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Clinical Chemistry Proficiency Test Program

Statistical Summary – January 2014 (Event 14-1)

This statistical report summarizes participant data for the five Clinical Chemistry proficiency survey specimens shipped 27 January 2014. Test samples (Vials C01, C02, C03, C04, C05) were prepared by the quantitative transfer of constituents to pooled human serum. The material was subsequently sterile filtered, dispensed into aliquots, stored at -80°C, and distributed to participants for analysis.

Results for individual instrument and reagent systems where the number of laboratories using those systems is three or greater are provided. Mean and Standard Deviation (± 1 SD) values are calculated by a robust statistical technique that does not assume a Gaussian distribution.

Disclaimer:

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

Should you have any questions regarding this report, please contact the Clinical Chemistry Section at (518) 474-5582.

Summary of Participant Performance (Mean and Standard Deviation)

Glucose (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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123.2 ± 3.82	280.5 ± 6.53	77.8 ± 2.79	39.1 ± 1.50	179.1 ± 4.40	n = 387	[---] All Methods & Instruments
<Instruments>						
124.8 ± 0.80	278.6 ± 1.33	78.5 ± 0.83	44.8 ± 0.80	181.0 ± 2.01	n = 5	[AXA] Abaxis Piccolo
120.8 ± 2.36	283.5 ± 6.69	76.3 ± 1.91	38.1 ± 0.93	178.0 ± 3.26	n = 22	[ABJ] Abbott Architect c System
123.4 ± 1.02	283.7 ± 4.06	79.3 ± 0.51	41.0 ± 0.90	180.3 ± 5.09	n = 3	[AWA] Alfa Wassermann ACE Alera
121.2 ± 3.11	280.6 ± 6.72	76.1 ± 1.88	39.0 ± 1.21	178.6 ± 4.06	n = 65	[OLC] Beckman Coulter AU Chemistry System
120.8 ± 2.65	278.9 ± 4.17	76.5 ± 2.87	39.0 ± 1.45	177.6 ± 2.43	n = 16	[BCG] Beckman Coulter UniCel DxC 600
120.0 ± 2.35	277.9 ± 4.37	74.7 ± 2.21	37.5 ± 1.03	175.9 ± 4.28	n = 8	[BCH] Beckman Coulter UniCel DxC 800
152.5 ± 4.53	312.7 ± 7.75	110.1 ± 3.72	77.2 ± 5.00	199.2 ± 4.11	n = 3	[HEC] HemoCue Glucose 201
135.9 ± 5.22	292.2 ± 5.12	82.3 ± 4.96	40.9 ± 2.05	190.6 ± 8.97	n = 3	[HOA] Horiba ABX Pentra
119.9 ± 1.60	276.9 ± 3.02	78.0 ± 0.00	39.5 ± 0.74	178.1 ± 1.01	n = 7	[IAA] i-STAT
124.9 ± 2.91	279.6 ± 6.75	81.2 ± 2.29	38.2 ± 1.73	179.2 ± 3.86	n = 7	[JJE] Ortho Vitros 250/350/950
124.5 ± 1.86	279.3 ± 4.06	80.4 ± 1.02	38.6 ± 1.02	175.5 ± 1.86	n = 3	[JJH] Ortho Vitros 4600
124.8 ± 1.63	279.9 ± 4.04	80.2 ± 1.90	38.3 ± 1.33	177.5 ± 3.78	n = 14	[JJF] Ortho Vitros 5,1FS
124.1 ± 2.15	279.2 ± 4.01	79.1 ± 1.79	37.9 ± 1.25	177.7 ± 3.02	n = 20	[JJG] Ortho Vitros 5600
123.7 ± 0.51	284.7 ± 3.37	78.0 ± 0.90	40.3 ± 0.51	183.5 ± 2.74	n = 3	[ROK] Roche cobas c111
125.2 ± 1.07	286.5 ± 3.68	79.0 ± 0.93	40.0 ± 0.64	184.0 ± 2.01	n = 5	[ROJ] Roche cobas c311
122.1 ± 2.15	281.9 ± 6.17	77.0 ± 1.44	39.3 ± 0.86	180.0 ± 3.11	n = 24	[ROC] Roche cobas c501
122.2 ± 0.76	281.5 ± 2.88	77.2 ± 0.92	39.4 ± 0.96	178.5 ± 2.03	n = 7	[ROH] Roche cobas c701
123.0 ± 0.93	284.2 ± 2.55	77.6 ± 1.09	40.0 ± 0.00	181.3 ± 2.62	n = 5	[ROS] Roche Cobas INTEGRA 400
121.2 ± 2.11	279.3 ± 4.02	76.0 ± 0.00	39.2 ± 0.41	177.7 ± 1.58	n = 4	[ROT] Roche Cobas INTEGRA 800
123.0 ± 3.37	281.3 ± 6.96	77.2 ± 2.13	39.4 ± 1.10	180.3 ± 3.97	n = 28	[ROD] Roche MODULAR D/P
120.7 ± 3.42	277.0 ± 7.53	75.9 ± 1.93	38.8 ± 1.17	176.8 ± 4.63	n = 21	[BYE] Siemens ADVIA 1800
121.3 ± 1.37	277.8 ± 3.23	77.3 ± 1.37	39.3 ± 0.51	177.0 ± 2.70	n = 3	[BYB] Siemens ADVIA 2400
128.2 ± 2.23	283.0 ± 4.57	81.2 ± 1.80	40.6 ± 1.46	183.2 ± 2.70	n = 23	[DUE] Siemens Dimension EXL
128.5 ± 3.51	283.8 ± 6.43	81.5 ± 2.74	41.1 ± 1.46	182.1 ± 4.14	n = 16	[DUR] Siemens Dimension RxL
124.4 ± 2.89	275.2 ± 6.88	78.2 ± 2.38	38.6 ± 1.21	177.1 ± 4.81	n = 42	[DUT] Siemens Dimension Vista
127.5 ± 2.84	282.8 ± 5.98	81.2 ± 1.52	40.5 ± 1.44	181.6 ± 3.06	n = 15	[DUX] Siemens Dimension Xpand
<Reagents>						
124.8 ± 0.80	278.6 ± 1.33	78.5 ± 0.83	44.8 ± 0.80	181.0 ± 2.01	n = 5	[AX1] Abaxis
120.8 ± 2.29	283.2 ± 6.60	76.4 ± 1.92	38.2 ± 0.93	178.0 ± 3.16	n = 23	[AB1] Abbott
123.4 ± 1.02	283.7 ± 4.06	79.3 ± 0.51	41.0 ± 0.90	180.3 ± 5.09	n = 3	[AW1] Alfa Wassermann
120.4 ± 2.44	278.5 ± 4.06	75.9 ± 2.52	38.5 ± 1.48	177.4 ± 2.97	n = 27	[BC1] Beckman Coulter
121.2 ± 3.07	280.6 ± 6.54	76.1 ± 1.88	38.9 ± 1.17	178.5 ± 3.99	n = 62	[OL1] Beckman Coulter AU Series
145.9 ± 10.32	309.6 ± 7.55	104.0 ± 9.38	70.2 ± 10.10	194.9 ± 7.08	n = 5	[HE1] HemoCue
119.7 ± 1.63	276.6 ± 3.26	78.0 ± 0.00	39.7 ± 0.72	178.1 ± 1.13	n = 6	[IA1] i-STAT
124.5 ± 2.09	279.4 ± 4.30	79.8 ± 1.97	38.1 ± 1.32	176.7 ± 3.50	n = 44	[JJ1] Ortho Clinical Diagnostics
123.7 ± 0.51	284.7 ± 3.37	78.0 ± 0.90	40.3 ± 0.51	183.5 ± 2.74	n = 3	[R08] Roche cobas c111
122.5 ± 2.06	282.6 ± 5.23	77.3 ± 1.36	39.4 ± 0.86	180.3 ± 3.25	n = 38	[R04] Roche cobas c311/c501/c502/c701/c702
123.0 ± 3.37	281.3 ± 6.96	77.2 ± 2.13	39.4 ± 1.10	180.3 ± 3.97	n = 28	[R02] Roche Hitachi and Modular D/P
122.3 ± 1.75	282.1 ± 3.99	76.8 ± 1.16	39.6 ± 0.56	179.5 ± 2.89	n = 9	[R01] Roche Integra and MIRA
121.0 ± 3.19	277.6 ± 6.99	76.2 ± 1.87	38.9 ± 1.09	177.1 ± 4.40	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
126.5 ± 3.42	280.0 ± 7.26	80.0 ± 2.70	39.8 ± 1.82	180.4 ± 4.73	n = 96	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Urea Nitrogen (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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14.1 ± 0.67	40.4 ± 1.60	24.4 ± 1.13	16.8 ± 0.83	34.6 ± 1.33	n = 371	[---] All Methods & Instruments
<Instruments>						
13.4 ± 0.55	38.4 ± 0.55	22.5 ± 0.83	15.8 ± 0.80	31.6 ± 0.55	n = 5	[AXA] Abaxis Piccolo
14.0 ± 0.00	40.8 ± 1.05	24.4 ± 0.64	17.0 ± 0.00	34.8 ± 0.84	n = 21	[ABJ] Abbott Architect c System
13.3 ± 0.51	39.3 ± 0.51	23.6 ± 1.02	17.0 ± 0.90	33.8 ± 1.54	n = 3	[AWA] Alfa Wassermann ACE Alera
14.2 ± 0.48	40.8 ± 1.02	24.7 ± 0.73	17.2 ± 0.63	35.0 ± 0.95	n = 62	[OLC] Beckman Coulter AU Chemistry System
15.0 ± 0.00	41.2 ± 0.73	25.2 ± 0.57	17.5 ± 0.64	35.2 ± 0.95	n = 16	[BCG] Beckman Coulter UniCel DxC 600
11.9 ± 0.75	37.9 ± 0.75	22.7 ± 0.54	15.3 ± 0.54	31.7 ± 0.87	n = 8	[BCH] Beckman Coulter UniCel DxC 800
14.5 ± 0.74	44.5 ± 1.14	26.7 ± 1.11	16.3 ± 0.74	38.3 ± 0.74	n = 7	[IAA] i-STAT
14.0 ± 0.00	38.5 ± 0.57	23.0 ± 0.00	16.3 ± 0.54	33.4 ± 0.68	n = 8	[JJE] Ortho Vitros 250/350/950
14.7 ± 0.51	39.4 ± 1.02	23.7 ± 0.51	16.3 ± 0.51	34.3 ± 0.51	n = 3	[JJH] Ortho Vitros 4600
14.0 ± 0.47	38.6 ± 0.84	23.2 ± 0.74	15.9 ± 0.58	33.3 ± 0.91	n = 14	[JJF] Ortho Vitros 5,1FS
13.8 ± 0.49	38.3 ± 0.91	22.9 ± 0.70	16.1 ± 0.49	33.2 ± 0.61	n = 20	[JJG] Ortho Vitros 5600
13.7 ± 0.51	40.5 ± 1.86	24.7 ± 0.51	16.7 ± 0.51	34.5 ± 1.86	n = 3	[ROK] Roche cobas c111
14.0 ± 0.00	40.6 ± 0.55	25.0 ± 0.00	17.0 ± 0.00	35.0 ± 0.00	n = 5	[ROJ] Roche cobas c311
13.9 ± 0.30	40.1 ± 0.91	24.0 ± 0.69	16.7 ± 0.51	34.3 ± 0.66	n = 23	[ROC] Roche cobas c501
13.6 ± 0.56	39.4 ± 1.34	23.7 ± 1.11	17.0 ± 0.00	33.7 ± 1.28	n = 7	[ROH] Roche cobas c701
13.5 ± 0.57	41.3 ± 0.90	24.5 ± 0.57	16.8 ± 0.41	35.0 ± 0.75	n = 4	[ROS] Roche Cobas INTEGRA 400
13.5 ± 0.57	40.0 ± 1.14	23.8 ± 0.41	16.5 ± 0.57	34.3 ± 0.90	n = 4	[ROT] Roche Cobas INTEGRA 800
14.3 ± 0.59	40.5 ± 1.12	24.7 ± 0.68	17.1 ± 0.77	34.7 ± 0.83	n = 27	[ROD] Roche MODULAR D/P
14.3 ± 0.54	40.8 ± 0.97	25.5 ± 0.68	17.5 ± 0.57	35.4 ± 0.73	n = 21	[BYE] Siemens ADVIA 1800
14.7 ± 0.51	40.7 ± 0.51	25.3 ± 0.51	17.3 ± 0.51	35.3 ± 0.51	n = 3	[BYB] Siemens ADVIA 2400
14.0 ± 0.38	40.9 ± 1.42	24.4 ± 0.72	16.6 ± 0.68	34.7 ± 0.87	n = 23	[DUE] Siemens Dimension EXL
14.1 ± 0.68	40.9 ± 1.76	24.5 ± 1.13	16.8 ± 0.78	34.9 ± 1.12	n = 16	[DUR] Siemens Dimension RxL
14.0 ± 0.80	41.0 ± 1.62	24.4 ± 1.09	16.9 ± 0.95	35.1 ± 1.50	n = 42	[DUT] Siemens Dimension Vista
14.1 ± 0.75	41.0 ± 1.19	24.8 ± 1.07	17.2 ± 0.87	34.8 ± 1.12	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
13.4 ± 0.55	38.4 ± 0.55	22.5 ± 0.83	15.8 ± 0.80	31.6 ± 0.55	n = 5	[AX1] Abaxis
14.0 ± 0.00	40.9 ± 1.20	24.4 ± 0.71	17.0 ± 0.00	34.8 ± 0.88	n = 22	[AB1] Abbott
13.3 ± 0.51	39.3 ± 0.51	23.6 ± 1.02	17.0 ± 0.90	33.8 ± 1.54	n = 3	[AW1] Alfa Wassermann
13.8 ± 1.68	39.8 ± 2.04	24.2 ± 1.51	16.7 ± 1.19	34.0 ± 1.97	n = 28	[BC1] Beckman Coulter
14.2 ± 0.49	40.8 ± 1.04	24.7 ± 0.72	17.2 ± 0.64	34.9 ± 0.93	n = 58	[OL1] Beckman Coulter AU Series
14.4 ± 0.79	44.3 ± 1.21	26.7 ± 1.21	16.2 ± 0.73	38.2 ± 0.73	n = 6	[IA1] i-STAT
14.0 ± 0.47	38.5 ± 0.87	23.1 ± 0.65	16.1 ± 0.55	33.3 ± 0.76	n = 45	[JJ1] Ortho Clinical Diagnostics
13.7 ± 0.51	40.5 ± 1.86	24.7 ± 0.51	16.7 ± 0.51	34.5 ± 1.86	n = 3	[R08] Roche cobas c111
14.0 ± 0.00	40.0 ± 0.99	24.1 ± 0.83	16.8 ± 0.48	34.3 ± 0.85	n = 37	[R04] Roche cobas c311/c501/c502/c701/c702
14.3 ± 0.59	40.5 ± 1.12	24.7 ± 0.68	17.1 ± 0.77	34.7 ± 0.83	n = 27	[R02] Roche Hitachi and Modular D/P
13.5 ± 0.57	40.7 ± 1.20	24.1 ± 0.60	16.7 ± 0.54	34.7 ± 0.87	n = 8	[R01] Roche Integra and MIRA
14.4 ± 0.55	40.8 ± 0.91	25.4 ± 0.65	17.5 ± 0.57	35.4 ± 0.70	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
14.0 ± 0.71	41.0 ± 1.55	24.5 ± 1.02	16.8 ± 0.89	34.9 ± 1.25	n = 94	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Creatinine (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code]	Instrument or Reagent System
1.89 ± 0.14	5.27 ± 0.21	1.11 ± 0.12	0.89 ± 0.08	2.62 ± 0.12	n = 374	[---]	All Methods & Instruments
1.89 ± 0.14	5.27 ± 0.23	1.09 ± 0.11	0.89 ± 0.08	2.61 ± 0.12	n = 205	[---]	All IDMS Traceable Methods
1.90 ± 0.14	5.27 ± 0.19	1.14 ± 0.13	0.90 ± 0.08	2.63 ± 0.13	n = 166	[---]	All Non-IDMS Traceable Methods
1.89 ± 0.13	5.26 ± 0.17	1.16 ± 0.12	0.90 ± 0.08	2.62 ± 0.12	n = 132	[-G-]	Alkaline picrate/Jaffe
1.88 ± 0.16	5.20 ± 0.17	1.12 ± 0.11	0.87 ± 0.08	2.58 ± 0.10	n = 145	[-H-]	Alkaline picrate/Jaffe-IDMS calibration
1.91 ± 0.18	5.35 ± 0.29	1.04 ± 0.12	0.92 ± 0.09	2.68 ± 0.18	n = 34	[-I-]	Enzymatic
1.91 ± 0.11	5.47 ± 0.25	1.04 ± 0.07	0.92 ± 0.06	2.69 ± 0.14	n = 60	[-J-]	Enzymatic-IDMS-traceable calibration
1.93 ± 0.05	5.27 ± 0.14	1.14 ± 0.10	0.90 ± 0.00	2.67 ± 0.05	n = 3	[-Z-]	Other
1.77 ± 0.07	5.11 ± 0.09	0.91 ± 0.07	0.89 ± 0.09	2.48 ± 0.16	n = 5	[AXA]	Abaxis Piccolo
2.20 ± 0.06	5.53 ± 0.12	1.29 ± 0.04	0.96 ± 0.05	2.73 ± 0.06	n = 21	[ABJ]	Abbott Architect c System
1.70 ± 0.09	5.12 ± 0.28	1.05 ± 0.09	0.86 ± 0.08	2.52 ± 0.20	n = 3	[AWA]	Alfa Wassermann ACE Alera
1.85 ± 0.05	5.17 ± 0.14	1.08 ± 0.04	0.86 ± 0.04	2.58 ± 0.06	n = 63	[OLC]	Beckman Coulter AU Chemistry System
1.73 ± 0.05	5.21 ± 0.10	1.03 ± 0.05	0.80 ± 0.04	2.51 ± 0.06	n = 17	[BCG]	Beckman Coulter UniCel DxC 600
1.84 ± 0.04	5.28 ± 0.09	1.12 ± 0.04	0.85 ± 0.05	2.57 ± 0.06	n = 8	[BCH]	Beckman Coulter UniCel DxC 800
2.18 ± 0.08	5.30 ± 0.09	1.25 ± 0.08	0.95 ± 0.08	2.88 ± 0.08	n = 5	[IAA]	i-STAT
1.95 ± 0.15	5.58 ± 0.11	1.03 ± 0.08	0.89 ± 0.10	2.80 ± 0.08	n = 9	[JJE]	Ortho Vitros 250/350/950
2.00 ± 0.09	5.80 ± 0.18	1.10 ± 0.09	1.00 ± 0.09	2.77 ± 0.14	n = 3	[JJH]	Ortho Vitros 4600
2.00 ± 0.06	5.73 ± 0.12	1.09 ± 0.05	0.97 ± 0.05	2.80 ± 0.11	n = 14	[JJF]	Ortho Vitros 5,1FS
2.00 ± 0.00	5.63 ± 0.14	1.07 ± 0.05	0.97 ± 0.05	2.76 ± 0.09	n = 20	[JJG]	Ortho Vitros 5600
1.80 ± 0.03	5.01 ± 0.15	1.06 ± 0.04	0.88 ± 0.02	2.51 ± 0.06	n = 3	[ROK]	Roche cobas c111
1.84 ± 0.14	5.31 ± 0.10	1.07 ± 0.12	0.86 ± 0.06	2.63 ± 0.06	n = 5	[ROJ]	Roche cobas c311
1.75 ± 0.14	5.30 ± 0.15	1.00 ± 0.02	0.85 ± 0.07	2.59 ± 0.09	n = 25	[ROC]	Roche cobas c501
1.91 ± 0.13	5.19 ± 0.21	1.12 ± 0.10	0.91 ± 0.07	2.59 ± 0.11	n = 7	[ROH]	Roche cobas c701
1.77 ± 0.10	5.07 ± 0.14	1.00 ± 0.01	0.86 ± 0.10	2.51 ± 0.10	n = 5	[ROS]	Roche Cobas INTEGRA 400
1.78 ± 0.05	5.27 ± 0.16	1.00 ± 0.00	0.85 ± 0.06	2.57 ± 0.08	n = 4	[ROT]	Roche Cobas INTEGRA 800
1.96 ± 0.12	5.25 ± 0.13	1.19 ± 0.12	0.91 ± 0.04	2.64 ± 0.07	n = 27	[ROD]	Roche MODULAR D/P
1.98 ± 0.06	5.12 ± 0.12	1.18 ± 0.05	0.90 ± 0.01	2.59 ± 0.05	n = 21	[BYE]	Siemens ADVIA 1800
2.00 ± 0.01	5.10 ± 0.02	1.22 ± 0.06	0.90 ± 0.01	2.52 ± 0.07	n = 3	[BYB]	Siemens ADVIA 2400
1.95 ± 0.08	5.32 ± 0.13	1.22 ± 0.10	0.93 ± 0.08	2.68 ± 0.11	n = 23	[DUE]	Siemens Dimension EXL
1.91 ± 0.11	5.27 ± 0.12	1.21 ± 0.10	0.91 ± 0.09	2.66 ± 0.09	n = 16	[DUR]	Siemens Dimension RxL
1.84 ± 0.10	5.21 ± 0.13	1.09 ± 0.11	0.88 ± 0.08	2.57 ± 0.12	n = 42	[DUT]	Siemens Dimension Vista
1.90 ± 0.12	5.24 ± 0.15	1.18 ± 0.13	0.90 ± 0.11	2.61 ± 0.14	n = 14	[DUX]	Siemens Dimension Xpand
1.77 ± 0.07	5.11 ± 0.09	0.91 ± 0.07	0.89 ± 0.09	2.48 ± 0.16	n = 5	[AX1]	Abaxis
2.19 ± 0.06	5.52 ± 0.13	1.29 ± 0.05	0.96 ± 0.05	2.73 ± 0.06	n = 22	[AB1]	Abbott
1.70 ± 0.09	5.12 ± 0.28	1.05 ± 0.09	0.86 ± 0.08	2.52 ± 0.20	n = 3	[AW1]	Alfa Wassermann
1.77 ± 0.08	5.23 ± 0.11	1.07 ± 0.06	0.82 ± 0.06	2.54 ± 0.07	n = 28	[BC1]	Beckman Coulter
1.85 ± 0.05	5.17 ± 0.12	1.08 ± 0.03	0.85 ± 0.04	2.58 ± 0.06	n = 58	[OL1]	Beckman Coulter AU Series
2.20 ± 0.08	5.31 ± 0.11	1.27 ± 0.09	0.93 ± 0.08	2.90 ± 0.08	n = 4	[IA1]	i-STAT
1.99 ± 0.06	5.66 ± 0.15	1.08 ± 0.06	0.96 ± 0.07	2.78 ± 0.10	n = 45	[JJ1]	Ortho Clinical Diagnostics
1.80 ± 0.03	5.01 ± 0.15	1.06 ± 0.04	0.88 ± 0.02	2.51 ± 0.06	n = 3	[R08]	Roche cobas c111
1.80 ± 0.15	5.27 ± 0.17	1.03 ± 0.10	0.87 ± 0.07	2.60 ± 0.09	n = 39	[R04]	Roche cobas c311/c501/c502/c701/c702
1.96 ± 0.12	5.25 ± 0.13	1.19 ± 0.12	0.91 ± 0.04	2.64 ± 0.07	n = 27	[R02]	Roche Hitachi and Modular D/P
1.76 ± 0.07	5.15 ± 0.18	1.00 ± 0.00	0.84 ± 0.06	2.54 ± 0.10	n = 9	[R01]	Roche Integra and MIRA
2.00 ± 0.00	5.12 ± 0.10	1.19 ± 0.05	0.90 ± 0.01	2.58 ± 0.06	n = 25	[BY1]	Siemens ADVIA/ADVIA Centaur
1.89 ± 0.11	5.25 ± 0.14	1.15 ± 0.13	0.90 ± 0.09	2.62 ± 0.13	n = 95	[DA5]	Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Estimated Glomerular Filtration Rate (mL/min/1.73 m²)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code]	Method
45.9 ± 4.37	14.1 ± 0.97	86.0 ± 11.30	110.2 ± 11.66	31.7 ± 1.99	n = 296	[---]	All Methods
45.4 ± 4.55	14.0 ± 0.95	84.9 ± 11.42	109.5 ± 12.11	31.5 ± 1.97	n = 165	[-A-]	IDMS-traceable MDRD Study Equation
46.4 ± 4.00	14.5 ± 0.86	81.6 ± 9.57	105.4 ± 11.51	32.2 ± 2.00	n = 87	[-B-]	Original MDRD Study Equation (4-variable)
62.4 ± 18.61	20.0 ± 7.75	109.7 ± 22.31	135.3 ± 30.35	42.8 ± 13.77	n = 6	[-D-]	Cockcroft-Gault Equation
47.9 ± 2.39	13.7 ± 0.75	91.9 ± 6.94	116.4 ± 2.26	32.1 ± 1.22	n = 33	[-F-]	CKD-EPI Equation
42.5 ± 4.47	12.9 ± 0.77	91.3 ± 4.85	114.0 ± 6.90	28.2 ± 3.07	n = 3	[-Z-]	Other

