

Summary of Participant Performance (Mean and Standard Deviation)

Glucose (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
-----	-----	-----	-----	-----	-----	-----
45.2 ± 2.39	178.8 ± 4.33	70.9 ± 2.51	283.6 ± 6.92	119.8 ± 3.74	n = 391	[---] All Methods & Instruments
<Instruments>						
43.3 ± 0.53	177.4 ± 3.00	69.8 ± 0.84	286.5 ± 3.61	119.1 ± 1.21	n = 11	[ABH] Abbott Architect
43.7 ± 1.17	176.1 ± 4.40	69.8 ± 2.30	279.7 ± 8.64	119.2 ± 3.36	n = 48	[OLC] Beckman Coulter AU Chemistry System
44.1 ± 3.32	179.5 ± 4.16	71.1 ± 3.37	280.3 ± 6.35	120.7 ± 3.38	n = 13	[BCS] Beckman Coulter CX
44.1 ± 1.76	177.3 ± 4.85	69.2 ± 2.71	281.8 ± 5.90	118.7 ± 2.78	n = 17	[BCX] Beckman Coulter LX-20
45.3 ± 2.34	176.6 ± 3.41	70.5 ± 2.35	281.5 ± 6.02	119.4 ± 3.26	n = 16	[BCG] Beckman Coulter UniCel DxC 600
44.9 ± 2.08	177.6 ± 4.22	70.8 ± 2.91	282.7 ± 7.40	119.4 ± 3.67	n = 24	[BCH] Beckman Coulter UniCel DxC 800
60.1 ± 2.35	198.8 ± 2.11	88.6 ± 3.44	298.3 ± 3.41	137.0 ± 3.36	n = 4	[HEB] HemoCue B-Glucose
68.8 ± 5.90	211.4 ± 1.02	102.1 ± 3.72	312.9 ± 2.86	151.2 ± 4.10	n = 3	[HEC] HemoCue Glucose 201
43.1 ± 0.60	181.7 ± 1.52	71.0 ± 0.97	281.1 ± 2.80	118.0 ± 0.91	n = 8	[IAA] i-STAT
45.0 ± 0.78	182.6 ± 2.53	69.9 ± 1.12	286.5 ± 5.12	116.1 ± 2.47	n = 15	[JJE] Ortho Vitros 250/350/950
44.1 ± 0.90	181.7 ± 2.79	68.5 ± 1.23	285.3 ± 4.63	114.3 ± 2.21	n = 28	[JJF] Ortho Vitros 5,1FS
45.0 ± 0.90	182.5 ± 4.53	69.3 ± 0.51	285.3 ± 7.74	114.1 ± 2.86	n = 3	[JJG] Ortho Vitros 5600
45.0 ± 1.40	178.7 ± 3.35	71.4 ± 1.42	284.5 ± 4.98	121.2 ± 2.87	n = 14	[ROC] Roche cobas c501
44.5 ± 1.02	177.6 ± 2.76	70.0 ± 0.98	282.5 ± 4.45	119.9 ± 1.53	n = 12	[ROT] Roche Cobas INTEGRA
44.2 ± 1.22	177.0 ± 3.08	70.4 ± 1.37	282.7 ± 6.19	120.0 ± 2.92	n = 39	[ROD] Roche MODULAR D/P
45.9 ± 1.27	183.8 ± 3.21	72.6 ± 1.37	292.8 ± 4.72	124.5 ± 2.25	n = 5	[BYA] Siemens ADVIA 1650
44.7 ± 0.97	179.7 ± 3.50	71.0 ± 1.68	283.9 ± 6.11	120.6 ± 2.97	n = 15	[BYE] Siemens ADVIA 1800
45.7 ± 1.37	183.0 ± 5.41	72.3 ± 2.26	290.7 ± 8.57	123.3 ± 3.16	n = 3	[BYB] Siemens ADVIA 2400
48.9 ± 1.49	180.2 ± 3.03	74.2 ± 1.07	285.1 ± 5.04	122.6 ± 2.01	n = 9	[DUE] Siemens Dimension EXL
48.4 ± 1.40	179.9 ± 3.64	73.5 ± 1.61	285.2 ± 5.87	122.6 ± 2.49	n = 50	[DUR] Siemens Dimension RxL
46.2 ± 1.45	176.2 ± 6.15	71.0 ± 1.69	278.4 ± 8.59	120.1 ± 3.63	n = 12	[DUT] Siemens Dimension Vista
48.2 ± 1.89	178.8 ± 2.65	73.0 ± 1.79	283.5 ± 3.76	121.7 ± 2.73	n = 22	[DUX] Siemens Dimension Xpand
<Reagents>						
43.3 ± 0.51	177.7 ± 3.07	69.8 ± 0.79	286.9 ± 3.62	119.2 ± 1.19	n = 12	[AB1] Abbott
44.5 ± 2.28	177.5 ± 3.95	70.3 ± 2.78	281.4 ± 6.41	119.3 ± 3.36	n = 67	[BC1] Beckman Coulter
43.7 ± 1.12	175.7 ± 4.18	69.6 ± 1.99	278.9 ± 7.91	118.8 ± 2.95	n = 45	[OL1] Beckman Coulter AU Series
47.5 ± 3.10	182.9 ± 5.25	72.9 ± 3.94	290.0 ± 7.94	121.9 ± 3.04	n = 5	[CR1] Carolina
62.9 ± 5.49	204.0 ± 7.20	94.0 ± 8.31	304.0 ± 8.77	142.8 ± 8.74	n = 7	[HE1] HemoCue
43.2 ± 0.73	181.5 ± 1.40	70.8 ± 1.00	281.7 ± 2.92	117.7 ± 0.97	n = 6	[IA1] i-STAT thermal cartridge
44.5 ± 0.98	182.1 ± 2.98	69.1 ± 1.39	285.9 ± 5.30	114.9 ± 2.61	n = 47	[JJ1] Ortho Clinical Diagnostics
45.0 ± 1.40	178.7 ± 3.35	71.4 ± 1.42	284.5 ± 4.98	121.2 ± 2.87	n = 14	[R04] Roche cobas c501
44.3 ± 1.26	177.2 ± 3.14	70.5 ± 1.44	283.2 ± 6.52	120.1 ± 2.86	n = 41	[R02] Roche Hitachi and Modular D/P
44.5 ± 1.02	177.6 ± 2.76	70.0 ± 0.98	282.5 ± 4.45	119.9 ± 1.53	n = 12	[R01] Roche Integra and MIRA
45.1 ± 1.22	180.7 ± 4.44	71.5 ± 1.99	286.5 ± 7.74	122.0 ± 3.50	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
48.1 ± 1.70	179.3 ± 3.88	73.2 ± 1.87	284.2 ± 5.85	122.1 ± 2.78	n = 93	[DA5] Siemens Dimension
47.7 ± 3.16	172.8 ± 8.59	71.6 ± 5.58	283.8 ± 5.00	116.7 ± 5.97	n = 3	[ZZZ] Reagent Not Listed

Summary of Participant Performance (Mean and Standard Deviation)

Urea Nitrogen (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
8.8 ± 0.77	12.5 ± 0.77	61.6 ± 2.63	32.2 ± 1.86	27.2 ± 1.46	n = 372	[---] All Methods & Instruments
<Instruments>						
9.0 ± 0.00	12.6 ± 0.55	61.4 ± 0.55	32.1 ± 0.49	27.5 ± 0.57	n = 10	[ABH] Abbott Architect
9.0 ± 0.00	12.7 ± 0.67	62.6 ± 1.77	32.8 ± 0.97	28.0 ± 0.93	n = 45	[OLC] Beckman Coulter AU Chemistry System
8.9 ± 0.92	12.6 ± 0.80	63.4 ± 1.37	33.1 ± 0.69	28.1 ± 0.62	n = 13	[BCS] Beckman Coulter CX
8.5 ± 1.32	11.8 ± 1.38	61.9 ± 2.82	31.4 ± 2.06	26.4 ± 1.53	n = 17	[BCX] Beckman Coulter LX-20
9.0 ± 0.00	13.0 ± 0.00	61.7 ± 1.33	32.8 ± 0.83	27.6 ± 0.64	n = 15	[BCG] Beckman Coulter UniCel DxC 600
8.1 ± 1.08	11.1 ± 0.62	60.1 ± 1.15	30.4 ± 1.30	25.7 ± 1.04	n = 25	[BCH] Beckman Coulter UniCel DxC 800
7.8 ± 0.41	12.0 ± 0.00	63.7 ± 5.04	33.0 ± 2.89	25.7 ± 1.70	n = 8	[IAA] i-STAT
8.0 ± 0.00	12.3 ± 0.51	56.7 ± 1.15	28.3 ± 0.59	24.8 ± 0.44	n = 15	[JJE] Ortho Vitros 250/350/950
7.5 ± 0.57	12.4 ± 0.55	56.8 ± 1.07	28.4 ± 0.74	24.6 ± 0.69	n = 28	[JJF] Ortho Vitros 5,1FS
7.7 ± 0.51	12.0 ± 0.00	56.8 ± 1.54	28.0 ± 0.90	24.3 ± 0.51	n = 3	[JJG] Ortho Vitros 5600
9.0 ± 0.00	12.4 ± 0.56	62.5 ± 1.97	32.6 ± 0.95	27.7 ± 0.74	n = 14	[ROC] Roche cobas c501
9.0 ± 0.00	12.1 ± 0.44	63.0 ± 2.36	32.3 ± 1.15	27.2 ± 1.16	n = 11	[ROT] Roche Cobas INTEGRA
9.0 ± 0.00	12.6 ± 0.59	61.2 ± 1.21	32.4 ± 0.87	27.4 ± 0.69	n = 37	[ROD] Roche MODULAR D/P
9.0 ± 0.00	13.0 ± 0.64	63.0 ± 0.00	33.0 ± 0.00	28.0 ± 0.00	n = 5	[BYA] Siemens ADVIA 1650
9.2 ± 0.44	13.2 ± 0.44	62.4 ± 1.08	32.9 ± 0.43	28.1 ± 0.55	n = 15	[BYE] Siemens ADVIA 1800
9.7 ± 0.51	13.7 ± 0.51	62.7 ± 0.51	33.0 ± 0.00	28.3 ± 0.51	n = 3	[BYB] Siemens ADVIA 2400
9.2 ± 1.02	12.9 ± 0.60	62.8 ± 1.37	33.2 ± 1.20	27.9 ± 0.85	n = 8	[DUE] Siemens Dimension EXL
8.9 ± 0.57	12.5 ± 0.64	62.6 ± 2.03	32.7 ± 1.15	27.6 ± 0.95	n = 51	[DUR] Siemens Dimension RxL
8.8 ± 0.41	12.4 ± 0.56	61.6 ± 1.71	32.6 ± 1.22	27.6 ± 1.01	n = 12	[DUT] Siemens Dimension Vista
8.9 ± 0.47	12.3 ± 0.54	62.2 ± 1.95	32.7 ± 0.74	27.7 ± 0.89	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
9.0 ± 0.00	12.7 ± 0.53	61.4 ± 0.60	32.2 ± 0.67	27.6 ± 0.57	n = 11	[AB1] Abbott
8.6 ± 1.01	12.0 ± 1.23	61.4 ± 2.14	31.6 ± 1.87	26.8 ± 1.50	n = 66	[BC1] Beckman Coulter
9.1 ± 0.37	12.7 ± 0.68	62.6 ± 1.80	32.8 ± 0.99	28.0 ± 0.93	n = 44	[OL1] Beckman Coulter AU Series
8.5 ± 0.57	12.8 ± 1.27	61.7 ± 1.58	32.5 ± 1.22	27.3 ± 0.90	n = 4	[CR1] Carolina
8.0 ± 0.00	12.0 ± 0.00	65.9 ± 1.80	34.2 ± 1.86	26.3 ± 0.97	n = 6	[IA1] i-STAT thermal cartridge
7.6 ± 0.56	12.3 ± 0.54	56.8 ± 1.12	28.3 ± 0.69	24.7 ± 0.60	n = 48	[JJ1] Ortho Clinical Diagnostics
9.0 ± 0.00	12.4 ± 0.56	62.5 ± 1.97	32.6 ± 0.95	27.7 ± 0.74	n = 14	[R04] Roche cobas c501
9.0 ± 0.00	12.6 ± 0.62	61.3 ± 1.27	32.5 ± 0.91	27.4 ± 0.70	n = 39	[R02] Roche Hitachi and Modular D/P
9.0 ± 0.00	12.1 ± 0.44	63.0 ± 2.36	32.3 ± 1.15	27.2 ± 1.16	n = 11	[R01] Roche Integra and MIRA
9.2 ± 0.51	13.3 ± 0.55	62.5 ± 1.08	33.0 ± 0.00	28.1 ± 0.53	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
8.9 ± 0.57	12.5 ± 0.63	62.4 ± 1.95	32.7 ± 1.12	27.6 ± 0.94	n = 92	[DA5] Siemens Dimension
9.3 ± 0.51	13.3 ± 0.51	63.5 ± 1.86	34.0 ± 0.90	28.0 ± 0.90	n = 3	[ZZZ] Reagent Not Listed

Summary of Participant Performance (Mean and Standard Deviation)

Creatinine (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
1.06 ± 0.13	2.40 ± 0.10	3.42 ± 0.16	1.77 ± 0.17	1.04 ± 0.13	n = 379	[---] All Methods & Instruments
1.07 ± 0.14	2.40 ± 0.09	3.43 ± 0.18	1.77 ± 0.18	1.04 ± 0.13	n = 139	[---] All IDMS Traceable Methods
1.05 ± 0.12	2.40 ± 0.10	3.41 ± 0.15	1.77 ± 0.17	1.03 ± 0.12	n = 235	[---] All Non-IDMS Traceable Methods
1.05 ± 0.13	2.39 ± 0.09	3.38 ± 0.11	1.76 ± 0.17	1.02 ± 0.12	n = 197	[-G-] Alkaline picrate/Jaffe
1.09 ± 0.14	2.38 ± 0.09	3.38 ± 0.12	1.79 ± 0.21	1.04 ± 0.15	n = 92	[-H-] Alkaline picrate/Jaffe - IDMS calibration
1.04 ± 0.09	2.49 ± 0.13	3.67 ± 0.19	1.79 ± 0.15	1.08 ± 0.12	n = 38	[-I-] Enzymatic
1.03 ± 0.13	2.42 ± 0.09	3.54 ± 0.23	1.74 ± 0.14	1.04 ± 0.11	n = 47	[-J-] Enzymatic - IDMS-traceable calibration
1.12 ± 0.12	2.47 ± 0.15	3.52 ± 0.22	1.87 ± 0.16	1.11 ± 0.20	n = 5	[-Z-] Other
<Instruments>						
1.32 ± 0.03	2.44 ± 0.08	3.47 ± 0.14	2.13 ± 0.15	1.12 ± 0.06	n = 10	[ABH] Abbott Architect
1.09 ± 0.03	2.35 ± 0.06	3.35 ± 0.08	1.76 ± 0.05	1.02 ± 0.05	n = 48	[OLC] Beckman Coulter AU Chemistry System
0.98 ± 0.12	2.37 ± 0.09	3.43 ± 0.12	1.65 ± 0.10	0.98 ± 0.07	n = 13	[BCS] Beckman Coulter CX
0.91 ± 0.06	2.37 ± 0.04	3.35 ± 0.08	1.63 ± 0.05	0.91 ± 0.04	n = 17	[BCX] Beckman Coulter LX-20
0.88 ± 0.08	2.33 ± 0.10	3.33 ± 0.10	1.50 ± 0.09	0.64 ± 0.07	n = 16	[BCG] Beckman Coulter UniCel DxC 600
0.91 ± 0.07	2.36 ± 0.05	3.30 ± 0.05	1.62 ± 0.07	0.90 ± 0.00	n = 25	[BCH] Beckman Coulter UniCel DxC 800
1.10 ± 0.00	2.76 ± 0.08	3.95 ± 0.07	1.99 ± 0.09	1.28 ± 0.07	n = 6	[IAA] i-STAT
1.08 ± 0.04	2.48 ± 0.04	3.67 ± 0.05	1.81 ± 0.04	1.10 ± 0.00	n = 15	[JJE] Ortho Vitros 250/350/950
1.07 ± 0.09	2.48 ± 0.06	3.73 ± 0.07	1.81 ± 0.06	1.08 ± 0.08	n = 28	[JJF] Ortho Vitros 5,1FS
1.17 ± 0.05	2.47 ± 0.05	3.70 ± 0.00	1.83 ± 0.05	1.17 ± 0.05	n = 3	[JJG] Ortho Vitros 5600
1.05 ± 0.12	2.38 ± 0.11	3.46 ± 0.11	1.64 ± 0.16	0.95 ± 0.17	n = 16	[ROC] Roche cobas c501
0.97 ± 0.11	2.32 ± 0.09	3.35 ± 0.09	1.63 ± 0.10	0.96 ± 0.06	n = 12	[ROT] Roche Cobas INTEGRA
1.09 ± 0.15	2.42 ± 0.08	3.39 ± 0.09	1.81 ± 0.20	1.08 ± 0.13	n = 37	[ROD] Roche MODULAR D/P
1.23 ± 0.08	2.43 ± 0.08	3.49 ± 0.16	2.09 ± 0.16	1.18 ± 0.09	n = 5	[BYA] Siemens ADVIA 1650
1.24 ± 0.08	2.43 ± 0.07	3.55 ± 0.12	2.15 ± 0.14	1.23 ± 0.07	n = 15	[BYE] Siemens ADVIA 1800
1.17 ± 0.10	2.32 ± 0.14	3.32 ± 0.06	5.36 ± 6.07	1.14 ± 0.14	n = 3	[BYB] Siemens ADVIA 2400
1.02 ± 0.04	2.42 ± 0.04	3.40 ± 0.00	1.80 ± 0.08	1.03 ± 0.05	n = 8	[DUE] Siemens Dimension EXL
1.08 ± 0.09	2.41 ± 0.09	3.39 ± 0.11	1.83 ± 0.10	1.06 ± 0.08	n = 51	[DUR] Siemens Dimension RxL
1.02 ± 0.11	2.44 ± 0.15	3.43 ± 0.16	1.78 ± 0.13	1.04 ± 0.10	n = 12	[DUT] Siemens Dimension Vista
1.07 ± 0.09	2.37 ± 0.08	3.36 ± 0.06	1.79 ± 0.12	1.03 ± 0.07	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
1.31 ± 0.08	2.45 ± 0.09	3.46 ± 0.13	2.11 ± 0.18	1.12 ± 0.09	n = 12	[AB1] Abbott
0.91 ± 0.07	2.36 ± 0.06	3.33 ± 0.08	1.60 ± 0.09	0.88 ± 0.12	n = 67	[BC1] Beckman Coulter
1.09 ± 0.03	2.36 ± 0.06	3.35 ± 0.08	1.76 ± 0.05	1.02 ± 0.04	n = 45	[OL1] Beckman Coulter AU Series
1.12 ± 0.08	2.40 ± 0.00	3.56 ± 0.11	1.72 ± 0.08	1.02 ± 0.08	n = 5	[CR1] Carolina
1.10 ± 0.00	2.78 ± 0.08	3.95 ± 0.08	2.00 ± 0.10	1.30 ± 0.06	n = 5	[IA1] i-STAT thermal cartridge
1.08 ± 0.08	2.48 ± 0.06	3.71 ± 0.07	1.82 ± 0.06	1.09 ± 0.07	n = 48	[JJ1] Ortho Clinical Diagnostics
1.05 ± 0.12	2.38 ± 0.11	3.46 ± 0.11	1.64 ± 0.16	0.95 ± 0.17	n = 16	[R04] Roche cobas c501
1.09 ± 0.15	2.42 ± 0.08	3.39 ± 0.10	1.80 ± 0.20	1.07 ± 0.13	n = 40	[R02] Roche Hitachi and Modular D/P
0.97 ± 0.11	2.32 ± 0.09	3.35 ± 0.09	1.63 ± 0.10	0.96 ± 0.06	n = 12	[R01] Roche Integra and MIRA
1.23 ± 0.09	2.43 ± 0.09	3.52 ± 0.15	2.14 ± 0.15	1.21 ± 0.08	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
1.06 ± 0.09	2.41 ± 0.10	3.39 ± 0.10	1.81 ± 0.11	1.05 ± 0.08	n = 89	[DA5] Siemens Dimension
1.07 ± 0.05	2.40 ± 0.00	3.40 ± 0.09	1.80 ± 0.09	1.10 ± 0.00	n = 3	[DA6] Siemens Dimension LOCI
1.03 ± 0.03	2.30 ± 0.06	3.22 ± 0.06	1.61 ± 0.07	0.93 ± 0.02	n = 3	[ZZZ] Reagent Not Listed

