Summary of Participant Performance (Mean and Standard Deviation)

Glucose (mg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
80.1 ± 2.59	204.8 ± 5.38	55.4 ± 2.17	119.2 ± 3.34	94.2 ± 2.93	n = 392	[---] All Methods & Instruments
						<Instruments>
83.6 ± 1.02	203.5 ± 1.86	59.0 ± 0.90	120.3 ± 1.37	95.4 ± 1.02	n = 3	[AXA] Abaxis Piccolo
79.2 ± 1.27	204.0 ± 3.18	54.0 ± 0.91	118.0 ± 2.00	92.9 ± 1.61	n = 13	[ABJ] Abbott Architect c System
79.8 ± 2.36	201.7 ± 4.80	54.8 ± 1.40	117.9 ± 2.94	92.7 ± 2.52	n = 50	[OLC] Beckman Coulter AU Chemistry System
80.6 ± 2.40	201.9 ± 6.36	55.2 ± 1.99	119.4 ± 2.96	94.5 ± 3.19	n = 10	[BCS] Beckman Coulter CX
78.9 ± 2.27	204.0 ± 5.49	55.0 ± 1.85	118.5 ± 3.87	93.9 ± 2.35	n = 13	[BCX] Beckman Coulter LX-20
80.3 ± 1.94	203.2 ± 5.45	55.7 ± 2.03	118.7 ± 2.60	94.4 ± 2.77	n = 20	[BCG] Beckman Coulter UniCel DxC 600
80.0 ± 1.79	203.7 ± 3.36	55.0 ± 1.46	119.1 ± 2.58	93.6 ± 2.11	n = 23	[BCH] Beckman Coulter UniCel DxC 800
97.5 ± 1.23	218.9 ± 4.13	72.1 ± 2.72	124.2 ± 3.73	105.3 ± 4.02	n = 4	[HEB] HemoCue B-Glucose
109.8 ± 5.00	228.4 ± 6.45	84.8 ± 4.10	137.7 ± 2.26	116.7 ± 1.37	n = 3	[HEC] HemoCue Glucose 201
79.7 ± 0.54	210.5 ± 2.94	55.1 ± 0.85	119.0 ± 0.91	92.1 ± 1.26	n = 8	[IAA] i-STAT
78.2 ± 1.91	209.7 ± 4.89	53.5 ± 1.14	118.2 ± 2.98	93.9 ± 2.14	n = 14	[JJE] Ortho Vitros 250/350/950
76.7 ± 1.65	206.5 ± 3.90	52.2 ± 1.32	116.0 ± 2.55	91.7 ± 1.98	n = 25	[JJF] Ortho Vitros 5,1FS
76.2 ± 1.28	203.6 ± 3.97	51.6 ± 1.33	115.2 ± 1.91	91.8 ± 0.41	n = 5	[JJG] Ortho Vitros 5600
81.0 ± 2.13	204.3 ± 4.91	55.8 ± 1.18	119.8 ± 3.03	94.3 ± 1.79	n = 14	[ROC] Roche cobas c501
79.7 ± 1.18	202.8 ± 3.98	55.5 ± 1.21	118.4 ± 2.13	93.3 ± 1.61	n = 15	[ROT] Roche Cobas INTEGRA
80.6 ± 2.62	205.4 ± 4.90	55.5 ± 1.47	119.5 ± 3.00	93.9 ± 2.39	n = 39	[ROD] Roche MODULAR D/P
82.8 ± 1.54	210.5 ± 3.63	57.6 ± 1.02	122.8 ± 2.36	97.3 ± 1.37	n = 3	[BYA] Siemens ADVIA 1650
80.5 ± 2.22	204.4 ± 5.28	55.9 ± 1.62	119.4 ± 3.15	94.3 ± 2.32	n = 15	[BYE] Siemens ADVIA 1800
82.3 ± 1.37	208.6 ± 2.56	56.3 ± 1.37	122.0 ± 0.90	96.0 ± 0.90	n = 3	[BYB] Siemens ADVIA 2400
82.2 ± 1.97	205.4 ± 3.54	57.5 ± 1.17	122.0 ± 1.72	97.4 ± 1.86	n = 11	[DUE] Siemens Dimension EXL
82.1 ± 1.81	207.2 ± 3.34	57.3 ± 1.57	121.4 ± 2.41	96.9 ± 1.85	n = 42	[DUR] Siemens Dimension RxL
79.2 ± 1.88	201.1 ± 5.04	56.0 ± 1.82	118.9 ± 2.69	94.8 ± 3.03	n = 19	[DUT] Siemens Dimension Vista
82.1 ± 1.89	205.5 ± 4.49	57.7 ± 2.33	121.7 ± 2.93	96.4 ± 2.60	n = 21	[DUX] Siemens Dimension Xpand
						<Reagents>
83.6 ± 1.02	203.5 ± 1.86	59.0 ± 0.90	120.3 ± 1.37	95.4 ± 1.02	n = 3	[AX1] Abaxis
79.2 ± 1.47	204.0 ± 3.37	54.1 ± 1.12	118.1 ± 2.22	93.1 ± 1.94	n = 14	[AB1] Abbott
79.8 ± 2.07	203.3 ± 4.88	55.1 ± 1.84	118.9 ± 2.96	93.8 ± 2.44	n = 63	[BC1] Beckman Coulter
79.6 ± 2.28	201.4 ± 4.69	54.8 ± 1.42	117.7 ± 2.76	92.5 ± 2.38	n = 47	[OL1] Beckman Coulter AU Series
81.1 ± 2.28	204.3 ± 5.38	56.0 ± 1.42	119.8 ± 2.47	95.3 ± 3.23	n = 7	[CR1] Carolina
102.2 ± 7.03	222.3 ± 7.05	77.2 ± 7.30	130.1 ± 7.96	110.3 ± 6.96	n = 7	[HE1] HemoCue
79.6 ± 0.56	210.9 ± 2.85	55.0 ± 0.82	118.9 ± 1.01	91.8 ± 0.92	n = 7	[IA1] i-STAT thermal cartridge
83.3 ± 3.37	218.5 ± 8.12	57.5 ± 1.86	127.5 ± 3.63	98.3 ± 1.37	n = 3	[JA1] JAS Diagnostics
77.0 ± 1.83	207.0 ± 4.55	52.6 ± 1.41	116.4 ± 2.76	92.2 ± 2.19	n = 45	[JJ1] Ortho Clinical Diagnostics
80.8 ± 2.13	204.2 ± 4.71	55.8 ± 1.15	119.8 ± 2.89	94.2 ± 1.77	n = 15	[RO4] Roche cobas c311/c501/c502/c701
80.6 ± 2.62	205.4 ± 4.90	55.5 ± 1.47	119.5 ± 3.00	93.9 ± 2.39	n = 39	[RO2] Roche Hitachi and Modular D/P
79.7 ± 1.18	202.8 ± 3.98	55.5 ± 1.21	118.4 ± 2.13	93.3 ± 1.61	n = 15	[RO1] Roche Integra and MIRA
81.1 ± 2.38	206.0 ± 5.76	56.2 ± 1.73	120.4 ± 3.47	95.0 ± 2.70	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
81.6 ± 2.19	205.5 ± 4.67	57.2 ± 1.77	121.1 ± 2.70	96.5 ± 2.35	n = 93	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Urea Nitrogen (mg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
12.1 ± 0.85	34.3 ± 1.90	23.5 ± 1.28	17.5 ± 1.20	56.9 ± 2.96	n = 373	[---] All Methods & Instruments
						<Instruments>
12.3 ± 0.51	31.0 ± 0.90	22.0 ± 0.00	16.0 ± 0.00	55.3 ± 0.51	n = 3	[AXA] Abaxis Piccolo
12.0 ± 0.00	33.9 ± 0.44	23.8 ± 0.41	17.6 ± 0.56	56.4 ± 1.42	n = 12	[ABJ] Abbott Architect c System
12.3 ± 0.54	34.6 ± 1.24	24.1 ± 0.73	17.8 ± 0.60	57.5 ± 1.67	n = 47	[OLC] Beckman Coulter AU Chemistry System
12.4 ± 0.55	34.6 ± 0.97	24.3 ± 0.94	17.5 ± 0.83	57.9 ± 1.76	n = 10	[BCS] Beckman Coulter CX
11.9 ± 1.00	33.7 ± 1.12	23.1 ± 1.11	16.3 ± 1.16	55.5 ± 1.95	n = 13	[BCX] Beckman Coulter LX-20
12.5 ± 0.57	34.4 ± 0.96	23.7 ± 0.91	18.0 ± 0.67	57.2 ± 1.63	n = 19	[BCG] Beckman Coulter UniCel DxC 600
11.3 ± 0.98	33.0 ± 0.50	22.5 ± 0.78	16.7 ± 0.65	55.2 ± 1.43	n = 24	[BCH] Beckman Coulter UniCel DxC 800
11.1 ± 0.55	38.3 ± 0.69	22.3 ± 0.80	20.0 ± 0.00	64.4 ± 1.07	n = 9	[IAA] i-STAT
11.0 ± 0.00	28.5 ± 0.74	21.3 ± 0.74	15.0 ± 0.68	50.2 ± 0.98	n = 14	[JJE] Ortho Vitros 250/350/950
10.8 ± 0.51	28.2 ± 0.70	21.0 ± 0.59	14.6 ± 0.66	49.4 ± 1.09	n = 25	[JJF] Ortho Vitros 5,1FS
10.6 ± 0.55	28.0 ± 0.64	20.8 ± 0.80	14.6 ± 0.55	49.5 ± 0.83	n = 5	[JJG] Ortho Vitros 5600
12.0 ± 0.00	34.6 ± 0.62	23.6 ± 0.54	17.6 ± 0.57	56.8 ± 1.13	n = 14	[ROC] Roche cobas c501
12.1 ± 0.50	34.3 ± 0.63	23.7 ± 0.96	17.5 ± 0.57	57.6 ± 0.98	n = 13	[ROT] Roche Cobas INTEGRA
12.2 ± 0.51	34.4 ± 0.68	23.9 ± 0.50	18.0 ± 0.00	57.2 ± 1.35	n = 37	[ROD] Roche MODULAR D/P
12.7 ± 0.51	35.3 ± 0.51	25.0 ± 0.90	18.3 ± 0.51	60.0 ± 0.90	n = 3	[BYA] Siemens ADVIA 1650
12.5 ± 0.57	34.8 ± 0.53	24.0 ± 0.00	18.0 ± 0.00	58.6 ± 0.83	n = 15	[BYE] Siemens ADVIA 1800
13.0 ± 0.00	36.0 ± 0.00	25.0 ± 0.00	18.7 ± 0.51	60.3 ± 0.51	n = 3	[BYB] Siemens ADVIA 2400
12.3 ± 0.67	35.1 ± 0.87	24.2 ± 0.80	17.8 ± 0.48	58.3 ± 1.19	n = 10	[DUE] Siemens Dimension EXL
12.5 ± 0.74	35.4 ± 1.32	24.2 ± 0.92	17.9 ± 0.87	58.3 ± 1.71	n = 43	[DUR] Siemens Dimension RxL
12.0 ± 0.51	34.3 ± 0.78	23.1 ± 1.06	17.6 ± 0.67	56.5 ± 2.58	n = 19	[DUT] Siemens Dimension Vista
12.4 ± 0.68	35.1 ± 1.12	23.9 ± 0.81	17.9 ± 1.04	58.2 ± 1.70	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
12.3 ± 0.51	31.0 ± 0.90	22.0 ± 0.00	16.0 ± 0.00	55.3 ± 0.51	n = 3	[AX1] Abaxis
12.0 ± 0.00	34.0 ± 0.55	24.0 ± 0.00	17.7 ± 0.54	56.3 ± 1.36	n = 13	[AB1] Abbott
11.9 ± 0.91	33.7 ± 1.17	23.1 ± 1.05	17.1 ± 1.11	56.1 ± 1.89	n = 62	[BC1] Beckman Coulter
12.3 ± 0.53	34.6 ± 1.26	24.0 ± 0.72	17.8 ± 0.58	57.5 ± 1.69	n = 46	[OL1] Beckman Coulter AU Series
12.8 ± 0.91	35.0 ± 1.87	24.7 ± 0.97	17.8 ± 0.73	58.8 ± 2.39	n = 6	[CR1] Carolina
11.1 ± 0.60	38.1 ± 0.66	22.1 ± 0.75	20.0 ± 0.00	64.5 ± 1.14	n = 8	[IA1] i-STAT thermal cartridge
13.3 ± 0.51	35.6 ± 1.02	24.4 ± 1.02	18.0 ± 0.90	57.3 ± 0.51	n = 3	[JA1] JAS Diagnostics
10.8 ± 0.46	28.3 ± 0.74	21.1 ± 0.70	14.8 ± 0.69	49.7 ± 1.18	n = 46	[JJ1] Ortho Clinical Diagnostics
12.0 ± 0.00	34.7 ± 0.59	23.7 ± 0.53	17.7 ± 0.55	56.8 ± 1.07	n = 15	[RO4] Roche cobas c311/c501/c502/c701
12.2 ± 0.51	34.4 ± 0.68	23.9 ± 0.50	18.0 ± 0.00	57.2 ± 1.35	n = 37	[RO2] Roche Hitachi and Modular D/P
12.1 ± 0.50	34.3 ± 0.63	23.7 ± 0.96	17.5 ± 0.57	57.6 ± 0.98	n = 13	[RO1] Roche Integra and MIRA
12.6 ± 0.55	35.0 ± 0.68	24.4 ± 0.58	18.0 ± 0.00	58.9 ± 1.09	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
12.3 ± 0.70	35.0 ± 1.20	23.9 ± 0.99	17.8 ± 0.84	58.0 ± 1.95	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Creatinine (mg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
1.01 ± 0.12	2.60 ± 0.17	1.25 ± 0.11	1.71 ± 0.12	4.94 ± 0.15	n = 381	[---] All Methods & Instruments
1.02 ± 0.14	2.60 ± 0.20	1.25 ± 0.13	1.71 ± 0.13	5.01 ± 0.36	n = 188	[---] All IDMS Traceable Methods
1.00 ± 0.10	2.59 ± 0.13	1.24 ± 0.10	1.71 ± 0.10	4.97 ± 0.14	n = 187	[---] All Non-IDMS Traceable Methods
0.99 ± 0.09	2.58 ± 0.11	1.23 ± 0.08	1.71 ± 0.09	4.97 ± 0.13	n = 168	[-G-] Alkaline picrate/Jaffe
0.99 ± 0.14	2.55 ± 0.11	1.21 ± 0.09	1.67 ± 0.10	4.90 ± 0.13	n = 124	[-H-] Alkaline picrate/Jaffe - IDMS calibration
1.10 ± 0.12	2.85 ± 0.23	1.42 ± 0.16	1.84 ± 0.20	5.59 ± 0.48	n = 19	[-I-] Enzymatic
1.06 ± 0.12	2.77 ± 0.27	1.36 ± 0.12	1.80 ± 0.15	5.52 ± 0.50	n = 64	[-J-] Enzymatic - IDMS-traceable calibration
0.99 ± 0.14	2.61 ± 0.21	1.27 ± 0.13	1.69 ± 0.14	4.90 ± 0.38	n = 6	[-Z-] Other
						<Instruments>
0.99 ± 0.03	2.57 ± 0.15	1.29 ± 0.09	1.63 ± 0.05	5.01 ± 0.16	n = 3	[AXA] Abaxis Piccolo
1.02 ± 0.06	2.88 ± 0.05	1.18 ± 0.04	1.83 ± 0.05	5.09 ± 0.09	n = 12	[ABJ] Abbott Architect c System
1.00 ± 0.02	2.51 ± 0.05	1.21 ± 0.03	1.67 ± 0.05	4.83 ± 0.10	n = 50	[OLC] Beckman Coulter AU Chemistry System
0.96 ± 0.12	2.60 ± 0.12	1.25 ± 0.11	1.71 ± 0.10	4.87 ± 0.10	n = 10	[BCS] Beckman Coulter CX
0.85 ± 0.05	2.52 ± 0.06	1.18 ± 0.04	1.61 ± 0.04	4.92 ± 0.08	n = 13	[BCX] Beckman Coulter LX-20
0.80 ± 0.00	2.52 ± 0.08	1.04 ± 0.06	1.59 ± 0.06	4.83 ± 0.14	n = 20	[BCG] Beckman Coulter UniCel DxC 600
0.87 ± 0.05	2.50 ± 0.06	1.19 ± 0.04	1.62 ± 0.05	4.96 ± 0.09	n = 24	[BCH] Beckman Coulter UniCel DxC 800
1.10 ± 0.00	2.82 ± 0.14	1.51 ± 0.11	2.07 ± 0.09	5.94 ± 0.24	n = 8	[IAA] i-STAT
1.10 ± 0.00	2.88 ± 0.12	1.43 ± 0.05	1.84 ± 0.07	5.68 ± 0.18	n = 14	[JJE] Ortho Vitros 250/350/950
1.14 ± 0.06	2.98 ± 0.05	1.44 ± 0.06	1.90 ± 0.02	5.83 ± 0.10	n = 25	[JJF] Ortho Vitros 5,1FS
1.20 ± 0.00	3.02 ± 0.08	1.47 ± 0.05	1.90 ± 0.05	5.85 ± 0.16	n = 5	[JJG] Ortho Vitros 5600
0.97 ± 0.08	2.54 ± 0.09	1.16 ± 0.12	1.62 ± 0.09	4.89 ± 0.15	n = 17	[ROC] Roche cobas c501
0.96 ± 0.08	2.44 ± 0.10	1.20 ± 0.00	1.61 ± 0.04	4.86 ± 0.17	n = 14	[ROT] Roche Cobas INTEGRA
1.04 ± 0.12	2.59 ± 0.12	1.27 ± 0.07	1.72 ± 0.11	4.99 ± 0.13	n = 37	[ROD] Roche MODULAR D/P
1.13 ± 0.05	2.74 ± 0.05	1.27 ± 0.05	1.80 ± 0.00	4.98 ± 0.09	n = 3	[BYA] Siemens ADVIA 1650
1.20 ± 0.06	2.68 ± 0.08	1.30 ± 0.00	1.76 ± 0.06	4.89 ± 0.09	n = 15	[BYE] Siemens ADVIA 1800
1.20 ± 0.09	2.64 ± 0.05	1.23 ± 0.06	1.76 ± 0.07	4.96 ± 0.05	n = 3	[BYB] Siemens ADVIA 2400
0.99 ± 0.11	2.57 ± 0.10	1.26 ± 0.08	1.74 ± 0.08	5.06 ± 0.10	n = 10	[DUE] Siemens Dimension EXL
1.00 ± 0.05	2.59 ± 0.07	1.26 ± 0.06	1.73 ± 0.07	4.98 ± 0.11	n = 43	[DUR] Siemens Dimension RxL
0.98 ± 0.08	2.57 ± 0.08	1.29 ± 0.08	1.72 ± 0.06	5.02 ± 0.12	n = 19	[DUT] Siemens Dimension Vista
1.00 ± 0.00	2.59 ± 0.07	1.26 ± 0.06	1.73 ± 0.06	5.01 ± 0.07	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
0.99 ± 0.03	2.57 ± 0.15	1.29 ± 0.09	1.63 ± 0.05	5.01 ± 0.16	n = 3	[AX1] Abaxis
1.04 ± 0.06	2.88 ± 0.05	1.19 ± 0.04	1.83 ± 0.05	5.08 ± 0.09	n = 14	[AB1] Abbott
0.85 ± 0.06	2.52 ± 0.07	1.15 ± 0.09	1.61 ± 0.06	4.91 ± 0.12	n = 63	[BC1] Beckman Coulter
1.00 ± 0.02	2.51 ± 0.05	1.21 ± 0.03	1.66 ± 0.05	4.84 ± 0.10	n = 47	[OL1] Beckman Coulter AU Series
1.07 ± 0.07	2.72 ± 0.11	1.20 ± 0.14	1.77 ± 0.05	4.91 ± 0.15	n = 7	[CR1] Carolina
1.10 ± 0.00	2.82 ± 0.15	1.51 ± 0.12	2.06 ± 0.09	5.97 ± 0.25	n = 7	[IA1] i-STAT thermal cartridge
0.91 ± 0.12	2.28 ± 0.18	1.20 ± 0.17	1.53 ± 0.18	4.37 ± 0.52	n = 3	[JA1] JAS Diagnostics
1.14 ± 0.06	2.97 ± 0.09	1.44 ± 0.06	1.88 ± 0.05	5.81 ± 0.15	n = 46	[JJ1] Ortho Clinical Diagnostics
0.97 ± 0.08	2.54 ± 0.08	1.17 ± 0.12	1.63 ± 0.09	4.90 ± 0.14	n = 18	[RO4] Roche cobas c311/c501/c502/c701
1.04 ± 0.12	2.59 ± 0.12	1.27 ± 0.07	1.72 ± 0.11	4.99 ± 0.13	n = 37	[RO2] Roche Hitachi and Modular D/P
0.96 ± 0.08	2.44 ± 0.10	1.20 ± 0.00	1.61 ± 0.04	4.86 ± 0.17	n = 14	[RO1] Roche Integra and MIRA
1.19 ± 0.08	2.68 ± 0.09	1.27 ± 0.05	1.77 ± 0.07	4.91 ± 0.10	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
1.00 ± 0.07	2.59 ± 0.08	1.26 ± 0.07	1.73 ± 0.07	5.01 ± 0.10	n = 90	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Glomerular filtration rate (mL/min/1.73 m²)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
87.1 ± 13.20	29.0 ± 2.53	66.1 ± 10.02	47.0 ± 4.20	13.6 ± 1.05	n = 273	[---] All Methods
83.7 ± 15.49	28.2 ± 2.87	63.1 ± 10.48	45.9 ± 4.49	13.2 ± 1.34	n = 153	[-A-] IDMS-traceable MDRD Study Equation
90.0 ± 7.41	29.9 ± 1.50	69.3 ± 7.00	48.2 ± 3.24	13.9 ± 0.59	n = 111	[-B-] Original MDRD Study Equation (4-variable)
94.0 ± 9.12	30.5 ± 0.57	68.0 ± 5.70	48.0 ± 1.14	14.0 ± 0.00	n = 2	[-C-] Original MDRD Study Equation (6-variable)
86.6 ± 9.11	29.0 ± 3.53	71.9 ± 9.28	47.5 ± 3.90	13.3 ± 1.58	n = 4	[-F-] CKD-EPI Equation