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

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Method
46 (34-58)	14 (10-18)	86 (64-108)	109 (81-137)	32 (23-40)	IDMS-traceable MDRD Study Equation
48 (36-61)	15 (11-19)	87 (65-109)	114 (85-143)	33 (24-42)	Original MDRD Study Equation
47 (35-59)	14 (10-17)	91 (68-114)	115 (86-144)	32 (23-40)	CKD-EPI Equation
74 (55-93)	27 (19-34)	126 (94-158)	157 (117-197)	53 (40-67)	Cockcroft-Gault Equation

Laboratories were asked to report Estimated Glomerular Filtration Rate (eGFR) for samples C01-C05 for a 51-year-old African American man weighing 113 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 ± 25% of the target eGFR for all samples/equations.

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

Summary of Participant Performance (Mean and Standard Deviation)

Uric Acid (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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2.91 ± 0.14	7.27 ± 0.36	5.79 ± 0.21	4.45 ± 0.22	11.36 ± 0.55	n = 330	[---] All Methods & Instruments
<Instruments>						
2.86 ± 0.07	7.51 ± 0.13	5.89 ± 0.12	4.51 ± 0.09	11.88 ± 0.28	n = 21	[ABJ] Abbott Architect c System
3.06 ± 0.07	7.76 ± 0.15	6.00 ± 0.11	4.85 ± 0.09	12.01 ± 0.22	n = 61	[OLC] Beckman Coulter AU Chemistry System
2.90 ± 0.00	7.04 ± 0.08	5.60 ± 0.07	4.40 ± 0.00	10.97 ± 0.14	n = 13	[BCG] Beckman Coulter UniCel DxC 600
2.90 ± 0.05	7.02 ± 0.05	5.58 ± 0.05	4.42 ± 0.05	11.02 ± 0.17	n = 7	[BCH] Beckman Coulter UniCel DxC 800
2.85 ± 0.08	7.10 ± 0.13	5.80 ± 0.09	4.40 ± 0.06	11.11 ± 0.24	n = 5	[JJE] Ortho Vitros 250/350/950
2.87 ± 0.05	7.16 ± 0.10	5.86 ± 0.10	4.43 ± 0.05	11.15 ± 0.19	n = 3	[JJH] Ortho Vitros 4600
2.82 ± 0.06	7.11 ± 0.10	5.78 ± 0.10	4.39 ± 0.07	11.12 ± 0.16	n = 14	[JJF] Ortho Vitros 5,1FS
2.80 ± 0.08	7.07 ± 0.13	5.70 ± 0.12	4.37 ± 0.08	11.01 ± 0.22	n = 20	[JJG] Ortho Vitros 5600
2.88 ± 0.04	7.52 ± 0.04	5.95 ± 0.06	4.58 ± 0.04	11.75 ± 0.12	n = 4	[ROJ] Roche cobas c311
2.86 ± 0.06	7.41 ± 0.15	5.85 ± 0.15	4.51 ± 0.10	11.55 ± 0.25	n = 22	[ROC] Roche cobas c501
2.80 ± 0.00	7.33 ± 0.07	5.78 ± 0.07	4.45 ± 0.10	11.53 ± 0.11	n = 6	[ROH] Roche cobas c701
2.75 ± 0.06	7.20 ± 0.11	5.65 ± 0.06	4.32 ± 0.04	11.13 ± 0.15	n = 4	[ROT] Roche Cobas INTEGRA 800
2.79 ± 0.06	7.33 ± 0.18	5.77 ± 0.13	4.44 ± 0.11	11.50 ± 0.31	n = 25	[ROD] Roche MODULAR D/P
2.83 ± 0.07	7.36 ± 0.13	5.85 ± 0.11	4.49 ± 0.09	11.51 ± 0.21	n = 21	[BYE] Siemens ADVIA 1800
2.90 ± 0.09	7.38 ± 0.15	5.86 ± 0.10	4.47 ± 0.05	11.41 ± 0.37	n = 3	[BYB] Siemens ADVIA 2400
3.07 ± 0.06	7.15 ± 0.12	5.82 ± 0.12	4.35 ± 0.09	11.18 ± 0.15	n = 22	[DUE] Siemens Dimension EXL
3.06 ± 0.09	7.12 ± 0.11	5.80 ± 0.07	4.37 ± 0.09	11.15 ± 0.16	n = 14	[DUR] Siemens Dimension RxL
2.89 ± 0.09	6.73 ± 0.11	5.44 ± 0.11	4.16 ± 0.08	10.50 ± 0.15	n = 41	[DUT] Siemens Dimension Vista
3.09 ± 0.14	7.15 ± 0.17	5.81 ± 0.12	4.32 ± 0.09	11.21 ± 0.15	n = 9	[DUX] Siemens Dimension Xpand
<Reagents>						
2.86 ± 0.07	7.51 ± 0.13	5.89 ± 0.12	4.51 ± 0.09	11.88 ± 0.28	n = 21	[AB1] Abbott
2.90 ± 0.00	7.03 ± 0.06	5.59 ± 0.06	4.40 ± 0.00	10.96 ± 0.17	n = 24	[BC1] Beckman Coulter
3.06 ± 0.07	7.76 ± 0.16	6.00 ± 0.11	4.85 ± 0.10	12.01 ± 0.22	n = 59	[OL1] Beckman Coulter AU Series
2.82 ± 0.08	7.10 ± 0.12	5.75 ± 0.12	4.39 ± 0.08	11.07 ± 0.20	n = 42	[JJ1] Ortho Clinical Diagnostics
2.85 ± 0.06	7.41 ± 0.14	5.85 ± 0.13	4.51 ± 0.10	11.58 ± 0.22	n = 35	[R04] Roche cobas c311/c501/c502/c701/c702
2.79 ± 0.06	7.33 ± 0.18	5.77 ± 0.13	4.44 ± 0.11	11.50 ± 0.31	n = 25	[R02] Roche Hitachi and Modular D/P
2.75 ± 0.06	7.20 ± 0.11	5.67 ± 0.05	4.35 ± 0.06	11.20 ± 0.19	n = 6	[R01] Roche Integra and MIRA
2.84 ± 0.08	7.37 ± 0.14	5.85 ± 0.10	4.49 ± 0.08	11.51 ± 0.25	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
2.99 ± 0.13	6.94 ± 0.26	5.64 ± 0.24	4.26 ± 0.13	10.85 ± 0.42	n = 86	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Bilirubin (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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4.82 ± 0.26	0.62 ± 0.13	2.61 ± 0.20	1.39 ± 0.16	1.11 ± 0.16	n = 356	[---] All Methods & Instruments
<Instruments>						
4.92 ± 0.08	0.70 ± 0.00	2.65 ± 0.08	1.40 ± 0.00	1.14 ± 0.06	n = 5	[AXA] Abaxis Piccolo
5.13 ± 0.13	0.70 ± 0.05	2.90 ± 0.10	1.64 ± 0.10	1.29 ± 0.10	n = 21	[ABJ] Abbott Architect c System
5.71 ± 0.20	0.80 ± 0.09	3.26 ± 0.10	1.70 ± 0.09	1.43 ± 0.05	n = 3	[AWA] Alfa Wassermann ACE Alera
4.56 ± 0.14	0.73 ± 0.06	2.54 ± 0.08	1.48 ± 0.07	1.20 ± 0.05	n = 63	[OLC] Beckman Coulter AU Chemistry System
5.05 ± 0.18	0.80 ± 0.12	2.95 ± 0.14	1.58 ± 0.15	1.34 ± 0.11	n = 16	[BCG] Beckman Coulter UniCel DxC 600
5.15 ± 0.17	0.76 ± 0.08	3.02 ± 0.12	1.50 ± 0.11	1.30 ± 0.08	n = 7	[BCH] Beckman Coulter UniCel DxC 800
4.82 ± 0.18	0.57 ± 0.05	2.50 ± 0.00	1.43 ± 0.11	1.11 ± 0.09	n = 8	[JJE] Ortho Vitros 250/350/950
5.06 ± 0.10	0.66 ± 0.10	2.56 ± 0.10	1.46 ± 0.10	1.20 ± 0.09	n = 3	[JJH] Ortho Vitros 4600
4.88 ± 0.16	0.64 ± 0.09	2.45 ± 0.08	1.41 ± 0.08	1.15 ± 0.08	n = 14	[JJF] Ortho Vitros 5,1FS
4.98 ± 0.21	0.70 ± 0.09	2.57 ± 0.12	1.47 ± 0.14	1.21 ± 0.11	n = 20	[JJG] Ortho Vitros 5600
4.66 ± 0.11	0.50 ± 0.00	2.42 ± 0.08	1.16 ± 0.06	0.90 ± 0.00	n = 5	[ROJ] Roche cobas c311
4.75 ± 0.15	0.50 ± 0.00	2.45 ± 0.10	1.20 ± 0.08	0.95 ± 0.10	n = 22	[ROC] Roche cobas c501
4.51 ± 0.11	0.43 ± 0.05	2.30 ± 0.06	1.10 ± 0.06	0.83 ± 0.05	n = 6	[ROH] Roche cobas c701
4.50 ± 0.06	0.50 ± 0.00	2.34 ± 0.06	1.20 ± 0.00	0.90 ± 0.00	n = 5	[ROS] Roche Cobas INTEGRA 400
4.53 ± 0.09	0.52 ± 0.04	2.38 ± 0.04	1.20 ± 0.00	0.95 ± 0.06	n = 4	[ROT] Roche Cobas INTEGRA 800
4.71 ± 0.11	0.48 ± 0.05	2.47 ± 0.07	1.22 ± 0.09	0.94 ± 0.08	n = 26	[ROD] Roche MODULAR D/P
5.30 ± 0.17	0.65 ± 0.06	2.90 ± 0.10	1.47 ± 0.06	1.18 ± 0.05	n = 21	[BYE] Siemens ADVIA 1800
5.37 ± 0.14	0.63 ± 0.05	2.94 ± 0.10	1.47 ± 0.05	1.17 ± 0.05	n = 3	[BYB] Siemens ADVIA 2400
4.86 ± 0.13	0.56 ± 0.08	2.66 ± 0.10	1.36 ± 0.06	1.05 ± 0.07	n = 23	[DUE] Siemens Dimension EXL
4.85 ± 0.10	0.57 ± 0.05	2.63 ± 0.09	1.32 ± 0.08	1.03 ± 0.06	n = 16	[DUR] Siemens Dimension RxL
4.81 ± 0.09	0.60 ± 0.00	2.65 ± 0.07	1.38 ± 0.04	1.10 ± 0.00	n = 42	[DUT] Siemens Dimension Vista
4.78 ± 0.11	0.56 ± 0.07	2.65 ± 0.09	1.35 ± 0.07	1.02 ± 0.08	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
4.92 ± 0.08	0.70 ± 0.00	2.65 ± 0.08	1.40 ± 0.00	1.14 ± 0.06	n = 5	[AX1] Abaxis
5.13 ± 0.13	0.70 ± 0.05	2.90 ± 0.10	1.64 ± 0.10	1.29 ± 0.10	n = 21	[AB1] Abbott
5.71 ± 0.20	0.80 ± 0.09	3.26 ± 0.10	1.70 ± 0.09	1.43 ± 0.05	n = 3	[AW1] Alfa Wassermann
5.05 ± 0.21	0.80 ± 0.11	2.96 ± 0.16	1.55 ± 0.14	1.32 ± 0.11	n = 26	[BC1] Beckman Coulter
4.57 ± 0.14	0.73 ± 0.06	2.54 ± 0.09	1.48 ± 0.06	1.20 ± 0.05	n = 60	[OL1] Beckman Coulter AU Series
4.92 ± 0.20	0.65 ± 0.10	2.51 ± 0.11	1.44 ± 0.11	1.17 ± 0.10	n = 45	[JJ1] Ortho Clinical Diagnostics
4.68 ± 0.17	0.48 ± 0.05	2.41 ± 0.12	1.17 ± 0.09	0.92 ± 0.10	n = 35	[R04] Roche cobas c311/c501/c502/c701/c702
4.71 ± 0.11	0.48 ± 0.05	2.47 ± 0.07	1.22 ± 0.09	0.94 ± 0.08	n = 26	[R02] Roche Hitachi and Modular D/P
4.51 ± 0.08	0.50 ± 0.00	2.36 ± 0.06	1.20 ± 0.00	0.93 ± 0.05	n = 9	[R01] Roche Integra and MIRA
5.32 ± 0.17	0.65 ± 0.06	2.91 ± 0.11	1.47 ± 0.06	1.19 ± 0.05	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
4.82 ± 0.11	0.58 ± 0.06	2.65 ± 0.09	1.36 ± 0.07	1.06 ± 0.07	n = 95	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Phosphorus (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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3.19 ± 0.21	5.51 ± 0.21	3.71 ± 0.21	2.54 ± 0.17	4.54 ± 0.22	n = 328	[---] All Methods & Instruments
<Instruments>						
3.15 ± 0.12	5.50 ± 0.13	3.69 ± 0.13	2.49 ± 0.06	4.49 ± 0.11	n = 20	[ABJ] Abbott Architect c System
3.10 ± 0.09	5.32 ± 0.13	3.56 ± 0.08	2.45 ± 0.08	4.37 ± 0.11	n = 59	[OLC] Beckman Coulter AU Chemistry System
3.35 ± 0.15	5.70 ± 0.15	3.77 ± 0.11	2.67 ± 0.08	4.67 ± 0.15	n = 14	[BCG] Beckman Coulter UniCel DxC 600
3.34 ± 0.07	5.71 ± 0.06	3.89 ± 0.06	2.62 ± 0.04	4.77 ± 0.07	n = 8	[BCH] Beckman Coulter UniCel DxC 800
3.80 ± 0.15	5.92 ± 0.25	4.30 ± 0.19	3.05 ± 0.15	5.02 ± 0.23	n = 7	[JJE] Ortho Vitros 250/350/950
3.77 ± 0.23	5.87 ± 0.23	4.27 ± 0.23	3.00 ± 0.18	4.97 ± 0.23	n = 3	[JJH] Ortho Vitros 4600
3.72 ± 0.09	5.83 ± 0.11	4.22 ± 0.11	2.94 ± 0.13	4.92 ± 0.12	n = 14	[JJF] Ortho Vitros 5,1FS
3.69 ± 0.14	5.80 ± 0.14	4.19 ± 0.13	2.89 ± 0.13	4.88 ± 0.14	n = 20	[JJG] Ortho Vitros 5600
3.27 ± 0.05	5.63 ± 0.05	3.87 ± 0.05	2.63 ± 0.05	4.70 ± 0.00	n = 3	[ROJ] Roche cobas c311
3.25 ± 0.09	5.57 ± 0.11	3.77 ± 0.10	2.59 ± 0.06	4.59 ± 0.08	n = 23	[ROC] Roche cobas c501
3.18 ± 0.09	5.55 ± 0.10	3.75 ± 0.12	2.52 ± 0.14	4.55 ± 0.12	n = 6	[ROH] Roche cobas c701
3.20 ± 0.09	5.47 ± 0.14	3.74 ± 0.10	2.50 ± 0.09	4.54 ± 0.10	n = 3	[ROS] Roche Cobas INTEGRA 400
3.20 ± 0.08	5.51 ± 0.11	3.70 ± 0.08	2.50 ± 0.08	4.48 ± 0.13	n = 4	[ROT] Roche Cobas INTEGRA 800
3.22 ± 0.09	5.53 ± 0.16	3.74 ± 0.11	2.54 ± 0.13	4.55 ± 0.13	n = 25	[ROD] Roche MODULAR D/P
3.18 ± 0.08	5.50 ± 0.12	3.73 ± 0.10	2.52 ± 0.09	4.53 ± 0.12	n = 21	[BYE] Siemens ADVIA 1800
3.13 ± 0.05	5.43 ± 0.05	3.67 ± 0.05	2.47 ± 0.05	4.43 ± 0.05	n = 3	[BYB] Siemens ADVIA 2400
3.18 ± 0.10	5.54 ± 0.10	3.73 ± 0.09	2.56 ± 0.07	4.58 ± 0.09	n = 21	[DUE] Siemens Dimension EXL
3.17 ± 0.09	5.53 ± 0.15	3.71 ± 0.10	2.54 ± 0.08	4.55 ± 0.12	n = 15	[DUR] Siemens Dimension RxL
2.94 ± 0.09	5.36 ± 0.13	3.49 ± 0.10	2.35 ± 0.09	4.33 ± 0.13	n = 41	[DUT] Siemens Dimension Vista
3.20 ± 0.00	5.50 ± 0.11	3.67 ± 0.09	2.57 ± 0.10	4.52 ± 0.07	n = 10	[DUX] Siemens Dimension Xpand
<Reagents>						
3.15 ± 0.12	5.50 ± 0.13	3.69 ± 0.13	2.49 ± 0.06	4.49 ± 0.11	n = 20	[AB1] Abbott
3.36 ± 0.14	5.71 ± 0.12	3.82 ± 0.13	2.66 ± 0.08	4.72 ± 0.17	n = 25	[BC1] Beckman Coulter
3.10 ± 0.09	5.33 ± 0.13	3.57 ± 0.08	2.45 ± 0.08	4.37 ± 0.11	n = 56	[OL1] Beckman Coulter AU Series
3.71 ± 0.14	5.82 ± 0.16	4.22 ± 0.15	2.93 ± 0.15	4.91 ± 0.16	n = 44	[JJ1] Ortho Clinical Diagnostics
3.23 ± 0.09	5.56 ± 0.11	3.78 ± 0.11	2.59 ± 0.08	4.59 ± 0.10	n = 34	[R04] Roche cobas c311/c501/c502/c701/c702
3.22 ± 0.09	5.53 ± 0.16	3.74 ± 0.11	2.54 ± 0.13	4.55 ± 0.13	n = 25	[R02] Roche Hitachi and Modular D/P
3.20 ± 0.08	5.50 ± 0.12	3.72 ± 0.09	2.50 ± 0.08	4.51 ± 0.12	n = 7	[R01] Roche Integra and MIRA
3.17 ± 0.08	5.49 ± 0.11	3.72 ± 0.10	2.51 ± 0.09	4.52 ± 0.11	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
3.07 ± 0.16	5.45 ± 0.15	3.61 ± 0.16	2.47 ± 0.14	4.46 ± 0.17	n = 87	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Calcium (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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13.25 ± 0.35	8.87 ± 0.21	9.68 ± 0.34	10.49 ± 0.28	7.00 ± 0.18	n = 364	[---] All Methods & Instruments
<Instruments>						
12.70 ± 0.40	8.80 ± 0.10	9.29 ± 0.13	10.66 ± 0.14	7.15 ± 0.06	n = 5	[AXA] Abaxis Piccolo
13.63 ± 0.29	8.93 ± 0.16	9.86 ± 0.16	10.62 ± 0.21	7.12 ± 0.13	n = 21	[ABJ] Abbott Architect c System
12.83 ± 0.05	8.87 ± 0.14	9.73 ± 0.05	10.63 ± 0.05	7.17 ± 0.05	n = 3	[AWA] Alfa Wassermann ACE Alera
13.27 ± 0.32	8.96 ± 0.17	9.93 ± 0.17	10.41 ± 0.20	7.10 ± 0.14	n = 63	[OLC] Beckman Coulter AU Chemistry System
12.89 ± 0.11	8.67 ± 0.09	9.54 ± 0.12	10.29 ± 0.11	6.93 ± 0.08	n = 17	[BCG] Beckman Coulter UniCel DxC 600
12.97 ± 0.18	8.67 ± 0.14	9.60 ± 0.08	10.35 ± 0.12	6.93 ± 0.09	n = 8	[BCH] Beckman Coulter UniCel DxC 800
13.40 ± 0.22	8.98 ± 0.08	10.04 ± 0.17	10.84 ± 0.17	6.94 ± 0.22	n = 7	[JJE] Ortho Vitros 250/350/950
13.50 ± 0.09	9.12 ± 0.15	10.14 ± 0.10	10.90 ± 0.18	7.06 ± 0.10	n = 3	[JJH] Ortho Vitros 4600
13.31 ± 0.12	8.87 ± 0.13	9.92 ± 0.12	10.80 ± 0.18	6.90 ± 0.13	n = 14	[JJF] Ortho Vitros 5,1FS
13.24 ± 0.19	8.88 ± 0.13	9.93 ± 0.10	10.73 ± 0.13	6.90 ± 0.16	n = 20	[JJG] Ortho Vitros 5600
13.40 ± 0.09	8.80 ± 0.09	9.64 ± 0.10	10.62 ± 0.15	6.90 ± 0.18	n = 3	[ROK] Roche cobas c111
13.56 ± 0.11	9.02 ± 0.08	9.86 ± 0.11	10.75 ± 0.16	7.10 ± 0.06	n = 5	[ROJ] Roche cobas c311
13.50 ± 0.22	8.95 ± 0.20	9.80 ± 0.19	10.66 ± 0.22	7.03 ± 0.15	n = 24	[ROC] Roche cobas c501
13.46 ± 0.21	8.88 ± 0.16	9.73 ± 0.16	10.55 ± 0.19	6.97 ± 0.10	n = 6	[ROH] Roche cobas c701
13.53 ± 0.31	8.94 ± 0.26	9.72 ± 0.26	10.70 ± 0.08	6.90 ± 0.21	n = 5	[ROS] Roche Cobas INTEGRA 400
13.44 ± 0.23	8.90 ± 0.15	9.69 ± 0.11	10.62 ± 0.13	7.00 ± 0.08	n = 4	[ROT] Roche Cobas INTEGRA 800
13.59 ± 0.34	9.06 ± 0.20	9.75 ± 0.23	10.75 ± 0.20	7.06 ± 0.18	n = 26	[ROD] Roche MODULAR D/P
13.23 ± 0.23	8.91 ± 0.16	9.72 ± 0.19	10.48 ± 0.19	7.04 ± 0.17	n = 21	[BYE] Siemens ADVIA 1800
13.40 ± 0.21	8.97 ± 0.27	9.83 ± 0.27	10.44 ± 0.36	7.11 ± 0.23	n = 3	[BYB] Siemens ADVIA 2400
13.06 ± 0.29	8.74 ± 0.15	9.27 ± 0.19	10.28 ± 0.21	6.84 ± 0.15	n = 23	[DUE] Siemens Dimension EXL
13.10 ± 0.29	8.85 ± 0.21	9.35 ± 0.23	10.38 ± 0.28	6.96 ± 0.18	n = 16	[DUR] Siemens Dimension RxL
13.10 ± 0.33	8.73 ± 0.17	9.27 ± 0.22	10.30 ± 0.22	6.92 ± 0.17	n = 42	[DUT] Siemens Dimension Vista
12.96 ± 0.23	8.72 ± 0.13	9.23 ± 0.16	10.26 ± 0.19	6.91 ± 0.11	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
12.70 ± 0.40	8.80 ± 0.10	9.29 ± 0.13	10.66 ± 0.14	7.15 ± 0.06	n = 5	[AX1] Abaxis
13.63 ± 0.29	8.93 ± 0.16	9.86 ± 0.16	10.62 ± 0.21	7.12 ± 0.13	n = 21	[AB1] Abbott
12.83 ± 0.05	8.87 ± 0.14	9.73 ± 0.05	10.63 ± 0.05	7.17 ± 0.05	n = 3	[AW1] Alfa Wassermann
12.94 ± 0.17	8.69 ± 0.13	9.59 ± 0.13	10.33 ± 0.13	6.94 ± 0.09	n = 28	[BC1] Beckman Coulter
13.28 ± 0.32	8.97 ± 0.16	9.94 ± 0.16	10.42 ± 0.20	7.10 ± 0.14	n = 60	[OL1] Beckman Coulter AU Series
13.30 ± 0.19	8.91 ± 0.14	9.95 ± 0.14	10.78 ± 0.16	6.92 ± 0.16	n = 44	[JJ1] Ortho Clinical Diagnostics
13.40 ± 0.09	8.80 ± 0.09	9.64 ± 0.10	10.62 ± 0.15	6.90 ± 0.18	n = 3	[R08] Roche cobas c111
13.49 ± 0.20	8.95 ± 0.16	9.79 ± 0.17	10.65 ± 0.20	7.03 ± 0.12	n = 35	[R04] Roche cobas c311/c501/c502/c701/c702
13.61 ± 0.31	9.08 ± 0.17	9.77 ± 0.21	10.81 ± 0.09	7.07 ± 0.18	n = 25	[R02] Roche Hitachi and Modular D/P
13.49 ± 0.28	8.93 ± 0.21	9.71 ± 0.17	10.67 ± 0.10	6.96 ± 0.16	n = 9	[R01] Roche Integra and MIRA
12.76 ± 0.45	8.72 ± 0.21	9.45 ± 0.42	10.38 ± 0.21	7.03 ± 0.32	n = 4	[GZ1] Sekisui Diagnostics (Genzyme)
13.24 ± 0.24	8.81 ± 0.17	9.74 ± 0.20	10.48 ± 0.20	7.05 ± 0.17	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
13.07 ± 0.31	8.75 ± 0.17	9.28 ± 0.21	10.30 ± 0.22	6.91 ± 0.16	n = 95	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Magnesium (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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1.88 ± 0.10	4.33 ± 0.15	2.49 ± 0.10	1.10 ± 0.10	3.28 ± 0.12	n = 332	[---] All Methods & Instruments
<Instruments>						
1.81 ± 0.13	4.09 ± 0.17	2.50 ± 0.11	0.99 ± 0.10	3.11 ± 0.13	n = 20	[ABJ] Abbott Architect c System
1.90 ± 0.05	4.28 ± 0.11	2.47 ± 0.07	1.10 ± 0.00	3.22 ± 0.08	n = 60	[OLC] Beckman Coulter AU Chemistry System
1.90 ± 0.00	4.33 ± 0.08	2.49 ± 0.04	1.10 ± 0.00	3.30 ± 0.00	n = 16	[BCG] Beckman Coulter UniCel DxC 600
1.90 ± 0.00	4.27 ± 0.10	2.48 ± 0.06	1.12 ± 0.04	3.27 ± 0.07	n = 8	[BCH] Beckman Coulter UniCel DxC 800
1.96 ± 0.06	4.49 ± 0.17	2.55 ± 0.08	1.20 ± 0.00	3.34 ± 0.13	n = 5	[JJE] Ortho Vitros 250/350/950
1.96 ± 0.10	4.40 ± 0.00	2.50 ± 0.00	1.20 ± 0.09	3.30 ± 0.00	n = 3	[JJH] Ortho Vitros 4600
1.88 ± 0.05	4.35 ± 0.07	2.46 ± 0.06	1.18 ± 0.05	3.26 ± 0.08	n = 14	[JJF] Ortho Vitros 5,1FS
1.86 ± 0.06	4.30 ± 0.07	2.44 ± 0.08	1.12 ± 0.04	3.22 ± 0.10	n = 19	[JJG] Ortho Vitros 5600
1.90 ± 0.00	4.35 ± 0.08	2.50 ± 0.00	1.12 ± 0.05	3.31 ± 0.09	n = 21	[ROC] Roche cobas c501
1.86 ± 0.06	4.06 ± 0.20	2.42 ± 0.08	1.10 ± 0.00	3.10 ± 0.15	n = 5	[ROH] Roche cobas c701
1.85 ± 0.06	4.18 ± 0.15	2.48 ± 0.04	1.15 ± 0.06	3.22 ± 0.13	n = 4	[ROT] Roche Cobas INTEGRA 800
1.95 ± 0.08	4.34 ± 0.16	2.52 ± 0.10	1.13 ± 0.08	3.30 ± 0.10	n = 25	[ROD] Roche MODULAR D/P
2.11 ± 0.09	4.35 ± 0.12	2.65 ± 0.08	1.31 ± 0.06	3.33 ± 0.12	n = 20	[BYE] Siemens ADVIA 1800
2.16 ± 0.14	4.51 ± 0.27	2.79 ± 0.18	1.33 ± 0.09	3.44 ± 0.19	n = 3	[BYB] Siemens ADVIA 2400
1.89 ± 0.09	4.47 ± 0.12	2.54 ± 0.11	1.06 ± 0.06	3.37 ± 0.10	n = 20	[DUE] Siemens Dimension EXL
1.91 ± 0.09	4.50 ± 0.16	2.55 ± 0.09	1.09 ± 0.05	3.38 ± 0.10	n = 16	[DUR] Siemens Dimension RxL
1.76 ± 0.10	4.35 ± 0.12	2.38 ± 0.09	0.97 ± 0.10	3.29 ± 0.13	n = 42	[DUT] Siemens Dimension Vista
1.86 ± 0.07	4.42 ± 0.11	2.51 ± 0.09	1.04 ± 0.07	3.36 ± 0.12	n = 13	[DUX] Siemens Dimension Xpand
<Reagents>						
1.81 ± 0.13	4.09 ± 0.17	2.50 ± 0.11	0.99 ± 0.10	3.11 ± 0.13	n = 20	[AB1] Abbott
1.90 ± 0.00	4.30 ± 0.10	2.48 ± 0.05	1.10 ± 0.00	3.27 ± 0.06	n = 27	[BC1] Beckman Coulter
1.90 ± 0.05	4.28 ± 0.11	2.48 ± 0.07	1.10 ± 0.00	3.23 ± 0.08	n = 56	[OL1] Beckman Coulter AU Series
1.88 ± 0.07	4.34 ± 0.09	2.46 ± 0.07	1.16 ± 0.06	3.25 ± 0.10	n = 41	[JJ1] Ortho Clinical Diagnostics
1.90 ± 0.00	4.33 ± 0.09	2.50 ± 0.00	1.10 ± 0.00	3.30 ± 0.10	n = 31	[R04] Roche cobas c311/c501/c502/c701/c702
1.95 ± 0.08	4.34 ± 0.16	2.52 ± 0.10	1.13 ± 0.08	3.30 ± 0.10	n = 25	[R02] Roche Hitachi and Modular D/P
1.85 ± 0.06	4.22 ± 0.14	2.50 ± 0.00	1.17 ± 0.05	3.21 ± 0.12	n = 6	[R01] Roche Integra and MIRA
2.12 ± 0.10	4.37 ± 0.15	2.66 ± 0.09	1.32 ± 0.07	3.34 ± 0.12	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
1.83 ± 0.11	4.41 ± 0.14	2.46 ± 0.13	1.02 ± 0.09	3.34 ± 0.12	n = 91	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Iron (µg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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111.4 ± 5.59	94.7 ± 4.29	98.4 ± 5.03	74.1 ± 3.29	86.0 ± 4.17	n = 264	[---] All Methods & Instruments
<Instruments>						
112.5 ± 2.22	92.7 ± 3.07	97.6 ± 3.39	73.5 ± 2.20	85.1 ± 2.44	n = 15	[ABJ] Abbott Architect c System
112.9 ± 3.83	97.4 ± 3.56	100.9 ± 3.42	75.7 ± 2.94	87.8 ± 3.05	n = 53	[OLC] Beckman Coulter AU Chemistry System
111.7 ± 4.39	94.7 ± 2.73	95.4 ± 4.58	73.9 ± 2.62	84.7 ± 2.79	n = 8	[BCG] Beckman Coulter UniCel DxC 600
111.8 ± 4.72	93.8 ± 3.94	95.1 ± 4.56	75.9 ± 3.16	85.0 ± 4.51	n = 7	[BCH] Beckman Coulter UniCel DxC 800
130.1 ± 4.38	99.0 ± 6.37	117.8 ± 5.00	71.0 ± 5.48	93.3 ± 4.06	n = 3	[JJH] Ortho Vitros 4600
131.2 ± 7.30	101.8 ± 7.17	119.5 ± 5.95	72.0 ± 6.36	95.3 ± 6.44	n = 12	[JJF] Ortho Vitros 5,1FS
131.8 ± 6.27	103.1 ± 5.65	121.3 ± 5.93	74.0 ± 5.59	96.1 ± 5.22	n = 20	[JJG] Ortho Vitros 5600
114.2 ± 2.54	96.5 ± 2.48	101.5 ± 2.36	77.0 ± 2.37	88.4 ± 2.59	n = 13	[ROC] Roche cobas c501
115.1 ± 1.13	96.1 ± 1.13	102.2 ± 2.11	76.8 ± 1.27	88.5 ± 1.22	n = 4	[ROG] Roche cobas c502
112.8 ± 1.54	95.6 ± 1.02	100.8 ± 1.54	76.0 ± 0.90	87.3 ± 1.37	n = 3	[ROH] Roche cobas c701
114.1 ± 2.05	96.7 ± 1.37	101.7 ± 0.51	77.3 ± 1.37	87.3 ± 1.37	n = 3	[ROT] Roche Cobas INTEGRA 800
112.2 ± 2.27	93.8 ± 1.43	99.4 ± 1.98	74.4 ± 1.74	85.7 ± 2.07	n = 24	[ROD] Roche MODULAR D/P
109.7 ± 3.02	92.9 ± 2.97	98.1 ± 2.77	73.2 ± 2.27	84.8 ± 2.22	n = 20	[BYE] Siemens ADVIA 1800
109.4 ± 2.55	92.8 ± 2.44	98.8 ± 3.25	73.5 ± 2.82	84.8 ± 3.25	n = 3	[BYB] Siemens ADVIA 2400
106.1 ± 1.69	91.6 ± 1.53	94.5 ± 0.70	72.3 ± 0.78	82.8 ± 1.17	n = 12	[DUE] Siemens Dimension EXL
105.3 ± 2.54	91.1 ± 2.15	92.9 ± 1.80	71.3 ± 1.59	82.0 ± 1.77	n = 9	[DUR] Siemens Dimension RxL
107.7 ± 1.64	92.8 ± 2.10	95.5 ± 2.05	72.9 ± 1.84	83.5 ± 1.44	n = 38	[DUT] Siemens Dimension Vista
<Reagents>						
112.1 ± 2.29	92.1 ± 2.91	96.5 ± 2.15	73.0 ± 1.65	84.4 ± 1.62	n = 13	[AB3] Abbott-Iron/6K95
111.8 ± 3.99	94.3 ± 2.71	95.5 ± 3.91	74.7 ± 2.92	84.9 ± 3.15	n = 19	[BC1] Beckman Coulter
113.8 ± 3.67	98.4 ± 3.21	101.8 ± 2.71	76.3 ± 2.68	88.7 ± 2.53	n = 42	[OL1] Beckman Coulter AU Series
131.4 ± 6.52	102.3 ± 6.40	120.4 ± 5.95	73.1 ± 5.91	95.6 ± 5.51	n = 35	[JJ1] Ortho Clinical Diagnostics
114.2 ± 2.21	96.1 ± 2.05	101.3 ± 2.09	76.7 ± 1.90	88.1 ± 1.97	n = 23	[R04] Roche cobas c311/c501/c502/c701/c702
112.2 ± 2.27	93.8 ± 1.43	99.4 ± 1.98	74.4 ± 1.74	85.7 ± 2.07	n = 24	[R02] Roche Hitachi and Modular D/P
114.0 ± 1.66	96.0 ± 1.54	101.7 ± 1.38	78.0 ± 2.64	88.0 ± 2.64	n = 5	[R01] Roche Integra and MIRA
110.0 ± 1.56	94.7 ± 1.77	97.9 ± 1.90	74.4 ± 1.95	85.2 ± 1.14	n = 8	[GZ1] Sekisui Diagnostics (Genzyme)
109.3 ± 2.81	92.6 ± 2.80	97.9 ± 2.67	72.9 ± 2.34	84.6 ± 2.20	n = 23	[BY1] Siemens ADVIA/ADVIA Centaur
107.0 ± 2.13	92.2 ± 2.28	94.7 ± 2.12	72.4 ± 1.66	83.1 ± 1.64	n = 61	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Sodium (mmol/L)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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151.0 ± 2.65	162.9 ± 2.50	124.8 ± 2.19	137.3 ± 1.78	145.6 ± 1.83	n = 374	[---] All Methods & Instruments
<Instruments>						
146.9 ± 1.83	160.7 ± 1.10	122.4 ± 1.52	136.5 ± 1.62	143.8 ± 1.55	n = 5	[AXA] Abaxis Piccolo
152.2 ± 1.14	163.9 ± 1.37	124.1 ± 0.96	137.4 ± 0.86	145.6 ± 1.02	n = 21	[ABJ] Abbott Architect c System
152.7 ± 0.51	163.3 ± 0.51	125.3 ± 0.51	134.3 ± 0.51	145.3 ± 0.51	n = 3	[AWA] Alfa Wassermann ACE Alera
150.1 ± 1.48	162.1 ± 1.64	124.0 ± 1.35	137.2 ± 1.38	144.8 ± 1.22	n = 63	[OLC] Beckman Coulter AU Chemistry System
149.2 ± 1.54	161.5 ± 1.90	123.8 ± 0.84	136.4 ± 1.32	144.8 ± 1.98	n = 17	[BCG] Beckman Coulter UniCel DxC 600
149.1 ± 1.25	161.8 ± 1.89	125.0 ± 1.31	137.0 ± 1.86	145.2 ± 2.04	n = 8	[BCH] Beckman Coulter UniCel DxC 800
148.1 ± 0.60	159.5 ± 1.03	123.5 ± 0.57	133.7 ± 0.54	143.7 ± 0.69	n = 8	[IAA] i-STAT
