

New York State Department of Health - Wadsworth Center
Quantitative Urine Chemistry - Educational Proficiency Testing - 8 November 2010

Summary of Participant Performance (Mean and Standard Deviation)

Albumin

The following albumin results are summaries with all results converted to mg/L:

Specimen: U81	Specimen: U82	Specimen: U83	Specimen: U84	Specimen: U85	Number	Instrument or Reagent System
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85.8 ± 6.52	860.8 ± 65.80	706.4 ± 51.42	649.8 ± 56.02	254.6 ± 17.60	n = 181	All Methods & Instruments
						<Method Principles>
83.8 ± 5.88	842.0 ± 90.03	692.2 ± 60.45	635.2 ± 64.91	251.0 ± 17.69	n = 82	Reporting in mg/dL
87.4 ± 6.58	866.5 ± 54.22	713.1 ± 44.64	656.6 ± 46.52	257.5 ± 16.67	n = 83	Reporting in mg/L
86.9 ± 4.51	878.7 ± 49.64	727.3 ± 38.58	673.8 ± 42.62	256.0 ± 17.55	n = 16	Reporting in ug/mL
						<Instruments>
87.3 ± 3.08	833.6 ± 34.43	681.5 ± 32.60	623.4 ± 25.32	253.4 ± 16.51	n = 3	Abbott Architect
84.3 ± 4.22	848.9 ± 51.29	684.9 ± 39.06	634.1 ± 49.44	247.4 ± 8.43	n = 3	Beckman Coulter LX-20
83.7 ± 3.54	885.2 ± 37.06	715.2 ± 25.49	656.1 ± 25.62	255.3 ± 7.52	n = 8	Beckman Coulter UniCel DxC 600
82.4 ± 3.70	828.0 ± 51.30	691.6 ± 32.78	624.4 ± 29.64	246.3 ± 11.38	n = 11	Beckman Coulter UniCel DxC 800
81.4 ± 2.96	758.5 ± 136.80	639.5 ± 84.81	588.4 ± 72.84	246.4 ± 6.87	n = 30	Beckman Coulter AU Chemistry System
79.9 ± 4.35	858.3 ± 38.83	684.1 ± 27.49	617.9 ± 37.02	254.1 ± 14.14	n = 10	Ortho Vitros 5,1FS
85.6 ± 7.42	863.9 ± 81.72	706.5 ± 54.57	638.0 ± 44.47	250.8 ± 34.95	n = 11	Other
82.0 ± 3.86	849.8 ± 27.03	695.0 ± 20.70	652.5 ± 27.32	257.1 ± 7.95	n = 11	Roche cobas c501
85.1 ± 2.28	840.1 ± 52.80	696.7 ± 38.47	640.8 ± 52.07	245.7 ± 13.30	n = 5	Roche Cobas INTEGRA
86.0 ± 3.92	884.3 ± 42.84	731.6 ± 29.01	677.0 ± 28.06	257.0 ± 6.53	n = 22	Roche MODULAR D/P
86.5 ± 2.14	840.6 ± 37.39	681.0 ± 34.64	635.3 ± 34.79	243.6 ± 4.34	n = 10	Siemens ADVIA 1800
88.5 ± 2.43	824.8 ± 26.38	697.7 ± 19.93	650.7 ± 12.68	254.8 ± 6.32	n = 3	Siemens ADVIA 2400
82.9 ± 5.28	>300	>300	>300	268.9 ± 10.75	n = 3	Siemens DCA 2000
92.8 ± 1.75	874.8 ± 51.70	728.5 ± 34.47	665.8 ± 36.69	267.0 ± 21.10	n = 26	Siemens Dimension
98.5 ± 4.84	970.7 ± 59.52	789.4 ± 33.13	748.2 ± 17.04	280.0 ± 17.54	n = 13	Siemens Dimension Vista
94.3 ± 5.97	990.6 ± 97.80	771.7 ± 19.40	740.1 ± 55.77	288.5 ± 17.41	n = 3	Siemens Immulite 2000
85.6 ± 7.42	863.9 ± 81.72	706.5 ± 54.57	638.0 ± 44.47	250.8 ± 34.95	n = 11	Reagent Not Listed
						<Reagents>
82.7 ± 3.66	844.8 ± 53.84	691.3 ± 39.79	629.7 ± 40.97	247.0 ± 12.98	n = 29	Beckman Coulter
80.8 ± 1.45	826.5 ± 60.04	681.0 ± 45.57	624.3 ± 31.24	246.2 ± 6.55	n = 5	Kamiya
81.7 ± 3.30	720.8 ± 142.61	617.1 ± 81.72	572.2 ± 68.18	246.1 ± 8.79	n = 17	Beckman Coulter AU Series
79.4 ± 4.01	856.0 ± 36.72	680.8 ± 24.91	617.2 ± 31.80	252.0 ± 13.43	n = 12	Ortho Clinical Diagnostics
89.1 ± 6.96	896.6 ± 73.97	730.8 ± 43.61	674.3 ± 52.32	265.2 ± 28.96	n = 11	Other
82.0 ± 3.86	849.8 ± 27.03	695.0 ± 20.70	652.5 ± 27.32	257.1 ± 7.95	n = 11	Roche cobas c501
85.8 ± 4.21	883.8 ± 43.04	731.2 ± 30.89	675.6 ± 31.64	256.3 ± 7.40	n = 22	Roche Hitachi and Modular D/P
85.8 ± 1.40	855.8 ± 49.14	708.5 ± 34.91	656.0 ± 48.76	248.9 ± 13.42	n = 4	Roche Integra and MIRA
86.9 ± 2.36	837.1 ± 42.47	685.4 ± 38.84	639.4 ± 37.08	246.2 ± 7.45	n = 15	Siemens ADVIA
85.0 ± 6.21	>300	>300	>300	267.5 ± 7.79	n = 5	Siemens DCA
93.7 ± 3.90	904.8 ± 75.23	745.8 ± 45.17	689.4 ± 54.67	270.0 ± 21.50	n = 36	Siemens Dimension/Stratus
94.3 ± 5.97	990.6 ± 97.80	771.7 ± 19.40	740.1 ± 55.77	288.5 ± 17.41	n = 3	Siemens Immulite
89.1 ± 6.96	896.6 ± 73.97	730.8 ± 43.61	674.3 ± 52.32	265.2 ± 28.96	n = 11	Reagent Not Listed

New York State Department of Health - Wadsworth Center
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Summary of Participant Performance (Mean and Standard Deviation)

Creatinine

The following creatinine results are summaries with all results converted to mg/dL:

