJG] Ortho Vitros 5600
2.13 ± 0.08	3.87 ± 0.06	5.62 ± 0.23	4.34 ± 0.10	5.21 ± 0.15	n = 11	[ROC] Roche cobas c501
2.03 ± 0.05	3.83 ± 0.05	5.53 ± 0.05	4.20 ± 0.09	5.10 ± 0.09	n = 3	[ROT] Roche Cobas INTEGRA 800
2.14 ± 0.06	3.86 ± 0.06	5.60 ± 0.10	4.32 ± 0.08	5.17 ± 0.14	n = 5	[ROD] Roche MODULAR D/P
1.90 ± 0.00	3.63 ± 0.12	5.41 ± 0.24	4.08 ± 0.07	4.89 ± 0.12	n = 9	[BYE] Siemens ADVIA 1800
1.93 ± 0.06	3.59 ± 0.05	5.70 ± 0.10	4.07 ± 0.06	5.17 ± 0.08	n = 23	[DUE] Siemens Dimension EXL
1.99 ± 0.05	3.59 ± 0.06	5.64 ± 0.11	4.05 ± 0.08	5.12 ± 0.10	n = 31	[DUT] Siemens Dimension Vista
1.98 ± 0.07	3.64 ± 0.09	5.78 ± 0.14	4.12 ± 0.08	5.18 ± 0.15	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
2.10 ± 0.00	3.83 ± 0.05	5.57 ± 0.05	4.27 ± 0.05	5.37 ± 0.05	n = 3	[AX1] Abaxis
2.03 ± 0.09	3.71 ± 0.13	5.46 ± 0.15	4.15 ± 0.14	4.94 ± 0.15	n = 16	[AB1] Abbott
2.02 ± 0.05	3.63 ± 0.08	5.54 ± 0.16	4.12 ± 0.09	4.93 ± 0.12	n = 16	[BC1] Beckman Coulter
1.92 ± 0.09	3.63 ± 0.10	5.45 ± 0.13	4.09 ± 0.13	4.94 ± 0.14	n = 34	[OL1] Beckman Coulter AU Series
1.56 ± 0.06	3.46 ± 0.07	5.35 ± 0.11	4.25 ± 0.10	4.93 ± 0.14	n = 19	[JJ1] Ortho Clinical Diagnostics
2.11 ± 0.09	3.86 ± 0.07	5.65 ± 0.16	4.33 ± 0.09	5.20 ± 0.10	n = 16	[RO4] Roche cobas c311/c501/c502/c701/c702
2.14 ± 0.06	3.86 ± 0.06	5.60 ± 0.10	4.32 ± 0.08	5.17 ± 0.14	n = 5	[RO2] Roche Hitachi and Modular D/P
2.05 ± 0.06	3.82 ± 0.04	5.55 ± 0.06	4.23 ± 0.09	5.13 ± 0.09	n = 4	[RO1] Roche Integra and MIRA
1.90 ± 0.06	3.65 ± 0.10	5.42 ± 0.20	4.10 ± 0.09	4.92 ± 0.11	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
1.96 ± 0.06	3.59 ± 0.06	5.68 ± 0.11	4.06 ± 0.07	5.14 ± 0.10	n = 63	[DA5] Siemens Dimension

## Summary of Participant Performance (Mean and Standard Deviation)

## Total Protein (g/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
3.11 ± 0.13	5.91 ± 0.17	8.27 ± 0.23	6.78 ± 0.20	7.86 ± 0.21	n = 189	[---] All Methods & Instruments
<Instruments>						
3.20 ± 0.09	5.97 ± 0.14	8.27 ± 0.23	6.95 ± 0.27	8.00 ± 0.09	n = 3	[AXA] Abaxis Piccolo
2.90 ± 0.06	5.68 ± 0.09	8.01 ± 0.11	6.50 ± 0.00	7.61 ± 0.08	n = 17	[ABJ] Abbott Architect c System
3.02 ± 0.07	5.78 ± 0.13	8.07 ± 0.14	6.65 ± 0.15	7.71 ± 0.14	n = 34	[OLC] Beckman Coulter AU Chemistry System
3.11 ± 0.06	5.94 ± 0.07	8.18 ± 0.09	6.66 ± 0.10	7.75 ± 0.12	n = 10	[BCG] Beckman Coulter UniCel DxC 600
2.95 ± 0.08	5.76 ± 0.11	8.05 ± 0.16	6.58 ± 0.21	7.86 ± 0.14	n = 5	[BCH] Beckman Coulter UniCel DxC 800
3.23 ± 0.05	5.93 ± 0.07	8.43 ± 0.05	6.78 ± 0.10	7.90 ± 0.14	n = 6	[JJE] Ortho Vitros 250/350/950
3.16 ± 0.10	5.86 ± 0.14	8.43 ± 0.13	6.70 ± 0.15	7.81 ± 0.17	n = 10	[JJG] Ortho Vitros 5600
3.14 ± 0.08	5.97 ± 0.14	8.27 ± 0.18	6.83 ± 0.16	7.93 ± 0.19	n = 11	[ROC] Roche cobas c501
3.03 ± 0.05	5.77 ± 0.05	8.02 ± 0.15	6.60 ± 0.18	7.64 ± 0.10	n = 3	[ROT] Roche Cobas INTEGRA 800
3.10 ± 0.06	5.90 ± 0.06	8.15 ± 0.08	6.64 ± 0.23	7.78 ± 0.08	n = 5	[ROD] Roche MODULAR D/P
3.13 ± 0.09	6.10 ± 0.12	8.35 ± 0.10	6.86 ± 0.10	7.90 ± 0.08	n = 9	[BYE] Siemens ADVIA 1800
3.23 ± 0.06	6.05 ± 0.10	8.45 ± 0.12	6.96 ± 0.09	8.04 ± 0.11	n = 23	[DUE] Siemens Dimension EXL
3.16 ± 0.08	6.00 ± 0.08	8.43 ± 0.13	6.90 ± 0.10	8.02 ± 0.12	n = 31	[DUT] Siemens Dimension Vista
3.16 ± 0.09	6.00 ± 0.08	8.44 ± 0.13	6.97 ± 0.11	8.01 ± 0.14	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
3.20 ± 0.09	5.97 ± 0.14	8.27 ± 0.23	6.95 ± 0.27	8.00 ± 0.09	n = 3	[AX1] Abaxis
2.90 ± 0.06	5.68 ± 0.09	8.01 ± 0.11	6.50 ± 0.00	7.61 ± 0.08	n = 17	[AB1] Abbott
3.07 ± 0.11	5.88 ± 0.12	8.15 ± 0.14	6.67 ± 0.11	7.78 ± 0.14	n = 17	[BC1] Beckman Coulter
3.02 ± 0.07	5.77 ± 0.14	8.07 ± 0.15	6.65 ± 0.16	7.71 ± 0.15	n = 33	[OL1] Beckman Coulter AU Series
3.20 ± 0.07	5.90 ± 0.12	8.43 ± 0.11	6.74 ± 0.13	7.85 ± 0.15	n = 19	[JJ1] Ortho Clinical Diagnostics
3.13 ± 0.06	5.93 ± 0.14	8.25 ± 0.19	6.82 ± 0.16	7.90 ± 0.18	n = 13	[RO4] Roche cobas c311/c501/c502/c701/c702
3.10 ± 0.06	5.90 ± 0.06	8.15 ± 0.08	6.64 ± 0.23	7.78 ± 0.08	n = 5	[RO2] Roche Hitachi and Modular D/P
3.05 ± 0.06	5.75 ± 0.06	7.98 ± 0.15	6.57 ± 0.16	7.60 ± 0.11	n = 4	[RO1] Roche Integra and MIRA
3.14 ± 0.09	6.10 ± 0.12	8.38 ± 0.12	6.88 ± 0.11	7.91 ± 0.09	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
3.19 ± 0.08	6.02 ± 0.10	8.44 ± 0.13	6.93 ± 0.11	8.03 ± 0.12	n = 63	[DA5] Siemens Dimension