156.1 ± 2.57	165.9 ± 2.82	130.0 ± 1.73	137.3 ± 1.64	148.5 ± 2.50	n = 7	[JJE] Ortho Vitros 250/350/950
155.9 ± 1.24	166.7 ± 1.44	129.4 ± 1.53	136.9 ± 1.50	147.9 ± 1.27	n = 15	[JJF] Ortho Vitros 5,1FS
155.2 ± 1.57	165.3 ± 1.52	129.3 ± 1.35	136.4 ± 1.76	147.2 ± 1.45	n = 20	[JJG] Ortho Vitros 5600
148.0 ± 0.00	161.6 ± 1.02	123.6 ± 1.02	137.0 ± 0.90	145.7 ± 0.51	n = 3	[ROK] Roche cobas c111
150.8 ± 0.80	163.0 ± 0.93	124.2 ± 0.80	137.6 ± 1.09	145.5 ± 0.83	n = 5	[ROJ] Roche cobas c311
150.1 ± 1.39	163.5 ± 1.87	123.9 ± 1.34	136.8 ± 1.38	145.5 ± 1.22	n = 23	[ROC] Roche cobas c501
152.4 ± 0.94	164.3 ± 1.37	125.2 ± 0.73	137.2 ± 1.22	146.4 ± 0.79	n = 6	[ROH] Roche cobas c701
148.3 ± 1.58	161.3 ± 1.58	121.9 ± 1.13	135.7 ± 1.51	143.2 ± 1.27	n = 4	[ROS] Roche Cobas INTEGRA 400
149.2 ± 1.27	160.8 ± 1.46	123.2 ± 0.41	136.3 ± 0.90	143.3 ± 0.82	n = 4	[ROT] Roche Cobas INTEGRA 800
152.1 ± 1.86	164.4 ± 1.85	124.5 ± 1.37	137.5 ± 1.10	145.5 ± 1.74	n = 26	[ROD] Roche MODULAR D/P
153.0 ± 0.75	164.8 ± 0.99	126.9 ± 0.71	139.4 ± 0.83	147.3 ± 1.14	n = 21	[BYE] Siemens ADVIA 1800
152.3 ± 1.37	163.6 ± 1.02	125.7 ± 0.51	138.7 ± 0.51	146.7 ± 0.51	n = 3	[BYB] Siemens ADVIA 2400
151.5 ± 1.23	163.2 ± 1.87	125.4 ± 1.14	138.5 ± 1.15	146.3 ± 1.15	n = 24	[DUE] Siemens Dimension EXL
150.3 ± 2.06	161.5 ± 1.90	124.5 ± 1.33	137.3 ± 1.56	145.0 ± 1.92	n = 15	[DUR] Siemens Dimension RxL
148.7 ± 1.42	160.3 ± 1.63	123.7 ± 1.51	137.4 ± 1.48	145.1 ± 1.81	n = 42	[DUT] Siemens Dimension Vista
152.3 ± 1.08	164.4 ± 1.37	126.2 ± 0.64	139.5 ± 0.61	147.2 ± 1.05	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
146.9 ± 1.83	160.7 ± 1.10	122.4 ± 1.52	136.5 ± 1.62	143.8 ± 1.55	n = 5	[AX1] Abaxis
152.0 ± 1.41	163.7 ± 1.64	124.1 ± 0.95	137.3 ± 1.14	145.5 ± 1.04	n = 23	[AB1] Abbott
152.7 ± 0.51	163.3 ± 0.51	125.3 ± 0.51	134.3 ± 0.51	145.3 ± 0.51	n = 3	[AW1] Alfa Wassermann
149.2 ± 1.48	161.6 ± 1.77	124.0 ± 1.35	136.4 ± 1.37	144.8 ± 1.87	n = 28	[BC1] Beckman Coulter
150.1 ± 1.47	162.1 ± 1.69	124.1 ± 1.34	137.2 ± 1.37	144.8 ± 1.23	n = 61	[OL1] Beckman Coulter AU Series
148.0 ± 0.55	159.4 ± 0.94	123.5 ± 0.57	133.5 ± 0.57	143.5 ± 0.57	n = 6	[IA1] i-STAT
153.5 ± 1.86	164.7 ± 1.37	126.7 ± 0.51	138.1 ± 2.86	145.6 ± 1.02	n = 3	[IL1] Instrumentation Lab
155.6 ± 1.67	165.8 ± 1.84	129.4 ± 1.42	136.8 ± 1.66	147.6 ± 1.62	n = 44	[JJ1] Ortho Clinical Diagnostics
148.0 ± 0.00	161.6 ± 1.02	123.6 ± 1.02	137.0 ± 0.90	145.7 ± 0.51	n = 3	[R08] Roche cobas c111
150.6 ± 1.52	163.6 ± 1.69	124.2 ± 1.26	137.0 ± 1.39	145.6 ± 1.18	n = 36	[R04] Roche cobas c311/c501/c502/c701/c702
152.1 ± 1.86	164.4 ± 1.85	124.5 ± 1.37	137.5 ± 1.10	145.5 ± 1.74	n = 26	[R02] Roche Hitachi and Modular D/P
148.8 ± 1.48	161.0 ± 1.55	122.7 ± 0.94	136.2 ± 1.03	143.3 ± 1.03	n = 8	[R01] Roche Integra and MIRA
152.9 ± 0.97	164.6 ± 1.15	126.7 ± 0.78	139.4 ± 0.90	147.1 ± 1.01	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
150.2 ± 2.14	161.8 ± 2.42	124.7 ± 1.71	138.1 ± 1.62	145.8 ± 1.83	n = 94	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Potassium (mmol/L)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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3.70 ± 0.09	6.28 ± 0.12	2.34 ± 0.10	4.32 ± 0.09	5.33 ± 0.11	n = 375	[---] All Methods & Instruments
<Instruments>						
3.89 ± 0.21	6.67 ± 0.22	2.20 ± 0.09	4.48 ± 0.23	5.61 ± 0.18	n = 5	[AXA] Abaxis Piccolo
3.67 ± 0.06	6.27 ± 0.05	2.30 ± 0.07	4.29 ± 0.06	5.28 ± 0.07	n = 21	[ABJ] Abbott Architect c System
3.80 ± 0.00	6.50 ± 0.09	2.43 ± 0.05	4.37 ± 0.05	5.50 ± 0.09	n = 3	[AWA] Alfa Wassermann ACE Alera
3.73 ± 0.06	6.27 ± 0.10	2.40 ± 0.00	4.34 ± 0.06	5.33 ± 0.06	n = 63	[OLC] Beckman Coulter AU Chemistry System
3.66 ± 0.07	6.30 ± 0.00	2.23 ± 0.07	4.29 ± 0.06	5.33 ± 0.08	n = 17	[BCG] Beckman Coulter UniCel DxC 600
3.66 ± 0.07	6.27 ± 0.07	2.28 ± 0.04	4.29 ± 0.06	5.31 ± 0.06	n = 8	[BCH] Beckman Coulter UniCel DxC 800
3.58 ± 0.04	6.08 ± 0.04	2.25 ± 0.06	4.17 ± 0.05	5.22 ± 0.04	n = 8	[IAA] i-STAT
3.86 ± 0.06	6.44 ± 0.09	2.50 ± 0.05	4.44 ± 0.06	5.50 ± 0.10	n = 7	[JJE] Ortho Vitros 250/350/950
3.83 ± 0.05	6.40 ± 0.09	2.50 ± 0.00	4.43 ± 0.05	5.47 ± 0.05	n = 3	[JJH] Ortho Vitros 4600
3.84 ± 0.06	6.37 ± 0.06	2.50 ± 0.00	4.40 ± 0.07	5.45 ± 0.06	n = 14	[JJF] Ortho Vitros 5,1FS
3.82 ± 0.07	6.34 ± 0.12	2.48 ± 0.05	4.36 ± 0.10	5.44 ± 0.09	n = 20	[JJG] Ortho Vitros 5600
3.70 ± 0.00	6.30 ± 0.00	2.33 ± 0.05	4.37 ± 0.05	5.40 ± 0.09	n = 3	[ROK] Roche cobas c111
3.60 ± 0.00	6.20 ± 0.00	2.20 ± 0.00	4.24 ± 0.06	5.30 ± 0.00	n = 5	[ROJ] Roche cobas c311
3.60 ± 0.06	6.24 ± 0.09	2.20 ± 0.00	4.25 ± 0.07	5.29 ± 0.07	n = 23	[ROC] Roche cobas c501
3.74 ± 0.08	6.33 ± 0.05	2.38 ± 0.07	4.40 ± 0.00	5.40 ± 0.00	n = 6	[ROH] Roche cobas c701
3.68 ± 0.04	6.28 ± 0.04	2.30 ± 0.00	4.35 ± 0.06	5.32 ± 0.04	n = 4	[ROS] Roche Cobas INTEGRA 400
3.70 ± 0.00	6.25 ± 0.06	2.30 ± 0.00	4.38 ± 0.04	5.32 ± 0.04	n = 4	[ROT] Roche Cobas INTEGRA 800
3.63 ± 0.08	6.26 ± 0.09	2.29 ± 0.09	4.28 ± 0.07	5.24 ± 0.08	n = 26	[ROD] Roche MODULAR D/P
3.80 ± 0.00	6.40 ± 0.00	2.43 ± 0.05	4.43 ± 0.07	5.44 ± 0.07	n = 21	[BYE] Siemens ADVIA 1800
3.77 ± 0.05	6.33 ± 0.05	2.43 ± 0.05	4.40 ± 0.00	5.40 ± 0.00	n = 3	[BYB] Siemens ADVIA 2400
3.69 ± 0.04	6.31 ± 0.06	2.25 ± 0.06	4.33 ± 0.05	5.38 ± 0.06	n = 23	[DUE] Siemens Dimension EXL
3.68 ± 0.04	6.27 ± 0.07	2.28 ± 0.06	4.29 ± 0.05	5.33 ± 0.06	n = 16	[DUR] Siemens Dimension RxL
3.62 ± 0.05	6.12 ± 0.06	2.32 ± 0.04	4.27 ± 0.05	5.24 ± 0.07	n = 42	[DUT] Siemens Dimension Vista
3.70 ± 0.00	6.36 ± 0.06	2.30 ± 0.00	4.37 ± 0.06	5.40 ± 0.00	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
3.89 ± 0.21	6.67 ± 0.22	2.20 ± 0.09	4.48 ± 0.23	5.61 ± 0.18	n = 5	[AX1] Abaxis
3.67 ± 0.07	6.26 ± 0.06	2.30 ± 0.06	4.28 ± 0.07	5.29 ± 0.06	n = 23	[AB1] Abbott
3.80 ± 0.00	6.50 ± 0.09	2.43 ± 0.05	4.37 ± 0.05	5.50 ± 0.09	n = 3	[AW1] Alfa Wassermann
3.66 ± 0.07	6.29 ± 0.05	2.25 ± 0.06	4.29 ± 0.06	5.33 ± 0.07	n = 28	[BC1] Beckman Coulter
3.73 ± 0.06	6.27 ± 0.10	2.40 ± 0.00	4.34 ± 0.06	5.33 ± 0.06	n = 61	[OL1] Beckman Coulter AU Series
3.57 ± 0.05	6.10 ± 0.00	2.23 ± 0.05	4.17 ± 0.05	5.20 ± 0.00	n = 6	[IA1] i-STAT
3.60 ± 0.00	6.13 ± 0.05	2.27 ± 0.05	4.20 ± 0.00	5.20 ± 0.00	n = 3	[IL1] Instrumentation Lab
3.83 ± 0.07	6.37 ± 0.10	2.50 ± 0.00	4.39 ± 0.09	5.45 ± 0.08	n = 44	[JJ1] Ortho Clinical Diagnostics
3.70 ± 0.00	6.30 ± 0.00	2.33 ± 0.05	4.37 ± 0.05	5.40 ± 0.09	n = 3	[R08] Roche cobas c111
3.64 ± 0.09	6.26 ± 0.09	2.24 ± 0.09	4.28 ± 0.10	5.31 ± 0.08	n = 36	[R04] Roche cobas c311/c501/c502/c701/c702
3.63 ± 0.08	6.26 ± 0.09	2.29 ± 0.09	4.28 ± 0.07	5.24 ± 0.08	n = 26	[R02] Roche Hitachi and Modular D/P
3.70 ± 0.00	6.27 ± 0.05	2.30 ± 0.00	4.37 ± 0.05	5.32 ± 0.04	n = 8	[R01] Roche Integra and MIRA
3.80 ± 0.00	6.39 ± 0.06	2.43 ± 0.05	4.43 ± 0.07	5.43 ± 0.07	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
3.66 ± 0.06	6.23 ± 0.13	2.30 ± 0.05	4.30 ± 0.06	5.32 ± 0.10	n = 95	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Chloride (mmol/L)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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102.6 ± 2.22	115.1 ± 2.25	83.4 ± 1.87	89.0 ± 2.38	106.9 ± 1.76	n = 370	[---] All Methods & Instruments
<Instruments>						
101.2 ± 0.80	112.4 ± 1.69	83.9 ± 2.05	88.4 ± 1.52	105.1 ± 1.27	n = 5	[AXA] Abaxis Piccolo
102.5 ± 0.84	114.4 ± 0.91	84.1 ± 0.77	88.9 ± 0.72	107.3 ± 0.60	n = 20	[ABJ] Abbott Architect c System
106.7 ± 0.51	117.3 ± 0.51	86.3 ± 0.51	90.0 ± 0.00	108.7 ± 0.51	n = 3	[AWA] Alfa Wassermann ACE Alera
101.4 ± 1.05	113.7 ± 1.07	83.2 ± 0.94	88.2 ± 0.76	106.3 ± 1.03	n = 63	[OLC] Beckman Coulter AU Chemistry System
101.6 ± 1.06	114.1 ± 0.87	84.1 ± 0.81	88.9 ± 1.15	106.5 ± 0.96	n = 17	[BCG] Beckman Coulter UniCel DxC 600
101.7 ± 1.68	114.4 ± 1.79	83.6 ± 0.57	89.0 ± 0.00	106.8 ± 1.61	n = 8	[BCH] Beckman Coulter UniCel DxC 800
107.0 ± 1.42	117.4 ± 1.31	90.7 ± 1.83	88.6 ± 0.83	109.6 ± 1.49	n = 7	[IAA] i-STAT
101.7 ± 2.01	114.5 ± 2.06	83.0 ± 1.42	88.8 ± 1.42	107.7 ± 2.14	n = 7	[JJE] Ortho Vitros 250/350/950
102.4 ± 1.02	114.3 ± 0.51	83.0 ± 0.90	88.4 ± 1.02	107.7 ± 0.51	n = 3	[JJH] Ortho Vitros 4600
102.4 ± 1.00	115.1 ± 1.91	83.4 ± 0.84	88.1 ± 1.29	107.6 ± 1.37	n = 14	[JJF] Ortho Vitros 5,1FS
102.6 ± 1.06	115.3 ± 1.30	83.7 ± 1.27	88.6 ± 1.34	107.5 ± 1.38	n = 20	[JJG] Ortho Vitros 5600
103.0 ± 0.90	116.3 ± 0.51	84.0 ± 0.90	90.7 ± 0.51	107.7 ± 0.51	n = 3	[ROK] Roche cobas c111
100.4 ± 1.37	113.5 ± 0.83	80.1 ± 1.83	86.7 ± 1.10	104.9 ± 1.87	n = 5	[ROJ] Roche cobas c311
98.9 ± 0.87	112.9 ± 0.79	79.3 ± 0.90	85.9 ± 0.78	104.3 ± 0.82	n = 23	[ROC] Roche cobas c501
100.7 ± 0.72	113.8 ± 0.73	80.0 ± 0.55	86.0 ± 0.55	104.8 ± 0.73	n = 6	[ROH] Roche cobas c701
102.3 ± 0.90	114.7 ± 0.90	82.5 ± 1.22	88.8 ± 1.46	105.7 ± 1.58	n = 4	[ROS] Roche Cobas INTEGRA 400
102.5 ± 1.71	114.5 ± 1.22	84.7 ± 0.90	90.0 ± 0.75	106.0 ± 1.14	n = 4	[ROT] Roche Cobas INTEGRA 800
101.3 ± 0.97	113.9 ± 1.23	81.3 ± 1.11	86.6 ± 0.84	105.5 ± 1.03	n = 26	[ROD] Roche MODULAR D/P
103.5 ± 1.20	115.4 ± 0.94	84.0 ± 0.00	89.0 ± 0.00	107.5 ± 0.67	n = 21	[BYE] Siemens ADVIA 1800
103.7 ± 0.51	115.0 ± 0.00	83.6 ± 1.02	88.7 ± 0.51	107.4 ± 1.02	n = 3	[BYB] Siemens ADVIA 2400
104.2 ± 0.75	118.0 ± 0.70	83.6 ± 0.80	93.7 ± 1.15	107.4 ± 0.91	n = 23	[DUE] Siemens Dimension EXL
105.2 ± 1.37	118.6 ± 0.95	82.3 ± 1.48	92.6 ± 2.09	107.6 ± 1.35	n = 16	[DUR] Siemens Dimension RxL
104.4 ± 1.28	117.0 ± 1.44	84.9 ± 1.45	90.8 ± 1.40	108.5 ± 1.55	n = 42	[DUT] Siemens Dimension Vista
104.4 ± 1.00	118.4 ± 0.96	84.2 ± 0.86	93.6 ± 1.03	107.8 ± 0.96	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
101.2 ± 0.80	112.4 ± 1.69	83.9 ± 2.05	88.4 ± 1.52	105.1 ± 1.27	n = 5	[AX1] Abaxis
102.4 ± 0.92	114.5 ± 0.99	84.1 ± 0.74	88.9 ± 0.68	107.3 ± 0.61	n = 22	[AB1] Abbott
106.7 ± 0.51	117.3 ± 0.51	86.3 ± 0.51	90.0 ± 0.00	108.7 ± 0.51	n = 3	[AW1] Alfa Wassermann
101.4 ± 1.30	114.1 ± 1.11	83.8 ± 0.88	88.7 ± 1.03	106.6 ± 1.11	n = 28	[BC1] Beckman Coulter
101.3 ± 1.02	113.7 ± 1.09	83.2 ± 0.90	88.2 ± 0.76	106.3 ± 1.02	n = 61	[OL1] Beckman Coulter AU Series
107.0 ± 1.60	117.5 ± 1.46	90.4 ± 1.82	88.6 ± 0.94	109.6 ± 1.67	n = 6	[IA1] i-STAT
102.5 ± 1.19	115.0 ± 1.61	83.5 ± 1.17	88.5 ± 1.35	107.6 ± 1.46	n = 44	[JJ1] Ortho Clinical Diagnostics
103.0 ± 0.90	116.3 ± 0.51	84.0 ± 0.90	90.7 ± 0.51	107.7 ± 0.51	n = 3	[R08] Roche cobas c111
99.3 ± 1.12	113.1 ± 0.84	79.5 ± 0.92	86.0 ± 0.85	104.3 ± 0.86	n = 35	[R04] Roche cobas c311/c501/c502/c701/c702
101.3 ± 0.97	113.9 ± 1.23	81.3 ± 1.11	86.6 ± 0.84	105.5 ± 1.03	n = 26	[R02] Roche Hitachi and Modular D/P
102.2 ± 1.36	114.7 ± 1.00	83.4 ± 1.75	89.2 ± 1.47	105.9 ± 1.27	n = 9	[R01] Roche Integra and MIRA
103.6 ± 1.14	115.4 ± 0.87	84.1 ± 0.61	89.0 ± 0.00	107.6 ± 0.78	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
104.5 ± 1.16	117.8 ± 1.43	84.1 ± 1.55	92.3 ± 2.03	108.0 ± 1.41	n = 95	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Albumin (g/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
5.06 ± 0.21	4.07 ± 0.15	5.90 ± 0.35	3.18 ± 0.13	3.73 ± 0.16	n = 360	[---] All Methods & Instruments
<Instruments>						
4.99 ± 0.11	4.15 ± 0.12	5.70 ± 0.18	3.30 ± 0.08	3.83 ± 0.09	n = 4	[AXA] Abaxis Piccolo
4.87 ± 0.12	3.94 ± 0.14	5.68 ± 0.10	3.08 ± 0.10	3.64 ± 0.16	n = 21	[ABJ] Abbott Architect c System
4.93 ± 0.14	4.04 ± 0.10	5.70 ± 0.09	3.23 ± 0.05	3.77 ± 0.14	n = 3	[AWA] Alfa Wassermann ACE Alera
5.08 ± 0.11	4.11 ± 0.08	5.91 ± 0.10	3.21 ± 0.07	3.77 ± 0.07	n = 64	[OLC] Beckman Coulter AU Chemistry System
4.89 ± 0.14	3.84 ± 0.12	5.95 ± 0.11	3.01 ± 0.09	3.53 ± 0.11	n = 16	[BCG] Beckman Coulter UniCel DxC 600
4.93 ± 0.12	3.89 ± 0.06	5.98 ± 0.13	3.05 ± 0.06	3.57 ± 0.07	n = 8	[BCH] Beckman Coulter UniCel DxC 800
4.65 ± 0.18	3.84 ± 0.13	5.37 ± 0.18	3.00 ± 0.08	3.47 ± 0.07	n = 7	[JJE] Ortho Vitros 250/350/950
4.84 ± 0.10	3.93 ± 0.05	5.46 ± 0.10	2.97 ± 0.05	3.50 ± 0.00	n = 3	[JJH] Ortho Vitros 4600
4.71 ± 0.18	3.92 ± 0.15	5.33 ± 0.19	2.97 ± 0.12	3.48 ± 0.12	n = 13	[JJF] Ortho Vitros 5,1FS
4.70 ± 0.14	3.88 ± 0.13	5.35 ± 0.13	2.97 ± 0.11	3.47 ± 0.11	n = 20	[JJG] Ortho Vitros 5600
5.15 ± 0.08	4.20 ± 0.06	5.90 ± 0.19	3.30 ± 0.00	3.90 ± 0.06	n = 5	[ROJ] Roche cobas c311
5.11 ± 0.14	4.18 ± 0.12	5.88 ± 0.23	3.32 ± 0.12	3.92 ± 0.12	n = 22	[ROC] Roche cobas c501
5.16 ± 0.10	4.17 ± 0.11	5.72 ± 0.31	3.33 ± 0.11	3.90 ± 0.10	n = 7	[ROH] Roche cobas c701
5.05 ± 0.06	4.12 ± 0.04	5.77 ± 0.09	3.28 ± 0.04	3.80 ± 0.08	n = 4	[ROS] Roche Cobas INTEGRA 400
5.09 ± 0.11	4.13 ± 0.09	5.75 ± 0.12	3.20 ± 0.08	3.80 ± 0.08	n = 4	[ROT] Roche Cobas INTEGRA 800
5.12 ± 0.10	4.20 ± 0.08	5.89 ± 0.11	3.29 ± 0.07	3.88 ± 0.07	n = 27	[ROD] Roche MODULAR D/P
4.92 ± 0.11	4.07 ± 0.09	5.60 ± 0.10	3.21 ± 0.07	3.77 ± 0.08	n = 21	[BYE] Siemens ADVIA 1800
4.83 ± 0.14	3.97 ± 0.05	5.47 ± 0.14	3.10 ± 0.09	3.70 ± 0.09	n = 3	[BYB] Siemens ADVIA 2400
5.23 ± 0.08	4.09 ± 0.06	6.31 ± 0.10	3.18 ± 0.05	3.73 ± 0.06	n = 23	[DUE] Siemens Dimension EXL
5.23 ± 0.09	4.05 ± 0.08	6.27 ± 0.14	3.17 ± 0.08	3.70 ± 0.00	n = 16	[DUR] Siemens Dimension RxL
5.26 ± 0.12	4.12 ± 0.10	6.29 ± 0.13	3.21 ± 0.08	3.77 ± 0.09	n = 42	[DUT] Siemens Dimension Vista
5.20 ± 0.07	4.08 ± 0.07	6.30 ± 0.10	3.16 ± 0.06	3.71 ± 0.07	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
4.99 ± 0.11	4.15 ± 0.12	5.70 ± 0.18	3.30 ± 0.08	3.83 ± 0.09	n = 4	[AX1] Abaxis
4.87 ± 0.12	3.94 ± 0.14	5.68 ± 0.10	3.08 ± 0.10	3.64 ± 0.16	n = 21	[AB1] Abbott
4.93 ± 0.14	4.04 ± 0.10	5.70 ± 0.09	3.23 ± 0.05	3.77 ± 0.14	n = 3	[AW1] Alfa Wassermann
4.91 ± 0.13	3.86 ± 0.10	5.94 ± 0.12	3.03 ± 0.07	3.55 ± 0.09	n = 26	[BC1] Beckman Coulter
5.09 ± 0.11	4.11 ± 0.08	5.91 ± 0.09	3.22 ± 0.07	3.78 ± 0.07	n = 60	[OL1] Beckman Coulter AU Series
4.70 ± 0.17	3.89 ± 0.14	5.35 ± 0.16	2.97 ± 0.11	3.47 ± 0.10	n = 44	[JJ1] Ortho Clinical Diagnostics
5.12 ± 0.13	4.18 ± 0.12	5.85 ± 0.23	3.31 ± 0.12	3.90 ± 0.12	n = 36	[R04] Roche cobas c311/c501/c502/c701/c702
5.13 ± 0.09	4.20 ± 0.07	5.88 ± 0.11	3.30 ± 0.07	3.88 ± 0.07	n = 26	[R02] Roche Hitachi and Modular D/P
5.07 ± 0.09	4.13 ± 0.07	5.76 ± 0.11	3.24 ± 0.07	3.80 ± 0.08	n = 8	[R01] Roche Integra and MIRA
5.00 ± 0.00	4.13 ± 0.05	5.95 ± 0.19	3.20 ± 0.00	3.77 ± 0.05	n = 3	[GZ1] Sekisui Diagnostics (Genzyme)
4.91 ± 0.11	4.06 ± 0.09	5.59 ± 0.11	3.20 ± 0.08	3.76 ± 0.08	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
5.24 ± 0.10	4.09 ± 0.09	6.30 ± 0.12	3.19 ± 0.07	3.74 ± 0.08	n = 95	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Total Protein (g/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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7.65 ± 0.24	6.66 ± 0.20	8.16 ± 0.28	5.16 ± 0.16	6.18 ± 0.19	n = 356	[---] All Methods & Instruments
<Instruments>						
7.70 ± 0.11	6.77 ± 0.09	8.10 ± 0.17	5.30 ± 0.11	6.30 ± 0.08	n = 4	[AXA] Abaxis Piccolo
7.57 ± 0.09	6.61 ± 0.06	8.04 ± 0.08	5.03 ± 0.07	6.10 ± 0.00	n = 22	[ABJ] Abbott Architect c System
7.54 ± 0.10	6.60 ± 0.18	8.00 ± 0.09	5.10 ± 0.00	6.03 ± 0.05	n = 3	[AWA] Alfa Wassermann ACE Alera
7.45 ± 0.15	6.55 ± 0.12	7.93 ± 0.14	5.04 ± 0.10	6.06 ± 0.12	n = 63	[OLC] Beckman Coulter AU Chemistry System
7.59 ± 0.20	6.47 ± 0.05	7.95 ± 0.19	5.07 ± 0.05	6.00 ± 0.00	n = 3	[BCX] Beckman Coulter LX-20
7.60 ± 0.16	6.63 ± 0.16	8.16 ± 0.14	5.17 ± 0.11	6.12 ± 0.14	n = 15	[BCG] Beckman Coulter UniCel DxC 600
7.38 ± 0.05	6.43 ± 0.10	7.89 ± 0.18	4.99 ± 0.11	5.88 ± 0.10	n = 8	[BCH] Beckman Coulter UniCel DxC 800
7.77 ± 0.11	6.52 ± 0.07	8.44 ± 0.06	5.18 ± 0.07	6.19 ± 0.10	n = 7	[JJE] Ortho Vitros 250/350/950
7.85 ± 0.19	6.53 ± 0.14	8.53 ± 0.14	5.03 ± 0.14	6.13 ± 0.14	n = 3	[JJH] Ortho Vitros 4600
7.86 ± 0.26	6.55 ± 0.23	8.58 ± 0.26	5.12 ± 0.19	6.16 ± 0.20	n = 14	[JJF] Ortho Vitros 5,1FS
7.88 ± 0.16	6.52 ± 0.19	8.56 ± 0.17	5.08 ± 0.17	6.10 ± 0.18	n = 20	[JJG] Ortho Vitros 5600
7.60 ± 0.10	6.72 ± 0.08	8.14 ± 0.06	5.20 ± 0.00	6.25 ± 0.08	n = 5	[ROJ] Roche cobas c311
7.48 ± 0.12	6.59 ± 0.10	7.95 ± 0.14	5.13 ± 0.10	6.13 ± 0.11	n = 22	[ROC] Roche cobas c501
7.45 ± 0.14	6.54 ± 0.12	7.97 ± 0.17	5.05 ± 0.10	6.12 ± 0.07	n = 6	[ROH] Roche cobas c701
7.45 ± 0.06	6.55 ± 0.06	7.95 ± 0.06	5.05 ± 0.06	6.08 ± 0.04	n = 4	[ROS] Roche Cobas INTEGRA 400
7.32 ± 0.04	6.40 ± 0.08	7.88 ± 0.20	4.98 ± 0.04	5.93 ± 0.09	n = 4	[ROT] Roche Cobas INTEGRA 800
7.53 ± 0.19	6.62 ± 0.12	7.98 ± 0.14	5.14 ± 0.10	6.15 ± 0.12	n = 26	[ROD] Roche MODULAR D/P
7.70 ± 0.13	6.72 ± 0.10	8.19 ± 0.11	5.22 ± 0.09	6.24 ± 0.11	n = 21	[BYE] Siemens ADVIA 1800
7.74 ± 0.10	6.73 ± 0.05	8.20 ± 0.09	5.23 ± 0.05	6.20 ± 0.09	n = 3	[BYB] Siemens ADVIA 2400
7.80 ± 0.11	6.85 ± 0.12	8.32 ± 0.12	5.29 ± 0.09	6.37 ± 0.10	n = 23	[DUE] Siemens Dimension EXL
7.86 ± 0.14	6.90 ± 0.11	8.40 ± 0.14	5.34 ± 0.07	6.41 ± 0.10	n = 16	[DUR] Siemens Dimension RxL
7.85 ± 0.13	6.87 ± 0.12	8.36 ± 0.13	5.32 ± 0.08	6.38 ± 0.10	n = 42	[DUT] Siemens Dimension Vista
7.81 ± 0.07	6.86 ± 0.09	8.32 ± 0.16	5.25 ± 0.08	6.35 ± 0.11	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
7.70 ± 0.11	6.77 ± 0.09	8.10 ± 0.17	5.30 ± 0.11	6.30 ± 0.08	n = 4	[AX1] Abaxis
7.57 ± 0.09	6.61 ± 0.06	8.04 ± 0.08	5.03 ± 0.07	6.10 ± 0.00	n = 22	[AB1] Abbott
7.54 ± 0.10	6.60 ± 0.18	8.00 ± 0.09	5.10 ± 0.00	6.03 ± 0.05	n = 3	[AW1] Alfa Wassermann
7.51 ± 0.20	6.53 ± 0.16	8.05 ± 0.22	5.10 ± 0.14	6.01 ± 0.17	n = 27	[BC1] Beckman Coulter
7.45 ± 0.15	6.55 ± 0.12	7.94 ± 0.13	5.04 ± 0.09	6.06 ± 0.11	n = 60	[OL1] Beckman Coulter AU Series
7.85 ± 0.18	6.53 ± 0.18	8.54 ± 0.19	5.11 ± 0.17	6.14 ± 0.17	n = 44	[JJ1] Ortho Clinical Diagnostics
7.47 ± 0.14	6.59 ± 0.13	7.98 ± 0.16	5.13 ± 0.11	6.13 ± 0.11	n = 34	[R04] Roche cobas c311/c501/c502/c701/c702
7.53 ± 0.19	6.62 ± 0.12	7.98 ± 0.14	5.14 ± 0.10	6.15 ± 0.12	n = 26	[R02] Roche Hitachi and Modular D/P
7.39 ± 0.09	6.48 ± 0.10	7.92 ± 0.14	5.01 ± 0.06	6.01 ± 0.10	n = 8	[R01] Roche Integra and MIRA
7.71 ± 0.12	6.73 ± 0.10	8.20 ± 0.11	5.22 ± 0.08	6.24 ± 0.11	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
7.83 ± 0.13	6.87 ± 0.12	8.35 ± 0.14	5.30 ± 0.09	6.38 ± 0.10	n = 94	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Cholesterol (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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221.1 ± 8.14	172.7 ± 4.66	169.0 ± 8.05	115.9 ± 3.77	209.2 ± 5.39	n = 325	[---] All Methods & Instruments
<Instruments>						
227.1 ± 3.72	173.5 ± 4.61	174.7 ± 3.07	117.9 ± 4.38	209.8 ± 3.23	n = 3	[AXA] Abaxis Piccolo
226.0 ± 2.44	180.8 ± 1.52	174.3 ± 2.02	120.8 ± 1.27	217.4 ± 2.51	n = 18	[ABJ] Abbott Architect c System
217.9 ± 4.54	171.7 ± 3.58	167.1 ± 3.47	114.5 ± 2.51	208.6 ± 4.24	n = 68	[OLC] Beckman Coulter AU Chemistry System
222.7 ± 6.46	169.4 ± 4.73	168.6 ± 5.34	114.9 ± 2.90	206.8 ± 5.33	n = 11	[BCG] Beckman Coulter UniCel DxC 600
227.6 ± 4.03	172.8 ± 1.80	172.0 ± 3.24	117.8 ± 2.19	209.1 ± 3.37	n = 8	[BCH] Beckman Coulter UniCel DxC 800
235.6 ± 6.28	172.1 ± 4.78	184.9 ± 5.22	117.2 ± 3.10	206.6 ± 4.36	n = 13	[JJF] Ortho Vitros 5,1FS
234.1 ± 4.63	170.5 ± 3.53	184.3 ± 4.00	116.8 ± 2.96	206.2 ± 3.02	n = 20	[JJG] Ortho Vitros 5600
222.5 ± 6.01	175.8 ± 4.75	171.5 ± 4.45	119.2 ± 3.76	213.1 ± 5.76	n = 20	[ROC] Roche cobas c501
221.5 ± 2.79	174.0 ± 1.81	171.2 ± 1.48	116.5 ± 1.66	211.0 ± 2.23	n = 7	[ROH] Roche cobas c701
219.7 ± 5.34	173.4 ± 3.97	169.6 ± 3.64	117.2 ± 2.46	211.6 ± 4.48	n = 5	[ROS] Roche Cobas INTEGRA 400
217.2 ± 3.73	172.0 ± 2.45	167.7 ± 2.54	115.8 ± 2.58	206.3 ± 3.17	n = 4	[ROT] Roche Cobas INTEGRA 800
222.1 ± 4.16	174.7 ± 4.08	171.1 ± 3.19	117.5 ± 2.47	211.5 ± 4.85	n = 28	[ROD] Roche MODULAR D/P
224.6 ± 3.21	170.3 ± 2.07	171.6 ± 2.92	117.1 ± 2.03	206.8 ± 3.77	n = 21	[BYE] Siemens ADVIA 1800
223.4 ± 1.02	167.7 ± 2.26	170.3 ± 1.37	115.7 ± 1.37	204.3 ± 1.37	n = 3	[BYB] Siemens ADVIA 2400
212.8 ± 5.88	172.8 ± 3.77	157.8 ± 4.83	112.7 ± 3.18	209.4 ± 3.91	n = 21	[DUE] Siemens Dimension EXL
212.8 ± 5.51	172.7 ± 3.63	159.7 ± 3.17	113.1 ± 3.37	209.9 ± 3.91	n = 11	[DUR] Siemens Dimension RxL
214.4 ± 5.49	171.7 ± 4.70	161.6 ± 5.23	112.7 ± 3.42	206.7 ± 5.95	n = 37	[DUT] Siemens Dimension Vista
210.9 ± 4.95	173.0 ± 4.17	157.9 ± 5.59	113.8 ± 3.53	208.2 ± 4.83	n = 9	[DUX] Siemens Dimension Xpand
<Reagents>						
227.1 ± 3.72	173.5 ± 4.61	174.7 ± 3.07	117.9 ± 4.38	209.8 ± 3.23	n = 3	[AX1] Abaxis
226.0 ± 2.44	180.8 ± 1.52	174.3 ± 2.02	120.8 ± 1.27	217.4 ± 2.51	n = 18	[AB1] Abbott
224.5 ± 6.37	171.1 ± 4.94	169.9 ± 5.24	116.3 ± 3.36	208.5 ± 5.57	n = 24	[BC1] Beckman Coulter
217.9 ± 4.46	171.8 ± 3.68	167.2 ± 3.52	114.5 ± 2.43	208.7 ± 4.17	n = 63	[OL1] Beckman Coulter AU Series
234.1 ± 5.41	170.9 ± 3.94	184.3 ± 4.41	116.9 ± 2.98	206.3 ± 3.70	n = 36	[JJ1] Ortho Clinical Diagnostics
222.3 ± 5.24	175.5 ± 4.11	171.6 ± 3.86	118.6 ± 3.55	213.0 ± 5.14	n = 29	[R04] Roche cobas c311/c501/c502/c701/c702
222.1 ± 4.23	174.6 ± 4.06	171.0 ± 3.58	117.4 ± 2.51	211.4 ± 4.78	n = 28	[R02] Roche Hitachi and Modular D/P
218.5 ± 4.88	172.7 ± 3.35	168.8 ± 3.39	116.5 ± 2.63	209.1 ± 4.84	n = 9	[R01] Roche Integra and MIRA
224.4 ± 2.92	170.0 ± 2.26	171.4 ± 2.67	116.9 ± 1.97	206.6 ± 3.60	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
213.4 ± 5.70	172.3 ± 4.31	159.8 ± 5.20	112.9 ± 3.36	208.2 ± 5.12	n = 78	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