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

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Method
83 (62-104)	28 (24-33)	66 (55-83)	46 (38-53)	13 (11-16)	IDMS-traceable MDRD Study Equation
90 (67-113)	30 (25-35)	71 (59-89)	49 (41-56)	14 (12-17)	Original MDRD Study Equation
136 (101-170)	53 (44-61)	110 (82-138)	80 (60-101)	28 (23-32)	Cockcroft-Gault Equation
95 (71-119)	31 (26-36)	74 (63-93)	51 (43-59)	14 (11-16)	CKD-EPI Equation

Laboratories were asked to report Estimated Glomerular Filtration Rate (eGFR) for samples C51-C55 for a 35-year-old non-African American man weighing 94 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 m^2 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 for samples C51 and C53. These data were removed from the calculations of mean and standard deviation since their inclusion would have skewed results. Participant results for specimens C51 and C53 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: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
4.88 ± 0.24	2.87 ± 0.17	6.33 ± 0.30	9.97 ± 0.44	7.26 ± 0.32	n = 333	[---] All Methods & Instruments
						<Instruments>
5.14 ± 0.10	3.07 ± 0.08	6.54 ± 0.12	10.32 ± 0.16	7.58 ± 0.12	n = 12	[ABJ] Abbott Architect c System
5.47 ± 0.09	3.16 ± 0.07	7.01 ± 0.14	10.82 ± 0.21	7.95 ± 0.14	n = 44	[OLC] Beckman Coulter AU Chemistry System
4.81 ± 0.18	2.98 ± 0.26	6.35 ± 0.19	9.87 ± 0.30	7.14 ± 0.10	n = 8	[BCS] Beckman Coulter CX
4.88 ± 0.10	2.93 ± 0.10	6.28 ± 0.14	9.58 ± 0.11	7.09 ± 0.07	n = 13	[BCX] Beckman Coulter LX-20
4.70 ± 0.10	2.79 ± 0.05	6.22 ± 0.09	9.64 ± 0.16	7.03 ± 0.16	n = 16	[BCG] Beckman Coulter UniCel DxC 600
4.72 ± 0.09	2.77 ± 0.07	6.23 ± 0.11	9.67 ± 0.19	7.04 ± 0.12	n = 22	[BCH] Beckman Coulter UniCel DxC 800
4.79 ± 0.14	2.80 ± 0.12	6.15 ± 0.17	9.92 ± 0.19	7.15 ± 0.19	n = 12	[JJE] Ortho Vitros 250/350/950
4.75 ± 0.09	2.78 ± 0.05	6.05 ± 0.08	9.89 ± 0.16	7.10 ± 0.12	n = 25	[JJF] Ortho Vitros 5,1FS
4.80 ± 0.09	2.80 ± 0.06	6.05 ± 0.08	9.82 ± 0.16	7.10 ± 0.13	n = 5	[JJG] Ortho Vitros 5600
4.99 ± 0.21	2.87 ± 0.10	6.55 ± 0.20	10.34 ± 0.30	7.53 ± 0.22	n = 16	[ROC] Roche cobas c501
4.81 ± 0.12	2.74 ± 0.07	6.33 ± 0.15	9.92 ± 0.24	7.20 ± 0.20	n = 11	[ROT] Roche Cobas INTEGRA
4.86 ± 0.10	2.75 ± 0.06	6.39 ± 0.11	10.09 ± 0.19	7.31 ± 0.13	n = 35	[ROD] Roche MODULAR D/P
4.83 ± 0.14	2.97 ± 0.05	6.54 ± 0.10	10.27 ± 0.23	7.42 ± 0.15	n = 3	[BYA] Siemens ADVIA 1650
4.89 ± 0.11	2.84 ± 0.06	6.37 ± 0.15	10.04 ± 0.14	7.29 ± 0.14	n = 15	[BYE] Siemens ADVIA 1800
5.00 ± 0.09	2.87 ± 0.05	6.50 ± 0.18	10.38 ± 0.15	7.50 ± 0.09	n = 3	[BYB] Siemens ADVIA 2400
4.86 ± 0.11	2.93 ± 0.09	6.27 ± 0.12	9.82 ± 0.17	7.21 ± 0.14	n = 10	[DUE] Siemens Dimension EXL
4.88 ± 0.12	2.90 ± 0.11	6.23 ± 0.10	9.87 ± 0.18	7.18 ± 0.13	n = 41	[DUR] Siemens Dimension RxL
4.69 ± 0.12	2.73 ± 0.09	6.05 ± 0.11	9.27 ± 0.18	6.87 ± 0.20	n = 18	[DUT] Siemens Dimension Vista
4.88 ± 0.09	2.95 ± 0.13	6.24 ± 0.10	9.90 ± 0.21	7.24 ± 0.18	n = 13	[DUX] Siemens Dimension Xpand
						<Reagents>
5.16 ± 0.11	3.07 ± 0.08	6.56 ± 0.14	10.35 ± 0.19	7.60 ± 0.14	n = 13	[AB1] Abbott
4.75 ± 0.13	2.82 ± 0.11	6.24 ± 0.13	9.64 ± 0.18	7.05 ± 0.12	n = 56	[BC1] Beckman Coulter
5.47 ± 0.09	3.16 ± 0.07	7.01 ± 0.14	10.82 ± 0.21	7.95 ± 0.14	n = 43	[OL1] Beckman Coulter AU Series
4.86 ± 0.18	2.98 ± 0.30	6.43 ± 0.32	9.98 ± 0.37	7.19 ± 0.15	n = 6	[CR1] Carolina
5.57 ± 0.14	3.52 ± 0.24	7.47 ± 0.51	11.40 ± 0.64	8.64 ± 0.47	n = 3	[JA1] JAS Diagnostics
4.77 ± 0.11	2.78 ± 0.07	6.07 ± 0.11	9.89 ± 0.17	7.11 ± 0.14	n = 42	[JJ1] Ortho Clinical Diagnostics
4.99 ± 0.21	2.87 ± 0.10	6.55 ± 0.20	10.34 ± 0.30	7.53 ± 0.22	n = 16	[RO4] Roche cobas c311/c501/c502/c701
4.86 ± 0.10	2.75 ± 0.06	6.39 ± 0.11	10.09 ± 0.19	7.31 ± 0.13	n = 35	[RO2] Roche Hitachi and Modular D/P
4.81 ± 0.12	2.74 ± 0.07	6.33 ± 0.15	9.92 ± 0.24	7.20 ± 0.20	n = 11	[RO1] Roche Integra and MIRA
4.89 ± 0.12	2.86 ± 0.08	6.40 ± 0.17	10.10 ± 0.23	7.33 ± 0.17	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
4.84 ± 0.14	2.88 ± 0.13	6.20 ± 0.13	9.77 ± 0.30	7.15 ± 0.19	n = 82	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Bilirubin (mg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
1.16 ± 0.21	0.62 ± 0.17	4.66 ± 0.25	0.94 ± 0.16	2.23 ± 0.29	n = 360	[---] All Methods & Instruments
						<Instruments>
1.13 ± 0.14	0.70 ± 0.09	4.63 ± 0.05	0.90 ± 0.09	2.15 ± 0.19	n = 3	[AXA] Abaxis Piccolo
1.32 ± 0.17	0.71 ± 0.11	5.04 ± 0.20	1.04 ± 0.08	2.50 ± 0.15	n = 12	[ABJ] Abbott Architect c System
1.22 ± 0.13	0.71 ± 0.08	4.57 ± 0.14	1.00 ± 0.08	2.18 ± 0.19	n = 48	[OLC] Beckman Coulter AU Chemistry System
1.32 ± 0.26	0.82 ± 0.19	4.88 ± 0.29	1.16 ± 0.16	2.51 ± 0.32	n = 8	[BCS] Beckman Coulter CX
1.26 ± 0.25	0.74 ± 0.13	4.90 ± 0.17	1.16 ± 0.12	2.30 ± 0.38	n = 13	[BCX] Beckman Coulter LX-20
1.36 ± 0.15	0.80 ± 0.16	4.93 ± 0.20	1.17 ± 0.16	2.52 ± 0.32	n = 19	[BCG] Beckman Coulter UniCel DxC 600
1.35 ± 0.17	0.77 ± 0.15	4.89 ± 0.19	1.17 ± 0.16	2.38 ± 0.31	n = 24	[BCH] Beckman Coulter UniCel DxC 800
1.20 ± 0.17	0.53 ± 0.12	4.46 ± 0.15	0.97 ± 0.12	2.28 ± 0.20	n = 13	[JJE] Ortho Vitros 250/350/950
1.13 ± 0.11	0.40 ± 0.11	4.53 ± 0.15	0.87 ± 0.10	2.29 ± 0.10	n = 25	[JJF] Ortho Vitros 5,1FS
1.04 ± 0.20	0.38 ± 0.16	4.38 ± 0.30	0.84 ± 0.15	2.10 ± 0.30	n = 5	[JJG] Ortho Vitros 5600
0.85 ± 0.22	0.46 ± 0.10	4.47 ± 0.16	0.75 ± 0.13	1.92 ± 0.39	n = 14	[ROC] Roche cobas c501
0.89 ± 0.09	0.48 ± 0.06	4.31 ± 0.08	0.75 ± 0.07	2.00 ± 0.16	n = 13	[ROT] Roche Cobas INTEGRA
0.97 ± 0.14	0.50 ± 0.08	4.55 ± 0.13	0.80 ± 0.06	2.07 ± 0.24	n = 37	[ROD] Roche MODULAR D/P
1.30 ± 0.09	0.70 ± 0.09	5.02 ± 0.15	1.03 ± 0.05	2.40 ± 0.18	n = 3	[BYA] Siemens ADVIA 1650
1.25 ± 0.10	0.69 ± 0.08	4.95 ± 0.18	1.01 ± 0.06	2.41 ± 0.14	n = 15	[BYE] Siemens ADVIA 1800
1.33 ± 0.05	0.73 ± 0.05	5.08 ± 0.15	1.03 ± 0.05	2.50 ± 0.18	n = 3	[BYB] Siemens ADVIA 2400
1.24 ± 0.07	0.67 ± 0.05	4.70 ± 0.10	0.95 ± 0.06	2.34 ± 0.06	n = 10	[DUE] Siemens Dimension EXL
1.19 ± 0.08	0.62 ± 0.07	4.66 ± 0.13	0.91 ± 0.09	2.28 ± 0.13	n = 43	[DUR] Siemens Dimension RxL
1.16 ± 0.07	0.61 ± 0.09	4.54 ± 0.12	0.89 ± 0.09	2.13 ± 0.29	n = 19	[DUT] Siemens Dimension Vista
1.17 ± 0.13	0.62 ± 0.12	4.61 ± 0.13	0.91 ± 0.09	2.21 ± 0.28	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
1.13 ± 0.14	0.70 ± 0.09	4.63 ± 0.05	0.90 ± 0.09	2.15 ± 0.19	n = 3	[AX1] Abaxis
1.30 ± 0.18	0.70 ± 0.11	5.02 ± 0.20	1.04 ± 0.08	2.48 ± 0.16	n = 13	[AB1] Abbott
1.36 ± 0.18	0.79 ± 0.15	4.92 ± 0.18	1.18 ± 0.14	2.45 ± 0.32	n = 60	[BC1] Beckman Coulter
1.22 ± 0.12	0.71 ± 0.08	4.58 ± 0.14	1.00 ± 0.07	2.19 ± 0.18	n = 46	[OL1] Beckman Coulter AU Series
1.10 ± 0.16	0.68 ± 0.17	4.74 ± 0.30	0.96 ± 0.11	2.24 ± 0.34	n = 7	[CR1] Carolina
1.14 ± 0.18	0.43 ± 0.14	4.51 ± 0.17	0.90 ± 0.14	2.25 ± 0.22	n = 45	[JJ1] Ortho Clinical Diagnostics
0.86 ± 0.22	0.47 ± 0.10	4.48 ± 0.16	0.76 ± 0.13	1.95 ± 0.38	n = 15	[RO4] Roche cobas c311/c501/c502/c701
0.97 ± 0.14	0.50 ± 0.08	4.55 ± 0.13	0.80 ± 0.06	2.07 ± 0.24	n = 37	[RO2] Roche Hitachi and Modular D/P
0.89 ± 0.09	0.48 ± 0.06	4.31 ± 0.08	0.75 ± 0.07	2.00 ± 0.16	n = 13	[RO1] Roche Integra and MIRA
1.27 ± 0.10	0.70 ± 0.08	4.98 ± 0.17	1.02 ± 0.06	2.44 ± 0.16	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
1.18 ± 0.10	0.62 ± 0.09	4.63 ± 0.14	0.91 ± 0.09	2.26 ± 0.17	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Phosphorus (mg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
3.00 ± 0.14	5.37 ± 0.22	2.51 ± 0.14	3.89 ± 0.18	6.28 ± 0.24	n = 335	[---] All Methods & Instruments
						<Instruments>
3.00 ± 0.00	5.29 ± 0.07	2.45 ± 0.08	3.84 ± 0.07	6.15 ± 0.06	n = 12	[ABJ] Abbott Architect c System
2.91 ± 0.07	5.14 ± 0.10	2.42 ± 0.09	3.73 ± 0.08	6.05 ± 0.13	n = 45	[OLC] Beckman Coulter AU Chemistry System
3.30 ± 0.16	5.53 ± 0.35	2.58 ± 0.09	4.08 ± 0.20	6.45 ± 0.20	n = 7	[BCS] Beckman Coulter CX
3.04 ± 0.09	5.49 ± 0.10	2.64 ± 0.08	4.03 ± 0.11	6.51 ± 0.10	n = 13	[BCX] Beckman Coulter LX-20
3.06 ± 0.14	5.39 ± 0.16	2.66 ± 0.19	3.93 ± 0.14	6.39 ± 0.22	n = 17	[BCG] Beckman Coulter UniCel DxC 600
3.03 ± 0.08	5.53 ± 0.10	2.65 ± 0.08	4.04 ± 0.07	6.52 ± 0.09	n = 23	[BCH] Beckman Coulter UniCel DxC 800
3.23 ± 0.07	5.77 ± 0.12	2.72 ± 0.08	4.31 ± 0.07	6.66 ± 0.14	n = 12	[JJE] Ortho Vitros 250/350/950
3.18 ± 0.14	5.71 ± 0.20	2.68 ± 0.11	4.21 ± 0.17	6.54 ± 0.20	n = 25	[JJF] Ortho Vitros 5,1FS
3.13 ± 0.14	5.72 ± 0.13	2.66 ± 0.11	4.20 ± 0.13	6.63 ± 0.14	n = 5	[JJG] Ortho Vitros 5600
3.03 ± 0.09	5.44 ± 0.10	2.52 ± 0.07	3.89 ± 0.08	6.32 ± 0.13	n = 16	[ROC] Roche cobas c501
2.99 ± 0.05	5.30 ± 0.07	2.48 ± 0.05	3.87 ± 0.07	6.25 ± 0.07	n = 11	[ROT] Roche Cobas INTEGRA
2.98 ± 0.11	5.35 ± 0.16	2.49 ± 0.09	3.85 ± 0.14	6.23 ± 0.16	n = 35	[ROD] Roche MODULAR D/P
3.03 ± 0.05	5.43 ± 0.14	2.57 ± 0.05	3.90 ± 0.09	6.35 ± 0.19	n = 3	[BYA] Siemens ADVIA 1650
3.02 ± 0.08	5.37 ± 0.09	2.53 ± 0.10	3.87 ± 0.07	6.26 ± 0.10	n = 15	[BYE] Siemens ADVIA 1800
3.03 ± 0.05	5.40 ± 0.09	2.50 ± 0.00	3.93 ± 0.05	6.27 ± 0.05	n = 3	[BYB] Siemens ADVIA 2400
2.99 ± 0.08	5.34 ± 0.10	2.46 ± 0.09	3.84 ± 0.07	6.22 ± 0.09	n = 9	[DUE] Siemens Dimension EXL
2.96 ± 0.10	5.34 ± 0.11	2.43 ± 0.08	3.84 ± 0.10	6.21 ± 0.13	n = 41	[DUR] Siemens Dimension RxL
2.82 ± 0.08	5.20 ± 0.16	2.35 ± 0.09	3.74 ± 0.14	6.06 ± 0.14	n = 18	[DUT] Siemens Dimension Vista
2.96 ± 0.07	5.32 ± 0.09	2.45 ± 0.08	3.81 ± 0.08	6.19 ± 0.12	n = 16	[DUX] Siemens Dimension Xpand
						<Reagents>
3.00 ± 0.00	5.30 ± 0.07	2.46 ± 0.08	3.84 ± 0.07	6.16 ± 0.07	n = 13	[AB1] Abbott
3.04 ± 0.10	5.47 ± 0.14	2.64 ± 0.11	4.01 ± 0.11	6.49 ± 0.14	n = 56	[BC1] Beckman Coulter
2.91 ± 0.07	5.14 ± 0.10	2.43 ± 0.09	3.73 ± 0.08	6.05 ± 0.14	n = 44	[OL1] Beckman Coulter AU Series
3.33 ± 0.12	5.72 ± 0.36	2.63 ± 0.17	4.19 ± 0.30	6.56 ± 0.36	n = 6	[CR1] Carolina
3.22 ± 0.24	5.63 ± 0.31	2.40 ± 0.18	4.05 ± 0.27	6.42 ± 0.32	n = 3	[JA1] JAS Diagnostics
3.19 ± 0.12	5.73 ± 0.17	2.69 ± 0.10	4.24 ± 0.15	6.59 ± 0.19	n = 42	[JJ1] Ortho Clinical Diagnostics
3.03 ± 0.09	5.44 ± 0.10	2.52 ± 0.07	3.89 ± 0.08	6.32 ± 0.13	n = 16	[RO4] Roche cobas c311/c501/c502/c701
2.98 ± 0.11	5.35 ± 0.16	2.49 ± 0.09	3.85 ± 0.14	6.23 ± 0.16	n = 35	[RO2] Roche Hitachi and Modular D/P
2.99 ± 0.05	5.30 ± 0.07	2.48 ± 0.05	3.87 ± 0.07	6.25 ± 0.07	n = 11	[RO1] Roche Integra and MIRA
3.01 ± 0.08	5.37 ± 0.11	2.52 ± 0.09	3.87 ± 0.08	6.26 ± 0.11	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
2.94 ± 0.11	5.31 ± 0.13	2.42 ± 0.09	3.82 ± 0.11	6.18 ± 0.14	n = 84	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Calcium (mg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
9.32 ± 0.24	13.14 ± 0.39	6.71 ± 0.17	10.65 ± 0.27	8.70 ± 0.22	n = 367	[---] All Methods & Instruments
						<Instruments>
9.80 ± 0.09	12.48 ± 0.41	6.83 ± 0.14	10.95 ± 0.19	8.97 ± 0.05	n = 3	[AXA] Abaxis Piccolo
9.40 ± 0.11	13.33 ± 0.26	6.74 ± 0.13	10.74 ± 0.15	8.83 ± 0.13	n = 12	[ABJ] Abbott Architect c System
9.27 ± 0.13	13.16 ± 0.28	6.63 ± 0.12	10.59 ± 0.19	8.67 ± 0.13	n = 48	[OLC] Beckman Coulter AU Chemistry System
9.21 ± 0.32	12.73 ± 0.25	6.73 ± 0.16	10.32 ± 0.53	8.72 ± 0.30	n = 10	[BCS] Beckman Coulter CX
9.29 ± 0.15	12.86 ± 0.24	6.75 ± 0.06	10.61 ± 0.21	8.66 ± 0.11	n = 13	[BCX] Beckman Coulter LX-20
9.15 ± 0.13	12.80 ± 0.15	6.68 ± 0.11	10.57 ± 0.11	8.55 ± 0.11	n = 20	[BCG] Beckman Coulter UniCel DxC 600
9.26 ± 0.12	12.81 ± 0.13	6.75 ± 0.10	10.63 ± 0.15	8.67 ± 0.10	n = 24	[BCH] Beckman Coulter UniCel DxC 800
9.62 ± 0.23	13.08 ± 0.25	6.72 ± 0.20	10.96 ± 0.24	8.98 ± 0.18	n = 14	[JJE] Ortho Vitros 250/350/950
9.51 ± 0.15	12.94 ± 0.23	6.63 ± 0.11	10.81 ± 0.22	8.82 ± 0.15	n = 25	[JJF] Ortho Vitros 5,1FS
9.38 ± 0.19	12.78 ± 0.26	6.60 ± 0.10	10.73 ± 0.20	8.75 ± 0.16	n = 5	[JJG] Ortho Vitros 5600
9.61 ± 0.17	13.97 ± 0.21	6.79 ± 0.09	11.07 ± 0.16	8.91 ± 0.15	n = 15	[ROC] Roche cobas c501
9.34 ± 0.25	13.78 ± 0.35	6.55 ± 0.16	10.76 ± 0.31	8.63 ± 0.21	n = 13	[ROT] Roche Cobas INTEGRA
9.47 ± 0.18	13.49 ± 0.27	6.75 ± 0.14	10.80 ± 0.21	8.83 ± 0.20	n = 37	[ROD] Roche MODULAR D/P
9.53 ± 0.05	13.58 ± 0.41	6.83 ± 0.05	10.93 ± 0.23	8.90 ± 0.09	n = 3	[BYA] Siemens ADVIA 1650
9.28 ± 0.23	13.14 ± 0.21	6.72 ± 0.24	10.60 ± 0.18	8.76 ± 0.23	n = 15	[BYE] Siemens ADVIA 1800
9.59 ± 0.20	13.32 ± 0.15	6.90 ± 0.18	10.80 ± 0.27	9.12 ± 0.24	n = 3	[BYB] Siemens ADVIA 2400
9.16 ± 0.17	13.22 ± 0.22	6.71 ± 0.18	10.52 ± 0.17	8.54 ± 0.16	n = 10	[DUE] Siemens Dimension EXL
9.23 ± 0.16	13.23 ± 0.28	6.76 ± 0.19	10.49 ± 0.24	8.57 ± 0.20	n = 43	[DUR] Siemens Dimension RxL
9.19 ± 0.26	13.00 ± 0.29	6.76 ± 0.15	10.49 ± 0.22	8.62 ± 0.23	n = 19	[DUT] Siemens Dimension Vista
9.26 ± 0.19	13.13 ± 0.14	6.75 ± 0.18	10.53 ± 0.17	8.55 ± 0.16	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
9.80 ± 0.09	12.48 ± 0.41	6.83 ± 0.14	10.95 ± 0.19	8.97 ± 0.05	n = 3	[AX1] Abaxis
9.41 ± 0.13	13.34 ± 0.24	6.76 ± 0.15	10.76 ± 0.17	8.85 ± 0.16	n = 13	[AB1] Abbott
9.21 ± 0.16	12.81 ± 0.18	6.72 ± 0.11	10.61 ± 0.17	8.62 ± 0.13	n = 63	[BC1] Beckman Coulter
9.27 ± 0.12	13.17 ± 0.26	6.63 ± 0.12	10.59 ± 0.19	8.67 ± 0.13	n = 47	[OL1] Beckman Coulter AU Series
9.46 ± 0.37	13.04 ± 0.45	6.93 ± 0.38	10.64 ± 0.63	8.97 ± 0.36	n = 6	[CR1] Carolina
9.03 ± 0.05	12.60 ± 0.09	6.23 ± 0.31	10.27 ± 0.14	8.50 ± 0.18	n = 3	[JA1] JAS Diagnostics
9.53 ± 0.22	12.98 ± 0.27	6.65 ± 0.16	10.86 ± 0.25	8.86 ± 0.19	n = 45	[JJ1] Ortho Clinical Diagnostics
9.64 ± 0.13	13.92 ± 0.24	6.79 ± 0.10	11.04 ± 0.16	8.90 ± 0.14	n = 14	[RO4] Roche cobas c311/c501/c502/c701