## Summary of Participant Performance (Mean and Standard Deviation)

## Cholesterol (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
121.8 ± 5.59	171.1 ± 7.33	168.5 ± 7.01	230.8 ± 6.29	162.6 ± 6.75	n = 166	[---] All Methods & Instruments
<Instruments>						
126.5 ± 1.02	174.1 ± 1.45	172.6 ± 1.37	238.4 ± 1.49	168.0 ± 1.80	n = 14	[ABJ] Abbott Architect c System
121.2 ± 3.09	167.5 ± 3.90	164.8 ± 3.53	229.6 ± 4.94	160.3 ± 3.25	n = 35	[OLC] Beckman Coulter AU Chemistry System
127.3 ± 2.89	183.7 ± 1.71	170.8 ± 2.83	236.2 ± 3.97	162.3 ± 3.85	n = 7	[BCG] Beckman Coulter UniCel DxC 600
126.5 ± 1.94	181.2 ± 2.58	171.9 ± 1.13	236.0 ± 1.65	162.5 ± 4.16	n = 4	[BCH] Beckman Coulter UniCel DxC 800
117.5 ± 1.86	176.2 ± 5.00	182.1 ± 2.86	227.2 ± 5.90	183.5 ± 4.53	n = 3	[JJE] Ortho Vitros 250/350/950
113.9 ± 2.71	172.6 ± 3.66	183.0 ± 5.03	223.0 ± 3.78	178.4 ± 2.91	n = 10	[JJG] Ortho Vitros 5600
129.0 ± 2.66	176.3 ± 3.40	174.0 ± 2.74	236.8 ± 5.09	169.2 ± 4.11	n = 10	[ROC] Roche cobas c501
127.7 ± 2.02	174.1 ± 2.72	172.7 ± 0.90	234.6 ± 4.99	169.0 ± 4.60	n = 4	[ROD] Roche MODULAR D/P
127.2 ± 2.42	182.9 ± 2.96	172.8 ± 2.79	230.6 ± 3.73	166.1 ± 3.05	n = 9	[BYE] Siemens ADVIA 1800
117.3 ± 2.69	164.4 ± 3.15	162.6 ± 3.06	228.6 ± 4.49	156.8 ± 2.77	n = 19	[DUE] Siemens Dimension EXL
118.4 ± 2.92	166.2 ± 5.78	164.0 ± 4.09	227.2 ± 4.78	158.9 ± 4.52	n = 26	[DUT] Siemens Dimension Vista
117.4 ± 4.03	167.3 ± 4.41	164.8 ± 3.87	233.6 ± 5.30	159.0 ± 3.16	n = 4	[DUX] Siemens Dimension Xpand
<Reagents>						
126.5 ± 1.02	174.1 ± 1.45	172.6 ± 1.37	238.4 ± 1.49	168.0 ± 1.80	n = 14	[AB1] Abbott
126.8 ± 2.54	180.9 ± 5.15	170.6 ± 2.36	235.6 ± 2.97	162.5 ± 3.50	n = 14	[BC1] Beckman Coulter
120.9 ± 2.97	167.2 ± 3.73	164.5 ± 3.36	229.3 ± 4.98	160.1 ± 3.28	n = 33	[OL1] Beckman Coulter AU Series
115.1 ± 3.25	173.8 ± 4.71	183.5 ± 4.49	224.9 ± 5.48	180.1 ± 4.23	n = 16	[JJ1] Ortho Clinical Diagnostics
127.6 ± 3.66	175.4 ± 3.53	173.1 ± 3.14	235.4 ± 5.32	167.5 ± 4.83	n = 14	[RO4] Roche cobas c311/c501/c502/c701/c702
127.7 ± 2.02	174.1 ± 2.72	172.7 ± 0.90	234.6 ± 4.99	169.0 ± 4.60	n = 4	[RO2] Roche Hitachi and Modular D/P
125.5 ± 2.74	170.3 ± 3.07	168.7 ± 3.16	230.3 ± 3.07	163.6 ± 2.56	n = 3	[RO1] Roche Integra and MIRA
127.7 ± 2.36	183.2 ± 2.77	173.3 ± 2.67	231.3 ± 3.88	166.6 ± 2.78	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
117.9 ± 2.95	165.5 ± 5.14	163.3 ± 3.65	228.1 ± 4.95	157.8 ± 3.80	n = 51	[DA5] Siemens Dimension



## Summary of Participant Performance (Mean and Standard Deviation)

## HDL-Cholesterol (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
30.8 ± 2.64	54.2 ± 4.40	39.2 ± 6.72	69.2 ± 5.38	37.1 ± 3.65	n = 161	[---] All Methods & Instruments
29.4 ± 3.87	52.5 ± 2.05	39.1 ± 5.34	69.6 ± 4.78	41.4 ± 5.37	n = 16	[---] All Precipitation Methods
30.9 ± 2.41	54.4 ± 4.50	39.2 ± 6.84	69.2 ± 5.43	36.9 ± 2.90	n = 145	[---] All Homogeneous (Direct) Methods
32.7 ± 1.57	59.8 ± 2.37	45.6 ± 1.85	74.1 ± 2.61	38.8 ± 1.48	n = 12	[AB1] Abbott
31.9 ± 0.89	60.0 ± 2.29	47.0 ± 1.41	76.0 ± 1.98	37.9 ± 1.36	n = 12	[BC1] Beckman Coulter
30.7 ± 1.76	58.5 ± 2.45	46.1 ± 2.27	73.8 ± 3.37	37.2 ± 1.89	n = 27	[OL1] Beckman Coulter AU Series
28.5 ± 0.83	53.7 ± 0.74	43.2 ± 1.73	72.0 ± 2.06	46.3 ± 1.38	n = 9	[JJ1] Ortho Clinical Diagnostics
29.6 ± 0.70	50.7 ± 1.03	31.5 ± 1.15	64.8 ± 1.31	34.7 ± 1.59	n = 14	[RO4] Roche cobas c311/c501/c502/c701/c702
30.7 ± 0.82	51.7 ± 0.90	32.7 ± 0.90	66.0 ± 1.76	35.2 ± 0.41	n = 4	[RO2] Roche Hitachi and Modular D/P
30.2 ± 1.54	51.9 ± 2.86	32.5 ± 1.86	66.2 ± 3.23	35.7 ± 1.37	n = 3	[RO1] Roche Integra and MIRA
23.9 ± 1.27	51.0 ± 2.59	35.4 ± 2.20	65.9 ± 2.77	26.7 ± 1.50	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
32.0 ± 1.71	52.6 ± 2.18	35.5 ± 1.91	66.0 ± 2.85	36.9 ± 1.81	n = 44	[DA5] Siemens Dimension