Summary of Participant Performance (Mean and Standard Deviation)

Glomerular filtration rate (mL/min/1.73 m²)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
62.4 ± 10.19	25.0 ± 1.65	16.6 ± 1.28	35.8 ± 4.72	64.0 ± 11.13	n = 265	[---] All Methods & Instruments
60.2 ± 9.90	24.5 ± 1.40	16.2 ± 1.20	35.0 ± 4.46	60.9 ± 9.67	n = 133	[-A-] IDMS-traceable MDRD Study Equation
64.3 ± 9.68	25.7 ± 1.50	17.0 ± 1.05	36.7 ± 4.67	67.8 ± 12.23	n = 119	[-B-] Original MDRD Study Equation (4-variable)
99.0 ± 37.96	39.1 ± 7.95	23.2 ± 4.89	47.6 ± 13.86	86.5 ± 31.01	n = 3	[-C-] Original MDRD Study Equation (6-variable)
92.5 ± 44.41	30.5 ± 8.19	21.4 ± 6.23	47.4 ± 11.79	109.9 ± 37.66	n = 3	[-D-] Cockcroft-Gault Equation
59.0 ± 2.28	23.0 ± 1.14	15.0 ± 1.14	33.0 ± 1.14	59.5 ± 0.57	n = 2	[-F-] CKD-EPI Equation
66.2 ± 7.32	23.8 ± 3.18	15.9 ± 2.15	36.2 ± 7.48	68.4 ± 11.35	n = 5	[-Z-] Other

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

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Method
62 (53-78)	25 (20-29)	16 (13-19)	35 (29-40)	64 (54-81)	IDMS-traceable MDRD Study Equation
68 (57-85)	26 (22-30)	17 (14-20)	37 (31-43)	69 (58-87)	Original MDRD Study Equation
61 (51-77)	27 (22-31)	19 (16-22)	37 (31-42)	62 (52-78)	Cockcroft-Gault Equation
63 (53-79)	24 (20-28)	15 (13-18)	34 (29-40)	65 (55-82)	CKD-EPI Equation

Laboratories were asked to report Estimated Glomerular Filtration Rate for samples C41-C45 for a 65-year-old African American woman weighing 75 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 +/- 15% of the target eGFR for eGFR ≤ 59 mL/min; +/- 25% of the target eGFR for eGFR > 80 mL/min; and a range of -15% to +25% of the target eGFR for eGFR = 60-80 mL/min.

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 for specimens C41 and C45 as > 60 mL/min/1.73 m². These data were removed from the calculations of mean and SD for those specimens since their inclusion would have skewed results. Participant results for specimens C41 and C45 reported as >60 mL/min/1.73 m² were considered acceptable performance.

Summary of Participant Performance (Mean and Standard Deviation)

Uric Acid (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
4.22 ± 0.19	2.76 ± 0.11	5.95 ± 0.23	9.06 ± 0.40	2.87 ± 0.16	n = 331	[---] All Methods & Instruments
<Instruments>						
4.54 ± 0.09	2.95 ± 0.08	6.34 ± 0.14	9.50 ± 0.12	3.09 ± 0.05	n = 10	[ABH] Abbott Architect
4.63 ± 0.10	2.87 ± 0.07	6.62 ± 0.14	9.84 ± 0.19	3.22 ± 0.08	n = 43	[OLC] Beckman Coulter AU Chemistry System
4.13 ± 0.12	2.81 ± 0.08	5.88 ± 0.15	8.67 ± 0.11	2.91 ± 0.08	n = 10	[BCS] Beckman Coulter CX
4.12 ± 0.08	2.87 ± 0.06	5.82 ± 0.09	8.67 ± 0.13	2.87 ± 0.06	n = 15	[BCX] Beckman Coulter LX-20
4.02 ± 0.08	2.80 ± 0.00	5.80 ± 0.00	8.70 ± 0.12	2.81 ± 0.05	n = 13	[BCG] Beckman Coulter UniCel DxC 600
4.03 ± 0.07	2.77 ± 0.06	5.79 ± 0.09	8.74 ± 0.13	2.82 ± 0.09	n = 23	[BCH] Beckman Coulter UniCel DxC 800
4.12 ± 0.09	2.69 ± 0.05	5.86 ± 0.12	8.99 ± 0.18	2.67 ± 0.06	n = 13	[JJE] Ortho Vitros 250/350/950
4.15 ± 0.07	2.70 ± 0.00	5.87 ± 0.11	9.02 ± 0.17	2.69 ± 0.05	n = 28	[JJF] Ortho Vitros 5,1FS
4.13 ± 0.05	2.73 ± 0.05	5.90 ± 0.09	9.07 ± 0.05	2.73 ± 0.05	n = 3	[JJG] Ortho Vitros 5600
4.28 ± 0.09	2.73 ± 0.06	6.12 ± 0.11	9.35 ± 0.09	2.90 ± 0.06	n = 13	[ROC] Roche cobas c501
4.19 ± 0.05	2.65 ± 0.07	6.00 ± 0.08	9.15 ± 0.14	2.82 ± 0.05	n = 10	[ROT] Roche Cobas INTEGRA
4.13 ± 0.07	2.63 ± 0.06	5.96 ± 0.10	9.14 ± 0.15	2.80 ± 0.06	n = 35	[ROD] Roche MODULAR D/P
4.24 ± 0.06	2.70 ± 0.00	6.02 ± 0.08	9.24 ± 0.06	2.84 ± 0.06	n = 5	[BYA] Siemens ADVIA 1650
4.22 ± 0.06	2.74 ± 0.06	6.03 ± 0.08	9.17 ± 0.15	2.80 ± 0.00	n = 15	[BYE] Siemens ADVIA 1800
4.20 ± 0.00	2.67 ± 0.05	5.97 ± 0.05	9.17 ± 0.05	2.80 ± 0.00	n = 3	[BYB] Siemens ADVIA 2400
4.28 ± 0.12	2.77 ± 0.09	5.95 ± 0.19	8.90 ± 0.25	2.85 ± 0.07	n = 8	[DUE] Siemens Dimension EXL
4.29 ± 0.15	2.80 ± 0.11	5.89 ± 0.13	8.92 ± 0.20	2.90 ± 0.10	n = 48	[DUR] Siemens Dimension RxL
4.17 ± 0.09	2.68 ± 0.04	5.83 ± 0.07	8.49 ± 0.12	2.90 ± 0.06	n = 12	[DUT] Siemens Dimension Vista
4.25 ± 0.09	2.80 ± 0.06	5.90 ± 0.12	8.93 ± 0.20	2.89 ± 0.10	n = 15	[DUX] Siemens Dimension Xpand
<Reagents>						
4.55 ± 0.12	2.96 ± 0.10	6.37 ± 0.16	9.51 ± 0.16	3.10 ± 0.07	n = 11	[AB1] Abbott
4.06 ± 0.09	2.81 ± 0.07	5.81 ± 0.09	8.71 ± 0.13	2.84 ± 0.08	n = 57	[BC1] Beckman Coulter
4.63 ± 0.10	2.87 ± 0.07	6.62 ± 0.14	9.84 ± 0.20	3.22 ± 0.08	n = 42	[OL1] Beckman Coulter AU Series
4.07 ± 0.16	2.73 ± 0.08	5.83 ± 0.16	8.77 ± 0.27	2.87 ± 0.09	n = 4	[CR1] Carolina
4.14 ± 0.08	2.69 ± 0.04	5.87 ± 0.11	9.02 ± 0.17	2.69 ± 0.05	n = 44	[JJ1] Ortho Clinical Diagnostics
4.28 ± 0.09	2.73 ± 0.06	6.12 ± 0.11	9.35 ± 0.09	2.90 ± 0.06	n = 13	[R04] Roche cobas c501
4.14 ± 0.07	2.63 ± 0.05	5.96 ± 0.10	9.14 ± 0.15	2.80 ± 0.06	n = 36	[R02] Roche Hitachi and Modular D/P
4.19 ± 0.05	2.65 ± 0.07	6.00 ± 0.08	9.15 ± 0.14	2.82 ± 0.05	n = 10	[R01] Roche Integra and MIRA
4.21 ± 0.05	2.71 ± 0.06	6.02 ± 0.08	9.18 ± 0.13	2.80 ± 0.00	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
4.26 ± 0.13	2.78 ± 0.10	5.88 ± 0.14	8.87 ± 0.26	2.89 ± 0.10	n = 83	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Bilirubin (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
0.62 ± 0.14	1.60 ± 0.14	0.39 ± 0.14	2.28 ± 0.23	3.90 ± 0.33	n = 359	[---] All Methods & Instruments
<Instruments>						
0.59 ± 0.09	1.69 ± 0.05	0.36 ± 0.08	2.31 ± 0.16	3.91 ± 0.31	n = 10	[ABH] Abbott Architect
0.71 ± 0.06	1.63 ± 0.07	0.50 ± 0.00	2.20 ± 0.12	3.77 ± 0.22	n = 46	[OLC] Beckman Coulter AU Chemistry System
0.82 ± 0.18	1.87 ± 0.24	0.61 ± 0.12	2.55 ± 0.24	4.17 ± 0.36	n = 10	[BCS] Beckman Coulter CX
0.87 ± 0.13	1.79 ± 0.12	0.64 ± 0.08	2.66 ± 0.14	4.14 ± 0.27	n = 17	[BCX] Beckman Coulter LX-20
0.79 ± 0.16	1.73 ± 0.21	0.54 ± 0.15	2.54 ± 0.17	4.03 ± 0.41	n = 15	[BCG] Beckman Coulter UniCel DxC 600
0.78 ± 0.14	1.77 ± 0.12	0.58 ± 0.16	2.54 ± 0.17	3.96 ± 0.46	n = 25	[BCH] Beckman Coulter UniCel DxC 800
0.63 ± 0.09	1.54 ± 0.08	0.35 ± 0.11	2.13 ± 0.13	3.94 ± 0.17	n = 14	[JJE] Ortho Vitros 250/350/950
0.56 ± 0.11	1.47 ± 0.10	0.24 ± 0.10	2.07 ± 0.11	3.78 ± 0.28	n = 28	[JJF] Ortho Vitros 5,1FS
0.50 ± 0.18	1.50 ± 0.09	0.20 ± 0.09	2.02 ± 0.24	3.45 ± 0.46	n = 3	[JJG] Ortho Vitros 5600
0.46 ± 0.07	1.47 ± 0.10	0.26 ± 0.07	2.01 ± 0.14	3.65 ± 0.29	n = 13	[ROC] Roche cobas c501
0.50 ± 0.00	1.43 ± 0.05	0.28 ± 0.04	2.03 ± 0.10	3.63 ± 0.11	n = 11	[ROT] Roche Cobas INTEGRA
0.50 ± 0.05	1.51 ± 0.08	0.30 ± 0.00	2.15 ± 0.11	3.77 ± 0.18	n = 37	[ROD] Roche MODULAR D/P
0.66 ± 0.06	1.70 ± 0.00	0.40 ± 0.00	2.42 ± 0.08	4.18 ± 0.16	n = 5	[BYA] Siemens ADVIA 1650
0.60 ± 0.07	1.64 ± 0.08	0.37 ± 0.06	2.35 ± 0.13	3.96 ± 0.36	n = 15	[BYE] Siemens ADVIA 1800
0.70 ± 0.00	1.70 ± 0.09	0.40 ± 0.00	2.46 ± 0.10	4.26 ± 0.10	n = 3	[BYB] Siemens ADVIA 2400
0.60 ± 0.00	1.59 ± 0.06	0.39 ± 0.06	2.30 ± 0.00	4.00 ± 0.00	n = 8	[DUE] Siemens Dimension EXL
0.59 ± 0.07	1.60 ± 0.07	0.37 ± 0.07	2.35 ± 0.11	4.04 ± 0.14	n = 51	[DUR] Siemens Dimension RxL
0.64 ± 0.09	1.60 ± 0.00	0.40 ± 0.00	2.33 ± 0.11	3.97 ± 0.21	n = 12	[DUT] Siemens Dimension Vista
0.60 ± 0.09	1.61 ± 0.07	0.39 ± 0.08	2.36 ± 0.11	4.02 ± 0.24	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
0.60 ± 0.07	1.69 ± 0.05	0.37 ± 0.08	2.31 ± 0.15	3.90 ± 0.29	n = 11	[AB1] Abbott
0.83 ± 0.15	1.77 ± 0.16	0.59 ± 0.15	2.58 ± 0.18	4.08 ± 0.38	n = 63	[BC1] Beckman Coulter
0.71 ± 0.06	1.63 ± 0.07	0.50 ± 0.00	2.20 ± 0.11	3.76 ± 0.22	n = 45	[OL1] Beckman Coulter AU Series
0.65 ± 0.06	1.83 ± 0.16	0.60 ± 0.00	2.40 ± 0.11	3.80 ± 0.24	n = 4	[CR1] Carolina
0.58 ± 0.12	1.50 ± 0.10	0.27 ± 0.12	2.09 ± 0.13	3.83 ± 0.32	n = 47	[JJ1] Ortho Clinical Diagnostics
0.46 ± 0.07	1.47 ± 0.10	0.26 ± 0.07	2.01 ± 0.14	3.65 ± 0.29	n = 13	[R04] Roche cobas c501
0.49 ± 0.06	1.50 ± 0.08	0.29 ± 0.04	2.14 ± 0.13	3.76 ± 0.20	n = 39	[R02] Roche Hitachi and Modular D/P
0.50 ± 0.00	1.43 ± 0.05	0.28 ± 0.04	2.03 ± 0.10	3.63 ± 0.11	n = 11	[R01] Roche Integra and MIRA
0.63 ± 0.07	1.65 ± 0.08	0.40 ± 0.00	2.38 ± 0.11	4.10 ± 0.21	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
0.60 ± 0.07	1.60 ± 0.07	0.38 ± 0.07	2.35 ± 0.11	4.02 ± 0.17	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Phosphorus (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
6.93 ± 0.24	5.20 ± 0.21	3.33 ± 0.15	3.83 ± 0.18	2.41 ± 0.13	n = 333	[---] All Methods & Instruments
<Instruments>						
6.79 ± 0.09	5.10 ± 0.00	3.30 ± 0.00	3.79 ± 0.06	2.39 ± 0.06	n = 8	[ABH] Abbott Architect
6.73 ± 0.16	5.01 ± 0.12	3.23 ± 0.09	3.70 ± 0.10	2.35 ± 0.08	n = 44	[OLC] Beckman Coulter AU Chemistry System
7.07 ± 0.46	5.12 ± 0.15	3.37 ± 0.12	3.95 ± 0.13	2.50 ± 0.13	n = 9	[BCS] Beckman Coulter CX
7.12 ± 0.14	5.40 ± 0.11	3.40 ± 0.08	3.92 ± 0.10	2.51 ± 0.08	n = 15	[BCX] Beckman Coulter LX-20
6.89 ± 0.23	5.25 ± 0.22	3.36 ± 0.12	3.83 ± 0.16	2.49 ± 0.12	n = 13	[BCG] Beckman Coulter UniCel DxC 600
7.16 ± 0.10	5.41 ± 0.06	3.38 ± 0.06	3.97 ± 0.07	2.50 ± 0.07	n = 24	[BCH] Beckman Coulter UniCel DxC 800
7.26 ± 0.13	5.48 ± 0.12	3.61 ± 0.11	4.20 ± 0.12	2.61 ± 0.11	n = 13	[JJE] Ortho Vitros 250/350/950
7.22 ± 0.19	5.47 ± 0.12	3.60 ± 0.12	4.18 ± 0.12	2.60 ± 0.13	n = 28	[JJF] Ortho Vitros 5,1FS
7.30 ± 0.09	5.46 ± 0.10	3.63 ± 0.14	4.15 ± 0.19	2.68 ± 0.24	n = 3	[JJG] Ortho Vitros 5600
6.87 ± 0.09	5.13 ± 0.09	3.32 ± 0.08	3.82 ± 0.10	2.40 ± 0.00	n = 15	[ROC] Roche cobas c501
6.88 ± 0.15	5.16 ± 0.11	3.30 ± 0.08	3.80 ± 0.11	2.35 ± 0.07	n = 10	[ROT] Roche Cobas INTEGRA
6.90 ± 0.14	5.16 ± 0.12	3.31 ± 0.09	3.82 ± 0.08	2.38 ± 0.09	n = 35	[ROD] Roche MODULAR D/P
6.98 ± 0.08	5.25 ± 0.08	3.40 ± 0.00	3.90 ± 0.00	2.40 ± 0.00	n = 5	[BYA] Siemens ADVIA 1650
7.00 ± 0.13	5.28 ± 0.12	3.39 ± 0.12	3.86 ± 0.11	2.43 ± 0.08	n = 15	[BYE] Siemens ADVIA 1800
6.70 ± 0.09	5.00 ± 0.00	3.20 ± 0.00	3.70 ± 0.00	2.30 ± 0.00	n = 3	[BYB] Siemens ADVIA 2400
6.92 ± 0.14	5.10 ± 0.05	3.30 ± 0.08	3.77 ± 0.07	2.34 ± 0.06	n = 7	[DUE] Siemens Dimension EXL
6.88 ± 0.15	5.15 ± 0.13	3.27 ± 0.11	3.74 ± 0.09	2.33 ± 0.10	n = 48	[DUR] Siemens Dimension RxL
6.78 ± 0.26	5.00 ± 0.00	3.17 ± 0.12	3.67 ± 0.18	2.21 ± 0.08	n = 12	[DUT] Siemens Dimension Vista
6.75 ± 0.16	5.09 ± 0.11	3.25 ± 0.07	3.73 ± 0.08	2.29 ± 0.08	n = 18	[DUX] Siemens Dimension Xpand
<Reagents>						
6.83 ± 0.13	5.10 ± 0.00	3.31 ± 0.06	3.80 ± 0.07	2.40 ± 0.07	n = 9	[AB1] Abbott
7.09 ± 0.21	5.37 ± 0.16	3.38 ± 0.08	3.92 ± 0.12	2.50 ± 0.09	n = 57	[BC1] Beckman Coulter
6.72 ± 0.15	5.01 ± 0.11	3.23 ± 0.08	3.70 ± 0.10	2.35 ± 0.09	n = 43	[OL1] Beckman Coulter AU Series
6.81 ± 0.30	5.22 ± 0.13	3.32 ± 0.15	4.00 ± 0.08	2.50 ± 0.08	n = 4	[CR1] Carolina
7.23 ± 0.16	5.47 ± 0.12	3.61 ± 0.12	4.19 ± 0.13	2.61 ± 0.13	n = 44	[JJ1] Ortho Clinical Diagnostics
6.87 ± 0.09	5.13 ± 0.09	3.32 ± 0.08	3.82 ± 0.10	2.40 ± 0.00	n = 15	[R04] Roche cobas c501
6.90 ± 0.14	5.16 ± 0.12	3.31 ± 0.09	3.82 ± 0.08	2.38 ± 0.08	n = 36	[R02] Roche Hitachi and Modular D/P
6.88 ± 0.15	5.16 ± 0.11	3.30 ± 0.08	3.80 ± 0.11	2.35 ± 0.07	n = 10	[R01] Roche Integra and MIRA
6.95 ± 0.16	5.22 ± 0.15	3.36 ± 0.12	3.83 ± 0.11	2.40 ± 0.08	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
6.85 ± 0.18	5.11 ± 0.13	3.26 ± 0.10	3.74 ± 0.10	2.31 ± 0.10	n = 85	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Calcium (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
10.13 ± 0.28	8.59 ± 0.25	12.05 ± 0.32	14.02 ± 0.41	7.84 ± 0.21	n = 367	[---] All Methods & Instruments
<Instruments>						
10.10 ± 0.14	8.73 ± 0.12	11.90 ± 0.15	13.96 ± 0.15	7.87 ± 0.11	n = 10	[ABH] Abbott Architect
10.11 ± 0.17	8.62 ± 0.15	11.96 ± 0.22	14.01 ± 0.37	7.77 ± 0.12	n = 45	[OLC] Beckman Coulter AU Chemistry System
9.94 ± 0.28	8.64 ± 0.29	11.82 ± 0.22	13.76 ± 0.43	7.85 ± 0.30	n = 13	[BCS] Beckman Coulter CX
9.96 ± 0.17	8.60 ± 0.16	11.94 ± 0.20	13.68 ± 0.28	7.85 ± 0.13	n = 17	[BCX] Beckman Coulter LX-20
9.84 ± 0.16	8.49 ± 0.12	11.81 ± 0.17	13.58 ± 0.15	7.79 ± 0.06	n = 16	[BCG] Beckman Coulter UniCel DxC 600
10.00 ± 0.17	8.61 ± 0.10	11.94 ± 0.14	13.68 ± 0.15	7.86 ± 0.09	n = 25	[BCH] Beckman Coulter UniCel DxC 800
10.35 ± 0.13	8.75 ± 0.11	12.23 ± 0.15	14.07 ± 0.34	8.05 ± 0.10	n = 15	[JJE] Ortho Vitros 250/350/950
10.38 ± 0.17	8.77 ± 0.13	12.24 ± 0.15	14.05 ± 0.26	8.01 ± 0.13	n = 28	[JJF] Ortho Vitros 5,1FS
10.34 ± 0.10	8.73 ± 0.14	12.24 ± 0.10	14.06 ± 0.10	7.96 ± 0.10	n = 3	[JJG] Ortho Vitros 5600
10.51 ± 0.30	8.78 ± 0.24	12.70 ± 0.28	14.68 ± 0.42	8.07 ± 0.18	n = 15	[ROC] Roche cobas c501
10.33 ± 0.07	8.40 ± 0.14	12.50 ± 0.11	14.50 ± 0.21	7.75 ± 0.10	n = 11	[ROT] Roche Cobas INTEGRA
10.29 ± 0.21	8.69 ± 0.18	12.18 ± 0.28	14.27 ± 0.34	7.92 ± 0.21	n = 37	[ROD] Roche MODULAR D/P
10.47 ± 0.32	8.70 ± 0.18	12.49 ± 0.29	14.50 ± 0.36	7.97 ± 0.23	n = 3	[HIJ] Roche/Hitachi 917
10.43 ± 0.18	8.88 ± 0.32	12.28 ± 0.38	14.36 ± 0.35	8.02 ± 0.30	n = 5	[BYA] Siemens ADVIA 1650
10.31 ± 0.13	8.80 ± 0.29	12.19 ± 0.21	14.21 ± 0.19	7.93 ± 0.24	n = 15	[BYE] Siemens ADVIA 1800
10.00 ± 0.27	8.73 ± 0.23	11.63 ± 0.14	13.84 ± 0.10	7.85 ± 0.19	n = 3	[BYB] Siemens ADVIA 2400
10.04 ± 0.17	8.34 ± 0.14	12.06 ± 0.14	14.17 ± 0.14	7.68 ± 0.12	n = 8	[DUE] Siemens Dimension EXL
9.96 ± 0.22	8.34 ± 0.21	11.96 ± 0.25	14.02 ± 0.29	7.67 ± 0.19	n = 51	[DUR] Siemens Dimension RxL
9.86 ± 0.22	8.42 ± 0.27	11.83 ± 0.32	13.87 ± 0.40	7.76 ± 0.15	n = 12	[DUT] Siemens Dimension Vista
9.98 ± 0.27	8.31 ± 0.23	12.00 ± 0.32	14.05 ± 0.44	7.72 ± 0.22	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
10.12 ± 0.15	8.75 ± 0.13	11.92 ± 0.14	13.96 ± 0.15	7.89 ± 0.13	n = 11	[AB1] Abbott
9.95 ± 0.19	8.57 ± 0.15	11.89 ± 0.19	13.67 ± 0.20	7.83 ± 0.12	n = 67	[BC1] Beckman Coulter
10.11 ± 0.17	8.62 ± 0.15	11.96 ± 0.23	14.01 ± 0.37	7.76 ± 0.12	n = 44	[OL1] Beckman Coulter AU Series
10.17 ± 0.38	8.68 ± 0.21	11.95 ± 0.28	13.83 ± 0.47	7.99 ± 0.27	n = 4	[CR1] Carolina
10.17 ± 0.14	8.84 ± 0.26	11.87 ± 0.05	13.83 ± 0.41	8.13 ± 0.14	n = 3	[GZ1] Genzyme
10.37 ± 0.16	8.76 ± 0.13	12.23 ± 0.14	14.06 ± 0.28	8.02 ± 0.13	n = 47	[JJ1] Ortho Clinical Diagnostics
10.55 ± 0.26	8.79 ± 0.25	12.71 ± 0.24	14.72 ± 0.35	8.07 ± 0.19	n = 14	[R04] Roche cobas c501
10.31 ± 0.23	8.70 ± 0.18	12.22 ± 0.29	14.30 ± 0.35	7.92 ± 0.20	n = 38	[R02] Roche Hitachi and Modular D/P
10.33 ± 0.07	8.40 ± 0.14	12.50 ± 0.11	14.50 ± 0.21	7.75 ± 0.10	n = 11	[R01] Roche Integra and MIRA
10.30 ± 0.24	8.81 ± 0.30	12.13 ± 0.33	14.19 ± 0.30	7.94 ± 0.24	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
9.96 ± 0.23	8.34 ± 0.21	11.96 ± 0.28	14.02 ± 0.34	7.70 ± 0.19	n = 91	[DA5] Siemens Dimension
10.10 ± 0.27	8.27 ± 0.14	11.55 ± 0.19	13.10 ± 0.64	7.63 ± 0.05	n = 3	[ZZZ] Reagent Not Listed