HDL-Cholesterol (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
40.2 ± 7.60	58.1 ± 5.26	38.4 ± 6.30	30.4 ± 3.79	66.4 ± 5.55	n = 309	[---] All Methods & Instruments
38.1 ± 5.92	58.8 ± 3.80	37.6 ± 5.99	28.4 ± 1.98	66.8 ± 3.98	n = 19	[---] All Precipitation Methods
33.2 ± 2.36	57.3 ± 3.37	33.4 ± 1.02	27.6 ± 2.56	64.6 ± 1.02	n = 3	[-J-] Dextran sulfate/magnetic separation
40.4 ± 7.68	58.0 ± 5.31	38.5 ± 6.32	30.6 ± 3.82	66.4 ± 5.60	n = 290	[---] All Homogeneous (Direct) Methods
25.5 ± 3.63	36.5 ± 3.63	23.7 ± 4.06	16.4 ± 1.02	49.3 ± 5.86	n = 3	[AX1] Abaxis
49.2 ± 1.85	61.7 ± 1.98	45.4 ± 1.62	34.8 ± 1.35	69.7 ± 1.97	n = 16	[AB1] Abbott
50.6 ± 1.30	65.0 ± 1.98	46.0 ± 1.14	35.1 ± 1.10	76.2 ± 2.22	n = 22	[BC1] Beckman Coulter
49.9 ± 1.85	63.1 ± 2.30	46.0 ± 1.78	35.2 ± 1.44	71.1 ± 2.37	n = 43	[OL1] Beckman Coulter AU Series
43.2 ± 1.76	60.4 ± 2.44	42.7 ± 1.50	27.9 ± 1.46	69.8 ± 2.73	n = 28	[JJ1] Ortho Clinical Diagnostics
33.8 ± 1.77	54.8 ± 1.63	33.7 ± 1.41	29.1 ± 1.12	62.7 ± 1.69	n = 26	[R04] Roche cobas c311/c501/c502/c701/c702
36.0 ± 1.23	56.9 ± 1.67	35.5 ± 0.87	30.3 ± 0.99	65.7 ± 1.98	n = 25	[R02] Roche Hitachi and Modular D/P
36.5 ± 0.70	57.6 ± 1.14	36.3 ± 0.80	31.0 ± 0.00	65.7 ± 0.97	n = 9	[R01] Roche Integra and MIRA
51.4 ± 2.80	63.6 ± 1.70	46.5 ± 1.30	36.2 ± 1.92	71.9 ± 1.77	n = 5	[GZ1] Sekisui Diagnostics (Genzyme)
38.1 ± 0.99	48.2 ± 0.72	33.5 ± 0.67	25.0 ± 0.61	57.0 ± 1.03	n = 26	[BY1] Siemens ADVIA/ADVIA Centaur
34.6 ± 1.68	55.4 ± 1.98	33.9 ± 1.43	29.1 ± 1.10	63.6 ± 2.01	n = 68	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