## Summary of Participant Performance (Mean and Standard Deviation)

## LDL-Cholesterol (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
73.3 ± 8.18	95.9 ± 10.19	91.9 ± 11.06	131.9 ± 14.49	102.1 ± 10.90	n = 154	[---] All Methods & Instruments
76.7 ± 5.84	98.9 ± 7.78	86.5 ± 9.02	139.1 ± 7.59	106.8 ± 7.25	n = 81	[-A-] Calculated Results Friedewald formula [LDL=TC-HDL-(Trigs÷5)]
68.7 ± 8.20	91.5 ± 10.95	98.1 ± 9.79	121.2 ± 13.93	94.8 ± 8.70	n = 73	[---] All Homogeneous (Direct) Methods
66.2 ± 1.27	88.5 ± 1.22	95.3 ± 0.82	117.3 ± 2.47	96.6 ± 1.80	n = 4	[AB1] Abbott
61.3 ± 3.32	81.6 ± 1.91	89.5 ± 5.50	110.8 ± 3.18	88.9 ± 2.83	n = 3	[BC1] Beckman Coulter
60.0 ± 4.55	79.9 ± 5.51	86.3 ± 6.33	107.0 ± 7.36	85.6 ± 4.15	n = 15	[OL1] Beckman Coulter AU Series
61.1 ± 2.19	87.2 ± 2.15	95.8 ± 3.61	116.7 ± 2.56	93.4 ± 3.06	n = 5	[JJ1] Ortho Clinical Diagnostics
83.0 ± 2.78	113.1 ± 3.34	111.0 ± 6.88	149.0 ± 3.60	121.0 ± 8.48	n = 8	[RO4] Roche cobas c311/c501/c502/c701/c702
84.1 ± 2.05	117.2 ± 4.11	114.7 ± 1.37	151.3 ± 2.26	128.5 ± 5.40	n = 3	[RO2] Roche Hitachi and Modular D/P
64.3 ± 4.06	86.7 ± 4.06	91.0 ± 4.60	112.5 ± 6.32	90.5 ± 6.32	n = 3	[GZ1] Sekisui Diagnostics
68.9 ± 2.27	98.3 ± 2.75	106.1 ± 5.03	129.5 ± 2.06	97.9 ± 2.60	n = 5	[BY1] Siemens ADVIA/ADVIA Centaur
71.6 ± 2.58	93.6 ± 3.75	100.9 ± 4.24	123.4 ± 6.55	97.4 ± 3.38	n = 23	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Triglycerides (mg/dL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
71.4 ± 5.59	88.0 ± 7.30	216.4 ± 12.52	109.3 ± 6.94	97.1 ± 7.07	n = 164	[---] All Methods & Instruments
<Instruments>						
73.3 ± 1.23	94.2 ± 2.79	206.6 ± 2.73	105.5 ± 1.72	91.9 ± 1.96	n = 13	[ABJ] Abbott Architect c System
68.4 ± 2.47	81.3 ± 2.44	211.4 ± 4.85	105.7 ± 2.58	94.1 ± 2.55	n = 32	[OLC] Beckman Coulter AU Chemistry System
76.1 ± 2.92	96.1 ± 3.68	234.9 ± 3.46	122.8 ± 2.35	108.9 ± 2.27	n = 7	[BCG] Beckman Coulter UniCel DxC 600
76.1 ± 3.06	94.2 ± 2.80	226.7 ± 6.68	120.0 ± 2.25	107.8 ± 2.11	n = 4	[BCH] Beckman Coulter UniCel DxC 800
67.4 ± 1.02	83.7 ± 0.51	229.3 ± 2.26	110.0 ± 0.00	104.4 ± 1.02	n = 3	[JJE] Ortho Vitros 250/350/950
67.0 ± 2.31	82.6 ± 2.29	230.5 ± 3.99	108.3 ± 1.55	101.9 ± 1.53	n = 10	[JJG] Ortho Vitros 5600
75.6 ± 1.59	91.0 ± 1.62	209.1 ± 3.49	112.8 ± 1.23	97.5 ± 1.08	n = 10	[ROC] Roche cobas c501
72.9 ± 1.38	90.4 ± 2.05	205.6 ± 4.32	109.1 ± 1.13	93.7 ± 1.93	n = 5	[ROD] Roche MODULAR D/P
75.5 ± 1.96	94.3 ± 1.85	223.9 ± 6.18	114.0 ± 3.07	99.8 ± 3.04	n = 9	[BYE] Siemens ADVIA 1800
64.0 ± 2.59	81.4 ± 2.02	206.6 ± 3.66	101.1 ± 2.35	88.1 ± 1.81	n = 19	[DUE] Siemens Dimension EXL
75.6 ± 2.76	93.7 ± 2.67	225.4 ± 5.12	114.5 ± 2.76	100.8 ± 2.85	n = 28	[DUT] Siemens Dimension Vista
63.6 ± 1.02	81.0 ± 0.90	206.1 ± 2.05	100.6 ± 1.02	95.0 ± 10.94	n = 3	[DUX] Siemens Dimension Xpand
<Reagents>						
73.3 ± 1.23	94.2 ± 2.79	206.6 ± 2.73	105.5 ± 1.72	91.9 ± 1.96	n = 13	[AB1] Abbott
75.3 ± 3.60	95.0 ± 3.68	231.1 ± 7.29	121.5 ± 2.76	108.3 ± 2.21	n = 13	[BC1] Beckman Coulter
68.4 ± 2.33	81.2 ± 2.29	211.3 ± 4.47	105.8 ± 2.39	94.2 ± 2.32	n = 30	[OL1] Beckman Coulter AU Series
67.3 ± 1.95	83.0 ± 1.80	230.9 ± 3.77	109.3 ± 2.30	103.2 ± 2.65	n = 16	[JJ1] Ortho Clinical Diagnostics
75.2 ± 2.02	90.8 ± 1.86	208.9 ± 3.26	112.1 ± 2.29	97.1 ± 1.76	n = 14	[RO4] Roche cobas c311/c501/c502/c701/c702
72.9 ± 1.38	90.4 ± 2.05	205.6 ± 4.32	109.1 ± 1.13	93.7 ± 1.93	n = 5	[RO2] Roche Hitachi and Modular D/P
69.7 ± 4.22	81.5 ± 4.61	195.8 ± 12.13	104.6 ± 6.23	90.7 ± 6.85	n = 3	[RO1] Roche Integra and MIRA
75.5 ± 1.91	94.3 ± 1.54	223.4 ± 5.40	114.0 ± 2.91	100.1 ± 2.80	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
70.3 ± 6.93	88.0 ± 7.28	216.7 ± 11.41	108.5 ± 7.83	95.3 ± 7.93	n = 52	[DA5] Siemens Dimension

## Summary of Participant Performance (Mean and Standard Deviation)

## Homocysteine (µmol/L)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
17.57 ± 1.98	9.37 ± 0.97	26.52 ± 2.64	18.18 ± 1.74	12.04 ± 1.49	n = 49	[---] All Methods & Instruments
<Instruments>						
16.50 ± 1.09	8.29 ± 0.58	24.83 ± 1.31	16.36 ± 1.05	11.89 ± 0.95	n = 5	[ABH] Abbott Architect i System
19.11 ± 1.57	9.56 ± 0.40	27.70 ± 1.38	18.13 ± 1.04	12.57 ± 0.94	n = 12	[OLC] Beckman Coulter AU Chemistry System
19.03 ± 0.59	9.87 ± 0.51	27.97 ± 1.52	19.08 ± 0.49	13.42 ± 0.50	n = 3	[ROG] Roche cobas c502
15.43 ± 1.34	9.19 ± 0.77	23.61 ± 1.36	18.09 ± 1.29	10.48 ± 1.10	n = 9	[COB] Siemens ADVIA Centaur
15.97 ± 0.67	8.94 ± 0.26	25.23 ± 0.78	17.04 ± 0.80	10.74 ± 0.67	n = 4	[DUT] Siemens Dimension Vista
18.06 ± 1.18	9.65 ± 1.14	28.79 ± 2.76	19.65 ± 1.88	12.52 ± 1.06	n = 7	[DPD] Siemens Immulite 2000
<Reagents>						
16.57 ± 0.99	8.27 ± 0.52	25.03 ± 1.26	15.97 ± 1.36	11.96 ± 0.85	n = 6	[AB1] Abbott
18.76 ± 1.34	10.84 ± 0.91	30.38 ± 2.05	20.22 ± 1.43	14.94 ± 1.65	n = 3	[AS1] Axis-Shield
19.55 ± 1.19	9.41 ± 0.36	27.40 ± 1.67	18.17 ± 1.28	12.52 ± 1.01	n = 8	[DZ1] Diazyme
19.03 ± 0.59	9.87 ± 0.51	27.97 ± 1.52	19.08 ± 0.49	13.42 ± 0.50	n = 3	[RO4] Roche cobas c311/c501/c502/c701/c702
15.43 ± 1.34	9.19 ± 0.77	23.61 ± 1.36	18.09 ± 1.29	10.48 ± 1.10	n = 9	[BY1] Siemens ADVIA/ADVIA Centaur
16.23 ± 0.59	9.03 ± 0.24	25.53 ± 0.60	17.32 ± 0.77	10.91 ± 0.72	n = 3	[DA5] Siemens Dimension
18.06 ± 1.18	9.65 ± 1.14	28.79 ± 2.76	19.65 ± 1.88	12.52 ± 1.06	n = 7	[DP5] Siemens Immulite