Summary of Participant Performance (Mean and Standard Deviation)

Magnesium (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
4.32 ± 0.16	1.20 ± 0.14	3.31 ± 0.13	2.46 ± 0.13	1.92 ± 0.11	n = 328	[---] All Methods & Instruments
<Instruments>						
4.26 ± 0.13	1.40 ± 0.00	3.26 ± 0.15	2.45 ± 0.11	1.86 ± 0.10	n = 7	[ABH] Abbott Architect
4.23 ± 0.11	1.20 ± 0.00	3.20 ± 0.09	2.39 ± 0.07	1.86 ± 0.07	n = 43	[OLC] Beckman Coulter AU Chemistry System
4.39 ± 0.31	1.38 ± 0.16	3.38 ± 0.22	2.58 ± 0.05	1.98 ± 0.05	n = 9	[BCS] Beckman Coulter CX
4.40 ± 0.15	1.31 ± 0.08	3.37 ± 0.12	2.51 ± 0.08	1.98 ± 0.05	n = 16	[BCX] Beckman Coulter LX-20
4.45 ± 0.14	1.30 ± 0.00	3.38 ± 0.13	2.55 ± 0.12	1.98 ± 0.06	n = 15	[BCG] Beckman Coulter UniCel DxC 600
4.40 ± 0.14	1.30 ± 0.00	3.40 ± 0.09	2.55 ± 0.07	1.98 ± 0.06	n = 24	[BCH] Beckman Coulter UniCel DxC 800
4.18 ± 0.10	1.06 ± 0.07	3.31 ± 0.09	2.45 ± 0.06	1.97 ± 0.05	n = 8	[JJE] Ortho Vitros 250/350/950
4.21 ± 0.08	1.08 ± 0.04	3.32 ± 0.07	2.45 ± 0.06	1.98 ± 0.05	n = 28	[JJF] Ortho Vitros 5,1FS
4.16 ± 0.13	1.23 ± 0.06	3.26 ± 0.14	2.40 ± 0.09	1.93 ± 0.10	n = 13	[ROC] Roche cobas c501
4.17 ± 0.15	1.25 ± 0.06	3.25 ± 0.08	2.42 ± 0.05	1.95 ± 0.11	n = 10	[ROT] Roche Cobas INTEGRA
4.36 ± 0.14	1.24 ± 0.06	3.34 ± 0.10	2.50 ± 0.07	1.93 ± 0.06	n = 33	[ROD] Roche MODULAR D/P
4.43 ± 0.14	1.30 ± 0.00	3.49 ± 0.13	2.70 ± 0.00	2.05 ± 0.08	n = 5	[BYA] Siemens ADVIA 1650
4.38 ± 0.10	1.31 ± 0.07	3.42 ± 0.08	2.69 ± 0.08	2.00 ± 0.08	n = 15	[BYE] Siemens ADVIA 1800
4.47 ± 0.14	1.45 ± 0.27	3.47 ± 0.14	2.77 ± 0.14	2.07 ± 0.14	n = 3	[BYB] Siemens ADVIA 2400
4.36 ± 0.11	1.02 ± 0.07	3.27 ± 0.11	2.37 ± 0.11	1.84 ± 0.09	n = 7	[DUE] Siemens Dimension EXL
4.33 ± 0.12	1.01 ± 0.06	3.24 ± 0.09	2.35 ± 0.08	1.82 ± 0.07	n = 51	[DUR] Siemens Dimension RxL
4.58 ± 0.11	1.33 ± 0.06	3.52 ± 0.08	2.63 ± 0.09	2.14 ± 0.06	n = 12	[DUT] Siemens Dimension Vista
4.36 ± 0.07	1.05 ± 0.07	3.22 ± 0.10	2.37 ± 0.09	1.84 ± 0.07	n = 18	[DUX] Siemens Dimension Xpand
<Reagents>						
4.24 ± 0.14	1.41 ± 0.08	3.24 ± 0.16	2.44 ± 0.11	1.85 ± 0.09	n = 8	[AB1] Abbott
4.42 ± 0.14	1.30 ± 0.00	3.39 ± 0.11	2.55 ± 0.08	1.98 ± 0.06	n = 61	[BC1] Beckman Coulter
4.23 ± 0.11	1.20 ± 0.00	3.20 ± 0.08	2.39 ± 0.06	1.87 ± 0.07	n = 42	[OL1] Beckman Coulter AU Series
4.07 ± 0.34	1.53 ± 0.14	3.16 ± 0.26	2.45 ± 0.19	1.87 ± 0.14	n = 3	[CR1] Carolina
4.21 ± 0.08	1.07 ± 0.05	3.32 ± 0.08	2.45 ± 0.06	1.97 ± 0.05	n = 38	[JJ1] Ortho Clinical Diagnostics
4.16 ± 0.13	1.23 ± 0.06	3.26 ± 0.14	2.40 ± 0.09	1.93 ± 0.10	n = 13	[R04] Roche cobas c501
4.35 ± 0.14	1.24 ± 0.06	3.33 ± 0.10	2.50 ± 0.07	1.93 ± 0.06	n = 35	[R02] Roche Hitachi and Modular D/P
4.21 ± 0.21	1.26 ± 0.06	3.26 ± 0.11	2.45 ± 0.08	1.96 ± 0.12	n = 10	[R01] Roche Integra and MIRA
4.38 ± 0.14	1.31 ± 0.08	3.43 ± 0.11	2.70 ± 0.09	2.02 ± 0.10	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
4.36 ± 0.14	1.03 ± 0.09	3.26 ± 0.13	2.38 ± 0.12	1.85 ± 0.11	n = 88	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Iron (µg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
112.8 ± 12.67	114.0 ± 5.76	99.8 ± 10.00	129.2 ± 18.87	82.8 ± 11.55	n = 263	[---] All Methods & Instruments
<Instruments>						
63.4 ± 2.64	105.5 ± 1.58	56.7 ± 2.02	42.4 ± 3.00	27.1 ± 2.47	n = 8	[ABH] Abbott Architect
114.8 ± 3.16	117.9 ± 3.24	101.1 ± 2.69	127.8 ± 4.46	82.8 ± 3.11	n = 40	[OLC] Beckman Coulter AU Chemistry System
102.2 ± 13.14	107.3 ± 5.12	89.3 ± 10.18	104.5 ± 29.27	73.2 ± 12.82	n = 4	[BCS] Beckman Coulter CX
92.2 ± 4.68	112.7 ± 4.19	84.0 ± 5.84	89.4 ± 5.08	62.9 ± 5.14	n = 13	[BCX] Beckman Coulter LX-20
92.5 ± 6.90	114.9 ± 5.43	85.8 ± 4.99	89.1 ± 5.09	64.0 ± 5.61	n = 8	[BCG] Beckman Coulter UniCel DxC 600
91.6 ± 3.53	113.1 ± 3.10	84.0 ± 3.73	86.4 ± 3.59	62.1 ± 3.58	n = 18	[BCH] Beckman Coulter UniCel DxC 800
133.2 ± 7.29	116.8 ± 6.72	115.5 ± 7.52	151.0 ± 10.61	94.2 ± 5.94	n = 5	[JJE] Ortho Vitros 250/350/950
134.8 ± 5.62	125.8 ± 5.82	117.8 ± 4.71	146.7 ± 5.77	95.3 ± 3.42	n = 25	[JJF] Ortho Vitros 5,1FS
131.9 ± 2.05	122.4 ± 1.02	116.2 ± 2.36	142.3 ± 2.26	92.8 ± 1.54	n = 3	[JJG] Ortho Vitros 5600
118.7 ± 4.47	116.8 ± 3.11	105.5 ± 3.15	140.6 ± 3.36	92.5 ± 2.21	n = 11	[ROC] Roche cobas c501
117.7 ± 1.83	115.0 ± 0.00	104.3 ± 1.91	140.9 ± 5.54	90.3 ± 3.23	n = 7	[ROT] Roche Cobas INTEGRA
116.7 ± 2.77	114.5 ± 2.85	102.9 ± 2.68	138.2 ± 2.92	89.1 ± 2.36	n = 32	[ROD] Roche MODULAR D/P
116.0 ± 0.90	114.4 ± 1.02	102.6 ± 2.56	138.0 ± 0.00	88.4 ± 1.02	n = 3	[HIJ] Roche/Hitachi 917
117.1 ± 1.83	112.5 ± 1.61	103.7 ± 1.38	139.2 ± 2.43	89.2 ± 0.80	n = 5	[BYA] Siemens ADVIA 1650
117.2 ± 3.59	113.0 ± 2.88	103.7 ± 2.72	139.2 ± 2.36	90.0 ± 2.29	n = 15	[BYE] Siemens ADVIA 1800
113.2 ± 1.54	108.7 ± 2.26	99.5 ± 1.86	134.2 ± 2.36	85.5 ± 1.86	n = 3	[BYB] Siemens ADVIA 2400
105.6 ± 1.69	111.3 ± 1.38	92.8 ± 0.41	116.3 ± 2.04	73.1 ± 2.69	n = 5	[DUE] Siemens Dimension EXL
108.5 ± 3.74	109.4 ± 2.30	96.3 ± 2.95	124.3 ± 9.55	76.7 ± 4.91	n = 34	[DUR] Siemens Dimension RxL
106.9 ± 2.16	111.3 ± 1.23	94.8 ± 2.21	117.5 ± 2.32	73.2 ± 2.59	n = 11	[DUT] Siemens Dimension Vista
108.9 ± 2.69	109.1 ± 2.05	96.0 ± 1.91	124.5 ± 7.40	76.9 ± 4.26	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
63.4 ± 2.63	105.2 ± 1.18	56.7 ± 2.02	42.5 ± 2.98	27.1 ± 2.45	n = 7	[AB2] Abbott-Iron/7D68
92.1 ± 4.88	113.0 ± 4.12	84.2 ± 4.61	87.6 ± 4.88	62.6 ± 4.44	n = 40	[BC1] Beckman Coulter
115.0 ± 3.13	118.5 ± 2.92	101.3 ± 2.86	127.5 ± 4.87	82.5 ± 3.21	n = 32	[OL1] Beckman Coulter AU Series
116.7 ± 7.58	109.4 ± 6.23	100.3 ± 4.96	134.0 ± 7.21	86.5 ± 4.53	n = 3	[CR1] Carolina
114.3 ± 7.67	116.5 ± 7.22	100.7 ± 5.86	129.7 ± 7.58	85.0 ± 4.60	n = 3	[DG1] Diagnostic Chemicals Ltd - Endpoint
114.0 ± 2.32	116.2 ± 1.89	100.2 ± 1.22	130.2 ± 2.16	84.1 ± 1.33	n = 6	[GZ1] Genzyme
134.4 ± 5.57	124.3 ± 6.31	117.5 ± 4.56	146.8 ± 6.72	95.1 ± 3.40	n = 33	[JJ1] Ortho Clinical Diagnostics
118.7 ± 4.47	116.8 ± 3.11	105.5 ± 3.15	140.6 ± 3.36	92.5 ± 2.21	n = 11	[R04] Roche cobas c501
116.7 ± 2.47	114.6 ± 2.61	103.0 ± 2.64	138.2 ± 2.74	89.1 ± 2.19	n = 34	[R02] Roche Hitachi and Modular D/P
117.7 ± 1.83	115.0 ± 0.00	104.3 ± 1.91	140.9 ± 5.54	90.3 ± 3.23	n = 7	[R01] Roche Integra and MIRA
116.0 ± 3.02	112.0 ± 2.73	102.8 ± 2.73	138.3 ± 3.07	89.0 ± 2.61	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
107.8 ± 3.20	110.1 ± 2.28	95.7 ± 2.71	121.5 ± 8.30	75.5 ± 4.47	n = 53	[DA5] Siemens Dimension
74.8 ± 54.18	75.0 ± 53.91	65.8 ± 47.79	73.1 ± 61.87	51.1 ± 39.51	n = 3	[ZZZ] Reagent Not Listed

Summary of Participant Performance (Mean and Standard Deviation)

