

Summary of Participant Performance (Mean and Standard Deviation)

Glucose (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
328.9 ± 7.50	74.1 ± 2.42	42.3 ± 1.85	179.7 ± 4.17	Non-gradable*	n = 389	[---] All Methods & Instruments
<Instruments>						
335.6 ± 6.03	72.4 ± 1.09	40.9 ± 0.93	178.0 ± 2.90	-----	n = 12	[ABH] Abbott Architect
327.6 ± 8.10	72.6 ± 1.96	41.4 ± 1.06	178.0 ± 4.83	-----	n = 48	[OLC] Beckman Coulter AU Chemistry System
322.2 ± 11.34	72.3 ± 3.08	41.2 ± 1.40	178.0 ± 5.15	-----	n = 11	[BCS] Beckman Coulter CX
326.8 ± 4.28	73.7 ± 2.03	41.9 ± 1.70	178.5 ± 3.95	-----	n = 15	[BCX] Beckman Coulter LX-20
330.6 ± 8.78	74.7 ± 2.41	42.8 ± 1.48	178.7 ± 4.59	-----	n = 19	[BCG] Beckman Coulter UniCel DxC 600
329.9 ± 4.12	74.5 ± 1.86	42.5 ± 1.71	179.8 ± 2.85	-----	n = 23	[BCH] Beckman Coulter UniCel DxC 800
341.6 ± 11.05	87.0 ± 5.98	61.3 ± 1.51	185.5 ± 2.98	-----	n = 4	[HEB] HemoCue B-Glucose
342.8 ± 18.55	98.8 ± 6.95	69.5 ± 4.53	197.3 ± 3.16	-----	n = 3	[HEC] HemoCue Glucose 201
329.0 ± 2.36	73.9 ± 1.32	41.5 ± 1.43	175.9 ± 1.26	-----	n = 8	[IAA] i-STAT
328.1 ± 5.36	74.0 ± 1.94	41.8 ± 1.37	181.3 ± 3.30	-----	n = 14	[JJE] Ortho Vitros 250/350/950
328.5 ± 4.38	72.6 ± 1.49	41.3 ± 1.03	180.3 ± 2.71	-----	n = 27	[JJF] Ortho Vitros 5,1FS
322.7 ± 9.96	73.0 ± 0.00	41.3 ± 0.82	178.8 ± 3.10	-----	n = 4	[JJG] Ortho Vitros 5600
328.6 ± 4.84	73.8 ± 1.29	41.9 ± 1.10	178.7 ± 3.58	-----	n = 17	[ROC] Roche cobas c501
326.4 ± 5.08	72.3 ± 1.19	41.2 ± 0.96	177.1 ± 3.10	-----	n = 12	[ROT] Roche Cobas INTEGRA
330.4 ± 6.57	73.8 ± 1.86	41.8 ± 0.97	179.6 ± 2.99	-----	n = 36	[ROD] Roche MODULAR D/P
339.4 ± 8.29	75.9 ± 4.27	43.8 ± 3.84	185.1 ± 5.95	-----	n = 5	[BYA] Siemens ADVIA 1650
329.7 ± 6.76	73.7 ± 1.61	42.6 ± 0.99	180.2 ± 4.32	-----	n = 15	[BYE] Siemens ADVIA 1800
336.3 ± 13.02	75.2 ± 2.36	43.5 ± 1.86	183.5 ± 5.40	-----	n = 3	[BYB] Siemens ADVIA 2400
329.0 ± 4.51	77.0 ± 1.52	45.0 ± 1.21	181.6 ± 2.51	-----	n = 9	[DUE] Siemens Dimension EXL
330.3 ± 8.12	76.6 ± 1.90	44.3 ± 1.96	181.8 ± 3.88	-----	n = 49	[DUR] Siemens Dimension RxL
317.3 ± 7.97	73.6 ± 1.77	42.9 ± 1.12	175.7 ± 2.86	-----	n = 13	[DUT] Siemens Dimension Vista
326.6 ± 7.56	76.2 ± 2.01	44.2 ± 2.53	180.9 ± 3.47	-----	n = 22	[DUX] Siemens Dimension Xpand
<Reagents>						
336.2 ± 6.10	72.6 ± 1.30	41.0 ± 1.07	178.4 ± 3.14	-----	n = 13	[AB1] Abbott
328.4 ± 5.74	74.2 ± 2.17	42.3 ± 1.72	179.0 ± 3.73	-----	n = 66	[BC1] Beckman Coulter
327.8 ± 7.98	72.6 ± 1.95	41.4 ± 1.04	177.8 ± 4.75	-----	n = 45	[OL1] Beckman Coulter AU Series
320.6 ± 12.77	73.2 ± 3.24	42.2 ± 1.07	178.3 ± 4.37	-----	n = 5	[CR1] Carolina
342.6 ± 14.25	91.6 ± 8.72	64.2 ± 4.88	190.3 ± 7.05	-----	n = 7	[HE1] HemoCue
329.8 ± 2.21	73.6 ± 1.22	41.1 ± 1.23	175.9 ± 1.33	-----	n = 6	[IA1] i-STAT thermal cartridge
328.4 ± 5.31	73.0 ± 1.59	41.4 ± 1.14	180.4 ± 2.92	-----	n = 46	[JJ1] Ortho Clinical Diagnostics
328.6 ± 4.84	73.8 ± 1.29	41.9 ± 1.10	178.7 ± 3.58	-----	n = 17	[RO4] Roche cobas c501
330.1 ± 6.68	73.8 ± 1.83	41.8 ± 0.97	179.4 ± 3.05	-----	n = 37	[RO2] Roche Hitachi and Modular D/P
327.2 ± 6.38	72.6 ± 1.73	41.4 ± 1.15	177.8 ± 4.09	-----	n = 13	[RO1] Roche Integra and MIRA
332.5 ± 9.15	74.3 ± 2.24	42.9 ± 1.37	181.7 ± 5.10	-----	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
327.7 ± 8.60	76.2 ± 2.14	44.2 ± 2.02	180.7 ± 4.14	-----	n = 93	[DA5] Siemens Dimension

*Please note that results for glucose for sample C50 were judged non-gradable due to unacceptable between-laboratory variation. Pass credit (100%) was assigned for that sample/analyte for all participants that reported glucose results.

Summary of Participant Performance (Mean and Standard Deviation)

Urea Nitrogen (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
45.1 ± 2.30	11.9 ± 0.78	19.0 ± 0.97	57.5 ± 2.63	25.1 ± 1.36	n = 372	[---] All Methods & Instruments
<Instruments>						
45.5 ± 1.53	12.0 ± 0.00	19.4 ± 0.57	58.4 ± 1.74	25.3 ± 0.76	n = 11	[ABH] Abbott Architect
45.8 ± 1.55	12.0 ± 0.53	19.5 ± 0.67	58.0 ± 1.79	25.3 ± 0.78	n = 45	[OLC] Beckman Coulter AU Chemistry System
45.9 ± 0.70	12.1 ± 0.44	19.6 ± 0.57	58.9 ± 1.01	26.0 ± 0.60	n = 11	[BCS] Beckman Coulter CX
44.0 ± 1.18	11.2 ± 0.95	18.2 ± 0.86	55.6 ± 1.36	24.1 ± 0.70	n = 15	[BCX] Beckman Coulter LX-20
45.0 ± 1.15	12.0 ± 0.00	19.2 ± 0.66	57.6 ± 2.15	25.7 ± 0.85	n = 18	[BCG] Beckman Coulter UniCel DxC 600
42.9 ± 1.69	10.7 ± 1.03	17.5 ± 1.17	54.8 ± 2.13	23.7 ± 1.05	n = 24	[BCH] Beckman Coulter UniCel DxC 800
47.9 ± 3.55	11.4 ± 0.72	17.6 ± 0.68	62.7 ± 4.46	26.2 ± 1.44	n = 8	[IAA] i-STAT
40.3 ± 1.33	10.8 ± 0.56	17.8 ± 0.80	53.3 ± 1.77	21.0 ± 1.03	n = 14	[JJE] Ortho Vitros 250/350/950
40.3 ± 0.82	10.8 ± 0.48	17.8 ± 0.54	53.3 ± 1.10	20.6 ± 0.58	n = 27	[JFF] Ortho Vitros 5,1FS
40.8 ± 0.41	11.0 ± 0.00	17.8 ± 0.41	54.0 ± 0.75	21.0 ± 0.00	n = 4	[JJG] Ortho Vitros 5600
45.5 ± 1.00	12.0 ± 0.00	19.0 ± 0.00	57.6 ± 1.01	25.4 ± 0.69	n = 17	[ROC] Roche cobas c501
45.5 ± 0.93	12.0 ± 0.60	18.6 ± 0.81	58.6 ± 1.27	25.1 ± 0.70	n = 11	[ROT] Roche Cobas INTEGRA
45.0 ± 1.08	12.0 ± 0.00	19.2 ± 0.56	57.7 ± 1.33	25.2 ± 0.60	n = 35	[ROD] Roche MODULAR D/P
47.3 ± 1.10	12.6 ± 0.55	20.0 ± 0.00	60.0 ± 1.00	26.0 ± 0.64	n = 5	[BYA] Siemens ADVIA 1650
46.3 ± 0.86	12.4 ± 0.55	19.6 ± 0.64	59.5 ± 1.09	25.5 ± 0.57	n = 15	[BYE] Siemens ADVIA 1800
46.7 ± 1.37	12.0 ± 0.90	20.4 ± 1.02	60.2 ± 1.54	25.7 ± 0.51	n = 3	[BYB] Siemens ADVIA 2400
45.5 ± 0.71	11.9 ± 0.60	19.4 ± 0.72	58.3 ± 1.93	25.3 ± 0.87	n = 8	[DUE] Siemens Dimension EXL
46.4 ± 1.24	12.3 ± 0.72	19.4 ± 0.78	59.1 ± 1.59	25.8 ± 0.80	n = 50	[DUR] Siemens Dimension RxL
45.2 ± 1.52	12.0 ± 0.00	19.1 ± 0.62	57.9 ± 1.74	25.3 ± 1.05	n = 13	[DUT] Siemens Dimension Vista
46.0 ± 1.60	12.0 ± 0.84	19.2 ± 0.63	58.8 ± 1.93	25.3 ± 0.74	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
45.4 ± 1.52	12.0 ± 0.00	19.4 ± 0.56	58.1 ± 1.82	25.3 ± 0.72	n = 12	[AB1] Abbott
44.2 ± 1.80	11.5 ± 0.99	18.5 ± 1.23	56.4 ± 2.36	24.7 ± 1.30	n = 65	[BC1] Beckman Coulter
45.8 ± 1.57	12.1 ± 0.50	19.5 ± 0.68	58.0 ± 1.81	25.3 ± 0.79	n = 44	[OL1] Beckman Coulter AU Series
45.3 ± 0.90	12.2 ± 0.41	19.2 ± 0.41	57.9 ± 2.72	26.2 ± 1.27	n = 4	[CR1] Carolina
49.3 ± 1.21	11.7 ± 0.51	18.0 ± 0.00	64.5 ± 1.70	26.8 ± 0.73	n = 6	[IA1] i-STAT thermal cartridge
40.4 ± 0.99	10.8 ± 0.45	17.8 ± 0.61	53.3 ± 1.27	20.7 ± 0.68	n = 47	[JJ1] Ortho Clinical Diagnostics
45.5 ± 1.00	12.0 ± 0.00	19.0 ± 0.00	57.6 ± 1.01	25.4 ± 0.69	n = 17	[RO4] Roche cobas c501
45.0 ± 1.06	12.0 ± 0.00	19.2 ± 0.54	57.6 ± 1.35	25.2 ± 0.59	n = 36	[RO2] Roche Hitachi and Modular D/P
45.4 ± 0.89	12.0 ± 0.55	18.6 ± 0.79	58.5 ± 1.33	25.2 ± 0.73	n = 12	[RO1] Roche Integra and MIRA
46.5 ± 1.10	12.3 ± 0.64	19.7 ± 0.68	59.8 ± 1.17	25.5 ± 0.66	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
46.1 ± 1.42	12.1 ± 0.70	19.3 ± 0.73	58.8 ± 1.80	25.6 ± 0.87	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Creatinine (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
2.42 ± 0.15	0.91 ± 0.13	1.58 ± 0.14	5.05 ± 0.23	1.88 ± 0.12	n = 378	[---] All Methods & Instruments
2.42 ± 0.16	0.91 ± 0.14	1.59 ± 0.14	5.09 ± 0.30	1.89 ± 0.15	n = 167	[---] All IDMS Traceable Methods
2.43 ± 0.14	0.91 ± 0.12	1.57 ± 0.15	5.03 ± 0.18	1.88 ± 0.09	n = 205	[---] All Non-IDMS Traceable Methods
2.42 ± 0.13	0.91 ± 0.12	1.56 ± 0.14	5.02 ± 0.15	1.88 ± 0.08	n = 180	[-G-] Alkaline picrate/Jaffe
2.39 ± 0.14	0.93 ± 0.15	1.56 ± 0.16	4.99 ± 0.16	1.85 ± 0.09	n = 112	[-H-] Alkaline picrate/Jaffe - IDMS calibration
2.47 ± 0.21	0.87 ± 0.12	1.65 ± 0.16	5.31 ± 0.37	1.99 ± 0.23	n = 25	[-I-] Enzymatic
2.49 ± 0.16	0.87 ± 0.10	1.63 ± 0.10	5.40 ± 0.36	2.03 ± 0.20	n = 55	[-J-] Enzymatic - IDMS-traceable calibration
2.44 ± 0.17	0.92 ± 0.14	1.66 ± 0.16	5.12 ± 0.25	1.90 ± 0.11	n = 6	[-Z-] Other
<Instruments>						
2.76 ± 0.05	1.14 ± 0.11	1.70 ± 0.06	5.46 ± 0.10	1.98 ± 0.07	n = 11	[ABH] Abbott Architect
2.39 ± 0.06	0.94 ± 0.05	1.59 ± 0.03	4.92 ± 0.09	1.83 ± 0.05	n = 48	[OLC] Beckman Coulter AU Chemistry System
2.35 ± 0.13	0.94 ± 0.11	1.47 ± 0.06	4.98 ± 0.15	1.90 ± 0.09	n = 11	[BCS] Beckman Coulter CX
2.28 ± 0.07	0.78 ± 0.08	1.43 ± 0.07	4.99 ± 0.08	1.81 ± 0.06	n = 15	[BCX] Beckman Coulter LX-20
2.27 ± 0.06	0.76 ± 0.06	1.18 ± 0.04	4.85 ± 0.18	1.81 ± 0.08	n = 19	[BCG] Beckman Coulter UniCel Dx C 600
2.30 ± 0.05	0.80 ± 0.00	1.46 ± 0.05	5.01 ± 0.05	1.81 ± 0.06	n = 24	[BCH] Beckman Coulter UniCel Dx C 800
2.63 ± 0.05	0.90 ± 0.00	1.82 ± 0.07	5.38 ± 0.18	1.97 ± 0.12	n = 6	[IAA] i-STAT
2.56 ± 0.06	0.90 ± 0.00	1.69 ± 0.03	5.58 ± 0.10	2.15 ± 0.07	n = 14	[JJE] Ortho Vitros 250/350/950
2.57 ± 0.07	0.93 ± 0.08	1.68 ± 0.06	5.59 ± 0.12	2.15 ± 0.06	n = 27	[JJF] Ortho Vitros 5,1FS
2.52 ± 0.04	0.90 ± 0.08	1.63 ± 0.07	5.64 ± 0.10	2.12 ± 0.05	n = 4	[JJG] Ortho Vitros 5600
2.33 ± 0.10	0.87 ± 0.12	1.45 ± 0.17	4.98 ± 0.18	1.83 ± 0.06	n = 19	[ROC] Roche cobas c501
2.29 ± 0.14	0.79 ± 0.15	1.50 ± 0.09	4.91 ± 0.18	1.80 ± 0.09	n = 12	[ROT] Roche Cobas INTEGRA
2.43 ± 0.14	0.97 ± 0.18	1.64 ± 0.14	5.10 ± 0.11	1.88 ± 0.10	n = 35	[ROD] Roche MODULAR D/P
2.50 ± 0.08	1.10 ± 0.09	1.67 ± 0.05	5.09 ± 0.13	1.90 ± 0.11	n = 5	[BYA] Siemens ADVIA 1650
2.63 ± 0.08	1.20 ± 0.11	1.72 ± 0.05	5.11 ± 0.14	1.91 ± 0.08	n = 15	[BYE] Siemens ADVIA 1800
2.65 ± 0.09	1.26 ± 0.10	1.75 ± 0.09	5.11 ± 0.19	1.86 ± 0.10	n = 3	[BYB] Siemens ADVIA 2400
2.46 ± 0.07	0.91 ± 0.08	1.61 ± 0.06	5.03 ± 0.09	1.91 ± 0.06	n = 8	[DUE] Siemens Dimension EXL
2.45 ± 0.07	0.91 ± 0.05	1.59 ± 0.06	5.06 ± 0.10	1.90 ± 0.00	n = 50	[DUR] Siemens Dimension RxL
2.42 ± 0.10	0.86 ± 0.08	1.52 ± 0.11	4.99 ± 0.15	1.82 ± 0.11	n = 13	[DUT] Siemens Dimension Vista
2.42 ± 0.08	0.90 ± 0.07	1.57 ± 0.08	5.01 ± 0.07	1.87 ± 0.07	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
2.75 ± 0.05	1.15 ± 0.10	1.70 ± 0.06	5.43 ± 0.14	1.97 ± 0.07	n = 12	[AB1] Abbott
2.29 ± 0.06	0.78 ± 0.06	1.39 ± 0.14	4.97 ± 0.12	1.82 ± 0.07	n = 66	[BC1] Beckman Coulter
2.39 ± 0.06	0.94 ± 0.04	1.59 ± 0.03	4.93 ± 0.09	1.83 ± 0.05	n = 44	[OL1] Beckman Coulter AU Series
2.44 ± 0.11	1.00 ± 0.00	1.46 ± 0.11	5.01 ± 0.13	1.94 ± 0.11	n = 5	[CR1] Carolina
2.63 ± 0.05	0.90 ± 0.00	1.82 ± 0.07	5.38 ± 0.18	1.97 ± 0.12	n = 6	[IA1] i-STAT thermal cartridge
2.56 ± 0.07	0.92 ± 0.07	1.68 ± 0.06	5.60 ± 0.12	2.15 ± 0.07	n = 47	[JJ1] Ortho Clinical Diagnostics
2.33 ± 0.10	0.87 ± 0.12	1.45 ± 0.17	4.98 ± 0.18	1.83 ± 0.06	n = 19	[RO4] Roche cobas c501
2.43 ± 0.14	0.97 ± 0.17	1.64 ± 0.14	5.10 ± 0.12	1.88 ± 0.10	n = 37	[RO2] Roche Hitachi and Modular D/P
2.30 ± 0.14	0.81 ± 0.16	1.51 ± 0.11	4.92 ± 0.17	1.81 ± 0.09	n = 13	[RO1] Roche Integra and MIRA
2.59 ± 0.11	1.19 ± 0.13	1.71 ± 0.07	5.10 ± 0.15	1.90 ± 0.10	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
2.44 ± 0.08	0.90 ± 0.06	1.58 ± 0.07	5.04 ± 0.10	1.89 ± 0.07	n = 90	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Glomerular filtration rate (mL/min/1.73 m²)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
32.1 ± 2.92	100.5 ± 21.83	52.1 ± 5.77	13.7 ± 1.25	42.9 ± 4.03	n = 250	[---] All Methods & Instruments
31.7 ± 2.60	100.8 ± 23.56	51.0 ± 5.01	13.4 ± 1.10	42.3 ± 4.12	n = 131	[-A-] IDMS-traceable MDRD Study Equation
32.8 ± 2.86	100.1 ± 18.48	53.7 ± 6.12	14.1 ± 1.18	43.7 ± 3.63	n = 109	[-B-] Original MDRD Study Equation (4-variable)
30.7 ± 9.49	98.4 ± 35.39	54.3 ± 17.73	14.3 ± 3.16	45.6 ± 10.01	n = 3	[-C-] Original MDRD Study Equation (6-variable)
52.0 ± 15.96	139.0 ± 21.66	86.5 ± 13.11	24.0 ± 9.12	66.5 ± 22.23	n = 2	[-D-] Cockcroft-Gault Equation
29.4 ± 1.02	88.5 ± 7.41	48.5 ± 1.86	12.3 ± 0.51	39.0 ± 1.80	n = 3	[-F-] CKD-EPI Equation

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

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Method
32 (26-37)	97 (73-122)	51 (43-59)	13 (11-16)	42 (35-49)	IDMS-traceable MDRD Study Equation
33 (28-39)	104 (77-130)	55 (46-64)	14 (12-17)	45 (38-52)	Original MDRD Study Equation
70 (59-87)	185 (138-232)	107 (80-134)	33 (28-39)	90 (67-112)	Cockcroft-Gault Equation
33 (27-38)	107 (80-134)	54 (46-63)	13 (11-16)	44 (37-51)	CKD-EPI Equation

Laboratories were asked to report Estimated Glomerular Filtration Rate (eGFR) for samples C46-C50 for an 18-year-old African American woman weighing 117 kg. Although the MDRD study equation has been validated for use in individuals 18-70 years of age*, 21 laboratories indicated they do not report eGFR for patients < 19 or < 20 years of age and thus did not report proficiency test results for this survey.