Summary of Participant Performance (Mean and Standard Deviation)

**Troponin I (µg/L)**

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
3.580 ± 4.585	8.594 ± 11.277	0.016 ± 0.014	0.962 ± 0.079	0.016 ± 0.014	n = 128	[---] All Methods & Instruments
<b>&lt;Instruments&gt;</b>						
13.964 ± 0.495	35.023 ± 1.032	0.010 ± 0.000	6.064 ± 0.233	0.011 ± 0.006	n = 12	[ABH] Abbott Architect i System
1.291 ± 0.100	3.141 ± 0.213	0.013 ± 0.012	0.963 ± 0.083	0.013 ± 0.012	n = 13	[SAA] Beckman Coulter ACCESS
1.082 ± 0.098	2.574 ± 0.241	0.004 ± 0.006	0.810 ± 0.074	0.004 ± 0.006	n = 5	[BCV] Beckman Coulter UniCel DxI 600
1.112 ± 0.031	2.627 ± 0.121	0.029 ± 0.031	0.794 ± 0.018	0.029 ± 0.031	n = 7	[BCU] Beckman Coulter UniCel DxI 800
11.912 ± 1.066	19.536 ± 1.888	0.043 ± 0.042	2.386 ± 0.226	0.043 ± 0.042	n = 3	[IAA] i-STAT
13.293 ± 0.818	32.766 ± 1.809	0.010 ± 0.000	3.209 ± 0.243	0.010 ± 0.000	n = 9	[JJG] Ortho Vitros 5600
5.630 ± 0.474	15.178 ± 1.250	0.010 ± 0.000	1.779 ± 0.160	0.010 ± 0.000	n = 16	[COB] Siemens ADVIA Centaur
1.584 ± 0.064	3.254 ± 0.117	0.033 ± 0.020	0.987 ± 0.025	0.033 ± 0.019	n = 20	[DUE] Siemens Dimension EXL
1.579 ± 0.069	3.283 ± 0.125	0.015 ± 0.006	0.985 ± 0.038	0.015 ± 0.006	n = 29	[DUT] Siemens Dimension Vista
16.840 ± 0.337	37.288 ± 5.259	0.046 ± 0.026	5.578 ± 0.194	0.049 ± 0.029	n = 3	[TOM] Tosoh Bioscience
<b>&lt;Reagents&gt;</b>						
13.904 ± 0.536	35.024 ± 1.034	0.010 ± 0.000	6.065 ± 0.233	0.011 ± 0.005	n = 14	[AB1] Abbott
1.196 ± 0.133	2.891 ± 0.352	0.012 ± 0.012	0.878 ± 0.113	0.012 ± 0.012	n = 25	[BC1] Beckman Coulter
13.318 ± 0.762	32.599 ± 1.782	0.010 ± 0.000	3.224 ± 0.232	0.010 ± 0.000	n = 10	[JJ1] Ortho Clinical Diagnostics
1.670 ± 0.362	3.280 ± 0.345	< 0.300	0.597 ± 0.130	< 0.300	n = 3	[RO3] Roche Elecsys/Modular E/e601/e411
5.594 ± 0.539	15.179 ± 1.250	0.010 ± 0.000	1.765 ± 0.183	0.010 ± 0.000	n = 17	[BY1] Siemens ADVIA/ADVIA Centaur
1.071 ± 0.294	2.863 ± 0.185	0.035 ± 0.012	0.927 ± 0.025	0.035 ± 0.012	n = 4	[DA5] Siemens Dimension
1.583 ± 0.068	3.274 ± 0.121	0.023 ± 0.018	0.986 ± 0.033	0.023 ± 0.017	n = 48	[DA6] Siemens Dimension LOCI

**Troponin T (µg/L)**

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
0.211 ± 0.018	0.492 ± 0.030	0.010 ± 0.000	0.603 ± 0.031	0.010 ± 0.000	n = 15	[---] All Methods & Instruments
<b>&lt;Instruments&gt;</b>						
0.209 ± 0.018	0.493 ± 0.026	0.010 ± 0.000	0.596 ± 0.041	0.010 ± 0.000	n = 8	[ROA] Roche cobas e601
0.223 ± 0.014	0.510 ± 0.027	0.010 ± 0.000	0.610 ± 0.018	0.035 ± 0.046	n = 3	[ROE] Roche MODULAR E
<b>&lt;Reagents&gt;</b>						
0.211 ± 0.018	0.492 ± 0.030	0.010 ± 0.000	0.603 ± 0.031	0.010 ± 0.000	n = 15	[RO3] Roche Elecsys/Modular E/e601/e411

Summary of Participant Performance (Mean and Standard Deviation)

Alanine Aminotransferase (U/L 37°C)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
107.0 ± 11.08	198.0 ± 19.06	60.3 ± 6.75	40.2 ± 6.25	141.2 ± 12.17	n = 193	[---] All Methods & Instruments
<Instruments>						
92.7 ± 1.37	173.2 ± 2.36	54.7 ± 0.51	39.7 ± 1.37	124.3 ± 0.51	n = 3	[AXA] Abaxis Piccolo
105.1 ± 2.27	197.1 ± 3.63	57.5 ± 0.96	36.6 ± 1.35	141.4 ± 2.49	n = 17	[ABJ] Abbott Architect c System
89.9 ± 2.76	168.6 ± 5.05	51.7 ± 1.76	32.2 ± 1.42	122.4 ± 4.13	n = 35	[OLC] Beckman Coulter AU Chemistry System
104.9 ± 2.07	191.8 ± 4.73	62.0 ± 1.54	41.9 ± 1.02	135.2 ± 2.80	n = 10	[BCG] Beckman Coulter UniCel DxC 600
105.3 ± 1.38	191.9 ± 2.79	61.8 ± 0.80	41.9 ± 1.83	135.9 ± 2.69	n = 5	[BCH] Beckman Coulter UniCel DxC 800
119.2 ± 3.32	206.0 ± 4.05	59.4 ± 2.77	42.9 ± 3.89	148.7 ± 3.53	n = 6	[JJE] Ortho Vitros 250/350/950
117.0 ± 4.33	205.8 ± 4.90	61.8 ± 3.07	44.2 ± 2.31	148.5 ± 4.24	n = 10	[JJG] Ortho Vitros 5600
101.0 ± 2.23	188.3 ± 4.92	55.9 ± 1.50	34.9 ± 0.87	135.3 ± 3.69	n = 11	[ROC] Roche cobas c501
101.7 ± 2.26	186.0 ± 6.37	55.2 ± 1.54	35.2 ± 1.54	133.0 ± 4.60	n = 3	[ROT] Roche Cobas INTEGRA 800
99.8 ± 0.41	188.6 ± 2.07	57.0 ± 1.91	35.4 ± 1.69	136.8 ± 2.37	n = 5	[ROD] Roche MODULAR D/P
107.8 ± 2.44	202.1 ± 6.33	59.5 ± 2.06	39.4 ± 2.16	144.8 ± 4.20	n = 9	[BYE] Siemens ADVIA 1800
117.7 ± 2.53	218.6 ± 5.38	68.8 ± 1.95	47.0 ± 1.63	153.5 ± 3.17	n = 23	[DUE] Siemens Dimension EXL
114.6 ± 2.43	213.2 ± 4.60	66.4 ± 2.26	45.1 ± 2.06	149.8 ± 3.54	n = 31	[DUT] Siemens Dimension Vista
117.7 ± 1.91	220.6 ± 4.84	67.7 ± 1.49	46.3 ± 1.11	153.7 ± 2.01	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
92.7 ± 1.37	173.2 ± 2.36	54.7 ± 0.51	39.7 ± 1.37	124.3 ± 0.51	n = 3	[AX1] Abaxis
105.1 ± 2.27	197.1 ± 3.63	57.5 ± 0.96	36.6 ± 1.35	141.4 ± 2.49	n = 17	[AB1] Abbott
105.1 ± 2.00	191.8 ± 5.17	62.0 ± 1.44	41.9 ± 1.42	135.5 ± 3.21	n = 18	[BC1] Beckman Coulter
89.7 ± 2.71	168.2 ± 4.88	51.7 ± 1.70	32.1 ± 1.27	122.2 ± 4.00	n = 32	[OL1] Beckman Coulter AU Series
118.7 ± 4.07	206.7 ± 5.00	61.6 ± 3.54	44.4 ± 3.03	149.2 ± 4.77	n = 19	[JJ1] Ortho Clinical Diagnostics
100.3 ± 2.27	187.9 ± 4.01	55.7 ± 1.53	34.8 ± 1.17	134.4 ± 3.49	n = 16	[RO4] Roche cobas c311/c501/c502/c701/c702
99.8 ± 0.41	188.6 ± 2.07	57.0 ± 1.91	35.4 ± 1.69	136.8 ± 2.37	n = 5	[RO2] Roche Hitachi and Modular D/P
101.6 ± 1.69	187.2 ± 4.79	54.6 ± 1.52	35.3 ± 1.61	133.2 ± 3.34	n = 5	[RO1] Roche Integra and MIRA
107.2 ± 2.84	200.8 ± 6.67	59.1 ± 2.11	39.0 ± 2.01	143.9 ± 4.70	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
116.1 ± 2.89	215.5 ± 5.26	67.2 ± 2.06	46.0 ± 2.35	151.1 ± 3.88	n = 24	[DA5] Siemens Dimension
116.1 ± 2.81	216.4 ± 6.07	67.5 ± 2.46	46.2 ± 1.72	152.2 ± 3.31	n = 38	[DA8] Siemens Dimension IFCC Standardized