Specimen: U81	Specimen: U82	Specimen: U83	Specimen: U84	Specimen: U85	Number	Instrument or Reagent System
38.4 ± 2.58	162.2 ± 8.47	72.4 ± 4.73	65.5 ± 4.24	96.0 ± 5.36	n = 276	All Methods & Instruments
38.4 ± 2.57	162.2 ± 8.51	72.5 ± 4.73	65.5 ± 4.25	96.1 ± 5.36	n = 268	<Method Principles>
36.2 ± 2.04	161.4 ± 8.43	69.2 ± 2.26	64.3 ± 3.21	95.9 ± 5.40	n = 3	Reporting in mg/dL
39.2 ± 2.72	161.4 ± 4.49	73.9 ± 4.35	66.8 ± 3.45	95.6 ± 4.32	n = 3	Reporting in mmol/L
						Reporting in mg/L
						<Instruments>
37.6 ± 1.77	156.1 ± 3.74	69.8 ± 2.70	63.3 ± 2.58	91.5 ± 1.68	n = 7	Abbott Architect
39.1 ± 1.05	167.8 ± 4.85	74.4 ± 1.91	66.5 ± 1.25	97.2 ± 2.80	n = 5	Beckman Coulter CX
39.0 ± 0.51	165.3 ± 3.72	74.8 ± 1.66	67.0 ± 1.01	98.0 ± 2.02	n = 13	Beckman Coulter LX-20
40.7 ± 1.08	171.5 ± 7.70	77.5 ± 2.62	69.9 ± 2.14	101.5 ± 3.69	n = 14	Beckman Coulter UniCel DxC 600
38.9 ± 1.20	165.0 ± 3.26	73.8 ± 1.96	66.5 ± 1.71	97.7 ± 1.87	n = 20	Beckman Coulter UniCel DxC 800
42.8 ± 1.71	171.5 ± 7.15	79.5 ± 2.76	71.5 ± 2.49	101.4 ± 3.93	n = 37	Beckman Coulter AU Chemistry System
37.2 ± 1.04	155.4 ± 1.98	67.1 ± 2.68	61.4 ± 2.58	94.9 ± 1.53	n = 3	Ortho Vitros 250/350/950
37.2 ± 1.81	157.5 ± 4.87	69.0 ± 2.25	62.5 ± 2.25	95.8 ± 3.07	n = 17	Ortho Vitros 5,1FS
37.2 ± 2.89	158.4 ± 7.65	69.4 ± 5.27	62.8 ± 4.55	98.2 ± 6.99	n = 4	Other
38.7 ± 1.50	164.1 ± 4.68	72.9 ± 2.44	66.8 ± 2.24	98.7 ± 2.03	n = 19	Roche cobas c501
36.4 ± 1.14	154.5 ± 4.35	68.1 ± 1.64	61.5 ± 1.91	90.7 ± 2.09	n = 14	Roche Cobas INTEGRA
36.9 ± 1.26	156.9 ± 5.05	70.3 ± 1.79	63.3 ± 1.84	93.5 ± 2.99	n = 31	Roche MODULAR D/P
39.6 ± 2.82	166.8 ± 10.24	73.8 ± 4.40	67.9 ± 2.75	98.4 ± 5.15	n = 3	Siemens ADVIA 1650
36.7 ± 1.08	154.6 ± 3.17	68.5 ± 1.56	62.2 ± 2.09	91.5 ± 2.16	n = 12	Siemens ADVIA 1800
33.2 ± 2.33	147.8 ± 17.81	64.1 ± 6.78	59.4 ± 5.16	82.5 ± 6.63	n = 3	Siemens ADVIA 2400
38.9 ± 2.12	169.5 ± 9.09	81.4 ± 6.67	70.2 ± 2.99	102.8 ± 3.06	n = 3	Siemens DCA 2000
37.9 ± 2.26	162.8 ± 7.90	71.9 ± 3.69	64.7 ± 3.19	95.4 ± 5.36	n = 47	Siemens Dimension
37.3 ± 1.37	158.9 ± 4.36	69.9 ± 2.03	62.8 ± 2.00	90.3 ± 2.60	n = 14	Siemens Dimension Vista
37.2 ± 2.89	158.4 ± 7.65	69.4 ± 5.27	62.8 ± 4.55	98.2 ± 6.99	n = 4	Reagent Not Listed
						<Reagents>
37.3 ± 1.43	154.0 ± 4.78	68.8 ± 2.40	62.3 ± 2.26	90.8 ± 2.22	n = 7	Abbott
39.6 ± 1.43	167.1 ± 5.76	75.3 ± 2.70	67.8 ± 2.39	98.8 ± 3.06	n = 53	Beckman Coulter
42.9 ± 1.27	172.6 ± 6.74	79.7 ± 2.17	71.7 ± 2.02	101.9 ± 3.54	n = 30	Beckman Coulter AU Series
37.1 ± 1.67	156.7 ± 4.62	68.6 ± 2.36	62.2 ± 2.33	95.4 ± 2.96	n = 22	Ortho Clinical Diagnostics
38.4 ± 2.40	160.3 ± 7.48	71.5 ± 4.49	64.2 ± 4.69	92.0 ± 4.41	n = 7	Other
38.7 ± 1.50	164.1 ± 4.68	72.9 ± 2.44	66.8 ± 2.24	98.7 ± 2.03	n = 19	Roche cobas c501
36.9 ± 1.23	157.0 ± 4.94	70.3 ± 1.75	63.3 ± 1.83	93.4 ± 2.99	n = 32	Roche Hitachi and Modular D/P
36.3 ± 1.27	154.6 ± 4.57	67.9 ± 1.74	61.5 ± 2.12	90.7 ± 2.40	n = 12	Roche Integra and MIRA
36.3 ± 2.03	155.1 ± 5.87	68.5 ± 2.58	62.2 ± 3.72	90.9 ± 4.79	n = 20	Siemens ADVIA
39.7 ± 1.82	169.9 ± 7.14	79.0 ± 6.07	68.9 ± 2.59	100.1 ± 4.01	n = 5	Siemens DCA
37.8 ± 2.15	162.1 ± 7.52	71.5 ± 3.46	64.5 ± 3.05	94.3 ± 5.36	n = 58	Siemens Dimension/Stratus
38.4 ± 2.40	160.3 ± 7.48	71.5 ± 4.49	64.2 ± 4.69	92.0 ± 4.41	n = 7	Reagent Not Listed

New York State Department of Health - Wadsworth Center
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Summary of Participant Performance (Mean and Standard Deviation)

Albumin-Creatinine Ratio

The following albumin-creatinine ratio results are summaries with all results converted µg/mg:

Specimen: U81	Specimen: U82	Specimen: U83	Specimen: U84	Specimen: U85	Number	Instrument or Reagent System
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224.7 ± 28.30	531.7 ± 59.67	978.7 ± 105.61	993.9 ± 126.91	266.2 ± 27.50	n = 155	All Methods & Instruments
228.4 ± 26.91	539.5 ± 44.34	994.0 ± 87.01	1007.8 ± 109.83	268.5 ± 26.18	n = 99	<Method Principles>
220.2 ± 29.74	526.1 ± 69.48	964.7 ± 119.35	989.9 ± 134.68	264.7 ± 30.55	n = 45	Reporting in mg/g
146.6 ± 100.71	253.4 ± 234.11	603.3 ± 428.41	622.6 ± 437.51	180.2 ± 123.80	n = 9	Reporting in ug/mg
						Other
220.4 ± 26.77	420.1 ± 164.74	738.4 ± 313.46	778.7 ± 317.76	268.1 ± 23.52	n = 23	<Instruments>
182.8 ± 96.70	363.9 ± 248.93	684.6 ± 470.16	645.0 ± 449.06	223.3 ± 135.53	n = 8	Clinical Analyzer calculation
						Manual Calculation
201.5 ± 33.74	509.0 ± 40.99	912.0 ± 105.83	936.2 ± 68.88	250.0 ± 27.32	n = 3	<Reagents>
201.5 ± 33.74	509.0 ± 40.99	912.0 ± 105.83	936.2 ± 68.88	250.0 ± 27.32	n = 3	Other
226.1 ± 27.89	534.4 ± 57.21	986.2 ± 102.13	1003.2 ± 120.10	266.5 ± 28.02	n = 121	Reagent Not Listed
220.4 ± 26.77	420.1 ± 164.74	738.4 ± 313.46	778.7 ± 317.76	268.1 ± 23.52	n = 23	Lab Information System
182.8 ± 96.70	363.9 ± 248.93	684.6 ± 470.16	645.0 ± 449.06	223.3 ± 135.53	n = 8	Clinical Analyzer calculation
						Manual Calculation

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Summary of Participant Performance (Mean and Standard Deviation)

alpha-Amylase (U/L)

Specimen: U81	Specimen: U82	Specimen: U83	Specimen: U84	Specimen: U85	Number	Instrument or Reagent System
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5.5 ± 2.55	9.1 ± 7.43	3.3 ± 1.65	108.4 ± 39.44	2.4 ± 2.02	n = 141	All Methods & Instruments
<Method Principles>						
5.7 ± 2.47	8.9 ± 6.19	3.0 ± 1.42	131.8 ± 20.63	1.6 ± 1.12	n = 36	Chromogenic (p-nitrophenyl substrat
6.0 ± 2.41	9.0 ± 5.36	2.4 ± 0.90	115.6 ± 6.62	1.3 ± 1.09	n = 20	Chromogenic (blocked/protected subs
5.0 ± 1.05	5.0 ± 0.00	5.0 ± 0.00	45.5 ± 1.64	5.0 ± 0.00	n = 28	Enz./saccharogenic (maltose phospho
<30	<30	<30	58.9 ± 4.70	<30	n = 12	Chromogenic (Drimarene red/amylopec
4.7 ± 2.84	8.6 ± 5.90	3.5 ± 2.94	131.8 ± 18.71	1.8 ± 1.00	n = 31	Enzymatic/CNPG3
6.9 ± 2.65	10.5 ± 5.80	3.3 ± 1.20	113.1 ± 10.44	2.3 ± 1.80	n = 11	Other
<Instruments>						
3.0 ± 0.00	8.8 ± 6.46	3.0 ± 0.00	128.6 ± 2.05	3.0 ± 0.00	n = 5	Abbott Architect
5.0 ± 0.00	5.0 ± 0.00	5.0 ± 0.00	46.0 ± 0.90	5.0 ± 0.00	n = 3	Beckman Coulter CX
5.0 ± 0.00	5.0 ± 0.00	5.0 ± 0.00	44.7 ± 1.91	5.0 ± 0.00	n = 8	Beckman Coulter LX-20
5.0 ± 0.00	4.2 ± 1.54	5.0 ± 0.00	45.7 ± 2.26	5.0 ± 0.00	n = 3	Beckman Coulter UniCel DxC 600
6.6 ± 3.13	6.6 ± 2.97	4.7 ± 1.35	72.0 ± 42.00	5.0 ± 0.00	n = 14	Beckman Coulter UniCel DxC 800
9.2 ± 2.37	9.8 ± 4.94	7.2 ± 4.45	114.3 ± 7.81	7.5 ± 4.41	n = 11	Beckman Coulter AU Chemistry System
<30	<30	<30	56.7 ± 2.78	<30	n = 13	Ortho Vitros 5,1FS
7.8 ± 1.53	3.9 ± 1.73	2.7 ± 0.74	108.8 ± 1.67	1.8 ± 1.36	n = 9	Roche cobas c501
8.9 ± 0.90	9.7 ± 4.13	14.6 ± 30.55	109.3 ± 3.97	1.8 ± 1.34	n = 4	Roche Cobas INTEGRA
7.0 ± 1.49	10.4 ± 6.01	3.5 ± 0.90	110.1 ± 1.90	2.6 ± 1.34	n = 17	Roche MODULAR D/P
6.0 ± 1.25	9.5 ± 1.74	2.0 ± 0.91	120.4 ± 2.99	0.8 ± 0.41	n = 8	Siemens ADVIA 1800
4.0 ± 0.90	9.1 ± 5.72	2.3 ± 0.51	110.3 ± 1.37	1.0 ± 0.90	n = 3	Siemens ADVIA 2400
3.7 ± 1.62	8.6 ± 6.36	2.6 ± 1.18	147.4 ± 3.04	1.1 ± 0.59	n = 27	Siemens Dimension
3.8 ± 1.34	8.0 ± 6.49	2.0 ± 0.00	142.9 ± 4.12	2.0 ± 0.00	n = 11	Siemens Dimension Vista
<Reagents>						
3.0 ± 0.00	8.8 ± 6.46	3.0 ± 0.00	128.6 ± 2.05	3.0 ± 0.00	n = 5	Abbott
5.3 ± 1.74	5.0 ± 0.00	5.0 ± 0.00	56.8 ± 31.37	5.0 ± 0.00	n = 29	Beckman Coulter
10.0 ± 0.00	10.9 ± 3.67	8.7 ± 3.46	113.3 ± 6.41	10.0 ± 0.00	n = 9	Beckman Coulter AU Series
<30	<30	<30	58.0 ± 4.31	<30	n = 15	Ortho Clinical Diagnostics
7.8 ± 1.53	3.9 ± 1.73	2.7 ± 0.74	108.8 ± 1.67	1.8 ± 1.36	n = 9	Roche cobas c501
6.9 ± 1.61	10.7 ± 5.90	3.5 ± 0.88	110.0 ± 1.82	2.6 ± 1.29	n = 18	Roche Hitachi and Modular D/P
8.9 ± 0.90	9.7 ± 4.13	14.6 ± 30.55	109.3 ± 3.97	1.8 ± 1.34	n = 4	Roche Integra and MIRA
5.4 ± 1.41	8.4 ± 4.45	2.2 ± 0.79	116.6 ± 5.65	0.8 ± 0.59	n = 13	Siemens ADVIA
3.7 ± 1.61	8.9 ± 6.36	2.4 ± 1.06	146.5 ± 3.63	1.4 ± 0.67	n = 36	Siemens Dimension/Stratus

