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Nirav R. Shah, M.D., M.P.H.
Commissioner

Sue Kelly
Executive Deputy Commissioner

Clinical Chemistry Proficiency Testing – May 7, 2012

Enclosed are results from the clinical chemistry proficiency survey shipped May 7, 2012. Test samples were prepared in-house by the quantitative transfer of constituents to pooled human serum. The material was subsequently sterile filtered, dispensed into aliquots and stored frozen at -80 °C. Five specimens (**C71, C72, C73, C74, C75**) were distributed to each participant for analysis.

Outlined below is a description of the process utilized in the evaluation of your laboratory's proficiency test results. A summary of your laboratory's performance for the three most recent surveys is also included with your report.

Target Value: In general, targets utilized are derived from all-participant mean values calculated by robust statistical technique. In some cases, however, it is recognized that method, reagent, and/or instrument specific targets may be required and "peer group" specific targets are used where appropriate. Should an alternate target be required to evaluate your laboratory's data, an asterisk will be placed adjacent to the method, reagent, and/or instrument listing(s) corresponding to the peer group utilized.

Acceptable Range: Represents limits established using criteria specified by CLIA '88 regulations, allowing for rounding to appropriate significant digits. Results falling within this range are scored as 100%. Any result exceeding these limits is considered unsatisfactory and receives a score of 0%. Laboratories must achieve an overall analyte score $\geq 80\%$ in order to meet performance criteria for that analyte.

Range Plots: Plots relative distance of your laboratory's result (represented by an "x") from the target for each sample analyzed. Any result exceeding the high or low limit by $>20\%$ of the acceptable range is indicated by an asterisk (*).

Not Gradable: Results for graded analytes for a few laboratories using unique instrument, reagent, or instrument/reagent combinations were considered "not gradable". For these laboratories, pass credit (100%) has been issued. **If a laboratory is unable to participate in the NYS clinical chemistry proficiency test event as a graded participant for any analyte, it is the responsibility of that laboratory to establish alternate means to verify the accuracy and precision of the test system for any non-graded analyte(s).**

Troponin I, Troponin T, and Estimated Glomerular Filtration Rate: These analytes were included in the May 2012 test event for evaluation only. Although results were not graded, targets and acceptable ranges appropriate for your laboratory's methodology are provided.

The attached statistical report provides a summary of participant data for the five survey specimens. Results for individual instrument and reagent systems where the number of laboratories using those systems is three or greater are provided. Mean and Standard Deviation (1 SD) values shown are calculated by a robust statistical technique that does not assume a Gaussian distribution. These statistical reports are also available on the internet at: <http://www.wadsworth.org/chemheme>

Should you have any questions regarding these reports or wish to obtain an additional copy, please contact the Clinical Chemistry Section at (518) 474-5582.

Note: The use of brand and/or trade names in this report does not constitute an endorsement of the products on the part of the Wadsworth Center or the New York State Department of Health

Summary of Participant Performance (Mean and Standard Deviation)

Glucose (mg/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
94.1 ± 3.02	282.0 ± 5.79	142.5 ± 4.04	63.9 ± 2.93	117.5 ± 3.88	n = 384	[---] All Methods & Instruments
98.0 ± 0.00	280.5 ± 1.86	145.5 ± 2.74	66.0 ± 0.00	120.4 ± 1.02	n = 3	<Instruments>
93.2 ± 1.33	282.1 ± 4.43	139.4 ± 2.14	61.1 ± 1.27	115.3 ± 1.66	n = 22	[AXA] Abaxis Piccolo
94.9 ± 2.34	282.6 ± 5.99	141.8 ± 3.42	62.4 ± 1.46	118.1 ± 2.93	n = 52	[ABJ] Abbott Architect c System
90.9 ± 3.94	272.8 ± 9.10	138.5 ± 7.16	61.2 ± 2.32	114.1 ± 3.85	n = 5	[OLC] Beckman Coulter AU Chemistry System
94.7 ± 1.58	286.2 ± 3.07	143.1 ± 2.72	63.4 ± 1.80	120.4 ± 3.49	n = 4	[BCS] Beckman Coulter CX
93.1 ± 3.52	282.3 ± 5.51	141.8 ± 3.73	63.2 ± 3.24	117.6 ± 3.66	n = 19	[BCX] Beckman Coulter LX-20
92.3 ± 2.41	283.0 ± 3.11	142.5 ± 1.73	63.2 ± 2.17	117.7 ± 1.48	n = 15	[BCG] Beckman Coulter UniCel DxC 600
116.0 ± 0.90	279.9 ± 3.72	157.3 ± 5.09	80.7 ± 0.51	135.5 ± 1.86	n = 3	[BCH] Beckman Coulter UniCel DxC 800
129.2 ± 3.09	287.1 ± 7.19	174.4 ± 1.90	92.7 ± 3.15	151.6 ± 3.79	n = 4	[HEB] HemoCue B-Glucose
97.1 ± 1.13	286.6 ± 0.94	143.4 ± 0.56	62.7 ± 0.97	117.5 ± 1.39	n = 6	[HEC] HemoCue Glucose 201
91.2 ± 1.82	283.0 ± 3.84	141.1 ± 2.35	66.0 ± 1.20	114.4 ± 2.29	n = 12	[IAA] i-STAT
88.8 ± 1.95	279.9 ± 5.15	138.3 ± 2.85	64.0 ± 2.13	111.8 ± 1.98	n = 21	[JJE] Ortho Vitros 250/350/950
88.2 ± 1.82	279.0 ± 4.94	136.9 ± 2.50	63.5 ± 1.15	110.4 ± 1.91	n = 16	[JJF] Ortho Vitros 5,1FS
95.1 ± 2.20	280.8 ± 5.29	142.4 ± 2.66	62.5 ± 1.12	117.5 ± 2.44	n = 17	[JJG] Ortho Vitros 5600
93.1 ± 2.05	280.5 ± 4.53	141.5 ± 1.86	61.5 ± 1.86	116.3 ± 2.26	n = 3	[ROC] Roche cobas c501
95.1 ± 1.01	283.5 ± 4.19	142.0 ± 1.81	62.0 ± 1.23	118.4 ± 1.10	n = 7	[ROH] Roche cobas c701
94.5 ± 0.83	279.5 ± 4.31	140.6 ± 1.89	61.6 ± 1.37	116.2 ± 1.78	n = 5	[ROS] Roche Cobas INTEGRA 400
95.0 ± 1.87	283.8 ± 6.12	142.9 ± 2.79	62.9 ± 1.21	117.9 ± 2.42	n = 33	[ROT] Roche Cobas INTEGRA 800
94.3 ± 1.34	282.2 ± 3.00	142.6 ± 1.53	62.6 ± 0.62	118.1 ± 0.98	n = 20	[ROD] Roche MODULAR D/P
91.7 ± 4.96	280.2 ± 10.49	140.2 ± 6.79	62.5 ± 1.86	117.5 ± 3.63	n = 3	[BYE] Siemens ADVIA 1800
95.6 ± 1.82	282.3 ± 3.74	145.9 ± 2.82	67.7 ± 1.79	120.6 ± 2.29	n = 15	[BYB] Siemens ADVIA 2400
96.5 ± 2.47	285.9 ± 8.37	147.4 ± 3.61	68.5 ± 1.66	121.6 ± 2.97	n = 25	[DUE] Siemens Dimension EXL
93.6 ± 2.16	277.6 ± 6.46	144.2 ± 3.64	66.3 ± 1.54	118.6 ± 3.30	n = 37	[DUR] Siemens Dimension RxL
95.9 ± 1.90	284.1 ± 4.68	146.9 ± 3.12	68.1 ± 1.98	121.1 ± 2.82	n = 21	[DUT] Siemens Dimension Vista
98.0 ± 0.00	280.5 ± 1.86	145.5 ± 2.74	66.0 ± 0.00	120.4 ± 1.02	n = 3	[DUX] Siemens Dimension Xpand
93.2 ± 1.33	282.1 ± 4.43	139.4 ± 2.14	61.1 ± 1.27	115.3 ± 1.66	n = 22	<Reagents>
93.1 ± 2.95	282.9 ± 4.76	142.3 ± 2.84	63.3 ± 2.67	117.7 ± 2.65	n = 42	[AX1] Abaxis
94.7 ± 2.26	282.3 ± 6.06	141.7 ± 3.30	62.3 ± 1.35	117.9 ± 2.85	n = 49	[AB1] Abbott
90.6 ± 6.45	273.6 ± 13.58	136.1 ± 9.19	62.9 ± 6.08	114.1 ± 6.58	n = 3	[BC1] Beckman Coulter
123.1 ± 7.50	283.4 ± 6.89	168.1 ± 9.91	87.6 ± 7.08	144.8 ± 9.59	n = 7	[OL1] Beckman Coulter AU Series
97.1 ± 1.13	286.6 ± 0.94	143.4 ± 0.56	62.7 ± 0.97	117.5 ± 1.39	n = 6	[CR1] Carolina
96.1 ± 2.86	288.8 ± 13.30	143.3 ± 3.07	69.6 ± 4.72	121.6 ± 4.72	n = 3	[HE1] HemoCue
89.2 ± 2.21	280.6 ± 5.08	138.5 ± 3.04	64.3 ± 1.95	111.8 ± 2.49	n = 50	[JA1] JAS Diagnostics
94.6 ± 2.34	280.5 ± 5.17	142.0 ± 2.69	62.3 ± 1.30	117.1 ± 2.58	n = 21	[JJ1] Ortho Clinical Diagnostics
95.0 ± 1.87	283.8 ± 6.12	142.9 ± 2.79	62.9 ± 1.21	117.9 ± 2.42	n = 33	[RO4] Roche cobas c311/c501/c502/c701
94.8 ± 0.97	281.8 ± 4.56	141.5 ± 1.99	61.8 ± 1.28	117.7 ± 1.77	n = 12	[RO2] Roche Hitachi and Modular D/P
94.4 ± 1.62	282.6 ± 3.61	142.8 ± 1.89	62.7 ± 0.76	118.2 ± 1.53	n = 24	[RO1] Roche Integra and MIRA
95.2 ± 2.49	281.6 ± 6.78	145.9 ± 3.67	67.5 ± 1.95	120.2 ± 3.22	n = 98	[BY1] Siemens ADVIA/ADVIA Centaur
98.0 ± 0.00	280.5 ± 1.86	145.5 ± 2.74	66.0 ± 0.00	120.4 ± 1.02	n = 3	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Urea Nitrogen (mg/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
13.7 ± 0.93	38.5 ± 2.26	22.7 ± 1.26	26.1 ± 1.46	18.8 ± 1.06	n = 366	[---] All Methods & Instruments
13.0 ± 0.00	37.7 ± 1.37	22.4 ± 1.02	24.7 ± 0.51	17.7 ± 0.51	n = 3	<Instruments>
13.9 ± 0.37	37.9 ± 0.65	22.6 ± 0.56	26.0 ± 0.00	18.7 ± 0.51	n = 21	[AXA] Abaxis Piccolo
14.0 ± 0.53	39.1 ± 1.18	23.2 ± 0.70	26.4 ± 0.92	19.0 ± 0.70	n = 50	[ABJ] Abbott Architect c System
14.4 ± 0.55	38.8 ± 0.80	22.5 ± 0.83	26.4 ± 1.09	19.0 ± 0.00	n = 5	[OLC] Beckman Coulter AU Chemistry System
13.8 ± 1.46	35.8 ± 1.27	20.3 ± 1.58	23.2 ± 1.46	16.3 ± 1.51	n = 4	[BCS] Beckman Coulter CX
14.2 ± 0.53	39.5 ± 0.80	23.4 ± 0.56	27.3 ± 0.76	19.4 ± 0.56	n = 18	[BCX] Beckman Coulter LX-20
13.2 ± 0.78	36.0 ± 1.43	20.0 ± 1.56	23.3 ± 1.75	16.6 ± 1.30	n = 16	[BCG] Beckman Coulter UniCel DxC 600
13.3 ± 0.51	44.8 ± 0.73	26.4 ± 0.79	30.4 ± 0.79	20.4 ± 0.79	n = 6	[BCH] Beckman Coulter UniCel DxC 800
12.3 ± 0.51	32.9 ± 0.93	20.9 ± 0.75	24.3 ± 0.77	17.8 ± 0.41	n = 12	[IAA] i-STAT
11.9 ± 0.54	32.1 ± 0.69	20.1 ± 0.47	23.4 ± 0.60	16.9 ± 0.67	n = 21	[JJE] Ortho Vitros 250/350/950
11.6 ± 0.56	31.9 ± 0.75	19.9 ± 0.60	23.2 ± 0.73	16.5 ± 0.64	n = 16	[JJF] Ortho Vitros 5,1FS
13.7 ± 0.53	38.7 ± 0.86	22.7 ± 0.59	26.0 ± 0.72	19.0 ± 0.00	n = 17	[JHG] Ortho Vitros 5600
13.3 ± 0.51	38.4 ± 1.02	22.3 ± 0.51	25.7 ± 0.51	18.7 ± 0.51	n = 3	[ROC] Roche cobas c501
13.6 ± 0.55	38.6 ± 1.09	22.8 ± 0.80	26.8 ± 0.80	19.0 ± 0.64	n = 5	[ROH] Roche cobas c701
14.0 ± 0.00	39.0 ± 0.00	22.6 ± 0.55	26.2 ± 0.80	18.4 ± 0.55	n = 5	[ROS] Roche Cobas INTEGRA 400
14.0 ± 0.70	39.0 ± 1.05	23.3 ± 0.69	26.6 ± 0.76	19.1 ± 0.50	n = 32	[ROT] Roche Cobas INTEGRA 800
14.1 ± 0.60	39.7 ± 0.82	22.9 ± 0.49	26.9 ± 0.63	19.1 ± 0.70	n = 20	[ROD] Roche MODULAR D/P
14.3 ± 0.51	40.3 ± 0.51	23.7 ± 0.51	27.3 ± 0.51	19.7 ± 0.51	n = 3	[BYE] Siemens ADVIA 1800
14.0 ± 0.68	39.4 ± 1.23	23.3 ± 0.61	26.7 ± 0.81	19.3 ± 0.84	n = 14	[BYB] Siemens ADVIA 2400
14.0 ± 0.71	39.5 ± 1.29	23.3 ± 0.68	26.9 ± 0.72	19.3 ± 0.58	n = 25	[DUE] Siemens Dimension EXL
13.6 ± 0.70	38.5 ± 1.18	22.7 ± 0.80	26.1 ± 0.96	18.6 ± 0.70	n = 37	[DUR] Siemens Dimension RxL
13.9 ± 0.92	39.5 ± 1.55	23.1 ± 0.96	26.7 ± 1.28	19.2 ± 1.13	n = 20	[DUT] Siemens Dimension Vista
13.0 ± 0.00	37.7 ± 1.37	22.4 ± 1.02	24.7 ± 0.51	17.7 ± 0.51	n = 3	[DUX] Siemens Dimension Xpand
13.9 ± 0.37	37.9 ± 0.65	22.6 ± 0.56	26.0 ± 0.00	18.7 ± 0.51	n = 21	<Reagents>
13.9 ± 0.92	37.8 ± 2.09	21.9 ± 2.04	25.4 ± 2.46	18.2 ± 1.80	n = 42	[AB1] Abbott
14.0 ± 0.54	39.1 ± 1.19	23.1 ± 0.70	26.4 ± 0.93	19.0 ± 0.72	n = 49	[BC1] Beckman Coulter
13.3 ± 0.51	44.8 ± 0.73	26.4 ± 0.79	30.4 ± 0.79	20.4 ± 0.79	n = 6	[OL1] Beckman Coulter AU Series
14.3 ± 0.51	40.6 ± 1.02	24.0 ± 0.90	26.7 ± 0.51	19.3 ± 0.51	n = 3	[IA1] i-STAT
11.9 ± 0.63	32.2 ± 0.87	20.3 ± 0.75	23.6 ± 0.85	17.1 ± 0.81	n = 51	[JA1] JAS Diagnostics
13.7 ± 0.54	38.6 ± 0.87	22.7 ± 0.59	25.9 ± 0.67	19.0 ± 0.00	n = 21	[JJ1] Ortho Clinical Diagnostics
14.0 ± 0.70	39.0 ± 1.05	23.3 ± 0.69	26.6 ± 0.76	19.1 ± 0.50	n = 32	[RO4] Roche cobas c311/c501/c502/c701
13.8 ± 0.48	39.0 ± 0.74	22.7 ± 0.67	26.5 ± 0.83	18.7 ± 0.67	n = 10	[RO2] Roche Hitachi and Modular D/P
14.2 ± 0.62	39.8 ± 0.80	23.0 ± 0.55	27.0 ± 0.61	19.2 ± 0.72	n = 24	[RO1] Roche Integra and MIRA
13.8 ± 0.76	39.1 ± 1.38	23.0 ± 0.82	26.5 ± 1.00	19.0 ± 0.84	n = 96	[BY1] Siemens ADVIA/ADVISIA Centaur
						[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Creatinine (mg/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
1.04 ± 0.09	4.18 ± 0.15	1.72 ± 0.16	2.34 ± 0.16	1.39 ± 0.14	n = 371	[---] All Methods & Instruments
1.03 ± 0.10	4.22 ± 0.27	1.67 ± 0.13	2.33 ± 0.17	1.35 ± 0.09	n = 200	[---] All IDMS Traceable Methods
1.04 ± 0.09	4.19 ± 0.13	1.79 ± 0.18	2.35 ± 0.14	1.45 ± 0.15	n = 168	[---] All Non-IDMS Traceable Methods
1.03 ± 0.08	4.19 ± 0.13	1.81 ± 0.17	2.35 ± 0.12	1.47 ± 0.15	n = 141	[-G-] Alkaline picrate/Jaffe
1.01 ± 0.09	4.15 ± 0.13	1.67 ± 0.12	2.31 ± 0.13	1.35 ± 0.09	n = 136	[-H-] Alkaline picrate/Jaffe-IDMS calibration
1.09 ± 0.10	4.60 ± 0.49	1.65 ± 0.19	2.35 ± 0.25	1.36 ± 0.15	n = 27	[-I-] Enzymatic
1.09 ± 0.09	4.68 ± 0.45	1.66 ± 0.14	2.37 ± 0.23	1.34 ± 0.11	n = 64	[-J-] Enzymatic-IDMS-traceable calibration
1.03 ± 0.05	4.12 ± 0.14	1.67 ± 0.12	2.33 ± 0.05	1.31 ± 0.11	n = 3	[-Z-] Other
<Instruments>						
0.98 ± 0.09	4.08 ± 0.06	1.39 ± 0.02	2.02 ± 0.15	1.22 ± 0.05	n = 3	[AXA] Abaxis Piccolo
1.08 ± 0.03	4.37 ± 0.09	1.80 ± 0.03	2.53 ± 0.05	1.39 ± 0.03	n = 21	[ABJ] Abbott Architect c System
1.00 ± 0.02	4.11 ± 0.09	1.64 ± 0.05	2.28 ± 0.05	1.33 ± 0.05	n = 52	[OLC] Beckman Coulter AU Chemistry System
1.00 ± 0.00	4.19 ± 0.17	1.65 ± 0.07	2.31 ± 0.14	1.38 ± 0.08	n = 5	[BCS] Beckman Coulter CX
0.97 ± 0.04	4.18 ± 0.08	1.61 ± 0.03	2.25 ± 0.05	1.29 ± 0.05	n = 4	[BCX] Beckman Coulter LX-20
0.90 ± 0.05	4.19 ± 0.11	1.52 ± 0.07	2.23 ± 0.06	1.24 ± 0.06	n = 19	[BCG] Beckman Coulter UniCel DxC 600
0.97 ± 0.05	4.21 ± 0.05	1.63 ± 0.05	2.26 ± 0.06	1.32 ± 0.05	n = 16	[BCH] Beckman Coulter UniCel DxC 800
1.20 ± 0.00	5.34 ± 0.44	1.75 ± 0.16	2.39 ± 0.13	1.60 ± 0.06	n = 5	[IAA] i-STAT
1.19 ± 0.05	4.76 ± 0.16	1.77 ± 0.08	2.47 ± 0.13	1.43 ± 0.09	n = 12	[JJE] Ortho Vitros 250/350/950
1.10 ± 0.01	5.00 ± 0.13	1.73 ± 0.05	2.52 ± 0.06	1.40 ± 0.00	n = 21	[JJF] Ortho Vitros 5,1FS
1.10 ± 0.00	4.97 ± 0.19	1.71 ± 0.04	2.50 ± 0.07	1.38 ± 0.04	n = 16	[JJG] Ortho Vitros 5600
0.98 ± 0.09	4.19 ± 0.12	1.54 ± 0.11	2.18 ± 0.10	1.26 ± 0.09	n = 19	[ROC] Roche cobas c501
1.09 ± 0.06	4.04 ± 0.14	1.70 ± 0.09	2.32 ± 0.10	1.40 ± 0.07	n = 3	[ROH] Roche cobas c701
1.00 ± 0.00	4.03 ± 0.07	1.60 ± 0.00	2.20 ± 0.00	1.29 ± 0.06	n = 6	[ROS] Roche Cobas INTEGRA 400
1.00 ± 0.00	4.09 ± 0.12	1.50 ± 0.00	2.10 ± 0.00	1.20 ± 0.01	n = 5	[ROT] Roche Cobas INTEGRA 800
1.05 ± 0.07	4.20 ± 0.11	1.73 ± 0.19	2.35 ± 0.20	1.39 ± 0.14	n = 32	[ROD] Roche MODULAR D/P
1.09 ± 0.06	4.16 ± 0.10	1.67 ± 0.08	2.40 ± 0.10	1.33 ± 0.07	n = 20	[BYE] Siemens ADVIA 1800
1.10 ± 0.03	4.17 ± 0.05	1.76 ± 0.06	2.40 ± 0.09	1.43 ± 0.02	n = 3	[BYB] Siemens ADVIA 2400
1.05 ± 0.06	4.21 ± 0.10	1.95 ± 0.09	2.40 ± 0.00	1.59 ± 0.05	n = 14	[DUE] Siemens Dimension EXL
1.05 ± 0.09	4.20 ± 0.14	1.92 ± 0.13	2.39 ± 0.12	1.57 ± 0.10	n = 25	[DUR] Siemens Dimension RxL
1.00 ± 0.09	4.12 ± 0.12	1.86 ± 0.10	2.31 ± 0.11	1.52 ± 0.10	n = 37	[DUT] Siemens Dimension Vista
1.01 ± 0.08	4.18 ± 0.13	1.90 ± 0.11	2.33 ± 0.14	1.55 ± 0.09	n = 20	[DUX] Siemens Dimension Xpand
<Reagents>						
0.98 ± 0.09	4.08 ± 0.06	1.39 ± 0.02	2.02 ± 0.15	1.22 ± 0.05	n = 3	[AX1] Abaxis
1.08 ± 0.04	4.37 ± 0.09	1.80 ± 0.03	2.53 ± 0.05	1.39 ± 0.03	n = 22	[AB1] Abbott
0.94 ± 0.07	4.19 ± 0.09	1.58 ± 0.08	2.24 ± 0.06	1.28 ± 0.07	n = 43	[BC1] Beckman Coulter
1.00 ± 0.02	4.11 ± 0.09	1.63 ± 0.05	2.28 ± 0.05	1.32 ± 0.04	n = 49	[OL1] Beckman Coulter AU Series
0.98 ± 0.05	4.30 ± 0.18	1.69 ± 0.07	2.41 ± 0.11	1.43 ± 0.05	n = 3	[CR1] Carolina
1.22 ± 0.04	5.47 ± 0.40	1.80 ± 0.15	2.43 ± 0.09	1.60 ± 0.08	n = 4	[IA1] i-STAT
1.09 ± 0.04	4.04 ± 0.16	1.70 ± 0.05	2.23 ± 0.08	1.40 ± 0.07	n = 3	[JA1] JAS Diagnostics
1.13 ± 0.05	4.94 ± 0.19	1.73 ± 0.06	2.51 ± 0.08	1.39 ± 0.05	n = 51	[JJ1] Ortho Clinical Diagnostics
1.00 ± 0.09	4.17 ± 0.13	1.57 ± 0.13	2.20 ± 0.11	1.28 ± 0.11	n = 23	[RO4] Roche cobas c311/c501/c502/c701
1.05 ± 0.07	4.20 ± 0.11	1.73 ± 0.19	2.35 ± 0.20	1.39 ± 0.14	n = 32	[RO2] Roche Hitachi and Modular D/P
1.00 ± 0.00	4.06 ± 0.10	1.56 ± 0.07	2.16 ± 0.06	1.26 ± 0.06	n = 11	[RO1] Roche Integra and MIRA
1.09 ± 0.06	4.16 ± 0.09	1.69 ± 0.09	2.41 ± 0.10	1.35 ± 0.08	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
1.02 ± 0.09	4.17 ± 0.13	1.89 ± 0.11	2.35 ± 0.13	1.55 ± 0.10	n = 95	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Glomerular filtration rate (mL/min/1.73 m²)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
88.5 ± 9.81	17.1 ± 1.52	48.7 ± 5.51	34.1 ± 3.17	60.5 ± 7.24	n = 286	[---] All Methods & Instruments
87.0 ± 10.95	16.8 ± 1.57	49.7 ± 5.15	33.8 ± 3.22	61.3 ± 7.13	n = 164	[-A-] IDMS-traceable MDRD Study Equation
89.3 ± 10.71	17.9 ± 1.13	46.6 ± 5.47	34.6 ± 3.15	58.3 ± 6.93	n = 98	[-B-] Original MDRD Study Equation (4-variable)
90.0 ± 2.71	16.5 ± 1.00	49.8 ± 3.76	33.7 ± 2.07	64.1 ± 4.00	n = 20	[-F-] CKD-EPI Equation
89.5 ± 1.71	15.3 ± 2.26	47.8 ± 10.49	32.0 ± 7.27	61.1 ± 8.46	n = 3	[-Z-] Other