## Summary of Participant Performance (Mean and Standard Deviation)

## Aspartate Aminotransferase (U/L 37°C)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
161.9 ± 8.89	106.8 ± 8.88	42.3 ± 3.64	66.8 ± 5.55	226.8 ± 15.16	n = 191	[---] All Methods & Instruments
<b>&lt;Instruments&gt;</b>						
159.8 ± 4.89	109.7 ± 5.09	45.0 ± 1.80	69.9 ± 2.05	222.4 ± 6.66	n = 3	[AXA] Abaxis Piccolo
163.6 ± 2.42	108.3 ± 2.16	43.5 ± 1.15	67.8 ± 1.11	230.7 ± 4.03	n = 16	[ABJ] Abbott Architect c System
142.3 ± 5.56	94.0 ± 3.80	38.7 ± 1.73	58.9 ± 2.60	199.3 ± 7.45	n = 34	[OLC] Beckman Coulter AU Chemistry System
160.6 ± 3.34	108.6 ± 2.25	46.0 ± 0.97	69.2 ± 1.92	219.8 ± 7.90	n = 10	[BCG] Beckman Coulter UniCel DxC 600
158.5 ± 1.24	105.1 ± 4.27	45.4 ± 1.09	68.5 ± 2.89	220.8 ± 4.50	n = 5	[BCH] Beckman Coulter UniCel DxC 800
165.1 ± 4.83	125.6 ± 3.66	46.9 ± 1.35	78.0 ± 1.95	250.7 ± 5.50	n = 6	[JJE] Ortho Vitros 250/350/950
165.3 ± 4.74	124.8 ± 3.76	45.9 ± 1.21	77.7 ± 2.17	245.4 ± 6.33	n = 10	[JJG] Ortho Vitros 5600
168.2 ± 3.79	110.8 ± 3.37	44.2 ± 1.33	68.4 ± 1.82	237.0 ± 6.52	n = 11	[ROC] Roche cobas c501
165.9 ± 2.05	108.3 ± 0.51	43.0 ± 0.90	66.7 ± 0.51	228.5 ± 8.26	n = 3	[ROT] Roche Cobas INTEGRA 800
161.2 ± 4.64	105.7 ± 3.49	44.1 ± 1.83	65.8 ± 0.41	225.8 ± 5.43	n = 5	[ROD] Roche MODULAR D/P
174.9 ± 1.40	117.2 ± 2.76	48.4 ± 2.53	73.8 ± 1.90	242.2 ± 2.65	n = 9	[BYE] Siemens ADVIA 1800
159.7 ± 5.03	104.3 ± 4.75	39.8 ± 2.30	65.5 ± 3.73	224.0 ± 5.49	n = 23	[DUE] Siemens Dimension EXL
164.7 ± 3.49	107.1 ± 3.85	40.7 ± 1.79	66.0 ± 1.80	229.9 ± 4.97	n = 31	[DUT] Siemens Dimension Vista
165.3 ± 3.53	108.3 ± 2.66	40.7 ± 2.80	66.5 ± 1.75	228.3 ± 7.94	n = 7	[DUX] Siemens Dimension Xpand
<b>&lt;Reagents&gt;</b>						
159.8 ± 4.89	109.7 ± 5.09	45.0 ± 1.80	69.9 ± 2.05	222.4 ± 6.66	n = 3	[AX1] Abaxis
163.6 ± 2.42	108.3 ± 2.16	43.5 ± 1.15	67.8 ± 1.11	230.7 ± 4.03	n = 16	[AB1] Abbott
160.3 ± 4.49	107.6 ± 4.19	45.8 ± 1.16	69.2 ± 2.92	219.9 ± 8.03	n = 18	[BC1] Beckman Coulter
142.1 ± 5.73	93.9 ± 3.95	38.6 ± 1.72	58.9 ± 2.71	198.9 ± 7.50	n = 32	[OL1] Beckman Coulter AU Series
166.2 ± 5.12	125.6 ± 3.80	46.4 ± 1.34	78.1 ± 2.10	248.2 ± 6.60	n = 19	[JJ1] Ortho Clinical Diagnostics
167.7 ± 3.40	110.5 ± 3.03	43.9 ± 1.33	67.9 ± 1.75	235.5 ± 5.63	n = 16	[RO4] Roche cobas c311/c501/c502/c701/c702
161.2 ± 4.64	105.7 ± 3.49	44.1 ± 1.83	65.8 ± 0.41	225.8 ± 5.43	n = 5	[RO2] Roche Hitachi and Modular D/P
166.2 ± 2.69	108.5 ± 1.07	42.6 ± 1.09	66.6 ± 0.55	229.7 ± 6.82	n = 5	[RO1] Roche Integra and MIRA
174.0 ± 3.49	116.3 ± 3.69	47.7 ± 2.71	73.1 ± 2.61	242.1 ± 2.30	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
162.7 ± 4.86	106.2 ± 4.31	40.3 ± 2.16	66.0 ± 2.40	227.2 ± 6.31	n = 63	[DA5] Siemens Dimension

