MEDICAL LABORATORY EVALUATION

PARTICIPANT SUMMARY

2 • 0 • 2 • 2

Medical Laboratory Evaluation

Chemistry
2022 MLE-M2

Table of Contents

EVALUATION CRITERIA

For quantitative procedures, a mean and standard deviation (SD) are calculated for each peer group. Acceptable performance is established on a target value mean ± the limits listed below.

Acetaminophen	± 15% or 2.5 µg/mL *
Acetone	80% Consensus
Albumin	± 10%
Alcohol	± 25%
Alpha-fetoprotein	± 3 SD
Alkaline Phosphatase	± 30%
ALT (SGPT)	± 20%
Ammonia	± 5% or 10 µmol/L *
Amylase	± 30%
AST (SGOT)	± 20%
B-Type Natriuretic Peptide (BNP)	± 2 SD or 25% *
Beta-2 Microglobulin	± 3 SD
Bilirubin, Direct	± 2 SD
Bilirubin, Total	± 0.4 mg/dL or 20% *
Bilirubin, Neonatal (Total)	± 0.4 mg/dL or 20% *
Blood Lead	± 4 µg/dL or ± 10%*
C-Peptide	± 2 SD
CA 125	± 2 SD or 20% *
CA 15-3	± 2 SD or 30% *
CA 19-9	± 2 SD or 30% *
CA 27/29	± 2 SD or 30% *
Calcium	± 1.0 mg/dL
Calcium, Ionized	± 3 SD
Carbamazepine	± 25%
CEA	± 1.2 ng/mL 20%
Chloride	± 5%
Cholesterol, Total	± 10%
CK-MB (Quantitative)	± 3 SD
CO_2	± 20%
Cortisol	± 25%
Creatine Kinase	± 30%
Creatinine (Serum)	± 0.3 mg/dL or 15% *
Creatinine (Urine)	± 17%
D-Dimer	± 2 SD or 30% *
DHEA-S	± 30% or 2 SD *
Digoxin	± 0.2 mg/dL or 20% *
Estradiol	± 30% or 2 SD *
Ferritin	± 20%
Folate	± 1.0 ng/mL or 30%*
FSH	± 18% or 2 SD *
Gentamicin	± 25% or 1.0 µg/mL *
GGT	± 2 SD or 15% *
Glucose, Serum	± 6 mg/dL or 10% *
Glucose, Whole Blood	± 6 mg/dL or 20% *
Glycohemoglobin	± 5%
HDL Cholesterol	± 30%
HCG, Serum—Qualitative	80% Consensus
HCG, Serum—Quantitative	± 18% or 2 SD *
Hematocrit	± 6%
Hemoglobin	± 7%
Homocysteine	± 30%
Insulin	± 2 SD
Iron	± 20%
Lactate Dehydrogenase	± 20%
Lactate (Lactic Acid)	± 0.4 mmol/L or 3 SD *
LDL Cholesterol	± 2 SD or 30% *
Lipase	± 30%
LH	± 2 SD or 20% *
Lithium	± 0.3 mmol/L or 20% *
Magnesium	± 25%
Myoglobin	± 2 SD or 30% *
NT-proBNP	± 2 SD or 25% *
Parathyroid Hormone, Intact	± 30% or 2 SD *
Phenobarbital	± 20%
Phenytoin	± 25%
Phosphorus	± 0.3 mg/dL or 10 % *
Potassium	± 0.5 mmol/L
Prealbumin	± 25%
Progesterone	± 25%
Prolactin	± 20%
Protein, Total (Serum)	± 10%
Protein, Total (Urine)	± 44%
PSA	± 0.9 ng/mL or 30% *
PSA, Free	± 0.9 ng/mL or 30% *
pCO_2	± 5 mmHg or 8% *
pH	± 0.04
pO2	± 3 SD
Salicylate	± 25%
SHBG	± 3 SD
Sodium	± 4.0 mmol/L
T_3 Uptake (% Uptake)	± 3 SD
T3, Free	± 3 SD
T4, Free	± 3 SD
tCO_2	± 20%
Testosterone	± 30% or 20 ng/dL *
Testosterone, Bioavailable	± 3 SD
Testosterone, Free	± 2 SD
Theophylline	± 25%
Thyroglobulin	± 2 SD
Thyroglobulin Antibody	± 3 SD
Thyroid Peroxidase Antibody (TPO)	± 3 SD
Thyroxine, Total T_4	± 1.0 µg/dL or 20% *
TIBC	± 2 SD or 20% *
Transferrin	± 10%
Triglyceride	± 25%
Triiodothyronine, Total T_3	± 3 SD
Troponin I	± 2 SD or 30% *
Troponin T	± 2 SD or 30% *
TSH	± 3 SD
UIBC	± 2 SD or 20% *
Urea Nitrogen	± 2.0 mg/dL or 9% *
Uric Acid	± 17%
Urine Drug Screen	80% Consensus
Valproic Acid	± 25%
Vancomycin	± 25% or 1.0 µg/mL *
Vitamin B_{12}	± 25%
Vitamin D	± 2 SD

*Whichever is greater

Sodium (mmol/L)

	Specimen IST-6						Specimen IST- 7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	106	139.9	0.5	0.3	140	135 - 144	103	145.3	0.6	0.4	145	141 - 150
All i-STAT Instruments	106	139.9	0.5	0.3	140	135 - 144	103	145.3	0.6	0.4	145	141 - 150
i-STAT - moderate	93	139.9	0.5	0.4	140	135 - 144	90	145.3	0.6	0.4	145	141 - 150
i-STAT - waived	12	140.0	0.1	0.0	140	136 - 144	13	145.3	0.5	0.3	145	141 - 150
	Specimen IST-8						**Specimen IST-9**					
All Method	101	124.1	0.4	0.3	124	120 - 129	103	160.5	0.6	0.4	161	156 - 165
All i-STAT Instruments	101	124.1	0.4	0.3	124	120 - 129	103	160.5	0.6	0.4	161	156 - 165
i-STAT - moderate	91	124.1	0.4	0.3	124	120 - 129	93	160.5	0.6	0.4	161	156 - 165
i-STAT - waived	10	124.1	0.3	0.3	124	120 - 129	10	160.4	0.7	0.4	161	156 - 165
	Specimen IST-10											
All Method	103	145.7	0.6	0.4	146	141 - 150						
All i-STAT Instruments	103	145.7	0.6	0.4	146	141 - 150						
i-STAT - moderate	94	145.7	0.6	0.4	146	141 - 150						
i-STAT - waived	10	146.0	0.8	0.6	146	142 - 150						

Potassium (mmol/L)

	Specimen IST-6						Specimen IST-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	98	3.80	0.01	0.0	3.8	3.3 - 4.3	107	6.15	0.06	1.0	6.1	5.6 - 6.7
All i-STAT Instruments	98	3.80	0.01	0.0	3.8	3.3 - 4.3	107	6.15	0.06	1.0	6.1	5.6 - 6.7
i-STAT - moderate	87	3.80	0.01	0.0	3.8	3.3 - 4.3	94	6.15	0.06	1.0	6.2	5.6 - 6.7
i-STAT - waived	13	3.82	0.04	1.0	3.8	3.3 - 4.4	13	6.15	0.05	0.8	6.1	5.6 - 6.7
	Specimen IST-8						**Specimen IST-9**					
All Method	94	2.70	0.01	0.0	2.7	2.2 - 3.2	103	6.51	0.05	0.7	6.5	6.0 - 7.1
All i-STAT Instruments	94	2.70	0.01	0.0	2.7	2.2 - 3.2	103	6.51	0.05	0.7	6.5	6.0 - 7.1
i-STAT - moderate	85	2.70	0.01	0.0	2.7	2.2 - 3.2	93	6.51	0.05	0.7	6.5	6.0 - 7.1
i-STAT - waived	10	2.71	0.03	1.2	2.7	2.2 - 3.3	10	6.51	0.03	0.5	6.5	6.0 - 7.1
	Specimen IST-10											
All Method	105	4.22	0.04	1.0	4.2	3.7 - 4.8						
All i-STAT Instruments	105	4.22	0.04	1.0	4.2	3.7 - 4.8						
i-STAT - moderate	95	4.22	0.04	1.0	4.2	3.7 - 4.8						
i-STAT - waived	10	4.21	0.03	0.8	4.2	3.7 - 4.8						

tCO_2 (mmol/L)

	Specimen IST-6						Specimen IST-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	101	25.5	0.9	3.6	26	20 - 31	102	13.5	0.6	4.7	14	10 - 17
All i-STAT Instruments	101	25.5	0.9	3.6	26	20 - 31	102	13.5	0.6	4.7	14	10 - 17
i-STAT - moderate	90	25.5	0.9	3.7	26	20 - 31	91	13.5	0.7	4.9	14	10 - 17
i-STAT - waived	11	25.6	0.8	3.2	26	20 - 31	11	13.5	0.5	3.9	13	10 - 17