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 > 60 mL/min/1.73 m². These data were removed from the calculations of mean and SD since their inclusion would have skewed results.

*Levey AS, Bosch, JP, Breyer-Lewis J, Greene T, Rogers N, Roth D. A more accurate method to estimate glomerular filtration rate from serum creatinine: a new prediction equation. Ann Intern Med. 1999;130:461-70.

Summary of Participant Performance (Mean and Standard Deviation)

Uric Acid (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
4.83 ± 0.25	9.23 ± 0.44	2.62 ± 0.19	3.07 ± 0.18	6.42 ± 0.31	n = 330	[---] All Methods & Instruments
<Instruments>						
5.20 ± 0.06	9.70 ± 0.07	2.84 ± 0.10	3.39 ± 0.07	6.74 ± 0.08	n = 11	[ABH] Abbott Architect
5.35 ± 0.10	10.03 ± 0.15	2.95 ± 0.07	3.38 ± 0.07	7.13 ± 0.12	n = 43	[OLC] Beckman Coulter AU Chemistry System
4.69 ± 0.13	8.79 ± 0.22	2.73 ± 0.05	3.00 ± 0.09	6.31 ± 0.14	n = 8	[BCS] Beckman Coulter CX
4.70 ± 0.08	8.83 ± 0.09	2.72 ± 0.07	3.05 ± 0.08	6.37 ± 0.12	n = 15	[BCX] Beckman Coulter LX-20
4.57 ± 0.08	8.74 ± 0.15	2.64 ± 0.07	2.97 ± 0.07	6.28 ± 0.12	n = 15	[BCG] Beckman Coulter UniCel DxC 600
4.59 ± 0.07	8.83 ± 0.12	2.62 ± 0.06	2.92 ± 0.06	6.27 ± 0.12	n = 22	[BCH] Beckman Coulter UniCel DxC 800
4.74 ± 0.21	9.03 ± 0.12	2.36 ± 0.07	2.92 ± 0.09	6.26 ± 0.08	n = 12	[JJE] Ortho Vitros 250/350/950
4.73 ± 0.11	9.16 ± 0.22	2.38 ± 0.08	2.93 ± 0.08	6.36 ± 0.14	n = 27	[JJF] Ortho Vitros 5,1FS
4.70 ± 0.08	9.08 ± 0.13	2.35 ± 0.06	2.92 ± 0.04	6.27 ± 0.09	n = 4	[JJG] Ortho Vitros 5600
4.89 ± 0.07	9.41 ± 0.22	2.53 ± 0.08	3.03 ± 0.08	6.54 ± 0.13	n = 17	[ROC] Roche cobas c501
4.75 ± 0.12	9.22 ± 0.19	2.49 ± 0.05	2.96 ± 0.08	6.42 ± 0.16	n = 9	[ROT] Roche Cobas INTEGRA
4.80 ± 0.10	9.35 ± 0.18	2.51 ± 0.05	2.96 ± 0.07	6.47 ± 0.14	n = 33	[ROD] Roche MODULAR D/P
4.86 ± 0.06	9.30 ± 0.09	2.55 ± 0.08	3.00 ± 0.00	6.50 ± 0.06	n = 5	[BYA] Siemens ADVIA 1650
4.83 ± 0.08	9.35 ± 0.16	2.60 ± 0.10	3.06 ± 0.08	6.53 ± 0.14	n = 15	[BYE] Siemens ADVIA 1800
4.83 ± 0.14	9.43 ± 0.23	2.56 ± 0.10	2.94 ± 0.10	6.55 ± 0.19	n = 3	[BYB] Siemens ADVIA 2400
4.89 ± 0.09	9.24 ± 0.20	2.69 ± 0.06	3.15 ± 0.07	6.29 ± 0.15	n = 8	[DUE] Siemens Dimension EXL
4.88 ± 0.14	9.17 ± 0.22	2.66 ± 0.09	3.18 ± 0.11	6.28 ± 0.13	n = 47	[DUR] Siemens Dimension RxL
4.63 ± 0.09	8.52 ± 0.09	2.57 ± 0.07	3.04 ± 0.07	5.87 ± 0.09	n = 13	[DUT] Siemens Dimension Vista
4.84 ± 0.07	9.14 ± 0.13	2.63 ± 0.06	3.16 ± 0.08	6.26 ± 0.08	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
5.19 ± 0.07	9.68 ± 0.08	2.82 ± 0.10	3.38 ± 0.08	6.74 ± 0.08	n = 12	[AB1] Abbott
4.62 ± 0.11	8.81 ± 0.13	2.67 ± 0.08	2.98 ± 0.09	6.31 ± 0.13	n = 57	[BC1] Beckman Coulter
5.35 ± 0.10	10.04 ± 0.15	2.95 ± 0.07	3.38 ± 0.07	7.13 ± 0.11	n = 42	[OL1] Beckman Coulter AU Series
4.65 ± 0.12	8.75 ± 0.22	2.70 ± 0.08	2.93 ± 0.09	6.23 ± 0.09	n = 4	[CR1] Carolina
4.71 ± 0.12	9.12 ± 0.22	2.37 ± 0.08	2.93 ± 0.08	6.32 ± 0.14	n = 43	[JJ1] Ortho Clinical Diagnostics
4.89 ± 0.07	9.41 ± 0.22	2.53 ± 0.08	3.03 ± 0.08	6.54 ± 0.13	n = 17	[RO4] Roche cobas c501
4.80 ± 0.10	9.35 ± 0.18	2.51 ± 0.05	2.96 ± 0.07	6.47 ± 0.13	n = 34	[RO2] Roche Hitachi and Modular D/P
4.75 ± 0.12	9.22 ± 0.19	2.49 ± 0.05	2.96 ± 0.08	6.42 ± 0.16	n = 9	[RO1] Roche Integra and MIRA
4.83 ± 0.09	9.36 ± 0.16	2.58 ± 0.09	3.03 ± 0.08	6.52 ± 0.13	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
4.84 ± 0.15	9.09 ± 0.30	2.64 ± 0.09	3.15 ± 0.11	6.23 ± 0.19	n = 82	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Bilirubin (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
0.78 ± 0.18	0.67 ± 0.16	4.62 ± 0.25	2.10 ± 0.21	0.50 ± 0.15	n = 358	[---] All Methods & Instruments
<Instruments>						
0.80 ± 0.07	0.69 ± 0.07	4.82 ± 0.27	2.21 ± 0.12	0.52 ± 0.06	n = 11	[ABH] Abbott Architect
0.87 ± 0.06	0.78 ± 0.05	4.37 ± 0.17	2.05 ± 0.13	0.61 ± 0.07	n = 46	[OLC] Beckman Coulter AU Chemistry System
0.99 ± 0.23	0.87 ± 0.17	4.82 ± 0.05	2.31 ± 0.18	0.69 ± 0.13	n = 8	[BCS] Beckman Coulter CX
1.00 ± 0.12	0.93 ± 0.14	4.81 ± 0.09	2.34 ± 0.13	0.73 ± 0.14	n = 15	[BCX] Beckman Coulter LX-20
0.99 ± 0.13	0.91 ± 0.12	4.77 ± 0.14	2.32 ± 0.15	0.67 ± 0.08	n = 18	[BCG] Beckman Coulter UniCel DxC 600
0.96 ± 0.20	0.90 ± 0.13	4.75 ± 0.23	2.31 ± 0.13	0.67 ± 0.13	n = 24	[BCH] Beckman Coulter UniCel DxC 800
0.83 ± 0.15	0.61 ± 0.10	4.60 ± 0.16	2.17 ± 0.17	0.49 ± 0.12	n = 13	[JJE] Ortho Vitros 250/350/950
0.76 ± 0.14	0.51 ± 0.11	4.57 ± 0.23	2.12 ± 0.18	0.38 ± 0.12	n = 27	[JJF] Ortho Vitros 5,1FS
0.75 ± 0.12	0.53 ± 0.09	4.55 ± 0.23	2.15 ± 0.23	0.33 ± 0.09	n = 4	[JJG] Ortho Vitros 5600
0.53 ± 0.10	0.50 ± 0.00	4.28 ± 0.14	1.81 ± 0.07	0.33 ± 0.06	n = 16	[ROC] Roche cobas c501
0.62 ± 0.08	0.50 ± 0.00	4.30 ± 0.17	1.87 ± 0.08	0.40 ± 0.00	n = 11	[ROT] Roche Cobas INTEGRA
0.62 ± 0.13	0.54 ± 0.08	4.51 ± 0.16	1.96 ± 0.14	0.38 ± 0.07	n = 35	[ROD] Roche MODULAR D/P
0.78 ± 0.04	0.70 ± 0.00	4.90 ± 0.11	2.23 ± 0.09	0.50 ± 0.00	n = 5	[BYA] Siemens ADVIA 1650
0.79 ± 0.09	0.70 ± 0.00	4.81 ± 0.17	2.16 ± 0.12	0.50 ± 0.06	n = 15	[BYE] Siemens ADVIA 1800
0.77 ± 0.05	0.70 ± 0.00	4.93 ± 0.05	2.20 ± 0.00	0.50 ± 0.09	n = 3	[BYB] Siemens ADVIA 2400
0.79 ± 0.06	0.65 ± 0.06	4.71 ± 0.08	2.14 ± 0.07	0.48 ± 0.04	n = 8	[DUE] Siemens Dimension EXL
0.73 ± 0.12	0.65 ± 0.07	4.67 ± 0.13	2.10 ± 0.12	0.46 ± 0.09	n = 50	[DUR] Siemens Dimension RxL
0.76 ± 0.07	0.66 ± 0.08	4.57 ± 0.20	2.09 ± 0.08	0.46 ± 0.07	n = 13	[DUT] Siemens Dimension Vista
0.77 ± 0.12	0.65 ± 0.07	4.74 ± 0.15	2.12 ± 0.12	0.46 ± 0.08	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
0.79 ± 0.07	0.69 ± 0.07	4.82 ± 0.25	2.20 ± 0.12	0.51 ± 0.05	n = 12	[AB1] Abbott
1.00 ± 0.16	0.92 ± 0.13	4.77 ± 0.16	2.33 ± 0.14	0.70 ± 0.11	n = 62	[BC1] Beckman Coulter
0.88 ± 0.06	0.78 ± 0.05	4.36 ± 0.16	2.04 ± 0.12	0.61 ± 0.06	n = 44	[OL1] Beckman Coulter AU Series
0.84 ± 0.11	0.72 ± 0.08	4.82 ± 0.13	2.16 ± 0.15	0.52 ± 0.08	n = 5	[CR1] Carolina
0.79 ± 0.15	0.55 ± 0.13	4.57 ± 0.21	2.14 ± 0.17	0.41 ± 0.14	n = 46	[JJ1] Ortho Clinical Diagnostics
0.53 ± 0.10	0.50 ± 0.00	4.28 ± 0.14	1.81 ± 0.07	0.33 ± 0.06	n = 16	[RO4] Roche cobas c501
0.61 ± 0.13	0.54 ± 0.08	4.50 ± 0.17	1.95 ± 0.14	0.38 ± 0.07	n = 36	[RO2] Roche Hitachi and Modular D/P
0.63 ± 0.08	0.52 ± 0.04	4.31 ± 0.22	1.88 ± 0.09	0.40 ± 0.00	n = 12	[RO1] Roche Integra and MIRA
0.79 ± 0.08	0.70 ± 0.00	4.86 ± 0.16	2.19 ± 0.10	0.50 ± 0.07	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
0.75 ± 0.11	0.65 ± 0.07	4.68 ± 0.15	2.11 ± 0.11	0.47 ± 0.08	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Phosphorus (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
4.08 ± 0.16	2.95 ± 0.16	6.24 ± 0.18	1.93 ± 0.13	5.48 ± 0.18	n = 333	[---] All Methods & Instruments
<Instruments>						
4.02 ± 0.10	2.90 ± 0.00	6.16 ± 0.08	1.88 ± 0.05	5.41 ± 0.07	n = 11	[ABH] Abbott Architect
3.95 ± 0.08	2.85 ± 0.08	6.08 ± 0.13	1.84 ± 0.07	5.30 ± 0.10	n = 43	[OLC] Beckman Coulter AU Chemistry System
4.29 ± 0.25	3.09 ± 0.07	6.18 ± 0.23	2.10 ± 0.06	5.45 ± 0.20	n = 7	[BCS] Beckman Coulter CX
4.10 ± 0.13	3.02 ± 0.07	6.45 ± 0.11	1.99 ± 0.09	5.63 ± 0.08	n = 15	[BCX] Beckman Coulter LX-20
4.11 ± 0.19	2.92 ± 0.16	6.40 ± 0.32	1.96 ± 0.10	5.51 ± 0.22	n = 16	[BCG] Beckman Coulter UniCel DxC 600
4.18 ± 0.07	3.03 ± 0.07	6.47 ± 0.09	2.03 ± 0.08	5.62 ± 0.09	n = 23	[BCH] Beckman Coulter UniCel DxC 800
4.36 ± 0.14	3.28 ± 0.12	6.38 ± 0.17	2.13 ± 0.11	5.76 ± 0.17	n = 12	[JJE] Ortho Vitros 250/350/950
4.36 ± 0.11	3.27 ± 0.12	6.30 ± 0.13	2.14 ± 0.11	5.71 ± 0.14	n = 27	[JJF] Ortho Vitros 5,1FS
4.33 ± 0.08	3.30 ± 0.08	6.32 ± 0.15	2.19 ± 0.11	5.73 ± 0.09	n = 4	[JJG] Ortho Vitros 5600
4.09 ± 0.10	2.97 ± 0.07	6.32 ± 0.12	1.93 ± 0.05	5.50 ± 0.10	n = 19	[ROC] Roche cobas c501
4.03 ± 0.08	2.91 ± 0.10	6.26 ± 0.12	1.87 ± 0.05	5.43 ± 0.12	n = 9	[ROT] Roche Cobas INTEGRA
4.08 ± 0.13	2.96 ± 0.12	6.30 ± 0.17	1.93 ± 0.10	5.48 ± 0.16	n = 33	[ROD] Roche MODULAR D/P
4.20 ± 0.09	3.04 ± 0.14	6.38 ± 0.13	1.98 ± 0.08	5.58 ± 0.04	n = 5	[BYA] Siemens ADVIA 1650
4.09 ± 0.09	2.97 ± 0.09	6.24 ± 0.10	1.92 ± 0.07	5.51 ± 0.09	n = 15	[BYE] Siemens ADVIA 1800
4.07 ± 0.05	2.94 ± 0.10	6.30 ± 0.00	1.87 ± 0.05	5.47 ± 0.05	n = 3	[BYB] Siemens ADVIA 2400
4.03 ± 0.07	2.90 ± 0.00	6.18 ± 0.05	1.87 ± 0.07	5.38 ± 0.07	n = 7	[DUE] Siemens Dimension EXL
4.01 ± 0.10	2.85 ± 0.10	6.16 ± 0.11	1.85 ± 0.10	5.44 ± 0.11	n = 47	[DUR] Siemens Dimension RxL
4.00 ± 0.13	2.84 ± 0.11	6.16 ± 0.15	1.83 ± 0.06	5.36 ± 0.09	n = 13	[DUT] Siemens Dimension Vista
4.00 ± 0.08	2.88 ± 0.05	6.12 ± 0.11	1.84 ± 0.06	5.43 ± 0.09	n = 17	[DUX] Siemens Dimension Xpand
<Reagents>						
4.03 ± 0.10	2.90 ± 0.00	6.16 ± 0.08	1.88 ± 0.05	5.42 ± 0.07	n = 12	[AB1] Abbott
4.16 ± 0.15	3.01 ± 0.12	6.44 ± 0.14	2.01 ± 0.10	5.59 ± 0.15	n = 57	[BC1] Beckman Coulter
3.95 ± 0.08	2.84 ± 0.08	6.09 ± 0.12	1.84 ± 0.07	5.30 ± 0.10	n = 42	[OL1] Beckman Coulter AU Series
4.13 ± 0.16	3.08 ± 0.04	6.00 ± 0.15	2.02 ± 0.13	5.37 ± 0.25	n = 4	[CR1] Carolina
4.35 ± 0.12	3.27 ± 0.12	6.33 ± 0.15	2.14 ± 0.11	5.73 ± 0.15	n = 43	[JJ1] Ortho Clinical Diagnostics
4.09 ± 0.10	2.97 ± 0.07	6.32 ± 0.12	1.93 ± 0.05	5.50 ± 0.10	n = 19	[RO4] Roche cobas c501
4.08 ± 0.12	2.96 ± 0.12	6.30 ± 0.17	1.93 ± 0.10	5.48 ± 0.15	n = 34	[RO2] Roche Hitachi and Modular D/P
4.03 ± 0.08	2.91 ± 0.10	6.26 ± 0.12	1.87 ± 0.05	5.43 ± 0.12	n = 9	[RO1] Roche Integra and MIRA
4.10 ± 0.09	2.97 ± 0.10	6.28 ± 0.10	1.93 ± 0.07	5.52 ± 0.08	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
4.01 ± 0.10	2.86 ± 0.09	6.15 ± 0.11	1.85 ± 0.08	5.42 ± 0.10	n = 84	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Calcium (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
9.43 ± 0.25	13.17 ± 0.32	7.08 ± 0.15	10.53 ± 0.29	8.56 ± 0.19	n = 367	[---] All Methods & Instruments
<Instruments>						
9.41 ± 0.11	12.92 ± 0.17	7.12 ± 0.09	10.41 ± 0.05	8.50 ± 0.09	n = 11	[ABH] Abbott Architect
9.39 ± 0.14	13.14 ± 0.21	7.05 ± 0.13	10.48 ± 0.15	8.49 ± 0.16	n = 46	[OLC] Beckman Coulter AU Chemistry System
9.43 ± 0.25	12.96 ± 0.46	7.17 ± 0.33	10.46 ± 0.38	8.49 ± 0.24	n = 11	[BCS] Beckman Coulter CX
9.37 ± 0.12	13.01 ± 0.21	7.08 ± 0.07	10.51 ± 0.14	8.47 ± 0.10	n = 15	[BCX] Beckman Coulter LX-20
9.23 ± 0.10	12.81 ± 0.15	7.00 ± 0.09	10.32 ± 0.10	8.38 ± 0.13	n = 19	[BCG] Beckman Coulter UniCel DxC 600
9.37 ± 0.12	12.94 ± 0.16	7.07 ± 0.08	10.48 ± 0.12	8.46 ± 0.11	n = 24	[BCH] Beckman Coulter UniCel DxC 800
9.75 ± 0.19	13.36 ± 0.24	7.15 ± 0.09	11.01 ± 0.17	8.69 ± 0.15	n = 14	[JJE] Ortho Vitros 250/350/950
9.74 ± 0.11	13.32 ± 0.16	7.12 ± 0.12	10.95 ± 0.16	8.65 ± 0.14	n = 27	[JJF] Ortho Vitros 5,1FS
9.75 ± 0.12	13.21 ± 0.11	7.11 ± 0.11	10.97 ± 0.09	8.67 ± 0.09	n = 4	[JJG] Ortho Vitros 5600
9.66 ± 0.20	13.69 ± 0.41	7.15 ± 0.17	10.81 ± 0.18	8.73 ± 0.18	n = 18	[ROC] Roche cobas c501
9.49 ± 0.10	13.50 ± 0.14	6.95 ± 0.10	10.53 ± 0.16	8.65 ± 0.16	n = 11	[ROT] Roche Cobas INTEGRA
9.52 ± 0.19	13.37 ± 0.28	7.15 ± 0.16	10.64 ± 0.23	8.70 ± 0.17	n = 35	[ROD] Roche MODULAR D/P
9.68 ± 0.17	13.46 ± 0.20	7.23 ± 0.14	10.81 ± 0.13	8.81 ± 0.13	n = 5	[BYA] Siemens ADVIA 1650
9.56 ± 0.15	13.27 ± 0.22	7.19 ± 0.20	10.59 ± 0.18	8.70 ± 0.13	n = 15	[BYE] Siemens ADVIA 1800
9.52 ± 0.24	13.13 ± 0.14	7.08 ± 0.15	10.47 ± 0.14	8.42 ± 0.15	n = 3	[BYB] Siemens ADVIA 2400
9.23 ± 0.12	13.09 ± 0.24	7.05 ± 0.16	10.33 ± 0.16	8.50 ± 0.15	n = 8	[DUE] Siemens Dimension EXL