## Summary of Participant Performance (Mean and Standard Deviation)

 $\alpha$ -Amylase (U/L 37°C)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
85.8 ± 14.57	46.7 ± 6.29	158.8 ± 21.27	205.4 ± 33.75	454.0 ± 81.92	n = 167	[---] All Methods & Instruments
<Instruments>						
94.1 ± 2.60	51.9 ± 1.52	173.0 ± 3.91	225.7 ± 5.29	502.2 ± 11.34	n = 16	[ABJ] Abbott Architect c System
69.4 ± 4.35	36.5 ± 2.45	126.5 ± 7.57	165.2 ± 9.90	371.6 ± 19.15	n = 29	[OLC] Beckman Coulter AU Chemistry System
89.0 ± 1.94	53.0 ± 1.66	168.1 ± 5.94	210.5 ± 5.61	463.2 ± 15.13	n = 7	[BCG] Beckman Coulter UniCel DxC 600
89.3 ± 0.91	52.8 ± 1.91	167.6 ± 4.08	213.5 ± 6.10	470.7 ± 12.43	n = 5	[BCH] Beckman Coulter UniCel DxC 800
49.4 ± 7.65	47.4 ± 6.60	125.4 ± 8.83	135.0 ± 8.40	279.6 ± 16.25	n = 4	[JJE] Ortho Vitros 250/350/950
42.2 ± 6.76	46.0 ± 5.09	125.3 ± 6.50	136.4 ± 7.16	283.8 ± 11.05	n = 10	[JJG] Ortho Vitros 5600
82.8 ± 1.25	52.3 ± 1.16	159.0 ± 3.42	201.4 ± 4.46	431.8 ± 8.92	n = 11	[ROC] Roche cobas c501
81.7 ± 0.51	51.7 ± 0.51	155.3 ± 2.26	199.0 ± 1.80	418.9 ± 4.38	n = 3	[ROT] Roche Cobas INTEGRA 800
80.8 ± 1.07	51.0 ± 0.00	155.8 ± 1.07	197.9 ± 1.27	426.4 ± 7.72	n = 5	[ROD] Roche MODULAR D/P
84.5 ± 1.80	51.9 ± 1.37	162.9 ± 4.91	207.6 ± 4.45	443.2 ± 7.38	n = 9	[BYE] Siemens ADVIA 1800
98.7 ± 2.31	46.4 ± 1.11	176.7 ± 3.14	235.7 ± 3.29	533.9 ± 9.04	n = 19	[DUE] Siemens Dimension EXL
95.8 ± 1.87	43.9 ± 0.86	170.9 ± 2.95	229.2 ± 3.23	521.3 ± 7.58	n = 31	[DUT] Siemens Dimension Vista
98.0 ± 0.90	46.0 ± 0.00	176.7 ± 0.51	234.9 ± 2.05	532.3 ± 4.06	n = 3	[DUX] Siemens Dimension Xpand
<Reagents>						
94.1 ± 2.60	51.9 ± 1.52	173.0 ± 3.91	225.7 ± 5.29	502.2 ± 11.34	n = 16	[AB1] Abbott
89.6 ± 2.04	53.6 ± 1.61	169.9 ± 5.03	213.3 ± 5.12	470.2 ± 14.62	n = 8	[BC1] Beckman Coulter
69.5 ± 4.39	36.6 ± 2.62	126.9 ± 7.64	165.7 ± 9.98	372.6 ± 19.70	n = 29	[OL1] Beckman Coulter AU Series
88.2 ± 1.78	51.6 ± 1.09	164.4 ± 3.41	207.7 ± 5.55	458.5 ± 10.66	n = 6	[BC2] Beckman Coulter IFCC Standardized
44.9 ± 7.49	46.5 ± 5.89	126.2 ± 7.04	137.0 ± 7.25	284.0 ± 12.86	n = 17	[JJ1] Ortho Clinical Diagnostics
82.8 ± 1.23	52.4 ± 1.07	159.1 ± 3.17	202.1 ± 4.21	431.9 ± 8.67	n = 13	[RO4] Roche cobas c311/c501/c502/c701/c702
80.8 ± 1.07	51.0 ± 0.00	155.8 ± 1.07	197.9 ± 1.27	426.4 ± 7.72	n = 5	[RO2] Roche Hitachi and Modular D/P
82.0 ± 0.08	52.0 ± 0.08	155.3 ± 1.70	199.3 ± 1.37	420.5 ± 3.78	n = 5	[RO1] Roche Integra and MIRA
84.3 ± 2.09	51.7 ± 1.50	162.2 ± 5.44	207.0 ± 4.96	442.9 ± 9.05	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
96.9 ± 2.32	44.9 ± 1.58	173.2 ± 4.09	231.7 ± 4.55	526.0 ± 10.23	n = 55	[DA5] Siemens Dimension



Summary of Participant Performance (Mean and Standard Deviation)

Alkaline Phosphatase (U/L 37°C)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
372.6 ± 42.84	120.9 ± 10.72	46.2 ± 5.40	287.7 ± 27.87	407.6 ± 41.76	n = 192	[---] All Methods & Instruments
<Instruments>						
325.6 ± 10.01	103.0 ± 5.48	41.8 ± 2.36	246.4 ± 1.02	344.3 ± 4.06	n = 3	[AXA] Abaxis Piccolo
387.4 ± 15.69	123.6 ± 5.51	47.0 ± 2.45	295.7 ± 12.07	420.9 ± 16.42	n = 16	[ABJ] Abbott Architect c System
338.6 ± 23.21	105.9 ± 7.31	40.2 ± 2.78	257.8 ± 18.95	368.6 ± 25.43	n = 35	[OLC] Beckman Coulter AU Chemistry System
334.9 ± 13.54	106.9 ± 4.15	40.9 ± 1.43	254.7 ± 12.79	367.9 ± 13.38	n = 9	[BCG] Beckman Coulter UniCel DxC 600
330.6 ± 12.81	105.1 ± 3.37	39.8 ± 0.41	251.1 ± 7.55	367.0 ± 11.87	n = 5	[BCH] Beckman Coulter UniCel DxC 800
311.6 ± 9.29	125.2 ± 3.63	62.1 ± 2.72	280.2 ± 6.29	373.9 ± 10.50	n = 6	[JJE] Ortho Vitros 250/350/950
296.6 ± 7.49	122.9 ± 1.62	60.7 ± 1.87	267.4 ± 3.88	352.1 ± 7.91	n = 10	[JJG] Ortho Vitros 5600
366.3 ± 9.37	118.6 ± 3.02	45.8 ± 0.92	281.7 ± 7.23	403.2 ± 6.57	n = 12	[ROC] Roche cobas c501
394.6 ± 6.66	123.4 ± 1.02	46.0 ± 1.80	298.2 ± 6.95	421.5 ± 6.32	n = 3	[ROT] Roche Cobas INTEGRA 800
361.5 ± 8.94	116.4 ± 2.61	44.6 ± 1.09	270.4 ± 10.12	387.9 ± 8.33	n = 5	[ROD] Roche MODULAR D/P
409.2 ± 14.97	130.0 ± 6.46	50.4 ± 2.29	311.6 ± 11.75	447.2 ± 10.93	n = 9	[BYE] Siemens ADVIA 1800
409.1 ± 7.62	128.3 ± 3.62	48.4 ± 2.24	310.9 ± 6.14	443.1 ± 8.54	n = 23	[DUE] Siemens Dimension EXL
411.6 ± 12.94	128.7 ± 3.34	48.2 ± 1.37	315.4 ± 9.35	448.2 ± 11.15	n = 31	[DUT] Siemens Dimension Vista
408.0 ± 11.68	127.3 ± 3.90	48.0 ± 2.78	308.6 ± 7.56	442.0 ± 9.17	n = 7	[DUX] Siemens Dimension Xpand
<Reagents>						
325.6 ± 10.01	103.0 ± 5.48	41.8 ± 2.36	246.4 ± 1.02	344.3 ± 4.06	n = 3	[AX1] Abaxis
387.4 ± 15.69	123.6 ± 5.51	47.0 ± 2.45	295.7 ± 12.07	420.9 ± 16.42	n = 16	[AB1] Abbott
337.2 ± 16.66	107.4 ± 4.91	41.0 ± 1.83	256.8 ± 13.20	370.5 ± 14.79	n = 17	[BC1] Beckman Coulter
337.6 ± 23.44	105.5 ± 7.47	40.0 ± 2.87	256.9 ± 19.48	367.5 ± 26.30	n = 32	[OL1] Beckman Coulter AU Series
303.8 ± 11.74	124.3 ± 3.40	61.6 ± 2.40	273.2 ± 8.73	361.0 ± 13.94	n = 19	[JJ1] Ortho Clinical Diagnostics
365.1 ± 9.64	117.2 ± 2.66	45.5 ± 0.92	279.4 ± 6.83	400.5 ± 8.41	n = 16	[RO4] Roche cobas c311/c501/c502/c701/c702
361.5 ± 8.94	116.4 ± 2.61	44.6 ± 1.09	270.4 ± 10.12	387.9 ± 8.33	n = 5	[RO2] Roche Hitachi and Modular D/P
388.0 ± 10.51	122.3 ± 2.38	45.4 ± 1.37	292.9 ± 8.30	416.6 ± 9.18	n = 5	[RO1] Roche Integra and MIRA
409.9 ± 12.83	130.0 ± 5.65	50.2 ± 2.16	312.1 ± 10.13	446.9 ± 9.95	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
412.2 ± 6.66	128.7 ± 2.90	48.3 ± 1.58	312.7 ± 6.30	443.7 ± 10.11	n = 25	[DA5] Siemens Dimension
409.5 ± 11.87	128.5 ± 3.95	48.3 ± 1.93	312.8 ± 10.40	447.1 ± 10.42	n = 37	[DA8] Siemens Dimension IFCC Standardized