Sodium (mmol/L)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
164.7 ± 2.87	131.7 ± 1.76	126.9 ± 1.71	148.7 ± 2.43	137.6 ± 1.61	n = 374	[---] All Methods & Instruments
<Instruments>						
165.6 ± 1.56	131.1 ± 0.92	126.3 ± 1.19	148.7 ± 0.96	137.3 ± 0.94	n = 10	[ABH] Abbott Architect
163.8 ± 2.03	131.0 ± 1.47	126.7 ± 1.05	148.3 ± 1.03	137.7 ± 1.24	n = 46	[OLC] Beckman Coulter AU Chemistry System
163.6 ± 1.61	131.2 ± 0.95	126.3 ± 1.95	147.6 ± 1.86	137.3 ± 1.30	n = 13	[BCS] Beckman Coulter CX
163.8 ± 1.80	131.7 ± 1.30	126.7 ± 1.63	148.0 ± 1.26	136.9 ± 0.89	n = 17	[BCX] Beckman Coulter LX-20
162.5 ± 0.81	130.6 ± 1.06	126.1 ± 1.07	147.7 ± 1.13	136.7 ± 0.90	n = 16	[BCG] Beckman Coulter UniCel DxC 600
164.0 ± 1.30	131.3 ± 1.33	126.6 ± 1.28	148.9 ± 0.82	137.2 ± 1.35	n = 25	[BCH] Beckman Coulter UniCel DxC 800
160.7 ± 0.85	131.3 ± 0.51	123.0 ± 0.00	144.1 ± 0.60	134.3 ± 0.51	n = 9	[IAA] i-STAT
169.4 ± 1.98	134.7 ± 2.17	128.7 ± 1.75	154.6 ± 1.97	138.8 ± 2.10	n = 15	[JJE] Ortho Vitros 250/350/950
170.1 ± 1.57	134.3 ± 1.30	129.0 ± 1.25	154.8 ± 1.40	138.6 ± 1.22	n = 28	[JJF] Ortho Vitros 5,1FS
168.7 ± 1.37	133.7 ± 1.37	127.7 ± 1.37	153.7 ± 1.37	137.3 ± 1.37	n = 3	[JJG] Ortho Vitros 5600
164.4 ± 1.55	130.8 ± 1.30	125.5 ± 1.27	148.4 ± 1.32	137.1 ± 1.29	n = 14	[ROC] Roche cobas c501
164.4 ± 1.31	130.3 ± 1.42	125.5 ± 1.08	147.6 ± 1.16	136.0 ± 0.00	n = 10	[ROT] Roche Cobas INTEGRA
166.3 ± 1.33	131.7 ± 1.15	126.2 ± 1.15	148.9 ± 1.39	137.6 ± 1.39	n = 36	[ROD] Roche MODULAR D/P
167.5 ± 2.20	133.0 ± 0.64	128.6 ± 1.09	150.4 ± 1.37	139.6 ± 1.09	n = 5	[BYA] Siemens ADVIA 1650
166.1 ± 1.39	133.3 ± 0.97	128.4 ± 0.73	150.0 ± 0.96	139.1 ± 0.93	n = 15	[BYE] Siemens ADVIA 1800
164.6 ± 1.02	132.0 ± 0.90	127.3 ± 0.51	149.3 ± 0.51	138.0 ± 0.00	n = 3	[BYB] Siemens ADVIA 2400
164.7 ± 1.38	132.0 ± 0.75	127.7 ± 0.90	148.8 ± 1.45	138.4 ± 1.06	n = 8	[DUE] Siemens Dimension EXL
162.4 ± 1.82	131.1 ± 1.69	126.7 ± 1.37	147.4 ± 1.78	137.6 ± 1.61	n = 51	[DUR] Siemens Dimension RxL
162.3 ± 1.96	129.1 ± 1.34	125.6 ± 0.93	144.6 ± 1.22	136.8 ± 1.59	n = 12	[DUT] Siemens Dimension Vista
165.1 ± 1.42	132.4 ± 1.31	128.3 ± 1.28	148.9 ± 1.23	139.1 ± 0.85	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
165.7 ± 1.55	131.3 ± 1.03	126.3 ± 1.16	148.9 ± 1.13	137.4 ± 1.05	n = 11	[AB1] Abbott
163.4 ± 1.45	131.1 ± 1.25	126.4 ± 1.36	148.2 ± 1.37	137.0 ± 1.17	n = 67	[BC1] Beckman Coulter
163.9 ± 1.99	131.1 ± 1.39	126.8 ± 1.00	148.3 ± 0.95	137.8 ± 1.18	n = 45	[OL1] Beckman Coulter AU Series
159.0 ± 16.82	132.0 ± 1.65	127.3 ± 1.51	148.8 ± 2.04	138.3 ± 2.26	n = 4	[CR1] Carolina
161.0 ± 0.82	131.4 ± 0.56	122.8 ± 0.47	144.2 ± 0.73	134.4 ± 0.56	n = 7	[IA1] i-STAT thermal cartridge
164.7 ± 1.37	130.7 ± 0.51	126.3 ± 0.51	150.3 ± 0.51	137.0 ± 0.00	n = 3	[IL1] Instrumentation Lab
169.8 ± 1.81	134.3 ± 1.60	128.8 ± 1.48	154.6 ± 1.49	138.6 ± 1.55	n = 47	[JJ1] Ortho Clinical Diagnostics
164.4 ± 1.55	130.8 ± 1.30	125.5 ± 1.27	148.4 ± 1.32	137.1 ± 1.29	n = 14	[R04] Roche cobas c501
166.2 ± 1.40	131.6 ± 1.14	126.3 ± 1.14	148.9 ± 1.36	137.5 ± 1.37	n = 37	[R02] Roche Hitachi and Modular D/P
164.4 ± 2.04	130.5 ± 1.77	125.6 ± 1.36	147.6 ± 1.17	136.3 ± 0.98	n = 11	[R01] Roche Integra and MIRA
166.2 ± 1.58	133.0 ± 1.00	128.3 ± 0.96	149.9 ± 0.95	139.0 ± 1.05	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
163.3 ± 2.23	131.3 ± 1.76	127.1 ± 1.52	147.7 ± 2.01	138.0 ± 1.63	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Potassium (mmol/L)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
6.18 ± 0.12	3.09 ± 0.09	2.71 ± 0.10	5.11 ± 0.12	3.74 ± 0.09	n = 375	[---] All Methods & Instruments
<Instruments>						
6.14 ± 0.11	3.09 ± 0.06	2.72 ± 0.09	5.10 ± 0.07	3.72 ± 0.09	n = 10	[ABH] Abbott Architect
6.14 ± 0.09	3.12 ± 0.05	2.78 ± 0.05	5.10 ± 0.05	3.80 ± 0.00	n = 47	[OLC] Beckman Coulter AU Chemistry System
6.17 ± 0.14	3.06 ± 0.15	2.64 ± 0.09	5.09 ± 0.09	3.69 ± 0.10	n = 13	[BCS] Beckman Coulter CX
6.21 ± 0.07	3.05 ± 0.06	2.68 ± 0.06	5.10 ± 0.08	3.70 ± 0.00	n = 17	[BCX] Beckman Coulter LX-20
6.18 ± 0.09	3.03 ± 0.05	2.63 ± 0.05	5.11 ± 0.06	3.70 ± 0.00	n = 16	[BCG] Beckman Coulter UniCel DxC 600
6.21 ± 0.08	3.03 ± 0.05	2.64 ± 0.06	5.11 ± 0.07	3.71 ± 0.05	n = 25	[BCH] Beckman Coulter UniCel DxC 800
6.00 ± 0.00	3.07 ± 0.05	2.60 ± 0.00	4.94 ± 0.07	3.70 ± 0.00	n = 9	[IAA] i-STAT
6.36 ± 0.07	3.28 ± 0.07	2.84 ± 0.06	5.38 ± 0.08	3.88 ± 0.08	n = 15	[JJE] Ortho Vitros 250/350/950
6.36 ± 0.08	3.25 ± 0.06	2.84 ± 0.06	5.37 ± 0.07	3.85 ± 0.06	n = 28	[JJF] Ortho Vitros 5,1FS
6.33 ± 0.05	3.23 ± 0.05	2.80 ± 0.00	5.33 ± 0.05	3.80 ± 0.00	n = 3	[JJG] Ortho Vitros 5600
6.03 ± 0.07	3.00 ± 0.05	2.60 ± 0.00	5.02 ± 0.07	3.64 ± 0.07	n = 13	[ROC] Roche cobas c501
6.20 ± 0.08	3.10 ± 0.00	2.70 ± 0.00	5.12 ± 0.05	3.75 ± 0.06	n = 10	[ROT] Roche Cobas INTEGRA
6.11 ± 0.07	3.03 ± 0.07	2.65 ± 0.09	5.03 ± 0.06	3.65 ± 0.09	n = 36	[ROD] Roche MODULAR D/P
6.25 ± 0.08	3.10 ± 0.06	2.74 ± 0.06	5.22 ± 0.08	3.80 ± 0.06	n = 5	[BYA] Siemens ADVIA 1650
6.24 ± 0.07	3.18 ± 0.04	2.80 ± 0.00	5.21 ± 0.05	3.83 ± 0.05	n = 15	[BYE] Siemens ADVIA 1800
6.13 ± 0.05	3.10 ± 0.00	2.80 ± 0.00	5.13 ± 0.05	3.80 ± 0.00	n = 3	[BYB] Siemens ADVIA 2400
6.18 ± 0.04	3.08 ± 0.04	2.70 ± 0.00	5.12 ± 0.04	3.73 ± 0.05	n = 8	[DUE] Siemens Dimension EXL
6.14 ± 0.07	3.05 ± 0.06	2.70 ± 0.00	5.07 ± 0.07	3.70 ± 0.00	n = 51	[DUR] Siemens Dimension RxL
6.13 ± 0.09	3.10 ± 0.00	2.77 ± 0.05	5.06 ± 0.08	3.79 ± 0.05	n = 12	[DUT] Siemens Dimension Vista
6.21 ± 0.07	3.06 ± 0.06	2.70 ± 0.00	5.13 ± 0.05	3.72 ± 0.05	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
6.15 ± 0.10	3.10 ± 0.07	2.73 ± 0.09	5.11 ± 0.08	3.73 ± 0.09	n = 11	[AB1] Abbott
6.20 ± 0.09	3.03 ± 0.06	2.65 ± 0.07	5.10 ± 0.07	3.70 ± 0.00	n = 67	[BC1] Beckman Coulter
6.14 ± 0.09	3.12 ± 0.05	2.78 ± 0.05	5.10 ± 0.05	3.80 ± 0.00	n = 46	[OL1] Beckman Coulter AU Series
6.35 ± 0.28	3.20 ± 0.17	2.76 ± 0.16	5.18 ± 0.13	3.78 ± 0.13	n = 4	[CR1] Carolina
6.00 ± 0.00	3.08 ± 0.05	2.60 ± 0.00	4.92 ± 0.07	3.68 ± 0.05	n = 7	[IA1] i-STAT thermal cartridge
6.00 ± 0.00	3.03 ± 0.05	2.60 ± 0.00	5.00 ± 0.00	3.60 ± 0.00	n = 3	[IL1] Instrumentation Lab
6.36 ± 0.07	3.26 ± 0.06	2.83 ± 0.06	5.37 ± 0.08	3.86 ± 0.07	n = 47	[JJ1] Ortho Clinical Diagnostics
6.03 ± 0.07	3.00 ± 0.05	2.60 ± 0.00	5.02 ± 0.07	3.64 ± 0.07	n = 13	[R04] Roche cobas c501
6.11 ± 0.08	3.03 ± 0.07	2.65 ± 0.09	5.02 ± 0.06	3.65 ± 0.09	n = 37	[R02] Roche Hitachi and Modular D/P
6.20 ± 0.11	3.10 ± 0.00	2.71 ± 0.05	5.12 ± 0.06	3.75 ± 0.08	n = 12	[R01] Roche Integra and MIRA
6.22 ± 0.08	3.15 ± 0.06	2.80 ± 0.00	5.20 ± 0.06	3.81 ± 0.05	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
6.15 ± 0.08	3.06 ± 0.06	2.70 ± 0.00	5.09 ± 0.07	3.72 ± 0.05	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Chloride (mmol/L)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
125.7 ± 2.33	91.4 ± 1.86	86.0 ± 2.14	104.1 ± 2.29	97.4 ± 1.91	n = 369	[---] All Methods & Instruments
<Instruments>						
125.8 ± 1.19	92.6 ± 0.81	86.6 ± 0.66	103.8 ± 0.61	97.7 ± 0.67	n = 10	[ABH] Abbott Architect
124.3 ± 1.51	91.2 ± 0.96	85.5 ± 1.08	103.0 ± 1.18	96.9 ± 1.03	n = 45	[OLC] Beckman Coulter AU Chemistry System
126.8 ± 2.44	94.9 ± 1.68	88.2 ± 1.98	105.6 ± 1.97	99.5 ± 1.76	n = 13	[BCS] Beckman Coulter CX
126.9 ± 1.49	92.9 ± 1.17	86.8 ± 1.56	104.8 ± 1.27	98.2 ± 1.15	n = 17	[BCX] Beckman Coulter LX-20
126.6 ± 1.21	92.9 ± 1.26	87.1 ± 1.01	105.2 ± 1.17	98.3 ± 1.06	n = 16	[BCG] Beckman Coulter UniCel DxC 600
126.7 ± 1.58	93.4 ± 1.39	87.5 ± 1.40	105.1 ± 1.40	98.7 ± 1.37	n = 25	[BCH] Beckman Coulter UniCel DxC 800
132.6 ± 2.12	92.6 ± 0.72	90.9 ± 1.95	113.2 ± 1.31	99.2 ± 1.02	n = 8	[IAA] i-STAT
127.6 ± 2.26	92.4 ± 1.62	87.1 ± 1.60	106.0 ± 2.10	98.8 ± 2.12	n = 15	[JJE] Ortho Vitros 250/350/950
128.5 ± 1.55	92.6 ± 1.11	87.2 ± 1.01	106.4 ± 1.45	98.6 ± 1.22	n = 28	[JJF] Ortho Vitros 5,1FS
127.7 ± 0.51	92.4 ± 1.02	87.7 ± 0.51	105.6 ± 1.02	98.7 ± 0.51	n = 3	[JJG] Ortho Vitros 5600
122.2 ± 1.07	88.4 ± 0.94	81.2 ± 1.26	99.8 ± 0.79	93.1 ± 1.12	n = 14	[ROC] Roche cobas c501
126.4 ± 1.45	90.0 ± 0.00	85.8 ± 1.05	104.6 ± 1.22	97.5 ± 0.69	n = 10	[ROT] Roche Cobas INTEGRA
124.5 ± 1.23	89.9 ± 1.10	82.7 ± 0.78	100.8 ± 1.16	94.5 ± 0.91	n = 36	[ROD] Roche MODULAR D/P
124.3 ± 1.99	91.1 ± 1.27	84.6 ± 1.09	102.9 ± 1.27	96.6 ± 1.09	n = 5	[BYA] Siemens ADVIA 1650
125.9 ± 0.94	91.8 ± 0.80	85.4 ± 0.65	103.6 ± 0.66	96.4 ± 1.08	n = 15	[BYE] Siemens ADVIA 1800
125.0 ± 0.90	91.0 ± 0.90	84.4 ± 1.02	102.3 ± 1.37	95.3 ± 1.37	n = 3	[BYB] Siemens ADVIA 2400
124.7 ± 0.87	90.8 ± 0.41	87.0 ± 0.00	104.5 ± 0.90	97.6 ± 0.68	n = 8	[DUE] Siemens Dimension EXL
125.2 ± 2.06	90.1 ± 1.55	85.8 ± 1.62	104.3 ± 1.82	97.2 ± 1.55	n = 50	[DUR] Siemens Dimension RxL
125.4 ± 1.77	90.7 ± 1.16	84.6 ± 0.87	104.2 ± 1.23	97.1 ± 1.02	n = 13	[DUT] Siemens Dimension Vista
124.5 ± 1.45	90.7 ± 1.05	87.2 ± 1.22	104.5 ± 1.13	97.5 ± 0.92	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
126.0 ± 1.33	92.7 ± 0.76	86.7 ± 0.76	103.9 ± 0.70	97.8 ± 0.76	n = 11	[AB1] Abbott
126.8 ± 1.58	93.4 ± 1.51	87.4 ± 1.51	105.1 ± 1.36	98.6 ± 1.39	n = 67	[BC1] Beckman Coulter
124.2 ± 1.53	91.3 ± 0.93	85.5 ± 1.04	102.9 ± 1.18	96.8 ± 1.02	n = 44	[OL1] Beckman Coulter AU Series
125.5 ± 1.23	93.0 ± 1.65	86.5 ± 1.23	105.7 ± 1.58	99.0 ± 1.14	n = 4	[CR1] Carolina
132.5 ± 2.73	92.3 ± 0.72	91.6 ± 0.79	113.7 ± 1.21	99.5 ± 1.02	n = 6	[IA1] i-STAT thermal cartridge
128.2 ± 1.78	92.6 ± 1.24	87.2 ± 1.18	106.3 ± 1.72	98.7 ± 1.42	n = 47	[JJ1] Ortho Clinical Diagnostics
122.2 ± 1.07	88.4 ± 0.94	81.2 ± 1.26	99.8 ± 0.79	93.1 ± 1.12	n = 14	[R04] Roche cobas c501
124.5 ± 1.25	89.9 ± 1.10	82.7 ± 0.77	100.8 ± 1.14	94.4 ± 0.90	n = 37	[R02] Roche Hitachi and Modular D/P
126.6 ± 1.62	90.0 ± 0.00	85.8 ± 0.99	104.8 ± 1.37	97.5 ± 0.67	n = 11	[R01] Roche Integra and MIRA
125.6 ± 1.24	91.5 ± 1.00	85.1 ± 0.98	103.3 ± 1.14	96.3 ± 1.20	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
125.0 ± 1.80	90.5 ± 1.30	86.1 ± 1.60	104.4 ± 1.50	97.3 ± 1.26	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Albumin (g/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
4.25 ± 0.19	4.95 ± 0.15	3.83 ± 0.17	5.14 ± 0.23	3.27 ± 0.17	n = 358	[---] All Methods & Instruments
<Instruments>						
3.98 ± 0.18	4.70 ± 0.10	3.56 ± 0.10	4.76 ± 0.13	3.05 ± 0.12	n = 10	[ABH] Abbott Architect
4.28 ± 0.11	4.97 ± 0.11	3.85 ± 0.09	5.11 ± 0.12	3.32 ± 0.10	n = 48	[OLC] Beckman Coulter AU Chemistry System
4.01 ± 0.06	4.81 ± 0.05	3.60 ± 0.00	4.98 ± 0.07	3.11 ± 0.06	n = 10	[BCS] Beckman Coulter CX
4.00 ± 0.06	4.81 ± 0.07	3.62 ± 0.06	4.94 ± 0.09	3.11 ± 0.06	n = 17	[BCX] Beckman Coulter LX-20
4.00 ± 0.07	4.78 ± 0.05	3.59 ± 0.05	4.89 ± 0.08	3.08 ± 0.07	n = 15	[BCG] Beckman Coulter UniCel DxC 600
4.06 ± 0.06	4.81 ± 0.07	3.67 ± 0.06	5.01 ± 0.06	3.12 ± 0.05	n = 25	[BCH] Beckman Coulter UniCel DxC 800
4.14 ± 0.10	5.02 ± 0.12	3.76 ± 0.08	5.08 ± 0.11	3.08 ± 0.10	n = 14	[JJE] Ortho Vitros 250/350/950
4.11 ± 0.15	5.01 ± 0.14	3.70 ± 0.11	4.99 ± 0.14	3.00 ± 0.09	n = 27	[JJF] Ortho Vitros 5,1FS
4.03 ± 0.23	4.93 ± 0.14	3.73 ± 0.23	4.98 ± 0.24	2.98 ± 0.15	n = 3	[JJG] Ortho Vitros 5600
4.46 ± 0.10	5.05 ± 0.11	4.02 ± 0.10	5.31 ± 0.11	3.47 ± 0.12	n = 13	[ROC] Roche cobas c501
4.23 ± 0.09	4.79 ± 0.08	3.81 ± 0.09	5.00 ± 0.00	3.31 ± 0.05	n = 10	[ROT] Roche Cobas INTEGRA
4.42 ± 0.12	5.00 ± 0.11	3.96 ± 0.08	5.21 ± 0.12	3.42 ± 0.08	n = 37	[ROD] Roche MODULAR D/P
4.30 ± 0.06	4.95 ± 0.11	3.85 ± 0.08	5.05 ± 0.11	3.30 ± 0.00	n = 5	[BYA] Siemens ADVIA 1650
4.25 ± 0.07	4.90 ± 0.07	3.79 ± 0.06	4.98 ± 0.08	3.28 ± 0.05	n = 15	[BYE] Siemens ADVIA 1800
4.23 ± 0.05	4.90 ± 0.09	3.77 ± 0.05	5.03 ± 0.05	3.23 ± 0.05	n = 3	[BYB] Siemens ADVIA 2400
4.40 ± 0.08	5.07 ± 0.09	3.96 ± 0.07	5.45 ± 0.12	3.34 ± 0.07	n = 8	[DUE] Siemens Dimension EXL
4.38 ± 0.10	5.06 ± 0.10	3.95 ± 0.08	5.45 ± 0.10	3.36 ± 0.07	n = 51	[DUR] Siemens Dimension RxL
4.33 ± 0.06	4.93 ± 0.12	3.88 ± 0.10	5.28 ± 0.13	3.31 ± 0.08	n = 12	[DUT] Siemens Dimension Vista
4.36 ± 0.10	5.04 ± 0.08	3.92 ± 0.08	5.42 ± 0.10	3.34 ± 0.08	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
4.01 ± 0.21	4.73 ± 0.14	3.58 ± 0.14	4.79 ± 0.18	3.07 ± 0.16	n = 11	[AB1] Abbott
4.02 ± 0.07	4.80 ± 0.07	3.63 ± 0.06	4.96 ± 0.09	3.11 ± 0.06	n = 61	[BC1] Beckman Coulter
4.29 ± 0.10	4.97 ± 0.10	3.85 ± 0.09	5.11 ± 0.12	3.32 ± 0.10	n = 47	[OL1] Beckman Coulter AU Series
4.07 ± 0.09	4.85 ± 0.06	3.65 ± 0.06	5.00 ± 0.08	3.03 ± 0.27	n = 4	[CR1] Carolina
4.45 ± 0.19	5.08 ± 0.24	3.90 ± 0.09	5.18 ± 0.24	3.37 ± 0.14	n = 3	[DG1] Diagnostic Chemicals Ltd - Endpoint
4.12 ± 0.14	5.00 ± 0.14	3.72 ± 0.12	5.02 ± 0.14	3.02 ± 0.10	n = 45	[JJ1] Ortho Clinical Diagnostics
4.46 ± 0.10	5.05 ± 0.11	4.02 ± 0.10	5.31 ± 0.11	3.47 ± 0.12	n = 13	[R04] Roche cobas c501
4.42 ± 0.12	5.01 ± 0.11	3.97 ± 0.09	5.22 ± 0.12	3.43 ± 0.09	n = 38	[R02] Roche Hitachi and Modular D/P
4.23 ± 0.09	4.79 ± 0.08	3.81 ± 0.09	5.00 ± 0.00	3.31 ± 0.05	n = 10	[R01] Roche Integra and MIRA
4.25 ± 0.08	4.91 ± 0.08	3.79 ± 0.07	5.00 ± 0.08	3.28 ± 0.06	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
4.37 ± 0.09	5.04 ± 0.11	3.94 ± 0.08	5.42 ± 0.12	3.35 ± 0.08	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Total Protein (g/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
7.15 ± 0.22	8.04 ± 0.25	6.31 ± 0.19	7.97 ± 0.24	5.35 ± 0.16	n = 361	[---] All Methods & Instruments
<Instruments>						
7.10 ± 0.07	7.94 ± 0.10	6.22 ± 0.06	7.88 ± 0.06	5.29 ± 0.05	n = 10	[ABH] Abbott Architect
7.07 ± 0.14	7.89 ± 0.18	6.22 ± 0.13	7.82 ± 0.17	5.26 ± 0.11	n = 47	[OLC] Beckman Coulter AU Chemistry System
7.10 ± 0.00	8.00 ± 0.13	6.31 ± 0.14	7.99 ± 0.17	5.31 ± 0.12	n = 11	[BCS] Beckman Coulter CX
6.87 ± 0.14	7.75 ± 0.19	6.08 ± 0.14	7.74 ± 0.15	5.17 ± 0.11	n = 18	[BCX] Beckman Coulter LX-20
7.00 ± 0.12	7.92 ± 0.12	6.17 ± 0.09	7.81 ± 0.17	5.25 ± 0.09	n = 14	[BCG] Beckman Coulter UniCel DxC 600
6.84 ± 0.15	7.76 ± 0.12	6.12 ± 0.11	7.76 ± 0.16	5.20 ± 0.06	n = 25	[BCH] Beckman Coulter UniCel DxC 800
7.15 ± 0.14	8.29 ± 0.18	6.33 ± 0.10	8.10 ± 0.21	5.34 ± 0.15	n = 15	[JJE] Ortho Vitros 250/350/950
7.09 ± 0.13	8.19 ± 0.13	6.24 ± 0.12	8.01 ± 0.14	5.25 ± 0.11	n = 28	[JJF] Ortho Vitros 5,1FS
7.05 ± 0.19	8.25 ± 0.27	6.23 ± 0.14	7.97 ± 0.31	5.26 ± 0.10	n = 3	[JJG] Ortho Vitros 5600
7.18 ± 0.19	7.98 ± 0.17	6.35 ± 0.17	7.95 ± 0.18	5.44 ± 0.12	n = 13	[ROC] Roche cobas c501
7.06 ± 0.16	7.91 ± 0.17	6.29 ± 0.16	7.87 ± 0.17	5.30 ± 0.12	n = 11	[ROT] Roche Cobas INTEGRA
7.15 ± 0.12	7.95 ± 0.12	6.31 ± 0.10	7.90 ± 0.13	5.36 ± 0.09	n = 37	[ROD] Roche MODULAR D/P
7.20 ± 0.15	8.13 ± 0.23	6.39 ± 0.18	8.08 ± 0.21	5.46 ± 0.15	n = 5	[BYA] Siemens ADVIA 1650
7.17 ± 0.07	8.05 ± 0.10	6.32 ± 0.09	8.01 ± 0.09	5.43 ± 0.08	n = 15	[BYE] Siemens ADVIA 1800
7.14 ± 0.10	8.00 ± 0.09	6.30 ± 0.00	7.97 ± 0.05	5.40 ± 0.09	n = 3	[BYB] Siemens ADVIA 2400
7.38 ± 0.11	8.27 ± 0.09	6.52 ± 0.06	8.27 ± 0.09	5.50 ± 0.09	n = 8	[DUE] Siemens Dimension EXL
7.40 ± 0.15	8.26 ± 0.16	6.54 ± 0.13	8.24 ± 0.14	5.51 ± 0.11	n = 51	[DUR] Siemens Dimension RxL
7.41 ± 0.14	8.29 ± 0.15	6.54 ± 0.16	8.18 ± 0.14	5.49 ± 0.07	n = 12	[DUT] Siemens Dimension Vista
7.32 ± 0.14	8.24 ± 0.17	6.48 ± 0.12	8.19 ± 0.16	5.49 ± 0.10	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
7.11 ± 0.08	7.95 ± 0.09	6.23 ± 0.06	7.89 ± 0.07	5.29 ± 0.04	n = 11	[AB1] Abbott
6.91 ± 0.16	7.81 ± 0.18	6.13 ± 0.13	7.79 ± 0.19	5.21 ± 0.10	n = 64	[BC1] Beckman Coulter
7.07 ± 0.14	7.88 ± 0.18	6.22 ± 0.14	7.82 ± 0.17	5.26 ± 0.11	n = 46	[OL1] Beckman Coulter AU Series
7.15 ± 0.06	7.97 ± 0.09	6.39 ± 0.11	7.92 ± 0.04	5.74 ± 1.10	n = 4	[CR1] Carolina
7.10 ± 0.14	8.23 ± 0.17	6.27 ± 0.13	8.03 ± 0.19	5.28 ± 0.13	n = 46	[JJ1] Ortho Clinical Diagnostics
7.18 ± 0.19	7.98 ± 0.17	6.35 ± 0.17	7.95 ± 0.18	5.44 ± 0.12	n = 13	[R04] Roche cobas c501
7.15 ± 0.12	7.95 ± 0.12	6.31 ± 0.10	7.90 ± 0.13	5.36 ± 0.10	n = 39	[R02] Roche Hitachi and Modular D/P
7.06 ± 0.16	7.91 ± 0.17	6.29 ± 0.16	7.87 ± 0.17	5.30 ± 0.12	n = 11	[R01] Roche Integra and MIRA
7.16 ± 0.11	8.05 ± 0.15	6.31 ± 0.11	8.00 ± 0.13	5.42 ± 0.11	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
7.38 ± 0.15	8.25 ± 0.15	6.52 ± 0.13	8.22 ± 0.14	5.50 ± 0.10	n = 91	[DA5] Siemens Dimension
6.79 ± 0.57	7.29 ± 0.93	6.15 ± 0.19	7.47 ± 1.06	5.57 ± 0.31	n = 3	[ZZZ] Reagent Not Listed