9.25 ± 0.16	13.11 ± 0.23	7.03 ± 0.16	10.32 ± 0.15	8.50 ± 0.15	n = 50	[DUR] Siemens Dimension RxL
9.19 ± 0.31	13.10 ± 0.30	7.07 ± 0.14	10.41 ± 0.32	8.55 ± 0.19	n = 13	[DUT] Siemens Dimension Vista
9.14 ± 0.13	13.05 ± 0.23	7.05 ± 0.17	10.23 ± 0.18	8.41 ± 0.18	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
9.42 ± 0.13	12.94 ± 0.20	7.13 ± 0.09	10.41 ± 0.05	8.52 ± 0.11	n = 12	[AB1] Abbott
9.33 ± 0.15	12.92 ± 0.20	7.06 ± 0.11	10.44 ± 0.18	8.45 ± 0.14	n = 66	[BC1] Beckman Coulter
9.40 ± 0.13	13.15 ± 0.20	7.06 ± 0.13	10.48 ± 0.14	8.49 ± 0.16	n = 45	[OL1] Beckman Coulter AU Series
9.53 ± 0.32	13.06 ± 0.35	7.25 ± 0.44	10.49 ± 0.27	8.54 ± 0.26	n = 4	[CR1] Carolina
9.51 ± 0.29	12.73 ± 0.32	7.33 ± 0.34	10.58 ± 0.41	8.58 ± 0.32	n = 3	[GZ1] Genzyme
9.75 ± 0.13	13.32 ± 0.18	7.13 ± 0.11	10.97 ± 0.16	8.67 ± 0.14	n = 46	[JJ1] Ortho Clinical Diagnostics
9.70 ± 0.18	13.76 ± 0.28	7.16 ± 0.16	10.84 ± 0.13	8.77 ± 0.15	n = 15	[RO4] Roche cobas c501
9.53 ± 0.19	13.39 ± 0.28	7.15 ± 0.16	10.65 ± 0.23	8.70 ± 0.17	n = 36	[RO2] Roche Hitachi and Modular D/P
9.50 ± 0.10	13.51 ± 0.14	6.96 ± 0.11	10.56 ± 0.17	8.64 ± 0.15	n = 12	[RO1] Roche Integra and MIRA
9.58 ± 0.17	13.32 ± 0.24	7.21 ± 0.21	10.64 ± 0.21	8.71 ± 0.17	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
9.22 ± 0.18	13.09 ± 0.24	7.04 ± 0.16	10.31 ± 0.20	8.49 ± 0.17	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Magnesium (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
2.04 ± 0.10	1.51 ± 0.12	2.92 ± 0.11	0.95 ± 0.12	4.41 ± 0.15	n = 328	[---] All Methods & Instruments
<Instruments>						
1.99 ± 0.07	1.54 ± 0.09	2.86 ± 0.07	0.92 ± 0.07	4.31 ± 0.16	n = 9	[ABH] Abbott Architect
2.00 ± 0.06	1.48 ± 0.07	2.86 ± 0.07	0.94 ± 0.06	4.35 ± 0.15	n = 43	[OLC] Beckman Coulter AU Chemistry System
2.15 ± 0.07	1.70 ± 0.05	3.05 ± 0.15	1.08 ± 0.05	4.51 ± 0.20	n = 7	[BCS] Beckman Coulter CX
2.15 ± 0.06	1.59 ± 0.07	2.98 ± 0.06	1.00 ± 0.00	4.47 ± 0.11	n = 14	[BCX] Beckman Coulter LX-20
2.10 ± 0.06	1.58 ± 0.05	2.99 ± 0.09	1.00 ± 0.00	4.47 ± 0.14	n = 18	[BCG] Beckman Coulter UniCel DxC 600
2.12 ± 0.07	1.58 ± 0.06	2.97 ± 0.07	1.01 ± 0.04	4.45 ± 0.13	n = 23	[BCH] Beckman Coulter UniCel DxC 800
2.05 ± 0.07	1.55 ± 0.10	2.88 ± 0.10	1.02 ± 0.04	4.45 ± 0.15	n = 8	[JJE] Ortho Vitros 250/350/950
2.05 ± 0.06	1.56 ± 0.06	2.80 ± 0.07	1.00 ± 0.00	4.36 ± 0.12	n = 27	[JJF] Ortho Vitros 5,1FS
2.07 ± 0.05	1.60 ± 0.00	2.80 ± 0.00	1.03 ± 0.05	4.33 ± 0.05	n = 3	[JJG] Ortho Vitros 5600
2.00 ± 0.00	1.50 ± 0.00	2.87 ± 0.08	1.00 ± 0.00	4.19 ± 0.09	n = 17	[ROC] Roche cobas c501
2.02 ± 0.09	1.50 ± 0.00	2.86 ± 0.10	1.00 ± 0.08	4.25 ± 0.13	n = 9	[ROT] Roche Cobas INTEGRA
2.06 ± 0.06	1.52 ± 0.06	3.00 ± 0.00	0.96 ± 0.06	4.45 ± 0.09	n = 31	[ROD] Roche MODULAR D/P
2.20 ± 0.00	1.72 ± 0.13	3.02 ± 0.11	1.15 ± 0.11	4.45 ± 0.18	n = 5	[BYA] Siemens ADVIA 1650
2.18 ± 0.07	1.77 ± 0.10	3.01 ± 0.10	1.17 ± 0.08	4.46 ± 0.11	n = 15	[BYE] Siemens ADVIA 1800
2.34 ± 0.10	1.87 ± 0.14	3.03 ± 0.14	1.24 ± 0.10	4.60 ± 0.18	n = 3	[BYB] Siemens ADVIA 2400
2.00 ± 0.00	1.38 ± 0.09	2.90 ± 0.08	0.80 ± 0.05	4.39 ± 0.10	n = 7	[DUE] Siemens Dimension EXL
1.98 ± 0.07	1.37 ± 0.07	2.91 ± 0.08	0.80 ± 0.08	4.45 ± 0.11	n = 50	[DUR] Siemens Dimension RxL
2.05 ± 0.09	1.46 ± 0.09	3.04 ± 0.08	0.87 ± 0.12	4.59 ± 0.11	n = 13	[DUT] Siemens Dimension Vista
2.00 ± 0.08	1.41 ± 0.08	2.92 ± 0.09	0.83 ± 0.07	4.48 ± 0.13	n = 17	[DUX] Siemens Dimension Xpand
<Reagents>						
1.99 ± 0.06	1.55 ± 0.08	2.86 ± 0.07	0.91 ± 0.07	4.30 ± 0.15	n = 10	[AB1] Abbott
2.12 ± 0.07	1.58 ± 0.07	2.99 ± 0.08	1.00 ± 0.00	4.48 ± 0.13	n = 60	[BC1] Beckman Coulter
2.00 ± 0.06	1.48 ± 0.07	2.86 ± 0.07	0.94 ± 0.06	4.35 ± 0.15	n = 41	[OL1] Beckman Coulter AU Series
2.13 ± 0.05	1.73 ± 0.05	2.87 ± 0.05	1.10 ± 0.00	4.23 ± 0.05	n = 3	[CR1] Carolina
2.05 ± 0.06	1.56 ± 0.07	2.81 ± 0.07	1.00 ± 0.00	4.37 ± 0.12	n = 38	[JJ1] Ortho Clinical Diagnostics
2.00 ± 0.00	1.50 ± 0.00	2.87 ± 0.08	1.00 ± 0.00	4.19 ± 0.09	n = 17	[RO4] Roche cobas c501
2.05 ± 0.06	1.52 ± 0.06	2.99 ± 0.04	0.97 ± 0.06	4.44 ± 0.10	n = 32	[RO2] Roche Hitachi and Modular D/P
2.03 ± 0.10	1.50 ± 0.00	2.89 ± 0.11	0.99 ± 0.09	4.26 ± 0.13	n = 9	[RO1] Roche Integra and MIRA
2.18 ± 0.08	1.76 ± 0.12	3.02 ± 0.10	1.17 ± 0.09	4.46 ± 0.14	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
1.99 ± 0.08	1.39 ± 0.08	2.93 ± 0.10	0.81 ± 0.08	4.47 ± 0.13	n = 87	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Iron (µg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
107.6 ± 15.89	131.1 ± 16.19	92.1 ± 7.70	108.3 ± 15.54	109.8 ± 5.07	n = 262	[---] All Methods & Instruments
<Instruments>						
45.3 ± 5.22	77.3 ± 2.40	60.8 ± 1.70	51.8 ± 4.54	87.3 ± 0.81	n = 10	[ABH] Abbott Architect
108.7 ± 3.92	133.8 ± 3.83	93.8 ± 2.85	110.0 ± 3.95	112.5 ± 3.47	n = 41	[OLC] Beckman Coulter AU Chemistry System
73.8 ± 8.03	101.5 ± 6.68	79.1 ± 2.63	76.8 ± 6.79	100.8 ± 3.10	n = 4	[BCS] Beckman Coulter CX
78.2 ± 6.85	107.1 ± 6.08	83.6 ± 4.23	83.6 ± 6.16	105.8 ± 3.53	n = 13	[BCX] Beckman Coulter LX-20
74.5 ± 2.70	104.3 ± 5.43	82.8 ± 4.14	78.9 ± 4.42	104.7 ± 4.96	n = 9	[BCG] Beckman Coulter UniCel DxC 600
75.9 ± 4.04	104.8 ± 3.90	82.6 ± 2.85	79.4 ± 4.04	106.1 ± 2.70	n = 17	[BCH] Beckman Coulter UniCel DxC 800
129.2 ± 3.92	159.5 ± 1.72	105.3 ± 4.04	132.5 ± 1.23	112.5 ± 5.59	n = 5	[JJE] Ortho Vitros 250/350/950
124.5 ± 3.37	157.0 ± 4.36	103.6 ± 3.37	128.8 ± 4.13	118.7 ± 4.57	n = 24	[JJF] Ortho Vitros 5,1FS
128.5 ± 2.17	159.8 ± 2.11	105.5 ± 1.22	131.8 ± 4.33	118.9 ± 1.13	n = 4	[JJG] Ortho Vitros 5600
116.8 ± 3.26	138.7 ± 4.13	97.1 ± 4.53	117.1 ± 2.65	112.5 ± 2.82	n = 13	[ROC] Roche cobas c501
115.0 ± 4.11	138.0 ± 0.00	95.0 ± 3.24	116.9 ± 3.28	110.6 ± 2.79	n = 6	[ROT] Roche Cobas INTEGRA
113.5 ± 2.12	134.9 ± 2.28	94.1 ± 2.12	113.7 ± 2.43	110.0 ± 1.88	n = 31	[ROD] Roche MODULAR D/P
117.0 ± 2.41	138.9 ± 2.14	95.1 ± 2.08	115.6 ± 2.07	111.5 ± 1.62	n = 5	[BYA] Siemens ADVIA 1650
115.5 ± 2.71	136.8 ± 2.16	94.4 ± 1.71	114.6 ± 2.33	111.6 ± 2.15	n = 15	[BYE] Siemens ADVIA 1800
113.3 ± 2.26	134.3 ± 1.37	92.2 ± 1.54	112.6 ± 1.02	108.4 ± 1.02	n = 3	[BYB] Siemens ADVIA 2400
100.6 ± 1.69	124.4 ± 1.33	86.3 ± 1.61	102.2 ± 1.89	106.1 ± 1.27	n = 5	[DUE] Siemens Dimension EXL
102.6 ± 4.04	126.8 ± 3.89	87.2 ± 2.52	103.1 ± 2.78	106.2 ± 1.20	n = 31	[DUR] Siemens Dimension RxL
101.6 ± 3.45	126.4 ± 2.10	88.3 ± 2.79	102.7 ± 3.49	108.1 ± 2.62	n = 12	[DUT] Siemens Dimension Vista
100.9 ± 2.88	125.8 ± 2.28	86.1 ± 2.14	102.4 ± 2.61	104.8 ± 3.20	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
44.7 ± 5.39	77.2 ± 2.56	60.6 ± 1.75	51.3 ± 4.65	87.3 ± 0.87	n = 8	[AB2] Abbott-Iron/7D68
75.7 ± 4.54	104.8 ± 5.24	82.6 ± 3.66	80.1 ± 5.37	105.6 ± 3.84	n = 40	[BC1] Beckman Coulter
108.6 ± 4.13	134.2 ± 3.78	93.9 ± 2.94	110.4 ± 4.10	113.3 ± 3.34	n = 32	[OL1] Beckman Coulter AU Series
77.8 ± 5.90	108.4 ± 3.87	82.2 ± 2.36	82.9 ± 3.72	102.3 ± 1.37	n = 3	[CR1] Carolina
109.0 ± 2.70	133.0 ± 4.60	93.5 ± 1.86	109.8 ± 2.36	111.8 ± 1.54	n = 3	[DG1] Diagnostic Chemicals Ltd - Endpoint
110.4 ± 4.57	133.6 ± 3.67	93.9 ± 2.65	109.7 ± 4.29	109.7 ± 2.72	n = 8	[GZ1] Genzyme
125.7 ± 3.82	157.7 ± 4.24	104.1 ± 3.40	129.5 ± 4.27	118.0 ± 4.49	n = 33	[JJ1] Ortho Clinical Diagnostics
116.8 ± 3.26	138.7 ± 4.13	97.1 ± 4.53	117.1 ± 2.65	112.5 ± 2.82	n = 13	[RO4] Roche cobas c501
113.5 ± 2.07	134.9 ± 2.26	94.1 ± 2.02	113.7 ± 2.33	110.1 ± 1.74	n = 32	[RO2] Roche Hitachi and Modular D/P
115.0 ± 4.11	138.0 ± 0.00	95.0 ± 3.24	116.9 ± 3.28	110.6 ± 2.79	n = 6	[RO1] Roche Integra and MIRA
115.6 ± 2.60	136.7 ± 2.49	94.2 ± 1.76	114.6 ± 2.22	111.0 ± 2.09	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
101.9 ± 3.63	126.1 ± 3.15	87.1 ± 2.54	102.8 ± 2.88	106.4 ± 1.90	n = 51	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Sodium (mmol/L)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
146.2 ± 2.42	141.7 ± 2.41	125.3 ± 1.62	150.5 ± 2.49	158.5 ± 2.48	n = 374	[---] All Methods & Instruments
<Instruments>						
146.6 ± 0.80	142.2 ± 1.42	124.8 ± 1.43	150.9 ± 1.30	158.7 ± 1.03	n = 11	[ABH] Abbott Architect
145.3 ± 1.15	141.4 ± 1.07	125.5 ± 1.11	150.1 ± 0.99	157.8 ± 1.48	n = 46	[OLC] Beckman Coulter AU Chemistry System
146.3 ± 1.28	141.8 ± 0.65	125.7 ± 1.13	150.0 ± 1.42	158.4 ± 2.17	n = 11	[BCS] Beckman Coulter CX
145.6 ± 1.38	141.7 ± 0.89	125.2 ± 1.23	150.4 ± 1.50	157.3 ± 1.85	n = 15	[BCX] Beckman Coulter LX-20
145.2 ± 0.99	140.8 ± 1.19	124.7 ± 0.84	149.6 ± 0.88	157.1 ± 0.78	n = 19	[BCG] Beckman Coulter UniCel DxC 600
145.4 ± 1.51	141.1 ± 1.56	124.8 ± 1.27	149.9 ± 1.80	157.2 ± 1.67	n = 24	[BCH] Beckman Coulter UniCel DxC 800
143.1 ± 0.55	138.3 ± 0.80	121.4 ± 0.56	146.9 ± 0.92	155.9 ± 1.12	n = 9	[IAA] i-STAT
151.4 ± 1.77	147.3 ± 2.55	125.8 ± 1.25	155.9 ± 2.28	163.7 ± 2.55	n = 14	[JJE] Ortho Vitros 250/350/950
151.7 ± 1.49	147.9 ± 1.57	125.7 ± 1.26	155.9 ± 1.45	164.0 ± 1.80	n = 27	[JFF] Ortho Vitros 5,1FS
151.3 ± 1.58	147.5 ± 2.17	125.0 ± 2.45	155.4 ± 1.80	163.5 ± 2.83	n = 4	[JJG] Ortho Vitros 5600
145.1 ± 1.44	141.0 ± 0.99	124.3 ± 1.18	149.8 ± 1.07	158.5 ± 1.11	n = 17	[ROC] Roche cobas c501
145.6 ± 0.81	140.1 ± 0.84	123.7 ± 1.23	149.3 ± 1.07	158.0 ± 0.97	n = 10	[ROT] Roche Cobas INTEGRA
146.9 ± 1.36	142.2 ± 1.27	125.1 ± 1.17	151.2 ± 1.08	158.8 ± 1.51	n = 34	[ROD] Roche MODULAR D/P
147.1 ± 2.33	142.4 ± 3.22	126.1 ± 2.45	150.1 ± 2.33	158.3 ± 3.62	n = 4	[BYA] Siemens ADVIA 1650
148.0 ± 0.99	143.2 ± 1.06	127.4 ± 0.83	152.3 ± 1.25	159.8 ± 1.76	n = 15	[BYE] Siemens ADVIA 1800
147.8 ± 2.36	142.3 ± 0.51	126.3 ± 0.51	152.1 ± 2.05	160.5 ± 1.86	n = 3	[BYB] Siemens ADVIA 2400
145.7 ± 1.38	141.3 ± 1.03	125.4 ± 1.22	149.5 ± 1.36	158.4 ± 1.22	n = 8	[DUE] Siemens Dimension EXL
145.3 ± 2.00	140.8 ± 1.97	125.5 ± 1.34	149.5 ± 2.15	157.9 ± 1.82	n = 50	[DUR] Siemens Dimension RxL
143.1 ± 1.98	137.8 ± 2.13	122.6 ± 1.95	147.8 ± 1.86	156.0 ± 2.51	n = 13	[DUT] Siemens Dimension Vista
146.5 ± 1.64	141.9 ± 1.82	126.2 ± 1.24	151.0 ± 1.81	159.0 ± 1.89	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
146.6 ± 0.76	142.3 ± 1.36	124.8 ± 1.36	151.0 ± 1.40	158.9 ± 1.07	n = 12	[AB1] Abbott
145.5 ± 1.37	141.3 ± 1.30	125.0 ± 1.18	150.0 ± 1.44	157.3 ± 1.54	n = 66	[BC1] Beckman Coulter
145.3 ± 1.14	141.4 ± 1.02	125.5 ± 1.06	150.1 ± 0.95	157.9 ± 1.41	n = 45	[OL1] Beckman Coulter AU Series
146.3 ± 0.82	141.1 ± 2.33	126.3 ± 1.58	149.7 ± 1.51	158.4 ± 1.90	n = 4	[CR1] Carolina
143.2 ± 0.47	138.5 ± 0.74	121.6 ± 0.56	147.2 ± 0.86	156.3 ± 1.11	n = 7	[IA1] i-STAT thermal cartridge
147.0 ± 0.90	142.8 ± 2.36	125.1 ± 2.86	152.3 ± 2.26	160.3 ± 2.26	n = 3	[IL1] Instrumentation Lab
151.5 ± 1.55	147.7 ± 1.88	125.8 ± 1.44	155.8 ± 1.56	164.0 ± 2.15	n = 46	[JJ1] Ortho Clinical Diagnostics
145.1 ± 1.44	141.0 ± 0.99	124.3 ± 1.18	149.8 ± 1.07	158.5 ± 1.11	n = 17	[RO4] Roche cobas c501
146.9 ± 1.35	142.2 ± 1.24	125.1 ± 1.14	151.2 ± 1.07	158.9 ± 1.50	n = 35	[RO2] Roche Hitachi and Modular D/P
145.6 ± 0.81	140.1 ± 0.85	123.9 ± 1.48	149.3 ± 1.09	158.0 ± 0.99	n = 11	[RO1] Roche Integra and MIRA
147.8 ± 1.26	143.2 ± 1.13	127.2 ± 0.97	151.9 ± 1.47	159.7 ± 1.56	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
145.4 ± 2.14	140.8 ± 2.23	125.5 ± 1.66	149.6 ± 2.24	158.0 ± 2.09	n = 91	[DA5] Siemens Dimension
146.3 ± 1.37	142.0 ± 0.90	125.0 ± 0.90	151.0 ± 0.90	159.6 ± 1.02	n = 3	[ZZZ] Reagent Not Listed