	Specimen IST-8						Specimen IST-9					
All Method	96	23.2	0.8	3.3	23	18 - 28	100	23.4	1.0	4.2	23	18 - 29
All i-STAT Instruments	96	23.2	0.8	3.3	23	18 - 28	100	23.4	1.0	4.2	23	18 - 29
i-STAT - moderate	88	23.2	0.8	3.3	23	18 - 28	92	23.4	1.0	4.2	23	18 - 29
i-STAT - waived	8	-	-	-	23	18 - 28	8	-	-	-	23	18 - 29

	Specimen IST-10					
All Method	99	20.7	0.8	3.9	21	16 - 25
All i-STAT Instruments	99	20.7	0.8	3.9	21	16 - 25
i-STAT - moderate	91	20.8	0.8	3.9	21	16 - 25
i-STAT - waived	8	-	-	-	20	16 - 25

Chloride (mmol/L)

	Specimen IST-6						Specimen IST-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	107	87.1	0.7	0.8	87	82 - 92	104	109.0	0.8	0.7	109	103 - 115
All i-STAT Instruments	107	87.1	0.7	0.8	87	82 - 92	104	109.0	0.8	0.7	109	103 - 115
i-STAT - moderate	94	87.2	0.6	0.7	87	82 - 92	92	109.0	0.7	0.7	109	103 - 115
i-STAT - waived	12	86.4	1.0	1.2	87	82 - 91	12	108.7	0.9	0.8	109	103 - 115

	Specimen IST-8						Specimen IST-9					
All Method	100	75.3	0.6	0.8	75	71 - 80	103	107.4	0.7	0.6	107	102 - 113
All i-STAT Instruments	100	75.3	0.6	0.8	75	71 - 80	103	107.4	0.7	0.6	107	102 - 113
i-STAT - moderate	92	75.3	0.6	0.8	75	71 - 80	95	107.4	0.7	0.6	107	102 - 113
i-STAT - waived	9	-	-	-	75	71 - 80	9	-	-	-	107	102 - 113

	Specimen IST-10					
All Method	104	83.4	0.7	0.8	83	79 - 88
All i-STAT Instruments	104	83.4	0.7	0.8	83	79 - 88
i-STAT - moderate	96	83.4	0.7	0.8	83	79 - 88
i-STAT - waived	9	-	-	-	83	79 - 88

Urea Nitrogen (BUN) (mg/dL)

	Specimen IST-6						Specimen IST-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	107	62.5	1.2	2.0	63	56 - 69	107	22.4	0.5	2.4	22	20 - 25
All i-STAT Instruments	107	62.5	1.2	2.0	63	56 - 69	107	22.4	0.5	2.4	22	20 - 25
i-STAT - moderate	94	62.5	1.2	1.9	63	56 - 69	94	22.4	0.6	2.5	22	20 - 25
i-STAT - waived	13	62.5	1.6	2.5	63	56 - 69	13	22.2	0.4	1.7	22	20 - 25
	Specimen IST-8						**Specimen IST-9**					
All Method	103	69.7	1.6	2.3	70	63 - 76	103	16.6	0.5	3.0	17	14 - 19
All i-STAT Instruments	101	69.8	1.3	1.9	70	63 - 77	103	16.6	0.5	3.0	17	14 - 19
i-STAT - moderate	91	69.9	1.3	1.8	70	63 - 77	93	16.6	0.5	3.0	17	14 - 19
i-STAT - waived	10	68.9	2.2	3.2	70	62 - 76	10	16.5	0.5	3.2	17	14 - 19
	Specimen IST-10											
All Method	104	37.4	0.7	2.0	37	34 - 41						
All i-STAT Instruments	104	37.4	0.7	2.0	37	34 - 41						
i-STAT - moderate	94	37.4	0.7	1.9	37	34 - 41						
i-STAT - waived	10	37.1	0.9	2.4	37	33 - 41						

Glucose (mg/dL)

	Specimen IST-6						Specimen IST-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	108	147.2	1.3	0.9	147	132 - 162	107	85.7	0.9	1.1	86	77 - 95
All i-STAT Instruments	108	147.2	1.3	0.9	147	132 - 162	107	85.7	0.9	1.1	86	77 - 95
i-STAT - moderate	93	147.0	1.1	0.8	147	132 - 162	95	85.7	0.9	1.1	86	77 - 95
i-STAT - waived	13	147.8	1.6	1.1	147	133 - 163	13	86.1	1.3	1.5	86	77 - 95
	Specimen IST-8						**Specimen IST-9**					
All Method	102	179.0	1.4	0.8	179	161 - 197	103	77.3	1.0	1.3	77	69 - 86
All i-STAT Instruments	102	179.0	1.4	0.8	179	161 - 197	103	77.3	1.0	1.3	77	69 - 86
i-STAT - moderate	92	179.0	1.4	0.8	179	161 - 197	94	77.3	1.0	1.4	77	69 - 86
i-STAT - waived	10	178.8	1.5	0.8	179	160 - 197	10	77.8	1.4	1.8	78	70 - 86
	Specimen IST-10											
All Method	101	132.7	1.2	0.9	133	119 - 146						
All i-STAT Instruments	101	132.7	1.2	0.9	133	119 - 146						
i-STAT - moderate	93	132.8	1.2	0.9	133	119 - 147						
i-STAT - waived	10	133.2	3.2	2.4	133	119 - 147						

Hematocrit (percent)

Instrument	Specimen IST-6 Labs	Mean	SD	CV	Median	Range	Specimen IST-7 Labs	Mean	SD	CV	Median	Range
All Method	22	24.9	0.7	2.7	25	23 - 27	22	24.5	0.7	2.7	24	23 - 27
All i-STAT Instruments	22	24.9	0.7	2.7	25	23 - 27	22	24.5	0.7	2.7	24	23 - 27
i-STAT - moderate	14	24.9	0.8	3.3	25	23 - 27	14	24.6	0.8	3.1	24	23 - 27
i-STAT - waived	8	24.9	0.4	1.4	25	23 - 27	8	24.5	0.5	2.2	25	23 - 26

Instrument	Specimen IST-8 Labs	Mean	SD	CV	Median	Range	Specimen IST-9 Labs	Mean	SD	CV	Median	Range
All Method	19	20.3	0.6	2.8	20	19 - 22	19	28.7	0.8	2.9	29	26 - 31
All i-STAT Instruments	19	20.3	0.6	2.8	20	19 - 22	19	28.7	0.8	2.9	29	26 - 31
i-STAT - moderate	13	20.3	0.6	3.1	20	19 - 22	13	28.6	0.8	2.7	28	26 - 31
i-STAT - waived	6	20.2	0.4	2.0	20	18 - 22	6	28.8	1.0	3.4	29	27 - 31

Instrument	Specimen IST-10 Labs	Mean	SD	CV	Median	Range
All Method	20	34.5	0.9	2.7	34	32 - 37
All i-STAT Instruments	20	34.5	0.9	2.7	34	32 - 37
i-STAT - moderate	14	34.6	1.0	2.9	34	32 - 37
i-STAT - waived	6	34.2	0.8	2.2	34	32 - 37

Hemoglobin (g/dL)

Instrument	Specimen IST-6 Labs	Mean	SD	CV	Median	Range	Specimen IST-7 Labs	Mean	SD	CV	Median	Range
All Method	22	8.47	0.21	2.4	8.5	7.8 - 9.1	22	8.36	0.20	2.4	8.2	7.7 - 9.0
All i-STAT Instruments	22	8.47	0.21	2.4	8.5	7.8 - 9.1	22	8.36	0.20	2.4	8.2	7.7 - 9.0
i-STAT - moderate	14	8.48	0.25	2.9	8.5	7.8 - 9.1	14	8.37	0.23	2.7	8.2	7.7 - 9.0
i-STAT - waived	8	8.46	0.11	1.3	8.5	7.8 - 9.1	8	8.35	0.16	1.9	8.4	7.7 - 9.0

Instrument	Specimen IST-8 Labs	Mean	SD	CV	Median	Range	Specimen IST-9 Labs	Mean	SD	CV	Median	Range
All Method	19	6.88	0.17	2.5	6.8	6.3 - 7.4	19	9.76	0.29	3.0	9.9	9.0 - 10.5
All i-STAT Instruments	19	6.88	0.17	2.5	6.8	6.3 - 7.4	19	9.76	0.29	3.0	9.9	9.0 - 10.5
i-STAT - moderate	13	6.89	0.19	2.7	6.8	6.4 - 7.4	13	9.73	0.28	2.9	9.5	9.0 - 10.5
i-STAT - waived	6	6.85	0.12	1.8	6.8	6.3 - 7.4	6	9.83	0.33	3.4	9.9	9.1 - 10.6

Instrument	Specimen IST-10 Labs	Mean	SD	CV	Median	Range
All Method	20	11.73	0.30	2.6	11.6	10.9 - 12.6
All i-STAT Instruments	20	11.73	0.30	2.6	11.6	10.9 - 12.6
i-STAT - moderate	14	11.76	0.32	2.7	11.6	10.9 - 12.6
i-STAT - waived	6	11.63	0.26	2.2	11.6	10.8 - 12.5

Creatinine (mg/dL)