9.47 ± 0.18	13.48 ± 0.26	6.75 ± 0.15	10.80 ± 0.21	8.83 ± 0.20	n = 37	[RO2] Roche Hitachi and Modular D/P
9.34 ± 0.25	13.78 ± 0.35	6.55 ± 0.16	10.76 ± 0.31	8.63 ± 0.21	n = 13	[RO1] Roche Integra and MIRA
9.38 ± 0.26	13.20 ± 0.25	6.78 ± 0.24	10.67 ± 0.24	8.84 ± 0.26	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
9.23 ± 0.19	13.16 ± 0.26	6.75 ± 0.18	10.50 ± 0.21	8.57 ± 0.19	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Magnesium (mg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
1.79 ± 0.10	4.28 ± 0.18	2.35 ± 0.09	2.90 ± 0.12	1.22 ± 0.10	n = 329	[---] All Methods & Instruments
						<Instruments>
1.72 ± 0.09	4.03 ± 0.16	2.29 ± 0.08	2.83 ± 0.06	1.21 ± 0.09	n = 11	[ABJ] Abbott Architect c System
1.74 ± 0.07	4.19 ± 0.17	2.29 ± 0.07	2.82 ± 0.11	1.20 ± 0.00	n = 45	[OLC] Beckman Coulter AU Chemistry System
1.86 ± 0.06	4.37 ± 0.13	2.46 ± 0.06	3.03 ± 0.07	1.38 ± 0.11	n = 7	[BCS] Beckman Coulter CX
1.83 ± 0.05	4.41 ± 0.13	2.40 ± 0.00	3.00 ± 0.00	1.29 ± 0.07	n = 12	[BCX] Beckman Coulter LX-20
1.82 ± 0.06	4.38 ± 0.08	2.39 ± 0.07	2.98 ± 0.09	1.29 ± 0.05	n = 19	[BCG] Beckman Coulter UniCel DxC 600
1.82 ± 0.05	4.34 ± 0.12	2.38 ± 0.08	2.96 ± 0.09	1.30 ± 0.00	n = 23	[BCH] Beckman Coulter UniCel DxC 800
1.90 ± 0.00	4.29 ± 0.06	2.40 ± 0.00	2.96 ± 0.07	1.23 ± 0.05	n = 8	[JJE] Ortho Vitros 250/350/950
1.88 ± 0.05	4.21 ± 0.09	2.37 ± 0.06	2.91 ± 0.06	1.20 ± 0.00	n = 25	[JJF] Ortho Vitros 5,1FS
1.85 ± 0.06	4.25 ± 0.12	2.32 ± 0.04	2.95 ± 0.06	1.20 ± 0.00	n = 4	[JJG] Ortho Vitros 5600
1.82 ± 0.06	4.03 ± 0.08	2.35 ± 0.06	2.81 ± 0.06	1.30 ± 0.00	n = 14	[ROC] Roche cobas c501
1.76 ± 0.09	4.06 ± 0.07	2.32 ± 0.06	2.82 ± 0.06	1.23 ± 0.05	n = 11	[ROT] Roche Cobas INTEGRA
1.79 ± 0.04	4.33 ± 0.08	2.40 ± 0.05	2.91 ± 0.07	1.24 ± 0.06	n = 33	[ROD] Roche MODULAR D/P
1.90 ± 0.09	4.50 ± 0.09	2.43 ± 0.05	3.07 ± 0.05	1.33 ± 0.05	n = 3	[BYA] Siemens ADVIA 1650
1.88 ± 0.07	4.31 ± 0.14	2.35 ± 0.09	2.96 ± 0.06	1.30 ± 0.00	n = 15	[BYE] Siemens ADVIA 1800
1.97 ± 0.05	4.54 ± 0.10	2.53 ± 0.05	3.07 ± 0.05	1.43 ± 0.05	n = 3	[BYB] Siemens ADVIA 2400
1.67 ± 0.05	4.27 ± 0.09	2.25 ± 0.06	2.83 ± 0.09	1.08 ± 0.04	n = 8	[DUE] Siemens Dimension EXL
1.71 ± 0.09	4.30 ± 0.13	2.30 ± 0.08	2.85 ± 0.09	1.10 ± 0.00	n = 43	[DUR] Siemens Dimension RxL
1.82 ± 0.07	4.50 ± 0.12	2.44 ± 0.09	3.00 ± 0.08	1.23 ± 0.07	n = 19	[DUT] Siemens Dimension Vista
1.71 ± 0.11	4.28 ± 0.16	2.28 ± 0.07	2.86 ± 0.09	1.10 ± 0.00	n = 17	[DUX] Siemens Dimension Xpand
						<Reagents>
1.72 ± 0.10	4.01 ± 0.21	2.29 ± 0.08	2.83 ± 0.06	1.20 ± 0.10	n = 12	[AB1] Abbott
1.82 ± 0.06	4.37 ± 0.12	2.39 ± 0.08	2.98 ± 0.09	1.30 ± 0.00	n = 58	[BC1] Beckman Coulter
1.74 ± 0.07	4.20 ± 0.16	2.30 ± 0.07	2.83 ± 0.11	1.20 ± 0.00	n = 43	[OL1] Beckman Coulter AU Series
1.90 ± 0.00	4.30 ± 0.15	2.46 ± 0.06	3.05 ± 0.08	1.50 ± 0.00	n = 5	[CR1] Carolina
1.88 ± 0.05	4.23 ± 0.09	2.37 ± 0.06	2.93 ± 0.07	1.20 ± 0.00	n = 37	[JJ1] Ortho Clinical Diagnostics
1.82 ± 0.06	4.03 ± 0.08	2.35 ± 0.06	2.81 ± 0.06	1.30 ± 0.00	n = 14	[RO4] Roche cobas c311/c501/c502/c701
1.79 ± 0.05	4.33 ± 0.09	2.40 ± 0.06	2.90 ± 0.07	1.24 ± 0.06	n = 33	[RO2] Roche Hitachi and Modular D/P
1.78 ± 0.09	4.10 ± 0.13	2.33 ± 0.06	2.83 ± 0.08	1.24 ± 0.06	n = 11	[RO1] Roche Integra and MIRA
1.89 ± 0.08	4.39 ± 0.19	2.39 ± 0.10	2.99 ± 0.09	1.32 ± 0.05	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
1.73 ± 0.10	4.33 ± 0.15	2.31 ± 0.10	2.88 ± 0.11	1.11 ± 0.07	n = 86	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Iron (µg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
87.5 ± 13.03	134.7 ± 7.38	72.3 ± 3.73	106.5 ± 10.94	103.3 ± 11.63	n = 265	[---] All Methods & Instruments
						<Instruments>
39.6 ± 3.77	110.9 ± 3.79	58.2 ± 2.15	64.4 ± 5.99	59.5 ± 5.79	n = 11	[ABJ] Abbott Architect c System
88.9 ± 3.64	137.8 ± 4.49	73.1 ± 2.89	108.7 ± 3.20	104.7 ± 3.33	n = 43	[OLC] Beckman Coulter AU Chemistry System
61.2 ± 10.83	126.8 ± 9.63	70.0 ± 4.02	90.2 ± 8.56	85.4 ± 6.08	n = 5	[BCS] Beckman Coulter CX
68.9 ± 3.69	133.4 ± 2.66	74.0 ± 2.81	93.6 ± 2.30	89.1 ± 2.86	n = 12	[BCX] Beckman Coulter LX-20
65.1 ± 4.34	129.7 ± 2.84	71.2 ± 1.93	91.1 ± 3.47	84.8 ± 3.56	n = 9	[BCG] Beckman Coulter UniCel DxC 600
63.8 ± 5.53	130.4 ± 4.42	72.4 ± 2.97	92.1 ± 4.79	86.7 ± 5.70	n = 17	[BCH] Beckman Coulter UniCel DxC 800
96.9 ± 4.09	144.9 ± 5.35	66.1 ± 5.33	121.6 ± 6.68	117.6 ± 6.41	n = 5	[JJE] Ortho Vitros 250/350/950
101.5 ± 5.56	149.0 ± 4.56	71.8 ± 2.98	125.7 ± 4.91	121.9 ± 4.55	n = 22	[JJF] Ortho Vitros 5,1FS
102.8 ± 3.20	155.3 ± 6.00	71.3 ± 0.91	127.6 ± 2.88	124.9 ± 2.61	n = 5	[JJG] Ortho Vitros 5600
94.8 ± 1.46	137.5 ± 2.43	76.2 ± 2.12	111.3 ± 1.63	109.3 ± 3.30	n = 12	[ROC] Roche cobas c501
95.8 ± 1.40	134.8 ± 3.14	74.2 ± 4.18	109.0 ± 4.04	106.3 ± 4.50	n = 8	[ROT] Roche Cobas INTEGRA
94.8 ± 2.92	136.0 ± 2.81	74.8 ± 1.82	111.4 ± 2.32	108.7 ± 2.77	n = 32	[ROD] Roche MODULAR D/P
96.3 ± 1.37	138.8 ± 1.54	74.4 ± 1.02	113.3 ± 2.26	110.3 ± 1.37	n = 3	[BYA] Siemens ADVIA 1650
94.6 ± 1.77	136.1 ± 2.88	73.1 ± 2.07	110.5 ± 2.25	108.3 ± 2.28	n = 15	[BYE] Siemens ADVIA 1800
97.2 ± 2.36	139.2 ± 2.36	75.3 ± 1.37	112.5 ± 2.74	110.9 ± 2.05	n = 3	[BYB] Siemens ADVIA 2400
81.4 ± 1.09	130.4 ± 1.09	70.0 ± 0.00	101.2 ± 1.07	98.4 ± 0.55	n = 5	[DUE] Siemens Dimension EXL
82.5 ± 3.10	129.3 ± 1.57	69.2 ± 0.93	101.8 ± 2.37	98.6 ± 1.63	n = 27	[DUR] Siemens Dimension RxL
81.8 ± 4.72	132.7 ± 5.13	70.7 ± 4.15	101.5 ± 4.81	99.1 ± 5.11	n = 17	[DUT] Siemens Dimension Vista
82.8 ± 1.27	129.8 ± 1.96	69.0 ± 0.75	102.7 ± 2.02	99.5 ± 1.22	n = 4	[DUX] Siemens Dimension Xpand
						<Reagents>
39.6 ± 3.77	110.9 ± 3.74	58.2 ± 2.14	64.4 ± 5.98	59.5 ± 5.78	n = 10	[AB2] Abbott-Iron/7D68
65.4 ± 5.43	130.8 ± 3.90	72.7 ± 2.86	92.2 ± 3.89	86.9 ± 4.92	n = 39	[BC1] Beckman Coulter
89.0 ± 3.86	139.1 ± 3.53	73.4 ± 2.62	109.2 ± 3.06	105.2 ± 3.11	n = 33	[OL1] Beckman Coulter AU Series
65.9 ± 9.80	127.0 ± 11.23	67.4 ± 4.42	94.5 ± 13.49	89.4 ± 9.13	n = 5	[CR1] Carolina
90.0 ± 3.61	136.6 ± 5.58	73.5 ± 3.63	108.3 ± 4.22	105.5 ± 3.63	n = 3	[DG1] Diagnostic Chemicals Ltd - Endpoint
89.0 ± 3.13	131.9 ± 5.80	70.8 ± 3.87	106.7 ± 3.59	102.3 ± 3.89	n = 9	[GZ1] Genzyme
101.0 ± 5.34	149.3 ± 5.52	71.4 ± 3.62	125.7 ± 4.98	122.1 ± 4.81	n = 32	[JJ1] Ortho Clinical Diagnostics
94.8 ± 1.46	137.5 ± 2.43	76.2 ± 2.12	111.3 ± 1.63	109.3 ± 3.30	n = 12	[RO4] Roche cobas c311/c501/c502/c701
94.8 ± 2.91	135.9 ± 2.79	74.8 ± 1.83	111.3 ± 2.35	108.7 ± 2.59	n = 32	[RO2] Roche Hitachi and Modular D/P
95.8 ± 1.40	134.8 ± 3.14	74.2 ± 4.18	109.0 ± 4.04	106.3 ± 4.50	n = 8	[RO1] Roche Integra and MIRA
95.1 ± 2.18	136.5 ± 2.95	73.2 ± 2.04	110.7 ± 2.54	108.7 ± 2.51	n = 22	[BY1] Siemens ADVIA/ADVIA Centaur
82.3 ± 3.16	130.2 ± 2.72	69.7 ± 1.78	101.7 ± 2.78	98.7 ± 2.32	n = 51	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Sodium (mmol/L)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
143.3 ± 1.96	134.0 ± 2.08	125.0 ± 1.66	139.7 ± 2.25	160.7 ± 2.36	n = 374	[---] All Methods & Instruments
						<Instruments>
143.0 ± 0.85	133.6 ± 0.79	123.7 ± 0.75	138.1 ± 1.07	161.0 ± 0.90	n = 12	[ABJ] Abbott Architect c System
142.5 ± 1.59	133.1 ± 1.27	124.8 ± 1.57	138.0 ± 1.14	160.0 ± 1.55	n = 48	[OLC] Beckman Coulter AU Chemistry System
142.9 ± 1.76	133.7 ± 2.74	125.4 ± 2.25	139.3 ± 1.44	160.2 ± 2.44	n = 10	[BCS] Beckman Coulter CX
141.9 ± 0.75	133.8 ± 1.11	125.2 ± 0.88	139.7 ± 1.37	159.7 ± 1.62	n = 13	[BCX] Beckman Coulter LX-20
142.4 ± 0.89	133.9 ± 0.85	125.1 ± 1.04	139.7 ± 0.88	160.7 ± 1.25	n = 20	[BCG] Beckman Coulter UniCel DxC 600
142.5 ± 1.11	133.7 ± 1.19	124.9 ± 1.28	139.4 ± 1.59	160.4 ± 1.24	n = 24	[BCH] Beckman Coulter UniCel DxC 800
139.5 ± 0.57	131.5 ± 0.57	123.3 ± 0.54	140.9 ± 0.60	158.0 ± 0.75	n = 8	[IAA] i-STAT
145.9 ± 2.22	140.5 ± 1.94	124.8 ± 2.05	145.7 ± 2.16	166.9 ± 2.01	n = 14	[JJE] Ortho Vitros 250/350/950
146.1 ± 1.87	140.1 ± 2.13	124.8 ± 1.71	146.0 ± 2.25	167.0 ± 2.54	n = 25	[JJF] Ortho Vitros 5,1FS
145.8 ± 2.10	140.1 ± 2.16	123.4 ± 2.07	145.9 ± 2.69	166.6 ± 3.22	n = 5	[JJG] Ortho Vitros 5600
143.3 ± 1.15	133.8 ± 1.60	124.5 ± 1.78	138.6 ± 1.88	161.5 ± 1.58	n = 15	[ROC] Roche cobas c501
142.5 ± 0.81	133.4 ± 0.91	123.4 ± 1.07	138.8 ± 0.98	160.2 ± 1.25	n = 12	[ROT] Roche Cobas INTEGRA
144.4 ± 1.10	134.1 ± 1.49	124.7 ± 1.23	139.4 ± 1.54	161.3 ± 1.36	n = 36	[ROD] Roche MODULAR D/P
144.9 ± 0.71	135.6 ± 0.55	126.5 ± 0.57	140.7 ± 0.81	162.4 ± 0.73	n = 15	[BYE] Siemens ADVIA 1800
144.0 ± 0.90	134.4 ± 1.02	125.7 ± 1.37	139.7 ± 1.37	160.4 ± 1.02	n = 3	[BYB] Siemens ADVIA 2400
144.2 ± 1.13	134.1 ± 0.74	126.4 ± 1.21	140.0 ± 0.84	161.1 ± 1.19	n = 10	[DUE] Siemens Dimension EXL
142.5 ± 1.91	133.2 ± 1.43	125.2 ± 1.64	138.9 ± 1.56	159.0 ± 1.66	n = 43	[DUR] Siemens Dimension RxL
143.0 ± 1.38	132.6 ± 1.97	125.3 ± 1.23	140.9 ± 1.20	159.1 ± 1.39	n = 19	[DUT] Siemens Dimension Vista
144.1 ± 1.20	134.4 ± 1.16	126.2 ± 1.29	139.9 ± 1.42	161.0 ± 1.72	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
143.1 ± 0.95	133.5 ± 0.83	123.7 ± 0.78	138.1 ± 1.09	161.1 ± 1.02	n = 13	[AB1] Abbott
142.3 ± 1.02	133.7 ± 1.13	124.9 ± 1.19	139.4 ± 1.37	160.2 ± 1.45	n = 63	[BC1] Beckman Coulter
142.6 ± 1.58	133.2 ± 1.22	124.9 ± 1.52	138.1 ± 1.10	160.0 ± 1.53	n = 47	[OL1] Beckman Coulter AU Series
144.5 ± 1.86	135.9 ± 2.18	127.2 ± 1.45	140.9 ± 1.43	162.4 ± 1.61	n = 6	[CR1] Carolina
139.4 ± 0.56	131.4 ± 0.56	123.2 ± 0.47	140.8 ± 0.47	158.0 ± 0.82	n = 7	[IA1] i-STAT thermal cartridge
142.0 ± 0.90	134.6 ± 1.02	125.0 ± 1.80	142.4 ± 1.02	161.4 ± 1.02	n = 3	[IL1] Instrumentation Lab
146.0 ± 2.08	140.3 ± 2.05	124.7 ± 1.96	145.9 ± 2.35	166.9 ± 2.43	n = 45	[JJ1] Ortho Clinical Diagnostics
143.3 ± 1.13	133.8 ± 1.53	124.5 ± 1.72	138.7 ± 1.80	161.4 ± 1.52	n = 16	[RO4] Roche cobas c311/c501/c502/c701
144.4 ± 1.10	134.1 ± 1.49	124.7 ± 1.23	139.4 ± 1.54	161.3 ± 1.36	n = 36	[RO2] Roche Hitachi and Modular D/P
142.4 ± 0.94	133.5 ± 0.87	123.2 ± 1.32	138.6 ± 1.16	160.0 ± 1.39	n = 13	[RO1] Roche Integra and MIRA
144.7 ± 0.83	135.4 ± 0.66	126.2 ± 0.89	140.5 ± 0.82	162.2 ± 1.14	n = 22	[BY1] Siemens ADVIA/ADVIA Centaur
143.3 ± 1.71	133.5 ± 1.61	125.6 ± 1.56	139.7 ± 1.62	159.7 ± 1.85	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Potassium (mmol/L)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
4.08 ± 0.09	3.44 ± 0.10	2.75 ± 0.09	4.78 ± 0.13	6.40 ± 0.13	n = 375	[---] All Methods & Instruments
						<Instruments>
4.23 ± 0.05	3.53 ± 0.05	2.80 ± 0.00	4.97 ± 0.14	6.30 ± 0.18	n = 3	[AXA] Abaxis Piccolo
4.09 ± 0.05	3.46 ± 0.06	2.76 ± 0.07	4.73 ± 0.08	6.33 ± 0.05	n = 12	[ABJ] Abbott Architect c System
4.09 ± 0.06	3.45 ± 0.06	2.81 ± 0.05	4.70 ± 0.00	6.34 ± 0.08	n = 49	[OLC] Beckman Coulter AU Chemistry System
4.05 ± 0.07	3.42 ± 0.07	2.73 ± 0.05	4.80 ± 0.00	6.42 ± 0.11	n = 10	[BCS] Beckman Coulter CX
4.02 ± 0.07	3.40 ± 0.00	2.70 ± 0.00	4.80 ± 0.00	6.42 ± 0.07	n = 13	[BCX] Beckman Coulter LX-20
4.04 ± 0.06	3.40 ± 0.00	2.70 ± 0.00	4.78 ± 0.05	6.42 ± 0.06	n = 20	[BCG] Beckman Coulter UniCel DxC 600
4.04 ± 0.06	3.40 ± 0.00	2.70 ± 0.00	4.77 ± 0.07	6.45 ± 0.08	n = 24	[BCH] Beckman Coulter UniCel DxC 800
4.00 ± 0.00	3.40 ± 0.00	2.70 ± 0.00	4.83 ± 0.05	6.25 ± 0.06	n = 8	[IAA] i-STAT
4.21 ± 0.07	3.70 ± 0.00	2.84 ± 0.06	5.08 ± 0.06	6.62 ± 0.10	n = 14	[JJE] Ortho Vitros 250/350/950
4.22 ± 0.06	3.69 ± 0.05	2.87 ± 0.06	5.08 ± 0.07	6.61 ± 0.08	n = 25	[JJF] Ortho Vitros 5,1FS
4.20 ± 0.06	3.72 ± 0.08	2.85 ± 0.08	5.08 ± 0.08	6.63 ± 0.11	n = 5	[JJG] Ortho Vitros 5600
3.99 ± 0.05	3.30 ± 0.00	2.66 ± 0.06	4.66 ± 0.08	6.30 ± 0.06	n = 14	[ROC] Roche cobas c501
4.10 ± 0.00	3.50 ± 0.00	2.80 ± 0.00	4.80 ± 0.00	6.43 ± 0.05	n = 12	[ROT] Roche Cobas INTEGRA
4.03 ± 0.08	3.39 ± 0.08	2.71 ± 0.09	4.70 ± 0.08	6.31 ± 0.09	n = 36	[ROD] Roche MODULAR D/P
4.20 ± 0.00	3.50 ± 0.00	2.83 ± 0.05	4.85 ± 0.06	6.50 ± 0.06	n = 15	[BYE] Siemens ADVIA 1800
4.13 ± 0.05	3.50 ± 0.00	2.80 ± 0.00	4.80 ± 0.09	6.40 ± 0.00	n = 3	[BYB] Siemens ADVIA 2400
4.08 ± 0.05	3.40 ± 0.00	2.70 ± 0.00	4.80 ± 0.00	6.40 ± 0.00	n = 10	[DUE] Siemens Dimension EXL
4.05 ± 0.07	3.39 ± 0.04	2.70 ± 0.00	4.74 ± 0.07	6.33 ± 0.09	n = 43	[DUR] Siemens Dimension RxL
4.16 ± 0.06	3.50 ± 0.00	2.80 ± 0.00	4.90 ± 0.04	6.51 ± 0.05	n = 19	[DUT] Siemens Dimension Vista
4.05 ± 0.06	3.40 ± 0.00	2.70 ± 0.00	4.75 ± 0.07	6.39 ± 0.08	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
4.23 ± 0.05	3.53 ± 0.05	2.80 ± 0.00	4.97 ± 0.14	6.30 ± 0.18	n = 3	[AX1] Abaxis
4.09 ± 0.06	3.47 ± 0.07	2.77 ± 0.07	4.74 ± 0.09	6.34 ± 0.06	n = 13	[AB1] Abbott
4.04 ± 0.06	3.40 ± 0.00	2.70 ± 0.00	4.78 ± 0.05	6.43 ± 0.07	n = 63	[BC1] Beckman Coulter
4.09 ± 0.05	3.45 ± 0.06	2.81 ± 0.05	4.70 ± 0.00	6.34 ± 0.08	n = 48	[OL1] Beckman Coulter AU Series
4.10 ± 0.14	3.47 ± 0.12	2.76 ± 0.06	4.77 ± 0.18	6.43 ± 0.27	n = 6	[CR1] Carolina
4.00 ± 0.00	3.40 ± 0.00	2.70 ± 0.00	4.82 ± 0.05	6.26 ± 0.06	n = 7	[IA1] i-STAT thermal cartridge
3.96 ± 0.10	3.46 ± 0.10	2.63 ± 0.05	4.85 ± 0.19	6.41 ± 0.20	n = 3	[IL1] Instrumentation Lab
4.21 ± 0.06	3.69 ± 0.05	2.86 ± 0.06	5.08 ± 0.07	6.62 ± 0.09	n = 45	[JJ1] Ortho Clinical Diagnostics
3.99 ± 0.04	3.32 ± 0.06	2.66 ± 0.06	4.66 ± 0.07	6.30 ± 0.06	n = 15	[RO4] Roche cobas c311/c501/c502/c701
4.03 ± 0.08	3.39 ± 0.08	2.71 ± 0.09	4.70 ± 0.08	6.31 ± 0.09	n = 36	[RO2] Roche Hitachi and Modular D/P
4.10 ± 0.00	3.50 ± 0.00	2.80 ± 0.00	4.80 ± 0.00	6.42 ± 0.06	n = 13	[RO1] Roche Integra and MIRA
4.18 ± 0.06	3.50 ± 0.00	2.81 ± 0.04	4.84 ± 0.06	6.49 ± 0.08	n = 22	[BY1] Siemens ADVIA/ADVIA Centaur