Summary of Participant Performance (Mean and Standard Deviation)

Cholesterol (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
239.2 ± 6.77	172.7 ± 7.47	165.0 ± 5.75	189.2 ± 7.13	134.6 ± 5.99	n = 333	[---] All Methods & Instruments
<Instruments>						
241.6 ± 2.46	175.1 ± 1.43	168.2 ± 1.60	191.8 ± 1.98	135.1 ± 1.42	n = 10	[ABH] Abbott Architect
235.1 ± 4.67	169.8 ± 3.23	162.7 ± 3.47	184.5 ± 3.72	130.2 ± 2.66	n = 47	[OLC] Beckman Coulter AU Chemistry System
236.7 ± 7.11	171.5 ± 6.47	162.1 ± 3.97	187.6 ± 5.85	135.8 ± 6.16	n = 9	[BCS] Beckman Coulter CX
234.8 ± 5.12	171.6 ± 2.96	159.2 ± 2.39	186.0 ± 4.17	134.1 ± 3.28	n = 14	[BCX] Beckman Coulter LX-20
233.7 ± 7.41	172.4 ± 1.95	161.9 ± 3.27	188.0 ± 3.09	135.1 ± 2.68	n = 12	[BCG] Beckman Coulter UniCel DxC 600
235.5 ± 3.88	175.0 ± 2.43	162.6 ± 2.09	189.0 ± 2.42	136.7 ± 2.07	n = 21	[BCH] Beckman Coulter UniCel DxC 800
248.5 ± 6.37	190.5 ± 2.83	175.1 ± 3.53	204.4 ± 6.50	145.8 ± 1.99	n = 7	[JJE] Ortho Vitros 250/350/950
247.6 ± 5.55	191.9 ± 4.89	173.8 ± 4.00	206.0 ± 4.03	145.3 ± 3.82	n = 27	[JJF] Ortho Vitros 5,1FS
246.2 ± 4.11	189.2 ± 2.36	171.8 ± 2.36	204.3 ± 1.37	145.3 ± 3.37	n = 3	[JJG] Ortho Vitros 5600
243.3 ± 3.92	176.4 ± 3.24	169.9 ± 2.96	194.6 ± 3.23	138.3 ± 2.88	n = 13	[ROC] Roche cobas c501
242.4 ± 4.31	174.7 ± 2.21	168.4 ± 2.99	190.6 ± 3.02	135.7 ± 2.24	n = 12	[ROT] Roche Cobas INTEGRA
241.1 ± 5.48	174.5 ± 3.69	167.4 ± 3.76	192.3 ± 3.73	137.2 ± 2.71	n = 38	[ROD] Roche MODULAR D/P
247.0 ± 4.60	176.5 ± 4.53	169.0 ± 3.58	192.4 ± 6.23	137.3 ± 2.26	n = 3	[HIJ] Roche/Hitachi 917
245.5 ± 1.62	179.4 ± 1.89	171.3 ± 4.42	195.5 ± 2.33	139.9 ± 1.83	n = 5	[BYA] Siemens ADVIA 1650
240.7 ± 2.81	176.5 ± 2.25	167.8 ± 2.01	193.2 ± 2.34	137.6 ± 1.76	n = 15	[BYE] Siemens ADVIA 1800
237.8 ± 5.00	174.5 ± 4.53	164.5 ± 3.63	190.7 ± 4.22	137.0 ± 4.60	n = 3	[BYB] Siemens ADVIA 2400
240.1 ± 3.98	163.9 ± 3.36	161.0 ± 3.63	183.6 ± 2.78	129.5 ± 2.87	n = 8	[DUE] Siemens Dimension EXL
238.4 ± 5.85	165.4 ± 4.60	161.4 ± 3.81	185.5 ± 4.39	129.5 ± 3.77	n = 43	[DUR] Siemens Dimension RxL
232.3 ± 8.10	168.3 ± 4.69	161.1 ± 3.99	182.1 ± 4.91	127.9 ± 3.98	n = 11	[DUT] Siemens Dimension Vista
236.0 ± 6.10	163.4 ± 4.84	160.4 ± 3.88	182.7 ± 3.63	128.3 ± 4.02	n = 17	[DUX] Siemens Dimension Xpand
<Reagents>						
241.8 ± 2.32	174.9 ± 1.55	168.3 ± 1.51	191.7 ± 1.87	134.9 ± 1.42	n = 11	[AB1] Abbott
235.2 ± 5.57	173.5 ± 3.32	161.6 ± 3.24	188.1 ± 3.63	135.8 ± 2.99	n = 54	[BC1] Beckman Coulter
235.0 ± 4.66	169.9 ± 3.30	162.6 ± 3.53	184.3 ± 3.78	130.0 ± 2.53	n = 44	[OL1] Beckman Coulter AU Series
235.5 ± 5.40	166.3 ± 4.22	161.8 ± 4.11	183.6 ± 3.87	129.0 ± 4.51	n = 3	[CR1] Carolina
247.6 ± 5.65	191.4 ± 4.44	173.9 ± 3.86	205.6 ± 4.55	145.6 ± 3.66	n = 37	[JJ1] Ortho Clinical Diagnostics
243.3 ± 3.92	176.4 ± 3.24	169.9 ± 2.96	194.6 ± 3.23	138.3 ± 2.88	n = 13	[R04] Roche cobas c501
241.4 ± 5.99	174.6 ± 3.96	167.5 ± 3.98	192.3 ± 4.05	137.2 ± 2.56	n = 41	[R02] Roche Hitachi and Modular D/P
242.4 ± 4.31	174.7 ± 2.21	168.4 ± 2.99	190.6 ± 3.02	135.7 ± 2.24	n = 12	[R01] Roche Integra and MIRA
241.7 ± 4.32	177.0 ± 3.14	167.9 ± 3.39	193.5 ± 3.14	138.2 ± 2.56	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
237.5 ± 6.20	165.2 ± 4.85	161.1 ± 3.86	184.3 ± 4.41	129.0 ± 3.81	n = 79	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

HDL-Cholesterol (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
66.4 ± 7.63	51.2 ± 9.37	40.6 ± 3.97	53.1 ± 5.67	32.1 ± 3.12	n = 310	[---] All Methods & Instruments
70.3 ± 7.34	47.3 ± 7.25	40.3 ± 4.68	54.3 ± 6.28	31.1 ± 3.49	n = 18	[---] All Precipitation Methods
66.2 ± 7.58	51.5 ± 9.42	40.6 ± 3.90	53.1 ± 5.61	32.2 ± 3.07	n = 292	[---] All Homogeneous (Direct) Methods
52.5 ± 2.85	41.0 ± 1.14	33.5 ± 1.71	44.0 ± 1.14	28.0 ± 1.14	n = 2	[AX1] Abaxis
67.0 ± 2.59	57.6 ± 2.42	41.3 ± 1.76	53.9 ± 2.21	32.7 ± 1.80	n = 10	[AB1] Abbott
75.5 ± 2.53	49.8 ± 2.42	44.9 ± 2.76	59.5 ± 2.81	34.7 ± 2.47	n = 42	[BC1] Beckman Coulter
68.9 ± 3.49	59.5 ± 2.83	42.6 ± 2.43	55.2 ± 3.08	33.3 ± 2.36	n = 30	[OL1] Beckman Coulter AU Series
68.7 ± 5.09	58.5 ± 3.63	40.9 ± 4.38	54.3 ± 4.96	30.6 ± 3.87	n = 3	[CR1] Carolina
67.8 ± 3.34	60.0 ± 0.00	41.1 ± 3.43	53.7 ± 2.75	32.7 ± 1.91	n = 7	[EQ1/GZ1] Equal/Genzyme
75.0 ± 3.14	49.6 ± 1.96	42.9 ± 1.77	58.9 ± 2.25	32.8 ± 1.68	n = 30	[JJ1] Ortho Clinical Diagnostics
55.0 ± 2.28	46.0 ± 3.42	30.0 ± 1.14	40.0 ± 2.28	22.5 ± 0.57	n = 2	[PM1] Polymedco
57.2 ± 1.74	38.3 ± 1.10	36.4 ± 1.53	47.3 ± 1.68	30.7 ± 1.28	n = 11	[R04] Roche cobas c501
60.5 ± 2.50	39.8 ± 1.69	39.1 ± 1.85	50.3 ± 2.11	33.1 ± 1.93	n = 37	[R02] Roche Hitachi and Modular D/P
61.4 ± 2.15	40.8 ± 1.70	39.4 ± 1.60	51.0 ± 2.44	33.3 ± 1.58	n = 10	[R01] Roche Integra and MIRA
52.1 ± 1.34	46.6 ± 0.98	28.0 ± 0.98	38.0 ± 1.04	20.0 ± 0.65	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
65.9 ± 2.19	61.5 ± 1.39	39.5 ± 1.40	51.8 ± 1.37	30.2 ± 1.11	n = 72	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