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

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Method
87 (65-110)	17 (14-20)	50 (42-58)	34 (29-40)	64 (54-80)	IDMS-traceable MDRD Study Equation
92 (68-115)	18 (15-22)	49 (41-57)	36 (30-42)	63 (53-79)	Original MDRD Study Equation
87 (65-110)	16 (13-19)	49 (41-56)	33 (27-38)	63 (53-79)	CKD-EPI Equation
101 (75-126)	25 (21-29)	61 (51-77)	45 (38-52)	75 (64-95)	Cockcroft-Gault Equation

Laboratories were asked to report Estimated Glomerular Filtration Rate (eGFR) for samples C71-C75 for a 66-year-old African American man weighing 102 kg.

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

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

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

Allowable ranges are ± 15% of the target eGFR for eGFR ≤ 59 mL/min; ± 25% of the target eGFR for eGFR > 80 mL/min; and a range of -15% to ±25% of the target eGFR for eGFR = 60-80 mL/min.

Note: the NKDEP recommends reporting estimated GFR values greater than or equal to 60 mL/min/1.73 m² as "> 60 mL/min/1.73 m²" and not as an exact number. However, ranges exceeding 60 mL/min are provided as a relative indicator of acceptability for laboratories that report numeric results above that threshold. Note that some laboratories reported results > 60 mL/min/1.73 m² for samples C71 and C75. These data were removed from the calculations of mean and standard deviation since their inclusion would have skewed results. Participant results for specimens C71 and C75 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: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
7.27 ± 0.35	2.84 ± 0.16	5.83 ± 0.27	4.30 ± 0.24	4.83 ± 0.23	n = 332	[---] All Methods & Instruments
7.40 ± 0.23	2.85 ± 0.07	5.87 ± 0.14	4.24 ± 0.12	4.83 ± 0.10	n = 21	<Instruments>
7.86 ± 0.18	3.08 ± 0.10	6.30 ± 0.17	4.59 ± 0.12	5.28 ± 0.16	n = 48	[ABJ] Abbott Architect c System
7.37 ± 0.23	2.89 ± 0.19	5.65 ± 0.27	4.00 ± 0.08	4.70 ± 0.08	n = 5	[OLC] Beckman Coulter AU Chemistry System
7.30 ± 0.00	2.87 ± 0.09	5.62 ± 0.04	4.10 ± 0.08	4.75 ± 0.06	n = 4	[BCS] Beckman Coulter CX
7.21 ± 0.08	2.72 ± 0.07	5.53 ± 0.11	3.99 ± 0.07	4.64 ± 0.09	n = 16	[BCX] Beckman Coulter LX-20
7.21 ± 0.09	2.73 ± 0.05	5.51 ± 0.09	3.97 ± 0.05	4.63 ± 0.07	n = 16	[BCG] Beckman Coulter UniCel DxC 600
6.96 ± 0.12	2.69 ± 0.05	5.66 ± 0.06	4.19 ± 0.07	4.64 ± 0.10	n = 10	[BCH] Beckman Coulter UniCel DxC 800
7.02 ± 0.17	2.74 ± 0.07	5.67 ± 0.13	4.20 ± 0.12	4.66 ± 0.09	n = 21	[JJE] Ortho Vitros 250/350/950
7.03 ± 0.14	2.70 ± 0.00	5.63 ± 0.11	4.18 ± 0.09	4.64 ± 0.11	n = 16	[JJF] Ortho Vitros 5,1FS
7.42 ± 0.15	2.83 ± 0.07	5.86 ± 0.14	4.25 ± 0.10	4.84 ± 0.15	n = 17	[JHG] Ortho Vitros 5600
7.37 ± 0.16	2.80 ± 0.06	5.77 ± 0.11	4.14 ± 0.11	4.77 ± 0.11	n = 5	[ROC] Roche cobas c501
7.35 ± 0.16	2.77 ± 0.06	5.80 ± 0.12	4.16 ± 0.09	4.78 ± 0.11	n = 31	[ROT] Roche Cobas INTEGRA 800
7.39 ± 0.11	2.86 ± 0.06	5.81 ± 0.07	4.23 ± 0.06	4.82 ± 0.09	n = 20	[ROD] Roche MODULAR D/P
7.53 ± 0.14	2.87 ± 0.05	5.93 ± 0.05	4.33 ± 0.05	4.90 ± 0.09	n = 3	[BYE] Siemens ADVIA 1800
7.20 ± 0.16	2.96 ± 0.09	5.97 ± 0.13	4.59 ± 0.12	4.97 ± 0.11	n = 14	[BYB] Siemens ADVIA 2400
7.22 ± 0.22	3.04 ± 0.13	6.04 ± 0.17	4.58 ± 0.18	4.96 ± 0.15	n = 22	[DUE] Siemens Dimension EXL
6.74 ± 0.12	2.76 ± 0.06	5.70 ± 0.12	4.35 ± 0.09	4.75 ± 0.12	n = 36	[DUR] Siemens Dimension RxL
7.26 ± 0.14	3.00 ± 0.09	6.05 ± 0.10	4.56 ± 0.11	5.01 ± 0.11	n = 14	[DUT] Siemens Dimension Vista
						[DUX] Siemens Dimension Xpand
7.40 ± 0.23	2.85 ± 0.07	5.87 ± 0.14	4.24 ± 0.12	4.83 ± 0.10	n = 21	<Reagents>
7.22 ± 0.08	2.73 ± 0.07	5.53 ± 0.10	3.99 ± 0.07	4.65 ± 0.08	n = 41	[AB1] Abbott
7.86 ± 0.18	3.07 ± 0.10	6.30 ± 0.17	4.58 ± 0.12	5.27 ± 0.16	n = 47	[BC1] Beckman Coulter
7.90 ± 0.46	3.20 ± 0.09	6.27 ± 0.23	4.63 ± 0.14	5.15 ± 0.27	n = 3	[OL1] Beckman Coulter AU Series
7.01 ± 0.15	2.71 ± 0.05	5.65 ± 0.11	4.19 ± 0.10	4.65 ± 0.10	n = 47	[JA1] JAS Diagnostics
7.40 ± 0.15	2.82 ± 0.07	5.84 ± 0.13	4.24 ± 0.10	4.82 ± 0.15	n = 20	[JJ1] Ortho Clinical Diagnostics
7.35 ± 0.16	2.77 ± 0.06	5.80 ± 0.12	4.16 ± 0.09	4.78 ± 0.11	n = 31	[RO2] Roche Hitachi and Modular D/P
7.34 ± 0.13	2.80 ± 0.05	5.76 ± 0.10	4.16 ± 0.09	4.76 ± 0.10	n = 7	[RO1] Roche Integra and MIRA
7.40 ± 0.12	2.86 ± 0.06	5.83 ± 0.09	4.25 ± 0.07	4.84 ± 0.09	n = 24	[BY1] Siemens ADVIA/ADVISIA Centaur
7.02 ± 0.31	2.90 ± 0.16	5.89 ± 0.22	4.48 ± 0.17	4.89 ± 0.17	n = 86	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Bilirubin (mg/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
2.05 ± 0.18	0.82 ± 0.12	3.32 ± 0.22	1.25 ± 0.15	2.68 ± 0.18	n = 355	[---] All Methods & Instruments
						<Instruments>
2.13 ± 0.05	0.90 ± 0.00	3.47 ± 0.05	1.30 ± 0.00	2.77 ± 0.05	n = 3	[AXA] Abaxis Piccolo
2.19 ± 0.19	0.85 ± 0.09	3.47 ± 0.20	1.29 ± 0.12	2.80 ± 0.15	n = 21	[ABJ] Abbott Architect c System
2.09 ± 0.07	0.90 ± 0.00	3.18 ± 0.09	1.29 ± 0.04	2.63 ± 0.08	n = 50	[OLC] Beckman Coulter AU Chemistry System
2.32 ± 0.21	1.09 ± 0.11	3.68 ± 0.38	1.56 ± 0.19	2.97 ± 0.32	n = 4	[BCS] Beckman Coulter CX
2.30 ± 0.17	1.05 ± 0.06	3.47 ± 0.20	1.47 ± 0.15	2.97 ± 0.09	n = 4	[BCX] Beckman Coulter LX-20
2.25 ± 0.14	1.01 ± 0.12	3.59 ± 0.19	1.47 ± 0.17	2.90 ± 0.18	n = 18	[BCG] Beckman Coulter UniCel DxC 600
2.25 ± 0.16	1.01 ± 0.08	3.51 ± 0.22	1.46 ± 0.12	2.86 ± 0.18	n = 16	[BCH] Beckman Coulter UniCel DxC 800
2.16 ± 0.08	0.87 ± 0.06	3.40 ± 0.09	1.41 ± 0.07	2.75 ± 0.07	n = 11	[JJE] Ortho Vitros 250/350/950
2.13 ± 0.10	0.80 ± 0.07	3.46 ± 0.16	1.37 ± 0.09	2.77 ± 0.13	n = 21	[JJF] Ortho Vitros 5,1FS
2.00 ± 0.15	0.75 ± 0.07	3.30 ± 0.20	1.30 ± 0.13	2.64 ± 0.14	n = 16	[JJG] Ortho Vitros 5600
1.74 ± 0.06	0.67 ± 0.05	3.04 ± 0.10	1.02 ± 0.07	2.38 ± 0.06	n = 16	[ROC] Roche cobas c501
1.67 ± 0.05	0.60 ± 0.00	2.97 ± 0.05	0.93 ± 0.05	2.30 ± 0.09	n = 3	[ROH] Roche cobas c701
1.72 ± 0.07	0.67 ± 0.05	3.00 ± 0.00	1.00 ± 0.06	2.33 ± 0.10	n = 6	[ROS] Roche Cobas INTEGRA 400
1.80 ± 0.00	0.68 ± 0.08	3.15 ± 0.16	1.06 ± 0.06	2.44 ± 0.14	n = 5	[ROT] Roche Cobas INTEGRA 800
1.89 ± 0.12	0.71 ± 0.05	3.20 ± 0.13	1.11 ± 0.08	2.54 ± 0.12	n = 32	[ROD] Roche MODULAR D/P
2.09 ± 0.07	0.90 ± 0.00	3.50 ± 0.11	1.26 ± 0.06	2.80 ± 0.09	n = 20	[BYE] Siemens ADVIA 1800
2.16 ± 0.26	0.87 ± 0.05	3.59 ± 0.29	1.27 ± 0.14	2.92 ± 0.15	n = 3	[BYB] Siemens ADVIA 2400
1.99 ± 0.10	0.76 ± 0.06	3.33 ± 0.11	1.20 ± 0.00	2.65 ± 0.08	n = 14	[DUE] Siemens Dimension EXL
2.04 ± 0.09	0.78 ± 0.05	3.37 ± 0.09	1.23 ± 0.07	2.69 ± 0.06	n = 25	[DUR] Siemens Dimension RxL
2.00 ± 0.07	0.80 ± 0.00	3.33 ± 0.10	1.24 ± 0.08	2.67 ± 0.07	n = 37	[DUT] Siemens Dimension Vista
2.04 ± 0.09	0.79 ± 0.06	3.36 ± 0.15	1.22 ± 0.10	2.68 ± 0.10	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
2.13 ± 0.05	0.90 ± 0.00	3.47 ± 0.05	1.30 ± 0.00	2.77 ± 0.05	n = 3	[AX1] Abaxis
2.19 ± 0.19	0.85 ± 0.09	3.47 ± 0.20	1.29 ± 0.12	2.80 ± 0.15	n = 21	[AB1] Abbott
2.25 ± 0.16	1.02 ± 0.10	3.54 ± 0.23	1.47 ± 0.16	2.88 ± 0.20	n = 43	[BC1] Beckman Coulter
2.09 ± 0.07	0.90 ± 0.00	3.18 ± 0.09	1.30 ± 0.00	2.63 ± 0.08	n = 48	[OL1] Beckman Coulter AU Series
2.10 ± 0.13	0.80 ± 0.08	3.40 ± 0.17	1.36 ± 0.11	2.73 ± 0.14	n = 50	[JJ1] Ortho Clinical Diagnostics
1.73 ± 0.06	0.66 ± 0.06	3.03 ± 0.09	1.01 ± 0.07	2.36 ± 0.07	n = 20	[RO4] Roche cobas c311/c501/c502/c701
1.89 ± 0.12	0.71 ± 0.05	3.20 ± 0.13	1.11 ± 0.08	2.54 ± 0.12	n = 32	[RO2] Roche Hitachi and Modular D/P
1.77 ± 0.08	0.67 ± 0.06	3.05 ± 0.10	1.03 ± 0.06	2.37 ± 0.12	n = 11	[RO1] Roche Integra and MIRA
2.11 ± 0.11	0.90 ± 0.00	3.51 ± 0.15	1.27 ± 0.07	2.81 ± 0.11	n = 24	[BY1] Siemens ADVIA/ADVISIA Centaur
2.01 ± 0.09	0.79 ± 0.05	3.34 ± 0.11	1.23 ± 0.08	2.67 ± 0.07	n = 96	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Phosphorus (mg/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
2.64 ± 0.16	6.39 ± 0.30	3.77 ± 0.21	3.87 ± 0.22	3.24 ± 0.18	n = 336	[---] All Methods & Instruments
						<Instruments>
2.60 ± 0.06	6.30 ± 0.06	3.72 ± 0.11	3.84 ± 0.10	3.21 ± 0.07	n = 20	[ABJ] Abbott Architect c System
2.57 ± 0.09	6.15 ± 0.16	3.63 ± 0.10	3.75 ± 0.10	3.14 ± 0.08	n = 49	[OLC] Beckman Coulter AU Chemistry System
2.68 ± 0.27	6.54 ± 0.62	3.99 ± 0.47	4.35 ± 0.52	3.44 ± 0.29	n = 4	[BCS] Beckman Coulter CX
2.77 ± 0.08	6.85 ± 0.12	4.00 ± 0.11	4.10 ± 0.08	3.40 ± 0.08	n = 4	[BCX] Beckman Coulter LX-20
2.73 ± 0.14	6.40 ± 0.19	3.93 ± 0.17	3.96 ± 0.10	3.36 ± 0.16	n = 17	[BCG] Beckman Coulter UniCel DxC 600
2.69 ± 0.05	6.65 ± 0.08	3.84 ± 0.07	3.90 ± 0.07	3.32 ± 0.04	n = 16	[BCH] Beckman Coulter UniCel DxC 800
3.01 ± 0.12	7.10 ± 0.15	4.20 ± 0.10	4.37 ± 0.14	3.65 ± 0.12	n = 10	[JJE] Ortho Vitros 250/350/950
2.99 ± 0.13	7.00 ± 0.15	4.13 ± 0.14	4.30 ± 0.14	3.58 ± 0.13	n = 21	[JJF] Ortho Vitros 5,1FS
3.03 ± 0.16	6.99 ± 0.12	4.16 ± 0.15	4.32 ± 0.17	3.60 ± 0.16	n = 16	[JJG] Ortho Vitros 5600
2.67 ± 0.07	6.42 ± 0.09	3.82 ± 0.10	3.89 ± 0.11	3.26 ± 0.12	n = 18	[ROC] Roche cobas c501
2.53 ± 0.14	6.27 ± 0.14	3.70 ± 0.09	3.77 ± 0.14	3.20 ± 0.09	n = 3	[ROH] Roche cobas c701
2.67 ± 0.09	6.45 ± 0.12	3.83 ± 0.08	3.90 ± 0.08	3.33 ± 0.09	n = 4	[ROS] Roche Cobas INTEGRA 400
2.65 ± 0.08	6.38 ± 0.08	3.72 ± 0.08	3.85 ± 0.08	3.22 ± 0.08	n = 5	[ROT] Roche Cobas INTEGRA 800
2.62 ± 0.10	6.33 ± 0.17	3.77 ± 0.13	3.87 ± 0.13	3.24 ± 0.11	n = 31	[ROD] Roche MODULAR D/P
2.63 ± 0.06	6.33 ± 0.13	3.78 ± 0.11	3.86 ± 0.09	3.26 ± 0.09	n = 20	[BYE] Siemens ADVIA 1800
2.67 ± 0.05	6.37 ± 0.05	3.83 ± 0.05	3.90 ± 0.00	3.20 ± 0.09	n = 3	[BYB] Siemens ADVIA 2400
2.58 ± 0.10	6.25 ± 0.10	3.63 ± 0.08	3.73 ± 0.09	3.13 ± 0.08	n = 13	[DUE] Siemens Dimension EXL
2.62 ± 0.09	6.31 ± 0.12	3.66 ± 0.12	3.78 ± 0.12	3.16 ± 0.12	n = 23	[DUR] Siemens Dimension RxL
2.50 ± 0.09	6.25 ± 0.16	3.58 ± 0.14	3.68 ± 0.11	3.10 ± 0.10	n = 36	[DUT] Siemens Dimension Vista
2.63 ± 0.06	6.35 ± 0.12	3.70 ± 0.08	3.80 ± 0.13	3.18 ± 0.09	n = 17	[DUX] Siemens Dimension Xpand
						<Reagents>
2.60 ± 0.06	6.30 ± 0.06	3.72 ± 0.11	3.84 ± 0.10	3.21 ± 0.07	n = 20	[AB1] Abbott
2.71 ± 0.11	6.56 ± 0.22	3.88 ± 0.13	3.94 ± 0.12	3.33 ± 0.09	n = 40	[BC1] Beckman Coulter
2.57 ± 0.09	6.15 ± 0.15	3.63 ± 0.10	3.74 ± 0.10	3.14 ± 0.09	n = 48	[OL1] Beckman Coulter AU Series
2.70 ± 0.36	6.61 ± 0.37	3.88 ± 0.24	4.15 ± 0.19	3.31 ± 0.29	n = 3	[JA1] JAS Diagnostics
3.01 ± 0.13	7.02 ± 0.15	4.15 ± 0.14	4.32 ± 0.15	3.60 ± 0.14	n = 47	[JJ1] Ortho Clinical Diagnostics
2.66 ± 0.08	6.40 ± 0.11	3.80 ± 0.11	3.88 ± 0.12	3.25 ± 0.11	n = 21	[RO4] Roche cobas c311/c501/c502/c701
2.62 ± 0.10	6.33 ± 0.17	3.77 ± 0.13	3.87 ± 0.13	3.24 ± 0.11	n = 31	[RO2] Roche Hitachi and Modular D/P
2.66 ± 0.09	6.40 ± 0.10	3.77 ± 0.09	3.87 ± 0.08	3.27 ± 0.10	n = 9	[RO1] Roche Integra and MIRA
2.63 ± 0.06	6.34 ± 0.12	3.80 ± 0.10	3.87 ± 0.08	3.25 ± 0.09	n = 24	[BY1] Siemens ADVIA/ADVIa Centaur
2.57 ± 0.11	6.28 ± 0.14	3.63 ± 0.13	3.74 ± 0.13	3.14 ± 0.11	n = 89	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Calcium (mg/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
10.07 ± 0.25	6.89 ± 0.23	9.95 ± 0.27	11.60 ± 0.29	8.19 ± 0.20	n = 363	[---] All Methods & Instruments
						<Instruments>
10.10 ± 0.18	6.80 ± 0.18	10.10 ± 0.09	11.43 ± 0.05	8.66 ± 0.10	n = 3	[AXA] Abaxis Piccolo
10.04 ± 0.12	7.03 ± 0.05	9.94 ± 0.10	11.75 ± 0.18	8.15 ± 0.07	n = 21	[ABJ] Abbott Architect c System
10.07 ± 0.16	7.01 ± 0.12	9.99 ± 0.14	11.64 ± 0.16	8.23 ± 0.15	n = 51	[OLC] Beckman Coulter AU Chemistry System
9.82 ± 0.32	7.02 ± 0.27	9.66 ± 0.17	11.28 ± 0.33	8.13 ± 0.16	n = 5	[BCS] Beckman Coulter CX
10.25 ± 0.12	7.03 ± 0.09	9.55 ± 0.23	11.38 ± 0.13	8.15 ± 0.17	n = 4	[BCX] Beckman Coulter LX-20
9.97 ± 0.18	6.89 ± 0.12	9.69 ± 0.25	11.33 ± 0.27	8.10 ± 0.15	n = 19	[BCG] Beckman Coulter UniCel DxC 600
10.07 ± 0.11	6.92 ± 0.10	9.72 ± 0.13	11.28 ± 0.15	8.16 ± 0.11	n = 16	[BCH] Beckman Coulter UniCel DxC 800
10.10 ± 0.17	6.74 ± 0.19	10.21 ± 0.26	11.85 ± 0.22	8.30 ± 0.24	n = 12	[JJE] Ortho Vitros 250/350/950
10.03 ± 0.16	6.63 ± 0.13	10.06 ± 0.19	11.68 ± 0.20	8.18 ± 0.17	n = 21	[JJF] Ortho Vitros 5,1FS
10.01 ± 0.14	6.64 ± 0.14	10.08 ± 0.18	11.69 ± 0.18	8.19 ± 0.16	n = 16	[JJG] Ortho Vitros 5600
10.46 ± 0.19	6.95 ± 0.16	10.08 ± 0.20	11.86 ± 0.14	8.27 ± 0.13	n = 18	[ROC] Roche cobas c501
10.55 ± 0.19	7.04 ± 0.10	10.34 ± 0.10	12.05 ± 0.19	8.43 ± 0.14	n = 3	[ROH] Roche cobas c701
10.41 ± 0.25	6.78 ± 0.15	10.21 ± 0.21	11.77 ± 0.31	8.25 ± 0.23	n = 6	[ROS] Roche Cobas INTEGRA 400
10.10 ± 0.30	6.77 ± 0.18	9.98 ± 0.30	11.55 ± 0.23	8.06 ± 0.20	n = 5	[ROT] Roche Cobas INTEGRA 800
10.29 ± 0.25	7.04 ± 0.20	10.13 ± 0.26	11.80 ± 0.26	8.33 ± 0.20	n = 32	[ROD] Roche MODULAR D/P
10.22 ± 0.21	7.20 ± 0.23	10.17 ± 0.19	11.76 ± 0.20	8.39 ± 0.14	n = 20	[BYE] Siemens ADVIA 1800
10.32 ± 0.15	7.40 ± 0.09	9.85 ± 0.36	11.68 ± 0.24	8.34 ± 0.10	n = 3	[BYB] Siemens ADVIA 2400
9.91 ± 0.13	6.72 ± 0.16	9.83 ± 0.14	11.41 ± 0.19	8.02 ± 0.16	n = 14	[DUE] Siemens Dimension EXL
10.01 ± 0.14	6.80 ± 0.14	9.87 ± 0.19	11.54 ± 0.18	8.16 ± 0.14	n = 25	[DUR] Siemens Dimension RxL
9.81 ± 0.22	6.74 ± 0.15	9.66 ± 0.25	11.37 ± 0.27	8.01 ± 0.21	n = 37	[DUT] Siemens Dimension Vista
9.87 ± 0.20	6.77 ± 0.15	9.78 ± 0.21	11.43 ± 0.23	8.05 ± 0.19	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
10.10 ± 0.18	6.80 ± 0.18	10.10 ± 0.09	11.43 ± 0.05	8.66 ± 0.10	n = 3	[AX1] Abaxis
10.04 ± 0.12	7.03 ± 0.05	9.94 ± 0.10	11.75 ± 0.18	8.15 ± 0.07	n = 21	[AB1] Abbott
10.02 ± 0.18	6.91 ± 0.11	9.70 ± 0.20	11.31 ± 0.21	8.13 ± 0.14	n = 43	[BC1] Beckman Coulter
10.07 ± 0.16	7.01 ± 0.12	10.00 ± 0.14	11.64 ± 0.15	8.23 ± 0.16	n = 50	[OL1] Beckman Coulter AU Series
10.19 ± 0.20	6.92 ± 0.32	9.93 ± 0.23	11.36 ± 0.39	8.15 ± 0.19	n = 3	[JA1] JAS Diagnostics
10.04 ± 0.17	6.66 ± 0.15	10.10 ± 0.20	11.73 ± 0.22	8.20 ± 0.18	n = 50	[JJ1] Ortho Clinical Diagnostics
10.48 ± 0.18	6.99 ± 0.14	10.14 ± 0.18	11.90 ± 0.13	8.31 ± 0.12	n = 20	[RO4] Roche cobas c311/c501/c502/c701
10.29 ± 0.26	7.04 ± 0.20	10.13 ± 0.26	11.81 ± 0.27	8.32 ± 0.20	n = 31	[RO2] Roche Hitachi and Modular D/P
10.29 ± 0.30	6.78 ± 0.16	10.13 ± 0.26	11.65 ± 0.29	8.16 ± 0.23	n = 11	[RO1] Roche Integra and MIRA
10.12 ± 0.41	7.10 ± 0.27	10.04 ± 0.39	11.48 ± 0.41	8.35 ± 0.19	n = 3	[GZ1] Sekisui Diagnostics (Genzyme)
10.25 ± 0.21	7.25 ± 0.23	10.16 ± 0.21	11.77 ± 0.23	8.39 ± 0.15	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
9.90 ± 0.20	6.76 ± 0.15	9.77 ± 0.23	11.44 ± 0.24	8.06 ± 0.19	n = 96	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Magnesium (mg/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
1.75 ± 0.08	2.26 ± 0.11	3.55 ± 0.15	1.09 ± 0.09	2.94 ± 0.12	n = 328	[---] All Methods & Instruments
1.68 ± 0.05	2.20 ± 0.00	3.24 ± 0.06	1.04 ± 0.06	2.69 ± 0.07	n = 20	<Instruments>
1.71 ± 0.06	2.24 ± 0.07	3.46 ± 0.08	1.10 ± 0.00	2.88 ± 0.08	n = 48	[ABJ] Abbott Architect c System
1.78 ± 0.04	2.35 ± 0.06	3.48 ± 0.26	1.20 ± 0.00	2.90 ± 0.18	n = 4	[OLC] Beckman Coulter AU Chemistry System
1.75 ± 0.06	2.40 ± 0.00	3.63 ± 0.08	1.18 ± 0.04	3.02 ± 0.04	n = 4	[BCS] Beckman Coulter CX
1.80 ± 0.05	2.36 ± 0.07	3.61 ± 0.12	1.15 ± 0.07	3.02 ± 0.08	n = 19	[BCX] Beckman Coulter LX-20
1.77 ± 0.05	2.32 ± 0.05	3.58 ± 0.08	1.12 ± 0.05	2.98 ± 0.06	n = 16	[BCG] Beckman Coulter UniCel DxC 600
1.80 ± 0.09	2.10 ± 0.09	3.52 ± 0.12	1.03 ± 0.05	2.94 ± 0.08	n = 6	[BCH] Beckman Coulter UniCel DxC 800
1.80 ± 0.00	2.12 ± 0.07	3.52 ± 0.04	1.07 ± 0.05	2.95 ± 0.06	n = 21	[JJE] Ortho Vitros 250/350/950
1.79 ± 0.05	2.10 ± 0.00	3.52 ± 0.07	1.05 ± 0.06	2.93 ± 0.08	n = 15	[JJF] Ortho Vitros 5,1FS
1.73 ± 0.06	2.22 ± 0.06	3.42 ± 0.08	1.13 ± 0.05	2.87 ± 0.07	n = 16	[JJG] Ortho Vitros 5600
1.77 ± 0.05	2.27 ± 0.05	3.53 ± 0.05	1.10 ± 0.00	2.90 ± 0.00	n = 3	[ROC] Roche cobas c501
1.72 ± 0.07	2.23 ± 0.05	3.47 ± 0.05	1.15 ± 0.06	2.87 ± 0.05	n = 6	[ROH] Roche cobas c701
1.76 ± 0.06	2.28 ± 0.08	3.54 ± 0.08	1.11 ± 0.05	2.92 ± 0.09	n = 29	[ROT] Roche Cobas INTEGRA 800
1.85 ± 0.08	2.34 ± 0.08	3.68 ± 0.08	1.34 ± 0.08	3.04 ± 0.06	n = 20	[ROD] Roche MODULAR D/P
1.90 ± 0.09	2.37 ± 0.05	3.77 ± 0.05	1.32 ± 0.15	3.07 ± 0.05	n = 3	[BYE] Siemens ADVIA 1800
1.70 ± 0.00	2.23 ± 0.06	3.53 ± 0.10	0.98 ± 0.04	2.89 ± 0.11	n = 11	[BYB] Siemens ADVIA 2400
1.68 ± 0.09	2.25 ± 0.09	3.62 ± 0.11	1.02 ± 0.08	2.98 ± 0.12	n = 24	[DUE] Siemens Dimension EXL
1.75 ± 0.07	2.34 ± 0.07	3.71 ± 0.10	1.06 ± 0.06	3.07 ± 0.08	n = 37	[DUR] Siemens Dimension RxL
1.70 ± 0.09	2.29 ± 0.10	3.59 ± 0.12	1.02 ± 0.09	2.98 ± 0.11	n = 18	[DUT] Siemens Dimension Vista
						[DUX] Siemens Dimension Xpand
1.68 ± 0.05	2.20 ± 0.00	3.24 ± 0.06	1.04 ± 0.06	2.69 ± 0.07	n = 20	<Reagents>
1.78 ± 0.05	2.35 ± 0.07	3.61 ± 0.10	1.15 ± 0.06	3.00 ± 0.07	n = 41	[AB1] Abbott
1.71 ± 0.06	2.24 ± 0.07	3.47 ± 0.08	1.10 ± 0.00	2.89 ± 0.08	n = 48	[BC1] Beckman Coulter
1.80 ± 0.05	2.11 ± 0.07	3.52 ± 0.06	1.06 ± 0.06	2.94 ± 0.07	n = 42	[OL1] Beckman Coulter AU Series
1.74 ± 0.06	2.23 ± 0.06	3.43 ± 0.09	1.12 ± 0.05	2.88 ± 0.06	n = 19	[JJ1] Ortho Clinical Diagnostics
1.77 ± 0.06	2.29 ± 0.07	3.54 ± 0.08	1.12 ± 0.05	2.92 ± 0.09	n = 29	[RO4] Roche cobas c311/c501/c502/c701
1.71 ± 0.06	2.22 ± 0.04	3.45 ± 0.06	1.15 ± 0.06	2.85 ± 0.06	n = 8	[RO2] Roche Hitachi and Modular D/P
1.86 ± 0.09	2.34 ± 0.08	3.70 ± 0.10	1.34 ± 0.10	3.05 ± 0.07	n = 25	[RO1] Roche Integra and MIRA
1.71 ± 0.09	2.29 ± 0.10	3.64 ± 0.13	1.03 ± 0.08	3.00 ± 0.12	n = 89	[BY1] Siemens ADVIA/ADVISIA Centaur
						[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Iron ($\mu\text{g/dL}$)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
85.7 \pm 4.09	111.9 \pm 8.22	104.2 \pm 4.27	125.4 \pm 4.94	85.5 \pm 5.13	n = 266	[---] All Methods & Instruments
77.2 \pm 10.88	97.2 \pm 21.19	99.4 \pm 6.35	118.8 \pm 6.92	77.7 \pm 14.45	n = 16	<Instruments>
86.5 \pm 2.83	113.8 \pm 3.12	105.1 \pm 3.57	127.9 \pm 4.35	85.6 \pm 2.20	n = 45	[ABJ] Abbott Architect c System
82.8 \pm 7.18	100.5 \pm 8.23	96.1 \pm 9.52	115.3 \pm 14.38	75.8 \pm 10.08	n = 4	[OLC] Beckman Coulter AU Chemistry System
85.0 \pm 2.88	101.5 \pm 2.83	103.8 \pm 2.58	122.3 \pm 2.26	81.2 \pm 2.80	n = 4	[BCS] Beckman Coulter CX
84.8 \pm 2.27	101.8 \pm 3.21	105.2 \pm 1.85	123.8 \pm 2.10	81.4 \pm 1.61	n = 11	[BCX] Beckman Coulter LX-20
85.2 \pm 1.52	102.4 \pm 2.30	104.7 \pm 2.06	124.2 \pm 2.03	82.0 \pm 1.65	n = 13	[BCG] Beckman Coulter UniCel DxC 600
92.7 \pm 6.84	142.0 \pm 4.01	106.3 \pm 5.23	140.9 \pm 7.04	96.7 \pm 3.15	n = 4	[BCH] Beckman Coulter UniCel DxC 800
89.6 \pm 6.34	137.0 \pm 6.80	110.2 \pm 5.97	143.3 \pm 7.11	96.4 \pm 7.47	n = 18	[JJE] Ortho Vitros 250/350/950
90.9 \pm 6.53	139.5 \pm 6.61	110.0 \pm 6.94	144.3 \pm 9.06	97.5 \pm 5.73	n = 16	[JJF] Ortho Vitros 5,1FS
88.4 \pm 3.70	114.4 \pm 4.01	107.2 \pm 4.86	127.7 \pm 4.64	88.8 \pm 3.24	n = 10	[JHG] Ortho Vitros 5600
87.7 \pm 3.37	113.7 \pm 3.16	105.6 \pm 1.02	125.2 \pm 2.36	87.7 \pm 2.26	n = 3	[ROC] Roche cobas c501
90.0 \pm 1.76	115.0 \pm 1.65	105.8 \pm 4.33	126.6 \pm 3.05	87.5 \pm 2.67	n = 4	[ROS] Roche Cobas INTEGRA 400
85.8 \pm 2.34	112.8 \pm 1.98	103.8 \pm 2.15	124.7 \pm 2.26	86.2 \pm 1.65	n = 29	[ROT] Roche Cobas INTEGRA 800
88.0 \pm 1.57	115.8 \pm 2.33	106.0 \pm 1.93	126.2 \pm 2.14	88.4 \pm 1.92	n = 19	[ROD] Roche MODULAR D/P
86.5 \pm 3.63	115.0 \pm 5.48	105.8 \pm 3.23	126.3 \pm 4.22	88.7 \pm 2.26	n = 3	[BYE] Siemens ADVIA 1800
82.0 \pm 0.00	108.2 \pm 0.85	101.0 \pm 0.00	123.2 \pm 2.22	81.0 \pm 0.00	n = 7	[BYB] Siemens ADVIA 2400
81.9 \pm 1.20	107.8 \pm 1.25	100.7 \pm 1.60	122.3 \pm 1.41	81.1 \pm 1.12	n = 15	[DUE] Siemens Dimension EXL
82.7 \pm 2.27	108.8 \pm 2.13	101.5 \pm 1.86	124.2 \pm 2.29	82.4 \pm 1.95	n = 32	[DUR] Siemens Dimension RxL
81.7 \pm 0.90	107.7 \pm 0.90	101.0 \pm 0.75	122.3 \pm 1.51	81.3 \pm 0.90	n = 4	[DUT] Siemens Dimension Vista
83.2 \pm 1.79	110.3 \pm 2.29	103.1 \pm 1.23	122.4 \pm 2.44	86.3 \pm 0.97	n = 7	[DUX] Siemens Dimension Xpand
67.0 \pm 1.13	75.9 \pm 2.27	93.4 \pm 1.34	112.6 \pm 1.85	63.3 \pm 1.50	n = 9	<Reagents>
85.1 \pm 2.12	101.9 \pm 3.10	104.8 \pm 2.19	123.8 \pm 2.35	81.7 \pm 2.13	n = 30	[AB3] Abbott-Iron/6K95
87.1 \pm 2.86	114.5 \pm 3.04	105.9 \pm 3.15	129.0 \pm 3.52	86.0 \pm 2.18	n = 36	[AB2] Abbott-Iron/7D68
90.4 \pm 6.52	138.7 \pm 6.66	109.6 \pm 6.49	143.4 \pm 7.99	96.9 \pm 6.31	n = 38	[BC1] Beckman Coulter
87.3 \pm 3.69	113.8 \pm 3.57	105.9 \pm 4.65	126.5 \pm 4.43	88.1 \pm 3.03	n = 13	[OL1] Beckman Coulter AU Series
85.8 \pm 2.34	112.8 \pm 1.98	103.8 \pm 2.15	124.7 \pm 2.26	86.2 \pm 1.65	n = 29	[JJ1] Ortho Clinical Diagnostics
89.5 \pm 2.13	114.5 \pm 2.40	105.7 \pm 3.19	125.9 \pm 2.78	87.6 \pm 2.50	n = 7	[RO2] Roche Hitachi and Modular D/P
84.4 \pm 1.47	111.4 \pm 1.96	101.7 \pm 2.57	123.1 \pm 3.03	84.3 \pm 1.52	n = 8	[RO1] Roche Integra and MIRA
87.8 \pm 2.20	115.4 \pm 2.70	106.0 \pm 2.11	125.9 \pm 2.55	88.5 \pm 1.92	n = 22	[GZ1] Sekisui Diagnostics (Genzyme)
82.3 \pm 1.76	108.4 \pm 1.79	101.2 \pm 1.68	123.4 \pm 2.23	81.8 \pm 1.66	n = 58	[BY1] Siemens ADVIA/ADVIA Centaur