4.07 ± 0.07	3.41 ± 0.05	2.72 ± 0.05	4.78 ± 0.09	6.39 ± 0.10	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Chloride (mmol/L)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
104.0 ± 2.05	97.3 ± 2.98	89.7 ± 2.15	121.3 ± 4.28	122.6 ± 2.64	n = 370	[---] All Methods & Instruments
						<Instruments>
103.0 ± 2.70	99.3 ± 1.37	89.7 ± 1.37	119.3 ± 1.37	118.6 ± 2.56	n = 3	[AXA] Abaxis Piccolo
104.8 ± 0.76	99.0 ± 0.79	90.8 ± 0.67	124.3 ± 1.03	124.4 ± 1.06	n = 11	[ABJ] Abbott Architect c System
102.9 ± 0.97	96.3 ± 1.11	89.2 ± 0.98	121.1 ± 1.08	121.3 ± 1.40	n = 47	[OLC] Beckman Coulter AU Chemistry System
107.5 ± 1.62	101.9 ± 2.07	93.5 ± 1.61	125.0 ± 3.41	124.3 ± 3.33	n = 10	[BCS] Beckman Coulter CX
103.3 ± 1.77	98.9 ± 1.32	91.0 ± 1.43	124.5 ± 1.88	123.4 ± 2.31	n = 13	[BCX] Beckman Coulter LX-20
104.5 ± 1.44	99.7 ± 1.09	91.6 ± 1.34	124.0 ± 1.47	124.3 ± 1.61	n = 20	[BCG] Beckman Coulter UniCel DxC 600
104.7 ± 0.94	99.6 ± 1.32	91.5 ± 0.96	123.8 ± 1.52	124.3 ± 1.59	n = 24	[BCH] Beckman Coulter UniCel DxC 800
107.7 ± 0.69	108.5 ± 0.76	92.0 ± 0.00	131.0 ± 0.00	130.7 ± 2.02	n = 8	[IAA] i-STAT
105.2 ± 1.37	100.1 ± 1.43	91.4 ± 1.30	125.4 ± 1.22	126.3 ± 1.16	n = 14	[JJE] Ortho Vitros 250/350/950
105.5 ± 1.79	99.9 ± 1.79	91.3 ± 1.73	125.2 ± 2.37	125.8 ± 2.42	n = 25	[JJF] Ortho Vitros 5,1FS
104.6 ± 1.33	99.1 ± 1.65	90.0 ± 1.28	123.8 ± 2.76	124.8 ± 2.76	n = 5	[JJG] Ortho Vitros 5600
99.7 ± 0.97	92.2 ± 1.30	85.2 ± 1.15	117.7 ± 2.06	119.3 ± 1.46	n = 15	[ROC] Roche cobas c501
104.3 ± 0.57	97.5 ± 1.11	90.0 ± 0.85	121.0 ± 1.30	122.5 ± 0.78	n = 12	[ROT] Roche Cobas INTEGRA
102.0 ± 0.96	94.3 ± 1.03	87.0 ± 0.94	120.0 ± 1.36	120.3 ± 0.88	n = 36	[ROD] Roche MODULAR D/P
104.5 ± 1.15	97.2 ± 0.63	89.5 ± 0.86	122.5 ± 0.65	122.6 ± 0.66	n = 15	[BYE] Siemens ADVIA 1800
104.7 ± 1.37	97.4 ± 1.02	89.4 ± 1.02	121.7 ± 1.37	121.4 ± 1.02	n = 3	[BYB] Siemens ADVIA 2400
103.3 ± 0.51	95.5 ± 0.69	89.3 ± 0.54	115.1 ± 0.87	121.1 ± 0.87	n = 10	[DUE] Siemens Dimension EXL
103.9 ± 1.92	94.7 ± 1.42	88.5 ± 1.50	114.9 ± 2.01	121.9 ± 1.70	n = 42	[DUR] Siemens Dimension RxL
104.9 ± 0.71	98.3 ± 2.29	89.4 ± 1.04	122.8 ± 1.25	124.1 ± 1.12	n = 20	[DUT] Siemens Dimension Vista
103.5 ± 1.16	95.4 ± 1.16	89.3 ± 1.21	114.8 ± 1.21	120.9 ± 1.01	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
103.0 ± 2.70	99.3 ± 1.37	89.7 ± 1.37	119.3 ± 1.37	118.6 ± 2.56	n = 3	[AX1] Abaxis
104.8 ± 0.88	99.1 ± 0.88	90.8 ± 0.88	124.3 ± 0.96	124.4 ± 0.98	n = 13	[AB1] Abbott
104.6 ± 1.51	99.6 ± 1.43	91.5 ± 1.32	124.0 ± 1.64	124.3 ± 1.70	n = 63	[BC1] Beckman Coulter
102.9 ± 0.99	96.3 ± 1.11	89.2 ± 1.00	121.1 ± 1.08	121.3 ± 1.41	n = 46	[OL1] Beckman Coulter AU Series
107.0 ± 2.77	101.5 ± 2.66	93.4 ± 1.82	122.6 ± 8.33	121.3 ± 1.38	n = 6	[CR1] Carolina
107.7 ± 0.74	108.6 ± 0.74	92.0 ± 0.00	130.6 ± 0.74	130.9 ± 2.16	n = 7	[IA1] i-STAT thermal cartridge
105.3 ± 1.65	99.9 ± 1.76	91.1 ± 1.60	125.2 ± 2.17	125.9 ± 2.14	n = 45	[JJ1] Ortho Clinical Diagnostics
99.8 ± 0.93	92.2 ± 1.24	85.2 ± 1.11	117.6 ± 1.99	119.2 ± 1.46	n = 16	[RO4] Roche cobas c311/c501/c502/c701
102.0 ± 0.96	94.3 ± 1.03	87.0 ± 0.94	120.0 ± 1.36	120.3 ± 0.88	n = 36	[RO2] Roche Hitachi and Modular D/P
104.3 ± 0.57	97.5 ± 1.11	90.0 ± 0.85	121.0 ± 1.30	122.5 ± 0.78	n = 12	[RO1] Roche Integra and MIRA
104.5 ± 1.14	97.2 ± 0.64	89.4 ± 0.81	122.4 ± 0.76	122.4 ± 0.90	n = 22	[BY1] Siemens ADVIA/ADVIA Centaur
104.0 ± 1.61	95.5 ± 1.75	89.0 ± 1.29	116.0 ± 3.41	122.0 ± 1.81	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Albumin (g/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
3.47 ± 0.18	5.37 ± 0.23	2.86 ± 0.15	4.28 ± 0.20	4.20 ± 0.16	n = 358	[---] All Methods & Instruments
						<Instruments>
3.60 ± 0.09	4.97 ± 0.23	2.97 ± 0.05	4.27 ± 0.05	4.16 ± 0.10	n = 3	[AXA] Abaxis Piccolo
3.32 ± 0.14	5.08 ± 0.14	2.80 ± 0.11	4.16 ± 0.18	4.04 ± 0.18	n = 12	[ABJ] Abbott Architect c System
3.51 ± 0.09	5.33 ± 0.09	2.91 ± 0.06	4.34 ± 0.09	4.21 ± 0.09	n = 50	[OLC] Beckman Coulter AU Chemistry System
3.31 ± 0.11	5.36 ± 0.21	2.79 ± 0.10	4.15 ± 0.17	4.07 ± 0.16	n = 8	[BCS] Beckman Coulter CX
3.31 ± 0.08	5.25 ± 0.10	2.76 ± 0.10	4.04 ± 0.12	3.96 ± 0.12	n = 13	[BCX] Beckman Coulter LX-20
3.22 ± 0.12	5.13 ± 0.15	2.70 ± 0.00	4.03 ± 0.08	3.93 ± 0.09	n = 19	[BCG] Beckman Coulter UniCel DxC 600
3.27 ± 0.07	5.20 ± 0.08	2.73 ± 0.07	4.06 ± 0.09	3.95 ± 0.10	n = 24	[BCH] Beckman Coulter UniCel DxC 800
3.23 ± 0.11	5.21 ± 0.15	2.57 ± 0.08	3.97 ± 0.13	4.21 ± 0.16	n = 13	[JJE] Ortho Vitros 250/350/950
3.25 ± 0.11	5.29 ± 0.14	2.57 ± 0.09	4.05 ± 0.11	4.26 ± 0.13	n = 24	[JJF] Ortho Vitros 5,1FS
3.22 ± 0.11	5.31 ± 0.14	2.53 ± 0.11	4.00 ± 0.10	4.29 ± 0.13	n = 5	[JJG] Ortho Vitros 5600
3.66 ± 0.12	5.43 ± 0.14	3.04 ± 0.10	4.46 ± 0.13	4.33 ± 0.10	n = 14	[ROC] Roche cobas c501
3.49 ± 0.09	5.16 ± 0.15	2.89 ± 0.07	4.24 ± 0.11	4.17 ± 0.09	n = 12	[ROT] Roche Cobas INTEGRA
3.64 ± 0.09	5.42 ± 0.13	3.03 ± 0.10	4.47 ± 0.10	4.32 ± 0.13	n = 37	[ROD] Roche MODULAR D/P
3.60 ± 0.09	5.40 ± 0.09	3.00 ± 0.09	4.50 ± 0.09	4.30 ± 0.09	n = 3	[BYA] Siemens ADVIA 1650
3.51 ± 0.07	5.26 ± 0.10	2.94 ± 0.07	4.38 ± 0.09	4.23 ± 0.08	n = 15	[BYE] Siemens ADVIA 1800
3.57 ± 0.05	5.40 ± 0.09	3.00 ± 0.00	4.46 ± 0.10	4.33 ± 0.05	n = 3	[BYB] Siemens ADVIA 2400
3.56 ± 0.06	5.68 ± 0.12	2.90 ± 0.06	4.40 ± 0.06	4.28 ± 0.10	n = 10	[DUE] Siemens Dimension EXL
3.55 ± 0.07	5.65 ± 0.11	2.88 ± 0.05	4.38 ± 0.08	4.26 ± 0.09	n = 43	[DUR] Siemens Dimension RxL
3.54 ± 0.08	5.55 ± 0.12	2.90 ± 0.00	4.34 ± 0.08	4.22 ± 0.10	n = 19	[DUT] Siemens Dimension Vista
3.58 ± 0.06	5.68 ± 0.10	2.88 ± 0.07	4.40 ± 0.10	4.28 ± 0.07	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
3.60 ± 0.09	4.97 ± 0.23	2.97 ± 0.05	4.27 ± 0.05	4.16 ± 0.10	n = 3	[AX1] Abaxis
3.33 ± 0.14	5.09 ± 0.14	2.80 ± 0.11	4.18 ± 0.18	4.05 ± 0.17	n = 13	[AB1] Abbott
3.26 ± 0.09	5.19 ± 0.12	2.73 ± 0.07	4.04 ± 0.08	3.95 ± 0.10	n = 58	[BC1] Beckman Coulter
3.51 ± 0.09	5.33 ± 0.09	2.91 ± 0.06	4.35 ± 0.09	4.21 ± 0.09	n = 49	[OL1] Beckman Coulter AU Series
3.36 ± 0.12	5.42 ± 0.17	2.82 ± 0.10	4.27 ± 0.21	4.15 ± 0.19	n = 6	[CR1] Carolina
3.53 ± 0.05	5.40 ± 0.18	3.00 ± 0.09	4.37 ± 0.14	4.20 ± 0.09	n = 3	[DG1] Diagnostic Chemicals Ltd - Endpoint
3.24 ± 0.11	5.26 ± 0.16	2.56 ± 0.10	4.01 ± 0.13	4.24 ± 0.15	n = 43	[JJ1] Ortho Clinical Diagnostics
3.66 ± 0.12	5.43 ± 0.14	3.04 ± 0.10	4.46 ± 0.13	4.33 ± 0.10	n = 14	[RO4] Roche cobas c311/c501/c502/c701
3.64 ± 0.09	5.41 ± 0.12	3.02 ± 0.10	4.46 ± 0.10	4.32 ± 0.13	n = 36	[RO2] Roche Hitachi and Modular D/P
3.49 ± 0.09	5.16 ± 0.15	2.89 ± 0.07	4.24 ± 0.11	4.17 ± 0.09	n = 12	[RO1] Roche Integra and MIRA
3.53 ± 0.08	5.29 ± 0.12	2.95 ± 0.08	4.40 ± 0.10	4.25 ± 0.09	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
3.56 ± 0.07	5.64 ± 0.12	2.89 ± 0.05	4.38 ± 0.08	4.26 ± 0.09	n = 92	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Total Protein (g/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
5.71 ± 0.17	8.12 ± 0.25	4.69 ± 0.14	7.22 ± 0.23	6.92 ± 0.22	n = 360	[---] All Methods & Instruments
						<Instruments>
5.67 ± 0.05	7.97 ± 0.14	4.64 ± 0.10	7.17 ± 0.14	6.80 ± 0.09	n = 3	[AXA] Abaxis Piccolo
5.64 ± 0.08	7.99 ± 0.09	4.61 ± 0.05	7.14 ± 0.09	6.83 ± 0.11	n = 12	[ABJ] Abbott Architect c System
5.65 ± 0.12	7.99 ± 0.13	4.61 ± 0.08	7.15 ± 0.13	6.81 ± 0.14	n = 49	[OLC] Beckman Coulter AU Chemistry System
5.63 ± 0.19	8.20 ± 0.21	4.64 ± 0.15	7.18 ± 0.17	6.88 ± 0.17	n = 8	[BCS] Beckman Coulter CX
5.46 ± 0.09	7.88 ± 0.17	4.48 ± 0.04	6.88 ± 0.12	6.60 ± 0.15	n = 14	[BCX] Beckman Coulter LX-20
5.61 ± 0.13	8.02 ± 0.20	4.65 ± 0.13	7.08 ± 0.17	6.82 ± 0.17	n = 18	[BCG] Beckman Coulter UniCel DxC 600
5.42 ± 0.11	7.79 ± 0.18	4.49 ± 0.09	6.85 ± 0.12	6.62 ± 0.11	n = 24	[BCH] Beckman Coulter UniCel DxC 800
5.68 ± 0.11	8.27 ± 0.08	4.76 ± 0.11	7.25 ± 0.18	7.02 ± 0.12	n = 14	[JJE] Ortho Vitros 250/350/950
5.70 ± 0.11	8.30 ± 0.20	4.75 ± 0.11	7.26 ± 0.15	6.94 ± 0.12	n = 25	[JJF] Ortho Vitros 5,1FS
5.60 ± 0.10	8.26 ± 0.14	4.60 ± 0.00	7.20 ± 0.00	6.94 ± 0.06	n = 5	[JJG] Ortho Vitros 5600
5.75 ± 0.06	8.03 ± 0.13	4.70 ± 0.00	7.20 ± 0.15	6.87 ± 0.14	n = 14	[ROC] Roche cobas c501
5.68 ± 0.12	7.99 ± 0.17	4.62 ± 0.07	7.09 ± 0.14	6.84 ± 0.09	n = 13	[ROT] Roche Cobas INTEGRA
5.71 ± 0.13	7.98 ± 0.14	4.65 ± 0.07	7.14 ± 0.11	6.85 ± 0.15	n = 37	[ROD] Roche MODULAR D/P
5.88 ± 0.15	8.26 ± 0.10	4.90 ± 0.09	7.43 ± 0.14	5.38 ± 3.33	n = 3	[BYA] Siemens ADVIA 1650
5.74 ± 0.08	8.09 ± 0.12	4.81 ± 0.05	7.22 ± 0.11	6.95 ± 0.12	n = 15	[BYE] Siemens ADVIA 1800
5.83 ± 0.05	8.16 ± 0.10	4.83 ± 0.05	7.30 ± 0.09	7.00 ± 0.09	n = 3	[BYB] Siemens ADVIA 2400
5.94 ± 0.10	8.44 ± 0.19	4.81 ± 0.09	7.53 ± 0.13	7.20 ± 0.14	n = 10	[DUE] Siemens Dimension EXL
5.86 ± 0.11	8.35 ± 0.11	4.79 ± 0.09	7.46 ± 0.10	7.13 ± 0.10	n = 43	[DUR] Siemens Dimension RxL
5.81 ± 0.10	8.26 ± 0.14	4.78 ± 0.10	7.34 ± 0.20	7.07 ± 0.15	n = 19	[DUT] Siemens Dimension Vista
5.86 ± 0.09	8.36 ± 0.15	4.78 ± 0.07	7.47 ± 0.07	7.15 ± 0.11	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
5.67 ± 0.05	7.97 ± 0.14	4.64 ± 0.10	7.17 ± 0.14	6.80 ± 0.09	n = 3	[AX1] Abaxis
5.65 ± 0.09	8.00 ± 0.11	4.62 ± 0.07	7.15 ± 0.11	6.84 ± 0.13	n = 13	[AB1] Abbott
5.49 ± 0.15	7.89 ± 0.21	4.53 ± 0.12	6.94 ± 0.18	6.69 ± 0.19	n = 60	[BC1] Beckman Coulter
5.66 ± 0.12	7.99 ± 0.14	4.61 ± 0.08	7.15 ± 0.14	6.80 ± 0.14	n = 48	[OL1] Beckman Coulter AU Series
5.64 ± 0.22	8.34 ± 0.16	4.80 ± 0.20	7.27 ± 0.19	6.93 ± 0.25	n = 6	[CR1] Carolina
5.68 ± 0.12	8.28 ± 0.16	4.73 ± 0.12	7.24 ± 0.15	6.96 ± 0.12	n = 44	[JJ1] Ortho Clinical Diagnostics
5.74 ± 0.06	8.01 ± 0.12	4.70 ± 0.00	7.19 ± 0.16	6.86 ± 0.14	n = 13	[RO4] Roche cobas c311/c501/c502/c701
5.71 ± 0.13	7.98 ± 0.14	4.65 ± 0.07	7.14 ± 0.11	6.85 ± 0.15	n = 37	[RO2] Roche Hitachi and Modular D/P
5.68 ± 0.12	7.99 ± 0.17	4.62 ± 0.07	7.09 ± 0.14	6.84 ± 0.09	n = 13	[RO1] Roche Integra and MIRA
5.77 ± 0.10	8.13 ± 0.14	4.82 ± 0.07	7.26 ± 0.14	6.98 ± 0.14	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
5.86 ± 0.11	8.34 ± 0.14	4.79 ± 0.09	7.46 ± 0.13	7.13 ± 0.12	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Cholesterol (mg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
144.0 ± 4.87	182.6 ± 6.76	149.9 ± 5.38	230.9 ± 7.40	225.9 ± 6.97	n = 331	[---] All Methods & Instruments
						<Instruments>
149.9 ± 2.86	188.0 ± 2.70	159.7 ± 3.37	232.5 ± 3.63	204.0 ± 48.22	n = 3	[AXA] Abaxis Piccolo
148.3 ± 1.80	187.3 ± 1.76	149.4 ± 1.57	234.7 ± 2.05	227.7 ± 2.65	n = 12	[ABJ] Abbott Architect c System
142.4 ± 3.19	179.8 ± 4.45	145.7 ± 3.66	227.0 ± 5.95	222.4 ± 4.97	n = 51	[OLC] Beckman Coulter AU Chemistry System
141.7 ± 3.82	182.3 ± 5.42	150.9 ± 6.45	230.2 ± 4.31	226.5 ± 6.23	n = 8	[BCS] Beckman Coulter CX
141.6 ± 3.25	180.6 ± 3.83	152.3 ± 3.17	226.9 ± 5.33	222.2 ± 5.29	n = 12	[BCX] Beckman Coulter LX-20
141.2 ± 3.95	179.8 ± 4.91	152.3 ± 4.25	227.4 ± 4.13	224.7 ± 5.35	n = 15	[BCG] Beckman Coulter UniCel DxC 600
141.9 ± 2.54	179.2 ± 4.63	151.9 ± 3.08	227.0 ± 3.36	224.5 ± 4.22	n = 20	[BCH] Beckman Coulter UniCel DxC 800
152.6 ± 2.30	203.5 ± 2.93	160.0 ± 3.32	247.7 ± 5.09	244.0 ± 4.39	n = 6	[JJE] Ortho Vitros 250/350/950
149.2 ± 4.32	203.3 ± 4.49	155.9 ± 4.47	242.0 ± 6.52	238.0 ± 6.07	n = 24	[JJF] Ortho Vitros 5,1FS
150.4 ± 3.92	205.8 ± 5.02	156.4 ± 2.83	246.2 ± 5.63	240.3 ± 4.58	n = 5	[JJG] Ortho Vitros 5600
148.8 ± 4.56	185.5 ± 5.35	151.7 ± 4.48	233.9 ± 7.28	228.5 ± 5.61	n = 12	[ROC] Roche cobas c501
145.5 ± 2.41	184.0 ± 3.44	148.8 ± 2.26	232.2 ± 4.96	225.2 ± 4.00	n = 14	[ROT] Roche Cobas INTEGRA
147.0 ± 2.88	184.6 ± 4.01	151.4 ± 3.09	232.6 ± 4.84	227.8 ± 4.08	n = 38	[ROD] Roche MODULAR D/P
147.6 ± 4.72	185.5 ± 1.86	156.7 ± 5.09	231.8 ± 2.36	229.5 ± 2.74	n = 3	[BYA] Siemens ADVIA 1650
143.3 ± 2.92	180.6 ± 3.04	154.1 ± 3.81	226.1 ± 4.48	223.3 ± 4.13	n = 15	[BYE] Siemens ADVIA 1800
145.4 ± 1.02	183.0 ± 1.80	156.7 ± 1.37	226.2 ± 4.11	226.3 ± 1.37	n = 3	[BYB] Siemens ADVIA 2400
139.7 ± 3.30	180.5 ± 4.69	145.7 ± 2.94	231.5 ± 5.06	224.7 ± 5.30	n = 10	[DUE] Siemens Dimension EXL
140.4 ± 4.38	180.7 ± 6.16	145.6 ± 4.34	230.2 ± 6.16	223.0 ± 6.43	n = 34	[DUR] Siemens Dimension RxL
141.2 ± 4.49	180.6 ± 5.70	146.7 ± 2.30	229.7 ± 6.64	225.1 ± 5.60	n = 17	[DUT] Siemens Dimension Vista
143.3 ± 3.20	181.2 ± 5.08	147.2 ± 3.52	232.7 ± 6.65	225.9 ± 5.30	n = 15	[DUX] Siemens Dimension Xpand
						<Reagents>
149.9 ± 2.86	188.0 ± 2.70	159.7 ± 3.37	232.5 ± 3.63	204.0 ± 48.22	n = 3	[AX1] Abaxis
148.4 ± 1.80	187.3 ± 1.67	149.4 ± 1.47	234.4 ± 2.13	228.0 ± 2.54	n = 13	[AB1] Abbott
141.8 ± 3.23	180.2 ± 4.79	152.3 ± 3.49	227.5 ± 4.19	224.3 ± 5.16	n = 52	[BC1] Beckman Coulter
142.4 ± 2.92	179.7 ± 4.26	145.6 ± 3.49	226.8 ± 5.72	222.3 ± 4.62	n = 48	[OL1] Beckman Coulter AU Series
140.6 ± 5.59	181.3 ± 5.73	149.0 ± 8.13	235.7 ± 10.23	229.4 ± 9.05	n = 5	[CR1] Carolina
150.1 ± 4.16	203.7 ± 4.37	156.8 ± 4.28	243.7 ± 6.56	239.5 ± 5.86	n = 35	[JJ1] Ortho Clinical Diagnostics
148.8 ± 4.56	185.5 ± 5.35	151.7 ± 4.48	233.9 ± 7.28	228.5 ± 5.61	n = 12	[RO4] Roche cobas c311/c501/c502/c701
146.7 ± 3.23	184.3 ± 4.22	151.3 ± 3.20	232.4 ± 5.01	227.7 ± 4.39	n = 39	[RO2] Roche Hitachi and Modular D/P
145.5 ± 2.41	184.0 ± 3.44	148.8 ± 2.26	232.2 ± 4.96	225.2 ± 4.00	n = 14	[RO1] Roche Integra and MIRA
143.9 ± 3.15	181.6 ± 3.64	154.8 ± 4.15	227.0 ± 5.42	224.6 ± 4.73	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
141.0 ± 4.26	180.7 ± 5.61	146.1 ± 3.67	230.8 ± 6.37	224.3 ± 6.03	n = 76	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