LDL-Cholesterol (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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148.3 ± 15.92	93.3 ± 13.43	108.6 ± 12.83	69.7 ± 10.63	116.3 ± 15.59	n = 297	[---] All Methods & Instruments
-----	-----	-----	-----	-----	-----	-----
155.7 ± 9.02	100.0 ± 7.07	114.7 ± 8.49	75.0 ± 5.23	124.0 ± 7.89	n = 146	[-A-] All Calculated Results Friedewald formula [LDL=TC-HDL-(Trigs÷5)]
-----	-----	-----	-----	-----	-----	-----
138.5 ± 17.07	84.4 ± 13.80	101.4 ± 12.80	62.6 ± 10.82	106.0 ± 15.89	n = 149	[---] All Homogeneous (Direct) Methods
130.4 ± 2.31	77.8 ± 1.96	95.6 ± 2.31	58.7 ± 1.58	97.7 ± 1.58	n = 4	[AB1] Abbott
125.2 ± 9.00	74.6 ± 5.03	93.0 ± 6.83	55.5 ± 4.86	94.4 ± 5.86	n = 11	[BC1] Beckman Coulter
121.6 ± 7.37	71.1 ± 4.98	89.0 ± 5.70	53.0 ± 2.98	91.3 ± 5.50	n = 26	[OL1] Beckman Coulter AU Series
137.7 ± 4.19	82.6 ± 2.80	101.6 ± 2.73	58.2 ± 2.01	103.2 ± 3.83	n = 14	[JJ1] Ortho Clinical Diagnostics
164.9 ± 4.99	107.2 ± 3.09	122.2 ± 2.74	80.8 ± 2.81	131.3 ± 3.28	n = 11	[R04] Roche cobas c311/c501/c502/c701/c702
164.0 ± 6.69	105.2 ± 4.35	121.7 ± 5.04	79.7 ± 3.34	127.5 ± 5.62	n = 13	[R02] Roche Hitachi and Modular D/P
149.7 ± 4.06	88.7 ± 4.94	106.6 ± 3.22	66.6 ± 1.89	112.0 ± 5.41	n = 5	[R01] Roche Integra and MIRA
115.6 ± 6.18	66.7 ± 3.24	83.8 ± 3.74	49.6 ± 3.40	85.7 ± 3.54	n = 10	[GZ1] Sekisui Diagnostics
135.7 ± 5.63	79.2 ± 3.31	98.8 ± 3.90	57.0 ± 2.34	100.8 ± 3.48	n = 13	[BY1] Siemens ADVIA/ADVIA Centaur
143.2 ± 7.35	90.0 ± 6.00	104.6 ± 4.93	67.1 ± 3.95	112.5 ± 8.22	n = 36	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Triglycerides (mg/dL)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
-----	-----	-----	-----	-----	-----	-----
129.0 ± 7.74	76.8 ± 4.36	82.8 ± 5.16	54.5 ± 3.39	95.7 ± 4.68	n = 317	[---] All Methods & Instruments
<Instruments>						
140.8 ± 2.36	86.0 ± 2.70	92.5 ± 1.86	60.3 ± 2.26	106.5 ± 1.86	n = 3	[AXA] Abaxis Piccolo
129.1 ± 2.34	74.7 ± 1.78	83.9 ± 1.93	55.0 ± 1.41	94.1 ± 2.03	n = 18	[ABJ] Abbott Architect c System
125.6 ± 3.66	75.1 ± 2.17	80.9 ± 2.23	52.5 ± 1.52	93.8 ± 2.63	n = 63	[OLC] Beckman Coulter AU Chemistry System
130.6 ± 3.33	83.1 ± 2.28	83.6 ± 3.17	55.3 ± 2.25	98.8 ± 2.98	n = 11	[BCG] Beckman Coulter UniCel DxC 600
127.3 ± 5.18	81.7 ± 3.22	81.7 ± 3.77	55.3 ± 2.00	98.3 ± 3.66	n = 8	[BCH] Beckman Coulter UniCel DxC 800
139.7 ± 4.13	78.3 ± 3.13	89.9 ± 3.20	55.1 ± 2.15	96.5 ± 3.55	n = 13	[JJF] Ortho Vitros 5,1FS
139.6 ± 2.98	78.6 ± 1.83	89.5 ± 2.17	55.0 ± 1.92	96.7 ± 2.11	n = 20	[JJG] Ortho Vitros 5600
125.2 ± 3.35	78.8 ± 2.71	81.6 ± 2.34	58.1 ± 2.19	98.9 ± 2.34	n = 19	[ROC] Roche cobas c501
125.4 ± 2.30	79.1 ± 2.19	81.4 ± 2.52	56.5 ± 1.14	97.1 ± 1.84	n = 7	[ROH] Roche cobas c701
122.0 ± 1.14	77.3 ± 0.90	77.8 ± 3.23	55.0 ± 0.00	94.8 ± 2.84	n = 5	[ROS] Roche Cobas INTEGRA 400
119.4 ± 1.80	77.3 ± 1.58	76.8 ± 0.41	55.3 ± 0.90	94.7 ± 1.58	n = 4	[ROT] Roche Cobas INTEGRA 800
125.5 ± 4.15	75.9 ± 2.24	80.2 ± 2.54	55.0 ± 2.26	94.9 ± 3.37	n = 28	[ROD] Roche MODULAR D/P
130.4 ± 3.23	75.5 ± 2.42	84.2 ± 2.50	54.4 ± 1.90	95.1 ± 2.83	n = 21	[BYE] Siemens ADVIA 1800
130.0 ± 2.70	74.5 ± 2.74	83.5 ± 2.74	52.9 ± 2.05	93.9 ± 2.86	n = 3	[BYB] Siemens ADVIA 2400
123.0 ± 2.70	69.4 ± 2.58	76.7 ± 2.92	47.2 ± 2.50	88.7 ± 1.99	n = 21	[DUE] Siemens Dimension EXL
124.7 ± 3.16	70.8 ± 3.13	78.4 ± 2.77	48.8 ± 2.97	89.9 ± 2.61	n = 11	[DUR] Siemens Dimension RxL
138.8 ± 3.55	80.7 ± 1.83	88.1 ± 2.43	56.9 ± 1.57	101.0 ± 1.76	n = 39	[DUT] Siemens Dimension Vista
120.2 ± 2.92	67.3 ± 1.98	74.1 ± 1.79	45.2 ± 4.11	88.0 ± 5.06	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
140.8 ± 2.36	86.0 ± 2.70	92.5 ± 1.86	60.3 ± 2.26	106.5 ± 1.86	n = 3	[AX1] Abaxis
129.1 ± 2.34	74.7 ± 1.78	83.9 ± 1.93	55.0 ± 1.41	94.1 ± 2.03	n = 18	[AB1] Abbott
129.0 ± 5.53	82.3 ± 3.86	82.9 ± 4.09	55.3 ± 2.63	98.4 ± 4.18	n = 23	[BC1] Beckman Coulter
125.6 ± 3.45	75.0 ± 2.15	81.0 ± 2.05	52.4 ± 1.33	93.7 ± 2.53	n = 58	[OL1] Beckman Coulter AU Series
140.0 ± 3.55	78.6 ± 2.49	89.8 ± 2.57	55.2 ± 2.02	96.8 ± 2.78	n = 36	[JJ1] Ortho Clinical Diagnostics
125.3 ± 3.08	78.9 ± 2.51	81.5 ± 2.54	57.5 ± 2.13	98.2 ± 2.49	n = 29	[R04] Roche cobas c311/c501/c502/c701/c702
125.5 ± 4.15	75.9 ± 2.24	80.2 ± 2.54	55.0 ± 2.26	94.9 ± 3.37	n = 28	[R02] Roche Hitachi and Modular D/P
120.8 ± 2.12	77.3 ± 1.27	77.4 ± 1.74	55.1 ± 0.60	95.1 ± 1.55	n = 9	[R01] Roche Integra and MIRA
130.3 ± 3.01	75.4 ± 2.38	84.1 ± 2.46	54.3 ± 1.87	95.1 ± 2.80	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
130.8 ± 9.57	75.0 ± 6.79	82.7 ± 7.17	52.3 ± 5.95	95.1 ± 7.54	n = 77	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Homocysteine (μmol/L)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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26.87 ± 2.02	11.10 ± 0.95	14.73 ± 1.46	8.48 ± 0.77	10.02 ± 0.99	n = 115	[---] All Methods & Instruments
<Instruments>						
25.23 ± 0.75	10.30 ± 0.40	14.31 ± 0.54	8.12 ± 0.35	9.39 ± 0.43	n = 15	[ABH] Abbott Architect i System
27.77 ± 1.13	11.58 ± 0.58	16.01 ± 0.82	8.93 ± 0.62	10.43 ± 0.66	n = 20	[OLC] Beckman Coulter AU Chemistry System
26.67 ± 0.25	11.51 ± 0.35	15.48 ± 0.49	8.85 ± 0.19	10.65 ± 0.28	n = 4	[JJG] Ortho Vitros 5600
27.00 ± 1.50	10.67 ± 0.30	14.33 ± 0.55	8.65 ± 0.30	9.90 ± 0.40	n = 4	[ROC] Roche cobas c501
27.99 ± 1.44	11.10 ± 0.27	14.91 ± 0.93	8.57 ± 0.23	10.03 ± 0.32	n = 3	[ROG] Roche cobas c502
28.77 ± 1.22	11.53 ± 0.23	16.15 ± 0.54	8.95 ± 0.19	10.53 ± 0.32	n = 3	[ROT] Roche Cobas INTEGRA 800
23.53 ± 4.79	11.62 ± 1.32	16.07 ± 1.52	9.09 ± 0.83	10.79 ± 1.38	n = 3	[ROD] Roche MODULAR D/P
24.69 ± 2.48	12.00 ± 0.74	15.46 ± 0.42	9.52 ± 1.04	11.03 ± 0.85	n = 3	[BYE] Siemens ADVIA 1800
27.07 ± 1.53	11.34 ± 0.62	14.25 ± 1.06	8.17 ± 0.55	10.14 ± 0.83	n = 23	[COB] Siemens ADVIA Centaur
23.64 ± 1.34	9.72 ± 0.77	12.47 ± 0.67	7.94 ± 0.46	9.12 ± 0.73	n = 9	[DUT] Siemens Dimension Vista
27.39 ± 2.04	10.91 ± 1.15	13.83 ± 1.21	8.09 ± 1.03	9.16 ± 0.99	n = 15	[DPD] Siemens Immulite 2000
<Reagents>						
25.23 ± 0.75	10.30 ± 0.40	14.31 ± 0.54	8.12 ± 0.35	9.39 ± 0.43	n = 15	[AB1] Abbott
25.63 ± 5.93	13.03 ± 1.49	17.11 ± 1.25	9.63 ± 0.95	11.84 ± 0.83	n = 3	[AS1] Axis-Shield
27.57 ± 1.38	11.32 ± 0.92	15.70 ± 1.14	8.21 ± 0.31	10.20 ± 0.96	n = 5	[CR1] Carolina
27.73 ± 1.43	11.39 ± 0.71	15.66 ± 1.11	8.95 ± 0.59	10.37 ± 0.73	n = 28	[DZ1] Diazyme
26.81 ± 0.51	11.63 ± 0.38	15.51 ± 0.43	8.78 ± 0.23	10.65 ± 0.24	n = 5	[JJ1] Ortho Clinical Diagnostics
28.45 ± 0.47	11.74 ± 0.42	16.01 ± 0.60	9.08 ± 0.47	10.88 ± 0.36	n = 4	[GZ1] Sekisui Diagnostics (Genzyme)
27.00 ± 1.52	11.39 ± 0.69	14.32 ± 1.12	8.22 ± 0.63	10.20 ± 0.88	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
24.20 ± 1.41	10.20 ± 0.32	12.90 ± 0.49	8.08 ± 0.24	9.33 ± 0.36	n = 5	[DA5] Siemens Dimension
23.07 ± 1.08	8.97 ± 0.65	11.98 ± 0.46	7.58 ± 0.61	8.70 ± 0.99	n = 4	[DA6] Siemens Dimension LOCI
27.39 ± 2.04	10.91 ± 1.15	13.83 ± 1.21	8.09 ± 1.03	9.16 ± 0.99	n = 15	[DP5] Siemens Immulite