Summary of Participant Performance (Mean and Standard Deviation)

Potassium (mmol/L)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
5.53 ± 0.12	3.73 ± 0.10	2.39 ± 0.10	5.34 ± 0.11	4.59 ± 0.10	n = 375	[---] All Methods & Instruments
<Instruments>						
5.52 ± 0.06	3.77 ± 0.05	2.42 ± 0.04	5.34 ± 0.07	4.58 ± 0.04	n = 11	[ABH] Abbott Architect
5.49 ± 0.06	3.77 ± 0.06	2.48 ± 0.05	5.31 ± 0.05	4.59 ± 0.04	n = 47	[OLC] Beckman Coulter AU Chemistry System
5.53 ± 0.06	3.73 ± 0.08	2.36 ± 0.06	5.33 ± 0.08	4.60 ± 0.00	n = 11	[BCS] Beckman Coulter CX
5.53 ± 0.05	3.72 ± 0.05	2.36 ± 0.06	5.35 ± 0.07	4.57 ± 0.06	n = 15	[BCX] Beckman Coulter LX-20
5.52 ± 0.08	3.70 ± 0.04	2.34 ± 0.06	5.33 ± 0.07	4.57 ± 0.06	n = 19	[BCG] Beckman Coulter UniCel DxC 600
5.51 ± 0.08	3.70 ± 0.00	2.31 ± 0.05	5.34 ± 0.08	4.56 ± 0.08	n = 24	[BCH] Beckman Coulter UniCel DxC 800
5.40 ± 0.00	3.70 ± 0.00	2.30 ± 0.00	5.24 ± 0.06	4.50 ± 0.00	n = 9	[IAA] i-STAT
5.76 ± 0.08	3.94 ± 0.06	2.50 ± 0.00	5.59 ± 0.10	4.76 ± 0.09	n = 14	[JJE] Ortho Vitros 250/350/950
5.77 ± 0.08	3.97 ± 0.05	2.50 ± 0.00	5.57 ± 0.07	4.78 ± 0.07	n = 27	[JFF] Ortho Vitros 5,1FS
5.80 ± 0.08	3.98 ± 0.04	2.48 ± 0.04	5.57 ± 0.09	4.80 ± 0.08	n = 4	[JJG] Ortho Vitros 5600
5.42 ± 0.09	3.60 ± 0.00	2.30 ± 0.00	5.23 ± 0.06	4.50 ± 0.00	n = 16	[ROC] Roche cobas c501
5.58 ± 0.05	3.70 ± 0.00	2.40 ± 0.00	5.35 ± 0.06	4.60 ± 0.00	n = 10	[ROT] Roche Cobas INTEGRA
5.48 ± 0.07	3.68 ± 0.07	2.35 ± 0.09	5.28 ± 0.06	4.49 ± 0.08	n = 34	[ROD] Roche MODULAR D/P
5.53 ± 0.09	3.77 ± 0.08	2.42 ± 0.04	5.35 ± 0.06	4.59 ± 0.11	n = 4	[BYA] Siemens ADVIA 1650
5.64 ± 0.11	3.82 ± 0.04	2.51 ± 0.04	5.46 ± 0.09	4.69 ± 0.09	n = 15	[BYE] Siemens ADVIA 1800
5.82 ± 0.15	3.86 ± 0.10	2.57 ± 0.05	5.65 ± 0.19	4.80 ± 0.18	n = 3	[BYB] Siemens ADVIA 2400
5.51 ± 0.06	3.70 ± 0.00	2.30 ± 0.00	5.30 ± 0.00	4.57 ± 0.05	n = 8	[DUE] Siemens Dimension EXL
5.51 ± 0.07	3.69 ± 0.06	2.33 ± 0.05	5.31 ± 0.08	4.57 ± 0.06	n = 50	[DUR] Siemens Dimension RxL
5.52 ± 0.12	3.73 ± 0.05	2.45 ± 0.06	5.35 ± 0.08	4.64 ± 0.09	n = 13	[DUT] Siemens Dimension Vista
5.52 ± 0.06	3.70 ± 0.00	2.32 ± 0.05	5.33 ± 0.06	4.57 ± 0.05	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
5.53 ± 0.06	3.77 ± 0.05	2.43 ± 0.05	5.35 ± 0.07	4.58 ± 0.04	n = 12	[AB1] Abbott
5.53 ± 0.07	3.70 ± 0.05	2.33 ± 0.06	5.34 ± 0.07	4.57 ± 0.06	n = 66	[BC1] Beckman Coulter
5.49 ± 0.06	3.77 ± 0.06	2.49 ± 0.05	5.31 ± 0.04	4.59 ± 0.04	n = 46	[OL1] Beckman Coulter AU Series
5.47 ± 0.08	3.65 ± 0.06	2.40 ± 0.00	5.25 ± 0.06	4.53 ± 0.09	n = 4	[CR1] Carolina
5.42 ± 0.05	3.68 ± 0.05	2.30 ± 0.00	5.24 ± 0.06	4.50 ± 0.00	n = 7	[IA1] i-STAT thermal cartridge
5.58 ± 0.15	3.70 ± 0.09	2.30 ± 0.09	5.35 ± 0.19	4.58 ± 0.15	n = 3	[IL1] Instrumentation Lab
5.77 ± 0.08	3.96 ± 0.06	2.50 ± 0.00	5.57 ± 0.08	4.78 ± 0.08	n = 46	[JJ1] Ortho Clinical Diagnostics
5.42 ± 0.09	3.60 ± 0.00	2.30 ± 0.00	5.23 ± 0.06	4.50 ± 0.00	n = 16	[RO4] Roche cobas c501
5.48 ± 0.07	3.69 ± 0.07	2.35 ± 0.08	5.28 ± 0.06	4.49 ± 0.08	n = 35	[RO2] Roche Hitachi and Modular D/P
5.58 ± 0.07	3.70 ± 0.00	2.40 ± 0.00	5.35 ± 0.09	4.60 ± 0.00	n = 12	[RO1] Roche Integra and MIRA
5.63 ± 0.13	3.80 ± 0.00	2.50 ± 0.07	5.44 ± 0.11	4.68 ± 0.11	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
5.51 ± 0.07	3.70 ± 0.04	2.34 ± 0.06	5.32 ± 0.07	4.58 ± 0.06	n = 91	[DA5] Siemens Dimension
5.53 ± 0.14	3.70 ± 0.09	2.37 ± 0.14	5.33 ± 0.14	4.55 ± 0.19	n = 3	[ZZZ] Reagent Not Listed

Summary of Participant Performance (Mean and Standard Deviation)

Chloride (mmol/L)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
107.0 ± 2.48	100.0 ± 2.47	81.8 ± 1.86	110.8 ± 2.46	121.7 ± 2.64	n = 369	[---] All Methods & Instruments
<Instruments>						
107.7 ± 0.80	101.1 ± 0.87	82.4 ± 0.92	111.6 ± 0.93	123.2 ± 0.76	n = 11	[ABH] Abbott Architect
105.9 ± 1.09	98.8 ± 1.08	81.2 ± 0.85	109.8 ± 1.25	120.6 ± 1.18	n = 45	[OLC] Beckman Coulter AU Chemistry System
110.5 ± 1.81	103.7 ± 2.31	85.7 ± 2.54	114.1 ± 1.40	125.1 ± 2.80	n = 11	[BCS] Beckman Coulter CX
107.6 ± 1.54	101.5 ± 1.21	82.5 ± 1.27	111.6 ± 1.76	123.7 ± 1.71	n = 15	[BCX] Beckman Coulter LX-20
108.4 ± 1.77	101.5 ± 1.37	82.9 ± 1.17	111.9 ± 1.28	123.5 ± 1.43	n = 19	[BCG] Beckman Coulter UniCel DxC 600
107.9 ± 1.12	101.6 ± 1.16	82.8 ± 1.07	112.3 ± 1.48	123.9 ± 1.35	n = 24	[BCH] Beckman Coulter UniCel DxC 800
113.5 ± 0.71	107.3 ± 0.54	82.7 ± 0.87	116.5 ± 0.90	126.3 ± 1.24	n = 8	[IAA] i-STAT
109.6 ± 1.50	102.1 ± 1.46	82.9 ± 0.97	113.8 ± 1.91	124.7 ± 1.65	n = 14	[JJE] Ortho Vitros 250/350/950
109.7 ± 0.88	102.2 ± 1.09	82.7 ± 0.94	113.5 ± 1.22	124.4 ± 1.47	n = 27	[JFF] Ortho Vitros 5,1FS
107.9 ± 2.72	101.2 ± 2.92	81.8 ± 1.46	112.7 ± 2.26	123.2 ± 1.96	n = 4	[JJG] Ortho Vitros 5600
101.9 ± 1.42	94.9 ± 0.92	76.7 ± 0.70	106.6 ± 1.03	117.9 ± 0.92	n = 17	[ROC] Roche cobas c501
107.3 ± 0.94	100.4 ± 1.09	81.5 ± 0.89	110.9 ± 0.74	121.3 ± 0.67	n = 10	[ROT] Roche Cobas INTEGRA
105.1 ± 1.20	97.5 ± 1.19	79.1 ± 1.10	108.7 ± 0.90	119.4 ± 1.19	n = 34	[ROD] Roche MODULAR D/P
105.7 ± 2.26	98.6 ± 2.64	80.6 ± 1.90	109.1 ± 2.33	119.7 ± 2.26	n = 4	[BYA] Siemens ADVIA 1650
107.3 ± 1.24	99.7 ± 0.97	81.2 ± 0.89	110.4 ± 1.58	120.8 ± 1.95	n = 15	[BYE] Siemens ADVIA 1800
106.7 ± 1.37	99.7 ± 0.51	81.0 ± 0.90	110.7 ± 0.51	121.7 ± 0.51	n = 3	[BYB] Siemens ADVIA 2400
105.6 ± 1.07	99.0 ± 0.75	82.7 ± 0.54	109.3 ± 0.69	120.1 ± 0.85	n = 8	[DUE] Siemens Dimension EXL
106.7 ± 1.61	99.2 ± 1.31	81.7 ± 1.29	110.7 ± 1.44	121.3 ± 1.69	n = 49	[DUR] Siemens Dimension RxL
107.1 ± 1.87	100.1 ± 1.61	80.7 ± 1.65	111.1 ± 1.69	120.9 ± 1.15	n = 14	[DUT] Siemens Dimension Vista
105.4 ± 1.06	98.8 ± 0.78	82.6 ± 0.91	109.2 ± 0.69	119.7 ± 0.80	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
107.8 ± 0.97	101.2 ± 0.98	82.5 ± 1.02	111.8 ± 1.09	123.3 ± 0.88	n = 12	[AB1] Abbott
108.3 ± 1.74	101.7 ± 1.41	82.9 ± 1.33	112.2 ± 1.55	123.9 ± 1.67	n = 66	[BC1] Beckman Coulter
106.0 ± 1.04	98.8 ± 1.01	81.2 ± 0.80	109.8 ± 1.20	120.7 ± 1.13	n = 44	[OL1] Beckman Coulter AU Series
107.8 ± 3.73	102.8 ± 2.11	84.7 ± 1.51	114.5 ± 2.30	123.1 ± 4.10	n = 4	[CR1] Carolina
113.7 ± 0.51	107.5 ± 0.57	83.1 ± 0.59	116.8 ± 0.73	126.8 ± 0.73	n = 6	[IA1] i-STAT thermal cartridge
109.7 ± 1.17	102.3 ± 1.29	82.7 ± 1.01	113.6 ± 1.60	124.5 ± 1.61	n = 46	[JJ1] Ortho Clinical Diagnostics
101.9 ± 1.42	94.9 ± 0.92	76.7 ± 0.70	106.6 ± 1.03	117.9 ± 0.92	n = 17	[RO4] Roche cobas c501
105.1 ± 1.21	97.4 ± 1.17	79.1 ± 1.08	108.7 ± 0.87	119.4 ± 1.17	n = 35	[RO2] Roche Hitachi and Modular D/P
107.4 ± 1.16	100.5 ± 1.36	81.7 ± 1.19	111.0 ± 0.89	121.4 ± 0.82	n = 11	[RO1] Roche Integra and MIRA
107.1 ± 1.31	99.7 ± 0.95	81.1 ± 0.87	110.1 ± 1.64	120.6 ± 1.92	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
106.3 ± 1.62	99.2 ± 1.17	81.9 ± 1.34	110.2 ± 1.46	120.7 ± 1.53	n = 91	[DA5] Siemens Dimension
107.2 ± 2.36	100.6 ± 2.56	81.0 ± 2.70	110.7 ± 1.37	121.4 ± 1.02	n = 3	[ZZZ] Reagent Not Listed

Summary of Participant Performance (Mean and Standard Deviation)