						[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Sodium (mmol/L)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
121.7 ± 1.90	147.7 ± 2.41	152.4 ± 2.49	157.8 ± 3.64	126.9 ± 1.84	n = 370	[---] All Methods & Instruments
						<Instruments>
120.0 ± 0.00	145.6 ± 1.02	153.2 ± 1.54	159.3 ± 1.37	128.3 ± 1.37	n = 3	[AXA] Abaxis Piccolo
120.3 ± 0.90	147.8 ± 0.89	152.8 ± 0.78	159.7 ± 1.14	125.9 ± 0.67	n = 21	[ABJ] Abbott Architect c System
120.9 ± 1.19	146.4 ± 1.24	151.1 ± 1.27	156.7 ± 1.17	126.0 ± 1.30	n = 51	[OLC] Beckman Coulter AU Chemistry System
120.9 ± 2.86	145.5 ± 0.57	151.1 ± 1.83	157.0 ± 0.93	125.4 ± 1.98	n = 5	[BCS] Beckman Coulter CX
121.3 ± 0.90	147.5 ± 1.23	151.8 ± 0.41	157.8 ± 1.27	127.0 ± 0.75	n = 4	[BCX] Beckman Coulter LX-20
121.4 ± 1.39	146.9 ± 1.18	151.9 ± 1.38	158.0 ± 1.22	127.1 ± 1.74	n = 19	[BCG] Beckman Coulter UniCel DxC 600
121.0 ± 1.18	146.2 ± 1.00	150.7 ± 1.16	156.7 ± 1.14	126.7 ± 1.36	n = 16	[BCH] Beckman Coulter UniCel DxC 800
119.5 ± 0.74	144.0 ± 0.47	148.4 ± 0.56	151.5 ± 0.74	123.6 ± 0.56	n = 7	[IAA] i-STAT
122.1 ± 1.70	152.8 ± 1.81	158.1 ± 2.01	165.1 ± 2.63	129.7 ± 2.19	n = 12	[JJE] Ortho Vitros 250/350/950
121.9 ± 1.31	151.9 ± 1.17	156.9 ± 1.38	164.8 ± 1.76	128.4 ± 1.38	n = 21	[JJF] Ortho Vitros 5,1FS
122.2 ± 1.09	152.2 ± 1.43	157.4 ± 1.44	164.8 ± 1.31	128.8 ± 1.17	n = 16	[JJG] Ortho Vitros 5600
120.1 ± 0.98	146.9 ± 1.80	152.3 ± 1.50	157.8 ± 1.85	125.8 ± 1.19	n = 17	[ROC] Roche cobas c501
122.7 ± 1.37	148.7 ± 1.37	153.3 ± 3.16	159.2 ± 2.36	126.8 ± 1.54	n = 3	[ROH] Roche cobas c701
120.5 ± 0.83	147.0 ± 0.64	151.0 ± 0.64	156.1 ± 1.27	125.0 ± 1.00	n = 5	[ROS] Roche Cobas INTEGRA 400
120.6 ± 1.33	146.6 ± 1.52	150.7 ± 1.38	156.3 ± 1.61	125.0 ± 0.93	n = 5	[ROT] Roche Cobas INTEGRA 800
121.9 ± 1.83	148.6 ± 1.45	153.0 ± 1.55	159.6 ± 1.03	126.1 ± 1.20	n = 31	[ROD] Roche MODULAR D/P
123.6 ± 1.08	149.3 ± 1.46	153.9 ± 1.21	159.9 ± 1.71	128.3 ± 1.23	n = 20	[BYE] Siemens ADVIA 1800
122.7 ± 0.51	148.6 ± 1.02	153.0 ± 0.90	159.0 ± 0.90	128.0 ± 0.90	n = 3	[BYB] Siemens ADVIA 2400
122.1 ± 1.28	147.4 ± 1.52	151.8 ± 1.44	155.9 ± 1.38	126.8 ± 0.78	n = 15	[DUE] Siemens Dimension EXL
121.5 ± 1.49	146.0 ± 2.01	150.4 ± 1.94	154.7 ± 2.09	126.3 ± 1.80	n = 24	[DUR] Siemens Dimension RxL
124.7 ± 1.69	146.7 ± 1.44	151.8 ± 1.76	153.5 ± 1.61	128.2 ± 1.70	n = 37	[DUT] Siemens Dimension Vista
122.7 ± 1.36	147.6 ± 1.19	152.0 ± 1.15	157.3 ± 1.73	127.2 ± 0.94	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
120.0 ± 0.00	145.6 ± 1.02	153.2 ± 1.54	159.3 ± 1.37	128.3 ± 1.37	n = 3	[AX1] Abaxis
120.3 ± 0.87	147.7 ± 0.96	152.8 ± 0.79	159.7 ± 1.14	125.9 ± 0.71	n = 22	[AB1] Abbott
121.2 ± 1.30	146.5 ± 1.24	151.4 ± 1.33	157.4 ± 1.32	126.8 ± 1.53	n = 43	[BC1] Beckman Coulter
120.9 ± 1.14	146.4 ± 1.26	151.0 ± 1.30	156.7 ± 1.19	125.9 ± 1.23	n = 50	[OL1] Beckman Coulter AU Series
119.4 ± 0.79	144.0 ± 0.55	148.5 ± 0.57	151.7 ± 0.51	123.7 ± 0.51	n = 6	[IA1] i-STAT
119.1 ± 2.05	148.0 ± 1.80	154.0 ± 1.80	159.7 ± 0.51	126.7 ± 1.37	n = 3	[IL1] Instrumentation Lab
122.1 ± 1.42	152.1 ± 1.41	157.3 ± 1.62	164.8 ± 1.85	128.8 ± 1.64	n = 50	[JJ1] Ortho Clinical Diagnostics
120.5 ± 1.43	147.2 ± 1.82	152.3 ± 1.67	158.0 ± 1.96	125.9 ± 1.20	n = 21	[RO4] Roche cobas c311/c501/c502/c701
121.9 ± 1.83	148.6 ± 1.45	153.0 ± 1.55	159.6 ± 1.03	126.1 ± 1.20	n = 31	[RO2] Roche Hitachi and Modular D/P
120.6 ± 1.11	146.9 ± 1.13	150.9 ± 1.02	156.2 ± 1.45	125.0 ± 0.97	n = 10	[RO1] Roche Integra and MIRA
123.4 ± 1.19	149.2 ± 1.41	153.9 ± 1.22	159.9 ± 1.69	128.2 ± 1.26	n = 24	[BY1] Siemens ADVIA/ADVISIA Centaur
123.0 ± 2.06	146.9 ± 1.68	151.5 ± 1.79	154.9 ± 2.30	127.3 ± 1.71	n = 96	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Potassium (mmol/L)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
2.45 ± 0.08	4.13 ± 0.10	5.36 ± 0.11	6.44 ± 0.15	4.42 ± 0.09	n = 370	[---] All Methods & Instruments
						<Instruments>
2.40 ± 0.18	4.37 ± 0.14	5.68 ± 0.24	6.55 ± 0.19	4.47 ± 0.05	n = 3	[AXA] Abaxis Piccolo
2.43 ± 0.08	4.11 ± 0.07	5.33 ± 0.08	6.44 ± 0.10	4.39 ± 0.08	n = 21	[ABJ] Abbott Architect c System
2.49 ± 0.05	4.10 ± 0.00	5.31 ± 0.05	6.40 ± 0.07	4.40 ± 0.00	n = 51	[OLC] Beckman Coulter AU Chemistry System
2.40 ± 0.09	4.08 ± 0.11	5.36 ± 0.11	6.45 ± 0.08	4.38 ± 0.08	n = 5	[BCS] Beckman Coulter CX
2.40 ± 0.00	4.20 ± 0.08	5.40 ± 0.08	6.57 ± 0.09	4.45 ± 0.06	n = 4	[BCX] Beckman Coulter LX-20
2.37 ± 0.07	4.11 ± 0.05	5.40 ± 0.00	6.51 ± 0.07	4.43 ± 0.05	n = 19	[BCG] Beckman Coulter UniCel DxC 600
2.34 ± 0.06	4.08 ± 0.07	5.33 ± 0.07	6.46 ± 0.07	4.37 ± 0.08	n = 16	[BCH] Beckman Coulter UniCel DxC 800
2.40 ± 0.00	4.04 ± 0.06	5.20 ± 0.00	6.20 ± 0.00	4.36 ± 0.06	n = 7	[IAA] i-STAT
2.53 ± 0.05	4.33 ± 0.06	5.57 ± 0.08	6.71 ± 0.13	4.63 ± 0.07	n = 12	[JJE] Ortho Vitros 250/350/950
2.51 ± 0.04	4.31 ± 0.05	5.56 ± 0.07	6.70 ± 0.09	4.59 ± 0.05	n = 21	[JJF] Ortho Vitros 5,1FS
2.50 ± 0.00	4.28 ± 0.05	5.51 ± 0.06	6.65 ± 0.10	4.56 ± 0.09	n = 16	[JJG] Ortho Vitros 5600
2.35 ± 0.11	4.03 ± 0.06	5.32 ± 0.09	6.38 ± 0.10	4.36 ± 0.10	n = 16	[ROC] Roche cobas c501
2.43 ± 0.05	4.14 ± 0.10	5.33 ± 0.05	6.44 ± 0.10	4.40 ± 0.09	n = 3	[ROH] Roche cobas c701
2.46 ± 0.06	4.20 ± 0.00	5.40 ± 0.00	6.46 ± 0.06	4.50 ± 0.00	n = 5	[ROS] Roche Cobas INTEGRA 400
2.46 ± 0.06	4.16 ± 0.06	5.36 ± 0.06	6.42 ± 0.08	4.44 ± 0.06	n = 5	[ROT] Roche Cobas INTEGRA 800
2.46 ± 0.09	4.10 ± 0.07	5.31 ± 0.09	6.45 ± 0.09	4.37 ± 0.09	n = 31	[ROD] Roche MODULAR D/P
2.53 ± 0.06	4.23 ± 0.06	5.43 ± 0.08	6.54 ± 0.12	4.48 ± 0.06	n = 20	[BYE] Siemens ADVIA 1800
2.50 ± 0.00	4.17 ± 0.05	5.40 ± 0.00	6.47 ± 0.05	4.40 ± 0.09	n = 3	[BYB] Siemens ADVIA 2400
2.40 ± 0.00	4.10 ± 0.00	5.34 ± 0.06	6.41 ± 0.06	4.40 ± 0.00	n = 14	[DUE] Siemens Dimension EXL
2.40 ± 0.00	4.07 ± 0.06	5.31 ± 0.07	6.36 ± 0.08	4.39 ± 0.05	n = 25	[DUR] Siemens Dimension RxL
2.47 ± 0.05	4.10 ± 0.00	5.30 ± 0.00	6.24 ± 0.07	4.38 ± 0.05	n = 37	[DUT] Siemens Dimension Vista
2.40 ± 0.00	4.10 ± 0.00	5.35 ± 0.07	6.43 ± 0.08	4.40 ± 0.00	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
2.40 ± 0.18	4.37 ± 0.14	5.68 ± 0.24	6.55 ± 0.19	4.47 ± 0.05	n = 3	[AX1] Abaxis
2.43 ± 0.07	4.11 ± 0.07	5.32 ± 0.09	6.43 ± 0.10	4.39 ± 0.09	n = 22	[AB1] Abbott
2.36 ± 0.07	4.10 ± 0.07	5.37 ± 0.07	6.49 ± 0.08	4.40 ± 0.07	n = 43	[BC1] Beckman Coulter
2.49 ± 0.05	4.10 ± 0.00	5.31 ± 0.06	6.40 ± 0.07	4.40 ± 0.00	n = 50	[OL1] Beckman Coulter AU Series
2.40 ± 0.00	4.03 ± 0.05	5.20 ± 0.00	6.20 ± 0.00	4.37 ± 0.05	n = 6	[IA1] i-STAT
2.30 ± 0.00	4.07 ± 0.05	5.27 ± 0.05	6.40 ± 0.09	4.37 ± 0.05	n = 3	[IL1] Instrumentation Lab
2.51 ± 0.04	4.31 ± 0.05	5.55 ± 0.07	6.69 ± 0.11	4.59 ± 0.07	n = 50	[JJ1] Ortho Clinical Diagnostics
2.37 ± 0.11	4.06 ± 0.09	5.33 ± 0.09	6.40 ± 0.12	4.37 ± 0.10	n = 20	[RO4] Roche cobas c311/c501/c502/c701
2.46 ± 0.09	4.10 ± 0.07	5.31 ± 0.09	6.45 ± 0.09	4.37 ± 0.09	n = 31	[RO2] Roche Hitachi and Modular D/P
2.45 ± 0.07	4.17 ± 0.05	5.38 ± 0.04	6.45 ± 0.07	4.46 ± 0.06	n = 11	[RO1] Roche Integra and MIRA
2.52 ± 0.05	4.23 ± 0.07	5.43 ± 0.07	6.54 ± 0.12	4.48 ± 0.06	n = 24	[BY1] Siemens ADVIA/ADVISIA Centaur
2.42 ± 0.05	4.10 ± 0.00	5.32 ± 0.06	6.33 ± 0.11	4.39 ± 0.04	n = 96	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Chloride (mmol/L)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
87.2 ± 2.02	105.4 ± 2.70	112.4 ± 2.13	105.4 ± 2.64	92.5 ± 2.17	n = 365	[---] All Methods & Instruments
						<Instruments>
88.6 ± 1.02	105.8 ± 1.54	111.6 ± 1.02	104.3 ± 0.51	92.0 ± 0.90	n = 3	[AXA] Abaxis Piccolo
88.7 ± 0.74	106.2 ± 0.84	112.8 ± 0.84	105.1 ± 0.86	93.6 ± 0.82	n = 20	[ABJ] Abbott Architect c System
86.3 ± 1.02	103.3 ± 1.30	110.6 ± 1.11	102.8 ± 0.81	92.0 ± 0.96	n = 50	[OLC] Beckman Coulter AU Chemistry System
89.9 ± 3.37	107.5 ± 3.43	113.3 ± 2.06	107.0 ± 5.19	94.6 ± 2.30	n = 5	[BCS] Beckman Coulter CX
88.7 ± 0.90	106.8 ± 1.27	113.3 ± 0.82	106.0 ± 0.75	93.5 ± 1.22	n = 4	[BCX] Beckman Coulter LX-20
88.8 ± 0.99	107.2 ± 0.82	113.8 ± 1.19	106.3 ± 1.09	94.6 ± 1.03	n = 19	[BCG] Beckman Coulter UniCel DxC 600
88.8 ± 0.86	107.2 ± 1.02	113.3 ± 1.44	105.8 ± 1.23	94.3 ± 1.34	n = 16	[BCH] Beckman Coulter UniCel DxC 800
90.4 ± 0.56	113.3 ± 0.97	118.8 ± 0.73	112.9 ± 1.23	97.1 ± 0.59	n = 6	[IAA] i-STAT
88.7 ± 1.32	108.5 ± 1.33	114.6 ± 1.34	107.6 ± 1.42	94.8 ± 1.67	n = 12	[JJE] Ortho Vitros 250/350/950
88.7 ± 1.09	108.2 ± 1.43	114.1 ± 1.64	106.8 ± 1.30	93.9 ± 1.12	n = 21	[JJF] Ortho Vitros 5,1FS
88.5 ± 0.70	108.1 ± 1.15	113.9 ± 1.07	106.8 ± 1.41	94.0 ± 0.97	n = 16	[JJG] Ortho Vitros 5600
81.5 ± 1.50	100.0 ± 1.66	108.9 ± 1.30	101.2 ± 1.25	87.7 ± 1.25	n = 17	[ROC] Roche cobas c501
84.5 ± 1.86	101.2 ± 2.36	110.7 ± 0.51	102.5 ± 1.86	89.7 ± 1.37	n = 3	[ROH] Roche cobas c701
87.2 ± 1.07	106.2 ± 0.41	112.5 ± 1.07	105.2 ± 0.80	93.0 ± 0.00	n = 5	[ROS] Roche Cobas INTEGRA 400
87.4 ± 1.09	105.6 ± 1.09	112.8 ± 0.80	105.1 ± 1.27	93.0 ± 0.64	n = 5	[ROT] Roche Cobas INTEGRA 800
84.8 ± 1.38	102.7 ± 1.30	110.9 ± 1.04	103.2 ± 1.02	90.1 ± 0.94	n = 31	[ROD] Roche MODULAR D/P
87.2 ± 0.90	104.9 ± 1.00	111.7 ± 1.46	103.5 ± 1.66	91.4 ± 1.86	n = 20	[BYE] Siemens ADVIA 1800
87.3 ± 0.51	105.0 ± 0.90	112.3 ± 0.51	104.7 ± 0.51	92.0 ± 0.90	n = 3	[BYB] Siemens ADVIA 2400
86.7 ± 0.70	104.7 ± 0.98	112.2 ± 0.69	107.3 ± 0.60	91.8 ± 0.79	n = 14	[DUE] Siemens Dimension EXL
85.2 ± 1.09	104.3 ± 1.78	112.4 ± 1.59	107.5 ± 1.71	90.7 ± 1.18	n = 25	[DUR] Siemens Dimension RxL
87.5 ± 1.29	107.0 ± 1.39	114.2 ± 1.36	107.0 ± 1.25	93.3 ± 1.28	n = 37	[DUT] Siemens Dimension Vista
87.1 ± 1.12	104.9 ± 1.23	111.9 ± 1.25	107.9 ± 1.30	92.1 ± 1.04	n = 20	[DUX] Siemens Dimension Xpand
						<Reagents>
88.6 ± 1.02	105.8 ± 1.54	111.6 ± 1.02	104.3 ± 0.51	92.0 ± 0.90	n = 3	[AX1] Abaxis
88.7 ± 0.74	106.2 ± 0.81	112.8 ± 0.81	105.1 ± 0.82	93.6 ± 0.81	n = 21	[AB1] Abbott
88.7 ± 0.96	107.1 ± 1.12	113.5 ± 1.41	106.0 ± 1.35	94.2 ± 1.37	n = 43	[BC1] Beckman Coulter
86.3 ± 0.99	103.3 ± 1.31	110.6 ± 1.09	102.8 ± 0.79	91.9 ± 0.95	n = 49	[OL1] Beckman Coulter AU Series
90.4 ± 0.56	113.3 ± 0.97	118.8 ± 0.73	112.9 ± 1.23	97.1 ± 0.59	n = 6	[IA1] i-STAT
88.6 ± 1.11	108.2 ± 1.40	114.2 ± 1.55	107.0 ± 1.46	94.1 ± 1.31	n = 50	[JJ1] Ortho Clinical Diagnostics
81.5 ± 1.63	99.9 ± 1.77	109.0 ± 1.51	101.2 ± 1.45	87.7 ± 1.47	n = 20	[RO4] Roche cobas c311/c501/c502/c701
84.8 ± 1.38	102.7 ± 1.30	110.9 ± 1.04	103.2 ± 1.02	90.1 ± 0.94	n = 31	[RO2] Roche Hitachi and Modular D/P
87.1 ± 1.26	105.5 ± 1.42	112.5 ± 1.03	105.0 ± 1.19	93.0 ± 0.00	n = 11	[RO1] Roche Integra and MIRA
87.1 ± 0.93	105.0 ± 0.99	111.8 ± 1.34	103.7 ± 1.56	91.4 ± 1.76	n = 24	[BY1] Siemens ADVIA/ADVIS Centaur
86.7 ± 1.48	105.5 ± 1.86	112.9 ± 1.67	107.3 ± 1.35	92.2 ± 1.59	n = 96	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Albumin (g/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
3.35 ± 0.16	4.51 ± 0.15	4.13 ± 0.21	5.02 ± 0.25	3.41 ± 0.22	n = 354	[---] All Methods & Instruments
3.47 ± 0.05	4.34 ± 0.10	4.50 ± 0.09	5.30 ± 0.09	3.77 ± 0.05	n = 3	<Instruments>
3.27 ± 0.11	4.38 ± 0.13	3.93 ± 0.13	4.70 ± 0.14	3.27 ± 0.12	n = 21	[AXA] Abaxis Piccolo
3.41 ± 0.09	4.54 ± 0.08	4.17 ± 0.08	4.94 ± 0.10	3.51 ± 0.09	n = 51	[ABJ] Abbott Architect c System
3.29 ± 0.13	4.41 ± 0.13	3.86 ± 0.19	4.63 ± 0.18	3.18 ± 0.04	n = 5	[OLC] Beckman Coulter AU Chemistry System
3.17 ± 0.09	4.27 ± 0.09	3.75 ± 0.06	4.50 ± 0.11	3.07 ± 0.09	n = 4	[BCS] Beckman Coulter CX
3.20 ± 0.00	4.32 ± 0.08	3.74 ± 0.07	4.50 ± 0.10	3.10 ± 0.00	n = 18	[BCX] Beckman Coulter LX-20
3.25 ± 0.07	4.40 ± 0.00	3.81 ± 0.08	4.60 ± 0.08	3.15 ± 0.07	n = 16	[BCG] Beckman Coulter UniCel DxC 600
3.07 ± 0.06	4.50 ± 0.07	4.07 ± 0.09	5.38 ± 0.12	3.22 ± 0.06	n = 11	[BCH] Beckman Coulter UniCel DxC 800
3.01 ± 0.13	4.38 ± 0.16	4.01 ± 0.18	5.28 ± 0.19	3.11 ± 0.14	n = 20	[JJE] Ortho Vitros 250/350/950
2.99 ± 0.07	4.38 ± 0.13	3.95 ± 0.15	5.22 ± 0.21	3.09 ± 0.10	n = 16	[JJF] Ortho Vitros 5,1FS
3.49 ± 0.10	4.63 ± 0.11	4.39 ± 0.14	5.17 ± 0.15	3.67 ± 0.11	n = 16	[JJG] Ortho Vitros 5600
3.50 ± 0.09	4.67 ± 0.05	4.33 ± 0.14	5.23 ± 0.14	3.67 ± 0.05	n = 3	[ROC] Roche cobas c501
3.46 ± 0.06	4.60 ± 0.17	4.26 ± 0.06	5.08 ± 0.08	3.60 ± 0.06	n = 5	[ROH] Roche cobas c701
3.40 ± 0.00	4.50 ± 0.10	4.20 ± 0.00	5.00 ± 0.00	3.60 ± 0.00	n = 5	[ROS] Roche Cobas INTEGRA 400
3.48 ± 0.10	4.63 ± 0.13	4.33 ± 0.11	5.11 ± 0.13	3.63 ± 0.12	n = 32	[ROT] Roche Cobas INTEGRA 800
3.42 ± 0.07	4.50 ± 0.06	4.30 ± 0.06	5.11 ± 0.08	3.60 ± 0.00	n = 20	[ROD] Roche MODULAR D/P
3.44 ± 0.10	4.53 ± 0.05	4.30 ± 0.09	5.20 ± 0.00	3.60 ± 0.09	n = 3	[BYE] Siemens ADVIA 1800
3.36 ± 0.06	4.57 ± 0.06	4.12 ± 0.06	5.04 ± 0.06	3.41 ± 0.06	n = 14	[BYB] Siemens ADVIA 2400
3.34 ± 0.07	4.54 ± 0.11	4.12 ± 0.11	5.04 ± 0.11	3.39 ± 0.08	n = 25	[DUE] Siemens Dimension EXL
3.40 ± 0.09	4.60 ± 0.11	4.16 ± 0.10	5.07 ± 0.09	3.45 ± 0.09	n = 37	[DUR] Siemens Dimension RxL
3.37 ± 0.10	4.57 ± 0.10	4.16 ± 0.10	5.08 ± 0.14	3.41 ± 0.06	n = 20	[DUT] Siemens Dimension Vista
						[DUX] Siemens Dimension Xpand
3.47 ± 0.05	4.34 ± 0.10	4.50 ± 0.09	5.30 ± 0.09	3.77 ± 0.05	n = 3	<Reagents>
3.27 ± 0.11	4.38 ± 0.13	3.93 ± 0.13	4.70 ± 0.14	3.27 ± 0.12	n = 21	[AX1] Abaxis
3.21 ± 0.08	4.34 ± 0.08	3.77 ± 0.09	4.54 ± 0.11	3.12 ± 0.07	n = 41	[AB1] Abbott
3.41 ± 0.08	4.54 ± 0.08	4.17 ± 0.08	4.94 ± 0.09	3.51 ± 0.08	n = 50	[BC1] Beckman Coulter
3.37 ± 0.14	4.48 ± 0.24	4.10 ± 0.18	4.77 ± 0.23	3.50 ± 0.18	n = 3	[OL1] Beckman Coulter AU Series
3.02 ± 0.10	4.42 ± 0.15	4.01 ± 0.16	5.28 ± 0.19	3.13 ± 0.12	n = 48	[JA1] JAS Diagnostics
3.49 ± 0.10	4.63 ± 0.10	4.37 ± 0.14	5.17 ± 0.14	3.66 ± 0.11	n = 20	[JJ1] Ortho Clinical Diagnostics
3.48 ± 0.11	4.63 ± 0.14	4.34 ± 0.09	5.12 ± 0.13	3.64 ± 0.11	n = 31	[RO4] Roche cobas c311/c501/c502/c701
3.42 ± 0.06	4.53 ± 0.12	4.22 ± 0.06	5.02 ± 0.08	3.60 ± 0.00	n = 10	[RO2] Roche Hitachi and Modular D/P
3.42 ± 0.07	4.51 ± 0.06	4.30 ± 0.07	5.13 ± 0.09	3.60 ± 0.07	n = 24	[RO1] Roche Integra and MIRA
3.37 ± 0.09	4.57 ± 0.10	4.15 ± 0.10	5.06 ± 0.10	3.42 ± 0.08	n = 96	[BY1] Siemens ADVIA/ADVISIA Centaur
						[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Total Protein (g/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
5.47 ± 0.16	7.15 ± 0.21	7.18 ± 0.19	8.70 ± 0.24	5.97 ± 0.17	n = 355	[---] All Methods & Instruments
5.50 ± 0.09	7.14 ± 0.10	7.33 ± 0.14	8.90 ± 0.09	6.03 ± 0.14	n = 3	<Instruments>
5.35 ± 0.07	7.15 ± 0.08	7.17 ± 0.08	8.77 ± 0.10	5.90 ± 0.09	n = 21	[AXA] Abaxis Piccolo
5.37 ± 0.10	7.02 ± 0.14	7.02 ± 0.11	8.49 ± 0.14	5.84 ± 0.11	n = 50	[ABJ] Abbott Architect c System
5.43 ± 0.29	7.20 ± 0.18	7.29 ± 0.21	8.59 ± 0.23	6.08 ± 0.23	n = 5	[OLC] Beckman Coulter AU Chemistry System
5.27 ± 0.14	6.82 ± 0.16	6.94 ± 0.14	8.42 ± 0.08	5.74 ± 0.14	n = 5	[BCS] Beckman Coulter CX
5.45 ± 0.08	7.11 ± 0.09	7.12 ± 0.09	8.62 ± 0.17	5.89 ± 0.17	n = 17	[BCG] Beckman Coulter UniCel DxC 600
5.27 ± 0.08	6.88 ± 0.12	7.01 ± 0.11	8.48 ± 0.16	5.81 ± 0.08	n = 16	[BCH] Beckman Coulter UniCel DxC 800
5.50 ± 0.00	7.20 ± 0.10	7.21 ± 0.09	8.81 ± 0.14	6.03 ± 0.09	n = 12	[JJE] Ortho Vitros 250/350/950
5.43 ± 0.11	7.05 ± 0.20	7.13 ± 0.15	8.64 ± 0.19	5.91 ± 0.14	n = 21	[JJF] Ortho Vitros 5,1FS
5.45 ± 0.15	7.08 ± 0.16	7.11 ± 0.12	8.71 ± 0.15	5.90 ± 0.15	n = 16	[JJG] Ortho Vitros 5600
5.43 ± 0.12	7.02 ± 0.11	7.07 ± 0.13	8.56 ± 0.12	5.91 ± 0.10	n = 16	[ROC] Roche cobas c501
5.43 ± 0.05	7.00 ± 0.00	7.00 ± 0.00	8.50 ± 0.09	5.90 ± 0.00	n = 3	[ROH] Roche cobas c701
5.33 ± 0.11	7.01 ± 0.13	7.04 ± 0.11	8.52 ± 0.18	5.89 ± 0.13	n = 5	[ROS] Roche Cobas INTEGRA 400
5.34 ± 0.11	7.00 ± 0.09	7.00 ± 0.09	8.50 ± 0.06	5.80 ± 0.10	n = 5	[ROT] Roche Cobas INTEGRA 800
5.46 ± 0.09	7.09 ± 0.12	7.09 ± 0.11	8.58 ± 0.15	5.92 ± 0.11	n = 32	[ROD] Roche MODULAR D/P
5.58 ± 0.08	7.24 ± 0.08	7.28 ± 0.12	8.78 ± 0.11	6.07 ± 0.09	n = 20	[BYE] Siemens ADVIA 1800
5.62 ± 0.15	7.27 ± 0.05	7.30 ± 0.09	8.80 ± 0.09	6.06 ± 0.10	n = 3	[BYB] Siemens ADVIA 2400
5.62 ± 0.12	7.36 ± 0.13	7.39 ± 0.11	8.97 ± 0.13	6.13 ± 0.10	n = 14	[DUE] Siemens Dimension EXL
5.62 ± 0.12	7.38 ± 0.13	7.37 ± 0.10	8.95 ± 0.12	6.14 ± 0.10	n = 25	[DUR] Siemens Dimension RxL
5.63 ± 0.09	7.36 ± 0.10	7.37 ± 0.10	8.91 ± 0.10	6.11 ± 0.07	n = 37	[DUT] Siemens Dimension Vista
5.62 ± 0.08	7.40 ± 0.12	7.42 ± 0.11	8.96 ± 0.13	6.17 ± 0.09	n = 20	[DUX] Siemens Dimension Xpand
5.50 ± 0.09	7.14 ± 0.10	7.33 ± 0.14	8.90 ± 0.09	6.03 ± 0.14	n = 3	<Reagents>
5.35 ± 0.07	7.15 ± 0.08	7.17 ± 0.08	8.77 ± 0.10	5.90 ± 0.09	n = 21	[AX1] Abaxis
5.35 ± 0.14	6.98 ± 0.18	7.05 ± 0.14	8.52 ± 0.18	5.84 ± 0.14	n = 42	[AB1] Abbott
5.37 ± 0.10	7.02 ± 0.14	7.02 ± 0.11	8.49 ± 0.14	5.84 ± 0.11	n = 49	[BC1] Beckman Coulter
5.50 ± 0.18	7.28 ± 0.32	7.20 ± 0.27	8.73 ± 0.34	6.07 ± 0.23	n = 3	[OL1] Beckman Coulter AU Series
5.46 ± 0.13	7.10 ± 0.18	7.15 ± 0.14	8.71 ± 0.18	5.94 ± 0.15	n = 49	[JA1] JAS Diagnostics
5.43 ± 0.11	7.02 ± 0.10	7.05 ± 0.10	8.55 ± 0.12	5.90 ± 0.06	n = 19	[JJ1] Ortho Clinical Diagnostics
5.46 ± 0.09	7.09 ± 0.12	7.09 ± 0.11	8.58 ± 0.15	5.92 ± 0.11	n = 32	[RO4] Roche cobas c311/c501/c502/c701
5.33 ± 0.11	7.00 ± 0.11	7.02 ± 0.10	8.51 ± 0.13	5.84 ± 0.12	n = 10	[RO2] Roche Hitachi and Modular D/P
5.58 ± 0.10	7.25 ± 0.08	7.28 ± 0.11	8.79 ± 0.10	6.07 ± 0.09	n = 24	[RO1] Roche Integra and MIRA
5.62 ± 0.10	7.38 ± 0.12	7.39 ± 0.11	8.94 ± 0.12	6.13 ± 0.09	n = 95	[BY1] Siemens ADVIA/ADVISIA Centaur
						[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Cholesterol (mg/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
118.8 ± 4.51	268.7 ± 8.56	167.3 ± 7.75	185.1 ± 9.17	138.1 ± 6.79	n = 327	[---] All Methods & Instruments
122.5 ± 4.61	270.0 ± 4.51	175.0 ± 2.70	190.3 ± 3.16	143.7 ± 2.26	n = 3	<Instruments>
121.3 ± 0.90	272.6 ± 1.59	170.8 ± 1.15	191.6 ± 1.42	141.1 ± 1.65	n = 17	[AXA] Abaxis Piccolo
116.1 ± 2.68	264.8 ± 5.83	163.8 ± 4.15	182.4 ± 3.83	135.2 ± 3.06	n = 56	[ABJ] Abbott Architect c System
117.4 ± 7.48	269.8 ± 14.28	162.6 ± 11.27	176.3 ± 12.49	131.5 ± 11.06	n = 6	[OLC] Beckman Coulter AU Chemistry System
119.5 ± 2.83	267.9 ± 5.29	165.3 ± 4.78	179.8 ± 6.55	134.6 ± 4.19	n = 4	[BCS] Beckman Coulter CX
117.4 ± 3.19	266.7 ± 4.01	164.8 ± 2.97	179.2 ± 4.08	133.9 ± 3.38	n = 16	[BCX] Beckman Coulter LX-20
117.3 ± 2.30	265.4 ± 3.67	163.9 ± 2.45	179.0 ± 3.38	135.2 ± 2.44	n = 15	[BCG] Beckman Coulter UniCel DxC 600
125.6 ± 1.33	284.7 ± 4.29	184.2 ± 4.80	211.0 ± 5.85	153.1 ± 3.64	n = 5	[BCH] Beckman Coulter UniCel DxC 800
122.9 ± 3.40	283.0 ± 6.41	181.2 ± 4.45	206.9 ± 6.90	147.6 ± 4.77	n = 20	[JJE] Ortho Vitros 250/350/950
124.9 ± 2.48	286.5 ± 4.37	184.5 ± 3.50	210.4 ± 4.24	148.3 ± 3.21	n = 16	[JJF] Ortho Vitros 5,1FS
122.9 ± 4.27	272.1 ± 8.74	172.8 ± 5.31	190.7 ± 6.55	144.1 ± 5.17	n = 15	[JJG] Ortho Vitros 5600
119.2 ± 1.54	269.2 ± 1.54	169.5 ± 1.86	186.5 ± 1.86	138.5 ± 1.86	n = 3	[ROC] Roche cobas c501
121.5 ± 1.80	272.2 ± 5.27	170.8 ± 4.48	189.9 ± 3.11	141.5 ± 3.12	n = 5	[ROH] Roche cobas c701
119.9 ± 1.83	271.6 ± 5.95	169.4 ± 2.57	187.7 ± 2.18	141.7 ± 2.81	n = 5	[ROS] Roche Cobas INTEGRA 400
120.1 ± 2.65	271.5 ± 6.27	170.0 ± 3.45	189.5 ± 4.38	141.0 ± 2.69	n = 33	[ROT] Roche Cobas INTEGRA 800
121.6 ± 1.81	265.7 ± 3.18	171.7 ± 2.81	185.7 ± 2.64	142.8 ± 1.70	n = 20	[ROD] Roche MODULAR D/P
121.5 ± 4.53	269.4 ± 2.56	169.9 ± 5.72	186.7 ± 3.16	144.9 ± 4.38	n = 3	[BYE] Siemens ADVIA 1800
113.3 ± 2.83	262.7 ± 7.06	157.0 ± 3.00	172.9 ± 4.71	128.0 ± 3.68	n = 13	[BYB] Siemens ADVIA 2400
116.2 ± 4.30	267.4 ± 6.92	161.3 ± 5.26	178.6 ± 6.24	131.8 ± 4.97	n = 18	[DUE] Siemens Dimension EXL
115.9 ± 3.70	263.9 ± 6.16	163.2 ± 3.62	182.3 ± 4.75	134.5 ± 3.27	n = 32	[DUR] Siemens Dimension RxL
117.6 ± 3.31	269.5 ± 6.83	162.4 ± 4.90	179.6 ± 4.64	133.5 ± 4.43	n = 14	[DUT] Siemens Dimension Vista
122.5 ± 4.61	270.0 ± 4.51	175.0 ± 2.70	190.3 ± 3.16	143.7 ± 2.26	n = 3	[DUX] Siemens Dimension Xpand
121.3 ± 0.90	272.6 ± 1.59	170.8 ± 1.15	191.6 ± 1.42	141.1 ± 1.65	n = 17	<Reagents>
117.4 ± 3.03	266.0 ± 4.13	164.3 ± 3.03	178.9 ± 4.66	134.5 ± 3.18	n = 40	[AB1] Abbott
116.0 ± 2.73	264.8 ± 6.05	163.8 ± 4.19	182.6 ± 3.70	135.3 ± 3.10	n = 53	[BC1] Beckman Coulter
117.4 ± 3.87	265.3 ± 13.23	165.2 ± 8.71	181.3 ± 6.93	134.3 ± 7.67	n = 3	[OL1] Beckman Coulter AU Series
124.2 ± 2.96	284.7 ± 5.51	182.9 ± 4.49	208.8 ± 6.31	148.6 ± 4.55	n = 41	[JAS] JAS Diagnostics
122.1 ± 4.26	271.2 ± 7.45	172.1 ± 4.94	189.8 ± 6.14	143.0 ± 5.40	n = 18	[JJ1] Ortho Clinical Diagnostics
119.9 ± 2.63	271.4 ± 6.32	169.9 ± 3.71	189.4 ± 4.68	141.0 ± 2.76	n = 33	[RO4] Roche cobas c311/c501/c502/c701
120.7 ± 1.92	272.0 ± 5.52	170.0 ± 3.63	188.7 ± 2.90	141.6 ± 3.03	n = 10	[RO2] Roche Hitachi and Modular D/P
121.8 ± 2.29	266.4 ± 3.36	171.8 ± 2.93	185.9 ± 2.71	142.9 ± 1.70	n = 24	[RO1] Roche Integra and MIRA
115.8 ± 3.92	265.5 ± 6.98	161.6 ± 4.78	179.5 ± 6.11	132.8 ± 4.59	n = 77	[BY1] Siemens ADVIA/ADVIS Centaur
122.5 ± 4.61	270.0 ± 4.51	175.0 ± 2.70	190.3 ± 3.16	143.7 ± 2.26	n = 3	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