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Summary of Participant Performance (Mean and Standard Deviation)

Calcium (mg/dL)

Specimen: U81	Specimen: U82	Specimen: U83	Specimen: U84	Specimen: U85	Number	Instrument or Reagent System
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3.19 ± 1.03	6.78 ± 0.27	10.25 ± 0.38	9.73 ± 0.34	5.50 ± 0.48	n = 174	All Methods & Instruments
						<Method Principles>
3.90 ± 0.95	6.78 ± 0.29	10.35 ± 0.33	9.84 ± 0.30	5.61 ± 0.43	n = 83	o-Cresolphthalein
3.00 ± 0.30	6.75 ± 0.29	10.24 ± 0.46	9.66 ± 0.34	5.61 ± 0.47	n = 50	Arsenazo dye
1.89 ± 0.19	6.81 ± 0.19	10.01 ± 0.15	9.58 ± 0.28	5.11 ± 0.24	n = 34	Ion selective electrode
3.31 ± 0.30	6.86 ± 0.24	10.30 ± 0.53	9.80 ± 0.46	5.50 ± 0.48	n = 6	Other
						<Instruments>
2.98 ± 0.16	6.44 ± 0.19	9.70 ± 0.08	9.20 ± 0.11	5.51 ± 0.22	n = 5	Abbott Architect
2.29 ± 0.40	6.34 ± 0.26	9.85 ± 0.42	9.10 ± 0.40	5.37 ± 0.53	n = 4	Beckman Coulter CX
1.86 ± 0.20	6.87 ± 0.14	10.28 ± 0.26	9.80 ± 0.20	5.19 ± 0.25	n = 9	Beckman Coulter LX-20
1.98 ± 0.04	6.71 ± 0.14	10.02 ± 0.08	9.49 ± 0.13	5.21 ± 0.13	n = 5	Beckman Coulter UniCel DxC 600
1.86 ± 0.18	6.84 ± 0.12	9.97 ± 0.10	9.55 ± 0.17	5.04 ± 0.20	n = 17	Beckman Coulter UniCel DxC 800
3.26 ± 0.10	6.61 ± 0.20	10.19 ± 0.31	9.59 ± 0.24	5.76 ± 0.45	n = 17	Beckman Coulter AU Chemistry System
2.76 ± 0.21	6.95 ± 0.19	10.56 ± 0.44	9.86 ± 0.27	5.42 ± 0.48	n = 13	Ortho Vitros 5,1FS
3.04 ± 0.27	6.70 ± 0.29	10.44 ± 0.59	9.80 ± 0.35	5.41 ± 0.45	n = 11	Roche cobas c501
3.53 ± 0.15	6.79 ± 0.27	10.65 ± 0.22	10.17 ± 0.35	5.21 ± 0.18	n = 8	Roche Cobas INTEGRA
3.27 ± 0.21	6.55 ± 0.35	10.24 ± 0.29	9.67 ± 0.39	5.46 ± 0.42	n = 22	Roche MODULAR D/P
3.28 ± 0.22	6.81 ± 0.31	10.22 ± 0.12	9.72 ± 0.26	5.68 ± 0.38	n = 11	Siemens ADVIA 1800
3.01 ± 0.23	6.72 ± 0.32	10.13 ± 0.25	9.48 ± 0.35	5.83 ± 0.67	n = 3	Siemens ADVIA 2400
4.74 ± 0.57	6.92 ± 0.11	10.39 ± 0.29	9.91 ± 0.21	5.82 ± 0.32	n = 30	Siemens Dimension
5.00 ± 0.00	6.94 ± 0.24	10.31 ± 0.36	9.83 ± 0.22	5.78 ± 0.42	n = 11	Siemens Dimension Vista
						<Reagents>
2.98 ± 0.16	6.44 ± 0.19	9.70 ± 0.08	9.20 ± 0.11	5.51 ± 0.22	n = 5	Abbott
1.88 ± 0.19	6.82 ± 0.17	10.01 ± 0.16	9.57 ± 0.28	5.11 ± 0.26	n = 34	Beckman Coulter
3.26 ± 0.10	6.64 ± 0.16	10.21 ± 0.27	9.60 ± 0.21	5.81 ± 0.42	n = 16	Beckman Coulter AU Series
2.75 ± 0.19	6.94 ± 0.17	10.53 ± 0.43	9.85 ± 0.26	5.36 ± 0.53	n = 15	Ortho Clinical Diagnostics
3.08 ± 1.42	7.15 ± 0.27	10.10 ± 0.72	9.85 ± 0.54	5.70 ± 0.36	n = 3	Other
3.13 ± 0.21	6.75 ± 0.31	10.60 ± 0.47	9.89 ± 0.33	5.45 ± 0.51	n = 9	Roche cobas c501
3.27 ± 0.20	6.57 ± 0.34	10.24 ± 0.28	9.69 ± 0.39	5.43 ± 0.43	n = 23	Roche Hitachi and Modular D/P
3.53 ± 0.15	6.79 ± 0.27	10.65 ± 0.22	10.17 ± 0.35	5.21 ± 0.18	n = 8	Roche Integra and MIRA
3.24 ± 0.26	6.78 ± 0.33	10.23 ± 0.14	9.69 ± 0.27	5.72 ± 0.49	n = 17	Siemens ADVIA
4.91 ± 0.42	6.92 ± 0.13	10.37 ± 0.29	9.88 ± 0.21	5.82 ± 0.34	n = 39	Siemens Dimension/Stratus
3.08 ± 1.42	7.15 ± 0.27	10.10 ± 0.72	9.85 ± 0.54	5.70 ± 0.36	n = 3	Reagent Not Listed

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Summary of Participant Performance (Mean and Standard Deviation)

Chloride (mmol/L)