HDL-Cholesterol (mg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
33.3 ± 3.70	52.2 ± 7.15	28.5 ± 3.42	69.2 ± 8.15	47.9 ± 6.25	n = 312	[---] All Methods & Instruments
34.5 ± 4.34	54.8 ± 9.05	27.5 ± 5.58	73.0 ± 10.62	50.3 ± 7.16	n = 17	[---] All Precipitation Methods
33.2 ± 3.63	52.1 ± 7.02	28.5 ± 3.32	69.0 ± 7.99	47.8 ± 6.18	n = 295	[---] All Homogeneous (Direct) Methods
23.3 ± 1.37	40.5 ± 1.86	21.7 ± 1.37	55.5 ± 1.86	41.5 ± 1.86	n = 3	[AX1] Abaxis
34.2 ± 1.43	56.6 ± 1.80	32.1 ± 1.64	72.3 ± 2.49	51.1 ± 2.02	n = 12	[AB1] Abbott
33.5 ± 1.34	56.2 ± 1.97	31.1 ± 1.16	72.5 ± 2.53	50.8 ± 2.35	n = 33	[OL1] Beckman Coulter AU Series
37.3 ± 2.14	58.2 ± 2.20	31.7 ± 1.67	77.0 ± 3.49	55.1 ± 2.33	n = 43	[BC1] Beckman Coulter
35.9 ± 3.06	53.6 ± 7.95	31.3 ± 6.09	72.7 ± 11.67	51.8 ± 9.44	n = 4	[CR1] Carolina
33.4 ± 2.88	57.2 ± 1.07	31.8 ± 2.10	74.0 ± 1.54	52.0 ± 1.66	n = 5	[EQ1/GZ1] Equal/Genzyme
36.4 ± 1.74	61.4 ± 2.50	29.6 ± 1.76	79.7 ± 3.33	54.0 ± 2.05	n = 30	[JJ1] Ortho Clinical Diagnostics
30.4 ± 0.81	44.9 ± 1.19	25.6 ± 0.81	60.1 ± 1.63	41.3 ± 0.94	n = 10	[RO4] Roche cobas c311/c501/c502/c701
33.9 ± 1.79	47.3 ± 2.22	27.1 ± 1.27	63.5 ± 2.31	43.6 ± 1.61	n = 36	[RO2] Roche Hitachi and Modular D/P
31.6 ± 1.58	46.3 ± 1.28	25.8 ± 0.57	62.2 ± 1.45	42.3 ± 1.13	n = 12	[RO1] Roche Integra and MIRA
22.6 ± 1.07	46.5 ± 1.52	24.6 ± 0.92	64.2 ± 1.88	43.2 ± 1.19	n = 21	[BY1] Siemens ADVIA/ADVIA Centaur
31.4 ± 1.47	55.6 ± 1.68	30.5 ± 1.87	73.1 ± 2.07	50.1 ± 2.23	n = 17	[DA7] Siemens Dimension HDL (DF48A/K3048)
31.3 ± 1.77	46.0 ± 2.50	25.8 ± 1.53	62.1 ± 3.00	42.0 ± 1.95	n = 52	[DA5] Siemens Dimension HDL (DF48B/K3048A)