HDL-Cholesterol (mg/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
31.3 ± 3.15	78.3 ± 8.85	40.0 ± 4.39	34.8 ± 4.21	33.0 ± 3.55	n = 311	[---] All Methods & Instruments
31.3 ± 3.95	82.4 ± 9.95	41.5 ± 5.19	37.5 ± 5.52	33.2 ± 4.52	n = 18	[---] All Precipitation Methods
31.3 ± 3.12	78.1 ± 8.70	39.9 ± 4.29	34.6 ± 4.07	33.0 ± 3.47	n = 293	[---] All Homogeneous (Direct) Methods
21.3 ± 1.37	63.8 ± 1.54	25.5 ± 1.86	23.8 ± 2.36	20.5 ± 2.74	n = 3	[AX1] Abaxis
33.5 ± 1.39	81.8 ± 3.19	37.4 ± 1.71	34.7 ± 1.70	30.8 ± 1.73	n = 16	[AB1] Abbott
35.4 ± 1.89	90.6 ± 2.86	40.2 ± 1.84	37.6 ± 1.72	32.4 ± 1.57	n = 33	[BC1] Beckman Coulter
33.6 ± 1.67	82.8 ± 2.86	37.1 ± 1.31	34.6 ± 1.27	30.6 ± 1.12	n = 37	[OL1] Beckman Coulter AU Series
34.5 ± 0.57	83.6 ± 3.40	38.5 ± 0.57	35.0 ± 0.75	31.0 ± 0.75	n = 5	[EQ1/GZ1] Equal/Sekisui Diagnostics (Genzyme)
33.5 ± 1.34	91.8 ± 3.70	44.3 ± 1.85	41.6 ± 1.84	34.8 ± 1.41	n = 33	[JJ1] Ortho Clinical Diagnostics
30.6 ± 1.30	73.4 ± 2.00	40.4 ± 2.57	33.5 ± 2.23	34.4 ± 2.40	n = 9	[RO1] Roche Integra and MIRA
30.3 ± 1.62	74.1 ± 3.84	43.7 ± 3.68	35.7 ± 3.58	36.8 ± 3.45	n = 30	[RO2] Roche Hitachi and Modular D/P
29.5 ± 0.95	70.9 ± 2.01	39.3 ± 1.79	32.4 ± 1.61	33.1 ± 1.46	n = 15	[RO4] Roche cobas c311/c501/c502/c701
26.1 ± 0.90	71.3 ± 2.40	28.1 ± 0.89	26.4 ± 0.99	22.5 ± 0.78	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
29.7 ± 1.22	73.0 ± 2.49	40.7 ± 1.97	33.4 ± 1.74	34.1 ± 1.58	n = 71	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