Specimen: U81 -----	Specimen: U82 -----	Specimen: U83 -----	Specimen: U84 -----	Specimen: U85 -----	Number -----	Instrument or Reagent System -----
233.31 ± 6.73	71.01 ± 4.03	144.91 ± 3.83	132.04 ± 3.79	92.54 ± 5.96	n = 193	All Methods & Instruments
						<Method Principles>
233.41 ± 6.69	71.00 ± 3.90	144.98 ± 3.84	132.06 ± 3.78	92.71 ± 6.17	n = 169	Ion selective electrode (diluted)
232.68 ± 6.49	71.08 ± 5.08	144.42 ± 3.54	131.91 ± 3.77	91.66 ± 4.60	n = 22	Ion selective electrode (undiluted)
						<Instruments>
234.42 ± 4.32	71.00 ± 0.00	144.77 ± 2.28	131.71 ± 1.99	91.00 ± 0.00	n = 5	Abbott Architect
224.45 ± 6.10	71.87 ± 1.13	143.31 ± 2.69	132.21 ± 1.96	93.79 ± 1.96	n = 4	Beckman Coulter CX
228.57 ± 5.75	70.24 ± 1.54	143.50 ± 3.04	131.45 ± 2.73	92.36 ± 2.43	n = 13	Beckman Coulter LX-20
229.18 ± 6.56	70.14 ± 0.88	143.25 ± 1.99	130.60 ± 1.82	91.99 ± 1.45	n = 11	Beckman Coulter UniCel DxC 600
230.84 ± 5.08	70.21 ± 1.11	144.11 ± 2.06	131.76 ± 2.06	92.44 ± 1.28	n = 19	Beckman Coulter UniCel DxC 800
235.40 ± 3.01	72.05 ± 0.88	147.00 ± 1.91	133.55 ± 1.64	91.67 ± 0.72	n = 19	Beckman Coulter AU Chemistry System
213.51 ± 27.40	71.72 ± 0.51	143.74 ± 2.26	131.74 ± 2.26	93.16 ± 1.54	n = 3	Ortho Vitros 5,1FS
232.52 ± 5.17	63.22 ± 1.49	140.07 ± 1.84	126.08 ± 1.57	83.88 ± 1.57	n = 12	Roche cobas c501
226.12 ± 3.67	67.26 ± 0.80	140.37 ± 1.94	128.49 ± 1.86	89.14 ± 2.10	n = 9	Roche Cobas INTEGRA
237.83 ± 2.52	66.37 ± 1.36	142.47 ± 1.32	128.56 ± 1.65	86.43 ± 1.39	n = 24	Roche MODULAR D/P
229.71 ± 2.06	71.00 ± 0.00	143.99 ± 1.19	131.23 ± 1.38	92.42 ± 0.81	n = 12	Siemens ADVIA 1800
228.22 ± 5.00	70.56 ± 1.02	143.00 ± 2.70	130.26 ± 2.26	91.74 ± 1.37	n = 3	Siemens ADVIA 2400
238.52 ± 8.05	77.30 ± 2.50	149.91 ± 3.19	136.77 ± 2.64	106.96 ± 7.97	n = 21	Siemens Dimension
236.59 ± 6.50	75.89 ± 3.00	149.32 ± 2.49	136.21 ± 2.45	104.65 ± 6.45	n = 21	Siemens Dimension QuikLYTE
237.56 ± 2.28	71.96 ± 1.01	147.94 ± 1.56	135.00 ± 1.05	97.14 ± 1.10	n = 12	Siemens Dimension Vista
						<Reagents>
234.42 ± 4.32	71.00 ± 0.00	144.77 ± 2.28	131.71 ± 1.99	91.00 ± 0.00	n = 5	Abbott
229.47 ± 5.95	70.34 ± 1.36	143.66 ± 2.39	131.44 ± 2.27	92.41 ± 1.65	n = 46	Beckman Coulter
235.42 ± 2.90	72.05 ± 0.93	147.15 ± 1.72	133.68 ± 1.58	91.72 ± 0.71	n = 18	Beckman Coulter AU Series
219.63 ± 21.63	71.97 ± 0.68	144.40 ± 2.09	132.01 ± 1.89	93.41 ± 1.21	n = 4	Ortho Clinical Diagnostics
236.69 ± 0.90	71.70 ± 0.82	146.84 ± 1.27	134.70 ± 0.82	95.47 ± 2.17	n = 4	Other
232.52 ± 5.17	63.22 ± 1.49	140.07 ± 1.84	126.08 ± 1.57	83.88 ± 1.57	n = 12	Roche cobas c501
237.83 ± 2.52	66.37 ± 1.36	142.47 ± 1.32	128.56 ± 1.65	86.43 ± 1.39	n = 24	Roche Hitachi and Modular D/P
226.12 ± 3.67	67.26 ± 0.80	140.37 ± 1.94	128.49 ± 1.86	89.14 ± 2.10	n = 9	Roche Integra and MIRA
229.51 ± 2.82	71.05 ± 0.69	143.96 ± 1.36	131.21 ± 1.49	92.29 ± 1.06	n = 18	Siemens ADVIA
237.48 ± 6.90	75.80 ± 3.19	149.28 ± 2.68	136.17 ± 2.41	103.89 ± 7.43	n = 51	Siemens Dimension/Stratus
236.69 ± 0.90	71.70 ± 0.82	146.84 ± 1.27	134.70 ± 0.82	95.47 ± 2.17	n = 4	Reagent Not Listed

New York State Department of Health - Wadsworth Center
Quantitative Urine Chemistry - Educational Proficiency Testing - 8 November 2010

Summary of Participant Performance (Mean and Standard Deviation)

Glucose (mg/dL)

Specimen: U81	Specimen: U82	Specimen: U83	Specimen: U84	Specimen: U85	Number	Instrument or Reagent System
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1.3 ± 1.48	480.0 ± 16.81	244.2 ± 7.17	222.1 ± 7.41	24.9 ± 1.33	n = 127	All Methods & Instruments
						<Method Principles>
0.9 ± 1.06	479.7 ± 13.70	244.0 ± 5.75	222.4 ± 6.58	24.8 ± 1.05	n = 69	Hexokinase, UV
1.2 ± 1.53	474.4 ± 17.54	242.6 ± 6.60	220.0 ± 6.87	24.6 ± 1.24	n = 31	Hexokinase, colorimetric
<20	502.2 ± 12.89	257.5 ± 8.92	231.8 ± 7.98	27.7 ± 1.71	n = 15	Glucose oxidase, colorimetric
3.1 ± 1.01	477.2 ± 7.45	241.5 ± 5.97	217.3 ± 5.32	24.6 ± 0.94	n = 7	Glucose oxidase, O2 electrode
						<Instruments>
1.0 ± 0.00	498.7 ± 7.52	248.3 ± 2.47	225.0 ± 2.45	24.2 ± 0.41	n = 4	Abbott Architect
4.6 ± 0.74	478.2 ± 4.64	242.5 ± 4.33	218.1 ± 4.67	24.6 ± 0.94	n = 7	Beckman Coulter LX-20
3.1 ± 1.13	482.6 ± 6.10	241.2 ± 2.11	219.4 ± 2.31	24.8 ± 0.41	n = 4	Beckman Coulter UniCel DxC 600
3.6 ± 0.79	470.7 ± 9.49	242.4 ± 4.29	218.6 ± 5.30	24.6 ± 0.55	n = 6	Beckman Coulter UniCel DxC 800
5.0 ± 5.70	473.5 ± 4.69	242.3 ± 3.01	220.9 ± 2.89	25.0 ± 0.00	n = 12	Beckman Coulter AU Chemistry System
<20	506.6 ± 10.22	261.3 ± 5.68	234.8 ± 6.66	28.3 ± 1.27	n = 11	Ortho Vitros 5,1FS
1.4 ± 1.05	481.1 ± 11.74	245.3 ± 5.74	220.8 ± 8.48	25.5 ± 0.78	n = 11	Roche cobas c501
1.4 ± 1.85	466.7 ± 13.81	239.3 ± 7.98	216.1 ± 6.24	24.6 ± 0.70	n = 6	Roche Cobas INTEGRA
1.6 ± 0.79	487.0 ± 8.86	247.7 ± 4.10	226.6 ± 4.21	25.5 ± 0.77	n = 20	Roche MODULAR D/P
0.6 ± 0.56	481.4 ± 9.71	245.3 ± 4.77	222.0 ± 7.86	24.9 ± 0.60	n = 8	Siemens ADVIA 1800
6.0 ± 10.00	495.2 ± 4.11	250.5 ± 3.63	227.8 ± 3.23	25.3 ± 0.51	n = 3	Siemens ADVIA 2400
0.3 ± 0.53	472.6 ± 10.54	241.6 ± 4.40	221.0 ± 4.92	23.6 ± 1.01	n = 18	Siemens Dimension
1.0 ± 0.00	454.6 ± 13.30	235.5 ± 5.82	214.5 ± 6.14	23.2 ± 0.61	n = 10	Siemens Dimension Vista
						<Reagents>
1.0 ± 0.00	498.7 ± 7.52	248.3 ± 2.47	225.0 ± 2.45	24.2 ± 0.41	n = 4	Abbott
3.6 ± 1.54	476.8 ± 10.40	241.5 ± 4.12	218.4 ± 4.99	24.7 ± 0.75	n = 19	Beckman Coulter
6.3 ± 5.50	473.1 ± 4.91	242.7 ± 3.48	220.6 ± 2.71	25.0 ± 0.00	n = 10	Beckman Coulter AU Series
<20	504.9 ± 10.49	259.9 ± 6.80	233.5 ± 6.85	28.0 ± 1.39	n = 13	Ortho Clinical Diagnostics
1.3 ± 0.51	466.5 ± 6.53	238.3 ± 1.29	218.7 ± 5.29	23.9 ± 0.10	n = 3	Other
1.4 ± 1.05	481.1 ± 11.74	245.3 ± 5.74	220.8 ± 8.48	25.5 ± 0.78	n = 11	Roche cobas c501
1.6 ± 0.79	487.0 ± 8.86	247.7 ± 4.10	226.6 ± 4.21	25.5 ± 0.77	n = 20	Roche Hitachi and Modular D/P
1.4 ± 1.85	466.7 ± 13.81	239.3 ± 7.98	216.1 ± 6.24	24.6 ± 0.70	n = 6	Roche Integra and MIRA
0.4 ± 0.57	488.0 ± 11.34	247.8 ± 5.20	225.8 ± 5.87	25.2 ± 0.69	n = 13	Siemens ADVIA
0.6 ± 0.57	466.6 ± 15.88	239.7 ± 5.77	218.6 ± 6.34	23.4 ± 0.91	n = 26	Siemens Dimension/Stratus
1.3 ± 0.51	466.5 ± 6.53	238.3 ± 1.29	218.7 ± 5.29	23.9 ± 0.10	n = 3	Reagent Not Listed

New York State Department of Health - Wadsworth Center
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Summary of Participant Performance (Mean and Standard Deviation)

Magnesium (mg/dL)