Summary of Participant Performance (Mean and Standard Deviation)

Troponin I (µg/L)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
-----	-----	-----	-----	-----	-----	-----
0.993 ± 0.443	0.014 ± 0.013	4.259 ± 2.932	0.015 ± 0.013	0.994 ± 0.269	n = 227	[---] All Methods & Instruments
<Instruments>						
4.433 ± 0.241	0.009 ± 0.005	19.978 ± 0.960	0.009 ± 0.005	4.490 ± 0.177	n = 21	[ABH] Abbott Architect i System
0.607 ± 0.052	0.011 ± 0.012	2.150 ± 0.126	0.011 ± 0.011	0.802 ± 0.053	n = 23	[SAA] Beckman Coulter ACCESS
0.475 ± 0.016	0.010 ± 0.009	1.687 ± 0.067	0.010 ± 0.009	0.715 ± 0.027	n = 5	[BCU] Beckman Coulter UniCel DxI 800
0.083 ± 0.037	0.050 ± 0.001	1.264 ± 0.211	0.050 ± 0.001	0.107 ± 0.020	n = 5	[BSA] BioSite Triage
0.619 ± 0.071	0.017 ± 0.027	3.410 ± 0.283	0.017 ± 0.021	1.456 ± 0.126	n = 8	[IAA] i-STAT
1.354 ± 0.065	0.010 ± 0.000	7.564 ± 0.355	0.010 ± 0.000	2.394 ± 0.133	n = 18	[JJG] Ortho Vitros 5600
1.323 ± 0.080	0.010 ± 0.000	7.663 ± 0.588	0.010 ± 0.000	2.387 ± 0.184	n = 7	[JJC] Ortho Vitros Eci/ECiQ
1.481 ± 0.081	0.009 ± 0.007	7.167 ± 0.457	0.009 ± 0.007	1.159 ± 0.086	n = 47	[COB] Siemens ADVIA Centaur
1.304 ± 0.193	0.015 ± 0.023	6.688 ± 0.139	0.015 ± 0.023	1.244 ± 0.244	n = 4	[BYP] Siemens ADVIA Centaur CP
0.805 ± 0.043	0.060 ± 0.039	2.319 ± 0.102	0.060 ± 0.039	0.960 ± 0.053	n = 17	[DUE] Siemens Dimension EXL
0.701 ± 0.062	0.040 ± 0.000	2.444 ± 0.181	0.040 ± 0.000	0.673 ± 0.068	n = 9	[DUR] Siemens Dimension RxL
0.832 ± 0.047	0.016 ± 0.006	2.425 ± 0.161	0.019 ± 0.004	0.998 ± 0.058	n = 40	[DUT] Siemens Dimension Vista
0.734 ± 0.037	0.030 ± 0.018	2.633 ± 0.139	0.040 ± 0.000	0.712 ± 0.028	n = 6	[DUX] Siemens Dimension Xpand
1.250 ± 0.055	0.200 ± 0.000	5.390 ± 0.520	0.200 ± 0.000	1.865 ± 0.036	n = 3	[DPD] Siemens Immulite 2000
2.023 ± 0.041	0.060 ± 0.000	11.239 ± 0.621	0.060 ± 0.000	4.421 ± 0.128	n = 4	[TOM] Tosoh Bioscience
<Reagents>						
4.433 ± 0.231	0.008 ± 0.006	20.012 ± 0.934	0.008 ± 0.006	4.503 ± 0.183	n = 26	[AB1] Abbott
0.577 ± 0.078	0.012 ± 0.012	2.050 ± 0.234	0.012 ± 0.011	0.779 ± 0.066	n = 31	[BC1] Beckman Coulter
0.083 ± 0.037	0.050 ± 0.001	1.264 ± 0.211	0.050 ± 0.001	0.107 ± 0.020	n = 5	[BS1] Biosite Diagnostics
0.596 ± 0.082	0.019 ± 0.024	3.326 ± 0.323	0.022 ± 0.021	1.409 ± 0.131	n = 4	[IA1] i-STAT
1.346 ± 0.072	0.010 ± 0.000	7.584 ± 0.422	0.010 ± 0.000	2.391 ± 0.147	n = 25	[JJ1] Ortho Clinical Diagnostics
0.325 ± 0.039	0.300 ± 0.000	1.402 ± 0.013	0.300 ± 0.000	0.424 ± 0.050	n = 4	[R03] Roche Elecsys/Modular E/e601/e411
1.475 ± 0.084	0.009 ± 0.006	7.123 ± 0.459	0.009 ± 0.006	1.159 ± 0.096	n = 51	[BY1] Siemens ADVIA/ADVIA Centaur
0.731 ± 0.054	0.040 ± 0.000	2.489 ± 0.186	0.040 ± 0.000	0.713 ± 0.098	n = 18	[DA5] Siemens Dimension
0.826 ± 0.046	0.017 ± 0.006	2.388 ± 0.153	0.019 ± 0.005	0.988 ± 0.058	n = 54	[DA6] Siemens Dimension LOCI
1.250 ± 0.055	0.200 ± 0.000	5.390 ± 0.520	0.200 ± 0.000	1.865 ± 0.036	n = 3	[DP5] Siemens Immulite
2.005 ± 0.019	0.060 ± 0.000	11.479 ± 0.538	0.060 ± 0.000	4.470 ± 0.027	n = 3	[T02] Tosoh ST AIA

Summary of Participant Performance (Mean and Standard Deviation)

Troponin T (µg/L)

Specimen: C01 -----	Specimen: C02 -----	Specimen: C03 -----	Specimen: C04 -----	Specimen: C05 -----	Number -----	[Code] Instrument or Reagent System -----
0.131 ± 0.008	0.010 ± 0.000	0.315 ± 0.021	0.010 ± 0.000	0.585 ± 0.032	n = 39	[---] All Methods & Instruments
<Instruments>						
0.132 ± 0.007	0.010 ± 0.000	0.323 ± 0.022	0.010 ± 0.000	0.595 ± 0.054	n = 6	[R0F] Roche cobas e411
0.130 ± 0.007	0.010 ± 0.000	0.313 ± 0.021	0.010 ± 0.000	0.583 ± 0.029	n = 14	[R0A] Roche cobas e601
0.153 ± 0.034	0.010 ± 0.000	0.342 ± 0.041	0.010 ± 0.000	0.590 ± 0.009	n = 3	[R0B] Roche cobas e602
0.140 ± 0.000	0.010 ± 0.000	0.321 ± 0.020	0.010 ± 0.000	0.596 ± 0.037	n = 7	[BME] Roche Elecsys
0.129 ± 0.006	0.010 ± 0.000	0.307 ± 0.015	0.010 ± 0.000	0.577 ± 0.018	n = 8	[R0E] Roche MODULAR E
<Reagents>						
0.132 ± 0.007	0.010 ± 0.000	0.315 ± 0.021	0.010 ± 0.000	0.586 ± 0.030	n = 36	[R03] Roche Elecsys/Modular E/e601/e411

Summary of Participant Performance (Mean and Standard Deviation)