LDL-Cholesterol (mg/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
70.3 ± 10.55	154.2 ± 16.98	104.0 ± 12.99	124.4 ± 13.46	84.7 ± 11.52	n = 300	[---] All Methods & Instruments
75.6 ± 5.28	161.9 ± 9.55	110.7 ± 8.78	132.1 ± 9.56	90.4 ± 8.05	n = 156	[A-] All Calculated Results Friedewald formula [LDL=TC-HDL-(Trigs÷5)]
62.6 ± 10.24	142.7 ± 18.67	95.2 ± 12.43	115.6 ± 11.24	77.3 ± 10.86	n = 143	[---] All Homogeneous (Direct) Methods
59.1 ± 1.27	133.1 ± 3.27	94.4 ± 2.61	115.3 ± 2.17	76.7 ± 2.16	n = 6	[AB1] Abbott
55.4 ± 2.30	129.6 ± 5.69	88.9 ± 4.93	111.4 ± 4.92	73.4 ± 3.12	n = 15	[BC1] Beckman Coulter
53.1 ± 2.77	117.5 ± 4.49	80.3 ± 5.04	100.5 ± 5.34	65.1 ± 3.29	n = 19	[OL1] Beckman Coulter AU Series
55.9 ± 4.83	124.6 ± 9.74	84.6 ± 9.12	106.4 ± 10.43	69.0 ± 7.40	n = 13	[EQ1/GZ1] Equal/Sekisui Diagnostics (Genzyme)
57.5 ± 3.26	155.8 ± 7.44	95.8 ± 4.18	121.5 ± 4.65	74.3 ± 3.50	n = 15	[JJ1] Ortho Clinical Diagnostics
82.7 ± 1.99	172.3 ± 4.76	117.2 ± 3.16	133.6 ± 4.82	97.0 ± 3.52	n = 5	[RO4] Roche cobas c311/c501/c502/c701
81.5 ± 2.16	169.4 ± 6.52	109.0 ± 3.61	124.6 ± 4.03	90.3 ± 3.63	n = 14	[RO2] Roche Hitachi and Modular D/P
63.9 ± 7.62	147.2 ± 10.59	63.3 ± 12.84	70.5 ± 10.92	54.2 ± 9.57	n = 4	[RO1] Roche Integra and MIRA
58.0 ± 2.87	143.5 ± 6.24	89.6 ± 4.30	111.3 ± 4.42	71.1 ± 3.56	n = 12	[BY1] Siemens ADVIA/ADVISIA Centaur
69.1 ± 4.49	146.4 ± 7.41	103.6 ± 5.46	120.4 ± 5.71	85.4 ± 4.95	n = 34	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Triglycerides (mg/dL)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
63.2 ± 4.11	147.0 ± 6.78	95.3 ± 5.24	104.1 ± 6.26	82.6 ± 4.64	n = 319	[---] All Methods & Instruments
						<Instruments>
69.7 ± 0.51	168.3 ± 1.37	111.0 ± 0.90	124.6 ± 1.02	95.8 ± 1.54	n = 3	[AXA] Abaxis Piccolo
66.6 ± 2.37	142.0 ± 2.65	96.9 ± 2.46	100.8 ± 2.05	84.9 ± 2.46	n = 18	[ABJ] Abbott Architect c System
60.3 ± 1.55	145.1 ± 3.57	91.4 ± 2.70	100.8 ± 2.70	79.5 ± 2.46	n = 54	[OLC] Beckman Coulter AU Chemistry System
65.2 ± 10.78	162.6 ± 11.78	101.4 ± 11.21	113.6 ± 10.71	85.9 ± 9.27	n = 5	[BCS] Beckman Coulter CX
61.4 ± 1.80	154.7 ± 4.21	100.4 ± 3.79	111.4 ± 3.39	84.3 ± 3.17	n = 4	[BCX] Beckman Coulter LX-20
63.2 ± 1.98	155.8 ± 4.27	97.8 ± 2.59	109.0 ± 3.05	84.1 ± 2.36	n = 13	[BCG] Beckman Coulter UniCel DxC 600
63.3 ± 1.99	154.4 ± 5.10	98.1 ± 2.96	109.0 ± 3.91	83.5 ± 3.23	n = 13	[BCH] Beckman Coulter UniCel DxC 800
65.6 ± 0.55	153.5 ± 1.62	102.1 ± 2.23	116.4 ± 3.04	87.8 ± 1.07	n = 5	[JJE] Ortho Vitros 250/350/950
63.1 ± 2.08	147.2 ± 5.54	97.0 ± 3.12	110.6 ± 3.81	83.1 ± 2.50	n = 20	[JJF] Ortho Vitros 5.1FS
63.0 ± 1.79	147.0 ± 3.15	97.5 ± 3.11	110.8 ± 3.65	83.4 ± 2.80	n = 16	[JJG] Ortho Vitros 5600
67.2 ± 2.26	146.5 ± 3.35	96.2 ± 2.92	104.5 ± 2.36	85.5 ± 2.59	n = 15	[ROC] Roche cobas c501
66.2 ± 1.54	146.0 ± 1.80	95.3 ± 1.37	103.4 ± 1.02	85.0 ± 0.90	n = 3	[ROH] Roche cobas c701
62.7 ± 1.38	143.8 ± 3.60	90.4 ± 2.05	100.1 ± 3.11	80.1 ± 1.83	n = 5	[ROS] Roche Cobas INTEGRA 400
61.5 ± 1.22	142.5 ± 2.83	89.3 ± 1.51	99.7 ± 1.58	79.3 ± 0.90	n = 4	[ROT] Roche Cobas INTEGRA 800
64.6 ± 1.76	144.5 ± 2.48	95.2 ± 2.67	102.7 ± 2.53	83.7 ± 2.24	n = 33	[ROD] Roche MODULAR D/P
63.3 ± 1.42	146.3 ± 2.75	96.2 ± 2.31	102.5 ± 2.68	83.2 ± 1.47	n = 20	[BYE] Siemens ADVIA 1800
63.9 ± 3.72	148.9 ± 2.86	97.5 ± 4.53	106.7 ± 3.37	84.8 ± 3.23	n = 3	[BYB] Siemens ADVIA 2400
57.5 ± 2.26	142.4 ± 2.82	89.9 ± 2.45	97.6 ± 2.96	77.9 ± 2.38	n = 13	[DUE] Siemens Dimension EXL
57.7 ± 2.84	142.0 ± 3.40	91.5 ± 3.20	98.1 ± 4.26	77.7 ± 3.08	n = 18	[DUR] Siemens Dimension RxL
69.0 ± 2.36	158.8 ± 3.10	104.2 ± 3.22	111.4 ± 4.69	90.0 ± 2.98	n = 34	[DUT] Siemens Dimension Vista
57.0 ± 4.40	141.2 ± 2.25	90.3 ± 3.40	96.5 ± 2.97	76.3 ± 2.74	n = 12	[DUX] Siemens Dimension Xpand
						<Reagents>
69.7 ± 0.51	168.3 ± 1.37	111.0 ± 0.90	124.6 ± 1.02	95.8 ± 1.54	n = 3	[AX1] Abaxis
66.6 ± 2.37	142.0 ± 2.65	96.9 ± 2.46	100.8 ± 2.05	84.9 ± 2.46	n = 18	[AB1] Abbott
62.7 ± 2.21	155.1 ± 5.05	98.0 ± 3.36	109.2 ± 3.79	83.5 ± 3.13	n = 34	[BC1] Beckman Coulter
60.4 ± 1.56	144.8 ± 3.37	91.5 ± 2.61	100.7 ± 2.76	79.7 ± 2.36	n = 50	[OL1] Beckman Coulter AU Series
64.5 ± 12.80	177.6 ± 21.95	132.9 ± 36.87	144.5 ± 48.31	116.9 ± 51.68	n = 3	[CR1] Carolina
60.1 ± 2.86	152.2 ± 6.79	83.5 ± 5.43	101.7 ± 6.76	74.1 ± 3.72	n = 3	[JA1] JAS Diagnostics
63.5 ± 2.12	148.2 ± 4.69	97.8 ± 3.50	111.4 ± 4.17	83.8 ± 3.09	n = 41	[JJ1] Ortho Clinical Diagnostics
67.0 ± 2.19	146.4 ± 2.92	96.1 ± 2.72	104.3 ± 2.17	85.5 ± 2.35	n = 18	[RO4] Roche cobas c311/c501/c502/c701
64.6 ± 1.76	144.5 ± 2.48	95.2 ± 2.67	102.7 ± 2.53	83.7 ± 2.24	n = 33	[RO2] Roche Hitachi and Modular D/P
62.2 ± 1.42	143.2 ± 3.33	89.9 ± 1.91	99.8 ± 2.48	79.6 ± 1.40	n = 9	[RO1] Roche Integra and MIRA
63.5 ± 1.89	146.6 ± 2.82	96.4 ± 2.64	103.0 ± 2.99	83.3 ± 1.67	n = 24	[BY1] Siemens ADVIA/ADVISIA Centaur
62.6 ± 7.37	149.2 ± 10.36	96.3 ± 8.31	103.4 ± 8.82	82.5 ± 7.95	n = 76	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