Specimen: U81	Specimen: U82	Specimen: U83	Specimen: U84	Specimen: U85	Number	Instrument or Reagent System
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13.61 ± 0.54	4.01 ± 0.30	7.86 ± 0.34	7.24 ± 0.36	4.76 ± 0.27	n = 121	All Methods & Instruments
						<Method Principles>
14.11 ± 0.54	4.09 ± 0.24	8.05 ± 0.32	7.45 ± 0.38	4.85 ± 0.27	n = 27	Calmagite
13.55 ± 0.48	4.11 ± 0.28	7.96 ± 0.30	7.33 ± 0.27	4.83 ± 0.30	n = 27	Methylthymol blue
13.55 ± 0.37	3.99 ± 0.22	7.76 ± 0.24	7.16 ± 0.26	4.73 ± 0.21	n = 41	Xylidyl blue (Magon)
13.05 ± 0.65	3.40 ± 0.22	7.92 ± 0.48	7.12 ± 0.43	3.10 ± 0.49	n = 6	Formazon dye
13.27 ± 0.46	3.97 ± 0.34	7.70 ± 0.28	7.04 ± 0.31	4.73 ± 0.24	n = 14	Chlorophosphonazo III
10.62 ± 0.59	3.20 ± 0.64	6.46 ± 0.62	5.77 ± 0.42	3.75 ± 0.54	n = 3	Arsenazo dye
						<Instruments>
13.73 ± 0.32	3.84 ± 0.10	7.76 ± 0.10	6.97 ± 0.05	4.60 ± 0.09	n = 3	Beckman Coulter CX
14.37 ± 0.64	4.22 ± 0.34	8.10 ± 0.32	7.45 ± 0.32	4.88 ± 0.25	n = 5	Beckman Coulter LX-20
14.15 ± 0.53	4.09 ± 0.23	8.09 ± 0.38	7.50 ± 0.39	4.84 ± 0.28	n = 15	Beckman Coulter UniCel DxC 800
13.63 ± 0.50	3.94 ± 0.07	7.76 ± 0.13	7.12 ± 0.15	4.67 ± 0.10	n = 8	Beckman Coulter AU Chemistry System
13.05 ± 0.65	3.40 ± 0.22	7.92 ± 0.48	7.12 ± 0.43	3.10 ± 0.49	n = 6	Ortho Vitros 5,1FS
13.10 ± 0.35	3.78 ± 0.19	7.60 ± 0.23	6.99 ± 0.21	4.66 ± 0.22	n = 9	Roche cobas c501
13.51 ± 0.42	4.27 ± 0.28	7.88 ± 0.25	7.20 ± 0.37	4.83 ± 0.20	n = 6	Roche Cobas INTEGRA
13.50 ± 0.27	4.02 ± 0.28	7.75 ± 0.27	7.19 ± 0.30	4.78 ± 0.26	n = 19	Roche MODULAR D/P
13.70 ± 0.41	4.00 ± 0.22	7.77 ± 0.26	7.12 ± 0.28	4.70 ± 0.20	n = 9	Siemens ADVIA 1800
13.69 ± 0.09	4.14 ± 0.10	7.98 ± 0.24	7.26 ± 0.10	4.94 ± 0.05	n = 3	Siemens ADVIA 2400
13.41 ± 0.42	4.00 ± 0.06	7.89 ± 0.22	7.27 ± 0.13	4.68 ± 0.15	n = 18	Siemens Dimension
13.93 ± 0.40	4.43 ± 0.17	8.27 ± 0.34	7.70 ± 0.30	5.14 ± 0.19	n = 9	Siemens Dimension Vista
						<Reagents>
14.16 ± 0.54	4.08 ± 0.24	8.05 ± 0.34	7.45 ± 0.40	4.84 ± 0.28	n = 25	Beckman Coulter
13.63 ± 0.50	3.94 ± 0.06	7.76 ± 0.13	7.12 ± 0.15	4.67 ± 0.10	n = 7	Beckman Coulter AU Series
13.05 ± 0.65	3.40 ± 0.22	7.92 ± 0.48	7.12 ± 0.43	3.10 ± 0.49	n = 6	Ortho Clinical Diagnostics
13.10 ± 0.35	3.78 ± 0.19	7.60 ± 0.23	6.99 ± 0.21	4.66 ± 0.22	n = 9	Roche cobas c501
13.51 ± 0.25	4.01 ± 0.27	7.75 ± 0.25	7.21 ± 0.31	4.77 ± 0.25	n = 20	Roche Hitachi and Modular D/P
13.51 ± 0.42	4.27 ± 0.28	7.88 ± 0.25	7.20 ± 0.37	4.83 ± 0.20	n = 6	Roche Integra and MIRA
13.68 ± 0.31	4.02 ± 0.19	7.78 ± 0.28	7.13 ± 0.23	4.74 ± 0.21	n = 15	Siemens ADVIA
13.54 ± 0.47	4.11 ± 0.27	7.96 ± 0.27	7.34 ± 0.24	4.83 ± 0.30	n = 26	Siemens Dimension/Stratus

New York State Department of Health - Wadsworth Center
Quantitative Urine Chemistry - Educational Proficiency Testing - 8 November 2010

Summary of Participant Performance (Mean and Standard Deviation)

Sodium (mmol/L)

Specimen: U81	Specimen: U82	Specimen: U83	Specimen: U84	Specimen: U85	Number	Instrument or Reagent System
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239.2 ± 11.88	68.2 ± 1.82	143.3 ± 3.62	130.8 ± 3.02	106.8 ± 3.76	n = 219	All Methods & Instruments
						<Method Principles>
238.0 ± 11.54	68.1 ± 1.67	143.0 ± 3.37	130.6 ± 2.84	106.7 ± 3.69	n = 182	Ion selective electrode (diluted)
246.8 ± 9.77	68.3 ± 2.68	146.0 ± 4.99	132.8 ± 4.30	107.7 ± 3.97	n = 34	Ion selective electrode (undiluted)
235.4 ± 14.60	68.5 ± 1.86	142.4 ± 3.87	129.7 ± 3.37	104.4 ± 7.44	n = 3	Other
						<Instruments>
241.4 ± 1.89	64.8 ± 0.80	140.2 ± 1.78	127.5 ± 1.80	106.3 ± 1.61	n = 5	Abbott Architect
243.1 ± 6.88	68.6 ± 1.52	145.1 ± 2.74	132.2 ± 2.32	110.7 ± 2.61	n = 5	Beckman Coulter CX
241.4 ± 5.04	68.1 ± 1.11	144.2 ± 2.31	131.8 ± 1.99	108.2 ± 2.11	n = 13	Beckman Coulter LX-20
237.0 ± 2.97	69.1 ± 1.46	142.5 ± 1.44	130.4 ± 1.29	106.8 ± 2.15	n = 12	Beckman Coulter UniCel DxC 600
236.7 ± 3.09	69.0 ± 1.14	143.6 ± 1.42	131.0 ± 1.73	107.3 ± 1.50	n = 20	Beckman Coulter UniCel DxC 800
250.7 ± 2.78	68.2 ± 0.81	145.5 ± 1.20	132.7 ± 0.94	109.4 ± 0.91	n = 21	Beckman Coulter AU Chemistry System
250.6 ± 5.93	68.1 ± 3.09	148.9 ± 4.81	135.1 ± 4.45	107.7 ± 3.90	n = 17	Ortho Vitros 5,1FS
243.2 ± 2.51	66.4 ± 1.68	143.9 ± 1.55	130.9 ± 1.28	107.7 ± 1.33	n = 13	Roche cobas c501
238.3 ± 2.26	72.0 ± 1.98	145.8 ± 2.48	133.2 ± 1.42	108.7 ± 1.99	n = 9	Roche Cobas INTEGRA
246.2 ± 2.81	67.5 ± 1.71	144.8 ± 1.69	131.7 ± 1.94	107.7 ± 1.73	n = 25	Roche MODULAR D/P
246.6 ± 2.67	68.0 ± 0.00	145.9 ± 1.18	132.6 ± 1.12	109.2 ± 0.63	n = 12	Siemens ADVIA 1800
244.4 ± 4.72	66.7 ± 0.51	143.7 ± 1.37	131.4 ± 1.02	108.0 ± 0.00	n = 3	Siemens ADVIA 2400
224.4 ± 4.02	68.4 ± 1.39	139.5 ± 1.79	127.9 ± 1.77	101.6 ± 1.18	n = 21	Siemens Dimension
224.0 ± 2.89	68.4 ± 1.15	139.5 ± 1.66	127.8 ± 1.55	102.2 ± 1.27	n = 25	Siemens Dimension QuikLYTE
216.7 ± 2.11	66.7 ± 1.08	136.5 ± 1.29	124.5 ± 1.88	92.8 ± 2.45	n = 12	Siemens Dimension Vista
						<Reagents>
241.4 ± 1.89	64.8 ± 0.80	140.2 ± 1.78	127.5 ± 1.80	106.3 ± 1.61	n = 5	Abbott
237.9 ± 4.16	68.7 ± 1.34	143.5 ± 1.89	131.1 ± 1.76	107.5 ± 2.20	n = 48	Beckman Coulter
250.8 ± 2.89	68.2 ± 0.80	145.5 ± 1.24	132.8 ± 0.94	109.4 ± 0.81	n = 20	Beckman Coulter AU Series
250.7 ± 5.57	68.6 ± 3.27	149.7 ± 5.04	135.9 ± 4.77	108.4 ± 4.21	n = 19	Ortho Clinical Diagnostics
222.2 ± 12.95	67.1 ± 1.13	137.8 ± 3.80	127.3 ± 4.21	96.0 ± 7.61	n = 4	Other
243.2 ± 2.51	66.4 ± 1.68	143.9 ± 1.55	130.9 ± 1.28	107.7 ± 1.33	n = 13	Roche cobas c501
246.2 ± 2.81	67.5 ± 1.71	144.8 ± 1.69	131.7 ± 1.94	107.7 ± 1.73	n = 25	Roche Hitachi and Modular D/P
238.3 ± 2.26	72.0 ± 1.98	145.8 ± 2.48	133.2 ± 1.42	108.7 ± 1.99	n = 9	Roche Integra and MIRA
246.0 ± 3.08	68.1 ± 0.78	145.4 ± 1.34	132.4 ± 1.23	109.3 ± 1.18	n = 18	Siemens ADVIA
223.2 ± 4.52	68.2 ± 1.44	139.1 ± 2.05	127.4 ± 2.12	101.9 ± 1.29	n = 55	Siemens Dimension/Stratus
222.2 ± 12.95	67.1 ± 1.13	137.8 ± 3.80	127.3 ± 4.21	96.0 ± 7.61	n = 4	Reagent Not Listed