	Specimen IST-6						Specimen IST-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	116	6.16	0.19	3.2	6.2	5.2 - 7.1	117	1.02	0.05	4.7	1.0	0.7 - 1.4
All i-STAT Instruments	116	6.16	0.19	3.2	6.2	5.2 - 7.1	117	1.02	0.05	4.7	1.0	0.7 - 1.4
i-STAT - moderate	94	6.19	0.18	2.9	6.2	5.2 - 7.2	94	1.02	0.05	5.1	1.0	0.7 - 1.4
i-STAT - waived	22	6.01	0.19	3.2	6.0	5.1 - 7.0	21	1.00	0.01	0.0	1.0	0.7 - 1.3
	Specimen IST-8						**Specimen IST-9**					
All Method	100	3.83	0.09	2.5	3.8	3.2 - 4.5	101	0.72	0.04	5.7	0.7	0.4 - 1.1
All i-STAT Instruments	100	3.83	0.09	2.5	3.8	3.2 - 4.5	101	0.72	0.04	5.7	0.7	0.4 - 1.1
i-STAT - moderate	92	3.83	0.09	2.5	3.8	3.2 - 4.5	93	0.72	0.04	5.8	0.7	0.4 - 1.1
i-STAT - waived	8	-	-	-	3.8	3.2 - 4.5	8	-	-	-	0.7	0.4 - 1.1
	Specimen IST-10											
All Method	99	1.66	0.05	3.0	1.7	1.3 - 2.0						
All i-STAT Instruments	99	1.66	0.05	3.0	1.7	1.3 - 2.0						
i-STAT - moderate	91	1.66	0.05	3.0	1.7	1.3 - 2.0						
i-STAT - waived	8	-	-	-	1.7	1.3 - 2.0						

Ionized Calcium (mmol/L)

	Specimen IST-6						Specimen IST-7					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	103	2.141	0.026	1.2	2.14	2.06 - 2.22	103	0.814	0.010	1.2	0.81	0.78 - 0.85
All i-STAT Instruments	103	2.141	0.026	1.2	2.14	2.06 - 2.22	103	0.814	0.010	1.2	0.81	0.78 - 0.85
i-STAT - moderate	92	2.140	0.025	1.1	2.14	2.06 - 2.22	92	0.813	0.010	1.2	0.81	0.78 - 0.85
i-STAT - waived	11	2.152	0.035	1.6	2.15	2.04 - 2.26	11	0.815	0.013	1.6	0.82	0.77 - 0.86
	Specimen IST-8						**Specimen IST-9**					
All Method	99	2.038	0.031	1.5	2.04	1.94 - 2.14	98	0.887	0.009	1.0	0.89	0.86 - 0.92
All i-STAT Instruments	99	2.038	0.031	1.5	2.04	1.94 - 2.14	98	0.887	0.009	1.0	0.89	0.86 - 0.92
i-STAT - moderate	91	2.038	0.030	1.5	2.04	1.94 - 2.13	90	0.887	0.009	1.0	0.89	0.85 - 0.92
i-STAT - waived	8	-	-	-	2.05	1.94 - 2.14	8	-	-	-	0.89	0.86 - 0.92
	Specimen IST-10											
All Method	98	1.089	0.012	1.1	1.09	1.05 - 1.13						
All i-STAT Instruments	98	1.089	0.012	1.1	1.09	1.05 - 1.13						
i-STAT - moderate	90	1.089	0.012	1.1	1.09	1.05 - 1.13						
i-STAT - waived	8	-	-	-	1.10	1.05 - 1.13						

Albumin (g/dL)

	Specimen CH-6						Specimen CH-7					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	148	3.44	0.40	11.6	3.6	3.0 - 3.8	148	1.57	0.16	10.5	1.6	1.4 - 1.8
All Bromocresol Green Reagents	111	3.65	0.18	5.1	3.7	3.2 - 4.1	108	1.63	0.09	5.4	1.6	1.4 - 1.8
All Bromocresol Purple Reagents	35	2.80	0.07	2.5	2.8	2.5 - 3.1	36	1.36	0.12	9.1	1.3	1.2 - 1.5
Abaxis Piccolo												
Abaxis Piccolo - waived	10	2.82	0.14	5.0	2.8	2.5 - 3.2	10	1.48	0.08	5.3	1.5	1.3 - 1.7
All Chemistry Instruments	14	2.81	0.12	4.3	2.8	2.5 - 3.1	14	1.48	0.08	5.4	1.5	1.3 - 1.7
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	3.61	0.11	3.0	3.6	3.2 - 4.0	18	1.65	0.05	3.1	1.7	1.4 - 1.9
Beckman AU												
Beckman AU systems	24	3.69	0.08	2.1	3.7	3.3 - 4.1	24	1.67	0.07	4.1	1.7	1.5 - 1.9
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	3.43	0.18	5.2	3.5	3.0 - 3.8	17	1.64	0.06	3.7	1.6	1.4 - 1.8
Roche cobas c 501												
Roche cobas 6000 / c 501	8	3.93	0.10	2.6	3.9	3.5 - 4.4	8	1.76	0.16	9.1	1.7	1.5 - 2.0
Roche Integra												
Roche Integra	12	3.84	0.11	2.8	3.8	3.4 - 4.3	12	1.68	0.06	3.4	1.7	1.5 - 1.9
Siemens Healthcare												
Siemens Dimension	21	2.80	0.04	1.4	2.8	2.5 - 3.1	21	1.27	0.05	3.8	1.3	1.1 - 1.4
VITROS												
VITROS 250,350,400 500,700,750,950	12	3.54	0.16	4.6	3.5	3.1 - 3.9	12	1.47	0.07	4.4	1.5	1.3 - 1.7
All Chemistry Instruments	18	3.58	0.21	5.8	3.5	3.2 - 4.0	18	1.48	0.06	4.4	1.5	1.3 - 1.7

Albumin (g/dL)

	Specimen CH-8						Specimen CH-9					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	138	2.87	0.30	10.3	3.0	2.5 - 3.2	138	2.37	0.24	10.2	2.4	2.1 - 2.7
All Bromocresol Green Reagents	111	3.00	0.14	4.6	3.0	2.7 - 3.4	110	2.48	0.12	4.7	2.5	2.2 - 2.8
All Bromocresol Purple Reagents	26	2.33	0.07	3.0	2.3	2.1 - 2.6	25	1.92	0.07	3.8	1.9	1.7 - 2.2
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	2.4	2.1 - 2.6	3	-	-	-	2.1	1.7 - 2.2
All Chemistry Instruments	4	-	-	-	2.4	2.1 - 2.7	4	-	-	-	2.1	1.8 - 2.4
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	2.97	0.08	2.6	3.0	2.6 - 3.3	18	2.47	0.06	2.3	2.5	2.2 - 2.8
Beckman AU												
Beckman AU systems	24	3.05	0.08	2.6	3.1	2.7 - 3.4	24	2.51	0.08	3.1	2.5	2.2 - 2.8
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	2.92	0.12	4.2	2.9	2.6 - 3.3	17	2.43	0.09	3.8	2.4	2.1 - 2.7
Roche cobas c 501												
Roche cobas 6000 / c 501	8	3.20	0.11	3.3	3.2	2.8 - 3.6	8	2.63	0.09	3.4	2.6	2.3 - 2.9
Roche Integra												
Roche Integra	11	3.14	0.08	2.6	3.1	2.8 - 3.5	12	2.58	0.07	2.8	2.6	2.3 - 2.9
Siemens Healthcare												
Siemens Dimension	21	2.31	0.04	1.9	2.3	2.0 - 2.6	19	1.90	0.01	0.0	1.9	1.7 - 2.1
VITROS												
VITROS 250,350,400 500,700,750,950	12	2.88	0.11	3.7	2.9	2.5 - 3.2	12	2.31	0.11	4.7	2.3	2.0 - 2.6
All Chemistry Instruments	17	2.86	0.09	3.3	2.9	2.5 - 3.2	18	2.34	0.13	5.5	2.3	2.1 - 2.6

Albumin (g/dL)

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	138	3.39	0.36	10.7	3.5	3.0 - 3.8
All Bromocresol Green Reagents	110	3.55	0.16	4.6	3.5	3.1 - 4.0
All Bromocresol Purple Reagents	26	2.72	0.08	2.9	2.7	2.4 - 3.0
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	2.8	2.4 - 3.0
All Chemistry Instruments	4	-	-	-	2.8	2.4 - 3.1
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	18	3.52	0.09	2.5	3.5	3.1 - 3.9
Beckman AU						
Beckman AU systems	24	3.57	0.10	2.7	3.6	3.2 - 4.0
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	3.36	0.17	5.1	3.4	3.0 - 3.7
Roche cobas c 501						
Roche cobas 6000 / c 501	8	3.80	0.13	3.4	3.8	3.4 - 4.2
Roche Integra						
Roche Integra	12	3.74	0.08	2.1	3.7	3.3 - 4.2
Siemens Healthcare						
Siemens Dimension	22	2.71	0.07	2.5	2.7	2.4 - 3.0
VITROS						
VITROS 250,350,400 500,700,750,950	12	3.48	0.16	4.6	3.5	3.1 - 3.9
All Chemistry Instruments	18	3.50	0.18	5.2	3.5	3.1 - 3.9