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

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
8.29 \pm 1.14	30.77 \pm 3.20	10.72 \pm 1.25	13.17 \pm 1.50	8.87 \pm 1.21	n = 121	[---] All Methods & Instruments
8.56 \pm 0.44	30.46 \pm 0.72	11.22 \pm 0.46	13.62 \pm 0.42	9.37 \pm 0.39	n = 11	<Instruments>
8.25 \pm 0.28	31.01 \pm 0.78	10.82 \pm 0.20	13.45 \pm 0.06	8.83 \pm 0.08	n = 4	[ABH] Abbott Architect i System
9.23 \pm 0.45	33.07 \pm 1.29	11.49 \pm 1.05	14.09 \pm 1.37	9.59 \pm 0.40	n = 23	[ABB] Abbott AxSym
9.13 \pm 0.24	32.80 \pm 0.51	11.65 \pm 0.46	14.22 \pm 0.82	9.75 \pm 0.19	n = 4	[OLC] Beckman Coulter AU Chemistry System
8.63 \pm 0.25	31.47 \pm 0.55	12.05 \pm 0.39	15.08 \pm 0.21	9.89 \pm 0.11	n = 4	[BCH] Beckman Coulter UniCel DxC 800
9.12 \pm 0.81	32.55 \pm 1.75	10.73 \pm 0.72	13.24 \pm 0.57	9.33 \pm 0.29	n = 6	[JJG] Ortho Vitros 5600
6.73 \pm 0.53	25.56 \pm 1.41	9.28 \pm 0.68	11.64 \pm 0.66	7.23 \pm 0.54	n = 25	[ROD] Roche MODULAR D/P
7.60 \pm 0.10	29.28 \pm 1.12	9.27 \pm 0.45	10.93 \pm 0.24	7.47 \pm 0.27	n = 7	[COB] Siemens ADVIA Centaur
7.98 \pm 0.77	31.45 \pm 2.43	10.98 \pm 1.14	13.63 \pm 0.97	9.13 \pm 0.81	n = 16	[DUT] Siemens Dimension Vista
8.35 \pm 0.27	32.22 \pm 1.23	11.13 \pm 0.14	14.19 \pm 0.92	9.09 \pm 0.83	n = 3	[DPD] Siemens Immulite 2000
						[DPE] Siemens Immulite 2500
8.46 \pm 0.42	30.60 \pm 0.77	11.08 \pm 0.45	13.56 \pm 0.36	9.21 \pm 0.42	n = 15	<Reagents>
9.01 \pm 0.56	32.48 \pm 1.44	12.81 \pm 1.00	15.77 \pm 1.40	10.33 \pm 1.09	n = 8	[AB1] Abbott
9.20 \pm 0.45	33.10 \pm 1.17	10.99 \pm 0.60	13.36 \pm 0.81	9.40 \pm 0.37	n = 27	[CR1] Carolina
8.62 \pm 0.44	31.40 \pm 0.93	12.01 \pm 0.50	15.08 \pm 0.40	9.90 \pm 0.09	n = 6	[DZ1] Diazyme
6.73 \pm 0.53	25.56 \pm 1.41	9.28 \pm 0.68	11.64 \pm 0.66	7.23 \pm 0.54	n = 25	[JJ1] Ortho Clinical Diagnostics
7.60 \pm 0.09	29.02 \pm 0.98	9.15 \pm 0.36	10.92 \pm 0.21	7.40 \pm 0.19	n = 6	[BY1] Siemens ADVIA/ADVIA Centaur
8.05 \pm 0.72	31.56 \pm 2.25	11.01 \pm 1.03	13.72 \pm 0.99	9.13 \pm 0.82	n = 19	[DA5] Siemens Dimension
						[DP5] Siemens Immulite

Summary of Participant Performance (Mean and Standard Deviation)

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

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
1.048 \pm 0.251	0.093 \pm 0.026	0.017 \pm 0.016	0.017 \pm 0.015	0.412 \pm 0.138	n = 224	[---] All Methods & Instruments
5.731 \pm 0.227	0.660 \pm 0.042	0.010 \pm 0.005	0.010 \pm 0.005	2.769 \pm 0.134	n = 22	<Instruments>
0.887 \pm 0.073	0.092 \pm 0.010	0.012 \pm 0.008	0.011 \pm 0.008	0.367 \pm 0.036	n = 25	[ABH] Abbott Architect i System
0.163 \pm 0.039	0.050 \pm 0.000	0.050 \pm 0.000	0.050 \pm 0.000	0.054 \pm 0.006	n = 10	[SAA] Beckman Coulter ACCESS
3.472 \pm 0.345	0.343 \pm 0.025	0.034 \pm 0.045	0.034 \pm 0.045	1.086 \pm 0.069	n = 4	[BSA] BioSite Triage
2.877 \pm 0.096	0.416 \pm 0.034	0.012 \pm 0.004	0.012 \pm 0.004	1.674 \pm 0.073	n = 14	[IAA] i-STAT
3.075 \pm 0.090	0.436 \pm 0.027	0.010 \pm 0.000	0.010 \pm 0.000	1.765 \pm 0.093	n = 13	[JJG] Ortho Vitros 5600
1.033 \pm 0.083	0.080 \pm 0.010	0.009 \pm 0.007	0.009 \pm 0.007	0.411 \pm 0.037	n = 42	[JJC] Ortho Vitros ECi/ECiQ
1.017 \pm 0.047	0.083 \pm 0.009	0.018 \pm 0.020	0.018 \pm 0.020	0.370 \pm 0.051	n = 4	[COB] Siemens ADVIA Centaur
1.316 \pm 0.081	0.121 \pm 0.017	0.082 \pm 0.037	0.082 \pm 0.037	0.569 \pm 0.041	n = 10	[BYP] Siemens ADVIA Centaur CP
0.948 \pm 0.112	0.084 \pm 0.022	0.040 \pm 0.000	0.038 \pm 0.016	0.314 \pm 0.034	n = 16	[DUE] Siemens Dimension EXL
1.304 \pm 0.056	0.123 \pm 0.008	0.020 \pm 0.000	0.020 \pm 0.000	0.563 \pm 0.035	n = 35	[DUR] Siemens Dimension RxL
0.927 \pm 0.094	0.088 \pm 0.022	0.025 \pm 0.022	0.026 \pm 0.021	0.284 \pm 0.034	n = 10	[DUT] Siemens Dimension Vista
2.098 \pm 0.315	0.334 \pm 0.023	0.200 \pm 0.000	0.200 \pm 0.000	1.004 \pm 0.133	n = 4	[DUX] Siemens Dimension Xpand
6.201 \pm 0.474	0.917 \pm 0.079	0.060 \pm 0.000	0.060 \pm 0.000	3.275 \pm 0.286	n = 4	[DPD] Siemens Immulite 2000
5.732 \pm 0.228	0.660 \pm 0.042	0.009 \pm 0.007	0.009 \pm 0.007	2.769 \pm 0.135	n = 27	[TOM] Tosoh Bioscience
0.889 \pm 0.069	0.092 \pm 0.011	0.011 \pm 0.009	0.010 \pm 0.007	0.367 \pm 0.034	n = 27	<Reagents>
0.163 \pm 0.039	0.050 \pm 0.000	0.050 \pm 0.000	0.050 \pm 0.000	0.054 \pm 0.006	n = 10	[AB1] Abbott
2.960 \pm 0.147	0.427 \pm 0.032	0.010 \pm 0.000	0.010 \pm 0.000	1.714 \pm 0.093	n = 27	[BC1] Beckman Coulter
0.483 \pm 0.016	0.305 \pm 0.006	0.305 \pm 0.006	0.305 \pm 0.006	0.305 \pm 0.006	n = 4	[BS1] Biosite Diagnostics
1.032 \pm 0.079	0.080 \pm 0.009	0.009 \pm 0.006	0.009 \pm 0.006	0.409 \pm 0.039	n = 46	[JJ1] Ortho Clinical Diagnostics
0.943 \pm 0.113	0.087 \pm 0.023	0.035 \pm 0.017	0.033 \pm 0.019	0.303 \pm 0.038	n = 27	[RO3] Roche Elecsys/Modular E/e601/e411
1.305 \pm 0.061	0.122 \pm 0.011	0.032 \pm 0.030	0.029 \pm 0.028	0.565 \pm 0.037	n = 44	[BY1] Siemens ADVIA/ADVISIA Centaur
1.995 \pm 0.343	0.318 \pm 0.050	0.200 \pm 0.000	0.200 \pm 0.000	0.961 \pm 0.142	n = 5	[DA5] Siemens Dimension
6.359 \pm 0.492	0.930 \pm 0.091	0.060 \pm 0.000	0.060 \pm 0.000	3.388 \pm 0.246	n = 3	[DA6] Siemens Dimension LOCI
						[DP5] Siemens Immulite
						[TO2] Tosoh ST AIA

Summary of Participant Performance (Mean and Standard Deviation)

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

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
0.616 \pm 0.050	0.111 \pm 0.011	0.010 \pm 0.000	0.010 \pm 0.000	0.305 \pm 0.023	n = 34	[---] All Methods & Instruments
0.574 \pm 0.010	0.120 \pm 0.009	0.024 \pm 0.010	0.024 \pm 0.010	0.306 \pm 0.010	n = 3	<Instruments> [ROF] Roche cobas e411
0.606 \pm 0.048	0.104 \pm 0.007	0.010 \pm 0.000	0.010 \pm 0.000	0.294 \pm 0.022	n = 10	[ROA] Roche cobas e601
0.649 \pm 0.017	0.118 \pm 0.013	0.010 \pm 0.000	0.010 \pm 0.000	0.317 \pm 0.028	n = 10	[BME] Roche Elecsys
0.611 \pm 0.033	0.112 \pm 0.007	0.010 \pm 0.000	0.010 \pm 0.000	0.307 \pm 0.013	n = 9	[ROE] Roche MODULAR E
0.613 \pm 0.048	0.111 \pm 0.010	0.010 \pm 0.000	0.010 \pm 0.000	0.305 \pm 0.022	n = 30	<Reagents> [RO3] Roche Elecsys/Modular E/e601/e411

Summary of Participant Performance (Mean and Standard Deviation)

Alanine Aminotransferase (U/L 37°C)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
121.0 ± 9.40	50.5 ± 6.65	169.4 ± 11.16	47.7 ± 6.61	140.5 ± 11.29	n = 356	[---] All Methods & Instruments
106.0 ± 4.60	46.6 ± 1.02	149.0 ± 3.61	41.8 ± 3.23	126.5 ± 2.74	n = 3	<Instruments>
118.2 ± 3.12	46.8 ± 1.85	166.6 ± 3.54	43.5 ± 1.88	137.9 ± 3.23	n = 21	[AXA] Abaxis Piccolo
105.3 ± 3.20	42.0 ± 1.30	151.3 ± 4.37	42.4 ± 1.88	123.5 ± 3.42	n = 51	[ABJ] Abbott Architect c System
115.3 ± 5.72	47.5 ± 3.18	160.4 ± 5.54	45.1 ± 1.38	132.0 ± 6.57	n = 5	[OLC] Beckman Coulter AU Chemistry System
117.0 ± 1.54	49.5 ± 1.07	161.1 ± 4.24	45.0 ± 0.93	132.2 ± 0.41	n = 5	[BCS] Beckman Coulter CX
117.8 ± 2.59	50.6 ± 1.41	163.2 ± 3.54	45.5 ± 2.12	134.4 ± 3.69	n = 17	[BCX] Beckman Coulter LX-20
118.7 ± 1.32	51.6 ± 1.47	164.7 ± 3.51	46.2 ± 1.58	136.4 ± 2.84	n = 15	[BCG] Beckman Coulter UniCel DxC 600
129.9 ± 5.29	55.8 ± 3.96	182.9 ± 6.27	58.4 ± 3.30	158.5 ± 5.06	n = 12	[BCH] Beckman Coulter UniCel DxC 800
132.2 ± 4.49	58.2 ± 4.12	185.5 ± 5.04	60.8 ± 5.02	159.3 ± 4.56	n = 21	[JJE] Ortho Vitros 250/350/950
131.3 ± 4.94	57.3 ± 3.23	183.4 ± 4.43	60.1 ± 2.80	158.2 ± 2.62	n = 16	[JJF] Ortho Vitros 5,1FS
118.7 ± 4.71	46.7 ± 1.72	173.1 ± 6.33	46.8 ± 1.97	140.7 ± 4.99	n = 16	[JJG] Ortho Vitros 5600
115.0 ± 2.70	44.8 ± 2.36	166.3 ± 6.73	43.2 ± 2.36	135.2 ± 5.00	n = 3	[ROC] Roche cobas c501
118.5 ± 4.53	46.0 ± 2.15	167.4 ± 6.19	42.7 ± 1.97	137.4 ± 4.76	n = 6	[ROH] Roche cobas c701
116.5 ± 3.20	45.5 ± 0.83	163.6 ± 5.67	43.0 ± 0.93	136.5 ± 3.86	n = 5	[ROS] Roche Cobas INTEGRA 400
117.4 ± 3.50	46.8 ± 2.09	167.8 ± 5.00	45.1 ± 2.02	137.7 ± 4.02	n = 32	[ROT] Roche Cobas INTEGRA 800
124.7 ± 3.98	50.9 ± 2.59	175.0 ± 4.56	46.3 ± 3.64	143.7 ± 4.25	n = 20	[ROD] Roche MODULAR D/P
123.7 ± 7.74	51.5 ± 1.86	171.5 ± 1.86	49.8 ± 4.11	141.3 ± 4.22	n = 3	[BYE] Siemens ADVIA 1800
127.7 ± 2.97	59.6 ± 1.61	175.0 ± 2.66	55.5 ± 1.93	146.0 ± 3.32	n = 15	[BYB] Siemens ADVIA 2400
130.0 ± 4.63	60.5 ± 3.27	175.1 ± 4.72	56.1 ± 2.81	147.5 ± 4.22	n = 24	[DUE] Siemens Dimension EXL
122.9 ± 1.91	51.0 ± 1.35	171.2 ± 3.53	46.6 ± 1.65	141.7 ± 2.87	n = 37	[DUR] Siemens Dimension RxL
130.8 ± 2.87	60.8 ± 0.68	177.1 ± 2.90	56.0 ± 1.16	148.9 ± 3.19	n = 19	[DUT] Siemens Dimension Vista
106.0 ± 4.60	46.6 ± 1.02	149.0 ± 3.61	41.8 ± 3.23	126.5 ± 2.74	n = 3	[DUX] Siemens Dimension Xpand
118.2 ± 3.12	46.8 ± 1.85	166.6 ± 3.54	43.5 ± 1.88	137.9 ± 3.23	n = 21	<Reagents>
118.2 ± 2.51	50.7 ± 1.75	163.4 ± 4.09	45.6 ± 1.75	134.6 ± 4.01	n = 43	[AB1] Abbott
105.3 ± 3.10	42.0 ± 1.23	151.3 ± 4.11	42.5 ± 1.83	123.6 ± 3.20	n = 49	[BC1] Beckman Coulter
111.8 ± 10.29	45.8 ± 2.36	157.7 ± 10.61	40.5 ± 1.86	126.5 ± 7.22	n = 3	[OL1] Beckman Coulter AU Series
131.3 ± 5.00	57.3 ± 4.04	184.1 ± 5.39	59.8 ± 4.09	158.7 ± 4.22	n = 50	[JA1] JAS Diagnostics
117.6 ± 4.69	46.4 ± 1.92	171.5 ± 6.96	46.3 ± 2.21	139.5 ± 5.43	n = 20	[JJ1] Ortho Clinical Diagnostics
117.4 ± 3.50	46.8 ± 2.09	167.8 ± 5.00	45.1 ± 2.02	137.7 ± 4.02	n = 32	[RO4] Roche cobas c311/c501/c502/c701
117.5 ± 4.08	45.8 ± 1.61	165.6 ± 6.30	43.0 ± 1.50	137.0 ± 4.40	n = 11	[RO2] Roche Hitachi and Modular D/P
124.5 ± 5.16	50.8 ± 2.74	174.4 ± 4.50	46.4 ± 4.11	143.4 ± 4.42	n = 24	[RO1] Roche Integra and MIRA
127.0 ± 5.01	56.8 ± 5.52	174.2 ± 4.44	52.1 ± 5.69	145.4 ± 4.55	n = 82	[BY1] Siemens ADVIA/ADVIS Centaur
124.5 ± 3.49	53.9 ± 5.37	172.9 ± 2.24	49.6 ± 4.71	143.3 ± 4.40	n = 12	[DA5] Siemens Dimension
						[DA8] Siemens Dimension IFCC Standardized