New York State Department of Health - Wadsworth Center
Quantitative Urine Chemistry - Educational Proficiency Testing - 8 November 2010

Summary of Participant Performance (Mean and Standard Deviation)

Phosphorus (mg/dL)

Specimen: U81 -----	Specimen: U82 -----	Specimen: U83 -----	Specimen: U84 -----	Specimen: U85 -----	Number -----	Instrument or Reagent System -----
181.71 ± 9.75	47.81 ± 2.30	83.24 ± 3.73	76.09 ± 3.81	146.47 ± 8.22	n = 157	All Methods & Instruments
<Method Principles>						
178.90 ± 6.85	47.03 ± 1.75	81.96 ± 2.97	74.87 ± 3.08	144.09 ± 4.91	n = 80	Phosphomolybdate - no reduction
177.80 ± 15.87	48.06 ± 1.89	83.79 ± 2.95	77.11 ± 3.25	147.61 ± 8.56	n = 4	Phosphomolybdate reduction (ANS)
188.11 ± 10.67	49.53 ± 2.79	85.96 ± 3.62	79.02 ± 4.71	152.24 ± 8.79	n = 41	Phosphomolybdate reduction (PMA phe
185.20 ± 11.40	47.91 ± 2.33	83.83 ± 4.86	76.57 ± 3.66	149.82 ± 12.75	n = 14	Phosphomolybdate reduction-other
180.43 ± 3.38	47.99 ± 1.72	82.90 ± 1.93	76.38 ± 2.40	145.14 ± 3.94	n = 14	Other
<Instruments>						
174.26 ± 1.27	48.10 ± 0.91	81.99 ± 1.72	75.26 ± 1.02	141.73 ± 1.70	n = 3	Abbott Architect
174.55 ± 39.13	48.32 ± 2.10	84.61 ± 9.53	82.30 ± 15.34	124.40 ± 89.05	n = 3	Beckman Coulter CX
176.74 ± 12.47	47.22 ± 2.34	81.35 ± 5.17	74.58 ± 6.54	139.41 ± 12.55	n = 7	Beckman Coulter LX-20
196.05 ± 11.62	49.63 ± 1.51	86.31 ± 2.74	79.65 ± 3.02	152.77 ± 7.97	n = 5	Beckman Coulter UniCel DxC 600
180.19 ± 8.77	47.26 ± 2.46	83.59 ± 3.75	75.78 ± 4.79	143.56 ± 12.56	n = 15	Beckman Coulter UniCel DxC 800
179.70 ± 3.86	47.19 ± 1.03	82.43 ± 0.90	75.44 ± 1.10	145.13 ± 2.63	n = 16	Beckman Coulter AU Chemistry System
193.05 ± 4.43	48.98 ± 1.39	86.91 ± 2.71	78.51 ± 1.75	156.88 ± 3.86	n = 10	Ortho Vitros 5,1FS
179.32 ± 3.92	47.05 ± 1.01	81.76 ± 1.39	74.83 ± 1.08	144.51 ± 3.26	n = 12	Roche cobas c501
179.30 ± 6.14	47.06 ± 1.56	81.79 ± 2.68	74.49 ± 2.59	143.71 ± 4.49	n = 6	Roche Cobas INTEGRA
175.64 ± 4.10	45.63 ± 1.27	80.16 ± 2.17	73.03 ± 2.48	141.44 ± 3.02	n = 23	Roche MODULAR D/P
181.86 ± 5.94	47.38 ± 1.09	82.96 ± 2.56	75.33 ± 2.34	145.63 ± 3.66	n = 10	Siemens ADVIA 1800
162.58 ± 19.24	44.48 ± 7.68	76.27 ± 12.12	69.89 ± 11.56	127.02 ± 16.47	n = 3	Siemens ADVIA 2400
192.12 ± 9.89	51.12 ± 2.70	88.10 ± 3.42	82.03 ± 4.84	156.24 ± 8.67	n = 25	Siemens Dimension
180.34 ± 5.77	46.99 ± 1.75	82.85 ± 1.72	75.44 ± 2.08	145.83 ± 5.68	n = 11	Siemens Dimension Vista
<Reagents>						
174.26 ± 1.27	48.10 ± 0.91	81.99 ± 1.72	75.26 ± 1.02	141.73 ± 1.70	n = 3	Abbott
183.81 ± 13.08	47.94 ± 2.31	83.62 ± 4.20	76.54 ± 4.66	145.22 ± 13.03	n = 29	Beckman Coulter
179.85 ± 3.43	47.26 ± 1.07	82.43 ± 0.90	75.44 ± 1.10	145.24 ± 2.36	n = 15	Beckman Coulter AU Series
191.14 ± 6.76	48.89 ± 1.54	86.36 ± 2.93	78.17 ± 1.95	154.67 ± 6.53	n = 12	Ortho Clinical Diagnostics
179.32 ± 3.92	47.05 ± 1.01	81.76 ± 1.39	74.83 ± 1.08	144.51 ± 3.26	n = 12	Roche cobas c501
175.93 ± 4.31	45.76 ± 1.38	80.31 ± 2.26	73.22 ± 2.58	141.66 ± 3.32	n = 24	Roche Hitachi and Modular D/P
179.30 ± 6.14	47.06 ± 1.56	81.79 ± 2.68	74.49 ± 2.59	143.71 ± 4.49	n = 6	Roche Integra and MIRA
180.98 ± 6.20	47.97 ± 1.50	83.17 ± 2.44	75.87 ± 2.37	145.61 ± 4.81	n = 16	Siemens ADVIA
188.93 ± 10.67	49.80 ± 3.18	86.36 ± 4.03	79.84 ± 5.43	152.66 ± 9.38	n = 35	Siemens Dimension/Stratus

New York State Department of Health - Wadsworth Center
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Summary of Participant Performance (Mean and Standard Deviation)

Potassium (mmol/L)

Specimen: U81	Specimen: U82	Specimen: U83	Specimen: U84	Specimen: U85	Number	Instrument or Reagent System
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83.11 ± 4.47	20.23 ± 0.61	38.49 ± 1.34	35.08 ± 1.24	66.56 ± 3.14	n = 218	All Methods & Instruments
						<Method Principles>
83.28 ± 4.53	20.22 ± 0.62	38.35 ± 1.30	34.98 ± 1.24	66.22 ± 2.87	n = 182	Ion selective electrode (diluted)
82.10 ± 4.07	20.33 ± 0.51	39.19 ± 1.29	35.55 ± 1.07	68.96 ± 3.55	n = 34	Ion selective electrode (undiluted)
						<Instruments>
84.16 ± 0.99	20.12 ± 0.04	38.33 ± 0.37	34.84 ± 0.36	67.09 ± 1.14	n = 5	Abbott Architect
85.27 ± 3.96	20.78 ± 0.34	39.90 ± 0.90	36.26 ± 0.45	69.56 ± 0.41	n = 4	Beckman Coulter CX
84.49 ± 1.87	20.14 ± 0.41	38.37 ± 0.66	34.96 ± 0.51	66.56 ± 1.42	n = 13	Beckman Coulter LX-20
83.48 ± 0.78	19.99 ± 0.16	37.91 ± 0.24	34.47 ± 0.33	65.10 ± 0.67	n = 13	Beckman Coulter UniCel DxC 600
83.97 ± 1.38	20.05 ± 0.11	38.20 ± 0.64	34.79 ± 0.48	65.67 ± 1.08	n = 20	Beckman Coulter UniCel DxC 800
87.31 ± 2.88	20.83 ± 0.27	39.47 ± 0.63	35.94 ± 0.80	68.87 ± 1.55	n = 20	Beckman Coulter AU Chemistry System
80.53 ± 2.21	20.46 ± 0.51	39.74 ± 1.00	36.01 ± 0.94	71.22 ± 2.30	n = 17	Ortho Vitros 5,1FS
84.32 ± 2.56	20.14 ± 0.24	38.54 ± 0.72	35.03 ± 0.58	67.20 ± 1.43	n = 13	Roche cobas c501
82.66 ± 1.24	21.14 ± 0.22	38.99 ± 0.56	35.71 ± 0.64	68.16 ± 1.11	n = 9	Roche Cobas INTEGRA
84.80 ± 4.19	20.69 ± 0.49	38.86 ± 1.15	35.82 ± 1.13	66.98 ± 3.38	n = 25	Roche MODULAR D/P
87.49 ± 1.96	20.40 ± 0.54	39.07 ± 0.73	35.69 ± 0.72	68.41 ± 1.22	n = 12	Siemens ADVIA 1800
86.13 ± 4.40	20.19 ± 0.92	38.26 ± 1.62	34.73 ± 1.96	69.02 ± 2.30	n = 3	Siemens ADVIA 2400
77.70 ± 1.64	19.70 ± 0.48	36.98 ± 0.90	33.69 ± 0.93	62.90 ± 1.92	n = 22	Siemens Dimension
77.30 ± 1.37	19.63 ± 0.47	36.82 ± 0.65	33.50 ± 0.55	62.86 ± 1.58	n = 24	Siemens Dimension QuikLYTE
86.99 ± 4.37	20.04 ± 0.83	40.06 ± 1.76	35.94 ± 1.74	65.84 ± 3.70	n = 12	Siemens Dimension Vista
						<Reagents>
84.16 ± 0.99	20.12 ± 0.04	38.33 ± 0.37	34.84 ± 0.36	67.09 ± 1.14	n = 5	Abbott
83.83 ± 1.51	20.08 ± 0.26	38.16 ± 0.58	34.77 ± 0.56	65.80 ± 1.41	n = 49	Beckman Coulter
87.31 ± 2.88	20.82 ± 0.31	39.49 ± 0.58	35.94 ± 0.80	68.87 ± 1.55	n = 19	Beckman Coulter AU Series
80.25 ± 2.24	20.39 ± 0.51	39.63 ± 0.99	35.93 ± 0.93	70.93 ± 2.34	n = 19	Ortho Clinical Diagnostics
85.66 ± 1.02	19.94 ± 0.45	39.32 ± 0.37	35.70 ± 0.35	65.60 ± 1.66	n = 4	Other
84.32 ± 2.56	20.14 ± 0.24	38.54 ± 0.72	35.03 ± 0.58	67.20 ± 1.43	n = 13	Roche cobas c501
84.59 ± 4.21	20.71 ± 0.49	38.85 ± 1.11	35.79 ± 1.10	67.02 ± 3.28	n = 26	Roche Hitachi and Modular D/P
82.94 ± 1.00	21.15 ± 0.24	39.02 ± 0.60	35.78 ± 0.66	68.25 ± 1.18	n = 8	Roche Integra and MIRA
87.43 ± 1.97	20.38 ± 0.56	39.06 ± 0.55	35.62 ± 0.61	68.42 ± 1.40	n = 18	Siemens ADVIA
77.55 ± 1.50	19.72 ± 0.53	36.96 ± 0.89	33.79 ± 1.12	63.17 ± 2.27	n = 55	Siemens Dimension/Stratus
85.66 ± 1.02	19.94 ± 0.45	39.32 ± 0.37	35.70 ± 0.35	65.60 ± 1.66	n = 4	Reagent Not Listed