LDL-Cholesterol (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
139.4 ± 15.09	101.4 ± 15.07	100.9 ± 13.38	111.5 ± 13.52	83.1 ± 11.36	n = 298	[-A-] All Methods & Instruments
146.0 ± 10.75	106.5 ± 16.16	107.9 ± 8.20	117.5 ± 9.94	87.7 ± 7.36	n = 165	[-A-] Calculated results Friedewald formula [LDL=TC-HDL-(Trigs÷5)]
128.9 ± 14.56	95.9 ± 11.22	90.0 ± 11.49	102.0 ± 12.56	74.9 ± 11.01	n = 129	[-A-] All Homogeneous (Direct) Methods
125.7 ± 1.37	92.7 ± 2.26	88.7 ± 0.51	101.0 ± 0.90	73.4 ± 1.02	n = 3	[AB1] Abbott
118.8 ± 3.95	87.0 ± 2.03	83.0 ± 2.60	93.3 ± 2.55	68.3 ± 2.07	n = 20	[BC1] Beckman Coulter
111.7 ± 6.84	84.9 ± 4.49	78.6 ± 4.11	89.3 ± 6.33	65.6 ± 3.24	n = 13	[OL1] Beckman Coulter AU Series
110.9 ± 15.08	78.7 ± 6.76	79.3 ± 9.53	88.6 ± 10.01	66.5 ± 5.43	n = 3	[CR1] Carolina
118.8 ± 12.19	89.2 ± 8.73	84.9 ± 10.84	95.7 ± 12.10	70.6 ± 8.73	n = 17	[EQ1/GZ1] Equal/Genzyme
142.0 ± 5.42	101.8 ± 4.83	89.1 ± 3.51	105.4 ± 1.91	69.4 ± 1.88	n = 9	[JJ1] Ortho Clinical Diagnostics
154.5 ± 1.71	116.0 ± 1.14	110.5 ± 1.71	125.5 ± 1.71	95.5 ± 1.71	n = 2	[R04] Roche cobas c501
148.7 ± 3.28	113.8 ± 3.25	106.5 ± 3.56	120.4 ± 3.78	93.4 ± 3.11	n = 16	[R02] Roche Hitachi and Modular D/P
128.5 ± 6.33	98.1 ± 4.92	84.5 ± 5.59	98.2 ± 6.25	69.2 ± 4.73	n = 12	[BY1] Siemens ADVIA/ADVIA Centaur
133.1 ± 6.92	96.9 ± 4.81	96.5 ± 5.66	107.9 ± 6.09	82.0 ± 5.22	n = 30	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Triglycerides (mg/dL)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
132.0 ± 5.61	84.3 ± 4.64	85.8 ± 4.76	99.1 ± 4.98	77.2 ± 4.58	n = 321	[---] All Methods & Instruments
<Instruments>						
128.8 ± 1.61	86.1 ± 2.46	83.6 ± 0.74	99.4 ± 1.57	81.8 ± 1.58	n = 11	[ABH] Abbott Architect
132.1 ± 4.32	82.1 ± 2.73	85.9 ± 2.91	98.0 ± 2.91	74.8 ± 2.85	n = 46	[OLC] Beckman Coulter AU Chemistry System
136.7 ± 10.03	84.7 ± 7.41	90.8 ± 8.47	101.0 ± 3.94	78.8 ± 2.58	n = 9	[BCS] Beckman Coulter CX
129.8 ± 3.47	82.5 ± 1.80	84.6 ± 2.21	96.7 ± 1.37	74.0 ± 2.40	n = 13	[BCX] Beckman Coulter LX-20
132.6 ± 3.72	82.9 ± 2.03	85.0 ± 2.99	97.1 ± 3.04	74.9 ± 3.25	n = 10	[BCG] Beckman Coulter UniCel DxC 600
129.5 ± 3.41	81.5 ± 1.84	84.0 ± 2.82	96.1 ± 1.85	72.9 ± 2.96	n = 18	[BCH] Beckman Coulter UniCel DxC 800
141.6 ± 3.66	92.3 ± 2.49	93.5 ± 2.61	110.9 ± 1.80	82.7 ± 1.58	n = 7	[JJE] Ortho Vitros 250/350/950
138.3 ± 4.19	89.5 ± 2.15	91.0 ± 2.54	106.9 ± 3.00	78.8 ± 2.18	n = 27	[JJF] Ortho Vitros 5,1FS
134.5 ± 1.86	87.6 ± 1.02	89.0 ± 0.90	106.0 ± 1.80	77.2 ± 1.54	n = 3	[JJG] Ortho Vitros 5600
138.0 ± 4.48	89.3 ± 2.95	90.5 ± 3.22	101.1 ± 2.79	81.9 ± 2.52	n = 13	[ROC] Roche cobas c501
131.5 ± 4.01	84.5 ± 2.47	86.8 ± 2.46	95.3 ± 3.32	76.1 ± 2.64	n = 10	[ROT] Roche Cobas INTEGRA
132.0 ± 4.03	85.3 ± 3.02	86.4 ± 3.25	98.9 ± 3.22	80.2 ± 3.25	n = 38	[ROD] Roche MODULAR D/P
137.3 ± 3.16	87.4 ± 1.02	88.6 ± 1.02	100.5 ± 1.86	79.8 ± 1.54	n = 3	[HIJ] Roche/Hitachi 917
134.0 ± 0.93	86.5 ± 0.83	86.0 ± 1.54	102.9 ± 1.27	81.1 ± 1.38	n = 5	[BYA] Siemens ADVIA 1650
132.3 ± 2.39	86.4 ± 2.08	87.2 ± 2.48	102.9 ± 2.46	81.0 ± 2.10	n = 15	[BYE] Siemens ADVIA 1800
132.3 ± 5.09	87.7 ± 4.06	86.1 ± 3.72	102.2 ± 4.10	80.8 ± 3.23	n = 3	[BYB] Siemens ADVIA 2400
130.0 ± 2.12	81.5 ± 1.20	81.9 ± 1.97	96.1 ± 1.32	73.8 ± 2.08	n = 8	[DUE] Siemens Dimension EXL
127.5 ± 2.19	80.7 ± 2.21	80.7 ± 2.16	95.8 ± 2.54	74.6 ± 1.83	n = 43	[DUR] Siemens Dimension RxL
142.5 ± 3.52	92.1 ± 3.15	90.9 ± 2.31	107.9 ± 3.33	85.6 ± 2.73	n = 11	[DUT] Siemens Dimension Vista
126.4 ± 3.63	79.9 ± 3.33	79.8 ± 2.90	95.7 ± 3.03	73.4 ± 2.74	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
128.7 ± 1.53	85.9 ± 2.43	83.5 ± 0.70	99.4 ± 1.47	81.7 ± 1.50	n = 12	[AB1] Abbott
130.6 ± 3.73	82.3 ± 2.18	84.7 ± 2.92	96.8 ± 2.30	74.3 ± 3.41	n = 48	[BC1] Beckman Coulter
131.7 ± 3.67	82.1 ± 2.27	85.7 ± 2.43	98.0 ± 2.88	74.9 ± 2.43	n = 42	[OL1] Beckman Coulter AU Series
144.0 ± 7.09	78.8 ± 2.80	95.0 ± 6.05	101.5 ± 3.42	77.4 ± 4.28	n = 4	[CR1] Carolina
138.6 ± 4.36	89.8 ± 2.51	91.2 ± 2.71	107.6 ± 3.30	79.4 ± 2.71	n = 37	[JJ1] Ortho Clinical Diagnostics
138.0 ± 4.48	89.3 ± 2.95	90.5 ± 3.22	101.1 ± 2.79	81.9 ± 2.52	n = 13	[R04] Roche cobas c501
132.2 ± 4.12	85.4 ± 2.88	86.5 ± 3.11	99.0 ± 2.99	80.1 ± 3.00	n = 40	[R02] Roche Hitachi and Modular D/P
132.1 ± 4.31	84.8 ± 2.73	87.1 ± 2.70	95.8 ± 4.04	76.5 ± 3.32	n = 11	[R01] Roche Integra and MIRA
132.3 ± 3.00	86.2 ± 2.48	86.4 ± 2.81	102.5 ± 2.84	80.7 ± 2.23	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
128.1 ± 4.00	81.3 ± 3.89	81.5 ± 4.05	96.4 ± 3.76	74.5 ± 3.10	n = 75	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Homocysteine (μmol/L)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
-----	-----	-----	-----	-----	-----	-----
10.58 ± 1.07	12.92 ± 0.94	14.37 ± 1.23	26.64 ± 2.03	17.27 ± 1.36	n = 127	[---] All Methods & Instruments
<Instruments>						
11.07 ± 0.78	12.66 ± 0.32	15.19 ± 0.64	27.85 ± 1.19	18.54 ± 0.67	n = 5	[ABH] Abbott Architect
11.65 ± 0.76	13.50 ± 0.49	15.90 ± 0.93	26.78 ± 1.41	17.19 ± 0.63	n = 11	[ABB] Abbott AxSym
11.16 ± 1.23	13.01 ± 1.06	15.04 ± 1.15	27.55 ± 1.18	18.06 ± 0.62	n = 8	[OLC] Beckman Coulter AU Chemistry System
11.59 ± 0.74	13.91 ± 0.62	15.46 ± 0.71	29.20 ± 1.67	17.64 ± 1.73	n = 6	[BCH] Beckman Coulter UniCel DxC 800
10.99 ± 0.51	12.29 ± 0.66	14.65 ± 0.49	26.47 ± 0.69	16.28 ± 0.83	n = 5	[JJF] Ortho Vitros 5,1FS
11.00 ± 0.36	13.02 ± 0.24	14.32 ± 0.24	25.55 ± 0.36	17.75 ± 0.54	n = 3	[ROC] Roche cobas c501
10.63 ± 0.69	12.18 ± 1.32	14.08 ± 0.86	27.02 ± 1.50	18.21 ± 2.35	n = 3	[ROD] Roche MODULAR D/P
9.81 ± 0.57	13.32 ± 0.58	13.42 ± 0.82	25.08 ± 1.59	16.55 ± 0.85	n = 27	[COB] Siemens ADVIA Centaur
10.13 ± 0.23	12.62 ± 0.55	13.63 ± 0.25	25.30 ± 1.14	16.44 ± 0.72	n = 4	[DUT] Siemens Dimension Vista
10.39 ± 0.94	12.39 ± 0.82	14.31 ± 0.98	27.24 ± 1.84	17.80 ± 1.33	n = 34	[DPD] Siemens Immulite 2000
10.31 ± 0.88	12.40 ± 0.84	13.88 ± 1.15	26.25 ± 1.55	16.93 ± 0.90	n = 7	[DPE] Siemens Immulite 2500
<Reagents>						
11.54 ± 0.71	13.32 ± 0.58	15.75 ± 0.89	27.06 ± 1.44	17.70 ± 1.09	n = 15	[AB1] Abbott
11.76 ± 0.25	13.93 ± 0.85	15.68 ± 0.49	27.94 ± 1.21	18.06 ± 1.67	n = 7	[CR1] Carolina
11.44 ± 0.73	13.47 ± 0.14	15.24 ± 0.67	27.93 ± 0.95	16.55 ± 0.36	n = 3	[CC1] Catch, Inc
10.43 ± 0.55	12.84 ± 0.70	14.31 ± 0.58	26.63 ± 1.95	18.35 ± 1.07	n = 10	[DZ1] Diazyme
11.57 ± 1.74	13.18 ± 1.05	14.83 ± 1.24	27.25 ± 2.17	16.65 ± 1.19	n = 5	[EQ1] Equal Diagnostics
10.37 ± 0.95	12.71 ± 1.47	14.40 ± 1.37	27.48 ± 2.97	18.00 ± 2.07	n = 3	[GZ1] Genzyme
10.99 ± 0.51	12.29 ± 0.66	14.65 ± 0.49	26.47 ± 0.69	16.28 ± 0.83	n = 5	[JJ1] Ortho Clinical Diagnostics
9.81 ± 0.57	13.32 ± 0.58	13.42 ± 0.82	25.08 ± 1.59	16.55 ± 0.85	n = 27	[BY1] Siemens ADVIA/ADVIA Centaur
10.13 ± 0.23	12.62 ± 0.55	13.63 ± 0.25	25.30 ± 1.14	16.44 ± 0.72	n = 4	[DA5] Siemens Dimension
10.41 ± 0.96	12.37 ± 0.84	14.25 ± 1.04	27.10 ± 1.90	17.63 ± 1.40	n = 43	[DP5] Siemens Immulite

Summary of Participant Performance (Mean and Standard Deviation)

Troponin I (µg/L)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
0.022 ± 0.022	0.084 ± 0.027	0.023 ± 0.022	0.569 ± 0.134	1.594 ± 0.401	n = 227	[---] All Methods & Instruments
<Instruments>						
0.009 ± 0.009	0.500 ± 0.022	0.009 ± 0.009	3.593 ± 0.140	9.628 ± 0.349	n = 10	[ABH] Abbott Architect
0.016 ± 0.012	0.047 ± 0.018	0.016 ± 0.012	0.437 ± 0.053	1.285 ± 0.080	n = 10	[ABB] Abbott AxSym
0.012 ± 0.007	0.077 ± 0.011	0.013 ± 0.008	0.552 ± 0.058	1.390 ± 0.138	n = 30	[SAA] Beckman Coulter ACCESS
0.015 ± 0.012	0.095 ± 0.012	0.013 ± 0.011	0.648 ± 0.085	1.627 ± 0.168	n = 8	[BCU] Beckman Coulter UniCel DxI 800
0.050 ± 0.000	0.050 ± 0.000	0.050 ± 0.000	0.131 ± 0.029	0.436 ± 0.106	n = 8	[BSA] BioSite Triage
0.008 ± 0.006	0.278 ± 0.013	0.008 ± 0.006	1.994 ± 0.063	5.382 ± 0.183	n = 18	[JJC] Ortho Vitros Eci/ECiQ
0.010 ± 0.007	0.093 ± 0.010	0.011 ± 0.006	0.573 ± 0.051	1.812 ± 0.122	n = 43	[COB] Siemens ADVIA Centaur
0.100 ± 0.000	0.113 ± 0.014	0.100 ± 0.000	0.862 ± 0.051	2.171 ± 0.099	n = 7	[DUE] Siemens Dimension EXL
0.036 ± 0.016	0.074 ± 0.032	0.037 ± 0.020	0.549 ± 0.072	1.433 ± 0.188	n = 44	[DUR] Siemens Dimension RxL
0.020 ± 0.000	0.114 ± 0.012	0.020 ± 0.000	0.947 ± 0.063	2.249 ± 0.145	n = 12	[DUT] Siemens Dimension Vista
0.032 ± 0.016	0.081 ± 0.034	0.029 ± 0.023	0.536 ± 0.079	1.396 ± 0.148	n = 12	[DUX] Siemens Dimension Xpand
0.200 ± 0.000	0.225 ± 0.014	0.200 ± 0.000	1.170 ± 0.010	2.493 ± 0.214	n = 6	[DPD] Siemens Immulite 2000
0.060 ± 0.000	0.629 ± 0.059	0.060 ± 0.000	3.809 ± 0.120	9.580 ± 0.255	n = 5	[TOM] Tosoh Bioscience
<Reagents>						
0.012 ± 0.011	0.274 ± 0.258	0.012 ± 0.011	2.064 ± 1.758	5.457 ± 4.826	n = 20	[AB1] Abbott
0.013 ± 0.010	0.080 ± 0.012	0.013 ± 0.010	0.566 ± 0.064	1.428 ± 0.160	n = 40	[BC1] Beckman Coulter
0.050 ± 0.000	0.050 ± 0.000	0.050 ± 0.000	0.131 ± 0.029	0.436 ± 0.106	n = 8	[BS1] Biosite Diagnostics
0.009 ± 0.006	0.279 ± 0.012	0.008 ± 0.006	1.985 ± 0.068	5.369 ± 0.202	n = 20	[JJ1] Ortho Clinical Diagnostics
0.010 ± 0.006	0.093 ± 0.010	0.010 ± 0.006	0.571 ± 0.051	1.806 ± 0.123	n = 45	[BY1] Siemens ADVIA/ADVIA Centaur
0.034 ± 0.016	0.078 ± 0.034	0.034 ± 0.020	0.548 ± 0.080	1.434 ± 0.198	n = 60	[DA5] Siemens Dimension
0.063 ± 0.046	0.113 ± 0.012	0.064 ± 0.046	0.918 ± 0.075	2.220 ± 0.115	n = 15	[DA6] Siemens Dimension LOCI
0.200 ± 0.000	0.218 ± 0.017	0.200 ± 0.000	1.105 ± 0.108	2.412 ± 0.236	n = 8	[DP5] Siemens Immulite
0.060 ± 0.000	0.646 ± 0.072	0.060 ± 0.000	3.990 ± 0.449	9.852 ± 1.004	n = 4	[T02] Tosoh ST AIA

Summary of Participant Performance (Mean and Standard Deviation)

Troponin T (µg/L)

Specimen: C41 -----	Specimen: C42 -----	Specimen: C43 -----	Specimen: C44 -----	Specimen: C45 -----	Number -----	[Code] Instrument or Reagent System -----
0.010 ± 0.000	0.081 ± 0.007	0.010 ± 0.000	0.468 ± 0.041	0.849 ± 0.085	n = 34	[---] All Methods & Instruments
0.010 ± 0.000	0.082 ± 0.015	0.010 ± 0.000	0.481 ± 0.081	0.881 ± 0.153	n = 3	<Instruments>
0.010 ± 0.000	0.080 ± 0.009	0.010 ± 0.000	0.431 ± 0.038	0.785 ± 0.107	n = 5	[R0F] Roche cobas e411
0.010 ± 0.000	0.082 ± 0.007	0.010 ± 0.000	0.491 ± 0.027	0.885 ± 0.057	n = 14	[R0A] Roche cobas e601
0.010 ± 0.000	0.080 ± 0.000	0.010 ± 0.000	0.449 ± 0.022	0.815 ± 0.060	n = 10	[BME] Roche Elecsys
						[R0E] Roche MODULAR E
0.010 ± 0.000	0.081 ± 0.008	0.010 ± 0.000	0.465 ± 0.041	0.840 ± 0.083	n = 29	<Reagents>
						[R03] Roche Elecsys/Modular E/e601/e411

Summary of Participant Performance (Mean and Standard Deviation)