Summary of Participant Performance (Mean and Standard Deviation)

LDL-Cholesterol (mg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
89.7 ± 12.29	100.7 ± 13.97	95.9 ± 10.18	126.5 ± 13.57	139.3 ± 13.76	n = 299	[---] All Methods
96.1 ± 6.37	106.8 ± 10.00	99.7 ± 7.00	130.8 ± 11.23	144.4 ± 9.38	n = 164	[-A-] All Calculated results Friedewald formula [LDL=TC-HDL-(Trigs÷5)]
79.2 ± 11.79	91.5 ± 13.49	89.9 ± 10.66	120.2 ± 14.13	130.7 ± 15.50	n = 132	[---] All Homogeneous (Direct) Methods
77.0 ± 1.76	87.0 ± 2.45	87.7 ± 3.72	116.2 ± 7.08	125.8 ± 8.56	n = 5	[AB1] Abbott
72.3 ± 3.02	81.5 ± 3.66	81.4 ± 3.22	109.2 ± 3.71	118.0 ± 4.91	n = 21	[BC1] Beckman Coulter
66.9 ± 5.67	75.9 ± 6.32	80.0 ± 5.48	103.9 ± 6.63	113.6 ± 7.67	n = 14	[OL1] Beckman Coulter AU Series
72.6 ± 10.65	80.6 ± 9.95	81.9 ± 7.80	107.7 ± 10.87	115.5 ± 11.62	n = 14	[EQ1/GZ1] Equal/Genzyme
76.6 ± 2.24	95.6 ± 2.94	87.9 ± 2.39	129.8 ± 5.76	139.8 ± 4.57	n = 10	[JJ1] Ortho Clinical Diagnostics
98.8 ± 1.54	116.8 ± 1.54	108.1 ± 2.05	143.1 ± 2.86	154.8 ± 2.36	n = 3	[RO4] Roche cobas c311/c501/c502/c701
96.9 ± 2.67	115.8 ± 3.14	108.4 ± 3.07	139.9 ± 3.96	153.5 ± 4.43	n = 14	[RO2] Roche Hitachi and Modular D/P
77.6 ± 4.40	94.5 ± 5.36	91.4 ± 5.42	127.0 ± 6.14	136.0 ± 6.31	n = 12	[BY1] Siemens ADVIA/ADVIA Centaur
86.4 ± 6.31	95.4 ± 5.87	94.0 ± 4.90	122.7 ± 7.52	134.9 ± 7.64	n = 29	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Triglycerides (mg/dL)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
78.3 ± 3.90	129.9 ± 7.00	109.9 ± 5.59	158.9 ± 6.86	173.8 ± 7.33	n = 320	[---] All Methods & Instruments
						<Instruments>
92.1 ± 3.72	145.5 ± 3.63	121.2 ± 4.10	177.4 ± 6.14	191.3 ± 6.85	n = 3	[AXA] Abaxis Piccolo
79.4 ± 1.35	127.3 ± 1.96	117.8 ± 1.80	155.8 ± 1.93	171.7 ± 2.52	n = 12	[ABJ] Abbott Architect c System
76.7 ± 2.47	128.3 ± 3.57	106.8 ± 3.30	155.6 ± 4.87	170.5 ± 5.20	n = 50	[OLC] Beckman Coulter AU Chemistry System
82.1 ± 7.65	132.8 ± 7.76	110.7 ± 7.11	162.9 ± 7.16	177.1 ± 9.74	n = 8	[BCS] Beckman Coulter CX
79.7 ± 4.31	129.9 ± 7.73	106.9 ± 4.86	156.5 ± 7.93	174.9 ± 6.95	n = 12	[BCX] Beckman Coulter LX-20
78.4 ± 2.54	131.0 ± 3.81	105.7 ± 5.39	161.6 ± 6.43	173.8 ± 6.81	n = 12	[BCG] Beckman Coulter UniCel DxC 600
79.4 ± 2.95	129.7 ± 4.58	106.7 ± 3.57	162.1 ± 4.82	178.0 ± 7.26	n = 17	[BCH] Beckman Coulter UniCel DxC 800
83.3 ± 2.78	149.2 ± 5.75	113.0 ± 3.55	174.0 ± 2.19	190.9 ± 5.54	n = 6	[JJE] Ortho Vitros 250/350/950
79.3 ± 1.63	143.6 ± 2.52	107.9 ± 2.36	166.7 ± 3.28	183.1 ± 3.55	n = 24	[JJF] Ortho Vitros 5,1FS
79.4 ± 1.09	143.8 ± 1.91	107.2 ± 1.66	166.5 ± 2.25	183.6 ± 1.52	n = 5	[JJG] Ortho Vitros 5600
82.4 ± 1.77	129.9 ± 2.35	112.9 ± 2.23	161.2 ± 2.54	174.2 ± 2.61	n = 12	[ROC] Roche cobas c501
77.9 ± 2.48	126.1 ± 3.72	106.4 ± 4.00	156.3 ± 4.57	170.0 ± 4.86	n = 12	[ROT] Roche Cobas INTEGRA
79.7 ± 2.68	127.5 ± 2.83	113.6 ± 2.81	158.2 ± 3.24	172.4 ± 4.19	n = 38	[ROD] Roche MODULAR D/P
80.7 ± 0.51	132.2 ± 2.36	115.1 ± 2.05	161.5 ± 2.74	176.8 ± 1.54	n = 3	[BYA] Siemens ADVIA 1650
77.7 ± 2.23	127.8 ± 3.02	112.5 ± 2.67	155.6 ± 2.96	170.8 ± 3.64	n = 15	[BYE] Siemens ADVIA 1800
79.4 ± 1.02	129.5 ± 1.86	113.5 ± 1.86	157.9 ± 2.05	173.4 ± 1.02	n = 3	[BYB] Siemens ADVIA 2400
73.0 ± 2.02	125.7 ± 3.12	108.4 ± 2.24	155.0 ± 2.27	170.5 ± 1.79	n = 10	[DUE] Siemens Dimension EXL
73.6 ± 3.02	126.9 ± 2.51	110.1 ± 2.61	155.5 ± 2.69	170.8 ± 3.14	n = 34	[DUR] Siemens Dimension RxL
84.7 ± 3.37	140.1 ± 4.95	121.5 ± 2.05	169.6 ± 4.16	184.8 ± 4.82	n = 17	[DUT] Siemens Dimension Vista
74.7 ± 2.48	126.9 ± 1.58	109.4 ± 2.20	155.4 ± 3.20	171.1 ± 3.29	n = 12	[DUX] Siemens Dimension Xpand
						<Reagents>
92.1 ± 3.72	145.5 ± 3.63	121.2 ± 4.10	177.4 ± 6.14	191.3 ± 6.85	n = 3	[AX1] Abaxis
79.4 ± 1.37	127.3 ± 2.47	117.6 ± 2.08	155.8 ± 2.29	171.5 ± 3.18	n = 14	[AB1] Abbott
79.2 ± 3.30	130.3 ± 5.05	106.6 ± 4.32	160.9 ± 6.41	175.8 ± 6.92	n = 48	[BC1] Beckman Coulter
76.7 ± 2.30	128.1 ± 3.73	107.0 ± 2.97	155.2 ± 4.39	170.3 ± 5.03	n = 46	[OL1] Beckman Coulter AU Series
89.5 ± 10.13	139.4 ± 10.15	117.1 ± 10.85	172.2 ± 14.24	189.1 ± 17.15	n = 5	[CR1] Carolina
76.0 ± 1.80	135.7 ± 5.09	94.8 ± 3.23	162.1 ± 5.63	173.8 ± 6.95	n = 3	[JA1] JAS Diagnostics
79.7 ± 2.10	144.2 ± 3.32	108.3 ± 3.03	167.4 ± 4.16	184.0 ± 4.66	n = 35	[JJ1] Ortho Clinical Diagnostics
82.4 ± 1.77	129.9 ± 2.35	112.9 ± 2.23	161.2 ± 2.54	174.2 ± 2.61	n = 12	[RO4] Roche cobas c311/c501/c502/c701
79.8 ± 2.55	127.6 ± 2.68	113.6 ± 2.81	158.1 ± 3.38	172.3 ± 4.23	n = 38	[RO2] Roche Hitachi and Modular D/P
77.7 ± 2.48	125.8 ± 3.76	106.8 ± 3.92	156.2 ± 4.24	171.3 ± 2.34	n = 13	[RO1] Roche Integra and MIRA
78.3 ± 2.23	128.4 ± 3.34	112.8 ± 2.75	156.4 ± 3.70	171.9 ± 3.98	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
75.7 ± 5.49	128.4 ± 5.74	111.7 ± 5.70	157.6 ± 6.67	172.5 ± 6.54	n = 72	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Homocysteine (µmol/L)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
8.26 ± 0.95	21.37 ± 2.17	7.01 ± 0.82	23.39 ± 2.28	14.57 ± 1.50	n = 125	[---] All Methods & Instruments
						<Instruments>
9.15 ± 0.46	22.00 ± 0.74	8.06 ± 0.29	23.70 ± 0.83	15.57 ± 0.61	n = 6	[ABH] Abbott Architect i System
8.96 ± 0.42	22.77 ± 0.53	7.11 ± 0.38	24.31 ± 0.73	15.27 ± 0.50	n = 9	[ABB] Abbott AxSym
8.37 ± 0.86	22.25 ± 1.72	7.13 ± 0.77	24.19 ± 1.61	15.02 ± 1.45	n = 13	[OLC] Beckman Coulter AU Chemistry System
8.91 ± 0.58	23.07 ± 1.00	7.80 ± 0.44	25.72 ± 1.03	15.99 ± 1.18	n = 6	[BCH] Beckman Coulter UniCel DxC 800
8.00 ± 0.84	21.15 ± 1.36	6.55 ± 0.68	22.98 ± 1.38	14.22 ± 0.96	n = 4	[JJF] Ortho Vitros 5,1FS
8.17 ± 1.22	19.90 ± 2.78	6.61 ± 1.70	22.14 ± 2.63	14.42 ± 1.31	n = 3	[ROC] Roche cobas c501
8.50 ± 0.91	21.72 ± 0.70	7.00 ± 0.49	23.93 ± 1.29	15.96 ± 1.68	n = 4	[ROD] Roche MODULAR D/P
7.42 ± 0.49	18.90 ± 0.73	6.69 ± 0.30	20.60 ± 1.02	13.44 ± 0.51	n = 22	[COB] Siemens ADVIA Centaur
8.03 ± 1.03	19.72 ± 1.59	7.09 ± 0.72	22.74 ± 1.42	13.73 ± 1.20	n = 6	[DUT] Siemens Dimension Vista
8.09 ± 0.87	22.00 ± 1.60	6.58 ± 1.00	23.97 ± 1.60	14.54 ± 1.38	n = 29	[DPD] Siemens Immulite 2000
9.02 ± 0.66	22.57 ± 2.75	6.94 ± 0.78	25.46 ± 3.11	14.92 ± 1.96	n = 7	[DPE] Siemens Immulite 2500
						<Reagents>
9.03 ± 0.44	22.47 ± 0.73	7.46 ± 0.62	24.06 ± 0.84	15.38 ± 0.56	n = 15	[AB1] Abbott
9.29 ± 1.35	23.44 ± 3.27	7.81 ± 1.55	25.37 ± 3.51	16.25 ± 2.91	n = 7	[CR1] Carolina
8.54 ± 0.84	22.21 ± 1.32	7.37 ± 0.75	24.42 ± 1.60	15.78 ± 1.41	n = 18	[DZ1] Diazyme
8.54 ± 0.80	22.15 ± 1.63	7.32 ± 0.42	24.63 ± 2.12	14.93 ± 1.47	n = 5	[EQ1] Equal Diagnostics
7.94 ± 0.74	21.23 ± 1.16	6.55 ± 0.58	22.94 ± 1.18	14.27 ± 0.81	n = 5	[JJ1] Ortho Clinical Diagnostics
7.42 ± 0.49	18.90 ± 0.73	6.69 ± 0.30	20.60 ± 1.02	13.44 ± 0.51	n = 22	[BY1] Siemens ADVIA/ADVIA Centaur
8.03 ± 1.03	19.72 ± 1.59	7.09 ± 0.72	22.74 ± 1.42	13.73 ± 1.20	n = 6	[DA5] Siemens Dimension
8.26 ± 0.91	21.91 ± 2.00	6.72 ± 0.97	23.97 ± 1.88	14.48 ± 1.58	n = 38	[DP5] Siemens Immulite

Summary of Participant Performance (Mean and Standard Deviation)

Troponin I (µg/L)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
2.046 ± 0.504	1.152 ± 0.205	0.019 ± 0.020	0.019 ± 0.019	0.208 ± 0.059	n = 228	[---] All Methods & Instruments
						<Instruments>
11.478 ± 0.502	6.801 ± 0.294	0.010 ± 0.007	0.009 ± 0.008	1.605 ± 0.086	n = 13	[ABH] Abbott Architect i System
1.725 ± 0.146	1.049 ± 0.117	0.016 ± 0.009	0.016 ± 0.009	0.211 ± 0.014	n = 7	[ABB] Abbott AxSym
1.853 ± 0.178	1.081 ± 0.119	0.010 ± 0.000	0.010 ± 0.000	0.203 ± 0.023	n = 32	[SAA] Beckman Coulter ACCESS
0.423 ± 0.278	0.285 ± 0.194	0.050 ± 0.000	0.050 ± 0.000	0.050 ± 0.000	n = 10	[BSA] BioSite Triage
7.641 ± 0.621	4.419 ± 0.353	0.031 ± 0.037	0.029 ± 0.039	0.741 ± 0.071	n = 5	[IAA] i-STAT
6.198 ± 0.185	3.262 ± 0.088	0.013 ± 0.005	0.013 ± 0.005	0.929 ± 0.037	n = 3	[JJG] Ortho Vitros 5600
6.535 ± 0.266	3.300 ± 0.098	0.010 ± 0.006	0.009 ± 0.007	0.943 ± 0.057	n = 17	[JJC] Ortho Vitros ECi/ECiQ
2.237 ± 0.192	1.177 ± 0.113	0.009 ± 0.007	0.010 ± 0.007	0.183 ± 0.022	n = 41	[COB] Siemens ADVIA Centaur
2.275 ± 0.124	1.274 ± 0.127	0.015 ± 0.023	0.015 ± 0.023	0.190 ± 0.015	n = 4	[BYP] Siemens ADVIA Centaur CP
2.624 ± 0.163	1.403 ± 0.073	0.074 ± 0.041	0.073 ± 0.045	0.293 ± 0.031	n = 8	[DUE] Siemens Dimension EXL
1.768 ± 0.192	1.073 ± 0.113	0.035 ± 0.022	0.034 ± 0.022	0.198 ± 0.046	n = 37	[DUR] Siemens Dimension RxL
2.787 ± 0.168	1.463 ± 0.086	0.021 ± 0.006	0.020 ± 0.000	0.315 ± 0.033	n = 18	[DUT] Siemens Dimension Vista
1.846 ± 0.215	1.130 ± 0.138	0.029 ± 0.021	0.031 ± 0.017	0.232 ± 0.032	n = 11	[DUX] Siemens Dimension Xpand
3.362 ± 0.167	2.173 ± 0.140	0.200 ± 0.000	0.200 ± 0.000	0.582 ± 0.033	n = 6	[DPD] Siemens Immulite 2000
12.209 ± 0.748	6.864 ± 0.387	0.060 ± 0.000	0.060 ± 0.000	1.982 ± 0.163	n = 6	[TOM] Tosoh Bioscience
						<Reagents>
9.191 ± 4.552	5.386 ± 2.717	0.012 ± 0.009	0.012 ± 0.009	1.242 ± 0.669	n = 21	[AB1] Abbott
1.834 ± 0.173	1.067 ± 0.121	0.010 ± 0.000	0.010 ± 0.000	0.203 ± 0.022	n = 36	[BC1] Beckman Coulter
0.423 ± 0.278	0.285 ± 0.194	0.050 ± 0.000	0.050 ± 0.000	0.050 ± 0.000	n = 10	[BS1] Biosite Diagnostics
7.469 ± 0.392	4.343 ± 0.466	0.037 ± 0.043	0.034 ± 0.045	0.717 ± 0.054	n = 4	[IA1] i-STAT thermal cartridge
6.482 ± 0.284	3.293 ± 0.096	0.010 ± 0.006	0.010 ± 0.007	0.937 ± 0.048	n = 20	[JJ1] Ortho Clinical Diagnostics
0.989 ± 0.190	0.597 ± 0.149	0.303 ± 0.005	0.303 ± 0.005	0.303 ± 0.005	n = 3	[RO3] Roche Elecsys/Modular E/e601/e411
2.241 ± 0.187	1.185 ± 0.117	0.009 ± 0.007	0.009 ± 0.007	0.184 ± 0.021	n = 45	[BY1] Siemens ADVIA/ADVIA Centaur
1.790 ± 0.216	1.101 ± 0.146	0.033 ± 0.020	0.032 ± 0.020	0.214 ± 0.054	n = 52	[DA5] Siemens Dimension
2.722 ± 0.201	1.450 ± 0.099	0.043 ± 0.040	0.041 ± 0.041	0.304 ± 0.035	n = 22	[DA6] Siemens Dimension LOCI
3.311 ± 0.240	2.130 ± 0.187	0.200 ± 0.000	0.200 ± 0.000	0.571 ± 0.043	n = 7	[DP5] Siemens Immulite
12.240 ± 0.849	6.880 ± 0.435	0.060 ± 0.000	0.060 ± 0.000	2.022 ± 0.152	n = 5	[TO2] Tosoh ST AIA

Summary of Participant Performance (Mean and Standard Deviation)

Troponin T (µg/L)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
1.038 ± 0.072	0.711 ± 0.048	0.010 ± 0.000	0.010 ± 0.000	0.240 ± 0.019	n = 32	[---] All Methods & Instruments
						<Instruments>
1.006 ± 0.029	0.689 ± 0.034	0.010 ± 0.000	0.010 ± 0.000	0.230 ± 0.016	n = 7	[ROA] Roche cobas e601
1.097 ± 0.096	0.748 ± 0.040	0.010 ± 0.000	0.010 ± 0.000	0.253 ± 0.019	n = 12	[BME] Roche Elecsys
1.019 ± 0.045	0.689 ± 0.029	0.010 ± 0.000	0.010 ± 0.000	0.235 ± 0.008	n = 10	[ROE] Roche MODULAR E
						<Reagents>
1.031 ± 0.070	0.707 ± 0.047	0.010 ± 0.000	0.010 ± 0.000	0.238 ± 0.019	n = 28	[RO3] Roche Elecsys/Modular E/e601/e411

Summary of Participant Performance (Mean and Standard Deviation)