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Summary of Participant Performance (Mean and Standard Deviation)

Total Protein (mg/dL)

Specimen: U81	Specimen: U82	Specimen: U83	Specimen: U84	Specimen: U85	Number	Instrument or Reagent System
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15.42 ± 5.36	97.97 ± 3.80	82.84 ± 3.56	75.01 ± 3.15	36.00 ± 4.40	n = 219	All Methods & Instruments
<Method Principles>						
15.73 ± 5.27	97.84 ± 3.48	82.82 ± 3.51	75.05 ± 3.15	36.41 ± 4.71	n = 111	Biuret (alkaline cupric sulfate)
13.71 ± 2.47	119.57 ± 17.14	104.33 ± 14.97	93.97 ± 12.75	45.53 ± 5.43	n = 3	Refractometry
10.68 ± 0.81	99.65 ± 2.69	81.53 ± 2.32	73.87 ± 2.17	33.13 ± 1.04	n = 23	Turbidimetric/Benzethonium Chloride
17.77 ± 5.43	97.62 ± 4.16	83.60 ± 3.76	75.65 ± 3.18	36.64 ± 3.55	n = 70	Pyrogallol red
12.30 ± 2.39	104.05 ± 18.58	87.70 ± 15.94	79.16 ± 15.02	36.80 ± 7.76	n = 12	Other
<Instruments>						
11.61 ± 0.40	100.02 ± 2.77	80.51 ± 1.89	73.19 ± 1.41	32.16 ± 1.48	n = 6	Abbott Architect
18.91 ± 4.38	103.68 ± 3.07	88.32 ± 4.22	79.05 ± 3.72	38.80 ± 2.36	n = 3	Beckman Coulter CX
16.92 ± 0.57	98.41 ± 3.33	85.17 ± 2.12	76.52 ± 1.75	38.23 ± 0.47	n = 12	Beckman Coulter LX-20
17.75 ± 1.41	100.68 ± 1.34	86.61 ± 1.68	77.83 ± 1.72	39.21 ± 1.27	n = 11	Beckman Coulter UniCel DxC 600
17.19 ± 0.45	100.37 ± 1.80	85.96 ± 1.24	77.20 ± 1.40	38.56 ± 0.82	n = 17	Beckman Coulter UniCel DxC 800
13.48 ± 1.03	100.89 ± 6.31	85.21 ± 5.27	76.08 ± 4.51	32.86 ± 2.11	n = 26	Beckman Coulter AU Chemistry System
12.23 ± 1.21	124.54 ± 10.32	106.33 ± 7.45	95.36 ± 7.73	46.40 ± 2.69	n = 14	Ortho Vitros 5,1FS
13.26 ± 1.37	122.91 ± 19.23	103.28 ± 18.49	93.34 ± 14.77	42.96 ± 8.16	n = 3	Other
10.05 ± 0.75	99.87 ± 5.61	82.65 ± 3.33	75.09 ± 3.27	32.67 ± 1.89	n = 15	Roche cobas c501
10.20 ± 0.72	97.76 ± 2.19	79.78 ± 0.72	72.68 ± 0.86	33.57 ± 0.59	n = 11	Roche Cobas INTEGRA
11.24 ± 1.09	97.93 ± 1.93	80.25 ± 2.11	72.38 ± 2.54	32.47 ± 1.20	n = 26	Roche MODULAR D/P
12.77 ± 0.66	94.32 ± 2.19	80.28 ± 2.26	71.80 ± 0.76	32.77 ± 1.20	n = 12	Siemens ADVIA 1800
12.76 ± 0.93	90.08 ± 7.17	78.22 ± 3.23	69.93 ± 2.86	31.60 ± 2.56	n = 3	Siemens ADVIA 2400
23.14 ± 1.18	96.26 ± 1.70	82.74 ± 1.53	75.60 ± 1.47	38.88 ± 1.16	n = 40	Siemens Dimension
23.55 ± 1.61	96.75 ± 4.10	83.14 ± 3.10	75.74 ± 2.63	38.71 ± 1.67	n = 14	Siemens Dimension Vista
13.26 ± 1.37	122.91 ± 19.23	103.28 ± 18.49	93.34 ± 14.77	42.96 ± 8.16	n = 3	Reagent Not Listed
<Reagents>						
11.61 ± 0.40	100.02 ± 2.77	80.51 ± 1.89	73.19 ± 1.41	32.16 ± 1.48	n = 6	Abbott
17.27 ± 0.93	100.15 ± 2.17	85.94 ± 1.62	77.13 ± 1.61	38.54 ± 1.06	n = 43	Beckman Coulter
13.52 ± 1.08	99.97 ± 5.15	84.29 ± 4.12	75.51 ± 3.68	32.73 ± 1.87	n = 23	Beckman Coulter AU Series
12.58 ± 0.87	126.83 ± 6.60	107.55 ± 4.89	97.18 ± 4.60	46.54 ± 2.78	n = 16	Ortho Clinical Diagnostics
18.43 ± 4.31	95.87 ± 2.80	80.31 ± 1.58	72.78 ± 3.14	35.17 ± 2.75	n = 5	Other
10.36 ± 1.22	104.42 ± 4.85	85.34 ± 3.09	78.07 ± 2.41	32.01 ± 1.53	n = 4	Pointe Scientific
10.11 ± 0.59	100.93 ± 2.99	83.20 ± 2.50	75.44 ± 2.48	33.24 ± 1.31	n = 12	Roche cobas c501
11.20 ± 0.95	98.37 ± 1.53	80.59 ± 1.98	72.82 ± 2.24	32.52 ± 1.20	n = 24	Roche Hitachi and Modular D/P
10.20 ± 0.72	97.76 ± 2.19	79.78 ± 0.72	72.68 ± 0.86	33.57 ± 0.59	n = 11	Roche Integra and MIRA
12.94 ± 0.82	94.01 ± 1.99	79.88 ± 2.21	71.67 ± 0.71	32.69 ± 1.15	n = 18	Siemens ADVIA
23.30 ± 1.22	96.25 ± 2.06	82.88 ± 1.93	75.66 ± 1.70	38.93 ± 1.23	n = 51	Siemens Dimension/Stratus
18.43 ± 4.31	95.87 ± 2.80	80.31 ± 1.58	72.78 ± 3.14	35.17 ± 2.75	n = 5	Reagent Not Listed

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Summary of Participant Performance (Mean and Standard Deviation)

Uric Acid (mg/dL)