Summary of Participant Performance (Mean and Standard Deviation)

γ-Glutamyltransferase (U/L 37°C)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
203.1 ± 42.16	98.1 ± 21.41	29.3 ± 6.93	178.1 ± 37.43	111.9 ± 23.27	n = 151	[---] All Methods & Instruments
<Instruments>						
198.6 ± 10.40	93.4 ± 4.85	27.8 ± 1.33	173.1 ± 8.99	108.9 ± 5.44	n = 11	[ABJ] Abbott Architect c System
154.6 ± 5.80	74.2 ± 2.96	23.1 ± 1.06	134.5 ± 4.64	85.2 ± 2.91	n = 29	[OLC] Beckman Coulter AU Chemistry System
210.2 ± 4.15	95.0 ± 2.51	22.5 ± 0.74	176.6 ± 4.85	107.2 ± 3.02	n = 7	[BCG] Beckman Coulter UniCel DxC 600
208.7 ± 5.35	93.2 ± 2.11	22.0 ± 0.75	174.5 ± 3.90	107.8 ± 2.11	n = 4	[BCH] Beckman Coulter UniCel DxC 800
338.2 ± 5.00	145.7 ± 0.51	31.6 ± 1.02	274.0 ± 2.70	167.3 ± 0.51	n = 3	[JJE] Ortho Vitros 250/350/950
330.5 ± 10.41	144.4 ± 3.36	32.3 ± 1.86	263.5 ± 6.46	162.6 ± 5.04	n = 10	[JJG] Ortho Vitros 5600
178.6 ± 3.80	84.0 ± 1.85	23.9 ± 1.28	155.2 ± 3.22	98.3 ± 1.31	n = 10	[ROC] Roche cobas c501
180.0 ± 1.50	84.5 ± 1.71	23.5 ± 1.22	155.5 ± 2.17	96.9 ± 4.25	n = 4	[ROD] Roche MODULAR D/P
193.7 ± 7.71	91.6 ± 2.41	28.0 ± 2.10	170.1 ± 6.87	105.9 ± 4.07	n = 9	[BYE] Siemens ADVIA 1800
227.7 ± 3.19	112.4 ± 2.53	39.5 ± 1.35	199.2 ± 4.64	127.3 ± 2.75	n = 18	[DUE] Siemens Dimension EXL
233.4 ± 3.93	112.8 ± 2.45	35.7 ± 2.06	202.8 ± 3.41	127.1 ± 2.53	n = 28	[DUT] Siemens Dimension Vista
<Reagents>						
198.6 ± 10.40	93.4 ± 4.85	27.8 ± 1.33	173.1 ± 8.99	108.9 ± 5.44	n = 11	[AB1] Abbott
209.9 ± 4.33	94.3 ± 2.43	22.4 ± 0.76	175.9 ± 4.36	107.7 ± 2.60	n = 13	[BC1] Beckman Coulter
154.5 ± 5.95	74.2 ± 3.05	23.1 ± 1.09	134.4 ± 4.78	85.2 ± 3.01	n = 28	[OL1] Beckman Coulter AU Series
335.7 ± 11.07	145.1 ± 2.70	32.4 ± 1.61	267.7 ± 7.27	164.6 ± 4.43	n = 16	[JJ1] Ortho Clinical Diagnostics
178.4 ± 3.72	83.8 ± 1.86	24.1 ± 1.11	154.9 ± 3.16	98.0 ± 1.42	n = 13	[RO4] Roche cobas c311/c501/c502/c701/c702
180.0 ± 1.50	84.5 ± 1.71	23.5 ± 1.22	155.5 ± 2.17	96.9 ± 4.25	n = 4	[RO2] Roche Hitachi and Modular D/P
176.2 ± 2.36	82.3 ± 1.37	23.3 ± 0.51	151.7 ± 2.26	94.0 ± 0.90	n = 3	[RO1] Roche Integra and MIRA
192.9 ± 6.66	91.1 ± 1.71	28.0 ± 1.91	169.7 ± 6.05	105.5 ± 3.54	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
231.1 ± 5.12	112.7 ± 2.59	37.3 ± 2.85	201.6 ± 4.67	127.3 ± 2.90	n = 49	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

**Creatine Kinase (U/L 37°C)**

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
199.7 ± 23.60	384.6 ± 26.85	126.4 ± 11.49	274.8 ± 19.71	97.3 ± 9.76	n = 168	[---] All Methods & Instruments
<b>&lt;Instruments&gt;</b>						
210.7 ± 16.50	405.7 ± 9.11	135.9 ± 2.37	291.6 ± 7.05	105.2 ± 2.26	n = 16	[ABJ] Abbott Architect c System
175.0 ± 18.98	339.3 ± 20.95	107.4 ± 6.16	239.8 ± 16.22	80.9 ± 5.55	n = 31	[OLC] Beckman Coulter AU Chemistry System
217.3 ± 9.69	408.7 ± 7.61	131.8 ± 2.57	289.1 ± 3.99	102.9 ± 3.16	n = 7	[BCG] Beckman Coulter UniCel DxC 600
183.3 ± 20.43	399.7 ± 8.32	128.6 ± 2.31	283.3 ± 6.87	102.7 ± 1.81	n = 5	[BCH] Beckman Coulter UniCel DxC 800
243.5 ± 18.08	398.3 ± 35.22	118.8 ± 9.99	269.5 ± 17.22	97.3 ± 9.30	n = 4	[JJE] Ortho Vitros 250/350/950
226.9 ± 20.47	380.9 ± 28.97	112.8 ± 6.07	258.0 ± 21.06	90.5 ± 5.86	n = 10	[JJG] Ortho Vitros 5600
206.1 ± 23.47	416.1 ± 13.45	128.6 ± 3.24	292.8 ± 11.86	96.9 ± 1.90	n = 12	[ROC] Roche cobas c501
196.3 ± 20.17	387.0 ± 7.04	133.6 ± 3.82	283.7 ± 4.73	105.0 ± 2.42	n = 5	[ROD] Roche MODULAR D/P
196.1 ± 15.28	385.3 ± 24.61	119.5 ± 2.61	273.4 ± 13.65	86.3 ± 2.97	n = 9	[BYE] Siemens ADVIA 1800
204.6 ± 14.20	384.7 ± 9.39	130.8 ± 2.43	279.7 ± 8.21	100.5 ± 2.18	n = 19	[DUE] Siemens Dimension EXL
200.1 ± 14.34	384.9 ± 6.52	133.1 ± 2.05	279.0 ± 6.50	102.5 ± 2.09	n = 31	[DUT] Siemens Dimension Vista
182.0 ± 8.16	368.0 ± 10.85	128.7 ± 1.37	266.7 ± 4.22	99.0 ± 0.90	n = 3	[DUX] Siemens Dimension Xpand
<b>&lt;Reagents&gt;</b>						
210.7 ± 16.50	405.7 ± 9.11	135.9 ± 2.37	291.6 ± 7.05	105.2 ± 2.26	n = 16	[AB1] Abbott
198.2 ± 23.47	403.7 ± 11.22	130.5 ± 3.62	282.8 ± 12.37	103.3 ± 2.83	n = 15	[BC1] Beckman Coulter
174.2 ± 20.00	337.9 ± 21.20	107.2 ± 6.41	238.3 ± 16.38	80.7 ± 5.82	n = 28	[OL1] Beckman Coulter AU Series
233.0 ± 20.87	389.1 ± 29.31	115.2 ± 7.69	263.8 ± 18.48	93.0 ± 7.27	n = 17	[JJ1] Ortho Clinical Diagnostics
204.0 ± 22.79	408.4 ± 19.17	129.6 ± 4.93	288.9 ± 13.34	97.8 ± 3.89	n = 16	[RO4] Roche cobas c311/c501/c502/c701/c702
196.3 ± 20.17	387.0 ± 7.04	133.6 ± 3.82	283.7 ± 4.73	105.0 ± 2.42	n = 5	[RO2] Roche Hitachi and Modular D/P
198.1 ± 13.85	381.6 ± 22.70	119.0 ± 2.66	271.4 ± 12.77	85.8 ± 2.93	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
200.8 ± 15.20	384.3 ± 8.48	132.0 ± 2.73	278.3 ± 8.47	101.6 ± 2.56	n = 51	[DA5] Siemens Dimension
191.8 ± 9.14	381.5 ± 7.18	130.1 ± 2.33	274.1 ± 5.72	101.0 ± 1.76	n = 4	[DA6] Siemens Dimension LOCI