Alanine Aminotransferase (U/L 37°C)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
85.1 ± 6.57	139.1 ± 8.28	208.8 ± 13.10	56.5 ± 5.92	77.2 ± 6.04	n = 359	[---] All Methods & Instruments
						<Instruments>
79.7 ± 0.51	123.8 ± 2.36	182.8 ± 1.54	50.0 ± 0.90	70.0 ± 1.80	n = 3	[AXA] Abaxis Piccolo
84.1 ± 2.51	140.4 ± 3.89	211.2 ± 6.31	52.9 ± 1.91	74.3 ± 2.54	n = 12	[ABJ] Abbott Architect c System
75.6 ± 2.98	123.8 ± 4.68	187.2 ± 7.14	47.6 ± 2.14	66.6 ± 2.65	n = 48	[OLC] Beckman Coulter AU Chemistry System
80.2 ± 2.18	135.1 ± 4.88	201.9 ± 4.66	53.5 ± 3.06	73.5 ± 3.34	n = 8	[BCS] Beckman Coulter CX
83.3 ± 3.21	136.8 ± 4.34	207.3 ± 7.49	54.8 ± 1.73	75.3 ± 2.45	n = 14	[BCX] Beckman Coulter LX-20
83.3 ± 2.60	137.9 ± 3.88	208.3 ± 5.34	55.4 ± 1.88	75.7 ± 2.31	n = 18	[BCG] Beckman Coulter UniCel DxC 600
83.8 ± 1.96	138.1 ± 2.18	206.9 ± 2.66	55.6 ± 1.42	75.7 ± 1.71	n = 23	[BCH] Beckman Coulter UniCel DxC 800
101.0 ± 3.26	146.2 ± 4.04	219.0 ± 5.69	66.4 ± 4.19	86.6 ± 4.76	n = 14	[JJE] Ortho Vitros 250/350/950
102.8 ± 5.23	148.9 ± 5.40	220.2 ± 9.09	67.9 ± 4.49	87.4 ± 5.47	n = 25	[JJF] Ortho Vitros 5,1FS
105.1 ± 3.68	154.4 ± 3.78	226.5 ± 1.22	68.4 ± 5.68	92.0 ± 0.75	n = 5	[JJG] Ortho Vitros 5600
86.8 ± 2.59	143.4 ± 4.35	217.8 ± 6.41	54.3 ± 1.78	76.4 ± 2.47	n = 14	[ROC] Roche cobas c501
84.9 ± 1.28	139.2 ± 1.30	215.2 ± 2.41	53.1 ± 1.12	74.9 ± 1.42	n = 13	[ROT] Roche Cobas INTEGRA
86.0 ± 3.09	141.4 ± 3.96	215.2 ± 6.47	54.8 ± 2.04	76.6 ± 3.08	n = 37	[ROD] Roche MODULAR D/P
87.5 ± 1.86	143.2 ± 3.23	218.4 ± 4.72	56.3 ± 2.26	78.5 ± 1.86	n = 3	[BYA] Siemens ADVIA 1650
90.9 ± 3.77	148.6 ± 5.09	225.3 ± 6.20	58.4 ± 3.45	80.9 ± 3.91	n = 15	[BYE] Siemens ADVIA 1800
88.5 ± 4.53	144.7 ± 7.58	220.3 ± 12.34	56.5 ± 2.74	79.0 ± 4.51	n = 3	[BYB] Siemens ADVIA 2400
86.0 ± 2.09	137.9 ± 2.55	200.8 ± 2.92	61.3 ± 1.82	80.9 ± 2.62	n = 11	[DUE] Siemens Dimension EXL
84.6 ± 2.62	135.6 ± 3.27	199.9 ± 4.04	60.3 ± 1.86	79.0 ± 2.23	n = 42	[DUR] Siemens Dimension RxL
87.3 ± 2.25	147.0 ± 2.27	220.7 ± 4.40	58.9 ± 1.48	80.5 ± 2.19	n = 19	[DUT] Siemens Dimension Vista
86.5 ± 1.76	137.8 ± 3.58	202.8 ± 4.31	60.4 ± 1.46	79.9 ± 1.67	n = 19	[DUX] Siemens Dimension Xpand
						<Reagents>
79.7 ± 0.51	123.8 ± 2.36	182.8 ± 1.54	50.0 ± 0.90	70.0 ± 1.80	n = 3	[AX1] Abaxis
84.0 ± 2.40	140.1 ± 3.77	211.2 ± 5.83	52.8 ± 1.84	74.1 ± 2.45	n = 13	[AB1] Abbott
83.1 ± 2.59	137.7 ± 3.71	207.0 ± 5.05	55.2 ± 1.80	75.4 ± 2.29	n = 60	[BC1] Beckman Coulter
75.5 ± 2.91	123.8 ± 4.71	187.0 ± 7.14	47.6 ± 2.10	66.6 ± 2.67	n = 46	[OL1] Beckman Coulter AU Series
82.1 ± 4.44	137.2 ± 5.93	208.0 ± 12.04	54.7 ± 4.06	76.3 ± 5.84	n = 6	[CR1] Carolina
61.2 ± 28.56	130.1 ± 14.85	173.0 ± 68.08	44.7 ± 12.34	59.3 ± 27.66	n = 3	[JA1] JAS Diagnostics
102.3 ± 4.54	148.6 ± 5.43	220.6 ± 7.79	67.3 ± 4.52	87.4 ± 5.30	n = 45	[JJ1] Ortho Clinical Diagnostics
86.8 ± 2.59	143.4 ± 4.35	217.8 ± 6.41	54.3 ± 1.78	76.4 ± 2.47	n = 14	[RO4] Roche cobas c311/c501/c502/c701
86.0 ± 3.09	141.4 ± 3.96	215.2 ± 6.47	54.8 ± 2.04	76.6 ± 3.08	n = 37	[RO2] Roche Hitachi and Modular D/P
84.9 ± 1.28	139.2 ± 1.30	215.2 ± 2.41	53.1 ± 1.12	74.9 ± 1.42	n = 13	[RO1] Roche Integra and MIRA
89.5 ± 4.20	146.6 ± 6.07	222.7 ± 8.39	57.4 ± 3.27	79.8 ± 3.83	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
85.8 ± 2.56	138.3 ± 5.27	203.4 ± 8.19	60.2 ± 1.87	79.7 ± 2.25	n = 90	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Aspartate Aminotransferase (U/L 37°C)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
75.7 ± 4.16	234.7 ± 11.95	454.5 ± 30.74	70.8 ± 4.52	157.0 ± 8.18	n = 359	[---] All Methods & Instruments
						<Instruments>
78.0 ± 0.90	224.5 ± 4.53	427.0 ± 12.65	71.0 ± 0.90	155.0 ± 0.90	n = 3	[AXA] Abaxis Piccolo
75.3 ± 2.30	234.0 ± 6.59	450.6 ± 10.05	70.8 ± 1.92	155.4 ± 4.27	n = 12	[ABJ] Abbott Architect c System
69.0 ± 2.70	210.6 ± 8.93	406.9 ± 15.87	64.3 ± 2.44	140.6 ± 5.52	n = 48	[OLC] Beckman Coulter AU Chemistry System
73.4 ± 3.94	228.2 ± 10.15	426.4 ± 38.93	70.2 ± 1.78	154.0 ± 9.95	n = 8	[BCS] Beckman Coulter CX
75.4 ± 3.24	229.0 ± 6.63	441.0 ± 19.62	72.6 ± 1.72	156.5 ± 6.80	n = 13	[BCX] Beckman Coulter LX-20
75.3 ± 2.06	232.1 ± 4.41	441.8 ± 14.98	73.0 ± 2.01	156.1 ± 3.51	n = 19	[BCG] Beckman Coulter UniCel DxC 600
75.5 ± 1.37	232.0 ± 4.22	440.0 ± 10.70	73.6 ± 1.38	156.5 ± 4.02	n = 23	[BCH] Beckman Coulter UniCel DxC 800
77.4 ± 3.00	241.7 ± 7.89	511.0 ± 18.16	71.1 ± 3.25	159.1 ± 6.98	n = 14	[JJE] Ortho Vitros 250/350/950
75.5 ± 2.93	236.2 ± 9.23	491.6 ± 19.52	69.6 ± 2.84	155.4 ± 5.70	n = 25	[JJF] Ortho Vitros 5,1FS
76.2 ± 1.07	237.5 ± 3.18	475.6 ± 20.82	69.2 ± 0.80	156.6 ± 1.37	n = 5	[JJG] Ortho Vitros 5600
78.7 ± 1.54	246.3 ± 6.86	480.8 ± 11.99	73.8 ± 1.56	162.9 ± 4.58	n = 14	[ROC] Roche cobas c501
76.9 ± 1.69	239.3 ± 4.93	469.9 ± 7.91	72.3 ± 1.45	159.5 ± 2.90	n = 13	[ROT] Roche Cobas INTEGRA
78.5 ± 2.78	240.2 ± 7.23	462.4 ± 13.75	74.5 ± 2.68	160.4 ± 5.08	n = 37	[ROD] Roche MODULAR D/P
81.5 ± 1.86	248.5 ± 3.63	479.0 ± 7.24	76.7 ± 0.51	165.3 ± 2.26	n = 3	[BYA] Siemens ADVIA 1650
84.3 ± 2.90	256.9 ± 5.91	492.5 ± 12.60	79.5 ± 3.35	171.6 ± 5.51	n = 15	[BYE] Siemens ADVIA 1800
81.6 ± 4.72	249.9 ± 12.42	480.6 ± 22.75	76.5 ± 5.40	166.0 ± 6.37	n = 3	[BYB] Siemens ADVIA 2400
75.6 ± 2.23	236.9 ± 2.64	453.8 ± 5.67	70.2 ± 1.09	158.9 ± 2.49	n = 10	[DUE] Siemens Dimension EXL
75.1 ± 2.36	233.6 ± 5.51	450.8 ± 9.81	68.6 ± 2.51	157.3 ± 4.20	n = 43	[DUR] Siemens Dimension RxL
73.6 ± 3.62	234.5 ± 7.70	457.2 ± 10.46	67.1 ± 3.16	157.9 ± 5.50	n = 19	[DUT] Siemens Dimension Vista
76.9 ± 2.25	237.2 ± 5.94	457.0 ± 11.45	70.3 ± 2.22	160.0 ± 4.31	n = 19	[DUX] Siemens Dimension Xpand
						<Reagents>
78.0 ± 0.90	224.5 ± 4.53	427.0 ± 12.65	71.0 ± 0.90	155.0 ± 0.90	n = 3	[AX1] Abaxis
75.2 ± 2.17	234.3 ± 6.27	451.5 ± 9.88	70.7 ± 1.83	155.6 ± 4.03	n = 13	[AB1] Abbott
75.2 ± 2.21	231.2 ± 5.63	439.0 ± 13.19	73.1 ± 1.85	155.8 ± 4.51	n = 61	[BC1] Beckman Coulter
68.9 ± 2.61	210.1 ± 8.12	406.2 ± 14.56	64.2 ± 2.37	140.3 ± 5.18	n = 46	[OL1] Beckman Coulter AU Series
78.8 ± 6.02	246.5 ± 17.62	479.7 ± 38.18	75.1 ± 7.74	166.8 ± 14.96	n = 6	[CR1] Carolina
69.4 ± 10.30	231.1 ± 3.72	426.3 ± 35.08	69.5 ± 1.86	141.1 ± 26.37	n = 3	[JA1] JAS Diagnostics
76.1 ± 2.85	238.1 ± 8.59	496.0 ± 22.47	70.0 ± 2.87	156.5 ± 5.84	n = 45	[JJ1] Ortho Clinical Diagnostics
78.7 ± 1.54	246.3 ± 6.86	480.8 ± 11.99	73.8 ± 1.56	162.9 ± 4.58	n = 14	[RO4] Roche cobas c311/c501/c502/c701
78.5 ± 2.78	240.2 ± 7.23	462.4 ± 13.75	74.5 ± 2.68	160.4 ± 5.08	n = 37	[RO2] Roche Hitachi and Modular D/P
76.9 ± 1.69	239.3 ± 4.93	469.9 ± 7.91	72.3 ± 1.45	159.5 ± 2.90	n = 13	[RO1] Roche Integra and MIRA
83.3 ± 3.42	254.1 ± 8.35	487.4 ± 15.55	78.3 ± 3.67	169.1 ± 6.32	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
75.3 ± 2.81	235.0 ± 6.04	453.6 ± 10.35	69.0 ± 2.71	158.2 ± 4.53	n = 89	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

α-Amylase (U/L 37°C)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
99.9 ± 14.79	251.1 ± 50.35	59.9 ± 6.95	55.1 ± 7.11	157.0 ± 28.53	n = 314	[---] All Methods & Instruments
						<Instruments>
107.8 ± 2.76	278.6 ± 7.09	66.7 ± 1.85	56.1 ± 1.90	170.9 ± 4.26	n = 9	[ABJ] Abbott Architect c System
85.5 ± 5.15	222.4 ± 12.26	51.1 ± 3.49	44.7 ± 2.53	137.3 ± 7.12	n = 37	[OLC] Beckman Coulter AU Chemistry System
113.8 ± 29.30	285.1 ±121.70	76.4 ± 26.10	69.1 ± 4.38	179.9 ± 64.51	n = 3	[BCS] Beckman Coulter CX
94.0 ± 14.88	204.9 ± 68.13	60.7 ± 5.52	66.7 ± 6.37	138.8 ± 34.72	n = 13	[BCX] Beckman Coulter LX-20
105.3 ± 8.91	252.9 ± 48.60	64.1 ± 3.41	62.0 ± 4.96	161.4 ± 23.08	n = 16	[BCG] Beckman Coulter UniCel DxC 600
103.6 ± 13.81	242.5 ± 60.89	64.1 ± 3.55	64.8 ± 5.30	157.2 ± 30.04	n = 22	[BCH] Beckman Coulter UniCel DxC 800
67.4 ± 1.74	160.6 ± 6.54	41.4 ± 3.14	49.4 ± 3.10	100.5 ± 4.54	n = 11	[JJE] Ortho Vitros 250/350/950
68.4 ± 4.92	161.6 ± 9.28	40.6 ± 4.46	51.4 ± 4.09	103.0 ± 6.60	n = 24	[JJF] Ortho Vitros 5,1FS
72.5 ± 1.23	163.1 ± 13.84	43.3 ± 0.90	51.7 ± 4.24	106.5 ± 0.57	n = 5	[JJG] Ortho Vitros 5600
101.3 ± 2.60	250.9 ± 4.69	61.0 ± 0.87	59.4 ± 1.07	157.3 ± 2.78	n = 15	[ROC] Roche cobas c501
101.6 ± 1.70	246.4 ± 3.36	61.0 ± 1.12	60.2 ± 1.09	157.7 ± 3.43	n = 10	[ROT] Roche Cobas INTEGRA
99.7 ± 2.22	247.9 ± 4.74	59.9 ± 1.78	59.3 ± 1.48	156.2 ± 3.02	n = 32	[ROD] Roche MODULAR D/P
105.3 ± 2.26	260.0 ± 2.70	62.3 ± 1.37	60.3 ± 1.37	163.8 ± 3.23	n = 3	[BYA] Siemens ADVIA 1650
106.6 ± 2.63	265.7 ± 8.18	63.5 ± 1.93	61.1 ± 1.64	166.7 ± 4.40	n = 14	[BYE] Siemens ADVIA 1800
100.1 ± 3.72	249.6 ± 11.95	59.5 ± 2.74	56.8 ± 2.36	156.1 ± 6.58	n = 3	[BYB] Siemens ADVIA 2400
110.4 ± 1.06	296.8 ± 4.88	62.8 ± 1.14	52.6 ± 0.72	180.7 ± 2.67	n = 8	[DUE] Siemens Dimension EXL
110.8 ± 1.96	296.3 ± 5.15	63.1 ± 1.39	52.6 ± 1.22	181.6 ± 3.11	n = 43	[DUR] Siemens Dimension RxL
106.1 ± 2.67	285.2 ± 9.82	59.8 ± 1.73	49.4 ± 1.07	173.7 ± 5.26	n = 19	[DUT] Siemens Dimension Vista
111.3 ± 1.35	297.0 ± 5.80	63.4 ± 1.20	52.5 ± 0.96	181.6 ± 2.93	n = 17	[DUX] Siemens Dimension Xpand
						<Reagents>
107.8 ± 2.76	278.6 ± 7.09	66.7 ± 1.85	56.1 ± 1.90	170.9 ± 4.26	n = 9	[AB1] Abbott
93.8 ± 14.82	199.2 ± 67.38	61.2 ± 4.98	68.2 ± 7.23	135.5 ± 32.61	n = 29	[BC1] Beckman Coulter*
109.9 ± 2.48	273.7 ± 5.44	65.5 ± 1.70	61.8 ± 1.74	172.3 ± 3.40	n = 24	[BC2] Beckman Coulter IFCC Standardized
85.3 ± 4.96	222.3 ± 12.49	51.0 ± 3.40	44.6 ± 2.37	137.0 ± 7.11	n = 36	[OL1] Beckman Coulter AU Series
68.4 ± 5.06	161.9 ± 8.63	41.1 ± 4.37	50.9 ± 4.14	102.7 ± 6.06	n = 42	[JJ1] Ortho Clinical Diagnostics
101.1 ± 2.61	250.5 ± 4.81	60.9 ± 0.90	59.3 ± 1.13	156.9 ± 3.05	n = 16	[RO4] Roche cobas c311/c501/c502/c701
99.7 ± 2.19	248.0 ± 4.76	60.0 ± 1.81	59.4 ± 1.50	156.3 ± 2.94	n = 33	[RO2] Roche Hitachi and Modular D/P
101.6 ± 1.70	246.4 ± 3.36	61.0 ± 1.12	60.2 ± 1.09	157.7 ± 3.43	n = 10	[RO1] Roche Integra and MIRA
105.3 ± 3.82	261.9 ± 10.41	62.6 ± 2.54	60.3 ± 2.35	164.2 ± 6.37	n = 22	[BY1] Siemens ADVIA/ADVIA Centaur
110.2 ± 2.73	295.0 ± 7.23	62.6 ± 1.90	52.0 ± 1.70	180.6 ± 4.26	n = 86	[DA5] Siemens Dimension

*A greater than expected variation was observed for results submitted by users of Beckman Coulter amylase reagents. Review of these data suggests that this variation was attributable to misidentification of reagent by a significant number of laboratories that had recently converted to Beckman Coulter's new IFCC-Standardized amylase reagent (AMY7), but failed to identify the appropriate selection of reagent (Beckman Coulter IFCC Standardized).

Summary of Participant Performance (Mean and Standard Deviation)

Alkaline Phosphatase (U/L 37°C)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
125.9 ± 12.13	373.2 ± 44.11	169.7 ± 16.94	56.4 ± 10.94	181.2 ± 18.03	n = 358	[---] All Methods & Instruments
						<Instruments>
112.4 ± 1.02	315.0 ± 7.24	149.9 ± 5.22	46.6 ± 1.02	158.3 ± 3.16	n = 3	[AXA] Abaxis Piccolo
133.0 ± 4.87	385.0 ± 15.21	177.5 ± 6.93	56.2 ± 2.44	188.9 ± 7.62	n = 12	[ABJ] Abbott Architect c System
116.0 ± 6.17	337.0 ± 17.15	155.8 ± 8.32	48.4 ± 2.78	164.9 ± 8.88	n = 48	[OLC] Beckman Coulter AU Chemistry System
113.8 ± 4.38	337.7 ± 29.68	151.9 ± 6.99	50.0 ± 3.35	166.2 ± 8.31	n = 8	[BCS] Beckman Coulter CX
116.7 ± 7.00	350.8 ± 4.68	155.8 ± 10.44	49.9 ± 3.54	166.5 ± 8.09	n = 13	[BCX] Beckman Coulter LX-20
116.8 ± 6.15	342.0 ± 15.80	156.4 ± 6.95	49.5 ± 2.36	167.4 ± 6.98	n = 19	[BCG] Beckman Coulter UniCel DxC 600
118.0 ± 4.35	344.6 ± 13.74	157.8 ± 6.47	50.1 ± 1.52	169.9 ± 5.00	n = 24	[BCH] Beckman Coulter UniCel DxC 800
132.3 ± 4.68	447.0 ± 14.03	178.6 ± 8.49	81.3 ± 4.12	196.7 ± 9.40	n = 13	[JJE] Ortho Vitros 250/350/950
128.8 ± 5.76	448.3 ± 17.39	178.0 ± 8.32	81.3 ± 3.50	191.7 ± 8.53	n = 25	[JJF] Ortho Vitros 5,1FS
128.3 ± 7.02	447.5 ± 24.21	174.5 ± 4.91	81.3 ± 3.12	188.2 ± 12.01	n = 5	[JJG] Ortho Vitros 5600
127.4 ± 3.36	372.0 ± 7.94	171.7 ± 3.41	55.7 ± 1.47	183.9 ± 5.95	n = 14	[ROC] Roche cobas c501
125.0 ± 3.13	368.2 ± 6.11	168.8 ± 4.30	53.5 ± 1.23	180.2 ± 2.84	n = 12	[ROT] Roche Cobas INTEGRA
123.6 ± 3.36	357.2 ± 8.15	166.1 ± 3.98	54.0 ± 1.17	176.9 ± 5.05	n = 37	[ROD] Roche MODULAR D/P
126.3 ± 3.07	369.2 ± 10.49	170.1 ± 4.38	53.2 ± 1.54	181.3 ± 4.06	n = 3	[BYA] Siemens ADVIA 1650
130.6 ± 3.92	381.1 ± 12.99	173.8 ± 5.55	55.1 ± 1.29	186.9 ± 3.85	n = 15	[BYE] Siemens ADVIA 1800
121.5 ± 2.74	351.7 ± 6.73	162.7 ± 4.06	51.3 ± 0.51	174.5 ± 2.74	n = 3	[BYB] Siemens ADVIA 2400
150.4 ± 6.02	424.2 ± 14.35	200.1 ± 5.66	71.1 ± 2.05	212.4 ± 7.28	n = 10	[DUE] Siemens Dimension EXL
146.5 ± 8.56	418.8 ± 17.55	196.3 ± 10.24	68.0 ± 7.62	210.1 ± 10.60	n = 43	[DUR] Siemens Dimension RxL
120.6 ± 4.98	343.8 ± 13.11	160.1 ± 7.85	51.1 ± 4.31	169.3 ± 5.24	n = 19	[DUT] Siemens Dimension Vista
137.9 ± 6.70	394.8 ± 11.83	185.3 ± 6.69	63.0 ± 4.41	198.2 ± 10.42	n = 19	[DUX] Siemens Dimension Xpand
						<Reagents>
112.4 ± 1.02	315.0 ± 7.24	149.9 ± 5.22	46.6 ± 1.02	158.3 ± 3.16	n = 3	[AX1] Abaxis
133.4 ± 4.77	386.7 ± 15.63	178.4 ± 7.44	56.5 ± 2.58	189.6 ± 7.69	n = 13	[AB1] Abbott
117.2 ± 5.07	343.6 ± 14.66	156.7 ± 6.81	50.0 ± 2.10	168.4 ± 6.16	n = 59	[BC1] Beckman Coulter
115.9 ± 5.82	336.6 ± 16.19	155.6 ± 7.89	48.3 ± 2.61	164.8 ± 8.28	n = 47	[OL1] Beckman Coulter AU Series
106.1 ± 20.59	309.8 ± 55.29	144.6 ± 27.85	47.0 ± 7.80	156.8 ± 15.10	n = 5	[CR1] Carolina
129.0 ± 13.55	375.5 ± 38.76	171.4 ± 6.66	54.3 ± 5.91	184.4 ± 12.82	n = 3	[JA1] JAS Diagnostics
129.9 ± 6.03	447.0 ± 17.91	177.9 ± 8.16	81.2 ± 3.58	192.8 ± 9.76	n = 44	[JJ1] Ortho Clinical Diagnostics
127.4 ± 3.36	372.0 ± 7.94	171.7 ± 3.41	55.7 ± 1.47	183.9 ± 5.95	n = 14	[RO4] Roche cobas c311/c501/c502/c701
123.6 ± 3.36	357.2 ± 8.15	166.1 ± 3.98	54.0 ± 1.17	176.9 ± 5.05	n = 37	[RO2] Roche Hitachi and Modular D/P
125.1 ± 2.97	368.1 ± 5.83	168.7 ± 4.02	53.6 ± 1.25	180.1 ± 2.60	n = 13	[RO1] Roche Integra and MIRA
127.8 ± 5.84	372.5 ± 18.50	170.8 ± 7.89	54.0 ± 2.17	183.9 ± 7.09	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
140.6 ± 13.57	403.2 ± 34.59	189.1 ± 17.23	64.1 ± 9.29	201.2 ± 19.11	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