Alanine Aminotransferase (U/L 37°C)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
173.0 ± 9.45	129.0 ± 9.51	257.5 ± 13.13	42.5 ± 7.20	52.4 ± 7.61	n = 359	[---] All Methods & Instruments
<Instruments>						
173.1 ± 4.80	125.4 ± 3.54	260.8 ± 6.16	38.4 ± 2.20	48.2 ± 2.43	n = 10	[ABH] Abbott Architect
154.0 ± 4.60	110.2 ± 3.61	230.6 ± 7.33	34.3 ± 1.52	43.3 ± 1.39	n = 46	[OLC] Beckman Coulter AU Chemistry System
165.8 ± 5.91	124.6 ± 10.29	247.3 ± 9.96	36.8 ± 1.79	46.9 ± 2.23	n = 10	[BCS] Beckman Coulter CX
168.3 ± 4.34	125.6 ± 3.08	249.8 ± 6.47	39.5 ± 1.82	48.5 ± 1.27	n = 17	[BCX] Beckman Coulter LX-20
165.6 ± 1.02	124.8 ± 2.02	247.8 ± 2.95	39.1 ± 1.03	48.1 ± 0.96	n = 15	[BCG] Beckman Coulter UniCel DxC 600
166.5 ± 3.60	125.3 ± 2.09	248.8 ± 4.72	39.1 ± 0.42	48.4 ± 1.12	n = 24	[BCH] Beckman Coulter UniCel DxC 800
179.9 ± 2.48	134.1 ± 1.93	266.2 ± 4.18	51.7 ± 2.30	65.6 ± 2.22	n = 15	[JJE] Ortho Vitros 250/350/950
178.8 ± 5.73	132.0 ± 4.06	264.3 ± 5.89	51.3 ± 3.49	63.9 ± 3.41	n = 28	[JJF] Ortho Vitros 5,1FS
183.0 ± 7.27	137.3 ± 5.09	267.2 ± 14.06	53.3 ± 2.26	68.1 ± 4.38	n = 3	[JJG] Ortho Vitros 5600
176.9 ± 3.39	127.2 ± 2.93	265.7 ± 5.61	39.3 ± 0.65	49.6 ± 1.46	n = 13	[ROC] Roche cobas c501
172.9 ± 2.62	126.0 ± 2.21	262.2 ± 4.38	38.1 ± 0.44	48.9 ± 0.81	n = 11	[ROT] Roche Cobas INTEGRA
175.4 ± 6.11	127.1 ± 3.84	263.8 ± 8.49	39.5 ± 2.17	49.6 ± 1.97	n = 37	[ROD] Roche MODULAR D/P
174.6 ± 7.21	128.6 ± 3.64	261.7 ± 8.88	40.4 ± 2.47	51.5 ± 1.62	n = 5	[BYA] Siemens ADVIA 1650
179.7 ± 3.75	131.8 ± 1.79	270.2 ± 4.65	41.1 ± 1.70	51.2 ± 2.12	n = 15	[BYE] Siemens ADVIA 1800
174.6 ± 6.66	126.5 ± 5.40	263.8 ± 11.53	39.8 ± 2.36	49.5 ± 1.86	n = 3	[BYB] Siemens ADVIA 2400
175.8 ± 3.18	138.0 ± 3.34	258.2 ± 5.17	49.9 ± 2.52	58.6 ± 1.89	n = 9	[DUE] Siemens Dimension EXL
177.7 ± 4.73	139.2 ± 4.03	260.9 ± 6.09	51.1 ± 1.87	59.6 ± 1.85	n = 50	[DUR] Siemens Dimension RxL
177.7 ± 4.66	136.7 ± 4.35	264.4 ± 6.18	40.9 ± 1.56	50.7 ± 1.92	n = 12	[DUT] Siemens Dimension Vista
178.2 ± 5.01	139.9 ± 4.00	261.4 ± 8.74	51.2 ± 2.02	59.9 ± 1.64	n = 20	[DUX] Siemens Dimension Xpand
<Reagents>						
173.0 ± 4.50	125.0 ± 3.58	260.4 ± 5.87	38.2 ± 2.09	48.2 ± 2.24	n = 11	[AB1] Abbott
166.0 ± 3.82	124.7 ± 2.92	247.8 ± 5.38	39.1 ± 1.37	48.2 ± 1.24	n = 63	[BC1] Beckman Coulter
154.2 ± 4.41	110.3 ± 3.49	230.9 ± 7.18	34.3 ± 1.50	43.3 ± 1.31	n = 44	[OL1] Beckman Coulter AU Series
168.5 ± 11.09	127.4 ± 17.29	254.7 ± 16.05	37.4 ± 9.03	50.2 ± 10.22	n = 4	[CR1] Carolina
179.3 ± 5.47	132.9 ± 3.75	265.0 ± 6.39	51.6 ± 3.16	64.7 ± 3.47	n = 47	[JJ1] Ortho Clinical Diagnostics
176.9 ± 3.39	127.2 ± 2.93	265.7 ± 5.61	39.3 ± 0.65	49.6 ± 1.46	n = 13	[R04] Roche cobas c501
175.4 ± 6.24	127.0 ± 3.85	263.8 ± 8.62	39.5 ± 2.18	49.6 ± 1.95	n = 39	[R02] Roche Hitachi and Modular D/P
172.9 ± 2.62	126.0 ± 2.21	262.2 ± 4.38	38.1 ± 0.44	48.9 ± 0.81	n = 11	[R01] Roche Integra and MIRA
178.3 ± 5.14	130.8 ± 3.33	267.9 ± 7.34	40.8 ± 1.99	50.9 ± 2.03	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
177.6 ± 4.67	138.9 ± 4.09	261.1 ± 6.69	50.7 ± 2.96	59.2 ± 2.81	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Aspartate Aminotransferase (U/L 37°C)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
94.1 ± 5.59	297.5 ± 21.95	50.4 ± 3.28	180.7 ± 11.37	75.7 ± 5.35	n = 359	[---] All Methods & Instruments
<Instruments>						
92.9 ± 1.59	294.5 ± 4.01	49.5 ± 1.29	178.2 ± 2.00	73.4 ± 1.31	n = 10	[ABH] Abbott Architect
84.8 ± 3.57	265.8 ± 10.60	45.8 ± 2.15	161.7 ± 6.50	66.5 ± 2.85	n = 46	[OLC] Beckman Coulter AU Chemistry System
94.2 ± 4.39	295.3 ± 16.97	49.5 ± 1.62	177.1 ± 9.18	73.4 ± 3.45	n = 10	[BCS] Beckman Coulter CX
94.2 ± 2.04	297.2 ± 7.47	50.6 ± 1.77	178.1 ± 5.80	72.9 ± 1.69	n = 17	[BCX] Beckman Coulter LX-20
93.7 ± 1.86	292.6 ± 5.42	50.4 ± 1.42	176.3 ± 2.80	72.3 ± 1.30	n = 15	[BCG] Beckman Coulter UniCel DxC 600
93.7 ± 2.03	293.7 ± 4.38	50.6 ± 1.34	177.1 ± 3.23	72.8 ± 1.25	n = 24	[BCH] Beckman Coulter UniCel DxC 800
100.6 ± 2.61	371.0 ± 6.75	54.4 ± 1.73	200.9 ± 5.84	82.4 ± 2.49	n = 15	[JJE] Ortho Vitros 250/350/950
101.6 ± 3.09	374.3 ± 9.86	54.6 ± 1.46	197.8 ± 5.22	83.1 ± 2.73	n = 28	[JJF] Ortho Vitros 5,1FS
104.0 ± 1.80	383.1 ± 5.22	55.4 ± 1.02	200.7 ± 5.91	82.7 ± 2.26	n = 3	[JJG] Ortho Vitros 5600
96.7 ± 3.29	309.2 ± 9.53	50.9 ± 1.72	186.1 ± 6.15	75.6 ± 3.52	n = 13	[ROC] Roche cobas c501
92.3 ± 4.05	298.6 ± 10.75	49.2 ± 1.76	180.0 ± 7.00	73.1 ± 2.75	n = 11	[ROT] Roche Cobas INTEGRA
95.4 ± 3.28	302.1 ± 9.10	51.4 ± 1.88	183.3 ± 5.57	76.6 ± 3.30	n = 37	[ROD] Roche MODULAR D/P
99.4 ± 2.99	313.6 ± 7.31	54.1 ± 2.16	192.0 ± 1.77	79.7 ± 2.81	n = 5	[BYA] Siemens ADVIA 1650
101.3 ± 1.88	321.2 ± 4.60	55.3 ± 1.76	193.9 ± 3.39	80.4 ± 1.48	n = 15	[BYE] Siemens ADVIA 1800
97.2 ± 4.89	311.8 ± 17.95	52.8 ± 2.36	188.5 ± 8.19	78.0 ± 3.58	n = 3	[BYB] Siemens ADVIA 2400
91.3 ± 2.57	290.6 ± 5.76	48.0 ± 1.85	177.1 ± 2.01	77.2 ± 2.10	n = 8	[DUE] Siemens Dimension EXL
92.2 ± 3.35	293.6 ± 7.24	48.9 ± 1.92	178.2 ± 4.67	76.7 ± 2.59	n = 51	[DUR] Siemens Dimension RxL
94.2 ± 3.82	306.1 ± 8.57	48.1 ± 2.63	183.0 ± 4.64	76.4 ± 2.87	n = 12	[DUT] Siemens Dimension Vista
93.2 ± 2.01	296.7 ± 6.06	49.6 ± 1.64	178.7 ± 2.85	78.1 ± 1.96	n = 20	[DUX] Siemens Dimension Xpand
<Reagents>						
92.9 ± 1.45	294.8 ± 3.52	49.6 ± 1.15	178.2 ± 1.73	73.5 ± 1.19	n = 11	[AB1] Abbott
93.7 ± 2.13	293.9 ± 5.95	50.3 ± 1.47	176.7 ± 3.86	72.6 ± 1.44	n = 64	[BC1] Beckman Coulter
84.9 ± 3.64	265.4 ± 10.24	45.9 ± 2.11	161.6 ± 6.31	66.7 ± 2.76	n = 44	[OL1] Beckman Coulter AU Series
97.6 ± 6.54	310.0 ± 9.98	50.6 ± 4.47	184.4 ± 9.00	75.9 ± 7.38	n = 4	[CR1] Carolina
101.5 ± 3.01	373.5 ± 9.66	54.6 ± 1.54	198.9 ± 5.78	82.8 ± 2.65	n = 47	[JJ1] Ortho Clinical Diagnostics
96.7 ± 3.29	309.2 ± 9.53	50.9 ± 1.72	186.1 ± 6.15	75.6 ± 3.52	n = 13	[R04] Roche cobas c501
95.3 ± 3.16	302.3 ± 8.90	51.4 ± 1.81	183.4 ± 5.42	76.5 ± 3.14	n = 39	[R02] Roche Hitachi and Modular D/P
92.3 ± 4.05	298.6 ± 10.75	49.2 ± 1.76	180.0 ± 7.00	73.1 ± 2.75	n = 11	[R01] Roche Integra and MIRA
100.3 ± 3.31	317.8 ± 8.99	54.6 ± 2.14	192.2 ± 5.36	80.0 ± 2.38	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
92.6 ± 3.16	295.4 ± 8.15	49.0 ± 1.99	178.8 ± 4.51	77.0 ± 2.54	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

 α -Amylase (U/L 37°C)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
111.3 ± 15.58	65.5 ± 10.30	88.3 ± 10.39	188.9 ± 44.12	411.1 ± 138.14	n = 316	[---] All Methods & Instruments
<Instruments>						
120.7 ± 2.29	66.2 ± 0.76	92.9 ± 1.98	217.1 ± 4.29	503.8 ± 8.97	n = 7	[ABH] Abbott Architect
98.3 ± 5.61	52.3 ± 3.31	75.2 ± 4.02	174.9 ± 8.76	402.6 ± 21.63	n = 35	[OLC] Beckman Coulter AU Chemistry System
104.0 ± 3.17	87.2 ± 4.80	85.1 ± 40.12	140.3 ± 8.75	234.9 ± 26.82	n = 5	[BCS] Beckman Coulter CX
100.6 ± 3.15	83.8 ± 3.11	85.1 ± 2.95	135.3 ± 3.92	223.5 ± 5.47	n = 17	[BCX] Beckman Coulter LX-20
100.4 ± 4.18	84.9 ± 3.02	85.6 ± 3.23	133.9 ± 3.55	221.7 ± 4.03	n = 12	[BCG] Beckman Coulter UniCel DxC 600
99.8 ± 2.52	83.5 ± 2.86	84.3 ± 2.53	135.3 ± 3.33	221.2 ± 4.16	n = 23	[BCH] Beckman Coulter UniCel DxC 800
84.7 ± 4.45	57.7 ± 3.49	67.9 ± 2.52	133.7 ± 6.62	258.5 ± 8.45	n = 11	[JJE] Ortho Vitros 250/350/950
83.0 ± 3.88	59.1 ± 3.10	66.9 ± 3.48	133.9 ± 5.40	250.3 ± 7.67	n = 27	[JJF] Ortho Vitros 5,1FS
80.6 ± 2.56	58.2 ± 4.11	64.1 ± 2.86	131.6 ± 7.08	239.4 ± 13.47	n = 3	[JJG] Ortho Vitros 5600
118.1 ± 2.40	70.9 ± 1.43	93.5 ± 1.81	204.2 ± 2.73	435.3 ± 6.25	n = 13	[ROC] Roche cobas c501
116.6 ± 2.10	69.4 ± 1.47	91.7 ± 1.22	200.3 ± 2.46	433.1 ± 5.55	n = 10	[ROT] Roche Cobas INTEGRA
115.9 ± 1.96	69.0 ± 1.20	91.2 ± 1.85	200.1 ± 3.36	430.8 ± 8.00	n = 33	[ROD] Roche MODULAR D/P
119.0 ± 1.14	68.5 ± 1.81	93.2 ± 0.41	206.7 ± 2.02	444.3 ± 4.42	n = 5	[BYA] Siemens ADVIA 1650
122.2 ± 4.21	71.2 ± 2.25	96.5 ± 2.91	214.0 ± 6.77	460.7 ± 14.13	n = 14	[BYE] Siemens ADVIA 1800
115.5 ± 1.86	67.0 ± 0.90	91.0 ± 1.80	201.0 ± 1.80	432.9 ± 7.17	n = 3	[BYB] Siemens ADVIA 2400
126.3 ± 1.83	61.8 ± 1.31	96.2 ± 1.48	231.9 ± 2.21	553.6 ± 7.20	n = 7	[DUE] Siemens Dimension EXL
125.6 ± 2.51	61.4 ± 1.22	96.3 ± 2.19	233.6 ± 4.43	554.8 ± 11.01	n = 52	[DUR] Siemens Dimension RxL
119.8 ± 2.98	58.9 ± 1.35	90.6 ± 1.46	222.6 ± 4.36	530.0 ± 8.29	n = 12	[DUT] Siemens Dimension Vista
125.7 ± 1.42	61.7 ± 0.92	96.6 ± 1.69	233.8 ± 3.44	556.2 ± 7.53	n = 18	[DUX] Siemens Dimension Xpand
<Reagents>						
120.7 ± 2.29	66.2 ± 0.76	92.9 ± 1.98	217.1 ± 4.29	503.8 ± 8.97	n = 7	[AB1] Abbott
100.3 ± 3.42	84.0 ± 3.01	84.8 ± 2.86	135.1 ± 3.57	222.1 ± 4.89	n = 56	[BC1] Beckman Coulter
98.2 ± 5.71	52.3 ± 3.38	75.2 ± 4.09	175.2 ± 8.74	403.6 ± 21.11	n = 34	[OL1] Beckman Coulter AU Series
83.4 ± 4.43	58.8 ± 3.46	67.0 ± 3.31	134.2 ± 6.48	252.1 ± 9.82	n = 43	[JJ1] Ortho Clinical Diagnostics
118.1 ± 2.40	70.9 ± 1.43	93.5 ± 1.81	204.2 ± 2.73	435.3 ± 6.25	n = 13	[R04] Roche cobas c501
116.0 ± 1.98	69.1 ± 1.25	91.4 ± 1.91	200.3 ± 3.48	431.2 ± 7.91	n = 35	[R02] Roche Hitachi and Modular D/P
116.6 ± 2.10	69.4 ± 1.47	91.7 ± 1.22	200.3 ± 2.46	433.1 ± 5.55	n = 10	[R01] Roche Integra and MIRA
119.5 ± 5.20	69.5 ± 3.05	94.2 ± 4.10	208.7 ± 9.25	449.5 ± 19.87	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
125.2 ± 2.74	61.3 ± 1.42	95.8 ± 2.69	232.6 ± 5.13	552.5 ± 12.64	n = 89	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Alkaline Phosphatase (U/L 37°C)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
81.9 ± 11.94	186.6 ± 17.05	114.1 ± 13.61	152.6 ± 16.85	228.3 ± 19.20	n = 357	[---] All Methods & Instruments
<Instruments>						
82.2 ± 3.64	191.8 ± 10.18	115.2 ± 4.63	155.6 ± 7.13	237.6 ± 9.64	n = 10	[ABH] Abbott Architect
72.8 ± 3.54	171.4 ± 7.62	102.1 ± 4.72	137.8 ± 6.43	211.8 ± 10.22	n = 46	[OLC] Beckman Coulter AU Chemistry System
73.3 ± 1.05	173.4 ± 13.09	102.0 ± 7.82	139.7 ± 11.75	214.8 ± 20.12	n = 10	[BCS] Beckman Coulter CX
72.8 ± 3.98	171.9 ± 7.02	101.7 ± 3.53	138.8 ± 4.92	210.7 ± 9.70	n = 17	[BCX] Beckman Coulter LX-20
71.9 ± 4.03	169.3 ± 8.39	100.3 ± 5.50	135.7 ± 7.00	207.2 ± 11.11	n = 15	[BCG] Beckman Coulter UniCel DxC 600
74.2 ± 2.79	172.3 ± 6.22	102.9 ± 3.02	138.6 ± 4.61	212.3 ± 6.77	n = 25	[BCH] Beckman Coulter UniCel DxC 800
105.8 ± 4.27	183.6 ± 8.51	128.3 ± 6.75	177.3 ± 7.43	227.4 ± 10.57	n = 14	[JJE] Ortho Vitros 250/350/950
109.4 ± 5.27	192.1 ± 8.11	135.2 ± 5.46	184.5 ± 7.38	233.2 ± 9.48	n = 28	[JJF] Ortho Vitros 5,1FS
107.6 ± 1.02	188.6 ± 4.72	131.8 ± 4.89	179.7 ± 3.37	224.8 ± 2.36	n = 3	[JJG] Ortho Vitros 5600
80.5 ± 3.00	190.4 ± 6.50	112.5 ± 2.87	151.4 ± 4.57	229.1 ± 5.15	n = 13	[ROC] Roche cobas c501
77.4 ± 1.89	184.6 ± 3.40	109.8 ± 1.91	148.0 ± 2.63	227.1 ± 3.74	n = 10	[ROT] Roche Cobas INTEGRA
72.4 ± 8.43	171.7 ± 19.47	101.4 ± 10.17	138.4 ± 14.81	212.4 ± 20.29	n = 3	[ROM] Roche Cobas MIRA/MIRA Plus
78.4 ± 2.67	183.5 ± 5.57	109.5 ± 3.22	147.4 ± 4.81	222.0 ± 6.82	n = 37	[ROD] Roche MODULAR D/P
82.6 ± 3.19	193.1 ± 5.75	115.6 ± 2.61	155.8 ± 4.39	239.4 ± 4.94	n = 5	[BYA] Siemens ADVIA 1650
84.3 ± 2.54	199.5 ± 5.14	117.5 ± 3.37	160.1 ± 5.00	243.5 ± 7.00	n = 15	[BYE] Siemens ADVIA 1800
80.7 ± 0.51	188.1 ± 3.72	112.2 ± 2.36	153.3 ± 4.06	232.3 ± 6.93	n = 3	[BYB] Siemens ADVIA 2400
99.1 ± 5.14	213.6 ± 9.40	131.2 ± 8.01	170.8 ± 10.54	255.4 ± 9.74	n = 8	[DUE] Siemens Dimension EXL
91.4 ± 7.72	211.1 ± 12.60	128.9 ± 8.49	164.7 ± 9.49	254.2 ± 13.02	n = 51	[DUR] Siemens Dimension RxL
81.6 ± 4.71	183.9 ± 11.31	113.4 ± 6.03	156.1 ± 8.41	234.4 ± 13.02	n = 12	[DUT] Siemens Dimension Vista
85.6 ± 4.40	202.1 ± 7.14	121.7 ± 5.69	157.1 ± 6.90	242.0 ± 9.82	n = 20	[DUX] Siemens Dimension Xpand
<Reagents>						
82.9 ± 4.13	193.6 ± 11.26	116.0 ± 5.00	156.6 ± 7.65	239.1 ± 10.37	n = 11	[AB1] Abbott
73.0 ± 3.39	171.1 ± 7.42	101.6 ± 3.92	137.5 ± 5.63	209.6 ± 9.44	n = 62	[BC1] Beckman Coulter
72.7 ± 3.36	171.3 ± 7.24	102.0 ± 4.41	137.7 ± 6.06	211.5 ± 9.65	n = 45	[OL1] Beckman Coulter AU Series
103.5 ± 50.22	182.7 ± 11.29	108.3 ± 7.75	145.9 ± 7.95	221.6 ± 10.24	n = 3	[CR1] Carolina
107.8 ± 5.18	189.1 ± 9.17	132.9 ± 6.63	181.9 ± 7.89	231.1 ± 9.84	n = 46	[JJ1] Ortho Clinical Diagnostics
80.5 ± 3.00	190.4 ± 6.50	112.5 ± 2.87	151.4 ± 4.57	229.1 ± 5.15	n = 13	[R04] Roche cobas c501
78.5 ± 2.68	183.7 ± 5.62	109.6 ± 3.25	147.6 ± 5.03	222.2 ± 6.80	n = 38	[R02] Roche Hitachi and Modular D/P
77.6 ± 1.85	185.0 ± 3.39	109.9 ± 1.77	148.1 ± 2.49	226.8 ± 3.61	n = 11	[R01] Roche Integra and MIRA
83.1 ± 3.24	195.8 ± 7.93	116.0 ± 4.00	157.7 ± 6.05	240.4 ± 8.41	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
89.1 ± 8.08	206.4 ± 14.05	125.4 ± 9.51	162.2 ± 9.84	249.3 ± 14.25	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