Summary of Participant Performance (Mean and Standard Deviation)

Aspartate Aminotransferase (U/L 37°C)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
74.5 ± 3.99	288.9 ± 13.88	175.1 ± 8.40	67.2 ± 3.67	144.4 ± 7.04	n = 356	[---] All Methods & Instruments
76.5 ± 1.86	290.0 ± 4.60	174.7 ± 3.37	68.6 ± 2.56	145.3 ± 3.07	n = 3	<Instruments>
74.7 ± 1.76	291.1 ± 5.31	172.5 ± 3.48	66.0 ± 1.56	143.3 ± 3.09	n = 21	[AXA] Abaxis Piccolo
67.7 ± 2.46	259.7 ± 8.82	156.8 ± 5.29	61.9 ± 2.58	130.0 ± 4.56	n = 51	[ABJ] Abbott Architect c System
71.1 ± 3.94	274.4 ± 15.16	165.9 ± 7.76	64.0 ± 3.15	136.6 ± 7.87	n = 5	[OLC] Beckman Coulter AU Chemistry System
74.2 ± 0.41	286.5 ± 3.77	171.5 ± 1.22	66.0 ± 0.75	141.7 ± 2.02	n = 4	[BCS] Beckman Coulter CX
74.4 ± 1.77	286.8 ± 6.51	172.0 ± 2.84	66.2 ± 1.91	141.7 ± 3.86	n = 18	[BCX] Beckman Coulter LX-20
75.2 ± 2.13	287.5 ± 5.59	172.7 ± 2.57	67.0 ± 0.96	142.3 ± 3.66	n = 15	[BCG] Beckman Coulter UniCel DxC 600
74.6 ± 2.00	290.5 ± 9.11	180.5 ± 4.62	72.7 ± 1.16	146.6 ± 3.46	n = 12	[BCH] Beckman Coulter UniCel DxC 800
73.9 ± 2.08	289.4 ± 7.44	180.6 ± 3.66	71.7 ± 1.99	144.7 ± 3.48	n = 21	[JJE] Ortho Vitros 250/350/950
74.1 ± 3.07	290.3 ± 9.12	180.0 ± 4.26	71.4 ± 1.84	143.5 ± 3.53	n = 16	[JJF] Ortho Vitros 5,1FS
75.6 ± 2.86	293.2 ± 13.37	178.6 ± 5.98	67.8 ± 2.25	147.0 ± 5.29	n = 16	[JJG] Ortho Vitros 5600
75.0 ± 0.90	297.2 ± 8.77	175.1 ± 3.72	67.7 ± 1.37	142.8 ± 4.11	n = 3	[ROC] Roche cobas c501
77.3 ± 2.31	304.5 ± 7.47	180.7 ± 3.47	67.3 ± 1.38	150.2 ± 3.29	n = 6	[ROH] Roche cobas c701
77.4 ± 1.52	298.3 ± 6.07	178.9 ± 3.82	67.7 ± 1.10	148.2 ± 3.38	n = 5	[ROS] Roche Cobas INTEGRA 400
75.6 ± 2.59	290.5 ± 5.68	175.3 ± 3.97	67.4 ± 1.40	144.5 ± 2.45	n = 33	[ROT] Roche Cobas INTEGRA 800
83.1 ± 2.93	315.0 ± 7.01	187.2 ± 3.97	72.0 ± 2.85	155.6 ± 3.20	n = 20	[ROD] Roche MODULAR D/P
82.0 ± 4.60	312.1 ± 13.79	185.1 ± 8.31	73.0 ± 5.48	153.8 ± 7.82	n = 3	[BYE] Siemens ADVIA 1800
74.2 ± 1.92	285.9 ± 5.35	174.2 ± 3.10	66.7 ± 1.40	145.0 ± 2.13	n = 14	[BYB] Siemens ADVIA 2400
75.8 ± 3.04	288.1 ± 7.37	176.1 ± 4.73	67.6 ± 2.65	147.3 ± 4.43	n = 25	[DUE] Siemens Dimension EXL
73.9 ± 3.11	292.2 ± 5.90	176.7 ± 4.74	66.1 ± 2.95	146.2 ± 4.08	n = 36	[DUR] Siemens Dimension RxL
76.3 ± 1.63	292.6 ± 5.46	178.2 ± 3.41	68.0 ± 1.68	149.0 ± 2.70	n = 19	[DUT] Siemens Dimension Vista
76.5 ± 1.86	290.0 ± 4.60	174.7 ± 3.37	68.6 ± 2.56	145.3 ± 3.07	n = 3	[DUX] Siemens Dimension Xpand
74.7 ± 1.76	291.1 ± 5.31	172.5 ± 3.48	66.0 ± 1.56	143.3 ± 3.09	n = 21	<Reagents>
74.5 ± 1.96	286.5 ± 6.50	172.0 ± 2.86	66.4 ± 1.69	141.6 ± 4.10	n = 43	[AB1] Abbott
67.8 ± 2.29	259.9 ± 8.32	156.9 ± 4.90	61.9 ± 2.48	130.1 ± 4.19	n = 49	[BC1] Beckman Coulter
73.1 ± 5.22	277.1 ± 25.28	166.4 ± 10.30	63.5 ± 2.74	134.5 ± 6.32	n = 3	[OL1] Beckman Coulter AU Series
74.2 ± 2.42	290.0 ± 8.37	180.3 ± 4.19	72.0 ± 1.87	144.8 ± 3.61	n = 50	[JA1] JAS Diagnostics
75.4 ± 2.55	293.7 ± 12.34	177.7 ± 5.78	67.8 ± 1.99	146.2 ± 5.17	n = 20	[JJ1] Ortho Clinical Diagnostics
75.6 ± 2.59	290.5 ± 5.68	175.3 ± 3.97	67.4 ± 1.40	144.5 ± 2.45	n = 33	[RO4] Roche cobas c311/c501/c502/c701
77.3 ± 1.93	301.5 ± 7.66	179.8 ± 3.95	67.6 ± 1.08	149.2 ± 3.63	n = 11	[RO2] Roche Hitachi and Modular D/P
82.7 ± 3.67	314.0 ± 9.13	186.5 ± 5.26	71.8 ± 3.49	155.0 ± 4.62	n = 24	[BY1] Siemens ADVIA/ADVISIA Centaur
75.0 ± 2.92	290.5 ± 6.97	176.5 ± 4.53	67.1 ± 2.61	146.9 ± 3.85	n = 87	[DA5] Siemens Dimension
74.0 ± 2.91	289.4 ± 5.93	174.7 ± 2.65	65.9 ± 1.40	146.0 ± 4.26	n = 6	[DA8] Siemens Dimension IFCC Standardized

Summary of Participant Performance (Mean and Standard Deviation)

 α -Amylase (U/L 37°C)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
402.0 ± 76.68	48.3 ± 5.66	102.3 ± 9.17	176.5 ± 20.60	85.1 ± 8.98	n = 316	[---] All Methods & Instruments
						<Instruments>
448.2 ± 8.31	50.2 ± 0.84	109.4 ± 2.03	189.5 ± 4.22	91.3 ± 1.66	n = 19	[ABJ] Abbott Architect c System
352.1 ± 21.89	38.8 ± 2.56	85.6 ± 5.35	148.5 ± 9.11	71.6 ± 4.57	n = 44	[OLC] Beckman Coulter AU Chemistry System
426.2 ± 4.80	54.3 ± 0.90	111.6 ± 1.80	192.7 ± 0.90	92.7 ± 2.47	n = 4	[BCX] Beckman Coulter LX-20
424.5 ± 12.76	53.2 ± 1.70	111.5 ± 1.93	191.8 ± 5.99	93.1 ± 2.28	n = 15	[BCG] Beckman Coulter UniCel DxC 600
426.4 ± 6.17	54.3 ± 0.76	112.3 ± 2.09	192.1 ± 3.15	94.3 ± 1.85	n = 15	[BCH] Beckman Coulter UniCel DxC 800
226.9 ± 13.83	47.3 ± 3.03	90.4 ± 7.62	138.4 ± 10.08	71.8 ± 5.30	n = 9	[JJE] Ortho Vitros 250/350/950
233.5 ± 10.89	51.3 ± 5.42	91.5 ± 6.14	145.9 ± 10.36	71.3 ± 4.33	n = 20	[JJF] Ortho Vitros 5,1FS
232.1 ± 11.01	53.3 ± 5.55	93.8 ± 5.10	145.0 ± 9.39	71.8 ± 4.83	n = 16	[JJG] Ortho Vitros 5600
389.9 ± 3.37	51.6 ± 1.13	105.4 ± 2.01	179.3 ± 2.42	87.8 ± 1.55	n = 16	[ROC] Roche cobas c501
385.4 ± 6.23	51.3 ± 1.37	104.3 ± 3.37	176.3 ± 4.22	86.8 ± 1.54	n = 3	[ROS] Roche Cobas INTEGRA 400
384.2 ± 5.25	50.8 ± 0.80	103.4 ± 1.33	176.1 ± 2.41	86.6 ± 1.09	n = 5	[ROT] Roche Cobas INTEGRA 800
383.4 ± 7.63	51.5 ± 1.27	103.3 ± 2.10	176.1 ± 2.57	86.2 ± 1.63	n = 30	[ROD] Roche MODULAR D/P
395.1 ± 8.78	50.5 ± 1.23	105.5 ± 2.55	180.9 ± 3.73	87.5 ± 1.66	n = 20	[BYE] Siemens ADVIA 1800
387.3 ± 6.93	50.0 ± 0.90	103.5 ± 1.86	180.0 ± 4.51	87.2 ± 1.54	n = 3	[BYB] Siemens ADVIA 2400
479.8 ± 8.74	46.0 ± 1.11	107.0 ± 2.68	193.7 ± 4.25	89.9 ± 2.16	n = 11	[DUE] Siemens Dimension EXL
485.1 ± 10.72	46.2 ± 1.55	107.6 ± 2.13	195.0 ± 4.09	90.9 ± 2.31	n = 23	[DUR] Siemens Dimension RxL
453.8 ± 5.58	42.5 ± 0.78	99.9 ± 1.86	181.4 ± 2.96	84.0 ± 1.45	n = 36	[DUT] Siemens Dimension Vista
488.7 ± 8.63	46.3 ± 1.08	108.3 ± 2.26	196.4 ± 3.35	91.1 ± 2.07	n = 16	[DUX] Siemens Dimension Xpand
						<Reagents>
448.2 ± 8.31	50.2 ± 0.84	109.4 ± 2.03	189.5 ± 4.22	91.3 ± 1.66	n = 19	[AB1] Abbott
428.3 ± 10.48	54.3 ± 1.37	112.2 ± 2.04	192.8 ± 5.04	94.3 ± 2.12	n = 13	[BC1] Beckman Coulter
352.4 ± 22.20	38.7 ± 2.52	85.5 ± 5.41	148.2 ± 9.11	71.5 ± 4.59	n = 43	[OL1] Beckman Coulter AU Series
425.9 ± 5.53	54.0 ± 1.00	111.8 ± 2.05	192.5 ± 3.70	93.7 ± 2.38	n = 24	[BC2] Beckman Coulter IFCC Standardized
231.9 ± 12.14	51.2 ± 5.45	92.4 ± 6.33	144.3 ± 10.08	71.6 ± 4.86	n = 47	[JJ1] Ortho Clinical Diagnostics
389.1 ± 3.84	51.6 ± 1.11	105.3 ± 1.78	179.2 ± 2.08	87.6 ± 1.50	n = 19	[RO4] Roche cobas c311/c501/c502/c701
383.4 ± 7.63	51.5 ± 1.27	103.3 ± 2.10	176.1 ± 2.57	86.2 ± 1.63	n = 30	[RO2] Roche Hitachi and Modular D/P
384.6 ± 5.65	50.9 ± 1.01	103.2 ± 1.53	176.1 ± 3.09	86.7 ± 1.24	n = 8	[RO1] Roche Integra and MIRA
394.1 ± 8.96	50.5 ± 1.20	105.2 ± 2.57	180.8 ± 3.88	87.5 ± 1.63	n = 23	[BY1] Siemens ADVIA/ADVISIA Centaur
472.3 ± 19.18	44.6 ± 2.30	104.5 ± 4.73	189.7 ± 8.34	88.0 ± 4.37	n = 86	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Alkaline Phosphatase (U/L 37°C)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
225.0 ± 20.38	52.5 ± 10.25	164.5 ± 19.85	151.1 ± 17.97	134.1 ± 14.63	n = 355	[---] All Methods & Instruments
207.3 ± 10.37	50.1 ± 3.72	145.7 ± 6.85	137.8 ± 9.49	116.5 ± 2.74	n = 3	<Instruments>
241.2 ± 7.00	52.7 ± 1.85	170.5 ± 4.46	156.0 ± 3.76	140.8 ± 4.44	n = 21	[AXA] Abaxis Piccolo
213.5 ± 11.35	45.4 ± 2.80	149.5 ± 7.27	136.6 ± 6.51	123.0 ± 6.47	n = 50	[ABJ] Abbott Architect c System
206.7 ± 1.59	44.7 ± 0.90	144.3 ± 3.98	132.5 ± 7.48	120.7 ± 1.52	n = 5	[OLC] Beckman Coulter AU Chemistry System
205.0 ± 13.12	43.0 ± 3.00	145.8 ± 8.34	131.7 ± 6.64	118.0 ± 7.42	n = 4	[BCS] Beckman Coulter CX
205.0 ± 9.60	44.8 ± 1.06	144.7 ± 7.02	133.2 ± 6.10	119.6 ± 5.63	n = 18	[BCX] Beckman Coulter LX-20
210.4 ± 7.48	45.7 ± 2.29	148.5 ± 5.29	135.2 ± 4.52	122.7 ± 4.28	n = 16	[BCG] Beckman Coulter UniCel DxC 600
225.5 ± 5.14	72.9 ± 3.48	193.8 ± 7.31	176.6 ± 6.95	151.8 ± 7.14	n = 11	[BCH] Beckman Coulter UniCel DxC 800
223.1 ± 8.16	72.7 ± 2.56	193.2 ± 5.52	176.6 ± 6.43	150.4 ± 4.63	n = 21	[JJE] Ortho Vitros 250/350/950
212.6 ± 6.78	72.7 ± 2.23	191.0 ± 7.15	171.4 ± 6.52	145.3 ± 2.82	n = 16	[JJF] Ortho Vitros 5,1FS
228.5 ± 7.45	49.9 ± 1.17	161.3 ± 3.48	149.1 ± 3.60	131.7 ± 3.88	n = 16	[JJG] Ortho Vitros 5600
229.3 ± 3.16	50.4 ± 1.02	158.6 ± 1.02	149.5 ± 1.86	130.7 ± 0.51	n = 3	[ROC] Roche cobas c501
229.1 ± 3.11	49.8 ± 1.07	161.2 ± 2.69	149.3 ± 2.55	132.1 ± 1.83	n = 5	[ROH] Roche cobas c701
228.6 ± 5.36	48.2 ± 1.07	160.2 ± 2.28	147.6 ± 2.31	132.1 ± 2.61	n = 5	[ROS] Roche Cobas INTEGRA 400
222.2 ± 5.59	49.6 ± 1.54	157.3 ± 3.86	145.6 ± 3.74	129.0 ± 3.14	n = 31	[ROT] Roche Cobas INTEGRA 800
245.2 ± 7.45	53.4 ± 2.03	173.4 ± 5.49	159.2 ± 5.28	141.8 ± 4.76	n = 20	[ROD] Roche MODULAR D/P
237.9 ± 6.58	52.0 ± 1.80	168.2 ± 2.36	154.1 ± 2.86	138.3 ± 5.86	n = 3	[BYE] Siemens ADVIA 1800
268.9 ± 8.09	68.2 ± 3.73	195.8 ± 9.44	179.7 ± 7.23	160.8 ± 6.26	n = 14	[BYB] Siemens ADVIA 2400
263.1 ± 10.85	65.3 ± 6.81	191.4 ± 9.61	173.9 ± 9.69	155.5 ± 7.58	n = 25	[DUE] Siemens Dimension EXL
212.1 ± 12.74	46.7 ± 3.44	151.2 ± 7.43	138.2 ± 7.70	123.3 ± 5.97	n = 37	[DUR] Siemens Dimension RxL
250.0 ± 11.18	59.3 ± 3.94	177.8 ± 7.73	165.5 ± 5.67	147.3 ± 5.57	n = 19	[DUT] Siemens Dimension Vista
207.3 ± 10.37	50.1 ± 3.72	145.7 ± 6.85	137.8 ± 9.49	116.5 ± 2.74	n = 3	[DUX] Siemens Dimension Xpand
241.2 ± 7.00	52.7 ± 1.85	170.5 ± 4.46	156.0 ± 3.76	140.8 ± 4.44	n = 21	<Reagents>
206.7 ± 8.91	44.8 ± 1.94	145.9 ± 6.24	133.8 ± 5.40	120.4 ± 5.38	n = 42	[AB1] Abbott
213.2 ± 10.89	45.3 ± 2.67	149.3 ± 6.96	136.4 ± 6.22	122.7 ± 6.22	n = 49	[BC1] Beckman Coulter
229.9 ± 8.46	52.3 ± 4.06	158.2 ± 5.90	149.7 ± 11.27	131.5 ± 4.61	n = 3	[OL1] Beckman Coulter AU Series
219.7 ± 10.05	72.8 ± 2.82	192.6 ± 6.96	174.8 ± 7.54	148.7 ± 6.58	n = 49	[JA1] JAS Diagnostics
228.8 ± 6.60	50.0 ± 1.16	160.9 ± 3.39	149.3 ± 3.22	131.7 ± 3.49	n = 20	[JJ1] Ortho Clinical Diagnostics
222.4 ± 5.53	49.6 ± 1.51	157.3 ± 3.75	145.6 ± 3.64	129.1 ± 3.10	n = 32	[RO4] Roche cobas c311/c501/c502/c701
228.3 ± 3.98	49.1 ± 1.32	160.7 ± 2.35	148.4 ± 2.35	132.0 ± 2.12	n = 11	[RO2] Roche Hitachi and Modular D/P
243.4 ± 8.37	53.1 ± 2.11	172.1 ± 6.12	157.9 ± 5.75	141.0 ± 5.34	n = 24	[RO1] Roche Integra and MIRA
242.2 ± 29.06	57.1 ± 10.86	173.5 ± 22.40	159.5 ± 20.51	142.5 ± 18.59	n = 95	[BY1] Siemens ADVIA/ADVISIA Centaur
						[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