Bilirubin, Direct (mg/dL)

Reagent/Instrument	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	80	0.93	0.30	32.8	0.9	0.3 - 1.6	77	0.04	0.06	126.9	0.0	0.0 - 0.2
All Roche Reagents	12	0.65	0.15	23.2	0.7	0.3 - 1.0	12	0.08	0.09	115.5	0.1	0.0 - 0.3
Beckman AU												
Beckman AU systems	15	0.99	0.18	18.3	1.0	0.6 - 1.4	14	0.00	0.01	0.0	0.0	0.0 - 0.1
Siemens Healthcare												
Siemens Dimension	15	0.67	0.20	30.4	0.7	0.2 - 1.1	14	0.06	0.05	80.3	0.1	0.0 - 0.2
All Chemistry Instruments	16	0.68	0.20	29.4	0.7	0.2 - 1.1	15	0.06	0.05	87.4	0.1	0.0 - 0.2
VITROS-BuBc and Bc												
All Chemistry Instruments	10	1.01	0.32	31.5	1.0	0.3 - 1.7	8	-	-	-	0.0	0.0 - 0.2

Reagent/Instrument	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	80	0.60	0.22	37.2	0.6	0.1 - 1.1	80	0.32	0.15	44.8	0.3	0.0 - 0.7
All Roche Reagents	12	0.43	0.11	24.8	0.4	0.2 - 0.7	12	0.25	0.09	36.2	0.2	0.0 - 0.5
Beckman AU												
Beckman AU systems	15	0.64	0.14	21.1	0.7	0.3 - 1.0	15	0.36	0.08	23.0	0.4	0.1 - 0.6
Siemens Healthcare												
Siemens Dimension	15	0.47	0.06	13.2	0.5	0.3 - 0.6	15	0.22	0.08	35.2	0.2	0.0 - 0.4
All Chemistry Instruments	16	0.48	0.07	14.4	0.5	0.3 - 0.7	16	0.23	0.08	34.4	0.2	0.0 - 0.4
VITROS-BuBc and Bc												
All Chemistry Instruments	10	0.55	0.32	57.7	0.5	0.0 - 1.2	10	0.26	0.20	77.3	0.3	0.0 - 0.7

Specimen CH-10

Reagent/Instrument	Labs	Mean	SD	CV	Median	Range
All Method	80	0.89	0.28	31.9	0.9	0.3 - 1.5
All Roche Reagents	12	0.61	0.14	23.7	0.6	0.3 - 0.9
Beckman AU						
Beckman AU systems	15	0.94	0.17	17.9	1.0	0.6 - 1.3
Siemens Healthcare						
Siemens Dimension	15	0.69	0.09	12.7	0.7	0.5 - 0.9
All Chemistry Instruments	16	0.70	0.09	12.8	0.7	0.5 - 0.9
VITROS-BuBc and Bc						
All Chemistry Instruments	10	0.94	0.31	33.0	1.0	0.3 - 1.6

Bilirubin, Total (mg/dL)

	Specimen CH-6						Specimen CH-7					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	146	3.15	0.46	14.5	3.2	2.5 - 3.8	144	0.12	0.07	57.2	0.1	0.0 - 0.6
All Alfa Wassermann Reagents	18	3.29	0.49	15.0	3.3	2.6 - 4.0	18	0.16	0.05	31.1	0.2	0.0 - 0.6
All Horiba Pentra Reagents	18	3.02	0.39	13.0	3.1	2.4 - 3.7	18	0.08	0.05	70.5	0.1	0.0 - 0.5
All Roche T. bili Special Reagents	18	2.79	0.35	12.7	2.8	2.2 - 3.4	18	0.14	0.07	50.2	0.2	0.0 - 0.6
Abaxis Piccolo												
Abaxis Piccolo - waived	10	2.63	0.41	15.4	2.6	2.1 - 3.2	10	0.19	0.07	38.8	0.2	0.0 - 0.6
All Chemistry Instruments	13	2.65	0.43	16.2	2.6	2.1 - 3.2	14	0.20	0.07	34.0	0.2	0.0 - 0.6
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	3.29	0.49	15.0	3.3	2.6 - 4.0	18	0.16	0.05	31.1	0.2	0.0 - 0.6
Beckman AU												
Beckman AU systems	23	3.58	0.20	5.6	3.6	2.8 - 4.3	24	0.10	0.01	0.0	0.1	0.0 - 0.5
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	3.02	0.39	13.0	3.1	2.4 - 3.7	18	0.08	0.05	70.5	0.1	0.0 - 0.5
Roche Integra-T. bili Gen.3												
All Chemistry Instruments	11	2.79	0.39	14.0	2.8	2.2 - 3.4	11	0.13	0.06	50.8	0.1	0.0 - 0.6
Siemens Healthcare												
Siemens Dimension	21	3.24	0.28	8.6	3.3	2.5 - 3.9	18	0.07	0.05	63.8	0.1	0.0 - 0.5
VITROS - TBIL												
VITROS 250,350,400 500,700,750,950	12	3.16	0.43	13.5	3.2	2.5 - 3.8	12	0.13	0.06	49.7	0.1	0.0 - 0.6
All Chemistry Instruments	18	3.23	0.40	12.5	3.2	2.5 - 3.9	17	0.10	0.03	33.4	0.1	0.0 - 0.6

Bilirubin, Total (mg/dL)

	Specimen CH-8						Specimen CH-9					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	137	2.08	0.30	14.4	2.1	1.6 - 2.5	137	1.14	0.19	16.3	1.1	0.7 - 1.6
All Alfa Wassermann Reagents	18	2.18	0.34	15.5	2.2	1.7 - 2.7	18	1.22	0.18	15.0	1.2	0.8 - 1.7
All Horiba Pentra Reagents	18	1.97	0.25	12.9	2.0	1.5 - 2.4	18	1.04	0.14	13.2	1.1	0.6 - 1.5
All Roche T. bili Special Reagents	18	1.79	0.24	13.6	1.8	1.3 - 2.2	18	0.96	0.14	14.5	1.0	0.5 - 1.4
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	1.6	1.6 - 2.5	3	-	-	-	0.9	0.7 - 1.6
All Chemistry Instruments	4	-	-	-	1.7	1.3 - 2.1	4	-	-	-	1.0	0.5 - 1.4
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	2.18	0.34	15.5	2.2	1.7 - 2.7	18	1.22	0.18	15.0	1.2	0.8 - 1.7
Beckman AU												
Beckman AU systems	23	2.35	0.14	6.1	2.4	1.8 - 2.9	23	1.33	0.09	7.0	1.3	0.9 - 1.8
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	1.97	0.25	12.9	2.0	1.5 - 2.4	18	1.04	0.14	13.2	1.1	0.6 - 1.5
Roche Integra-T. bili Gen.3												
All Chemistry Instruments	11	1.82	0.27	14.7	1.8	1.4 - 2.3	11	0.96	0.14	14.9	1.0	0.5 - 1.4
Siemens Healthcare												
Siemens Dimension	21	2.08	0.17	8.4	2.1	1.6 - 2.5	21	1.13	0.12	10.5	1.1	0.7 - 1.6
VITROS - TBIL												
VITROS 250,350,400 500,700,750,950	12	2.11	0.30	14.1	2.2	1.6 - 2.6	12	1.14	0.16	13.7	1.1	0.7 - 1.6
All Chemistry Instruments	18	2.12	0.28	13.1	2.2	1.6 - 2.6	18	1.13	0.16	13.9	1.1	0.7 - 1.6

Bilirubin, Total (mg/dL)

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	137	3.03	0.42	13.7	3.1	2.4 - 3.7
All Alfa Wassermann Reagents	18	3.18	0.43	13.5	3.2	2.5 - 3.9
All Horiba Pentra Reagents	18	2.88	0.36	12.5	2.9	2.3 - 3.5
All Roche T. bili Special Reagents	18	2.63	0.32	12.2	2.7	2.1 - 3.2
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	2.4	2.4 - 3.7
All Chemistry Instruments	4	-	-	-	2.4	2.0 - 3.0
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	18	3.18	0.43	13.5	3.2	2.5 - 3.9
Beckman AU						
Beckman AU systems	23	3.40	0.20	5.8	3.4	2.7 - 4.1
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	2.88	0.36	12.5	2.9	2.3 - 3.5
Roche Integra-T. bili Gen.3						
All Chemistry Instruments	11	2.65	0.36	13.8	2.7	2.1 - 3.2
Siemens Healthcare						
Siemens Dimension	21	3.08	0.23	7.5	3.1	2.4 - 3.7
VITROS - TBIL						
VITROS 250,350,400 500,700,750,950	12	2.99	0.44	14.8	3.0	2.3 - 3.6
All Chemistry Instruments	18	3.06	0.42	13.8	3.0	2.4 - 3.7

Calcium (mg/dL)