 γ -Glutamyltransferase (U/L 37°C)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
115.7 ± 24.01	28.2 ± 5.61	69.5 ± 14.76	50.5 ± 11.43	241.5 ± 44.96	n = 303	[---] All Methods & Instruments
<Instruments>						
118.2 ± 4.62	29.4 ± 1.86	70.2 ± 3.43	50.0 ± 0.00	246.4 ± 9.67	n = 9	[ABH] Abbott Architect
91.6 ± 3.56	24.3 ± 1.08	55.1 ± 2.28	39.9 ± 1.78	191.3 ± 7.19	n = 43	[OLC] Beckman Coulter AU Chemistry System
102.6 ± 16.95	24.2 ± 3.27	62.1 ± 11.37	45.6 ± 6.52	242.8 ± 47.46	n = 8	[BCS] Beckman Coulter CX
114.1 ± 4.52	23.6 ± 2.83	66.8 ± 2.40	45.7 ± 1.99	251.0 ± 6.67	n = 12	[BCX] Beckman Coulter LX-20
119.5 ± 3.89	24.3 ± 2.17	70.3 ± 2.34	47.3 ± 2.43	260.7 ± 9.48	n = 11	[BCG] Beckman Coulter UniCel DxC 600
117.9 ± 3.74	24.5 ± 2.48	69.4 ± 2.41	47.6 ± 2.21	256.2 ± 7.57	n = 19	[BCH] Beckman Coulter UniCel DxC 800
189.2 ± 6.62	32.0 ± 3.05	107.5 ± 4.11	70.4 ± 3.85	423.2 ± 18.01	n = 10	[JJE] Ortho Vitros 250/350/950
184.3 ± 4.87	32.2 ± 2.22	104.9 ± 3.32	68.3 ± 2.29	411.6 ± 10.93	n = 27	[JJF] Ortho Vitros 5,1FS
185.0 ± 1.80	32.0 ± 0.90	105.7 ± 1.37	68.3 ± 0.51	407.0 ± 7.21	n = 3	[JJG] Ortho Vitros 5600
101.6 ± 2.21	25.4 ± 0.76	60.5 ± 1.12	42.5 ± 1.20	213.2 ± 4.78	n = 13	[ROC] Roche cobas c501
97.7 ± 2.47	23.7 ± 0.96	58.7 ± 1.64	41.6 ± 1.60	206.0 ± 4.48	n = 10	[ROT] Roche Cobas INTEGRA
102.8 ± 2.69	25.1 ± 1.09	61.1 ± 1.82	42.4 ± 1.46	216.3 ± 6.39	n = 34	[ROD] Roche MODULAR D/P
104.1 ± 2.35	25.5 ± 1.22	61.8 ± 2.11	43.5 ± 1.23	219.9 ± 7.28	n = 4	[BYA] Siemens ADVIA 1650
108.0 ± 1.57	26.4 ± 1.93	63.7 ± 1.50	45.1 ± 1.92	228.3 ± 3.19	n = 15	[BYE] Siemens ADVIA 1800
131.6 ± 0.79	36.5 ± 1.49	80.2 ± 0.84	62.1 ± 1.40	277.1 ± 3.18	n = 7	[DUE] Siemens Dimension EXL
133.0 ± 3.53	36.6 ± 1.88	80.2 ± 3.07	61.8 ± 2.57	276.9 ± 6.55	n = 42	[DUR] Siemens Dimension RxL
130.6 ± 3.21	32.9 ± 2.42	77.2 ± 1.65	58.6 ± 2.40	278.7 ± 6.11	n = 12	[DUT] Siemens Dimension Vista
133.1 ± 2.24	37.1 ± 0.44	80.8 ± 0.84	62.2 ± 1.29	275.2 ± 5.07	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
118.5 ± 3.19	29.3 ± 1.21	70.3 ± 2.34	49.6 ± 1.84	247.3 ± 5.54	n = 9	[AB1] Abbott
116.9 ± 4.59	24.3 ± 2.69	68.6 ± 3.09	46.8 ± 2.54	254.4 ± 8.62	n = 47	[BC1] Beckman Coulter
91.5 ± 3.40	24.3 ± 1.09	55.0 ± 2.20	39.9 ± 1.73	191.1 ± 6.93	n = 42	[OL1] Beckman Coulter AU Series
185.4 ± 5.49	32.1 ± 2.35	105.5 ± 3.56	68.7 ± 2.76	413.2 ± 13.56	n = 40	[JJ1] Ortho Clinical Diagnostics
101.6 ± 2.21	25.4 ± 0.76	60.5 ± 1.12	42.5 ± 1.20	213.2 ± 4.78	n = 13	[R04] Roche cobas c501
102.7 ± 2.80	25.2 ± 1.13	61.1 ± 1.89	42.4 ± 1.51	216.3 ± 6.67	n = 36	[R02] Roche Hitachi and Modular D/P
97.7 ± 2.47	23.7 ± 0.96	58.7 ± 1.64	41.6 ± 1.60	206.0 ± 4.48	n = 10	[R01] Roche Integra and MIRA
106.4 ± 2.87	26.2 ± 1.88	62.9 ± 2.13	44.5 ± 1.96	225.5 ± 6.39	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
132.5 ± 3.18	36.3 ± 2.04	79.8 ± 2.66	61.5 ± 2.60	277.0 ± 6.03	n = 72	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Creatine Kinase (U/L 37°C)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
64.8 ± 10.80	248.4 ± 16.22	56.8 ± 10.26	352.9 ± 24.00	274.4 ± 22.59	n = 327	[---] All Methods & Instruments
<Instruments>						
77.7 ± 1.38	264.1 ± 5.88	67.3 ± 2.68	387.9 ± 4.66	290.7 ± 5.67	n = 9	[ABH] Abbott Architect
61.3 ± 3.02	230.3 ± 9.27	54.4 ± 2.36	330.0 ± 14.87	255.6 ± 11.10	n = 41	[OLC] Beckman Coulter AU Chemistry System
69.0 ± 10.24	252.6 ± 20.07	62.9 ± 8.81	364.3 ± 35.73	285.6 ± 34.84	n = 8	[BCS] Beckman Coulter CX
76.0 ± 3.17	264.1 ± 8.48	68.3 ± 2.91	387.5 ± 11.15	298.4 ± 9.62	n = 17	[BCX] Beckman Coulter LX-20
74.3 ± 2.15	258.5 ± 7.54	66.6 ± 2.21	377.7 ± 9.85	294.9 ± 10.12	n = 12	[BCG] Beckman Coulter UniCel DxC 600
75.1 ± 2.22	261.0 ± 7.67	67.0 ± 2.51	380.8 ± 12.78	295.8 ± 9.36	n = 24	[BCH] Beckman Coulter UniCel DxC 800
71.1 ± 2.98	274.4 ± 13.48	61.1 ± 2.91	374.2 ± 13.68	321.3 ± 14.09	n = 11	[JJE] Ortho Vitros 250/350/950
70.7 ± 3.25	269.0 ± 12.69	61.4 ± 2.98	364.1 ± 19.52	317.8 ± 12.45	n = 26	[JJF] Ortho Vitros 5,1FS
72.5 ± 4.53	288.0 ± 11.79	64.1 ± 6.08	375.5 ± 24.59	330.0 ± 19.21	n = 3	[JJG] Ortho Vitros 5600
67.4 ± 1.85	255.2 ± 4.84	59.1 ± 1.35	369.0 ± 7.72	282.8 ± 5.43	n = 13	[ROC] Roche cobas c501
59.6 ± 4.17	235.8 ± 5.91	51.9 ± 4.12	347.8 ± 8.51	266.2 ± 6.69	n = 9	[ROT] Roche Cobas INTEGRA
74.4 ± 1.41	248.3 ± 2.54	65.9 ± 1.30	356.5 ± 4.89	270.0 ± 3.05	n = 35	[ROD] Roche MODULAR D/P
61.7 ± 0.91	250.2 ± 2.59	53.2 ± 2.28	347.6 ± 2.65	267.1 ± 2.04	n = 5	[BYA] Siemens ADVIA 1650
61.8 ± 2.40	254.0 ± 5.94	54.2 ± 1.86	353.2 ± 14.05	271.4 ± 6.79	n = 15	[BYE] Siemens ADVIA 1800
61.8 ± 2.36	251.6 ± 13.82	54.0 ± 1.80	346.5 ± 8.26	268.8 ± 13.30	n = 3	[BYB] Siemens ADVIA 2400
50.7 ± 0.74	236.8 ± 3.44	42.5 ± 1.14	338.1 ± 6.30	259.5 ± 4.15	n = 7	[DUE] Siemens Dimension EXL
51.2 ± 2.64	237.9 ± 7.59	43.9 ± 2.63	337.7 ± 10.04	260.2 ± 8.32	n = 49	[DUR] Siemens Dimension RxL
53.0 ± 1.18	236.7 ± 7.05	45.8 ± 1.72	332.1 ± 12.33	259.1 ± 8.66	n = 13	[DUT] Siemens Dimension Vista
51.4 ± 1.99	238.5 ± 5.13	43.3 ± 2.44	337.8 ± 8.77	260.3 ± 5.23	n = 18	[DUX] Siemens Dimension Xpand
<Reagents>						
77.7 ± 1.38	264.1 ± 5.88	67.3 ± 2.68	387.9 ± 4.66	290.7 ± 5.67	n = 9	[AB1] Abbott
74.9 ± 2.80	260.9 ± 8.79	67.2 ± 2.67	381.6 ± 13.74	296.0 ± 10.10	n = 58	[BC1] Beckman Coulter
61.3 ± 3.07	230.2 ± 9.22	54.3 ± 2.41	329.8 ± 14.66	255.4 ± 10.85	n = 39	[OL1] Beckman Coulter AU Series
53.4 ± 6.14	230.8 ± 4.89	48.3 ± 5.86	324.4 ± 10.30	248.5 ± 4.61	n = 3	[CR1] Carolina
70.9 ± 3.34	271.9 ± 13.87	61.4 ± 3.34	367.8 ± 18.65	319.2 ± 13.19	n = 40	[JJ1] Ortho Clinical Diagnostics
67.4 ± 1.85	255.2 ± 4.84	59.1 ± 1.35	369.0 ± 7.72	282.8 ± 5.43	n = 13	[R04] Roche cobas c501
74.5 ± 1.44	248.3 ± 2.61	66.0 ± 1.37	356.3 ± 4.95	270.1 ± 3.06	n = 37	[R02] Roche Hitachi and Modular D/P
59.6 ± 4.17	235.8 ± 5.91	51.9 ± 4.12	347.8 ± 8.51	266.2 ± 6.69	n = 9	[R01] Roche Integra and MIRA
61.7 ± 2.24	251.5 ± 7.77	54.0 ± 1.83	349.6 ± 13.04	269.1 ± 7.91	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
51.5 ± 2.29	237.8 ± 6.74	44.0 ± 2.53	337.2 ± 9.52	260.1 ± 7.52	n = 87	[DA5] Siemens Dimension
60.0 ± 5.48	242.5 ± 3.63	55.0 ± 4.60	341.8 ± 8.59	263.1 ± 4.38	n = 3	[ZZZ] Reagent Not Listed

Summary of Participant Performance (Mean and Standard Deviation)

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

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
1.37 ± 1.04	17.19 ± 6.16	1.54 ± 1.24	22.35 ± 5.08	1.78 ± 1.69	n = 11	[---] All Methods - Results reported in U/L
2.85 ± 0.17	29.00 ± 1.14	2.85 ± 0.17	27.00 ± 1.14	3.00 ± 0.00	n = 2	[JJ1] Ortho Clinical Diagnostics
0.63 ± 0.32	16.88 ± 3.25	0.60 ± 0.33	24.35 ± 3.93	0.83 ± 0.36	n = 210	[-A-] All Methods - Results reported in ng/mL
0.80 ± 0.20	17.81 ± 2.12	0.70 ± 0.21	26.03 ± 3.18	0.93 ± 0.24	n = 18	[AB1] Abbott
1.79 ± 2.05	19.52 ± 0.71	1.73 ± 2.09	27.24 ± 0.98	1.95 ± 1.95	n = 23	[SAA] Beckman Coulter ACCESS
0.80 ± 0.00	19.40 ± 0.50	0.70 ± 0.00	27.66 ± 0.89	1.00 ± 0.00	n = 18	[BC-] Beckman Coulter LX-20/DxC 600/DxI 800
1.00 ± 0.00	12.99 ± 1.17	1.00 ± 0.00	17.19 ± 2.93	1.00 ± 0.00	n = 5	[BSA] BioSite Triage
0.30 ± 0.00	11.99 ± 0.69	0.24 ± 0.06	17.17 ± 1.08	0.43 ± 0.08	n = 16	[JJ1] Ortho Clinical Diagnostics
1.03 ± 0.07	20.99 ± 0.84	1.15 ± 0.12	29.03 ± 0.97	1.48 ± 0.10	n = 26	[R03] Roche Elecsys/Modular E/e601/e411
0.49 ± 0.21	14.39 ± 0.91	0.49 ± 0.25	22.33 ± 1.51	0.63 ± 0.23	n = 51	[DA5] Siemens Dimension
0.72 ± 0.22	14.25 ± 0.55	0.70 ± 0.23	21.63 ± 0.64	1.13 ± 0.11	n = 6	[DA6] Siemens Dimension LOCI
0.33 ± 0.16	16.86 ± 0.95	0.32 ± 0.16	23.06 ± 1.06	0.62 ± 0.18	n = 34	[BY1] Siemens ADVIA/ADVIA Centaur
0.53 ± 0.21	14.94 ± 0.38	0.52 ± 0.14	23.19 ± 1.67	0.65 ± 0.27	n = 6	[DP5] Siemens Immulite
0.70 ± 0.11	16.85 ± 0.17	0.60 ± 0.00	26.35 ± 0.40	0.80 ± 0.00	n = 2	[DA2] Siemens Stratus
0.60 ± 0.46	21.37 ± 1.04	0.45 ± 0.36	30.82 ± 1.32	1.05 ± 0.19	n = 3	[TOM] Tosoh
0.00 ± 0.00	5.37 ± 2.62	0.00 ± 0.00	8.31 ± 0.82	0.00 ± 0.00	n = 5	[-P-] All Methods - Results reported as %

Summary of Participant Performance (Mean and Standard Deviation)

Lactate Dehydrogenase (U/L 37°C)

Specimen: C41	Specimen: C42	Specimen: C43	Specimen: C44	Specimen: C45	Number	[Code] Instrument or Reagent System
161.3 ± 15.74	144.0 ± 13.73	122.8 ± 12.27	333.5 ± 32.06	219.5 ± 20.31	n = 270	[-A-] All Methods - Lactate to Pyruvate
476.2 ± 11.39	398.4 ± 15.64	357.2 ± 10.94	945.5 ± 24.55	617.8 ± 21.43	n = 45	[-B-] All Methods - Pyruvate to Lactate
<Instruments>						
173.7 ± 5.35	157.2 ± 4.13	132.5 ± 4.86	350.8 ± 10.87	231.1 ± 7.66	n = 9	[ABH] Abbott Architect
157.5 ± 9.09	140.7 ± 7.53	118.9 ± 7.21	326.7 ± 19.03	215.2 ± 13.58	n = 43	[OLC] Beckman Coulter AU Chemistry System
146.9 ± 7.92	130.2 ± 6.44	113.9 ± 8.05	303.6 ± 15.58	199.2 ± 5.15	n = 8	[BCS] Beckman Coulter CX
148.7 ± 3.83	132.2 ± 5.04	112.5 ± 4.38	306.2 ± 11.77	204.3 ± 10.64	n = 16	[BCX] Beckman Coulter LX-20
147.1 ± 3.42	133.0 ± 4.61	113.5 ± 2.58	306.6 ± 7.84	204.7 ± 6.23	n = 13	[BCG] Beckman Coulter UniCel DxC 600
149.0 ± 3.57	133.8 ± 3.55	113.4 ± 2.44	310.9 ± 7.49	204.4 ± 6.01	n = 21	[BCH] Beckman Coulter UniCel DxC 800
482.0 ± 7.48	408.6 ± 9.03	361.7 ± 6.38	950.8 ± 17.57	628.1 ± 17.76	n = 12	[JJE] Ortho Vitros 250/350/950
473.6 ± 10.81	393.8 ± 14.79	353.7 ± 11.15	946.2 ± 26.26	616.3 ± 22.57	n = 28	[JJF] Ortho Vitros 5,1FS
466.5 ± 6.32	392.8 ± 17.59	355.7 ± 15.78	925.0 ± 15.62	598.6 ± 12.55	n = 3	[JJG] Ortho Vitros 5600
183.6 ± 7.13	163.5 ± 6.38	139.6 ± 5.40	380.3 ± 11.52	246.2 ± 8.76	n = 14	[ROC] Roche cobas c501
180.4 ± 3.14	159.9 ± 5.21	136.9 ± 4.24	371.1 ± 9.33	242.7 ± 8.55	n = 9	[ROT] Roche Cobas INTEGRA
179.1 ± 3.45	159.7 ± 4.18	137.1 ± 3.02	373.6 ± 7.99	243.6 ± 6.58	n = 33	[ROD] Roche MODULAR D/P
174.2 ± 8.41	154.2 ± 7.20	132.1 ± 6.31	356.2 ± 15.72	233.4 ± 11.87	n = 5	[BYA] Siemens ADVIA 1650
180.8 ± 4.70	161.1 ± 5.59	137.8 ± 3.87	371.5 ± 9.68	245.6 ± 8.15	n = 15	[BYE] Siemens ADVIA 1800
171.4 ± 4.72	153.3 ± 3.07	130.3 ± 3.07	352.9 ± 9.28	231.9 ± 6.58	n = 3	[BYB] Siemens ADVIA 2400
151.1 ± 3.61	137.0 ± 3.25	115.7 ± 4.92	313.2 ± 5.18	207.7 ± 4.98	n = 6	[DUE] Siemens Dimension EXL
152.7 ± 6.01	136.2 ± 4.84	116.3 ± 4.36	314.2 ± 11.48	208.0 ± 8.29	n = 44	[DUR] Siemens Dimension RxL
156.3 ± 3.56	139.8 ± 3.01	119.1 ± 3.53	323.3 ± 6.78	212.9 ± 7.73	n = 12	[DUT] Siemens Dimension Vista
151.0 ± 4.13	134.7 ± 3.86	115.0 ± 3.98	312.8 ± 8.17	207.9 ± 5.27	n = 13	[DUX] Siemens Dimension Xpand
<Reagents>						
174.4 ± 5.44	157.4 ± 3.91	132.8 ± 4.64	352.8 ± 12.00	232.3 ± 7.98	n = 10	[AB1] Abbott
148.2 ± 4.17	132.6 ± 4.77	113.0 ± 3.50	308.0 ± 10.02	203.6 ± 7.39	n = 56	[BC1] Beckman Coulter
157.2 ± 8.82	140.5 ± 7.18	118.6 ± 7.11	326.1 ± 18.71	214.7 ± 13.16	n = 42	[OL1] Beckman Coulter AU Series
475.7 ± 10.98	398.3 ± 15.18	356.7 ± 10.89	946.2 ± 23.87	618.2 ± 22.09	n = 43	[JJ1] Ortho Clinical Diagnostics
183.6 ± 7.13	163.5 ± 6.38	139.6 ± 5.40	380.3 ± 11.52	246.2 ± 8.76	n = 14	[R04] Roche cobas c501
179.3 ± 3.47	159.7 ± 4.10	137.1 ± 2.94	373.7 ± 7.97	243.6 ± 6.31	n = 35	[R02] Roche Hitachi and Modular D/P
180.4 ± 3.14	159.9 ± 5.21	136.9 ± 4.24	371.1 ± 9.33	242.7 ± 8.55	n = 9	[R01] Roche Integra and MIRA
177.4 ± 6.86	157.4 ± 6.95	134.8 ± 5.68	363.9 ± 14.20	239.3 ± 11.37	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
152.7 ± 5.52	136.6 ± 4.57	116.5 ± 4.39	315.4 ± 10.36	208.6 ± 7.67	n = 76	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

LDH Isoenzyme 1 (%)

Specimen: C41 -----	Specimen: C42 -----	Specimen: C43 -----	Specimen: C44 -----	Specimen: C45 -----	Number -----	[Code] Instrument or Reagent System -----
50.5 ± 2.63	30.6 ± 2.99	49.1 ± 2.74	19.0 ± 3.68	32.7 ± 2.65	n = 10	[-P-] % - Electrophoresis
51.8 ± 0.80	32.8 ± 0.80	50.1 ± 1.38	21.3 ± 1.99	34.5 ± 1.80	n = 5	<Instruments>
49.2 ± 3.23	27.6 ± 2.56	46.5 ± 4.53	15.2 ± 1.54	30.9 ± 2.05	n = 3	[HLS] Helena SPIFE
						[SEE] Sebia Electrophoresis
51.5 ± 1.24	32.5 ± 1.24	50.1 ± 1.23	21.5 ± 1.75	34.2 ± 1.76	n = 6	<Reagents>
49.2 ± 3.23	27.6 ± 2.56	46.5 ± 4.53	15.2 ± 1.54	30.9 ± 2.05	n = 3	[HL1] Helena Laboratories
						[SE1] Sebia