 γ -Glutamyltransferase (U/L 37°C)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
65.0 ± 15.36	23.3 ± 5.55	80.7 ± 19.12	156.5 ± 35.99	67.9 ± 16.59	n = 302	[---] All Methods & Instruments
64.9 ± 3.78	23.1 ± 1.65	81.9 ± 4.66	160.1 ± 9.10	67.8 ± 4.11	n = 17	<Instruments>
50.6 ± 2.77	19.3 ± 1.26	62.9 ± 3.17	120.6 ± 5.54	52.6 ± 2.79	n = 47	[ABJ] Abbott Architect c System
52.8 ± 12.28	18.0 ± 1.65	65.2 ± 12.28	125.0 ± 25.67	53.7 ± 9.49	n = 4	[OLC] Beckman Coulter AU Chemistry System
60.9 ± 2.72	17.7 ± 2.26	76.5 ± 3.45	152.6 ± 3.54	64.8 ± 1.46	n = 4	[BCS] Beckman Coulter CX
63.8 ± 3.28	19.6 ± 1.35	79.9 ± 3.49	158.0 ± 6.56	66.4 ± 2.77	n = 15	[BCX] Beckman Coulter LX-20
63.5 ± 2.25	19.1 ± 1.81	78.6 ± 1.89	157.0 ± 3.21	66.6 ± 2.49	n = 14	[BCG] Beckman Coulter UniCel DxC 600
100.1 ± 2.44	27.2 ± 1.37	127.8 ± 3.13	255.1 ± 6.54	106.0 ± 1.55	n = 8	[BCH] Beckman Coulter UniCel DxC 800
98.4 ± 3.98	27.8 ± 1.90	124.8 ± 4.86	246.4 ± 8.78	104.0 ± 4.03	n = 20	[JJE] Ortho Vitros 250/350/950
99.4 ± 2.97	27.1 ± 1.02	126.0 ± 3.00	247.3 ± 4.92	105.0 ± 2.77	n = 15	[JJF] Ortho Vitros 5,1FS
54.4 ± 1.99	19.4 ± 0.81	66.8 ± 1.59	132.2 ± 4.05	55.7 ± 1.56	n = 15	[JJG] Ortho Vitros 5600
54.0 ± 0.90	18.7 ± 0.51	67.0 ± 0.90	132.9 ± 2.86	55.7 ± 1.37	n = 3	[ROC] Roche cobas c501
52.9 ± 1.13	18.0 ± 0.75	65.5 ± 0.57	129.5 ± 1.22	55.0 ± 0.00	n = 4	[ROS] Roche Cobas INTEGRA 400
55.2 ± 1.69	19.2 ± 1.37	68.1 ± 2.18	136.1 ± 3.74	56.3 ± 1.77	n = 30	[ROT] Roche Cobas INTEGRA 800
60.4 ± 1.67	22.0 ± 1.68	76.7 ± 1.94	149.1 ± 3.40	63.3 ± 1.91	n = 20	[ROD] Roche MODULAR D/P
58.5 ± 1.86	22.2 ± 1.54	77.0 ± 1.80	148.3 ± 1.37	65.0 ± 1.80	n = 3	[BYE] Siemens ADVIA 1800
75.3 ± 2.05	33.0 ± 2.06	92.1 ± 2.27	174.9 ± 2.62	78.6 ± 2.43	n = 11	[BYB] Siemens ADVIA 2400
74.5 ± 2.63	32.4 ± 2.27	91.2 ± 3.40	172.9 ± 5.35	78.0 ± 3.20	n = 19	[DUE] Siemens Dimension EXL
74.3 ± 2.16	29.0 ± 2.10	92.4 ± 2.01	179.3 ± 3.38	78.4 ± 2.04	n = 34	[DUR] Siemens Dimension RxL
75.5 ± 1.73	32.4 ± 1.21	92.6 ± 1.93	175.5 ± 3.46	78.9 ± 2.01	n = 10	[DUT] Siemens Dimension Vista
64.6 ± 3.62	23.0 ± 1.50	81.6 ± 4.48	159.3 ± 8.64	67.4 ± 3.85	n = 16	[DUX] Siemens Dimension Xpand
63.4 ± 2.87	19.2 ± 1.73	78.8 ± 3.28	156.5 ± 6.01	66.1 ± 2.71	n = 36	<Reagents>
50.7 ± 2.77	19.4 ± 1.24	63.1 ± 3.06	120.9 ± 5.45	52.7 ± 2.79	n = 45	[BC1] Beckman Coulter
50.8 ± 1.54	19.8 ± 1.54	59.5 ± 3.63	113.2 ± 10.38	51.5 ± 2.74	n = 3	[OL1] Beckman Coulter AU Series
99.1 ± 3.46	27.4 ± 1.53	125.8 ± 4.13	248.3 ± 7.80	104.8 ± 3.32	n = 43	[JA1] JAS Diagnostics
54.3 ± 2.10	19.5 ± 0.78	66.8 ± 1.66	131.8 ± 4.05	55.5 ± 1.67	n = 18	[JJ1] Ortho Clinical Diagnostics
55.2 ± 1.69	19.2 ± 1.37	68.1 ± 2.18	136.1 ± 3.74	56.3 ± 1.77	n = 30	[RO4] Roche cobas c311/c501/c502/c701
53.4 ± 1.13	18.3 ± 0.74	66.1 ± 1.01	130.6 ± 2.63	55.2 ± 0.86	n = 7	[RO2] Roche Hitachi and Modular D/P
60.2 ± 1.75	22.1 ± 1.68	76.6 ± 1.98	148.7 ± 3.30	63.5 ± 1.94	n = 24	[RO1] Roche Integra and MIRA
74.5 ± 2.23	30.9 ± 2.83	92.1 ± 2.56	176.7 ± 4.51	78.4 ± 2.49	n = 69	[BY1] Siemens ADVIA/ADVIS Centaur
76.6 ± 1.09	31.1 ± 1.83	92.4 ± 1.09	179.4 ± 3.78	77.8 ± 0.41	n = 5	[DA5] Siemens Dimension
						[DA8] Siemens Dimension IFCC Standardized

Summary of Participant Performance (Mean and Standard Deviation)

Creatine Kinase (U/L 37°C)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
72.7 ± 6.12	290.3 ± 21.08	61.8 ± 5.80	71.8 ± 7.06	405.0 ± 28.21	n = 325	[---] All Methods & Instruments
75.3 ± 2.01	299.6 ± 6.62	67.3 ± 1.35	78.9 ± 1.91	415.3 ± 9.34	n = 21	<Instruments>
62.9 ± 3.03	261.3 ± 9.48	52.6 ± 2.92	61.8 ± 3.06	362.0 ± 14.20	n = 46	[ABJ] Abbott Architect c System
69.6 ± 10.60	271.3 ± 46.08	59.9 ± 12.92	68.4 ± 14.76	387.6 ± 66.33	n = 4	[OLC] Beckman Coulter AU Chemistry System
74.6 ± 1.64	296.0 ± 3.36	64.3 ± 0.82	75.3 ± 1.58	417.0 ± 6.68	n = 4	[BCS] Beckman Coulter CX
74.4 ± 2.24	297.5 ± 4.49	65.8 ± 2.72	77.2 ± 2.48	422.4 ± 8.94	n = 16	[BCX] Beckman Coulter LX-20
75.5 ± 2.63	299.6 ± 7.49	66.0 ± 3.81	78.9 ± 3.44	425.6 ± 10.34	n = 16	[BCG] Beckman Coulter UniCel DxC 600
83.8 ± 7.10	357.6 ± 27.59	65.1 ± 4.57	71.1 ± 3.76	452.7 ± 27.23	n = 9	[BCH] Beckman Coulter UniCel DxC 800
82.7 ± 3.57	353.1 ± 12.27	63.4 ± 2.62	68.5 ± 3.39	447.7 ± 12.14	n = 19	[JJE] Ortho Vitros 250/350/950
82.5 ± 2.87	345.2 ± 15.51	63.3 ± 2.64	67.7 ± 2.24	443.1 ± 14.53	n = 15	[JJF] Ortho Vitros 5,1FS
72.6 ± 2.00	304.1 ± 9.68	58.1 ± 1.98	69.4 ± 2.32	424.7 ± 12.50	n = 16	[JGJ] Ortho Vitros 5600
76.5 ± 1.86	293.9 ± 4.38	67.7 ± 1.37	78.0 ± 0.90	407.0 ± 7.24	n = 3	[ROC] Roche cobas c501
63.4 ± 6.86	292.2 ± 20.50	48.7 ± 5.78	58.9 ± 6.19	412.9 ± 25.89	n = 5	[ROH] Roche cobas c701
74.2 ± 2.27	289.2 ± 6.77	64.1 ± 1.92	75.4 ± 2.30	402.8 ± 10.42	n = 31	[ROT] Roche Cobas INTEGRA 800
69.5 ± 1.83	285.5 ± 6.76	54.4 ± 1.72	63.9 ± 1.98	384.7 ± 10.03	n = 20	[ROD] Roche MODULAR D/P
66.7 ± 3.37	279.6 ± 14.48	53.8 ± 4.11	64.7 ± 3.07	377.7 ± 20.24	n = 3	[BYE] Siemens ADVIA 1800
70.7 ± 3.66	283.1 ± 6.73	62.0 ± 3.26	73.7 ± 2.72	395.7 ± 12.13	n = 13	[BYB] Siemens ADVIA 2400
72.1 ± 2.47	289.5 ± 4.88	63.0 ± 2.68	74.2 ± 2.62	402.7 ± 8.82	n = 25	[DUE] Siemens Dimension EXL
73.3 ± 2.34	287.1 ± 7.05	64.1 ± 2.31	75.8 ± 2.24	397.7 ± 9.98	n = 36	[DUR] Siemens Dimension RxL
71.8 ± 1.85	287.5 ± 5.28	62.9 ± 1.66	74.0 ± 2.19	400.2 ± 11.25	n = 15	[DUT] Siemens Dimension Vista
75.3 ± 2.01	299.6 ± 6.62	67.3 ± 1.35	78.9 ± 1.91	415.3 ± 9.34	n = 21	[DUX] Siemens Dimension Xpand
74.9 ± 2.72	298.4 ± 6.38	65.7 ± 3.20	77.7 ± 3.27	423.4 ± 11.17	n = 40	<Reagents>
62.8 ± 2.94	260.8 ± 9.41	52.5 ± 2.84	61.7 ± 2.99	361.5 ± 14.24	n = 44	[BC1] Beckman Coulter
82.9 ± 3.93	351.3 ± 17.08	63.7 ± 3.05	68.6 ± 3.25	446.8 ± 16.27	n = 43	[OL1] Beckman Coulter AU Series
73.1 ± 2.35	302.8 ± 9.93	59.0 ± 3.29	70.4 ± 3.79	421.4 ± 13.95	n = 20	[JJ1] Ortho Clinical Diagnostics
74.2 ± 2.30	289.3 ± 6.89	64.2 ± 1.88	75.5 ± 2.27	402.9 ± 10.68	n = 30	[RO4] Roche cobas c311/c501/c502/c701
67.2 ± 8.09	297.9 ± 17.38	53.4 ± 8.81	63.5 ± 9.50	419.1 ± 21.93	n = 7	[RO2] Roche Hitachi and Modular D/P
69.2 ± 2.01	284.5 ± 8.57	54.3 ± 2.15	63.8 ± 2.07	383.2 ± 12.42	n = 24	[RO1] Roche Integra and MIRA
72.2 ± 3.04	287.2 ± 7.39	63.5 ± 1.98	74.8 ± 2.33	400.0 ± 11.01	n = 28	[BY1] Siemens ADVIA/ADVISIA Centaur
72.4 ± 2.57	287.8 ± 5.76	63.3 ± 2.66	74.8 ± 2.77	399.5 ± 10.02	n = 59	[DA5] Siemens Dimension
						[DA8] Siemens Dimension IFCC Standardized

Summary of Participant Performance (Mean and Standard Deviation)

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

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
0.88 ± 0.27	39.60 ± 5.87	0.54 ± 0.27	0.60 ± 0.28	62.47 ± 9.32	n = 201	[-A-] All Methods - Results reported in ng/mL
0.79 ± 0.16	38.26 ± 4.72	0.47 ± 0.11	0.54 ± 0.10	59.41 ± 6.34	n = 23	[AB1] Abbott
0.98 ± 0.05	46.78 ± 1.68	0.60 ± 0.00	0.70 ± 0.00	75.24 ± 3.37	n = 15	[SAA] Beckman Coulter ACCESS
1.03 ± 0.06	48.32 ± 2.76	0.60 ± 0.06	0.76 ± 0.06	75.57 ± 4.41	n = 13	[BC-] Beckman Coulter DxC 600/DxI 800
1.00 ± 0.00	26.09 ± 4.86	1.00 ± 0.00	1.00 ± 0.00	27.85 ± 2.26	n = 6	[BS1] Biosite Diagnostics
0.72 ± 0.09	31.15 ± 1.80	0.31 ± 0.08	0.40 ± 0.09	47.67 ± 2.74	n = 23	[JJ1] Ortho Clinical Diagnostics
1.34 ± 0.10	41.97 ± 2.02	0.81 ± 0.09	0.89 ± 0.10	62.91 ± 2.87	n = 27	[RO3] Roche Elecsys/Modular E/e601/e411
0.87 ± 0.16	40.10 ± 1.99	0.28 ± 0.20	0.29 ± 0.18	62.70 ± 3.13	n = 32	[BY1] Siemens ADVIA/ADVIA Centaur
0.59 ± 0.25	40.95 ± 3.48	0.42 ± 0.27	0.48 ± 0.24	67.55 ± 6.11	n = 31	[DA5] Siemens Dimension
0.81 ± 0.15	35.07 ± 0.71	0.63 ± 0.18	0.65 ± 0.17	57.04 ± 1.20	n = 24	[DA6] Siemens Dimension LOCI
1.40 ± 0.73	42.59 ± 1.19	0.67 ± 0.31	0.78 ± 0.51	66.41 ± 4.22	n = 3	[DP5] Siemens Immulite
2.14 ± 1.60	42.34 ± 9.97	1.30 ± 1.14	1.39 ± 1.10	67.65 ± 16.48	n = 8	[-B-] All Methods - Results reported in U/L
0.00 ± 0.00	18.33 ± 5.82	0.00 ± 0.00	0.00 ± 0.00	20.18 ± 5.63	n = 4	[-P-] All Methods - Results reported as %
0.00 ± 0.00	20.00 ± 6.31	0.00 ± 0.00	0.00 ± 0.00	21.70 ± 5.97	n = 3	[HL1] Helena Laboratories

Summary of Participant Performance (Mean and Standard Deviation)

Lactate Dehydrogenase (U/L 37°C)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
90.1 ± 8.95	252.8 ± 26.44	120.1 ± 11.79	143.3 ± 13.29	274.3 ± 24.00	n = 312	[---] All Methods & Instruments
90.3 ± 8.90	253.2 ± 26.29	120.3 ± 11.75	143.5 ± 13.18	274.7 ± 23.81	n = 260	[-A-] Lactate to Pyruvate
242.8 ± 16.79	664.4 ± 22.23	355.7 ± 18.67	417.5 ± 23.27	707.8 ± 29.85	n = 47	[-B-] Pyruvate to Lactate
						<Instruments>
94.0 ± 5.74	259.1 ± 6.92	127.8 ± 8.72	153.5 ± 5.04	290.9 ± 10.04	n = 20	[ABJ] Abbott Architect c System
82.2 ± 3.82	226.5 ± 9.66	109.6 ± 4.54	129.8 ± 5.85	254.3 ± 10.51	n = 45	[OLC] Beckman Coulter AU Chemistry System
74.7 ± 0.82	202.5 ± 5.33	98.7 ± 3.89	115.8 ± 5.43	225.6 ± 7.65	n = 4	[BCS] Beckman Coulter CX
79.8 ± 4.62	215.7 ± 2.02	103.6 ± 4.28	124.6 ± 4.28	234.3 ± 2.65	n = 4	[BCX] Beckman Coulter LX-20
76.9 ± 2.68	212.9 ± 4.15	104.1 ± 3.74	122.9 ± 4.16	237.3 ± 6.59	n = 17	[BCG] Beckman Coulter UniCel DxC 600
80.1 ± 2.67	216.4 ± 6.41	105.3 ± 3.94	126.8 ± 3.92	243.0 ± 5.43	n = 16	[BCH] Beckman Coulter UniCel DxC 800
240.7 ± 14.92	666.4 ± 15.33	355.3 ± 9.94	430.2 ± 29.04	714.4 ± 27.25	n = 9	[JJE] Ortho Vitros 250/350/950
241.1 ± 15.60	665.5 ± 27.94	355.9 ± 24.22	415.8 ± 25.36	706.0 ± 32.45	n = 21	[JJF] Ortho Vitros 5,1FS
244.3 ± 18.77	659.5 ± 20.29	351.3 ± 16.06	411.4 ± 16.58	704.4 ± 24.99	n = 16	[JJG] Ortho Vitros 5600
94.4 ± 2.23	265.0 ± 6.58	122.1 ± 3.91	145.9 ± 2.27	279.3 ± 7.44	n = 16	[ROC] Roche cobas c501
96.6 ± 3.04	267.8 ± 2.46	124.5 ± 1.62	146.7 ± 2.77	284.3 ± 4.65	n = 5	[ROT] Roche Cobas INTEGRA 800
92.8 ± 2.68	263.4 ± 5.45	121.4 ± 5.17	145.6 ± 3.51	278.8 ± 7.93	n = 29	[ROD] Roche MODULAR D/P
95.7 ± 2.74	262.4 ± 7.31	128.5 ± 4.45	152.4 ± 4.78	286.6 ± 7.75	n = 20	[BYE] Siemens ADVIA 1800
91.2 ± 4.11	253.6 ± 9.68	123.0 ± 7.27	148.3 ± 6.73	275.8 ± 16.67	n = 3	[BYB] Siemens ADVIA 2400
93.2 ± 4.81	269.9 ± 8.24	126.8 ± 4.19	150.4 ± 5.55	289.0 ± 9.29	n = 12	[DUE] Siemens Dimension EXL
98.5 ± 6.85	275.2 ± 7.87	129.5 ± 4.60	152.4 ± 6.78	293.9 ± 11.80	n = 16	[DUR] Siemens Dimension RxL
96.0 ± 4.95	275.2 ± 6.93	129.3 ± 4.29	153.2 ± 6.07	293.4 ± 9.01	n = 37	[DUT] Siemens Dimension Vista
96.4 ± 5.34	272.9 ± 10.29	129.8 ± 3.98	149.6 ± 4.33	291.5 ± 9.57	n = 11	[DUX] Siemens Dimension Xpand
						<Reagents>
94.0 ± 5.74	259.1 ± 6.92	127.8 ± 8.72	153.5 ± 5.04	290.9 ± 10.04	n = 20	[AB1] Abbott
78.2 ± 3.29	214.3 ± 5.36	104.4 ± 3.85	124.6 ± 4.57	238.9 ± 6.95	n = 39	[BC1] Beckman Coulter
82.1 ± 3.85	226.4 ± 9.77	109.5 ± 4.54	129.7 ± 5.88	254.1 ± 10.64	n = 44	[OL1] Beckman Coulter AU Series
78.0 ± 6.31	219.9 ± 7.95	104.4 ± 6.23	123.6 ± 7.44	246.7 ± 9.49	n = 3	[JA1] JAS Diagnostics
241.8 ± 16.45	662.7 ± 22.59	354.1 ± 19.14	416.1 ± 23.06	706.9 ± 28.94	n = 46	[JJ1] Ortho Clinical Diagnostics
94.2 ± 2.09	265.1 ± 6.15	122.6 ± 3.91	146.3 ± 2.33	279.9 ± 7.15	n = 19	[RO4] Roche cobas c311/c501/c502/c701
92.8 ± 2.68	263.4 ± 5.45	121.4 ± 5.17	145.6 ± 3.51	278.8 ± 7.93	n = 29	[RO2] Roche Hitachi and Modular D/P
97.6 ± 2.98	268.5 ± 2.84	125.2 ± 2.16	147.7 ± 2.70	284.6 ± 4.81	n = 7	[RO1] Roche Integra and MIRA
94.8 ± 3.77	260.9 ± 8.60	127.5 ± 5.38	151.6 ± 5.47	284.4 ± 10.81	n = 24	[BY1] Siemens ADVIA/ADVISIA Centaur
94.9 ± 7.85	273.9 ± 8.82	128.1 ± 6.73	151.1 ± 8.11	288.3 ± 14.80	n = 25	[DA5] Siemens Dimension
96.3 ± 4.93	274.5 ± 7.79	129.0 ± 4.17	152.1 ± 5.80	293.6 ± 9.49	n = 49	[DA8] Siemens Dimension IFCC Standardized

Summary of Participant Performance (Mean and Standard Deviation)

LDH Isoenzyme 1 (%)

Specimen: C71	Specimen: C72	Specimen: C73	Specimen: C74	Specimen: C75	Number	[Code] Instrument or Reagent System
33.9 ± 2.57	49.6 ± 1.47	30.8 ± 2.08	31.2 ± 2.91	14.8 ± 2.50	n = 8	[-P-] All Methods - Results reported as %
36.0 ± 1.76	50.2 ± 0.41	32.4 ± 2.91	33.8 ± 2.58	16.2 ± 3.21	n = 4	<Instruments> [HLS] Helena SPIFE
32.0 ± 1.14	48.5 ± 1.94	30.0 ± 0.75	29.2 ± 0.41	13.8 ± 1.27	n = 4	[SEE] Sebia Electrophoresis
36.0 ± 1.76	50.2 ± 0.41	32.4 ± 2.91	33.8 ± 2.58	16.2 ± 3.21	n = 4	<Reagents> [HL1] Helena Laboratories
32.0 ± 1.14	48.5 ± 1.94	30.0 ± 0.75	29.2 ± 0.41	13.8 ± 1.27	n = 4	[SE1] Sebia