	Specimen CH-6						Specimen CH-7					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	147	12.22	0.37	3.0	12.2	11.2 - 13.3	148	7.30	0.29	4.0	7.3	6.2 - 8.3
All Arsenazo Methods	62	12.17	0.46	3.8	12.1	11.1 - 13.2	63	7.35	0.37	5.1	7.3	6.3 - 8.4
All CPC Methods	81	12.26	0.25	2.0	12.3	11.2 - 13.3	83	7.27	0.19	2.7	7.3	6.2 - 8.3
Abaxis Piccolo												
Abaxis Piccolo - waived	10	12.73	0.32	2.5	12.8	11.7 - 13.8	10	7.67	0.33	4.3	7.7	6.6 - 8.7
All Chemistry Instruments	14	12.76	0.30	2.4	12.8	11.7 - 13.8	14	7.71	0.29	3.7	7.8	6.7 - 8.8
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	16	11.91	0.30	2.5	11.9	10.9 - 13.0	17	7.51	0.28	3.7	7.6	6.5 - 8.6
Beckman AU												
Beckman AU systems	24	12.24	0.35	2.9	12.3	11.2 - 13.3	24	7.17	0.18	2.5	7.2	6.1 - 8.2
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	16	12.34	0.20	1.6	12.3	11.3 - 13.4	16	7.26	0.11	1.5	7.3	6.2 - 8.3
Roche Integra												
Roche Integra	12	12.41	0.21	1.7	12.5	11.4 - 13.5	12	7.45	0.11	1.5	7.4	6.4 - 8.5
Siemens Healthcare												
Siemens Dimension	21	12.11	0.20	1.7	12.1	11.1 - 13.2	21	7.22	0.22	3.1	7.2	6.2 - 8.3
All Chemistry Instruments	22	12.09	0.22	1.8	12.1	11.0 - 13.1	22	7.22	0.22	3.0	7.2	6.2 - 8.3
VITROS												
VITROS 250,350,400 500,700,750,950	12	12.07	0.23	1.9	12.1	11.0 - 13.1	12	7.13	0.16	2.2	7.2	6.1 - 8.2
All Chemistry Instruments	18	12.02	0.30	2.5	12.1	11.0 - 13.1	18	7.11	0.20	2.8	7.2	6.1 - 8.2

Calcium (mg/dL)

	Specimen CH-8						Specimen CH-9					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	136	10.62	0.26	2.5	10.6	9.6 - 11.7	138	9.29	0.28	3.0	9.3	8.2 - 10.3
All Arsenazo Methods	53	10.64	0.34	3.2	10.6	9.6 - 11.7	53	9.29	0.33	3.5	9.3	8.2 - 10.3
All CPC Methods	83	10.63	0.24	2.3	10.6	9.6 - 11.7	83	9.31	0.23	2.5	9.3	8.3 - 10.4
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	11.5	9.6 - 11.7	3	-	-	-	9.8	8.2 - 10.3
All Chemistry Instruments	4	-	-	-	11.5	10.4 - 12.5	4	-	-	-	9.9	8.8 - 10.9
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	17	10.74	0.25	2.4	10.7	9.7 - 11.8	17	9.49	0.16	1.7	9.5	8.4 - 10.5
Beckman AU												
Beckman AU systems	24	10.60	0.27	2.6	10.6	9.5 - 11.6	24	9.25	0.20	2.2	9.3	8.2 - 10.3
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	16	10.71	0.19	1.8	10.7	9.7 - 11.8	16	9.38	0.18	1.9	9.4	8.3 - 10.4
Roche Integra												
Roche Integra	12	10.79	0.21	2.0	10.8	9.7 - 11.8	12	9.44	0.26	2.7	9.5	8.4 - 10.5
Siemens Healthcare												
Siemens Dimension	21	10.48	0.19	1.9	10.5	9.4 - 11.5	21	9.18	0.19	2.1	9.2	8.1 - 10.2
All Chemistry Instruments	22	10.48	0.19	1.8	10.5	9.4 - 11.5	22	9.17	0.19	2.1	9.2	8.1 - 10.2
VITROS												
VITROS 250,350,400 500,700,750,950	12	10.53	0.17	1.6	10.5	9.5 - 11.6	12	9.18	0.18	2.0	9.2	8.1 - 10.2
All Chemistry Instruments	18	10.49	0.26	2.5	10.5	9.4 - 11.5	18	9.14	0.24	2.6	9.2	8.1 - 10.2

Calcium (mg/dL)

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	136	11.90	0.32	2.7	11.9	10.8 - 12.9
All Arsenazo Methods	53	11.88	0.41	3.4	11.8	10.8 - 12.9
All CPC Methods	83	11.94	0.29	2.4	11.9	10.9 - 13.0
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	12.8	10.8 - 12.9
All Chemistry Instruments	4	-	-	-	12.9	11.8 - 13.9
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	17	11.83	0.34	2.9	11.9	10.8 - 12.9
Beckman AU						
Beckman AU systems	24	11.95	0.33	2.7	11.9	10.9 - 13.0
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	16	12.01	0.21	1.8	12.0	11.0 - 13.1
Roche Integra						
Roche Integra	12	12.07	0.34	2.9	12.2	11.0 - 13.1
Siemens Healthcare						
Siemens Dimension	21	11.77	0.22	1.9	11.8	10.7 - 12.8
All Chemistry Instruments	22	11.76	0.23	1.9	11.8	10.7 - 12.8
VITROS						
VITROS 250,350,400 500,700,750,950	12	11.86	0.18	1.5	11.9	10.8 - 12.9
All Chemistry Instruments	18	11.79	0.29	2.5	11.9	10.7 - 12.8

Creatinine (mg/dL)

	Specimen CH-6						Specimen CH-7					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	147	4.01	0.24	6.0	4.0	3.4 - 4.7	147	0.58	0.09	14.9	0.6	0.2 - 0.9
All Alfa Wassermann Reagents	17	3.78	0.10	2.6	3.8	3.2 - 4.4	18	0.71	0.07	9.5	0.7	0.4 - 1.1
All Roche Reagents	21	3.83	0.21	5.4	3.8	3.2 - 4.5	21	0.55	0.06	10.9	0.5	0.2 - 0.9
All VITROS Reagents	18	4.30	0.14	3.2	4.3	3.6 - 5.0	18	0.58	0.04	7.4	0.6	0.2 - 0.9
Abaxis Piccolo												
Abaxis Piccolo - waived	10	4.10	0.16	4.0	4.2	3.4 - 4.8	10	0.65	0.10	15.0	0.7	0.3 - 1.0
All Chemistry Instruments	14	4.13	0.20	4.9	4.2	3.5 - 4.8	14	0.66	0.09	14.0	0.7	0.3 - 1.0
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	17	3.78	0.10	2.6	3.8	3.2 - 4.4	18	0.71	0.07	9.5	0.7	0.4 - 1.1
Beckman AU												
Beckman AU systems	23	4.08	0.13	3.2	4.1	3.4 - 4.7	24	0.56	0.05	9.0	0.6	0.2 - 0.9
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	3.82	0.10	2.7	3.8	3.2 - 4.4	17	0.53	0.07	13.0	0.5	0.2 - 0.9
Roche Integra												
Roche Integra	12	3.78	0.15	4.0	3.8	3.2 - 4.4	12	0.56	0.05	9.2	0.6	0.2 - 0.9
Siemens Healthcare												
Siemens Dimension	21	4.14	0.10	2.4	4.2	3.5 - 4.8	21	0.50	0.04	7.6	0.5	0.2 - 0.9
All Chemistry Instruments	22	4.15	0.10	2.4	4.2	3.5 - 4.8	22	0.50	0.04	8.7	0.5	0.2 - 0.8
VITROS - CREA												
All Chemistry Instruments	15	4.28	0.12	2.8	4.3	3.6 - 5.0	15	0.57	0.05	8.0	0.6	0.2 - 0.9

Creatinine (mg/dL)

	Specimen CH-8						Specimen CH-9					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	136	2.91	0.13	4.3	2.9	2.4 - 3.4	134	2.00	0.09	4.4	2.0	1.7 - 2.4
All Alfa Wassermann Reagents	17	2.87	0.08	3.0	2.9	2.4 - 3.4	17	2.04	0.07	3.5	2.1	1.7 - 2.4
All Roche Reagents	21	2.84	0.12	4.1	2.8	2.4 - 3.3	21	1.98	0.10	5.0	2.0	1.6 - 2.3
All VITROS Reagents	17	3.04	0.05	1.7	3.0	2.5 - 3.5	18	2.04	0.05	2.5	2.0	1.7 - 2.4
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	2.7	2.4 - 3.4	3	-	-	-	2.2	1.7 - 2.4
All Chemistry Instruments	4	-	-	-	2.8	2.4 - 3.3	4	-	-	-	2.2	1.8 - 2.6
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	17	2.87	0.08	3.0	2.9	2.4 - 3.4	17	2.04	0.07	3.5	2.1	1.7 - 2.4
Beckman AU												
Beckman AU systems	23	2.93	0.08	2.8	2.9	2.4 - 3.4	23	2.00	0.07	3.7	2.0	1.7 - 2.3
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	2.79	0.11	3.9	2.8	2.3 - 3.3	17	1.92	0.10	5.0	1.9	1.6 - 2.3
Roche Integra												
Roche Integra	12	2.84	0.07	2.4	2.9	2.4 - 3.3	12	1.98	0.08	4.2	2.0	1.6 - 2.3
Siemens Healthcare												
Siemens Dimension	21	2.94	0.09	3.0	3.0	2.5 - 3.4	21	2.01	0.07	3.5	2.0	1.7 - 2.4
All Chemistry Instruments	22	2.95	0.09	3.1	3.0	2.5 - 3.4	22	2.01	0.07	3.4	2.0	1.7 - 2.4
VITROS - CREA												
All Chemistry Instruments	15	3.02	0.08	2.6	3.0	2.5 - 3.5	15	2.03	0.05	2.4	2.0	1.7 - 2.4