Alanine Aminotransferase (U/L 37°C)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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179.1 ± 12.04	74.9 ± 7.23	82.2 ± 6.87	270.2 ± 18.25	104.0 ± 9.34	n = 360	[---] All Methods & Instruments
<Instruments>						
159.5 ± 2.17	67.9 ± 3.98	73.8 ± 2.69	239.4 ± 2.05	92.8 ± 4.61	n = 5	[AXA] Abaxis Piccolo
182.8 ± 4.44	74.5 ± 2.33	82.9 ± 2.18	275.9 ± 7.58	104.5 ± 3.31	n = 22	[ABJ] Abbott Architect c System
156.0 ± 1.80	59.7 ± 0.51	68.0 ± 0.90	239.9 ± 2.05	87.2 ± 2.36	n = 3	[AWA] Alfa Wassermann ACE Alera
159.1 ± 3.68	64.5 ± 1.83	72.6 ± 1.88	238.3 ± 5.21	90.5 ± 2.07	n = 64	[OLC] Beckman Coulter AU Chemistry System
176.3 ± 2.98	76.1 ± 1.11	82.2 ± 1.95	267.2 ± 4.57	103.7 ± 1.98	n = 16	[BCG] Beckman Coulter UniCel DxC 600
176.4 ± 1.85	77.2 ± 1.29	82.9 ± 2.37	267.4 ± 5.45	104.8 ± 2.34	n = 7	[BCH] Beckman Coulter UniCel DxC 800
189.8 ± 3.03	83.8 ± 4.03	89.5 ± 2.79	285.5 ± 3.10	118.5 ± 1.03	n = 7	[JJE] Ortho Vitros 250/350/950
187.5 ± 1.86	81.0 ± 2.70	85.2 ± 3.23	283.5 ± 4.53	114.5 ± 2.74	n = 3	[JJH] Ortho Vitros 4600
188.7 ± 8.64	85.0 ± 4.79	86.9 ± 5.64	281.9 ± 9.04	116.3 ± 6.97	n = 14	[JJF] Ortho Vitros 5,1FS
187.9 ± 4.28	84.2 ± 3.20	88.9 ± 3.45	284.4 ± 4.09	116.4 ± 3.33	n = 20	[JJG] Ortho Vitros 5600
175.3 ± 2.57	70.6 ± 1.09	80.1 ± 2.16	266.1 ± 1.83	100.3 ± 1.38	n = 5	[ROJ] Roche cobas c311
175.5 ± 3.57	71.3 ± 1.32	79.1 ± 1.66	267.3 ± 6.46	99.8 ± 2.23	n = 22	[ROC] Roche cobas c501
171.9 ± 2.07	70.4 ± 1.70	77.3 ± 1.74	262.6 ± 3.04	98.5 ± 0.74	n = 7	[ROH] Roche cobas c701
176.7 ± 7.66	72.0 ± 3.74	79.5 ± 3.91	271.7 ± 11.78	101.0 ± 4.37	n = 5	[ROS] Roche Cobas INTEGRA 400
171.8 ± 3.21	70.3 ± 0.82	77.3 ± 0.90	262.5 ± 5.27	98.8 ± 1.27	n = 4	[ROT] Roche Cobas INTEGRA 800
176.0 ± 6.34	72.2 ± 2.28	80.1 ± 2.82	261.5 ± 8.32	100.7 ± 3.85	n = 27	[ROD] Roche MODULAR D/P
188.2 ± 3.74	78.5 ± 2.28	86.4 ± 2.40	285.3 ± 4.18	108.9 ± 2.29	n = 21	[BYE] Siemens ADVIA 1800
184.2 ± 3.23	76.5 ± 1.86	84.2 ± 2.36	276.3 ± 7.67	106.2 ± 3.23	n = 3	[BYB] Siemens ADVIA 2400
189.2 ± 2.95	80.3 ± 2.83	88.0 ± 2.85	286.0 ± 5.83	111.1 ± 2.73	n = 23	[DUE] Siemens Dimension EXL
189.3 ± 4.47	82.8 ± 4.67	92.3 ± 4.80	283.7 ± 7.71	113.8 ± 3.95	n = 16	[DUR] Siemens Dimension RxL
183.0 ± 2.81	76.5 ± 1.65	84.4 ± 1.88	275.4 ± 5.65	105.4 ± 1.84	n = 42	[DUT] Siemens Dimension Vista
189.6 ± 3.50	82.4 ± 4.55	91.1 ± 4.13	284.4 ± 5.64	113.3 ± 4.50	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
159.5 ± 2.17	67.9 ± 3.98	73.8 ± 2.69	239.4 ± 2.05	92.8 ± 4.61	n = 5	[AX1] Abaxis
182.8 ± 4.44	74.5 ± 2.33	82.9 ± 2.18	275.9 ± 7.58	104.5 ± 3.31	n = 22	[AB1] Abbott
156.0 ± 1.80	59.7 ± 0.51	68.0 ± 0.90	239.9 ± 2.05	87.2 ± 2.36	n = 3	[AW1] Alfa Wassermann
176.0 ± 2.88	76.4 ± 1.24	82.2 ± 2.34	266.2 ± 5.24	103.7 ± 2.30	n = 28	[BC1] Beckman Coulter
159.1 ± 3.43	64.5 ± 1.68	72.5 ± 1.60	238.4 ± 4.96	90.5 ± 1.98	n = 59	[OL1] Beckman Coulter AU Series
188.4 ± 5.23	84.1 ± 3.85	88.2 ± 4.27	284.0 ± 5.39	116.5 ± 4.10	n = 44	[JJ1] Ortho Clinical Diagnostics
174.6 ± 3.61	70.9 ± 1.48	78.9 ± 2.03	265.7 ± 5.77	99.5 ± 1.97	n = 36	[R04] Roche cobas c311/c501/c502/c701/c702
176.0 ± 6.34	72.2 ± 2.28	80.1 ± 2.82	261.5 ± 8.32	100.7 ± 3.85	n = 27	[R02] Roche Hitachi and Modular D/P
173.2 ± 3.75	70.7 ± 1.69	77.6 ± 1.56	265.9 ± 7.43	99.3 ± 1.74	n = 9	[R01] Roche Integra and MIRA
187.6 ± 4.15	78.1 ± 2.53	86.0 ± 2.70	284.7 ± 5.66	108.6 ± 2.66	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
186.4 ± 4.72	79.0 ± 3.77	87.2 ± 4.34	280.8 ± 7.74	109.1 ± 4.83	n = 94	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Aspartate Aminotransferase (U/L 37°C)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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290.1 ± 22.29	78.6 ± 6.15	63.1 ± 5.18	135.6 ± 8.08	100.9 ± 7.34	n = 358	[---] All Methods & Instruments
<Instruments>						
282.3 ± 7.61	81.0 ± 1.54	65.9 ± 2.16	137.4 ± 1.37	102.0 ± 2.12	n = 5	[AXA] Abaxis Piccolo
292.4 ± 5.81	78.6 ± 2.44	63.1 ± 1.59	136.2 ± 3.55	100.9 ± 2.74	n = 21	[ABJ] Abbott Architect c System
277.6 ± 2.56	70.0 ± 2.70	58.0 ± 2.70	127.5 ± 3.63	93.5 ± 2.74	n = 3	[AWA] Alfa Wassermann ACE Alera
259.9 ± 7.56	70.7 ± 2.56	57.7 ± 2.18	121.2 ± 4.12	90.2 ± 3.02	n = 63	[OLC] Beckman Coulter AU Chemistry System
287.0 ± 7.10	81.4 ± 1.71	67.0 ± 1.66	135.4 ± 3.15	101.7 ± 2.20	n = 16	[BCG] Beckman Coulter UniCel DxC 600
285.5 ± 4.45	81.6 ± 0.96	67.5 ± 1.14	136.1 ± 1.51	100.9 ± 1.42	n = 8	[BCH] Beckman Coulter UniCel DxC 800
357.1 ± 10.18	88.8 ± 2.01	72.2 ± 2.79	146.7 ± 4.23	114.4 ± 2.53	n = 7	[JJE] Ortho Vitros 250/350/950
359.4 ± 7.94	88.7 ± 2.26	71.9 ± 3.72	145.7 ± 3.16	115.8 ± 2.36	n = 3	[JJH] Ortho Vitros 4600
352.3 ± 11.43	90.2 ± 2.72	71.5 ± 2.55	145.0 ± 4.61	114.2 ± 3.29	n = 14	[JJF] Ortho Vitros 5,1FS
355.7 ± 9.30	89.2 ± 2.14	70.5 ± 1.46	144.3 ± 3.74	113.8 ± 2.58	n = 20	[JJG] Ortho Vitros 5600
293.2 ± 2.37	78.0 ± 1.54	64.8 ± 1.07	136.2 ± 0.80	101.4 ± 0.55	n = 5	[ROJ] Roche cobas c311
298.0 ± 10.60	79.2 ± 2.28	64.4 ± 2.31	137.3 ± 4.47	102.1 ± 3.34	n = 22	[ROC] Roche cobas c501
288.9 ± 5.54	76.4 ± 3.15	62.6 ± 1.04	134.1 ± 2.78	99.1 ± 1.80	n = 7	[ROH] Roche cobas c701
298.5 ± 6.73	80.2 ± 1.07	64.5 ± 0.83	138.9 ± 2.88	102.6 ± 1.98	n = 5	[ROS] Roche Cobas INTEGRA 400
288.7 ± 2.54	77.5 ± 1.22	63.2 ± 0.41	134.8 ± 2.11	100.3 ± 0.82	n = 4	[ROT] Roche Cobas INTEGRA 800
287.5 ± 6.19	79.1 ± 2.56	64.1 ± 2.23	134.6 ± 3.17	100.3 ± 2.76	n = 27	[ROD] Roche MODULAR D/P
310.7 ± 5.83	87.1 ± 3.23	69.6 ± 2.94	147.0 ± 4.13	109.4 ± 3.38	n = 21	[BYE] Siemens ADVIA 1800
305.4 ± 6.45	82.5 ± 1.86	67.0 ± 1.80	142.7 ± 3.16	105.0 ± 1.80	n = 3	[BYB] Siemens ADVIA 2400
286.2 ± 5.67	76.5 ± 2.21	59.9 ± 2.33	134.1 ± 3.51	99.9 ± 2.77	n = 23	[DUE] Siemens Dimension EXL
288.4 ± 9.35	77.5 ± 2.46	60.6 ± 2.34	135.0 ± 3.40	100.2 ± 3.27	n = 16	[DUR] Siemens Dimension RxL
293.2 ± 4.92	76.1 ± 2.13	59.3 ± 2.21	135.2 ± 3.37	99.7 ± 2.48	n = 42	[DUT] Siemens Dimension Vista
293.1 ± 5.54	78.4 ± 2.17	61.4 ± 1.55	137.9 ± 2.63	101.4 ± 0.84	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
282.3 ± 7.61	81.0 ± 1.54	65.9 ± 2.16	137.4 ± 1.37	102.0 ± 2.12	n = 5	[AX1] Abaxis
292.4 ± 5.81	78.6 ± 2.44	63.1 ± 1.59	136.2 ± 3.55	100.9 ± 2.74	n = 21	[AB1] Abbott
277.6 ± 2.56	70.0 ± 2.70	58.0 ± 2.70	127.5 ± 3.63	93.5 ± 2.74	n = 3	[AW1] Alfa Wassermann
286.2 ± 6.40	81.2 ± 1.57	67.0 ± 1.43	135.5 ± 2.65	101.3 ± 1.96	n = 28	[BC1] Beckman Coulter
260.2 ± 7.47	70.8 ± 2.41	57.7 ± 2.08	121.3 ± 3.96	90.2 ± 2.88	n = 58	[OL1] Beckman Coulter AU Series
355.3 ± 10.16	89.4 ± 2.46	71.1 ± 2.28	144.9 ± 4.09	114.2 ± 2.89	n = 44	[JJ1] Ortho Clinical Diagnostics
294.9 ± 9.21	78.5 ± 2.39	64.1 ± 2.11	136.3 ± 3.80	101.2 ± 2.90	n = 36	[R04] Roche cobas c311/c501/c502/c701/c702
287.5 ± 6.19	79.1 ± 2.56	64.1 ± 2.23	134.6 ± 3.17	100.3 ± 2.76	n = 27	[R02] Roche Hitachi and Modular D/P
293.6 ± 7.00	78.9 ± 1.79	63.9 ± 0.98	136.9 ± 3.35	101.5 ± 1.95	n = 9	[R01] Roche Integra and MIRA
310.0 ± 6.34	86.4 ± 3.72	69.0 ± 3.13	146.2 ± 4.62	108.6 ± 3.85	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
291.0 ± 6.83	76.8 ± 2.37	60.0 ± 2.33	135.4 ± 3.56	100.1 ± 2.67	n = 95	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

 α -Amylase (U/L 37°C)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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81.2 ± 8.18	295.0 ± 52.03	224.4 ± 35.13	41.0 ± 6.13	167.8 ± 26.48	n = 312	[---] All Methods & Instruments
<Instruments>						
71.3 ± 1.37	287.5 ± 1.86	211.5 ± 2.74	38.3 ± 1.37	159.1 ± 2.86	n = 3	[AXA] Abaxis Piccolo
88.4 ± 3.01	321.8 ± 9.63	242.5 ± 6.85	44.1 ± 1.50	182.4 ± 5.22	n = 19	[ABJ] Abbott Architect c System
65.4 ± 3.10	251.7 ± 11.81	190.6 ± 9.16	33.5 ± 1.73	142.3 ± 7.24	n = 54	[OLC] Beckman Coulter AU Chemistry System
90.9 ± 1.78	319.3 ± 5.58	243.5 ± 3.96	49.1 ± 1.28	182.9 ± 3.24	n = 13	[BCG] Beckman Coulter UniCel DxC 600
91.9 ± 1.52	324.1 ± 4.12	248.6 ± 1.58	50.0 ± 0.75	187.4 ± 2.37	n = 8	[BCH] Beckman Coulter UniCel DxC 800
75.5 ± 3.43	181.0 ± 0.75	153.8 ± 3.60	38.4 ± 1.89	118.7 ± 3.66	n = 5	[JJE] Ortho Vitros 250/350/950
82.7 ± 4.06	188.8 ± 11.26	162.5 ± 9.94	36.0 ± 4.60	124.4 ± 7.34	n = 3	[JJH] Ortho Vitros 4600
72.8 ± 6.61	181.3 ± 6.88	157.3 ± 9.48	32.7 ± 2.52	115.6 ± 6.02	n = 13	[JJF] Ortho Vitros 5,1FS
76.1 ± 4.38	182.3 ± 8.33	155.9 ± 6.41	34.5 ± 2.85	116.0 ± 5.41	n = 20	[JJG] Ortho Vitros 5600
87.5 ± 1.22	297.6 ± 4.99	229.1 ± 3.38	47.5 ± 0.57	172.0 ± 1.76	n = 4	[ROJ] Roche cobas c311
85.4 ± 1.09	291.2 ± 5.18	225.0 ± 3.86	46.7 ± 0.89	167.7 ± 2.95	n = 20	[ROC] Roche cobas c501
85.7 ± 1.37	294.9 ± 2.05	225.9 ± 2.05	47.0 ± 0.90	169.2 ± 2.36	n = 3	[ROG] Roche cobas c502
87.0 ± 0.90	292.3 ± 3.16	224.5 ± 1.86	47.7 ± 0.51	168.8 ± 1.54	n = 3	[ROH] Roche cobas c701
85.5 ± 3.30	292.1 ± 9.48	223.6 ± 7.02	47.0 ± 1.47	168.8 ± 5.24	n = 3	[ROS] Roche Cobas INTEGRA 400
83.8 ± 0.41	288.0 ± 5.60	221.0 ± 2.88	46.0 ± 0.75	165.5 ± 1.94	n = 4	[ROT] Roche Cobas INTEGRA 800
84.5 ± 1.51	288.4 ± 5.13	222.0 ± 3.76	46.1 ± 1.04	165.9 ± 2.98	n = 24	[ROD] Roche MODULAR D/P
85.2 ± 1.44	294.1 ± 3.70	225.7 ± 2.87	45.8 ± 0.71	169.0 ± 2.53	n = 20	[BYE] Siemens ADVIA 1800
83.9 ± 2.86	290.4 ± 11.95	224.7 ± 6.93	45.5 ± 1.86	167.0 ± 6.42	n = 3	[BYB] Siemens ADVIA 2400
82.3 ± 1.87	346.0 ± 7.60	258.7 ± 6.20	40.2 ± 1.16	193.2 ± 4.68	n = 19	[DUE] Siemens Dimension EXL
82.7 ± 3.04	346.5 ± 8.79	259.6 ± 6.98	40.6 ± 1.63	193.2 ± 5.61	n = 13	[DUR] Siemens Dimension RxL
80.8 ± 1.42	342.6 ± 5.59	255.9 ± 4.13	39.5 ± 0.87	191.3 ± 3.08	n = 42	[DUT] Siemens Dimension Vista
82.7 ± 1.58	348.1 ± 4.51	259.6 ± 3.12	40.6 ± 0.86	194.2 ± 2.91	n = 10	[DUX] Siemens Dimension Xpand
<Reagents>						
71.3 ± 1.37	287.5 ± 1.86	211.5 ± 2.74	38.3 ± 1.37	159.1 ± 2.86	n = 3	[AX1] Abaxis
88.4 ± 3.01	321.8 ± 9.63	242.5 ± 6.85	44.1 ± 1.50	182.4 ± 5.22	n = 19	[AB1] Abbott
91.8 ± 1.49	323.6 ± 3.23	246.8 ± 3.31	49.9 ± 1.35	185.5 ± 2.95	n = 8	[BC1] Beckman Coulter
65.4 ± 3.22	251.5 ± 11.60	190.4 ± 8.94	33.5 ± 1.80	142.1 ± 7.05	n = 50	[OL1] Beckman Coulter AU Series
91.0 ± 1.61	319.5 ± 5.92	245.0 ± 4.59	49.4 ± 1.01	184.4 ± 3.71	n = 15	[BC2] Beckman Coulter IFCC Standardized
75.5 ± 5.61	182.1 ± 8.37	156.6 ± 8.01	34.6 ± 3.55	116.9 ± 6.18	n = 42	[JJ1] Ortho Clinical Diagnostics
85.7 ± 1.43	292.2 ± 5.37	225.3 ± 3.89	46.9 ± 0.96	168.4 ± 3.12	n = 31	[R04] Roche cobas c311/c501/c502/c701/c702
84.7 ± 1.62	288.8 ± 5.31	222.2 ± 3.83	46.2 ± 1.04	166.1 ± 3.04	n = 25	[R02] Roche Hitachi and Modular D/P
83.8 ± 0.59	289.0 ± 6.94	221.1 ± 3.81	46.2 ± 0.88	165.7 ± 1.70	n = 7	[R01] Roche Integra and MIRA
85.2 ± 1.52	294.4 ± 3.77	225.9 ± 3.12	45.8 ± 0.79	169.1 ± 2.57	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
81.6 ± 1.98	344.5 ± 6.82	257.4 ± 5.30	39.9 ± 1.13	192.2 ± 4.09	n = 84	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Alkaline Phosphatase (U/L 37°C)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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362.0 ± 35.89	49.6 ± 9.23	307.5 ± 29.35	182.2 ± 21.22	139.3 ± 15.14	n = 358	[---] All Methods & Instruments
<Instruments>						
298.6 ± 7.34	43.2 ± 2.37	255.3 ± 6.38	154.8 ± 2.55	116.6 ± 4.14	n = 5	[AXA] Abaxis Piccolo
384.0 ± 9.84	48.9 ± 2.05	320.1 ± 7.50	192.5 ± 4.58	142.6 ± 3.62	n = 21	[ABJ] Abbott Architect c System
360.2 ± 17.51	46.5 ± 3.63	311.8 ± 15.85	188.2 ± 9.43	137.3 ± 5.97	n = 3	[AWA] Alfa Wassermann ACE Alera
333.7 ± 19.07	41.8 ± 2.56	279.2 ± 16.13	168.3 ± 10.77	123.9 ± 7.12	n = 63	[OLC] Beckman Coulter AU Chemistry System
313.8 ± 18.84	40.8 ± 2.63	270.5 ± 11.07	161.5 ± 7.77	120.3 ± 5.43	n = 16	[BCG] Beckman Coulter UniCel DxC 600
323.7 ± 6.46	41.8 ± 0.86	277.0 ± 7.44	165.5 ± 3.28	122.7 ± 9.77	n = 8	[BCH] Beckman Coulter UniCel DxC 800
348.5 ± 7.78	65.8 ± 4.76	318.8 ± 12.39	163.3 ± 5.67	150.5 ± 0.83	n = 7	[JJE] Ortho Vitros 250/350/950
345.5 ± 9.93	66.0 ± 4.51	306.9 ± 9.80	156.0 ± 11.75	145.6 ± 8.23	n = 3	[JJH] Ortho Vitros 4600
341.8 ± 12.05	65.8 ± 2.72	308.1 ± 10.77	160.8 ± 6.01	149.4 ± 5.26	n = 14	[JJF] Ortho Vitros 5,1FS
343.2 ± 11.27	65.3 ± 2.42	307.4 ± 10.30	159.2 ± 5.20	148.5 ± 3.97	n = 20	[JJG] Ortho Vitros 5600
356.9 ± 15.21	46.5 ± 0.57	301.8 ± 10.58	181.8 ± 1.46	134.5 ± 1.22	n = 5	[ROJ] Roche cobas c311
352.1 ± 10.33	46.4 ± 1.47	295.5 ± 9.51	179.8 ± 4.66	134.1 ± 4.51	n = 22	[ROC] Roche cobas c501
353.4 ± 7.41	46.3 ± 0.74	295.8 ± 6.39	179.5 ± 2.85	133.9 ± 2.70	n = 7	[ROH] Roche cobas c701
369.7 ± 10.92	47.3 ± 1.51	309.7 ± 8.56	187.4 ± 4.51	138.6 ± 3.21	n = 4	[ROS] Roche Cobas INTEGRA 400
367.4 ± 2.31	45.0 ± 1.14	308.6 ± 2.83	185.5 ± 2.30	137.1 ± 2.71	n = 4	[ROT] Roche Cobas INTEGRA 800
344.4 ± 8.98	45.4 ± 1.06	289.0 ± 7.85	175.5 ± 5.09	129.8 ± 3.63	n = 25	[ROD] Roche MODULAR D/P
389.2 ± 13.55	49.5 ± 2.07	328.0 ± 11.22	196.5 ± 6.06	145.2 ± 4.28	n = 21	[BYE] Siemens ADVIA 1800
391.1 ± 5.22	50.7 ± 0.51	330.0 ± 3.61	197.2 ± 3.23	145.2 ± 2.36	n = 3	[BYB] Siemens ADVIA 2400
414.4 ± 19.45	65.4 ± 7.47	348.9 ± 15.12	215.6 ± 10.51	162.9 ± 6.73	n = 23	[DUE] Siemens Dimension EXL
407.7 ± 26.82	61.7 ± 9.40	345.4 ± 22.91	211.0 ± 11.47	160.5 ± 10.24	n = 16	[DUR] Siemens Dimension RxL
399.2 ± 14.46	51.5 ± 3.02	333.4 ± 13.41	202.6 ± 8.46	148.5 ± 7.22	n = 42	[DUT] Siemens Dimension Vista
393.4 ± 8.91	57.8 ± 5.59	333.9 ± 7.65	204.5 ± 5.53	152.5 ± 5.29	n = 14	[DUX] Siemens Dimension Xpand
<Reagents>						
298.6 ± 7.34	43.2 ± 2.37	255.3 ± 6.38	154.8 ± 2.55	116.6 ± 4.14	n = 5	[AX1] Abaxis
384.0 ± 9.84	48.9 ± 2.05	320.1 ± 7.50	192.5 ± 4.58	142.6 ± 3.62	n = 21	[AB1] Abbott
360.2 ± 17.51	46.5 ± 3.63	311.8 ± 15.85	188.2 ± 9.43	137.3 ± 5.97	n = 3	[AW1] Alfa Wassermann
318.3 ± 16.09	41.3 ± 2.21	272.2 ± 9.92	163.6 ± 5.62	121.0 ± 4.20	n = 28	[BC1] Beckman Coulter
333.0 ± 18.20	41.8 ± 2.39	278.9 ± 15.24	168.0 ± 10.18	123.6 ± 6.73	n = 59	[OL1] Beckman Coulter AU Series
344.0 ± 11.55	65.5 ± 2.95	309.1 ± 11.24	160.4 ± 6.33	149.4 ± 5.08	n = 44	[JJ1] Ortho Clinical Diagnostics
352.9 ± 10.23	46.4 ± 1.41	296.4 ± 9.33	180.1 ± 4.48	134.3 ± 4.25	n = 36	[R04] Roche cobas c311/c501/c502/c701/c702
343.9 ± 9.56	45.3 ± 1.09	288.5 ± 8.29	175.2 ± 5.35	129.6 ± 3.72	n = 26	[R02] Roche Hitachi and Modular D/P
366.2 ± 7.18	45.9 ± 1.58	307.1 ± 5.78	185.8 ± 3.56	137.3 ± 3.24	n = 9	[R01] Roche Integra and MIRA
388.8 ± 13.73	49.6 ± 2.13	327.9 ± 11.31	196.3 ± 6.22	145.1 ± 4.30	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
402.0 ± 18.06	56.6 ± 8.37	338.1 ± 15.82	206.9 ± 10.42	154.0 ± 9.92	n = 95	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