## Summary of Participant Performance (Mean and Standard Deviation)

## Creatine Kinase-MB (ng/mL)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
52.55 ± 8.65	56.38 ± 8.66	0.92 ± 0.34	27.48 ± 3.99	0.82 ± 0.27	n = 104	[-A-] All Methods - Results reported in ng/mL
46.97 ± 4.54	50.81 ± 3.73	2.14 ± 1.70	25.19 ± 2.27	2.04 ± 1.80	n = 12	[AB1] Abbott
61.75 ± 3.61	64.33 ± 3.64	1.20 ± 0.00	31.57 ± 1.37	0.96 ± 0.06	n = 9	[SAA] Beckman Coulter ACCESS
60.29 ± 5.06	65.30 ± 4.22	1.21 ± 0.08	32.75 ± 1.92	0.97 ± 0.05	n = 12	[BC1] Beckman Coulter UniCel
18.80 ± 3.76	30.85 ± 3.14	< 1.00	14.65 ± 0.29	< 1.00	n = 2	[BS1] Biosite
40.65 ± 2.40	41.34 ± 1.65	0.74 ± 0.06	21.20 ± 0.81	0.60 ± 0.06	n = 9	[JJ1] Ortho Clinical Diagnostics
52.99 ± 5.00	58.70 ± 2.54	1.29 ± 0.15	29.14 ± 1.53	1.07 ± 0.09	n = 15	[RO3] Roche Elecsys/Modular E/e601/e411
59.08 ± 4.16	60.91 ± 3.48	0.43 ± 0.30	29.10 ± 1.51	0.28 ± 0.25	n = 13	[BY1] Siemens ADVIA/ADVIA Centaur
56.92 ± 4.93	59.42 ± 5.91	0.62 ± 0.19	26.59 ± 1.44	0.60 ± 0.18	n = 13	[DA5] Siemens Dimension
47.08 ± 2.77	49.15 ± 1.87	0.78 ± 0.17	24.73 ± 1.33	0.89 ± 0.16	n = 17	[DA6] Siemens Dimension LOCI

Summary of Participant Performance (Mean and Standard Deviation)

Lactate Dehydrogenase (U/L 37°C)

Specimen: C36	Specimen: C37	Specimen: C38	Specimen: C39	Specimen: C40	Number	[Code] Instrument or Reagent System
243.8 ± 22.36	347.6 ± 34.46	101.0 ± 10.12	371.6 ± 35.13	81.1 ± 7.38	n = 146	[-A-] All Methods - Lactate to Pyruvate
620.1 ± 29.86	853.9 ± 26.73	292.3 ± 26.43	921.2 ± 29.70	234.8 ± 22.55	n = 17	[-B-] All Methods - Pyruvate to Lactate
<Instruments>						
256.9 ± 7.99	362.9 ± 6.72	107.5 ± 2.48	390.0 ± 7.75	87.6 ± 1.84	n = 15	[ABJ] Abbott Architect c System
217.5 ± 10.86	305.6 ± 15.15	89.0 ± 5.25	330.4 ± 14.58	71.5 ± 4.38	n = 32	[OLC] Beckman Coulter AU Chemistry System
209.4 ± 4.45	291.4 ± 11.89	87.6 ± 2.91	312.6 ± 5.50	73.2 ± 2.95	n = 8	[BCG] Beckman Coulter UniCel Dx C 600
212.8 ± 3.21	295.1 ± 4.41	88.2 ± 2.97	321.1 ± 2.86	75.6 ± 3.59	n = 5	[BCH] Beckman Coulter UniCel Dx C 800
621.6 ± 33.39	850.9 ± 28.20	317.0 ± 10.28	931.8 ± 26.28	254.2 ± 10.92	n = 5	[JJE] Ortho Vitros 250/350/950
618.9 ± 28.88	850.8 ± 26.22	277.5 ± 6.06	910.2 ± 23.29	228.1 ± 20.04	n = 10	[JJG] Ortho Vitros 5600
257.6 ± 4.43	371.5 ± 6.12	105.5 ± 1.38	392.7 ± 4.94	85.6 ± 1.46	n = 12	[ROC] Roche cobas c501
258.1 ± 5.88	368.3 ± 5.98	104.7 ± 2.35	393.6 ± 7.07	85.1 ± 2.81	n = 5	[ROD] Roche MODULAR D/P
255.9 ± 1.64	361.9 ± 11.36	106.6 ± 2.75	383.7 ± 9.86	84.8 ± 1.98	n = 9	[BYE] Siemens ADVIA 1800
254.6 ± 9.56	368.4 ± 9.82	104.9 ± 5.92	391.6 ± 10.48	83.1 ± 4.24	n = 16	[DUE] Siemens Dimension EXL
255.5 ± 8.93	365.1 ± 12.23	106.7 ± 4.35	391.1 ± 11.24	85.3 ± 3.52	n = 31	[DUT] Siemens Dimension Vista
265.7 ± 16.14	373.7 ± 16.68	107.6 ± 2.56	398.3 ± 9.47	82.5 ± 1.86	n = 3	[DUX] Siemens Dimension Xpand
<Reagents>						
256.9 ± 7.99	362.9 ± 6.72	107.5 ± 2.48	390.0 ± 7.75	87.6 ± 1.84	n = 15	[AB1] Abbott
210.4 ± 4.49	292.4 ± 8.63	87.3 ± 3.20	316.5 ± 7.32	73.4 ± 3.76	n = 15	[BC1] Beckman Coulter
218.4 ± 10.63	306.9 ± 14.78	89.4 ± 5.17	332.0 ± 13.50	71.8 ± 4.30	n = 30	[OL1] Beckman Coulter AU Series
622.1 ± 28.28	852.9 ± 24.88	294.3 ± 25.93	920.3 ± 27.07	236.9 ± 22.71	n = 18	[JJ1] Ortho Clinical Diagnostics
256.6 ± 3.96	369.6 ± 7.16	105.6 ± 1.42	391.6 ± 5.29	85.3 ± 1.48	n = 15	[RO4] Roche cobas c311/c501/c502/c701/c702
258.1 ± 5.88	368.3 ± 5.98	104.7 ± 2.35	393.6 ± 7.07	85.1 ± 2.81	n = 5	[RO2] Roche Hitachi and Modular D/P
253.0 ± 8.06	360.1 ± 12.06	106.4 ± 3.38	382.7 ± 10.76	84.9 ± 2.30	n = 11	[BY1] Siemens ADVIA/ADVIA Centaur
256.0 ± 9.89	367.2 ± 12.09	106.4 ± 4.70	391.7 ± 10.96	84.5 ± 3.60	n = 49	[DA5] Siemens Dimension