Creatinine (mg/dL)

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	136	3.81	0.22	5.7	3.8	3.2 - 4.4
All Alfa Wassermann Reagents	17	3.62	0.10	2.8	3.6	3.0 - 4.2
All Roche Reagents	21	3.64	0.17	4.6	3.6	3.0 - 4.2
All VITROS Reagents	18	4.08	0.11	2.7	4.1	3.4 - 4.7
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	3.7	3.2 - 4.4
All Chemistry Instruments	4	-	-	-	3.9	3.2 - 4.5
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	17	3.62	0.10	2.8	3.6	3.0 - 4.2
Beckman AU						
Beckman AU systems	23	3.85	0.12	3.2	3.9	3.2 - 4.5
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	17	3.67	0.17	4.7	3.7	3.1 - 4.3
Roche Integra						
Roche Integra	12	3.62	0.11	3.1	3.6	3.0 - 4.2
Siemens Healthcare						
Siemens Dimension	21	3.92	0.12	3.0	3.9	3.3 - 4.6
All Chemistry Instruments	22	3.93	0.12	3.1	4.0	3.3 - 4.6
VITROS - CREA						
All Chemistry Instruments	15	4.05	0.10	2.4	4.0	3.4 - 4.7

Glucose (mg/dL)

	Specimen CH-6						Specimen CH-7					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	150	204.8	5.1	2.5	205	184 - 226	151	53.8	3.0	5.5	54	47 - 60
All Alfa Wassermann Reagents	19	207.8	4.2	2.0	209	187 - 229	19	56.5	1.3	2.3	57	50 - 63
All Horiba Pentra Reagents	17	203.9	5.9	2.9	205	183 - 225	15	52.8	2.1	3.9	52	46 - 59
All Roche Reagents	20	207.5	3.2	1.5	207	186 - 229	20	54.4	1.1	2.0	54	48 - 61
Abaxis Piccolo												
Abaxis Piccolo - waived	10	203.0	1.5	0.7	203	182 - 224	10	58.3	0.7	1.2	58	52 - 65
All Chemistry Instruments	14	203.4	1.7	0.8	203	183 - 224	14	58.5	1.2	2.1	58	52 - 65
Alere Cholestech LDX												
Alere Cholestech LDX - waived	6	184.7	11.9	6.4	184	166 - 204	6	49.8	0.4	0.8	50	43 - 56
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	19	207.8	4.2	2.0	209	187 - 229	19	56.5	1.3	2.3	57	50 - 63
Beckman AU												
Beckman AU systems	24	202.2	6.3	3.1	205	181 - 223	24	53.3	1.5	2.8	54	47 - 60
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	203.9	5.9	2.9	205	183 - 225	15	52.8	2.1	3.9	52	46 - 59
Roche cobas c 501												
Roche cobas 6000 / c 501	8	206.4	3.5	1.7	206	185 - 228	8	53.5	0.8	1.4	54	47 - 60
Roche Integra												
Roche Integra	12	209.3	5.9	2.8	208	188 - 231	12	55.3	1.5	2.7	55	49 - 62
Siemens Healthcare												
Siemens Dimension	21	206.8	2.3	1.1	207	186 - 228	21	54.2	0.9	1.6	54	48 - 61
All Chemistry Instruments	22	206.5	2.5	1.2	207	185 - 228	22	54.2	0.9	1.7	54	48 - 61
VITROS												
VITROS 250,350,400 500,700,750,950	12	203.4	3.6	1.8	205	183 - 224	12	48.0	2.5	5.3	49	42 - 54
All Chemistry Instruments	18	203.9	5.1	2.5	205	183 - 225	17	48.6	1.2	2.4	49	42 - 55

Glucose (mg/dL)

	Specimen CH-8						Specimen CH-9					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	137	155.7	4.3	2.8	156	140 - 172	135	115.3	3.2	2.8	116	103 - 127
All Alfa Wassermann Reagents	19	158.2	3.7	2.3	159	142 - 175	19	118.3	3.1	2.6	118	106 - 131
All Horiba Pentra Reagents	17	154.2	4.1	2.7	155	138 - 170	17	113.6	3.2	2.9	114	102 - 126
All Roche Reagents	20	157.6	2.4	1.5	158	141 - 174	20	116.4	2.2	1.9	117	104 - 129
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	154	140 - 172	3	-	-	-	117	103 - 127
All Chemistry Instruments	4	-	-	-	155	139 - 171	4	-	-	-	118	105 - 129
Alere Cholestech LDX												
Alere Cholestech LDX - waived	1	-	-	-	125	140 - 172	1	-	-	-	93	103 - 127
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	19	158.2	3.7	2.3	159	142 - 175	19	118.3	3.1	2.6	118	106 - 131
Beckman AU												
Beckman AU systems	24	154.0	4.7	3.1	156	138 - 170	24	113.8	3.3	2.9	115	102 - 126
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	154.2	4.1	2.7	155	138 - 170	17	113.6	3.2	2.9	114	102 - 126
Roche cobas c 501												
Roche cobas 6000 / c 501	8	156.4	2.6	1.6	157	140 - 173	8	114.8	1.9	1.7	115	103 - 127
Roche Integra												
Roche Integra	12	159.2	4.0	2.5	158	143 - 176	12	118.2	3.0	2.5	118	106 - 130
Siemens Healthcare												
Siemens Dimension	21	157.0	1.9	1.2	157	141 - 173	21	116.4	1.6	1.3	116	104 - 129
All Chemistry Instruments	22	157.1	1.9	1.2	158	141 - 173	22	116.3	1.6	1.3	116	104 - 128
VITROS												
VITROS 250,350,400 500,700,750,950	12	151.5	2.8	1.8	152	136 - 167	12	111.3	3.0	2.7	112	100 - 123
All Chemistry Instruments	18	151.9	4.0	2.6	152	136 - 168	18	111.6	3.4	3.1	112	100 - 123

Glucose (mg/dL)

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	135	196.2	4.5	2.3	197	176 - 216
All Alfa Wassermann Reagents	19	198.3	5.1	2.6	198	178 - 219
All Horiba Pentra Reagents	17	194.1	6.0	3.1	195	174 - 214
All Roche Reagents	20	198.6	2.5	1.3	198	178 - 219
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	192	176 - 216
All Chemistry Instruments	4	-	-	-	193	173 - 213
Alere Cholestech LDX						
Alere Cholestech LDX - waived	1	-	-	-	164	176 - 216
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	19	198.3	5.1	2.6	198	178 - 219
Beckman AU						
Beckman AU systems	24	193.8	6.1	3.1	197	174 - 214
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	17	194.1	6.0	3.1	195	174 - 214
Roche cobas c 501						
Roche cobas 6000 / c 501	8	197.3	3.0	1.5	198	177 - 217
Roche Integra						
Roche Integra	12	200.4	4.3	2.2	199	180 - 221
Siemens Healthcare						
Siemens Dimension	21	197.9	2.7	1.4	199	178 - 218
All Chemistry Instruments	22	197.7	2.7	1.4	199	177 - 218
VITROS						
VITROS 250,350,400 500,700,750,950	12	193.7	3.7	1.9	194	174 - 214
All Chemistry Instruments	18	193.8	5.1	2.6	194	174 - 214

Iron (µg/dL)

Reagent/Instrument	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	61	176.7	12.5	7.1	176	141 - 213	61	36.6	2.9	7.8	36	29 - 44
All Roche Reagents	9	176.2	2.9	1.6	177	140 - 212	9	37.4	1.7	4.6	38	29 - 45
Beckman AU												
Beckman AU systems	17	191.9	6.2	3.2	190	153 - 231	16	38.3	1.9	4.9	39	30 - 46
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	7	166.9	3.7	2.2	167	133 - 201	7	34.7	1.8	5.2	35	27 - 42
Roche cobas c 501												
Roche cobas 6000 / c 501	5	176.8	2.9	1.6	177	141 - 213	5	38.6	0.9	2.3	38	30 - 47
Siemens Healthcare												
Siemens Dimension	13	164.3	2.2	1.3	164	131 - 198	13	35.8	0.8	2.3	36	28 - 43
VITROS												
All Chemistry Instruments	5	195.8	17.5	8.9	190	156 - 235	5	33.2	6.3	18.9	31	26 - 40