Albumin (g/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
4.26 ± 0.19	5.21 ± 0.25	3.51 ± 0.17	4.25 ± 0.19	4.30 ± 0.16	n = 356	[---] All Methods & Instruments
<Instruments>						
3.98 ± 0.13	4.80 ± 0.07	3.30 ± 0.09	3.97 ± 0.15	4.05 ± 0.10	n = 11	[ABH] Abbott Architect
4.27 ± 0.08	5.17 ± 0.08	3.53 ± 0.06	4.27 ± 0.07	4.31 ± 0.08	n = 48	[OLC] Beckman Coulter AU Chemistry System
4.06 ± 0.11	5.04 ± 0.19	3.34 ± 0.12	4.04 ± 0.11	4.15 ± 0.12	n = 8	[BCS] Beckman Coulter CX
4.06 ± 0.07	5.05 ± 0.13	3.33 ± 0.06	4.03 ± 0.07	4.12 ± 0.05	n = 15	[BCX] Beckman Coulter LX-20
3.99 ± 0.11	4.98 ± 0.10	3.30 ± 0.11	3.95 ± 0.12	4.07 ± 0.11	n = 18	[BCG] Beckman Coulter UniCel DxC 600
4.07 ± 0.07	5.04 ± 0.11	3.35 ± 0.08	4.05 ± 0.07	4.13 ± 0.08	n = 24	[BCH] Beckman Coulter UniCel DxC 800
4.07 ± 0.09	5.02 ± 0.11	3.32 ± 0.10	4.16 ± 0.13	4.20 ± 0.11	n = 13	[JJE] Ortho Vitros 250/350/950
4.08 ± 0.10	4.98 ± 0.12	3.28 ± 0.07	4.13 ± 0.13	4.20 ± 0.12	n = 26	[JJF] Ortho Vitros 5,1FS
4.05 ± 0.12	5.00 ± 0.17	3.30 ± 0.08	4.20 ± 0.08	4.28 ± 0.15	n = 4	[JJG] Ortho Vitros 5600
4.42 ± 0.12	5.32 ± 0.12	3.69 ± 0.09	4.46 ± 0.07	4.41 ± 0.11	n = 16	[ROC] Roche cobas c501
4.28 ± 0.07	5.10 ± 0.08	3.55 ± 0.06	4.26 ± 0.07	4.26 ± 0.06	n = 10	[ROT] Roche Cobas INTEGRA
4.38 ± 0.12	5.30 ± 0.13	3.65 ± 0.10	4.40 ± 0.12	4.38 ± 0.12	n = 35	[ROD] Roche MODULAR D/P
4.30 ± 0.00	5.16 ± 0.06	3.60 ± 0.00	4.30 ± 0.00	4.34 ± 0.06	n = 5	[BYA] Siemens ADVIA 1650
4.27 ± 0.09	5.11 ± 0.12	3.54 ± 0.07	4.26 ± 0.11	4.29 ± 0.08	n = 15	[BYE] Siemens ADVIA 1800
4.23 ± 0.14	5.10 ± 0.09	3.50 ± 0.09	4.23 ± 0.14	4.27 ± 0.14	n = 3	[BYB] Siemens ADVIA 2400
4.43 ± 0.05	5.54 ± 0.07	3.63 ± 0.07	4.41 ± 0.06	4.41 ± 0.06	n = 8	[DUE] Siemens Dimension EXL
4.44 ± 0.08	5.56 ± 0.10	3.62 ± 0.07	4.39 ± 0.08	4.46 ± 0.08	n = 50	[DUR] Siemens Dimension RxL
4.30 ± 0.07	5.34 ± 0.09	3.56 ± 0.08	4.24 ± 0.07	4.28 ± 0.08	n = 13	[DUT] Siemens Dimension Vista
4.42 ± 0.08	5.52 ± 0.07	3.60 ± 0.05	4.39 ± 0.08	4.42 ± 0.07	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
4.00 ± 0.16	4.82 ± 0.10	3.32 ± 0.11	3.99 ± 0.16	4.08 ± 0.13	n = 12	[AB1] Abbott
4.05 ± 0.07	5.02 ± 0.10	3.33 ± 0.07	4.02 ± 0.09	4.11 ± 0.08	n = 60	[BC1] Beckman Coulter
4.27 ± 0.07	5.17 ± 0.08	3.53 ± 0.06	4.27 ± 0.07	4.31 ± 0.08	n = 47	[OL1] Beckman Coulter AU Series
4.12 ± 0.13	5.21 ± 0.23	3.43 ± 0.16	4.12 ± 0.13	4.20 ± 0.17	n = 4	[CR1] Carolina
4.37 ± 0.05	5.36 ± 0.10	3.63 ± 0.05	4.40 ± 0.00	4.40 ± 0.00	n = 3	[DG1] Diagnostic Chemicals Ltd - Endpoint
4.08 ± 0.10	4.99 ± 0.12	3.29 ± 0.08	4.15 ± 0.13	4.21 ± 0.12	n = 44	[JJ1] Ortho Clinical Diagnostics
4.42 ± 0.12	5.32 ± 0.12	3.69 ± 0.09	4.46 ± 0.07	4.41 ± 0.11	n = 16	[RO4] Roche cobas c501
4.37 ± 0.12	5.29 ± 0.13	3.65 ± 0.10	4.40 ± 0.12	4.38 ± 0.13	n = 35	[RO2] Roche Hitachi and Modular D/P
4.28 ± 0.07	5.10 ± 0.08	3.55 ± 0.06	4.26 ± 0.07	4.26 ± 0.06	n = 10	[RO1] Roche Integra and MIRA
4.29 ± 0.09	5.12 ± 0.10	3.55 ± 0.07	4.27 ± 0.10	4.31 ± 0.08	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
4.42 ± 0.09	5.53 ± 0.11	3.61 ± 0.07	4.38 ± 0.09	4.42 ± 0.10	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Total Protein (g/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
7.10 ± 0.21	8.10 ± 0.24	5.75 ± 0.16	7.12 ± 0.20	7.06 ± 0.20	n = 359	[---] All Methods & Instruments
<Instruments>						
7.07 ± 0.06	8.01 ± 0.07	5.69 ± 0.04	7.07 ± 0.06	6.97 ± 0.06	n = 11	[ABH] Abbott Architect
7.05 ± 0.12	7.98 ± 0.14	5.65 ± 0.12	7.04 ± 0.09	6.98 ± 0.12	n = 47	[OLC] Beckman Coulter AU Chemistry System
7.15 ± 0.10	8.14 ± 0.16	5.76 ± 0.09	7.15 ± 0.17	7.10 ± 0.22	n = 9	[BCS] Beckman Coulter CX
6.88 ± 0.09	7.84 ± 0.13	5.53 ± 0.07	6.86 ± 0.13	6.86 ± 0.12	n = 16	[BCX] Beckman Coulter LX-20
6.96 ± 0.20	7.94 ± 0.19	5.65 ± 0.12	6.99 ± 0.14	6.92 ± 0.16	n = 17	[BCG] Beckman Coulter UniCel DxC 600
6.80 ± 0.12	7.84 ± 0.14	5.59 ± 0.08	6.86 ± 0.12	6.80 ± 0.08	n = 24	[BCH] Beckman Coulter UniCel DxC 800
7.01 ± 0.13	8.24 ± 0.08	5.79 ± 0.13	7.10 ± 0.17	7.00 ± 0.15	n = 14	[JJE] Ortho Vitros 250/350/950
7.02 ± 0.19	8.30 ± 0.21	5.84 ± 0.17	7.12 ± 0.17	7.07 ± 0.18	n = 27	[JJF] Ortho Vitros 5,1FS
7.07 ± 0.09	8.42 ± 0.20	5.80 ± 0.08	7.20 ± 0.08	7.13 ± 0.09	n = 4	[JJG] Ortho Vitros 5600
7.02 ± 0.13	7.96 ± 0.16	5.70 ± 0.11	7.03 ± 0.15	6.98 ± 0.12	n = 16	[ROC] Roche cobas c501
7.02 ± 0.20	7.90 ± 0.18	5.64 ± 0.12	7.02 ± 0.18	6.95 ± 0.14	n = 11	[ROT] Roche Cobas INTEGRA
7.06 ± 0.10	8.00 ± 0.11	5.73 ± 0.11	7.10 ± 0.12	7.05 ± 0.12	n = 35	[ROD] Roche MODULAR D/P
7.16 ± 0.13	8.09 ± 0.14	5.90 ± 0.10	7.20 ± 0.10	7.14 ± 0.11	n = 5	[BYA] Siemens ADVIA 1650
7.15 ± 0.08	8.14 ± 0.11	5.87 ± 0.07	7.21 ± 0.09	7.13 ± 0.09	n = 15	[BYE] Siemens ADVIA 1800
7.16 ± 0.10	8.16 ± 0.10	5.90 ± 0.09	7.23 ± 0.14	7.08 ± 0.15	n = 3	[BYB] Siemens ADVIA 2400
7.37 ± 0.22	8.34 ± 0.19	5.88 ± 0.12	7.36 ± 0.14	7.30 ± 0.15	n = 8	[DUE] Siemens Dimension EXL
7.34 ± 0.13	8.32 ± 0.16	5.85 ± 0.09	7.33 ± 0.13	7.28 ± 0.14	n = 50	[DUR] Siemens Dimension RxL
7.34 ± 0.07	8.34 ± 0.14	5.87 ± 0.12	7.33 ± 0.13	7.30 ± 0.11	n = 13	[DUT] Siemens Dimension Vista
7.28 ± 0.12	8.26 ± 0.11	5.83 ± 0.09	7.29 ± 0.10	7.23 ± 0.09	n = 21	[DUX] Siemens Dimension Xpand
<Reagents>						
7.08 ± 0.07	8.02 ± 0.07	5.70 ± 0.06	7.08 ± 0.07	6.98 ± 0.07	n = 12	[AB1] Abbott
6.88 ± 0.17	7.88 ± 0.17	5.60 ± 0.11	6.90 ± 0.15	6.86 ± 0.14	n = 63	[BC1] Beckman Coulter
7.04 ± 0.12	7.98 ± 0.14	5.66 ± 0.12	7.04 ± 0.09	6.98 ± 0.12	n = 46	[OL1] Beckman Coulter AU Series
7.15 ± 0.06	8.19 ± 0.11	5.88 ± 0.04	7.20 ± 0.08	7.23 ± 0.16	n = 4	[CR1] Carolina
7.02 ± 0.17	8.28 ± 0.20	5.82 ± 0.15	7.12 ± 0.17	7.06 ± 0.17	n = 45	[JJ1] Ortho Clinical Diagnostics
7.03 ± 0.13	7.96 ± 0.17	5.69 ± 0.11	7.02 ± 0.15	6.99 ± 0.13	n = 15	[RO4] Roche cobas c501
7.06 ± 0.10	8.00 ± 0.11	5.72 ± 0.11	7.09 ± 0.12	7.05 ± 0.12	n = 36	[RO2] Roche Hitachi and Modular D/P
7.02 ± 0.20	7.90 ± 0.18	5.64 ± 0.12	7.02 ± 0.18	6.95 ± 0.14	n = 11	[RO1] Roche Integra and MIRA
7.15 ± 0.09	8.14 ± 0.12	5.88 ± 0.09	7.20 ± 0.10	7.12 ± 0.11	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
7.33 ± 0.13	8.31 ± 0.15	5.85 ± 0.10	7.33 ± 0.13	7.27 ± 0.13	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Cholesterol (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
213.3 ± 6.94	194.9 ± 7.53	143.4 ± 7.00	219.6 ± 7.01	160.6 ± 5.58	n = 329	[---] All Methods & Instruments
<Instruments>						
216.9 ± 2.28	199.5 ± 2.39	143.5 ± 1.45	221.5 ± 3.66	163.4 ± 2.65	n = 11	[ABH] Abbott Architect
210.9 ± 4.54	192.9 ± 3.90	139.0 ± 2.76	215.5 ± 4.27	157.8 ± 3.04	n = 49	[OLC] Beckman Coulter AU Chemistry System
209.1 ± 7.86	190.5 ± 7.24	140.3 ± 8.55	214.2 ± 8.88	156.5 ± 4.50	n = 8	[BCS] Beckman Coulter CX
206.1 ± 5.81	187.6 ± 5.02	142.5 ± 3.70	214.6 ± 5.81	156.0 ± 2.77	n = 13	[BCX] Beckman Coulter LX-20
207.8 ± 3.23	189.7 ± 3.31	143.5 ± 3.07	216.3 ± 4.06	155.7 ± 3.50	n = 15	[BCG] Beckman Coulter UniCel DxC 600
209.4 ± 3.03	191.0 ± 2.72	144.0 ± 2.25	217.1 ± 3.45	156.7 ± 2.28	n = 20	[BCH] Beckman Coulter UniCel DxC 800
226.0 ± 5.21	212.8 ± 3.69	160.0 ± 2.77	234.2 ± 4.66	174.9 ± 3.24	n = 6	[JJE] Ortho Vitros 250/350/950
225.2 ± 4.25	212.4 ± 4.56	157.7 ± 3.15	233.4 ± 4.11	172.7 ± 3.93	n = 26	[JJF] Ortho Vitros 5,1FS
217.8 ± 8.03	208.9 ± 7.04	154.2 ± 4.33	231.0 ± 6.87	170.2 ± 5.34	n = 4	[JJG] Ortho Vitros 5600
216.9 ± 3.71	199.2 ± 3.78	146.3 ± 2.65	222.8 ± 4.30	163.3 ± 3.46	n = 15	[ROC] Roche cobas c501
214.7 ± 4.85	197.4 ± 4.29	143.5 ± 2.50	220.0 ± 3.85	161.0 ± 2.97	n = 12	[ROT] Roche Cobas INTEGRA
215.6 ± 3.54	197.9 ± 3.47	146.2 ± 3.14	222.5 ± 3.80	162.7 ± 2.92	n = 36	[ROD] Roche MODULAR D/P
214.8 ± 4.37	196.2 ± 2.10	148.0 ± 2.72	221.9 ± 2.41	161.0 ± 2.97	n = 5	[BYA] Siemens ADVIA 1650
215.1 ± 5.72	198.0 ± 4.65	150.6 ± 4.87	222.1 ± 4.74	161.3 ± 3.92	n = 15	[BYE] Siemens ADVIA 1800
213.7 ± 4.96	197.1 ± 5.72	149.5 ± 1.86	224.0 ± 5.48	161.0 ± 6.37	n = 3	[BYB] Siemens ADVIA 2400
211.1 ± 4.83	192.7 ± 3.95	138.6 ± 3.66	218.2 ± 4.09	161.1 ± 2.87	n = 8	[DUE] Siemens Dimension EXL
211.7 ± 6.12	191.3 ± 4.68	138.4 ± 3.44	217.9 ± 4.68	161.4 ± 3.61	n = 39	[DUR] Siemens Dimension RxL
207.4 ± 4.34	189.5 ± 4.41	136.2 ± 3.71	212.5 ± 4.48	156.5 ± 4.95	n = 12	[DUT] Siemens Dimension Vista
212.6 ± 5.78	190.5 ± 5.22	137.0 ± 4.86	217.5 ± 5.90	159.8 ± 4.58	n = 17	[DUX] Siemens Dimension Xpand
<Reagents>						
217.3 ± 2.68	199.8 ± 2.83	143.7 ± 2.00	222.0 ± 3.79	163.7 ± 2.51	n = 12	[AB1] Abbott
208.6 ± 4.21	190.2 ± 4.07	143.6 ± 2.89	216.5 ± 4.34	156.4 ± 2.96	n = 53	[BC1] Beckman Coulter
210.7 ± 4.37	192.8 ± 3.72	138.9 ± 2.51	215.4 ± 3.90	157.7 ± 2.73	n = 46	[OL1] Beckman Coulter AU Series
204.4 ± 6.10	186.7 ± 5.91	133.1 ± 5.47	208.6 ± 7.75	155.4 ± 5.38	n = 4	[CR1] Carolina
224.9 ± 5.09	212.2 ± 4.57	157.8 ± 3.47	233.4 ± 4.62	172.8 ± 4.13	n = 36	[JJ1] Ortho Clinical Diagnostics
216.9 ± 3.71	199.2 ± 3.78	146.3 ± 2.65	222.8 ± 4.30	163.3 ± 3.46	n = 15	[RO4] Roche cobas c501
215.6 ± 3.48	197.9 ± 3.65	146.0 ± 3.29	222.6 ± 3.69	162.6 ± 2.99	n = 38	[RO2] Roche Hitachi and Modular D/P
214.7 ± 4.85	197.4 ± 4.29	143.5 ± 2.50	220.0 ± 3.85	161.0 ± 2.97	n = 12	[RO1] Roche Integra and MIRA
214.1 ± 5.76	196.9 ± 4.26	149.3 ± 3.12	221.6 ± 4.31	160.7 ± 4.37	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
211.1 ± 5.92	191.0 ± 4.73	137.8 ± 3.87	217.0 ± 5.26	160.4 ± 4.27	n = 76	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

HDL-Cholesterol (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
42.9 ± 5.51	53.6 ± 6.15	34.3 ± 2.97	66.1 ± 7.59	42.7 ± 4.41	n = 308	[---] All Methods & Instruments
43.2 ± 4.82	54.8 ± 5.85	32.5 ± 4.39	68.2 ± 7.36	43.5 ± 4.36	n = 14	[---] All Precipitation Methods
42.8 ± 5.56	53.5 ± 6.16	34.3 ± 2.91	66.0 ± 7.58	42.6 ± 4.41	n = 294	[---] All Homogeneous (Direct) Methods
35.5 ± 0.57	44.0 ± 0.00	27.5 ± 1.71	53.5 ± 0.57	35.5 ± 0.57	n = 2	[AX1] Abaxis
42.8 ± 1.22	53.8 ± 1.64	35.4 ± 1.00	67.1 ± 2.21	44.1 ± 1.36	n = 11	[AB1] Abbott
51.8 ± 2.32	61.3 ± 2.81	37.9 ± 2.42	75.3 ± 3.30	46.5 ± 2.36	n = 43	[BC1] Beckman Coulter
43.5 ± 1.92	55.0 ± 2.39	35.1 ± 1.52	68.4 ± 2.61	45.2 ± 1.88	n = 32	[OL1] Beckman Coulter AU Series
43.6 ± 2.75	54.6 ± 3.49	35.3 ± 2.05	68.9 ± 3.24	44.1 ± 3.16	n = 6	[EQ1/GZ1] Equal/Genzyme
47.3 ± 2.06	60.2 ± 2.21	34.0 ± 1.65	75.6 ± 2.80	47.1 ± 1.58	n = 31	[JJ1] Ortho Clinical Diagnostics
37.3 ± 4.06	47.5 ± 4.53	28.5 ± 2.74	61.3 ± 5.97	40.7 ± 3.16	n = 3	[PM1] Polymedco
38.8 ± 1.38	48.7 ± 1.76	32.4 ± 1.31	59.1 ± 2.00	38.1 ± 1.13	n = 12	[RO4] Roche cobas c501
41.3 ± 2.06	50.7 ± 2.59	34.4 ± 1.88	61.5 ± 2.66	39.4 ± 1.89	n = 34	[RO2] Roche Hitachi and Modular D/P
40.1 ± 1.93	49.9 ± 1.81	32.7 ± 1.92	60.7 ± 3.17	39.1 ± 2.06	n = 10	[RO1] Roche Integra and MIRA
29.6 ± 1.19	39.1 ± 1.50	21.8 ± 0.96	52.3 ± 1.54	34.4 ± 1.38	n = 21	[BY1] Siemens ADVIA/ADVIA Centaur
40.7 ± 1.65	52.3 ± 1.67	32.2 ± 1.44	65.8 ± 2.18	43.9 ± 1.31	n = 44	[DA7] Siemens Dimension HDL (DF48A/K3048)
41.6 ± 1.45	51.2 ± 1.27	34.5 ± 0.83	62.3 ± 2.01	40.2 ± 1.14	n = 28	[DA5] Siemens Dimension HDL (DF48B/K3048A)

Summary of Participant Performance (Mean and Standard Deviation)