γ-Glutamyltransferase (U/L 37°C)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
71.8 ± 17.48	208.1 ± 43.88	43.3 ± 10.36	24.2 ± 5.88	120.7 ± 27.74	n = 303	[---] All Methods & Instruments
						<Instruments>
71.8 ± 2.99	215.0 ± 9.12	42.8 ± 2.12	25.1 ± 1.57	122.7 ± 5.75	n = 12	[ABJ] Abbott Architect c System
55.9 ± 2.72	162.6 ± 6.83	34.6 ± 1.83	20.7 ± 1.24	94.1 ± 4.33	n = 45	[OLC] Beckman Coulter AU Chemistry System
65.0 ± 9.72	200.8 ± 32.25	39.8 ± 4.08	21.1 ± 1.11	113.6 ± 16.26	n = 7	[BCS] Beckman Coulter CX
67.0 ± 3.15	207.8 ± 7.74	40.1 ± 3.34	19.9 ± 1.45	116.7 ± 4.67	n = 11	[BCX] Beckman Coulter LX-20
70.1 ± 3.32	215.7 ± 6.98	42.3 ± 2.14	19.5 ± 1.27	121.8 ± 4.02	n = 13	[BCG] Beckman Coulter UniCel DxC 600
70.0 ± 1.77	214.3 ± 5.81	42.0 ± 1.46	19.6 ± 1.15	120.6 ± 2.87	n = 18	[BCH] Beckman Coulter UniCel DxC 800
111.6 ± 3.43	333.9 ± 16.51	65.0 ± 1.77	27.7 ± 1.26	194.9 ± 10.16	n = 10	[JJE] Ortho Vitros 250/350/950
111.2 ± 3.69	326.5 ± 12.61	65.9 ± 2.00	28.4 ± 1.12	190.0 ± 6.56	n = 24	[JJF] Ortho Vitros 5,1FS
111.8 ± 1.55	329.9 ± 7.46	67.0 ± 0.00	29.2 ± 0.80	192.6 ± 3.79	n = 5	[JJG] Ortho Vitros 5600
60.6 ± 1.23	180.0 ± 4.68	36.6 ± 1.22	20.9 ± 0.58	103.3 ± 2.43	n = 14	[ROC] Roche cobas c501
59.5 ± 1.86	177.3 ± 3.14	36.0 ± 0.91	20.6 ± 1.03	102.6 ± 1.93	n = 11	[ROT] Roche Cobas INTEGRA
61.6 ± 1.59	185.5 ± 4.42	36.8 ± 1.27	20.8 ± 1.14	105.1 ± 2.76	n = 34	[ROD] Roche MODULAR D/P
66.0 ± 1.80	193.7 ± 3.16	40.8 ± 1.54	23.8 ± 1.54	111.2 ± 2.36	n = 3	[BYA] Siemens ADVIA 1650
65.7 ± 1.78	197.2 ± 5.34	40.0 ± 0.81	22.8 ± 1.78	112.9 ± 2.79	n = 15	[BYE] Siemens ADVIA 1800
86.6 ± 1.77	237.4 ± 2.58	52.9 ± 1.27	34.9 ± 2.38	142.0 ± 1.88	n = 9	[DUE] Siemens Dimension EXL
86.2 ± 2.61	236.1 ± 4.68	52.2 ± 2.65	34.7 ± 2.07	141.4 ± 3.19	n = 32	[DUR] Siemens Dimension RxL
85.0 ± 2.32	243.1 ± 4.69	50.6 ± 2.09	30.7 ± 2.57	144.1 ± 3.62	n = 19	[DUT] Siemens Dimension Vista
85.4 ± 1.38	232.7 ± 3.07	51.8 ± 1.18	35.1 ± 1.10	140.3 ± 1.81	n = 9	[DUX] Siemens Dimension Xpand
						<Reagents>
71.8 ± 2.71	215.3 ± 7.19	42.8 ± 2.01	25.1 ± 1.46	122.6 ± 4.88	n = 12	[AB1] Abbott
69.1 ± 2.88	212.9 ± 7.23	41.7 ± 1.93	19.7 ± 1.31	120.0 ± 3.71	n = 45	[BC1] Beckman Coulter
55.8 ± 2.70	162.4 ± 6.84	34.6 ± 1.84	20.7 ± 1.23	94.0 ± 4.34	n = 44	[OL1] Beckman Coulter AU Series
54.3 ± 13.40	160.7 ± 43.20	34.0 ± 5.05	21.5 ± 0.57	92.5 ± 19.51	n = 4	[CR1] Carolina
52.7 ± 14.17	167.3 ± 1.37	42.4 ± 12.55	21.7 ± 2.26	98.0 ± 1.80	n = 3	[JA1] JAS Diagnostics
111.4 ± 3.31	328.6 ± 13.02	65.8 ± 1.90	28.4 ± 1.25	191.2 ± 6.85	n = 39	[JJ1] Ortho Clinical Diagnostics
60.6 ± 1.23	180.0 ± 4.68	36.6 ± 1.22	20.9 ± 0.58	103.3 ± 2.43	n = 14	[RO4] Roche cobas c311/c501/c502/c701
61.6 ± 1.59	185.5 ± 4.42	36.8 ± 1.27	20.8 ± 1.14	105.1 ± 2.76	n = 34	[RO2] Roche Hitachi and Modular D/P
59.5 ± 1.86	177.3 ± 3.14	36.0 ± 0.91	20.6 ± 1.03	102.6 ± 1.93	n = 11	[RO1] Roche Integra and MIRA
65.1 ± 2.43	194.4 ± 6.63	39.4 ± 2.11	22.5 ± 2.12	111.3 ± 4.05	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
85.8 ± 2.35	237.5 ± 5.51	51.8 ± 2.29	33.9 ± 2.86	141.9 ± 3.17	n = 68	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Creatine Kinase (U/L 37°C)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
292.0 ± 22.93	256.5 ± 19.68	62.3 ± 7.47	88.9 ± 7.97	284.0 ± 19.70	n = 327	[---] All Methods & Instruments
						<Instruments>
312.4 ± 7.76	275.6 ± 6.19	68.1 ± 1.72	98.3 ± 2.15	303.6 ± 6.50	n = 11	[ABJ] Abbott Architect c System
264.1 ± 17.06	235.4 ± 11.38	56.4 ± 3.42	80.8 ± 4.79	261.6 ± 13.10	n = 42	[OLC] Beckman Coulter AU Chemistry System
283.7 ± 28.61	252.1 ± 18.36	60.0 ± 7.22	84.4 ± 7.38	269.0 ± 24.16	n = 6	[BCS] Beckman Coulter CX
306.6 ± 21.20	263.5 ± 16.32	66.7 ± 3.74	91.3 ± 3.66	290.7 ± 16.73	n = 13	[BCX] Beckman Coulter LX-20
308.0 ± 13.99	266.4 ± 13.69	65.9 ± 2.77	91.1 ± 3.78	295.2 ± 7.79	n = 16	[BCG] Beckman Coulter UniCel DxC 600
311.2 ± 10.52	271.1 ± 10.33	65.9 ± 2.30	91.3 ± 3.02	297.0 ± 10.01	n = 23	[BCH] Beckman Coulter UniCel DxC 800
323.1 ± 17.77	293.3 ± 16.80	72.9 ± 3.52	98.2 ± 4.05	326.6 ± 14.67	n = 11	[JJE] Ortho Vitros 250/350/950
322.0 ± 14.96	293.5 ± 15.07	75.6 ± 2.34	99.4 ± 3.91	323.4 ± 15.28	n = 23	[JJF] Ortho Vitros 5,1FS
317.8 ± 17.01	288.7 ± 22.01	73.3 ± 2.94	98.1 ± 2.33	319.6 ± 14.65	n = 5	[JJG] Ortho Vitros 5600
293.2 ± 11.63	255.5 ± 12.97	59.5 ± 1.52	86.5 ± 2.03	283.9 ± 11.52	n = 15	[ROC] Roche cobas c501
278.2 ± 9.57	237.7 ± 9.24	53.5 ± 3.82	78.5 ± 4.87	268.1 ± 8.27	n = 10	[ROT] Roche Cobas INTEGRA
290.0 ± 7.11	253.5 ± 7.40	63.7 ± 1.63	91.5 ± 2.40	277.3 ± 7.31	n = 35	[ROD] Roche MODULAR D/P
282.1 ± 7.44	255.0 ± 5.48	60.3 ± 1.37	87.0 ± 0.90	283.2 ± 5.00	n = 3	[BYA] Siemens ADVIA 1650
286.5 ± 11.12	260.1 ± 8.69	62.1 ± 1.83	89.5 ± 2.46	288.0 ± 8.79	n = 15	[BYE] Siemens ADVIA 1800
278.3 ± 1.37	252.5 ± 3.63	58.3 ± 1.37	86.0 ± 0.90	278.0 ± 3.61	n = 3	[BYB] Siemens ADVIA 2400
297.8 ± 12.08	260.8 ± 9.65	66.0 ± 1.04	94.1 ± 5.50	288.7 ± 7.01	n = 9	[DUE] Siemens Dimension EXL
283.1 ± 17.28	251.0 ± 11.26	56.2 ± 7.74	84.0 ± 8.46	280.4 ± 9.76	n = 42	[DUR] Siemens Dimension RxL
273.3 ± 18.03	243.7 ± 10.52	57.8 ± 6.34	84.9 ± 7.54	272.9 ± 13.05	n = 20	[DUT] Siemens Dimension Vista
294.1 ± 15.98	257.3 ± 11.67	60.8 ± 6.78	89.1 ± 8.17	284.7 ± 9.55	n = 16	[DUX] Siemens Dimension Xpand
						<Reagents>
312.4 ± 7.76	275.6 ± 6.19	68.1 ± 1.72	98.3 ± 2.15	303.6 ± 6.50	n = 11	[AB1] Abbott
309.6 ± 14.38	268.3 ± 12.90	66.3 ± 2.76	91.1 ± 3.48	295.9 ± 10.41	n = 55	[BC1] Beckman Coulter
263.5 ± 17.19	235.0 ± 11.21	56.4 ± 3.24	80.7 ± 4.61	261.2 ± 13.09	n = 40	[OL1] Beckman Coulter AU Series
255.1 ± 21.79	232.4 ± 13.00	54.0 ± 2.41	76.7 ± 2.03	254.2 ± 9.68	n = 5	[CR1] Carolina
321.7 ± 16.13	292.8 ± 16.71	74.6 ± 3.32	98.8 ± 3.78	323.7 ± 15.21	n = 39	[JJ1] Ortho Clinical Diagnostics
293.5 ± 11.21	256.2 ± 12.70	59.7 ± 1.69	86.7 ± 2.14	284.2 ± 11.04	n = 16	[RO4] Roche cobas c311/c501/c502/c701
289.7 ± 7.10	253.2 ± 7.31	63.7 ± 1.67	91.4 ± 2.34	277.0 ± 7.35	n = 34	[RO2] Roche Hitachi and Modular D/P
278.2 ± 9.57	237.7 ± 9.24	53.5 ± 3.82	78.5 ± 4.87	268.1 ± 8.27	n = 10	[RO1] Roche Integra and MIRA
284.2 ± 10.25	257.2 ± 8.36	61.1 ± 2.26	88.3 ± 2.56	284.9 ± 8.68	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
278.3 ± 16.99	247.9 ± 11.27	55.4 ± 6.97	82.9 ± 7.78	278.5 ± 11.00	n = 61	[DA5] Siemens Dimension
300.4 ± 8.05	261.1 ± 8.94	64.9 ± 1.78	93.6 ± 2.31	287.7 ± 5.70	n = 23	[DA8] Siemens Dimension IFCC Standardized

Summary of Participant Performance (Mean and Standard Deviation)

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

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
79.45 ± 8.61	44.09 ± 7.51	1.74 ± 1.33	1.86 ± 1.09	2.56 ± 1.99	n = 13	[---] All Methods – Results reported in U/L
80.11 ± 11.43	45.14 ± 6.40	0.81 ± 0.37	1.02 ± 0.38	1.24 ± 0.44	n = 204	[-A-] All Methods – Results reported in ng/mL
78.19 ± 11.37	44.58 ± 6.78	0.76 ± 0.17	1.10 ± 0.26	1.37 ± 0.28	n = 18	[AB1] Abbott
89.88 ± 5.18	51.28 ± 2.90	1.94 ± 2.06	2.26 ± 1.85	2.46 ± 1.72	n = 22	[SAA] Beckman Coulter ACCESS
90.53 ± 4.95	52.23 ± 2.54	0.90 ± 0.00	1.31 ± 0.07	1.56 ± 0.08	n = 17	[BC-] Beckman Coulter LX-20/DxC 600/DxI 800
31.97 ± 3.28	30.84 ± 1.52	1.00 ± 0.00	1.00 ± 0.00	1.05 ± 0.08	n = 5	[BS1] Biosite Diagnostics
56.10 ± 2.61	31.74 ± 1.58	0.57 ± 0.09	0.85 ± 0.08	1.02 ± 0.08	n = 16	[JJ1] Ortho Clinical Diagnostics
82.05 ± 3.98	47.27 ± 2.51	1.44 ± 0.13	1.44 ± 0.16	1.74 ± 0.18	n = 29	[RO3] Roche Elecsys/Modular E/e601/e411
70.17 ± 4.03	41.18 ± 2.22	0.60 ± 0.22	0.77 ± 0.20	0.99 ± 0.17	n = 33	[BY1] Siemens ADVIA Centaur/Centaur CP
84.53 ± 5.21	45.51 ± 3.17	0.57 ± 0.31	0.71 ± 0.26	0.81 ± 0.27	n = 44	[DA5] Siemens Dimension
70.80 ± 1.35	39.54 ± 0.60	0.88 ± 0.23	0.93 ± 0.08	1.16 ± 0.12	n = 8	[DA6] Siemens Dimension LOCI
77.86 ± 6.22	45.91 ± 4.66	1.46 ± 0.42	1.84 ± 0.41	2.02 ± 0.69	n = 7	[DP5] Siemens Immulite
90.21 ± 2.04	51.82 ± 2.02	0.72 ± 0.51	1.04 ± 0.74	1.73 ± 0.05	n = 3	[TOM] Tosoh Bioscience
31.67 ± 3.11	19.42 ± 3.24	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	n = 5	[-P-] All Methods – Results reported as %
32.59 ± 2.65	20.49 ± 2.77	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	n = 4	[HL1] Helena Laboratories

Summary of Participant Performance (Mean and Standard Deviation)

Lactate Dehydrogenase (U/L 37°C)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
284.3 ± 29.28	108.2 ± 11.16	70.6 ± 8.00	257.0 ± 26.82	269.8 ± 28.62	n = 264	[-A-] All Methods - Lactate to Pyruvate
801.6 ± 29.42	341.3 ± 22.03	208.1 ± 17.14	741.6 ± 25.64	786.7 ± 29.94	n = 43	[-B-] All Methods - Pyruvate to Lactate
						<Instruments>
289.8 ± 9.22	118.4 ± 7.10	75.8 ± 4.30	267.1 ± 7.20	277.3 ± 9.75	n = 11	[ABJ] Abbott Architect c System
270.6 ± 15.62	102.2 ± 5.61	67.5 ± 4.63	244.1 ± 13.85	255.9 ± 15.07	n = 43	[OLC] Beckman Coulter AU Chemistry System
256.6 ± 21.35	99.6 ± 7.42	64.8 ± 3.86	232.4 ± 16.01	244.8 ± 21.05	n = 7	[BCS] Beckman Coulter CX
255.8 ± 7.78	96.9 ± 3.04	62.8 ± 3.13	232.1 ± 9.21	242.1 ± 13.76	n = 11	[BCX] Beckman Coulter LX-20
256.3 ± 9.70	97.1 ± 3.47	63.4 ± 3.73	230.0 ± 8.37	240.7 ± 8.40	n = 17	[BCG] Beckman Coulter UniCel DxC 600
261.0 ± 6.35	98.5 ± 3.20	64.3 ± 2.24	235.3 ± 4.45	245.3 ± 5.03	n = 20	[BCH] Beckman Coulter UniCel DxC 800
804.0 ± 27.50	352.9 ± 20.52	208.6 ± 15.90	741.9 ± 18.16	785.1 ± 26.40	n = 11	[JJE] Ortho Vitros 250/350/950
797.0 ± 29.33	336.5 ± 22.68	209.6 ± 17.93	737.6 ± 25.14	782.4 ± 28.54	n = 25	[JJF] Ortho Vitros 5,1FS
817.5 ± 8.78	339.7 ± 24.72	199.0 ± 24.34	754.1 ± 31.31	814.6 ± 6.87	n = 5	[JJG] Ortho Vitros 5600
315.2 ± 12.43	118.8 ± 4.70	78.2 ± 5.00	283.1 ± 9.45	298.7 ± 11.62	n = 15	[ROC] Roche cobas c501
311.6 ± 7.65	115.9 ± 3.69	78.1 ± 2.16	278.6 ± 4.40	293.6 ± 4.74	n = 10	[ROT] Roche Cobas INTEGRA
309.5 ± 8.10	116.6 ± 2.58	76.5 ± 3.17	279.4 ± 6.43	293.0 ± 8.04	n = 33	[ROD] Roche MODULAR D/P
303.0 ± 4.60	117.0 ± 0.90	77.0 ± 1.80	277.2 ± 5.90	289.5 ± 3.63	n = 3	[BYA] Siemens ADVIA 1650
314.1 ± 9.14	120.6 ± 3.59	80.0 ± 2.44	284.0 ± 7.75	297.9 ± 8.69	n = 15	[BYE] Siemens ADVIA 1800
291.5 ± 9.03	112.1 ± 2.86	74.7 ± 2.26	264.6 ± 6.45	278.4 ± 6.23	n = 3	[BYB] Siemens ADVIA 2400
296.3 ± 34.43	112.0 ± 11.52	73.5 ± 11.00	267.0 ± 29.03	282.2 ± 36.38	n = 8	[DUE] Siemens Dimension EXL
272.3 ± 25.25	103.6 ± 8.93	67.1 ± 7.11	247.0 ± 25.02	260.8 ± 27.02	n = 36	[DUR] Siemens Dimension RxL
290.1 ± 28.71	110.6 ± 9.54	70.8 ± 7.57	264.1 ± 29.18	276.5 ± 29.15	n = 19	[DUT] Siemens Dimension Vista
282.1 ± 29.68	107.0 ± 11.39	68.4 ± 6.53	256.6 ± 27.44	268.5 ± 27.52	n = 11	[DUX] Siemens Dimension Xpand
						<Reagents>
291.6 ± 11.08	118.6 ± 6.66	76.1 ± 4.23	268.5 ± 8.66	278.9 ± 11.36	n = 12	[AB1] Abbott
257.8 ± 8.22	97.6 ± 3.50	63.6 ± 3.06	232.2 ± 7.78	242.6 ± 7.93	n = 53	[BC1] Beckman Coulter
270.1 ± 15.37	102.0 ± 5.40	67.4 ± 4.51	243.6 ± 13.62	255.4 ± 14.73	n = 42	[OL1] Beckman Coulter AU Series
256.4 ± 31.26	103.4 ± 9.86	66.4 ± 3.79	235.7 ± 17.09	250.3 ± 28.00	n = 4	[CR1] Carolina
800.9 ± 29.60	341.7 ± 23.98	208.5 ± 18.10	741.2 ± 25.42	785.9 ± 30.00	n = 41	[JJ1] Ortho Clinical Diagnostics
315.2 ± 12.43	118.8 ± 4.70	78.2 ± 5.00	283.1 ± 9.45	298.7 ± 11.62	n = 15	[RO4] Roche cobas c311/c501/c502/c701
309.5 ± 8.10	116.6 ± 2.58	76.5 ± 3.17	279.4 ± 6.43	293.0 ± 8.04	n = 33	[RO2] Roche Hitachi and Modular D/P
311.6 ± 7.65	115.9 ± 3.69	78.1 ± 2.16	278.6 ± 4.40	293.6 ± 4.74	n = 10	[RO1] Roche Integra and MIRA
308.9 ± 11.84	118.6 ± 4.59	78.6 ± 3.09	279.9 ± 10.01	293.3 ± 10.57	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
264.6 ± 7.56	101.2 ± 3.28	65.5 ± 4.24	239.5 ± 7.11	251.9 ± 7.74	n = 56	[DA5] Siemens Dimension
321.4 ± 10.87	120.5 ± 3.23	79.2 ± 4.81	291.7 ± 8.53	306.9 ± 11.74	n = 17	[DA8] Siemens Dimension IFCC Standardized

Summary of Participant Performance (Mean and Standard Deviation)

LDH Isoenzyme 1 (%)

Specimen: C51	Specimen: C52	Specimen: C53	Specimen: C54	Specimen: C55	Number	[Code] Instrument or Reagent System
37.1 ± 1.45	35.0 ± 2.79	34.1 ± 3.10	18.6 ± 2.50	42.9 ± 1.28	n = 10	[-P-] All Methods – Results reported as %
						<Instruments>
36.9 ± 1.27	35.9 ± 1.87	35.9 ± 2.70	20.2 ± 1.07	42.6 ± 0.55	n = 5	[HLS] Helena SPIFE
37.0 ± 1.14	32.8 ± 1.46	32.3 ± 2.43	16.0 ± 0.75	43.9 ± 1.88	n = 4	[SEE] Sebia Electrophoresis
						<Reagents>
37.3 ± 1.68	36.6 ± 2.35	35.2 ± 2.78	20.4 ± 0.94	42.5 ± 0.57	n = 6	[HL1] Helena Laboratories
37.0 ± 1.14	32.8 ± 1.46	32.3 ± 2.43	16.0 ± 0.75	43.9 ± 1.88	n = 4	[SE1] Sebia