Reagent/Instrument	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	61	129.9	8.2	6.3	129	103 - 156	61	92.8	5.8	6.3	93	74 - 112
All Roche Reagents	9	130.3	2.4	1.9	130	104 - 157	9	95.6	5.6	5.9	94	76 - 115
Beckman AU												
Beckman AU systems	17	139.5	4.3	3.1	139	111 - 168	17	99.1	4.4	4.5	98	79 - 119
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	7	123.4	2.9	2.3	123	98 - 149	7	88.4	2.3	2.6	88	70 - 107
Roche cobas c 501												
Roche cobas 6000 / c 501	5	131.6	2.4	1.8	131	105 - 158	5	94.2	0.8	0.9	94	75 - 114
Siemens Healthcare												
Siemens Dimension	13	122.2	2.0	1.6	122	97 - 147	13	88.0	2.0	2.3	88	70 - 106
VITROS												
All Chemistry Instruments	5	142.8	13.0	9.1	142	114 - 172	5	95.8	8.4	8.8	96	76 - 115

Reagent/Instrument	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	61	167.6	11.5	6.9	167	134 - 202
All Roche Reagents	9	168.3	3.7	2.2	168	134 - 202
Beckman AU						
Beckman AU systems	17	181.1	5.0	2.8	180	144 - 218
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	7	158.9	4.0	2.5	158	127 - 191
Roche cobas c 501						
Roche cobas 6000 / c 501	5	167.6	1.1	0.7	168	134 - 202
Siemens Healthcare						
Siemens Dimension	13	156.1	2.4	1.5	156	124 - 188
VITROS						
All Chemistry Instruments	5	186.6	17.3	9.3	186	149 - 224

Lactate (Lactic Acid) (mmol/L)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	5.65	0.07	1.3	5.7	5.2 - 6.1	5	0.35	0.07	20.2	0.4	0.0 - 0.8
	Specimen CH-8						**Specimen CH-9**					
All Method	5	3.90	0.01	0.0	3.9	3.5 - 4.3	5	2.45	0.07	2.9	2.5	2.0 - 2.9
	Specimen CH-10											
All Method	5	5.40	0.01	0.0	5.4	5.0 - 5.8						

Magnesium (mg/dL)

Reagent/Instrument	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	81	3.94	0.23	5.8	3.9	2.9 - 5.0	80	1.37	0.10	7.3	1.4	1.0 - 1.8
All Horiba Pentra Reagents	14	3.74	0.23	6.1	3.8	2.8 - 4.7	14	1.28	0.13	9.8	1.3	0.9 - 1.6
All Roche Reagents	18	3.91	0.10	2.6	3.9	2.9 - 4.9	18	1.39	0.04	3.0	1.4	1.0 - 1.8
Beckman AU												
Beckman AU systems	16	3.91	0.15	3.9	3.9	2.9 - 4.9	16	1.36	0.07	5.4	1.4	1.0 - 1.7
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	14	3.74	0.23	6.1	3.8	2.8 - 4.7	14	1.28	0.13	9.8	1.3	0.9 - 1.6
Roche Integra												
Roche Integra	10	3.86	0.10	2.5	3.9	2.8 - 4.9	10	1.40	0.01	0.0	1.4	1.0 - 1.8
Siemens Healthcare												
Siemens Dimension	12	4.08	0.14	3.3	4.1	3.0 - 5.1	12	1.39	0.12	8.4	1.4	1.0 - 1.8

Reagent/Instrument	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	81	3.11	0.18	5.7	3.1	2.3 - 3.9	82	2.44	0.15	6.0	2.4	1.8 - 3.1
All Horiba Pentra Reagents	14	2.91	0.19	6.6	2.9	2.1 - 3.7	14	2.34	0.19	8.2	2.4	1.7 - 3.0
All Roche Reagents	18	3.11	0.06	2.1	3.1	2.3 - 3.9	18	2.43	0.07	2.8	2.4	1.8 - 3.1
Beckman AU												
Beckman AU systems	16	3.09	0.10	3.2	3.1	2.3 - 3.9	16	2.42	0.07	2.7	2.4	1.8 - 3.1
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	14	2.91	0.19	6.6	2.9	2.1 - 3.7	14	2.34	0.19	8.2	2.4	1.7 - 3.0
Roche Integra												
Roche Integra	10	3.08	0.06	2.1	3.1	2.3 - 3.9	10	2.43	0.07	2.8	2.4	1.8 - 3.1
Siemens Healthcare												
Siemens Dimension	13	3.22	0.09	2.8	3.2	2.4 - 4.1	13	2.49	0.13	5.0	2.5	1.8 - 3.2

Reagent/Instrument	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	82	3.79	0.23	6.1	3.8	2.8 - 4.8
All Horiba Pentra Reagents	14	3.58	0.22	6.2	3.6	2.6 - 4.5
All Roche Reagents	18	3.76	0.09	2.4	3.8	2.8 - 4.8
Beckman AU						
Beckman AU systems	16	3.76	0.11	2.9	3.8	2.8 - 4.8
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	14	3.58	0.22	6.2	3.6	2.6 - 4.5
Roche Integra						
Roche Integra	10	3.73	0.09	2.5	3.7	2.7 - 4.7
Siemens Healthcare						
Siemens Dimension	13	3.94	0.14	3.5	3.9	2.9 - 5.0

Phosphorus (mg/dL)

	Specimen CH-6						Specimen CH-7					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	52	5.49	0.25	4.6	5.5	4.9 - 6.1	51	1.88	0.11	6.0	1.9	1.5 - 2.2
All Roche Reagents	15	5.39	0.20	3.6	5.3	4.8 - 6.0	15	1.81	0.06	3.5	1.8	1.5 - 2.2
Beckman AU												
Beckman AU systems	9	5.44	0.26	4.8	5.6	4.8 - 6.0	9	1.82	0.12	6.6	1.8	1.5 - 2.2
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	8	5.94	0.23	3.8	5.9	5.3 - 6.6	8	2.03	0.15	7.3	2.0	1.7 - 2.4
Roche cobas c 501												
Roche cobas 6000 / c 501	5	5.54	0.22	4.0	5.6	4.9 - 6.1	5	1.80	0.07	3.9	1.8	1.5 - 2.1
Roche Integra												
Roche Integra	9	5.29	0.13	2.4	5.2	4.7 - 5.9	9	1.82	0.07	3.7	1.8	1.5 - 2.2
Siemens Healthcare												
Siemens Dimension	6	5.58	0.08	1.3	5.6	5.0 - 6.2	6	1.95	0.05	2.8	2.0	1.6 - 2.3
VITROS												
VITROS 250,350,400 500,700,750,950	5	5.46	0.19	3.6	5.4	4.9 - 6.1	5	1.96	0.09	4.6	1.9	1.6 - 2.3
All Chemistry Instruments	7	5.44	0.16	3.0	5.4	4.8 - 6.0	7	1.99	0.09	4.5	2.0	1.6 - 2.3

	Specimen CH-8						Specimen CH-9					
All Method	51	4.32	0.18	4.2	4.3	3.8 - 4.8	52	3.35	0.17	5.0	3.4	3.0 - 3.7
All Roche Reagents	15	4.21	0.11	2.7	4.2	3.7 - 4.7	15	3.27	0.10	3.2	3.2	2.9 - 3.6
Beckman AU												
Beckman AU systems	9	4.26	0.19	4.6	4.3	3.8 - 4.7	9	3.27	0.14	4.3	3.3	2.9 - 3.6
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	8	4.70	0.22	4.7	4.6	4.2 - 5.2	8	3.65	0.16	4.4	3.6	3.2 - 4.1
Roche cobas c 501												
Roche cobas 6000 / c 501	5	4.30	0.12	2.8	4.3	3.8 - 4.8	5	3.32	0.13	3.9	3.3	2.9 - 3.7
Roche Integra												
Roche Integra	9	4.17	0.09	2.1	4.1	3.7 - 4.6	9	3.23	0.09	2.7	3.2	2.9 - 3.6
Siemens Healthcare												
Siemens Dimension	6	4.38	0.08	1.7	4.4	3.9 - 4.9	6	3.47	0.10	3.0	3.5	3.1 - 3.9
VITROS												
VITROS 250,350,400 500,700,750,950	5	4.30	0.07	1.6	4.3	3.8 - 4.8	5	3.38	0.11	3.2	3.4	3.0 - 3.8
All Chemistry Instruments	7	4.29	0.07	1.6	4.3	3.8 - 4.8	7	3.40	0.10	2.9	3.4	3.0 - 3.8