 γ -Glutamyltransferase (U/L 37°C)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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78.2 ± 18.69	46.3 ± 10.55	85.4 ± 20.11	181.2 ± 42.27	38.3 ± 8.92	n = 293	[---] All Methods & Instruments
<Instruments>						
77.7 ± 4.50	46.6 ± 2.78	85.2 ± 4.82	184.3 ± 11.29	37.8 ± 2.15	n = 17	[ABJ] Abbott Architect c System
61.4 ± 3.20	36.9 ± 1.87	66.6 ± 3.42	142.1 ± 7.47	30.6 ± 1.73	n = 55	[OLC] Beckman Coulter AU Chemistry System
75.3 ± 2.10	42.7 ± 0.98	83.5 ± 2.60	188.5 ± 5.14	34.3 ± 1.42	n = 12	[BCG] Beckman Coulter UniCel DxC 600
75.0 ± 1.99	43.0 ± 0.91	83.4 ± 2.12	188.7 ± 5.99	33.8 ± 1.02	n = 8	[BCH] Beckman Coulter UniCel DxC 800
119.9 ± 3.97	66.5 ± 2.98	130.3 ± 4.90	310.8 ± 12.82	52.5 ± 2.83	n = 4	[JJE] Ortho Vitros 250/350/950
119.2 ± 2.36	67.8 ± 1.54	130.0 ± 2.70	310.5 ± 5.40	53.0 ± 0.90	n = 3	[JJH] Ortho Vitros 4600
117.2 ± 2.23	66.2 ± 1.21	127.9 ± 1.99	304.7 ± 7.51	52.7 ± 1.33	n = 13	[JJF] Ortho Vitros 5,1FS
117.3 ± 2.64	66.1 ± 1.73	128.3 ± 3.58	303.6 ± 7.24	52.7 ± 1.21	n = 20	[JJG] Ortho Vitros 5600
66.1 ± 1.36	40.3 ± 1.28	72.9 ± 1.23	157.4 ± 3.29	32.6 ± 0.92	n = 17	[ROC] Roche cobas c501
66.6 ± 1.02	40.3 ± 0.51	73.7 ± 1.37	158.5 ± 1.86	33.0 ± 0.00	n = 3	[ROG] Roche cobas c502
66.5 ± 0.57	40.2 ± 0.41	72.5 ± 1.22	156.3 ± 0.82	33.0 ± 0.75	n = 4	[ROH] Roche cobas c701
66.3 ± 0.51	39.7 ± 0.51	72.5 ± 1.86	158.3 ± 4.06	32.3 ± 0.51	n = 3	[ROS] Roche Cobas INTEGRA 400
65.2 ± 1.27	38.9 ± 1.13	73.0 ± 1.65	158.7 ± 3.17	31.5 ± 0.57	n = 4	[ROT] Roche Cobas INTEGRA 800
66.7 ± 1.57	40.1 ± 1.26	73.7 ± 1.80	160.4 ± 3.10	32.4 ± 1.19	n = 25	[ROD] Roche MODULAR D/P
72.1 ± 2.93	42.6 ± 2.13	78.9 ± 2.76	169.9 ± 4.71	35.0 ± 2.43	n = 21	[BYE] Siemens ADVIA 1800
72.3 ± 3.07	38.5 ± 1.86	77.9 ± 2.05	168.8 ± 2.36	33.0 ± 1.80	n = 3	[BYB] Siemens ADVIA 2400
92.6 ± 2.27	56.7 ± 2.22	101.1 ± 2.62	207.4 ± 3.27	49.3 ± 2.24	n = 18	[DUE] Siemens Dimension EXL
92.1 ± 2.17	55.8 ± 1.55	99.5 ± 2.06	208.4 ± 3.65	48.0 ± 1.89	n = 9	[DUR] Siemens Dimension RxL
92.0 ± 2.31	53.4 ± 1.96	99.8 ± 2.70	211.5 ± 4.04	44.5 ± 1.88	n = 39	[DUT] Siemens Dimension Vista
93.0 ± 1.54	57.2 ± 1.28	100.5 ± 6.32	209.2 ± 4.07	49.0 ± 1.54	n = 5	[DUX] Siemens Dimension Xpand
<Reagents>						
77.2 ± 4.25	46.3 ± 2.56	84.8 ± 4.45	183.3 ± 10.80	37.6 ± 1.93	n = 16	[AB1] Abbott
75.0 ± 2.12	42.6 ± 1.29	83.2 ± 2.37	187.9 ± 5.70	33.8 ± 1.57	n = 24	[BC1] Beckman Coulter
61.3 ± 3.24	36.8 ± 1.88	66.5 ± 3.49	141.9 ± 7.66	30.6 ± 1.79	n = 52	[OL1] Beckman Coulter AU Series
117.6 ± 2.61	66.3 ± 1.87	128.4 ± 3.17	304.9 ± 7.90	52.7 ± 1.36	n = 40	[JJ1] Ortho Clinical Diagnostics
66.2 ± 1.34	40.3 ± 1.09	72.9 ± 1.47	157.3 ± 2.99	32.7 ± 0.86	n = 27	[R04] Roche cobas c311/c501/c502/c701/c702
66.7 ± 1.57	40.1 ± 1.26	73.7 ± 1.80	160.4 ± 3.10	32.4 ± 1.19	n = 25	[R02] Roche Hitachi and Modular D/P
66.0 ± 0.70	39.4 ± 0.83	72.8 ± 1.80	158.5 ± 3.58	31.8 ± 0.66	n = 7	[R01] Roche Integra and MIRA
72.1 ± 2.88	42.3 ± 2.49	78.6 ± 2.71	169.4 ± 4.62	34.9 ± 2.53	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
92.3 ± 2.25	54.8 ± 2.54	100.1 ± 2.82	209.8 ± 4.23	46.4 ± 3.05	n = 71	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

Creatine Kinase (U/L 37°C)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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262.7 ± 18.75	89.6 ± 5.68	242.7 ± 13.60	68.2 ± 4.59	283.4 ± 19.84	n = 323	[---] All Methods & Instruments
<Instruments>						
278.3 ± 3.99	92.1 ± 2.84	253.9 ± 3.51	70.6 ± 1.19	297.3 ± 8.12	n = 21	[ABJ] Abbott Architect c System
242.0 ± 9.76	78.5 ± 3.59	223.5 ± 9.07	59.8 ± 3.15	258.6 ± 14.18	n = 58	[OLC] Beckman Coulter AU Chemistry System
270.3 ± 5.34	91.1 ± 2.39	238.0 ± 3.36	69.9 ± 2.12	302.7 ± 5.60	n = 12	[BCG] Beckman Coulter UniCel DxC 600
275.4 ± 2.24	93.9 ± 2.51	239.4 ± 4.78	70.5 ± 1.56	295.5 ± 16.13	n = 8	[BCH] Beckman Coulter UniCel DxC 800
224.0 ± 29.64	84.8 ± 8.06	249.0 ± 22.83	64.9 ± 6.97	278.5 ± 38.61	n = 4	[JJE] Ortho Vitros 250/350/950
246.9 ± 5.72	95.6 ± 1.02	265.6 ± 6.45	71.6 ± 2.56	312.0 ± 5.48	n = 3	[JJH] Ortho Vitros 4600
234.2 ± 9.30	91.1 ± 3.42	252.8 ± 9.45	68.8 ± 3.97	291.0 ± 10.27	n = 12	[JJF] Ortho Vitros 5,1FS
228.2 ± 7.32	89.8 ± 3.07	248.5 ± 11.08	68.1 ± 2.29	291.6 ± 11.88	n = 20	[JJG] Ortho Vitros 5600
290.8 ± 4.16	94.3 ± 0.82	266.7 ± 3.62	71.7 ± 0.82	308.7 ± 11.16	n = 4	[ROJ] Roche cobas c311
286.1 ± 7.00	92.2 ± 1.69	260.7 ± 5.05	70.2 ± 1.92	304.7 ± 14.08	n = 22	[ROC] Roche cobas c501
286.5 ± 6.32	93.2 ± 1.54	265.6 ± 6.14	71.0 ± 0.90	302.1 ± 17.23	n = 3	[ROG] Roche cobas c502
269.3 ± 3.39	94.3 ± 1.10	243.3 ± 2.15	72.0 ± 1.00	285.0 ± 3.86	n = 5	[ROH] Roche cobas c701
285.9 ± 7.39	90.5 ± 5.97	260.3 ± 4.29	68.5 ± 5.66	309.2 ± 9.41	n = 4	[ROT] Roche Cobas INTEGRA 800
268.4 ± 5.12	92.5 ± 1.92	244.5 ± 4.40	70.6 ± 1.27	280.0 ± 9.51	n = 25	[ROD] Roche MODULAR D/P
268.6 ± 4.14	86.8 ± 1.73	245.6 ± 4.93	66.0 ± 1.42	286.5 ± 5.57	n = 20	[BYE] Siemens ADVIA 1800
267.5 ± 9.93	87.0 ± 4.51	244.7 ± 9.47	66.0 ± 3.61	280.1 ± 21.61	n = 3	[BYB] Siemens ADVIA 2400
265.6 ± 5.77	90.2 ± 3.94	240.1 ± 5.56	68.7 ± 3.72	282.8 ± 9.65	n = 20	[DUE] Siemens Dimension EXL
266.8 ± 6.15	90.9 ± 3.78	242.3 ± 5.23	68.9 ± 2.82	283.2 ± 11.61	n = 16	[DUR] Siemens Dimension RxL
264.5 ± 4.72	91.2 ± 2.45	239.9 ± 5.00	69.4 ± 2.26	282.9 ± 7.55	n = 42	[DUT] Siemens Dimension Vista
264.3 ± 7.12	88.1 ± 3.91	239.9 ± 7.91	67.5 ± 3.81	269.7 ± 16.99	n = 9	[DUX] Siemens Dimension Xpand
<Reagents>						
278.3 ± 3.99	92.1 ± 2.84	253.9 ± 3.51	70.6 ± 1.19	297.3 ± 8.12	n = 21	[AB1] Abbott
271.6 ± 5.29	91.7 ± 3.03	236.8 ± 5.53	70.1 ± 1.97	293.6 ± 18.95	n = 26	[BC1] Beckman Coulter
242.4 ± 9.61	78.6 ± 3.42	223.8 ± 9.20	59.9 ± 2.95	259.5 ± 14.39	n = 52	[OL1] Beckman Coulter AU Series
232.1 ± 10.82	90.7 ± 3.87	251.7 ± 12.82	68.6 ± 3.54	292.8 ± 14.48	n = 39	[JJ1] Ortho Clinical Diagnostics
284.0 ± 9.97	92.9 ± 1.80	259.4 ± 9.37	70.8 ± 1.69	301.1 ± 15.73	n = 35	[R04] Roche cobas c311/c501/c502/c701/c702
268.1 ± 5.16	92.5 ± 1.97	244.3 ± 4.37	70.7 ± 1.22	279.8 ± 9.85	n = 24	[R02] Roche Hitachi and Modular D/P
287.2 ± 6.66	93.6 ± 5.96	262.9 ± 5.83	71.8 ± 6.32	310.9 ± 9.74	n = 6	[R01] Roche Integra and MIRA
268.4 ± 5.54	86.7 ± 2.29	245.1 ± 6.03	65.8 ± 1.88	286.7 ± 6.61	n = 24	[BY1] Siemens ADVIA/ADVIA Centaur
265.2 ± 5.31	90.6 ± 3.27	240.4 ± 5.10	68.9 ± 2.81	282.4 ± 9.79	n = 83	[DA5] Siemens Dimension
259.9 ± 7.95	91.3 ± 4.26	237.7 ± 12.71	70.6 ± 3.54	278.9 ± 10.55	n = 4	[DA6] Siemens Dimension LOCI

Summary of Participant Performance (Mean and Standard Deviation)

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

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
54.24 ± 8.89	0.98 ± 0.35	0.81 ± 0.34	0.82 ± 0.38	28.12 ± 4.87	n = 194	[-A-] All Methods - Results reported as ng/mL
52.29 ± 2.99	1.34 ± 1.16	1.19 ± 1.22	1.13 ± 1.23	27.74 ± 2.06	n = 21	[AB1] Abbott
63.37 ± 2.53	1.15 ± 0.07	1.03 ± 0.07	0.90 ± 0.00	33.85 ± 1.56	n = 15	[SAA] Beckman Coulter ACCESS
65.25 ± 3.71	1.17 ± 0.07	1.05 ± 0.10	0.92 ± 0.06	34.21 ± 1.93	n = 13	[BCU] Beckman Coulter UniCel
29.67 ± 7.28	1.00 ± 0.00	0.72 ± 0.51	1.00 ± 0.00	16.48 ± 4.38	n = 3	[BS1] Biosite Diagnostics
38.82 ± 1.82	0.82 ± 0.11	0.66 ± 0.09	0.61 ± 0.09	20.31 ± 1.08	n = 23	[JJ1] Ortho Clinical Diagnostics
62.93 ± 2.57	1.51 ± 0.11	1.32 ± 0.10	1.54 ± 0.17	33.00 ± 1.32	n = 29	[R03] Roche Elecsys/Modular E/e601/e411
51.70 ± 3.45	0.60 ± 0.21	0.53 ± 0.25	0.48 ± 0.22	27.30 ± 1.85	n = 32	[BY1] Siemens ADVIA/ADVIA Centaur
53.93 ± 4.40	0.71 ± 0.24	0.61 ± 0.18	0.63 ± 0.29	25.74 ± 1.91	n = 27	[DA5] Siemens Dimension
50.44 ± 2.01	1.02 ± 0.16	0.64 ± 0.17	0.93 ± 0.16	26.95 ± 1.52	n = 26	[DA6] Siemens Dimension LOCI
63.35 ± 0.17	1.30 ± 0.11	1.40 ± 0.00	1.10 ± 0.11	32.65 ± 0.74	n = 2	[TOM] Tosoh
49.76 ± 3.02	5.61 ± 1.44	4.50 ± 1.02	4.70 ± 1.55	25.67 ± 2.67	n = 6	[---] All Methods - Results reported as U/L
17.50 ± 4.74	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	7.79 ± 3.10	n = 4	[-P-] All Methods - Results reported as %
16.31 ± 5.09	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	6.65 ± 3.37	n = 3	[HLS] Helena SPIFE

Summary of Participant Performance (Mean and Standard Deviation)

Lactate Dehydrogenase (U/L 37°C)

Specimen: C01	Specimen: C02	Specimen: C03	Specimen: C04	Specimen: C05	Number	[Code] Instrument or Reagent System
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253.3 ± 23.38	109.2 ± 9.80	281.2 ± 27.46	84.1 ± 7.73	211.9 ± 18.76	n = 262	[-A-] All Methods - Lactate to Pyruvate
607.8 ± 21.83	282.0 ± 14.57	660.1 ± 21.44	208.2 ± 13.30	532.0 ± 15.43	n = 42	[-B-] All Methods - Pyruvate to Lactate
<Instruments>						
259.7 ± 9.26	111.7 ± 2.80	286.9 ± 8.65	87.4 ± 5.26	218.6 ± 6.63	n = 20	[ABJ] Abbott Architect c System
226.2 ± 11.34	98.3 ± 5.33	247.8 ± 11.68	76.1 ± 4.21	189.4 ± 9.28	n = 56	[OLC] Beckman Coulter AU Chemistry System
207.7 ± 4.24	91.4 ± 3.17	231.3 ± 4.55	72.3 ± 2.01	178.2 ± 4.96	n = 13	[BCG] Beckman Coulter UniCel DxC 600
210.2 ± 5.92	93.3 ± 3.35	233.5 ± 6.54	72.8 ± 2.65	180.7 ± 4.88	n = 8	[BCH] Beckman Coulter UniCel DxC 800
596.3 ± 7.12	276.9 ± 5.13	659.7 ± 12.27	204.6 ± 7.51	532.4 ± 13.37	n = 5	[JJE] Ortho Vitros 250/350/950
651.8 ± 32.32	288.5 ± 4.53	662.7 ± 16.72	214.7 ± 16.87	545.9 ± 16.45	n = 3	[JJH] Ortho Vitros 4600
605.9 ± 18.46	280.2 ± 18.76	659.6 ± 26.71	208.4 ± 11.79	530.5 ± 17.30	n = 14	[JJF] Ortho Vitros 5,1FS
606.5 ± 21.87	283.3 ± 14.02	658.1 ± 20.09	209.2 ± 13.38	530.9 ± 13.84	n = 20	[JJG] Ortho Vitros 5600
263.6 ± 3.79	113.8 ± 0.41	296.2 ± 3.10	89.2 ± 3.82	221.5 ± 1.94	n = 4	[ROJ] Roche cobas c311
261.9 ± 5.40	113.4 ± 3.09	292.9 ± 6.82	87.2 ± 2.50	217.7 ± 5.51	n = 21	[ROC] Roche cobas c501
257.4 ± 4.25	111.8 ± 1.55	286.6 ± 2.47	85.0 ± 1.54	215.0 ± 1.28	n = 5	[ROH] Roche cobas c701
263.3 ± 5.77	115.0 ± 1.65	294.5 ± 3.90	88.3 ± 0.90	220.5 ± 1.22	n = 4	[ROT] Roche Cobas INTEGRA 800
260.6 ± 5.66	112.1 ± 2.81	291.4 ± 5.87	86.1 ± 2.59	217.2 ± 5.26	n = 25	[ROD] Roche MODULAR D/P
261.6 ± 5.05	113.1 ± 2.58	289.9 ± 5.24	89.6 ± 2.12	220.7 ± 4.59	n = 21	[BYE] Siemens ADVIA 1800
253.2 ± 7.82	109.7 ± 4.22	281.1 ± 8.93	86.2 ± 3.23	212.9 ± 7.44	n = 3	[BYB] Siemens ADVIA 2400
268.6 ± 10.03	116.5 ± 5.46	303.7 ± 10.32	90.0 ± 5.33	226.5 ± 7.62	n = 18	[DUE] Siemens Dimension EXL
270.1 ± 7.14	114.2 ± 7.36	301.1 ± 8.09	88.6 ± 6.52	225.9 ± 5.50	n = 8	[DUR] Siemens Dimension RxL
270.0 ± 6.79	115.7 ± 4.90	298.9 ± 8.36	88.1 ± 4.11	224.8 ± 7.57	n = 42	[DUT] Siemens Dimension Vista
260.9 ± 5.53	113.3 ± 5.49	299.6 ± 10.11	88.6 ± 4.42	222.4 ± 5.59	n = 6	[DUX] Siemens Dimension Xpand
<Reagents>						
259.7 ± 9.26	111.7 ± 2.80	286.9 ± 8.65	87.4 ± 5.26	218.6 ± 6.63	n = 20	[AB1] Abbott
209.4 ± 5.33	92.2 ± 3.53	232.6 ± 5.61	72.5 ± 2.38	179.4 ± 5.03	n = 25	[BC1] Beckman Coulter
226.7 ± 11.16	98.6 ± 5.08	248.0 ± 11.22	76.3 ± 4.11	189.8 ± 9.33	n = 52	[OL1] Beckman Coulter AU Series
607.7 ± 21.89	282.0 ± 14.37	659.2 ± 21.24	208.5 ± 12.75	531.8 ± 15.81	n = 42	[JJ1] Ortho Clinical Diagnostics
261.4 ± 5.25	113.1 ± 2.69	292.5 ± 6.31	86.8 ± 2.68	217.7 ± 4.73	n = 33	[R04] Roche cobas c311/c501/c502/c701/c702
260.6 ± 5.66	112.1 ± 2.81	291.4 ± 5.87	86.1 ± 2.59	217.2 ± 5.26	n = 25	[R02] Roche Hitachi and Modular D/P
265.7 ± 5.91	115.8 ± 2.53	296.4 ± 4.04	88.7 ± 1.15	222.5 ± 3.72	n = 6	[R01] Roche Integra and MIRA
260.7 ± 6.07	112.8 ± 3.00	289.1 ± 6.13	89.1 ± 2.59	219.9 ± 5.50	n = 25	[BY1] Siemens ADVIA/ADVIA Centaur
269.1 ± 8.37	115.4 ± 5.44	300.3 ± 9.18	88.6 ± 4.84	225.2 ± 7.29	n = 72	[DA5] Siemens Dimension

Summary of Participant Performance (Mean and Standard Deviation)

LDH Isoenzyme 1 (%)

Specimen: C01 -----	Specimen: C02 -----	Specimen: C03 -----	Specimen: C04 -----	Specimen: C05 -----	Number -----	[Code] Instrument or Reagent System -----
47.1 ± 1.85	31.9 ± 3.27	64.5 ± 2.29	30.9 ± 2.56	21.3 ± 2.29	n = 8	[---] All Methods - Results reported as %
46.3 ± 1.58	33.3 ± 1.58	63.9 ± 1.13	31.8 ± 2.04	22.9 ± 1.13	n = 4	<Instruments>
47.9 ± 1.68	29.8 ± 3.70	65.4 ± 2.86	29.6 ± 2.65	19.5 ± 1.93	n = 4	[HLS] Helena SPIFE
						[SEE] Sebia Electrophoresis
46.3 ± 1.58	33.3 ± 1.58	63.9 ± 1.13	31.8 ± 2.04	22.9 ± 1.13	n = 4	<Reagents>
47.9 ± 1.68	29.8 ± 3.70	65.4 ± 2.86	29.6 ± 2.65	19.5 ± 1.93	n = 4	[HL1] Helena Laboratories
						[SE1] Sebia