LDL-Cholesterol (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
137.3 ± 16.96	114.5 ± 15.03	88.4 ± 12.54	123.9 ± 14.34	92.6 ± 14.23	n = 296	[---] All Methods & Instruments
147.5 ± 8.67	122.7 ± 9.79	94.1 ± 9.14	130.4 ± 9.90	100.7 ± 6.98	n = 158	[-A-] All Calculated results Friedewald formula [LDL=TC-HDL-(Trigs+5)]
123.4 ± 14.91	104.1 ± 13.01	80.2 ± 11.24	115.0 ± 14.26	80.9 ± 12.07	n = 134	[---] All Homogeneous (Direct) Methods
123.1 ± 14.04	102.2 ± 12.02	80.3 ± 6.54	112.2 ± 10.69	81.1 ± 10.68	n = 4	[AB1] Abbott
113.7 ± 4.81	96.5 ± 3.35	74.3 ± 3.47	106.2 ± 4.41	73.5 ± 3.42	n = 22	[BC1] Beckman Coulter
106.6 ± 6.36	89.4 ± 5.30	70.0 ± 4.71	97.6 ± 4.24	69.4 ± 4.03	n = 15	[OL1] Beckman Coulter AU Series
113.4 ± 14.65	95.8 ± 12.46	75.4 ± 10.68	104.3 ± 12.19	74.7 ± 9.36	n = 17	[EQ1/GZ1] Equal/Genzyme
129.3 ± 4.63	110.0 ± 4.07	78.8 ± 2.99	126.9 ± 4.64	77.6 ± 4.68	n = 11	[JJ1] Ortho Clinical Diagnostics
150.2 ± 6.95	127.7 ± 4.22	103.4 ± 3.87	139.4 ± 4.72	108.4 ± 3.87	n = 3	[RO4] Roche cobas c501
145.1 ± 3.49	123.1 ± 3.71	99.9 ± 2.86	135.9 ± 3.91	104.8 ± 3.14	n = 13	[RO2] Roche Hitachi and Modular D/P
122.0 ± 5.77	102.7 ± 4.35	78.0 ± 4.05	117.1 ± 4.47	78.3 ± 4.07	n = 13	[BY1] Siemens ADVIA/ADVIA Centaur
131.2 ± 8.25	110.5 ± 7.85	87.4 ± 6.47	119.4 ± 7.69	87.8 ± 5.70	n = 29	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Triglycerides (mg/dL)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
122.0 ± 5.55	103.4 ± 5.23	84.7 ± 5.00	121.9 ± 5.28	95.9 ± 5.17	n = 317	[---] All Methods & Instruments
<Instruments>						
118.8 ± 2.15	101.0 ± 1.52	89.0 ± 1.82	118.9 ± 2.43	94.2 ± 1.58	n = 12	[ABH] Abbott Architect
120.6 ± 3.29	102.5 ± 2.88	80.9 ± 2.29	119.7 ± 3.22	94.9 ± 3.18	n = 48	[OLC] Beckman Coulter AU Chemistry System
126.5 ± 7.50	102.5 ± 1.71	89.2 ± 9.24	124.2 ± 5.98	98.3 ± 6.18	n = 8	[BCS] Beckman Coulter CX
122.0 ± 4.98	104.4 ± 5.18	81.9 ± 3.59	121.0 ± 5.89	94.9 ± 3.60	n = 13	[BCX] Beckman Coulter LX-20
122.0 ± 4.93	104.3 ± 3.88	80.6 ± 3.80	120.5 ± 5.01	94.4 ± 5.18	n = 12	[BCG] Beckman Coulter UniCel DxC 600
123.4 ± 5.37	106.4 ± 2.32	83.0 ± 2.40	123.6 ± 4.92	96.4 ± 2.95	n = 17	[BCH] Beckman Coulter UniCel DxC 800
133.9 ± 3.58	119.1 ± 3.28	90.7 ± 2.05	133.8 ± 2.15	108.4 ± 3.07	n = 6	[JJE] Ortho Vitros 250/350/950
128.9 ± 4.81	113.2 ± 4.50	86.1 ± 3.20	128.5 ± 4.56	102.2 ± 4.16	n = 26	[JJF] Ortho Vitros 5,1FS
125.8 ± 2.58	110.2 ± 2.11	84.3 ± 1.58	126.3 ± 0.90	100.9 ± 1.13	n = 4	[JJG] Ortho Vitros 5600
126.3 ± 2.73	105.9 ± 2.41	89.2 ± 2.29	125.0 ± 3.08	99.8 ± 2.70	n = 15	[ROC] Roche cobas c501
120.2 ± 4.07	100.2 ± 3.20	81.6 ± 2.22	118.3 ± 3.95	96.1 ± 4.41	n = 10	[ROT] Roche Cobas INTEGRA
122.2 ± 3.28	102.6 ± 3.06	88.9 ± 2.64	123.1 ± 3.17	96.7 ± 3.48	n = 36	[ROD] Roche MODULAR D/P
123.6 ± 3.92	104.0 ± 2.42	88.3 ± 2.81	123.5 ± 2.70	94.7 ± 0.90	n = 5	[BYA] Siemens ADVIA 1650
120.8 ± 2.35	102.8 ± 2.23	87.0 ± 1.71	121.7 ± 2.09	94.0 ± 2.22	n = 15	[BYE] Siemens ADVIA 1800
120.6 ± 3.87	103.3 ± 3.37	86.6 ± 3.87	121.6 ± 3.87	93.5 ± 3.63	n = 3	[BYB] Siemens ADVIA 2400
118.2 ± 1.31	100.1 ± 1.52	82.7 ± 1.64	118.4 ± 2.16	92.2 ± 2.73	n = 8	[DUE] Siemens Dimension EXL
117.4 ± 3.93	99.7 ± 2.59	82.7 ± 2.02	118.9 ± 2.41	91.4 ± 3.12	n = 39	[DUR] Siemens Dimension RxL
131.0 ± 3.02	110.4 ± 2.48	91.9 ± 1.98	131.1 ± 3.42	102.2 ± 1.56	n = 12	[DUT] Siemens Dimension Vista
118.0 ± 2.47	99.2 ± 1.97	82.4 ± 2.14	118.7 ± 2.36	92.4 ± 1.88	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
119.1 ± 2.39	101.2 ± 1.80	89.2 ± 2.12	119.1 ± 2.50	94.4 ± 1.62	n = 13	[AB1] Abbott
122.9 ± 5.17	105.0 ± 3.60	81.9 ± 3.67	122.1 ± 5.28	95.3 ± 4.18	n = 48	[BC1] Beckman Coulter
120.4 ± 3.02	102.4 ± 2.83	81.0 ± 2.18	119.6 ± 3.14	94.7 ± 2.82	n = 44	[OL1] Beckman Coulter AU Series
131.1 ± 10.54	110.7 ± 17.22	87.1 ± 10.66	124.3 ± 7.45	101.6 ± 3.21	n = 4	[CR1] Carolina
129.4 ± 5.01	113.8 ± 4.87	86.7 ± 3.56	129.2 ± 4.69	103.0 ± 4.52	n = 36	[JJ1] Ortho Clinical Diagnostics
126.3 ± 2.73	105.9 ± 2.41	89.2 ± 2.29	125.0 ± 3.08	99.8 ± 2.70	n = 15	[RO4] Roche cobas c501
122.3 ± 3.19	102.5 ± 3.05	88.8 ± 2.75	123.1 ± 3.17	96.7 ± 3.44	n = 37	[RO2] Roche Hitachi and Modular D/P
120.0 ± 3.57	100.5 ± 3.05	81.9 ± 2.72	118.9 ± 4.08	96.2 ± 4.06	n = 11	[RO1] Roche Integra and MIRA
121.0 ± 2.93	103.2 ± 2.29	87.1 ± 2.12	122.0 ± 2.35	94.3 ± 2.21	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
118.9 ± 5.53	100.4 ± 4.61	83.4 ± 3.92	119.7 ± 4.25	93.0 ± 4.91	n = 72	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Homocysteine ($\mu\text{mol/L}$)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
27.53 \pm 2.09	12.71 \pm 1.30	8.48 \pm 0.75	15.10 \pm 1.33	10.65 \pm 1.07	n = 123	[---] All Methods & Instruments
<Instruments>						
28.30 \pm 0.62	13.77 \pm 0.50	9.94 \pm 0.11	16.44 \pm 0.62	11.62 \pm 0.67	n = 6	[ABH] Abbott Architect
28.47 \pm 1.49	13.85 \pm 0.58	8.57 \pm 0.89	15.64 \pm 0.82	11.92 \pm 0.47	n = 10	[ABB] Abbott AxSym
28.28 \pm 0.99	13.45 \pm 1.14	8.50 \pm 0.75	15.77 \pm 1.06	10.89 \pm 0.82	n = 9	[OLC] Beckman Coulter AU Chemistry System
27.98 \pm 0.63	13.18 \pm 1.02	8.98 \pm 0.75	15.37 \pm 0.44	11.52 \pm 0.35	n = 6	[BCH] Beckman Coulter UniCel DxC 800
26.43 \pm 2.33	13.48 \pm 1.24	8.29 \pm 1.09	14.98 \pm 1.18	10.25 \pm 1.31	n = 4	[JJF] Ortho Vitros 5,1FS
27.28 \pm 1.22	12.64 \pm 0.56	8.59 \pm 0.52	15.18 \pm 0.41	10.97 \pm 0.50	n = 3	[ROC] Roche cobas c501
28.45 \pm 1.02	13.57 \pm 0.47	8.26 \pm 0.32	16.09 \pm 0.67	11.20 \pm 0.70	n = 4	[ROD] Roche MODULAR D/P
25.39 \pm 1.10	11.71 \pm 0.69	8.33 \pm 0.33	14.03 \pm 0.71	9.77 \pm 0.56	n = 26	[COB] Siemens ADVIA Centaur
26.01 \pm 1.98	11.35 \pm 0.68	8.08 \pm 0.47	13.16 \pm 0.96	10.45 \pm 0.57	n = 4	[DUT] Siemens Dimension Vista
28.71 \pm 2.25	12.68 \pm 1.26	8.45 \pm 0.93	15.29 \pm 1.35	10.35 \pm 1.05	n = 32	[DPD] Siemens Immulite 2000
28.93 \pm 1.72	12.86 \pm 0.75	8.56 \pm 0.56	15.40 \pm 1.40	10.65 \pm 1.04	n = 7	[DPE] Siemens Immulite 2500
<Reagents>						
28.31 \pm 1.26	13.88 \pm 0.50	9.12 \pm 1.04	15.89 \pm 0.81	11.88 \pm 0.47	n = 15	[AB1] Abbott
28.59 \pm 0.99	14.18 \pm 0.75	8.94 \pm 0.80	16.26 \pm 0.96	11.45 \pm 0.96	n = 7	[CR1] Carolina
28.08 \pm 1.10	12.94 \pm 0.55	8.49 \pm 0.49	15.70 \pm 0.77	11.10 \pm 0.59	n = 12	[DZ1] Diazyme
28.32 \pm 1.27	13.43 \pm 2.46	8.63 \pm 1.34	15.61 \pm 1.90	10.89 \pm 0.79	n = 5	[EQ1] Equal Diagnostics
26.43 \pm 2.33	13.48 \pm 1.24	8.29 \pm 1.09	14.98 \pm 1.18	10.25 \pm 1.31	n = 4	[JJ1] Ortho Clinical Diagnostics
25.39 \pm 1.10	11.71 \pm 0.69	8.33 \pm 0.33	14.03 \pm 0.71	9.77 \pm 0.56	n = 26	[BY1] Siemens ADVIA/ADVIA Centaur
26.01 \pm 1.98	11.35 \pm 0.68	8.08 \pm 0.47	13.16 \pm 0.96	10.45 \pm 0.57	n = 4	[DA5] Siemens Dimension
28.67 \pm 2.18	12.68 \pm 1.17	8.43 \pm 0.87	15.27 \pm 1.36	10.39 \pm 1.03	n = 40	[DP5] Siemens Immulite

Summary of Participant Performance (Mean and Standard Deviation)

Troponin I ($\mu\text{g/L}$)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
1.653 \pm 0.394	0.022 \pm 0.022	0.022 \pm 0.022	0.639 \pm 0.164	3.276 \pm 0.764	n = 225	[---] All Methods & Instruments
<Instruments>						
10.370 \pm 0.415	0.007 \pm 0.009	0.007 \pm 0.009	4.193 \pm 0.184	20.419 \pm 0.797	n = 12	[ABH] Abbott Architect
1.218 \pm 0.019	0.020 \pm 0.000	0.020 \pm 0.000	0.464 \pm 0.037	2.791 \pm 0.170	n = 7	[ABB] Abbott AxSym
1.422 \pm 0.140	0.010 \pm 0.000	0.010 \pm 0.000	0.594 \pm 0.062	2.919 \pm 0.300	n = 32	[SAA] Beckman Coulter ACCESS
0.537 \pm 0.174	0.050 \pm 0.000	0.050 \pm 0.000	0.140 \pm 0.035	2.171 \pm 0.800	n = 11	[BSA] BioSite Triage
5.691 \pm 0.202	0.008 \pm 0.005	0.007 \pm 0.006	2.526 \pm 0.090	10.609 \pm 0.455	n = 18	[JJC] Ortho Vitros Eci/ECiQ
1.903 \pm 0.123	0.009 \pm 0.007	0.009 \pm 0.007	0.658 \pm 0.055	4.158 \pm 0.264	n = 40	[COB] Siemens ADVIA Centaur
1.869 \pm 0.091	0.015 \pm 0.018	0.015 \pm 0.018	0.615 \pm 0.006	4.566 \pm 0.367	n = 5	[BYP] Siemens ADVIA Centaur CP
2.018 \pm 0.122	0.084 \pm 0.037	0.084 \pm 0.035	1.005 \pm 0.084	3.571 \pm 0.137	n = 7	[DUE] Siemens Dimension EXL
1.536 \pm 0.170	0.037 \pm 0.017	0.036 \pm 0.018	0.614 \pm 0.069	2.960 \pm 0.245	n = 44	[DUR] Siemens Dimension RxL
2.068 \pm 0.094	0.020 \pm 0.000	0.020 \pm 0.000	0.980 \pm 0.052	3.476 \pm 0.156	n = 13	[DUT] Siemens Dimension Vista
1.642 \pm 0.201	0.035 \pm 0.029	0.033 \pm 0.021	0.661 \pm 0.081	3.036 \pm 0.315	n = 11	[DUX] Siemens Dimension Xpand
2.736 \pm 0.242	0.200 \pm 0.000	0.200 \pm 0.000	1.215 \pm 0.104	5.985 \pm 0.509	n = 6	[DPD] Siemens Immulite 2000
11.269 \pm 0.733	0.060 \pm 0.000	0.060 \pm 0.000	5.214 \pm 0.521	20.716 \pm 0.784	n = 5	[TOM] Tosoh Bioscience
<Reagents>						
7.993 \pm 4.574	0.011 \pm 0.010	0.011 \pm 0.010	3.219 \pm 1.861	15.826 \pm 8.769	n = 19	[AB1] Abbott
1.430 \pm 0.144	0.010 \pm 0.000	0.010 \pm 0.000	0.597 \pm 0.061	2.942 \pm 0.276	n = 36	[BC1] Beckman Coulter
0.537 \pm 0.174	0.050 \pm 0.000	0.050 \pm 0.000	0.140 \pm 0.035	2.171 \pm 0.800	n = 11	[BS1] Biosite Diagnostics
5.683 \pm 0.193	0.009 \pm 0.006	0.007 \pm 0.006	2.520 \pm 0.086	10.561 \pm 0.448	n = 20	[JJ1] Ortho Clinical Diagnostics
0.703 \pm 0.077	0.303 \pm 0.005	0.303 \pm 0.005	0.303 \pm 0.005	1.697 \pm 0.077	n = 3	[RO3] Roche Elecsys/Modular E/e601/e411
1.898 \pm 0.120	0.009 \pm 0.007	0.009 \pm 0.007	0.654 \pm 0.054	4.193 \pm 0.290	n = 45	[BY1] Siemens ADVIA Centaur/Centaur CP
1.579 \pm 0.215	0.035 \pm 0.019	0.034 \pm 0.018	0.626 \pm 0.080	3.001 \pm 0.278	n = 59	[DA5] Siemens Dimension
2.064 \pm 0.136	0.052 \pm 0.046	0.055 \pm 0.044	0.993 \pm 0.073	3.536 \pm 0.134	n = 16	[DA6] Siemens Dimension LOCI
2.701 \pm 0.230	0.200 \pm 0.000	0.200 \pm 0.000	1.184 \pm 0.122	5.846 \pm 0.599	n = 7	[DP5] Siemens Immulite
11.301 \pm 0.907	0.060 \pm 0.000	0.060 \pm 0.000	5.304 \pm 0.624	20.648 \pm 0.896	n = 4	[TO2] Tosoh ST AIA

Summary of Participant Performance (Mean and Standard Deviation)

Troponin T ($\mu\text{g/L}$)

Specimen: C46 -----	Specimen: C47 -----	Specimen: C48 -----	Specimen: C49 -----	Specimen: C50 -----	Number -----	[Code] Instrument or Reagent System -----
1.082 \pm 0.057	0.010 \pm 0.000	0.010 \pm 0.000	0.584 \pm 0.037	1.485 \pm 0.097	n = 34	[---] All Methods & Instruments
						<Instruments>
1.074 \pm 0.022	0.010 \pm 0.000	0.010 \pm 0.000	0.578 \pm 0.018	1.460 \pm 0.052	n = 7	[ROA] Roche cobas e601
1.139 \pm 0.071	0.010 \pm 0.000	0.010 \pm 0.000	0.614 \pm 0.043	1.560 \pm 0.121	n = 14	[BME] Roche Elecsys
1.043 \pm 0.028	0.010 \pm 0.000	0.010 \pm 0.000	0.559 \pm 0.018	1.433 \pm 0.042	n = 10	[ROE] Roche MODULAR E
						<Reagents>
1.078 \pm 0.052	0.010 \pm 0.000	0.010 \pm 0.000	0.581 \pm 0.036	1.481 \pm 0.095	n = 30	[RO3] Roche Elecsys/Modular E/e601/e411

Summary of Participant Performance (Mean and Standard Deviation)