Specimen: U81	Specimen: U82	Specimen: U83	Specimen: U84	Specimen: U85	Number	Instrument or Reagent System
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28.82 ± 1.72	17.96 ± 2.15	11.76 ± 1.21	10.80 ± 1.23	15.68 ± 1.37	n = 159	All Methods & Instruments
						<Method Principles>
28.38 ± 1.89	17.76 ± 1.73	11.37 ± 1.15	10.47 ± 1.27	15.46 ± 1.75	n = 13	Uricase (NAD-NADH reaction)
28.12 ± 1.84	18.04 ± 2.08	11.78 ± 1.07	10.73 ± 0.99	15.38 ± 1.21	n = 52	Uricase/allantoin (differential abs
29.29 ± 1.46	17.93 ± 2.28	11.90 ± 1.31	10.96 ± 1.39	15.98 ± 1.39	n = 87	Uricase/peroxidase (colorimetric)
28.56 ± 1.05	18.35 ± 1.04	11.05 ± 0.65	10.13 ± 0.79	14.89 ± 0.86	n = 7	Other
						<Instruments>
28.56 ± 0.76	17.97 ± 0.66	11.58 ± 0.36	10.77 ± 0.71	15.42 ± 0.56	n = 4	Abbott Architect
30.43 ± 1.28	18.74 ± 1.68	12.90 ± 1.88	11.97 ± 1.70	18.71 ± 4.66	n = 5	Beckman Coulter CX
30.27 ± 0.58	19.49 ± 1.44	13.13 ± 0.48	12.09 ± 0.65	17.34 ± 0.37	n = 8	Beckman Coulter LX-20
30.97 ± 1.03	20.19 ± 2.33	13.89 ± 1.13	13.09 ± 1.23	18.05 ± 0.95	n = 4	Beckman Coulter UniCel DxC 600
30.14 ± 1.00	19.35 ± 1.87	13.50 ± 0.57	12.73 ± 0.48	17.53 ± 0.59	n = 15	Beckman Coulter UniCel DxC 800
29.84 ± 0.78	17.06 ± 3.08	11.94 ± 0.20	11.03 ± 0.18	15.95 ± 0.35	n = 16	Beckman Coulter AU Chemistry System
28.89 ± 0.98	18.10 ± 0.81	11.55 ± 0.46	10.58 ± 0.45	15.89 ± 0.61	n = 10	Ortho Vitros 5,1FS
28.74 ± 0.64	15.59 ± 3.80	10.95 ± 0.18	10.05 ± 0.35	15.12 ± 0.44	n = 12	Roche cobas c501
28.42 ± 0.65	17.06 ± 1.95	10.99 ± 0.35	9.98 ± 0.46	14.86 ± 0.39	n = 7	Roche Cobas INTEGRA
26.70 ± 0.69	16.71 ± 1.15	10.23 ± 0.29	9.25 ± 0.24	14.03 ± 0.30	n = 23	Roche MODULAR D/P
29.47 ± 0.70	18.78 ± 1.09	12.20 ± 0.57	10.97 ± 0.55	16.32 ± 0.60	n = 10	Siemens ADVIA 1800
27.92 ± 2.42	17.22 ± 1.96	11.04 ± 0.71	9.31 ± 1.20	14.61 ± 1.30	n = 3	Siemens ADVIA 2400
29.16 ± 1.64	18.77 ± 1.96	12.33 ± 1.09	11.18 ± 0.90	16.10 ± 1.11	n = 25	Siemens Dimension
26.37 ± 0.58	16.35 ± 2.84	11.73 ± 0.45	10.63 ± 0.41	14.81 ± 0.58	n = 11	Siemens Dimension Vista
						<Reagents>
28.56 ± 0.76	17.97 ± 0.66	11.58 ± 0.36	10.77 ± 0.71	15.42 ± 0.56	n = 4	Abbott
30.29 ± 0.94	19.38 ± 1.67	13.32 ± 0.87	12.47 ± 0.93	17.44 ± 0.83	n = 32	Beckman Coulter
29.77 ± 0.72	16.65 ± 3.38	11.94 ± 0.23	11.01 ± 0.18	15.96 ± 0.16	n = 14	Beckman Coulter AU Series
28.96 ± 0.92	18.09 ± 0.84	11.45 ± 0.46	10.47 ± 0.46	15.85 ± 0.54	n = 12	Ortho Clinical Diagnostics
28.74 ± 0.64	15.59 ± 3.80	10.95 ± 0.18	10.05 ± 0.35	15.12 ± 0.44	n = 12	Roche cobas c501
26.81 ± 0.81	16.63 ± 1.23	10.28 ± 0.33	9.28 ± 0.28	14.10 ± 0.42	n = 25	Roche Hitachi and Modular D/P
28.44 ± 0.71	17.97 ± 0.73	11.02 ± 0.39	9.87 ± 0.33	14.84 ± 0.44	n = 6	Roche Integra and MIRA
29.42 ± 0.66	18.91 ± 1.28	12.02 ± 0.74	10.97 ± 0.82	16.02 ± 1.10	n = 15	Siemens ADVIA
28.39 ± 1.90	18.29 ± 2.21	12.16 ± 0.91	11.02 ± 0.75	15.73 ± 1.11	n = 34	Siemens Dimension/Stratus

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Summary of Participant Performance (Mean and Standard Deviation)

Urea Nitrogen (mg/dL)

Specimen: U81 -----	Specimen: U82 -----	Specimen: U83 -----	Specimen: U84 -----	Specimen: U85 -----	Number -----	Instrument or Reagent System -----
1233.3 ± 64.92	1343.5 ± 74.77	763.9 ± 44.35	695.9 ± 40.97	673.4 ± 36.09	n = 162	All Methods & Instruments
<Method Principles>						
1225.9 ± 66.46	1336.5 ± 75.63	766.3 ± 41.16	697.5 ± 38.10	673.3 ± 34.89	n = 125	Urease w/glutamate dehydrogenase
1245.9 ± 63.13	1351.6 ± 77.67	771.0 ± 56.75	707.1 ± 62.10	687.6 ± 46.84	n = 22	Urease, conductivity rate
1261.5 ± 27.55	1377.9 ± 35.84	727.2 ± 19.25	661.8 ± 15.04	651.3 ± 16.23	n = 12	Urease with indicator dye
1274.6 ± 57.75	1393.8 ± 75.28	762.6 ± 59.50	706.3 ± 31.83	683.8 ± 31.63	n = 3	Other
<Instruments>						
1179.4 ± 16.88	1283.9 ± 22.38	730.3 ± 7.58	668.0 ± 8.66	644.0 ± 9.83	n = 4	Abbott Architect
1176.7 ± 222.63	1407.4 ± 66.74	798.7 ± 43.73	703.5 ± 40.09	674.1 ± 33.54	n = 3	Beckman Coulter CX
1257.0 ± 71.99	1383.0 ± 89.44	790.2 ± 63.38	722.0 ± 94.73	706.1 ± 62.51	n = 7	Beckman Coulter LX-20
1241.8 ± 70.87	1415.0 ± 113.08	753.8 ± 13.49	690.4 ± 11.07	672.3 ± 7.02	n = 6	Beckman Coulter UniCel DxC 600
1232.2 ± 45.12	1317.8 ± 54.73	753.2 ± 39.44	695.6 ± 44.47	671.6 ± 42.00	n = 16	Beckman Coulter UniCel DxC 800
1201.8 ± 37.05	1308.7 ± 28.54	760.0 ± 14.82	692.6 ± 14.25	664.9 ± 16.98	n = 21	Beckman Coulter AU Chemistry System
1258.8 ± 14.29	1376.5 ± 23.62	726.5 ± 11.49	664.0 ± 16.83	650.0 ± 10.16	n = 10	Ortho Vitros 5,1FS
1183.9 ± 29.91	1305.2 ± 43.80	749.3 ± 32.00	680.4 ± 20.74	658.4 ± 20.50	n = 12	Roche cobas c501
1272.2 ± 54.28	1378.7 ± 69.15	781.7 ± 47.61	713.1 ± 29.36	689.5 ± 32.93	n = 6	Roche Cobas INTEGRA
1183.7 ± 30.84	1291.9 ± 31.80	743.5 ± 20.87	668.4 ± 16.68	654.1 ± 17.78	n = 23	Roche MODULAR D/P
1301.2 ± 39.32	1446.2 ± 52.71	829.6 ± 22.67	750.2 ± 18.43	724.3 ± 14.28	n = 9	Siemens ADVIA 1800
1115.1 ± 91.65	1286.0 ± 96.96	765.1 ± 82.34	693.5 ± 40.73	678.2 ± 55.43	n = 3	Siemens ADVIA 2400
1295.6 ± 48.25	1410.5 ± 62.60	817.2 ± 40.07	749.7 ± 36.46	717.5 ± 35.54	n = 24	Siemens Dimension
1225.8 ± 38.50	1341.5 ± 38.44	756.9 ± 24.70	694.6 ± 21.21	668.4 ± 18.86	n = 12	Siemens Dimension Vista
<Reagents>						
1179.4 ± 16.88	1283.9 ± 22.38	730.3 ± 7.58	668.0 ± 8.66	644.0 ± 9.83	n = 4	Abbott
1240.9 ± 60.92	1353.5 ± 87.39	762.6 ± 43.75	698.8 ± 47.96	674.9 ± 40.00	n = 32	Beckman Coulter
1201.5 ± 39.67	1306.4 ± 24.65	759.0 ± 15.19	691.6 ± 12.53	664.4 ± 17.85	n = 19	Beckman Coulter AU Series
1262.2 ± 26.15	1379.4 ± 34.29	728.7 ± 18.72	664.1 ± 16.82	652.7 ± 16.27	n = 13	Ortho Clinical Diagnostics
1183.9 ± 29.91	1305.2 ± 43.80	749.3 ± 32.00	680.4 ± 20.74	658.4 ± 20.50	n = 12	Roche cobas c501
1183.7 ± 30.84	1291.9 ± 31.80	743.5 ± 20.87	668.4 ± 16.68	654.1 ± 17.78	n = 23	Roche Hitachi and Modular D/P
1272.2 ± 54.28	1378.7 ± 69.15	781.7 ± 47.61	713.1 ± 29.36	689.5 ± 32.93	n = 6	Roche Integra and MIRA
1275.9 ± 89.25	1396.9 ± 105.11	815.3 ± 39.40	735.8 ± 31.57	718.7 ± 18.84	n = 15	Siemens ADVIA
1272.6 ± 59.56	1385.0 ± 70.56	797.4 ± 47.39	730.7 ± 43.77	700.9 ± 40.36	n = 34	Siemens Dimension/Stratus