Alanine Aminotransferase (U/L 37°C)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
91.0 ± 6.91	43.1 ± 5.86	52.5 ± 6.06	227.2 ± 13.55	148.7 ± 7.93	n = 356	[---] All Methods & Instruments
<Instruments>						
90.1 ± 2.88	39.7 ± 1.77	49.8 ± 1.84	233.5 ± 6.35	149.7 ± 2.75	n = 11	[ABH] Abbott Architect
80.1 ± 2.79	36.3 ± 1.92	45.4 ± 1.91	205.5 ± 6.31	130.8 ± 3.88	n = 46	[OLC] Beckman Coulter AU Chemistry System
86.1 ± 2.14	38.8 ± 1.02	48.4 ± 1.23	216.0 ± 4.53	140.4 ± 2.43	n = 8	[BCS] Beckman Coulter CX
89.0 ± 2.24	42.0 ± 1.13	51.1 ± 1.95	224.2 ± 5.39	146.7 ± 4.02	n = 16	[BCX] Beckman Coulter LX-20
87.9 ± 2.15	41.2 ± 0.93	51.0 ± 1.32	224.2 ± 3.51	146.3 ± 2.30	n = 17	[BCG] Beckman Coulter UniCel DxC 600
88.5 ± 2.03	41.7 ± 1.21	51.2 ± 1.50	224.6 ± 4.47	146.9 ± 2.89	n = 23	[BCH] Beckman Coulter UniCel DxC 800
105.7 ± 1.56	54.6 ± 2.25	70.6 ± 3.33	243.7 ± 4.80	157.8 ± 3.95	n = 14	[JJE] Ortho Vitros 250/350/950
106.9 ± 4.06	55.3 ± 3.97	71.0 ± 4.12	244.4 ± 7.62	156.5 ± 6.21	n = 27	[JJF] Ortho Vitros 5,1FS
107.6 ± 5.00	54.7 ± 1.58	72.1 ± 2.33	247.1 ± 4.67	158.5 ± 3.45	n = 4	[JJG] Ortho Vitros 5600
91.8 ± 2.34	40.9 ± 1.14	51.7 ± 1.39	237.4 ± 4.90	152.1 ± 4.00	n = 16	[ROC] Roche cobas c501
89.3 ± 1.82	39.0 ± 0.93	49.2 ± 0.89	231.6 ± 3.84	148.3 ± 2.74	n = 11	[ROT] Roche Cobas INTEGRA
90.4 ± 2.37	41.0 ± 1.89	51.5 ± 2.40	234.0 ± 5.87	149.8 ± 4.05	n = 35	[ROD] Roche MODULAR D/P
92.2 ± 2.32	42.4 ± 1.09	53.0 ± 1.00	235.7 ± 6.59	152.9 ± 4.23	n = 5	[BYA] Siemens ADVIA 1650
93.7 ± 2.64	42.5 ± 2.04	53.1 ± 2.10	241.7 ± 4.64	155.0 ± 3.74	n = 15	[BYE] Siemens ADVIA 1800
91.5 ± 4.53	41.5 ± 1.86	52.7 ± 2.26	233.5 ± 11.02	150.3 ± 7.75	n = 3	[BYB] Siemens ADVIA 2400
93.2 ± 1.62	48.3 ± 2.40	56.8 ± 3.28	220.9 ± 4.44	148.7 ± 5.59	n = 9	[DUE] Siemens Dimension EXL
93.2 ± 3.08	48.4 ± 1.77	57.2 ± 2.22	219.2 ± 5.63	147.7 ± 4.01	n = 49	[DUR] Siemens Dimension RxL
90.9 ± 1.53	41.4 ± 1.98	50.3 ± 1.16	230.8 ± 2.86	152.5 ± 2.88	n = 13	[DUT] Siemens Dimension Vista
93.8 ± 2.43	48.1 ± 2.05	57.0 ± 1.54	218.6 ± 3.04	149.0 ± 3.81	n = 20	[DUX] Siemens Dimension Xpand
<Reagents>						
90.1 ± 2.68	39.8 ± 1.67	49.8 ± 1.67	233.9 ± 6.05	150.0 ± 2.57	n = 12	[AB1] Abbott
88.1 ± 2.18	41.4 ± 1.38	50.8 ± 1.71	223.5 ± 4.97	146.0 ± 3.31	n = 62	[BC1] Beckman Coulter
80.1 ± 2.60	36.3 ± 1.78	45.4 ± 1.77	205.5 ± 6.26	130.9 ± 3.95	n = 44	[OL1] Beckman Coulter AU Series
86.7 ± 6.43	39.3 ± 4.16	49.1 ± 4.54	222.7 ± 14.31	146.4 ± 10.60	n = 4	[CR1] Carolina
106.4 ± 3.69	54.8 ± 3.50	70.8 ± 3.99	244.3 ± 6.51	157.2 ± 5.25	n = 46	[JJ1] Ortho Clinical Diagnostics
91.8 ± 2.34	40.9 ± 1.14	51.7 ± 1.39	237.4 ± 4.90	152.1 ± 4.00	n = 16	[RO4] Roche cobas c501
90.5 ± 2.44	41.0 ± 1.84	51.5 ± 2.35	234.2 ± 5.95	150.0 ± 4.10	n = 36	[RO2] Roche Hitachi and Modular D/P
89.3 ± 1.82	39.0 ± 0.93	49.2 ± 0.89	231.6 ± 3.84	148.3 ± 2.74	n = 11	[RO1] Roche Integra and MIRA
92.8 ± 3.17	42.3 ± 1.79	52.9 ± 1.86	239.1 ± 7.46	153.8 ± 4.95	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
93.0 ± 2.70	47.6 ± 2.99	56.4 ± 3.35	221.1 ± 6.84	148.9 ± 4.54	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Aspartate Aminotransferase (U/L 37°C)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
290.1 ± 17.41	127.0 ± 7.41	73.5 ± 4.62	357.5 ± 24.40	167.5 ± 8.19	n = 356	[---] All Methods & Instruments
<Instruments>						
286.7 ± 6.07	127.2 ± 2.84	72.2 ± 2.10	353.6 ± 8.42	164.1 ± 3.77	n = 11	[ABH] Abbott Architect
258.5 ± 10.93	114.9 ± 4.55	66.0 ± 2.68	318.5 ± 12.26	148.6 ± 6.02	n = 46	[OLC] Beckman Coulter AU Chemistry System
275.7 ± 14.16	122.6 ± 5.36	70.9 ± 4.53	339.9 ± 11.86	158.6 ± 5.45	n = 8	[BCS] Beckman Coulter CX
283.2 ± 5.95	126.8 ± 3.50	73.2 ± 2.30	347.9 ± 10.10	165.4 ± 3.40	n = 15	[BCX] Beckman Coulter LX-20
283.0 ± 6.64	126.1 ± 3.00	72.4 ± 1.89	348.1 ± 10.03	163.6 ± 4.00	n = 18	[BCG] Beckman Coulter UniCel DxC 600
284.0 ± 5.14	127.2 ± 2.18	72.6 ± 1.62	350.3 ± 6.43	165.3 ± 2.86	n = 23	[BCH] Beckman Coulter UniCel DxC 800
319.1 ± 15.43	135.3 ± 5.96	79.7 ± 3.44	413.1 ± 20.49	171.4 ± 6.67	n = 14	[JJE] Ortho Vitros 250/350/950
317.5 ± 10.98	135.9 ± 4.87	80.3 ± 2.98	408.8 ± 13.42	172.4 ± 5.07	n = 27	[JJF] Ortho Vitros 5,1FS
312.8 ± 14.70	137.4 ± 6.49	79.1 ± 3.00	402.4 ± 16.72	169.2 ± 6.82	n = 4	[JJG] Ortho Vitros 5600
298.8 ± 7.97	131.4 ± 3.74	74.9 ± 2.26	369.8 ± 8.88	170.6 ± 6.14	n = 16	[ROC] Roche cobas c501
287.4 ± 7.69	125.9 ± 3.19	71.4 ± 1.58	355.2 ± 9.77	164.8 ± 3.92	n = 11	[ROT] Roche Cobas INTEGRA
293.9 ± 8.26	130.3 ± 3.03	75.2 ± 2.06	362.1 ± 9.74	168.9 ± 3.70	n = 35	[ROD] Roche MODULAR D/P
302.7 ± 6.14	137.2 ± 3.97	78.8 ± 2.55	375.1 ± 6.31	174.6 ± 5.85	n = 5	[BYA] Siemens ADVIA 1650
311.4 ± 6.85	139.3 ± 3.46	79.1 ± 2.15	385.3 ± 8.05	179.1 ± 3.96	n = 15	[BYE] Siemens ADVIA 1800
299.5 ± 12.80	134.0 ± 6.37	76.0 ± 4.51	369.1 ± 17.51	172.5 ± 8.26	n = 3	[BYB] Siemens ADVIA 2400
287.6 ± 5.82	123.0 ± 2.94	73.3 ± 1.56	355.1 ± 10.12	171.7 ± 3.74	n = 8	[DUE] Siemens Dimension EXL
288.8 ± 7.30	123.5 ± 2.92	72.8 ± 2.18	353.8 ± 8.27	168.7 ± 4.31	n = 50	[DUR] Siemens Dimension RxL
294.7 ± 6.54	125.1 ± 4.48	71.4 ± 4.15	362.4 ± 4.50	171.0 ± 5.52	n = 13	[DUT] Siemens Dimension Vista
290.5 ± 4.79	124.8 ± 3.27	73.3 ± 2.67	357.9 ± 7.68	170.5 ± 2.95	n = 20	[DUX] Siemens Dimension Xpand
<Reagents>						
287.2 ± 5.74	127.2 ± 2.67	72.2 ± 1.94	354.0 ± 7.89	164.2 ± 3.54	n = 12	[AB1] Abbott
282.7 ± 6.67	126.3 ± 3.20	72.4 ± 2.00	348.0 ± 9.27	164.2 ± 4.05	n = 63	[BC1] Beckman Coulter
257.8 ± 9.65	114.5 ± 4.11	65.9 ± 2.51	318.0 ± 11.12	148.2 ± 5.34	n = 44	[OL1] Beckman Coulter AU Series
305.4 ± 16.08	133.1 ± 9.84	77.9 ± 5.12	369.5 ± 11.73	171.1 ± 10.31	n = 4	[CR1] Carolina
317.7 ± 13.46	135.9 ± 5.50	80.0 ± 3.16	409.7 ± 16.65	171.8 ± 5.80	n = 46	[JJ1] Ortho Clinical Diagnostics
298.8 ± 7.97	131.4 ± 3.74	74.9 ± 2.26	369.8 ± 8.88	170.6 ± 6.14	n = 16	[RO4] Roche cobas c501
294.0 ± 8.11	130.4 ± 3.04	75.2 ± 2.03	362.6 ± 10.15	168.9 ± 3.59	n = 36	[RO2] Roche Hitachi and Modular D/P
287.4 ± 7.69	125.9 ± 3.19	71.4 ± 1.58	355.2 ± 9.77	164.8 ± 3.92	n = 11	[RO1] Roche Integra and MIRA
307.3 ± 10.17	138.0 ± 4.69	78.8 ± 2.69	380.1 ± 12.54	177.4 ± 6.05	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
289.8 ± 7.07	124.0 ± 3.32	72.9 ± 2.32	356.0 ± 8.63	169.7 ± 4.41	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

α -Amylase (U/L 37°C)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
132.2 ± 23.89	282.9 ± 77.52	44.8 ± 8.27	55.3 ± 9.50	247.0 ± 68.06	n = 315	[---] All Methods & Instruments
<Instruments>						
147.7 ± 2.39	332.7 ± 6.70	57.9 ± 3.42	55.2 ± 1.20	289.8 ± 5.34	n = 8	[ABH] Abbott Architect
117.9 ± 7.11	265.5 ± 14.97	37.6 ± 2.88	43.2 ± 3.09	233.3 ± 13.02	n = 35	[OLC] Beckman Coulter AU Chemistry System
109.2 ± 3.36	176.4 ± 5.15	60.6 ± 3.74	74.0 ± 3.63	160.9 ± 5.43	n = 15	[BCX] Beckman Coulter LX-20
108.7 ± 3.11	175.7 ± 5.15	62.3 ± 1.47	73.9 ± 3.29	159.7 ± 3.69	n = 15	[BCG] Beckman Coulter UniCel DxC 600
109.9 ± 3.13	177.5 ± 4.18	62.8 ± 4.42	74.7 ± 3.64	160.9 ± 4.12	n = 22	[BCH] Beckman Coulter UniCel DxC 800
95.5 ± 5.90	187.7 ± 5.52	39.9 ± 4.13	54.5 ± 4.93	152.5 ± 6.63	n = 11	[JJE] Ortho Vitros 250/350/950
95.1 ± 5.41	191.6 ± 8.60	39.2 ± 3.27	53.9 ± 3.90	152.7 ± 8.38	n = 26	[JJF] Ortho Vitros 5,1FS
93.2 ± 4.16	190.5 ± 10.31	39.5 ± 2.98	55.3 ± 1.58	151.5 ± 5.66	n = 4	[JJG] Ortho Vitros 5600
140.4 ± 2.84	299.8 ± 2.59	48.2 ± 1.02	59.1 ± 1.07	262.6 ± 3.53	n = 17	[ROC] Roche cobas c501
138.0 ± 1.68	296.7 ± 2.42	46.9 ± 0.79	59.0 ± 0.69	258.8 ± 3.27	n = 9	[ROT] Roche Cobas INTEGRA
137.9 ± 2.51	296.0 ± 5.14	47.1 ± 1.23	58.2 ± 1.36	259.1 ± 4.59	n = 31	[ROD] Roche MODULAR D/P
138.6 ± 5.88	301.8 ± 10.06	46.5 ± 1.81	57.5 ± 2.25	261.3 ± 8.93	n = 5	[BYA] Siemens ADVIA 1650
145.3 ± 2.94	315.8 ± 6.36	48.3 ± 1.16	60.4 ± 1.16	274.0 ± 4.94	n = 14	[BYE] Siemens ADVIA 1800
137.0 ± 2.70	299.9 ± 5.72	45.4 ± 1.02	57.2 ± 1.54	257.5 ± 5.43	n = 3	[BYB] Siemens ADVIA 2400
155.4 ± 1.30	362.1 ± 3.23	41.2 ± 0.47	49.5 ± 0.74	316.0 ± 3.36	n = 7	[DUE] Siemens Dimension EXL
155.3 ± 2.61	361.7 ± 5.89	41.2 ± 0.98	49.9 ± 1.05	315.8 ± 4.60	n = 51	[DUR] Siemens Dimension RxL
145.4 ± 2.15	341.0 ± 5.61	38.1 ± 1.03	46.2 ± 1.20	297.5 ± 5.52	n = 13	[DUT] Siemens Dimension Vista
157.1 ± 2.16	364.8 ± 5.46	41.6 ± 0.81	50.6 ± 0.96	317.9 ± 5.88	n = 17	[DUX] Siemens Dimension Xpand
<Reagents>						
147.7 ± 2.39	332.7 ± 6.70	57.9 ± 3.42	55.2 ± 1.20	289.8 ± 5.34	n = 8	[AB1] Abbott
109.4 ± 3.22	176.5 ± 4.60	62.4 ± 3.09	74.5 ± 3.09	160.2 ± 4.35	n = 53	[BC1] Beckman Coulter
117.6 ± 6.75	264.9 ± 14.79	37.4 ± 2.75	43.1 ± 2.92	232.8 ± 12.90	n = 34	[OL1] Beckman Coulter AU Series
95.4 ± 5.71	191.1 ± 9.01	39.7 ± 3.83	54.3 ± 4.05	152.9 ± 8.30	n = 43	[JJ1] Ortho Clinical Diagnostics
140.4 ± 2.84	299.8 ± 2.59	48.2 ± 1.02	59.1 ± 1.07	262.6 ± 3.53	n = 17	[RO4] Roche cobas c501
138.0 ± 2.59	296.2 ± 5.34	47.1 ± 1.33	58.2 ± 1.44	259.4 ± 4.75	n = 32	[RO2] Roche Hitachi and Modular D/P
138.2 ± 1.73	297.2 ± 2.72	47.0 ± 0.84	59.0 ± 0.64	259.1 ± 3.16	n = 10	[RO1] Roche Integra and MIRA
142.4 ± 5.32	309.4 ± 10.58	47.4 ± 1.65	59.1 ± 2.09	268.0 ± 10.00	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
155.1 ± 3.73	361.1 ± 8.23	41.1 ± 1.35	49.8 ± 1.44	314.9 ± 7.30	n = 85	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Alkaline Phosphatase (U/L 37°C)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
205.0 ± 20.69	46.3 ± 9.49	139.4 ± 13.36	112.6 ± 13.68	377.1 ± 35.94	n = 356	[---] All Methods & Instruments
<Instruments>						
210.0 ± 8.73	44.5 ± 2.37	145.4 ± 6.16	113.5 ± 5.04	388.0 ± 15.99	n = 11	[ABH] Abbott Architect
184.7 ± 9.72	39.2 ± 2.75	128.1 ± 6.64	99.6 ± 5.02	342.4 ± 17.30	n = 46	[OLC] Beckman Coulter AU Chemistry System
179.8 ± 10.37	38.8 ± 1.66	123.9 ± 6.29	97.6 ± 6.22	329.0 ± 13.09	n = 8	[BCS] Beckman Coulter CX
188.8 ± 8.35	38.4 ± 2.28	127.7 ± 5.04	100.9 ± 5.22	350.4 ± 19.99	n = 15	[BCX] Beckman Coulter LX-20
183.5 ± 12.06	39.3 ± 2.78	126.0 ± 9.02	98.5 ± 7.13	340.1 ± 23.34	n = 18	[BCG] Beckman Coulter UniCel DxC 600
189.4 ± 5.81	40.8 ± 2.59	130.7 ± 3.05	102.8 ± 4.51	350.6 ± 11.11	n = 24	[BCH] Beckman Coulter UniCel DxC 800
223.7 ± 9.97	62.9 ± 3.65	137.8 ± 7.85	127.5 ± 6.03	397.9 ± 21.74	n = 13	[JJE] Ortho Vitros 250/350/950
234.3 ± 11.89	65.8 ± 2.72	143.3 ± 6.92	132.3 ± 6.18	415.5 ± 19.99	n = 27	[JJF] Ortho Vitros 5,1FS
216.4 ± 10.59	62.4 ± 3.55	132.9 ± 8.09	125.2 ± 9.31	385.6 ± 18.15	n = 4	[JJG] Ortho Vitros 5600
201.5 ± 3.74	44.2 ± 1.43	138.7 ± 3.07	110.1 ± 3.46	369.9 ± 7.52	n = 16	[ROC] Roche cobas c501
201.3 ± 4.04	42.4 ± 0.81	137.4 ± 1.97	107.4 ± 2.26	374.1 ± 8.99	n = 10	[ROT] Roche Cobas INTEGRA
189.0 ± 10.00	40.1 ± 2.05	131.6 ± 5.58	103.0 ± 4.60	354.7 ± 16.72	n = 3	[ROM] Roche Cobas MIRA/MIRA Plus
196.8 ± 6.08	43.1 ± 1.53	136.1 ± 4.70	107.3 ± 3.95	360.9 ± 10.60	n = 35	[ROD] Roche MODULAR D/P
193.1 ± 16.86	42.5 ± 3.68	135.9 ± 10.19	105.9 ± 8.27	360.2 ± 29.25	n = 5	[BYA] Siemens ADVIA 1650
213.0 ± 7.81	44.8 ± 2.26	147.0 ± 5.91	115.6 ± 4.67	394.9 ± 13.13	n = 15	[BYE] Siemens ADVIA 1800
201.5 ± 3.63	42.7 ± 2.26	138.8 ± 1.54	108.8 ± 1.54	374.3 ± 3.07	n = 3	[BYB] Siemens ADVIA 2400
235.1 ± 8.36	60.3 ± 5.56	167.5 ± 9.14	131.7 ± 7.53	429.1 ± 12.00	n = 8	[DUE] Siemens Dimension EXL
226.5 ± 8.50	56.1 ± 6.79	160.4 ± 9.30	127.6 ± 6.87	420.1 ± 14.02	n = 50	[DUR] Siemens Dimension RxL
202.6 ± 8.19	51.6 ± 3.39	143.5 ± 4.10	118.9 ± 4.87	367.3 ± 11.29	n = 13	[DUT] Siemens Dimension Vista
217.0 ± 7.63	49.7 ± 2.59	152.2 ± 3.65	120.4 ± 4.25	403.0 ± 12.28	n = 20	[DUX] Siemens Dimension Xpand
<Reagents>						
209.9 ± 8.22	44.7 ± 2.28	145.8 ± 5.93	113.7 ± 4.75	388.9 ± 14.97	n = 12	[AB1] Abbott
187.5 ± 8.40	39.7 ± 2.64	128.4 ± 6.12	100.9 ± 5.58	346.5 ± 18.28	n = 61	[BC1] Beckman Coulter
184.3 ± 9.17	39.1 ± 2.59	127.9 ± 6.25	99.4 ± 4.67	341.7 ± 16.48	n = 45	[OL1] Beckman Coulter AU Series
186.8 ± 27.50	37.3 ± 1.37	131.0 ± 16.38	102.4 ± 12.64	326.6 ± 4.72	n = 3	[CR1] Carolina
229.5 ± 13.07	64.7 ± 3.43	141.1 ± 7.84	130.3 ± 6.87	407.9 ± 22.48	n = 45	[JJ1] Ortho Clinical Diagnostics
201.5 ± 3.74	44.2 ± 1.43	138.7 ± 3.07	110.1 ± 3.46	369.9 ± 7.52	n = 16	[RO4] Roche cobas c501
197.0 ± 6.17	43.2 ± 1.52	136.2 ± 4.74	107.5 ± 3.96	361.4 ± 10.94	n = 36	[RO2] Roche Hitachi and Modular D/P
201.5 ± 3.85	42.4 ± 0.80	137.6 ± 1.95	107.6 ± 2.19	374.6 ± 8.53	n = 11	[RO1] Roche Integra and MIRA
208.3 ± 10.15	44.1 ± 2.28	143.8 ± 6.85	112.8 ± 5.86	386.2 ± 17.32	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
222.6 ± 12.76	54.1 ± 6.52	156.6 ± 10.71	125.0 ± 7.57	412.7 ± 23.10	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

 γ -Glutamyltransferase (U/L 37°C)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
50.6 ± 12.19	25.5 ± 5.84	141.4 ± 29.31	79.0 ± 18.35	219.5 ± 40.46	n = 301	[---] All Methods & Instruments
<Instruments>						
50.9 ± 2.99	27.1 ± 1.97	146.3 ± 8.32	79.9 ± 4.13	229.5 ± 13.12	n = 10	[ABH] Abbott Architect
39.5 ± 2.02	21.5 ± 1.37	112.1 ± 5.12	61.4 ± 3.22	173.8 ± 7.61	n = 43	[OLC] Beckman Coulter AU Chemistry System
46.0 ± 3.98	21.3 ± 2.12	145.0 ± 6.15	74.9 ± 9.32	227.2 ± 7.58	n = 7	[BCS] Beckman Coulter CX
44.7 ± 2.98	20.8 ± 1.47	145.8 ± 6.26	75.4 ± 2.75	228.8 ± 8.81	n = 12	[BCX] Beckman Coulter LX-20
46.2 ± 2.14	20.8 ± 1.36	148.6 ± 7.30	75.9 ± 3.96	233.3 ± 12.50	n = 13	[BCG] Beckman Coulter UniCel DxC 600
45.2 ± 1.48	21.1 ± 1.30	146.4 ± 4.93	75.0 ± 2.90	230.2 ± 7.98	n = 18	[BCH] Beckman Coulter UniCel DxC 800
71.0 ± 3.63	28.4 ± 2.26	239.0 ± 7.67	120.5 ± 5.36	384.5 ± 18.35	n = 10	[JJE] Ortho Vitros 250/350/950
70.7 ± 1.84	29.2 ± 1.71	235.3 ± 5.82	118.9 ± 3.76	373.6 ± 9.00	n = 26	[JJF] Ortho Vitros 5,1FS
71.4 ± 1.80	31.2 ± 1.46	233.6 ± 4.37	121.2 ± 2.11	374.7 ± 9.25	n = 4	[JJG] Ortho Vitros 5600
42.5 ± 0.81	22.0 ± 0.00	123.8 ± 1.87	67.0 ± 1.56	194.7 ± 4.49	n = 16	[ROC] Roche cobas c501
41.4 ± 0.70	21.7 ± 0.97	119.5 ± 2.71	65.0 ± 1.13	187.7 ± 3.66	n = 9	[ROT] Roche Cobas INTEGRA
43.1 ± 1.53	22.3 ± 1.14	127.0 ± 3.17	68.2 ± 2.10	200.3 ± 5.50	n = 32	[ROD] Roche MODULAR D/P
44.6 ± 1.37	23.7 ± 1.10	130.4 ± 4.33	70.2 ± 2.27	204.6 ± 5.14	n = 5	[BYA] Siemens ADVIA 1650
46.5 ± 1.98	24.5 ± 2.13	133.6 ± 3.10	72.8 ± 2.33	208.8 ± 3.38	n = 15	[BYE] Siemens ADVIA 1800
64.2 ± 0.76	36.5 ± 1.49	164.0 ± 2.73	95.1 ± 1.98	255.7 ± 2.77	n = 7	[DUE] Siemens Dimension EXL
62.4 ± 2.29	34.8 ± 1.91	162.2 ± 3.57	93.1 ± 2.49	251.9 ± 4.98	n = 39	[DUR] Siemens Dimension RxL
60.1 ± 1.30	30.9 ± 1.85	163.0 ± 2.39	92.1 ± 1.60	254.4 ± 4.44	n = 13	[DUT] Siemens Dimension Vista
62.9 ± 1.57	35.0 ± 1.57	162.3 ± 2.70	92.6 ± 2.40	251.2 ± 4.98	n = 11	[DUX] Siemens Dimension Xpand
<Reagents>						
50.9 ± 2.44	26.9 ± 1.68	146.2 ± 6.71	80.0 ± 2.95	229.3 ± 11.01	n = 10	[AB1] Abbott
45.6 ± 2.22	20.9 ± 1.50	146.4 ± 6.19	75.3 ± 3.27	229.9 ± 9.90	n = 47	[BC1] Beckman Coulter
39.6 ± 2.02	21.5 ± 1.39	112.2 ± 5.09	61.4 ± 3.26	173.9 ± 7.66	n = 42	[OL1] Beckman Coulter AU Series
70.8 ± 2.28	29.2 ± 2.09	235.9 ± 5.93	119.5 ± 3.92	375.7 ± 11.34	n = 40	[JJ1] Ortho Clinical Diagnostics
42.5 ± 0.81	22.0 ± 0.00	123.8 ± 1.87	67.0 ± 1.56	194.7 ± 4.49	n = 16	[RO4] Roche cobas c501
43.1 ± 1.50	22.4 ± 1.13	127.0 ± 3.11	68.2 ± 2.06	200.2 ± 5.43	n = 33	[RO2] Roche Hitachi and Modular D/P
41.4 ± 0.70	21.7 ± 0.97	119.5 ± 2.71	65.0 ± 1.13	187.7 ± 3.66	n = 9	[RO1] Roche Integra and MIRA
45.4 ± 2.34	23.9 ± 2.17	131.6 ± 4.78	71.4 ± 2.91	206.2 ± 6.56	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
62.3 ± 2.27	34.5 ± 2.39	162.6 ± 3.18	93.0 ± 2.41	252.7 ± 4.94	n = 70	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Creatine Kinase (U/L 37°C)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
173.0 ± 15.74	63.1 ± 10.00	95.9 ± 13.68	262.8 ± 20.69	92.0 ± 10.51	n = 326	[---] All Methods & Instruments
<Instruments>						
188.7 ± 6.58	74.0 ± 2.46	105.0 ± 3.36	282.4 ± 6.09	100.7 ± 2.56	n = 10	[ABH] Abbott Architect
161.3 ± 8.08	60.5 ± 2.98	89.3 ± 4.65	244.8 ± 10.56	85.1 ± 4.09	n = 41	[OLC] Beckman Coulter AU Chemistry System
171.2 ± 15.18	65.0 ± 10.48	96.2 ± 13.69	264.8 ± 22.30	91.0 ± 9.46	n = 6	[BCS] Beckman Coulter CX
190.6 ± 4.18	74.1 ± 2.43	109.8 ± 4.24	288.3 ± 6.90	100.5 ± 3.23	n = 15	[BCX] Beckman Coulter LX-20
185.6 ± 4.61	72.3 ± 1.78	107.0 ± 3.48	282.3 ± 6.67	98.2 ± 2.60	n = 15	[BCG] Beckman Coulter UniCel DxC 600
186.5 ± 4.92	73.7 ± 2.00	107.4 ± 3.63	284.9 ± 8.22	98.7 ± 2.85	n = 23	[BCH] Beckman Coulter UniCel DxC 800
190.7 ± 13.77	62.3 ± 5.58	112.1 ± 10.57	281.0 ± 20.99	109.0 ± 8.74	n = 11	[JJE] Ortho Vitros 250/350/950
193.4 ± 8.26	64.8 ± 2.05	115.1 ± 5.62	283.4 ± 13.55	110.1 ± 5.25	n = 25	[JJF] Ortho Vitros 5,1FS
187.7 ± 12.07	63.4 ± 4.70	111.3 ± 9.74	279.3 ± 19.32	105.0 ± 5.99	n = 4	[JJG] Ortho Vitros 5600
177.7 ± 4.62	65.2 ± 1.95	97.4 ± 3.29	272.4 ± 7.16	93.5 ± 2.33	n = 17	[ROC] Roche cobas c501
163.6 ± 4.15	55.9 ± 4.02	87.3 ± 4.44	253.1 ± 2.87	81.6 ± 3.82	n = 8	[ROT] Roche Cobas INTEGRA
179.4 ± 2.70	72.8 ± 1.50	103.3 ± 1.53	269.4 ± 3.67	97.0 ± 1.59	n = 33	[ROD] Roche MODULAR D/P
164.4 ± 5.42	58.7 ± 1.61	88.7 ± 4.87	250.2 ± 9.86	89.7 ± 2.55	n = 5	[BYA] Siemens ADVIA 1650
170.9 ± 5.50	61.9 ± 2.06	93.5 ± 3.30	261.3 ± 8.12	93.4 ± 2.98	n = 15	[BYE] Siemens ADVIA 1800
164.5 ± 1.86	58.7 ± 0.51	87.3 ± 2.26	249.7 ± 5.09	88.7 ± 0.51	n = 3	[BYB] Siemens ADVIA 2400
161.7 ± 2.43	50.8 ± 2.28	83.1 ± 2.63	252.4 ± 4.33	82.2 ± 2.21	n = 7	[DUE] Siemens Dimension EXL
158.2 ± 6.75	50.5 ± 2.90	80.6 ± 4.52	246.2 ± 9.60	80.9 ± 3.21	n = 48	[DUR] Siemens Dimension RxL
154.7 ± 5.71	51.9 ± 1.98	81.2 ± 3.16	240.7 ± 10.79	83.3 ± 2.93	n = 14	[DUT] Siemens Dimension Vista
160.1 ± 4.29	50.3 ± 2.59	80.6 ± 3.64	245.7 ± 6.78	80.5 ± 2.83	n = 17	[DUX] Siemens Dimension Xpand
<Reagents>						
188.7 ± 6.58	74.0 ± 2.46	105.0 ± 3.36	282.4 ± 6.09	100.7 ± 2.56	n = 10	[AB1] Abbott
186.8 ± 5.62	73.4 ± 2.48	107.6 ± 4.03	284.5 ± 8.09	98.9 ± 3.27	n = 57	[BC1] Beckman Coulter
160.8 ± 7.60	60.4 ± 2.94	89.0 ± 4.35	244.0 ± 9.79	84.8 ± 3.58	n = 39	[OL1] Beckman Coulter AU Series
154.8 ± 8.77	54.9 ± 6.08	82.5 ± 8.19	241.1 ± 12.03	83.7 ± 5.91	n = 3	[CR1] Carolina
192.5 ± 10.21	64.4 ± 3.37	114.1 ± 7.59	282.3 ± 16.63	109.3 ± 6.73	n = 40	[JJ1] Ortho Clinical Diagnostics
177.7 ± 4.62	65.2 ± 1.95	97.4 ± 3.29	272.4 ± 7.16	93.5 ± 2.33	n = 17	[RO4] Roche cobas c501
179.5 ± 2.62	72.8 ± 1.50	103.3 ± 1.49	269.6 ± 3.44	97.1 ± 1.55	n = 33	[RO2] Roche Hitachi and Modular D/P
164.5 ± 5.61	57.3 ± 5.34	88.5 ± 5.52	253.1 ± 3.18	82.6 ± 4.83	n = 9	[RO1] Roche Integra and MIRA
168.6 ± 5.65	60.6 ± 2.35	91.8 ± 4.09	257.5 ± 9.57	91.8 ± 3.48	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
158.5 ± 6.17	50.7 ± 2.69	80.9 ± 3.96	246.0 ± 9.15	81.3 ± 3.18	n = 86	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

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

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
26.20 ± 5.04	1.75 ± 1.55	2.05 ± 1.69	61.15 ± 12.47	4.72 ± 3.04	n = 9	[---] All Methods - Results reported in U/L
29.10 ± 0.11	2.85 ± 0.17	2.85 ± 0.17	68.00 ± 0.00	5.20 ± 0.23	n = 2	[JJ1] Ortho Clinical Diagnostics
27.15 ± 2.45	2.35 ± 2.68	4.50 ± 2.85	60.65 ± 5.30	8.55 ± 0.63	n = 2	[RO1] Roche Integra and MIRA
24.36 ± 4.21	0.65 ± 0.32	0.61 ± 0.35	58.22 ± 9.03	1.09 ± 0.45	n = 208	[-A-] All Methods - Results reported in ng/mL
26.28 ± 3.55	0.75 ± 0.31	0.63 ± 0.27	58.15 ± 7.95	1.23 ± 0.40	n = 17	[AB1] Abbott
28.02 ± 1.27	1.98 ± 2.15	1.87 ± 2.23	67.28 ± 3.33	2.35 ± 1.89	n = 21	[SAA] Beckman Coulter ACCESS
27.79 ± 1.46	0.83 ± 0.05	0.68 ± 0.06	68.29 ± 3.26	1.35 ± 0.06	n = 18	[BC-] Beckman Coulter LX-20/DxC 600/DxI 800
14.51 ± 2.44	1.00 ± 0.00	1.00 ± 0.00	35.50 ± 7.63	1.00 ± 0.00	n = 7	[BS1] Biosite Diagnostics
17.22 ± 0.71	0.40 ± 0.00	0.30 ± 0.00	42.04 ± 1.41	0.86 ± 0.06	n = 17	[JJ1] Ortho Clinical Diagnostics
28.27 ± 1.38	1.04 ± 0.10	1.15 ± 0.11	61.28 ± 2.78	1.76 ± 0.12	n = 30	[RO3] Roche Elecsys/Modular E/e601/e411
22.29 ± 0.83	0.35 ± 0.16	0.32 ± 0.14	51.57 ± 1.95	0.90 ± 0.16	n = 33	[BY1] Siemens ADVIA Centaur/Centaur CP
22.50 ± 1.60	0.51 ± 0.19	0.50 ± 0.28	59.23 ± 3.99	0.72 ± 0.22	n = 48	[DA5] Siemens Dimension
22.30 ± 0.67	0.50 ± 0.00	0.65 ± 0.20	52.56 ± 1.78	0.97 ± 0.21	n = 6	[DA6] Siemens Dimension LOCI
25.34 ± 1.71	0.50 ± 0.07	0.51 ± 0.13	58.62 ± 8.79	1.79 ± 0.56	n = 7	[DP5] Siemens Immulite
31.00 ± 0.23	0.25 ± 0.29	0.25 ± 0.29	72.25 ± 3.02	0.60 ± 0.68	n = 2	[TO2] Tosoh ST AIA
13.59 ± 4.79	0.00 ± 0.00	0.00 ± 0.00	24.17 ± 2.79	0.00 ± 0.00	n = 5	[-P-] All Methods - Results reported as %
13.67 ± 5.67	0.00 ± 0.00	0.00 ± 0.00	24.44 ± 3.39	0.00 ± 0.00	n = 4	[HL1] Helena Laboratories

Summary of Participant Performance (Mean and Standard Deviation)

Lactate Dehydrogenase (U/L 37°C)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
393.5 ± 37.97	198.5 ± 20.23	81.5 ± 8.52	257.7 ± 25.40	117.5 ± 11.04	n = 266	[-A-] All Methods - Lactate to Pyruvate
1139.4 ± 48.49	577.1 ± 19.61	238.1 ± 14.30	743.8 ± 23.85	368.2 ± 17.13	n = 44	[-B-] All Methods - Pyruvate to Lactate
<Instruments>						
420.5 ± 14.05	211.5 ± 3.86	88.3 ± 3.78	275.4 ± 7.28	126.9 ± 4.05	n = 10	[ABH] Abbott Architect
389.2 ± 16.33	191.4 ± 8.22	79.5 ± 4.47	251.5 ± 11.64	113.5 ± 5.30	n = 42	[OLC] Beckman Coulter AU Chemistry System
353.8 ± 18.04	180.0 ± 7.91	74.6 ± 3.95	233.9 ± 15.54	108.7 ± 7.34	n = 7	[BCS] Beckman Coulter CX
368.7 ± 12.17	185.4 ± 6.08	76.3 ± 3.67	239.6 ± 7.18	110.1 ± 2.53	n = 13	[BCX] Beckman Coulter LX-20
361.8 ± 7.92	181.2 ± 3.59	74.4 ± 2.94	236.6 ± 5.75	108.7 ± 2.72	n = 16	[BCG] Beckman Coulter UniCel Dx C 600
366.1 ± 7.73	184.9 ± 3.93	76.3 ± 2.18	240.2 ± 5.16	110.3 ± 2.86	n = 20	[BCH] Beckman Coulter UniCel Dx C 800
1139.3 ± 43.32	586.6 ± 16.46	243.7 ± 8.85	755.3 ± 22.81	378.7 ± 11.86	n = 11	[JJE] Ortho Vitros 250/350/950
1142.1 ± 50.71	572.5 ± 18.86	234.1 ± 14.83	738.2 ± 21.01	362.2 ± 16.28	n = 27	[JFF] Ortho Vitros 5,1FS
1124.3 ± 35.29	570.2 ± 18.47	246.1 ± 11.85	747.2 ± 21.62	363.3 ± 13.58	n = 4	[JJG] Ortho Vitros 5600
448.8 ± 15.99	228.2 ± 6.63	92.4 ± 3.60	295.2 ± 9.24	132.5 ± 4.48	n = 18	[ROC] Roche cobas c501
433.7 ± 9.45	220.1 ± 4.73	90.2 ± 2.44	285.4 ± 5.58	129.9 ± 2.87	n = 8	[ROT] Roche Cobas INTEGRA
438.5 ± 9.11	222.9 ± 4.16	90.2 ± 3.07	288.3 ± 6.25	129.9 ± 2.77	n = 31	[ROD] Roche MODULAR D/P
424.4 ± 12.69	217.8 ± 3.55	89.2 ± 3.69	280.1 ± 6.25	128.9 ± 2.15	n = 5	[BYA] Siemens ADVIA 1650
441.2 ± 11.78	226.0 ± 6.59	94.6 ± 3.18	291.4 ± 7.84	133.4 ± 3.80	n = 15	[BYE] Siemens ADVIA 1800
411.0 ± 3.61	211.6 ± 1.02	87.0 ± 0.90	270.5 ± 1.86	123.2 ± 1.54	n = 3	[BYB] Siemens ADVIA 2400
375.4 ± 5.96	188.6 ± 4.66	78.0 ± 1.37	244.6 ± 4.55	112.2 ± 3.69	n = 6	[DUE] Siemens Dimension EXL
366.0 ± 10.71	185.7 ± 6.51	76.2 ± 3.73	241.7 ± 7.67	110.9 ± 3.54	n = 42	[DUR] Siemens Dimension RxL
376.7 ± 7.96	190.6 ± 5.12	78.3 ± 5.13	245.7 ± 4.54	114.0 ± 3.85	n = 13	[DUT] Siemens Dimension Vista
362.5 ± 7.87	183.5 ± 3.92	74.8 ± 2.45	238.9 ± 5.11	109.4 ± 1.88	n = 13	[DUX] Siemens Dimension Xpand
<Reagents>						
420.6 ± 12.28	211.6 ± 3.47	88.2 ± 3.41	275.0 ± 6.86	126.9 ± 3.66	n = 11	[AB1] Abbott
363.8 ± 10.28	183.3 ± 4.93	75.6 ± 3.00	238.3 ± 6.90	109.4 ± 3.27	n = 55	[BC1] Beckman Coulter
388.5 ± 15.68	191.1 ± 7.83	79.3 ± 4.35	251.1 ± 11.07	113.3 ± 5.04	n = 41	[OL1] Beckman Coulter AU Series
1139.0 ± 47.93	576.2 ± 19.70	238.5 ± 13.67	743.3 ± 23.03	367.2 ± 16.71	n = 42	[JJ1] Ortho Clinical Diagnostics
448.8 ± 15.99	228.2 ± 6.63	92.4 ± 3.60	295.2 ± 9.24	132.5 ± 4.48	n = 18	[RO4] Roche cobas c501
438.4 ± 8.90	222.7 ± 4.18	90.1 ± 3.01	288.3 ± 6.08	129.7 ± 2.95	n = 32	[RO2] Roche Hitachi and Modular D/P
433.7 ± 9.45	220.1 ± 4.73	90.2 ± 2.44	285.4 ± 5.58	129.9 ± 2.87	n = 8	[RO1] Roche Integra and MIRA
432.0 ± 16.44	221.3 ± 8.18	91.9 ± 4.48	284.9 ± 10.96	130.6 ± 5.13	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
368.1 ± 10.87	186.4 ± 6.15	76.3 ± 3.51	242.2 ± 6.76	111.1 ± 3.60	n = 74	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

LDH Isoenzyme 1 (%)

Specimen: C46	Specimen: C47	Specimen: C48	Specimen: C49	Specimen: C50	Number	[Code] Instrument or Reagent System
23.5 ± 2.68	57.1 ± 2.45	37.3 ± 3.91	43.1 ± 1.42	37.3 ± 4.40	n = 10	[-P-] All Methods (results reported as %)
						<Instruments>
25.7 ± 2.06	57.6 ± 2.05	39.5 ± 3.12	44.0 ± 1.00	39.5 ± 4.57	n = 5	[HLS] Helena SPIFE
21.3 ± 0.90	55.8 ± 3.73	34.0 ± 3.30	42.0 ± 1.65	35.0 ± 3.36	n = 4	[SEE] Sebia Electrophoresis
						<Reagents>
25.2 ± 2.16	57.3 ± 1.98	39.4 ± 2.78	43.7 ± 1.21	39.2 ± 4.04	n = 6	[HL1] Helena Laboratories
21.3 ± 0.90	55.8 ± 3.73	34.0 ± 3.30	42.0 ± 1.65	35.0 ± 3.36	n = 4	[SE1] Sebia