Phosphorus (mg/dL) cont'd

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	52	5.26	0.27	5.1	5.3	4.7 - 5.8
All Roche Reagents	15	5.15	0.18	3.5	5.1	4.6 - 5.7
Beckman AU						
Beckman AU systems	9	5.19	0.24	4.6	5.3	4.6 - 5.8
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	8	5.79	0.24	4.1	5.8	5.2 - 6.4
Roche cobas c 501						
Roche cobas 6000 / c 501	5	5.30	0.17	3.3	5.4	4.7 - 5.9
Roche Integra						
Roche Integra	9	5.07	0.14	2.8	5.1	4.5 - 5.6
Siemens Healthcare						
Siemens Dimension	6	5.33	0.05	1.0	5.3	4.7 - 5.9
VITROS						
VITROS 250,350,400 500,700,750,950	5	5.20	0.16	3.0	5.2	4.6 - 5.8
All Chemistry Instruments	7	5.19	0.13	2.6	5.2	4.6 - 5.8

Protein, Total (g/dL)

	Specimen CH-6						Specimen CH-7					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	145	6.89	0.22	3.1	6.9	6.2 - 7.6	145	2.72	0.12	4.5	2.7	2.4 - 3.0
All Alfa Wassermann Reagents	18	7.02	0.21	3.0	7.0	6.3 - 7.8	18	2.71	0.08	3.1	2.7	2.4 - 3.0
All Horiba Pentra Reagents	17	6.95	0.17	2.4	6.9	6.2 - 7.7	17	2.72	0.10	3.5	2.7	2.4 - 3.0
All Roche Reagents	20	6.81	0.18	2.7	6.8	6.1 - 7.5	21	2.65	0.10	3.7	2.6	2.3 - 3.0
Abaxis Piccolo												
Abaxis Piccolo - waived	10	6.93	0.13	1.9	6.9	6.2 - 7.7	10	2.88	0.08	2.7	2.9	2.5 - 3.2
All Chemistry Instruments	14	6.95	0.12	1.8	6.9	6.2 - 7.7	14	2.90	0.09	3.0	2.9	2.6 - 3.2
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	7.02	0.21	3.0	7.0	6.3 - 7.8	18	2.71	0.08	3.1	2.7	2.4 - 3.0
Beckman AU												
Beckman AU systems	24	6.83	0.15	2.2	6.9	6.1 - 7.6	24	2.74	0.15	5.6	2.7	2.4 - 3.1
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	6.95	0.17	2.4	6.9	6.2 - 7.7	17	2.72	0.10	3.5	2.7	2.4 - 3.0
Roche Integra												
Roche Integra	11	6.69	0.10	1.6	6.7	6.0 - 7.4	12	2.61	0.07	2.6	2.6	2.3 - 2.9
Siemens Healthcare												
Siemens Dimension	21	7.09	0.14	2.0	7.1	6.3 - 7.8	21	2.71	0.10	3.6	2.7	2.4 - 3.0
VITROS												
VITROS 250,350,400 500,700,750,950	12	6.68	0.14	2.1	6.7	6.0 - 7.4	12	2.74	0.11	4.0	2.8	2.4 - 3.1
All Chemistry Instruments	18	6.65	0.17	2.5	6.6	5.9 - 7.4	18	2.72	0.10	3.7	2.7	2.4 - 3.0

Protein, Total (g/dL)

	Specimen CH-8						Specimen CH-9					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	134	5.55	0.17	3.0	5.6	4.9 - 6.2	135	4.43	0.14	3.1	4.4	3.9 - 4.9
All Alfa Wassermann Reagents	18	5.64	0.24	4.3	5.7	5.0 - 6.3	18	4.48	0.17	3.8	4.5	4.0 - 5.0
All Horiba Pentra Reagents	17	5.61	0.12	2.1	5.6	5.0 - 6.2	17	4.48	0.11	2.4	4.5	4.0 - 5.0
All Roche Reagents	21	5.48	0.15	2.7	5.4	4.9 - 6.1	21	4.38	0.14	3.1	4.4	3.9 - 4.9
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	5.6	4.9 - 6.2	3	-	-	-	4.5	3.9 - 4.9
All Chemistry Instruments	4	-	-	-	5.6	5.0 - 6.2	4	-	-	-	4.5	4.0 - 5.1
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	5.64	0.24	4.3	5.7	5.0 - 6.3	18	4.48	0.17	3.8	4.5	4.0 - 5.0
Beckman AU												
Beckman AU systems	22	5.50	0.05	0.9	5.5	4.9 - 6.1	24	4.36	0.09	2.1	4.4	3.9 - 4.8
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	5.61	0.12	2.1	5.6	5.0 - 6.2	17	4.48	0.11	2.4	4.5	4.0 - 5.0
Roche Integra												
Roche Integra	12	5.41	0.08	1.5	5.4	4.8 - 6.0	12	4.31	0.10	2.3	4.3	3.8 - 4.8
Siemens Healthcare												
Siemens Dimension	21	5.69	0.12	2.2	5.7	5.1 - 6.3	21	4.52	0.10	2.2	4.5	4.0 - 5.0
VITROS												
VITROS 250,350,400 500,700,750,950	12	5.48	0.15	2.7	5.5	4.9 - 6.1	12	4.43	0.11	2.4	4.5	3.9 - 4.9
All Chemistry Instruments	18	5.44	0.16	2.9	5.5	4.8 - 6.0	18	4.41	0.12	2.7	4.4	3.9 - 4.9

Protein, Total (g/dL)

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	134	6.65	0.22	3.3	6.7	5.9 - 7.4
All Alfa Wassermann Reagents	18	6.78	0.31	4.5	6.8	6.1 - 7.5
All Horiba Pentra Reagents	17	6.69	0.14	2.1	6.7	6.0 - 7.4
All Roche Reagents	21	6.59	0.19	2.8	6.5	5.9 - 7.3
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	6.7	5.9 - 7.4
All Chemistry Instruments	4	-	-	-	6.8	6.0 - 7.5
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	18	6.78	0.31	4.5	6.8	6.1 - 7.5
Beckman AU						
Beckman AU systems	22	6.61	0.08	1.3	6.6	5.9 - 7.3
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	17	6.69	0.14	2.1	6.7	6.0 - 7.4
Roche Integra						
Roche Integra	12	6.50	0.13	2.1	6.5	5.8 - 7.2
Siemens Healthcare						
Siemens Dimension	21	6.84	0.14	2.0	6.9	6.1 - 7.6
VITROS						
VITROS 250,350,400 500,700,750,950	12	6.51	0.17	2.7	6.5	5.8 - 7.2
All Chemistry Instruments	17	6.47	0.18	2.8	6.5	5.8 - 7.2

Urea Nitrogen (mg/dL)

	Specimen CH-6						Specimen CH-7					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	147	34.9	2.4	7.0	35	31 - 38	147	6.5	0.9	14.4	7	4 - 9
All Alfa Wassermann Reagents	18	35.9	1.4	3.8	36	32 - 40	18	6.8	0.5	8.1	7	4 - 9
All Horiba Pentra Reagents	17	32.9	1.6	5.0	33	29 - 36	17	6.1	0.6	9.8	6	4 - 9
All Roche Reagents	21	36.1	1.4	3.9	36	32 - 40	21	6.7	0.5	7.2	7	4 - 9
Abaxis Piccolo												
Abaxis Piccolo - waived	10	33.7	0.7	2.0	34	30 - 37	10	7.4	0.5	7.0	7	5 - 10
All Chemistry Instruments	14	34.0	0.8	2.3	34	30 - 38	14	7.5	0.5	6.9	8	5 - 10
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	35.9	1.4	3.8	36	32 - 40	18	6.8	0.5	8.1	7	4 - 9
Beckman AU												
Beckman AU systems	24	36.8	1.3	3.6	37	33 - 41	23	7.1	0.4	5.9	7	5 - 10
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	32.9	1.6	5.0	33	29 - 36	17	6.1	0.6	9.8	6	4 - 9
Roche Integra												
Roche Integra	12	36.4	1.7	4.6	37	33 - 40	12	6.7	0.5	7.4	7	4 - 9
Siemens Healthcare												
Siemens Dimension	21	36.3	1.1	3.2	37	33 - 40	21	6.5	0.7	10.5	7	4 - 9
All Chemistry Instruments	22	36.2	1.2	3.2	37	32 - 40	22	6.5	0.7	10.3	7	4 - 9
VITROS												
VITROS 250,350,400 500,700,750,950	12	30.3	0.5	1.6	30	27 - 34	12	4.8	0.4	8.1	5	2 - 7
All Chemistry Instruments	18	30.3	0.8	2.5	30	27 - 34	18	4.8	0.4	9.0	5	2 - 7

Urea Nitrogen (mg/dL)

	Specimen CH-8						Specimen CH-9					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	137	25.5	1.9	7.5	26	23 - 28	137	18.0	1.5	8.2	18	15 - 20
All Alfa Wassermann Reagents	18	26.5	1.2	4.3	26	24 - 29	18	18.8	0.9	5.0	19	16 - 21
All Horiba Pentra Reagents	17	24.1	1.1	4.6	24	21 - 27	17	16.7	0.7	4.1	17	14 - 19
All Roche Reagents	21	26.3	0.9	3.5	27	23 - 29	21	18.5	0.7	3.7	19	16 - 21
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	25	23 - 28	3	-	-	-	17	15 - 20
All Chemistry Instruments	4	-	-	-	25	22 - 27	4	-	-	-	18	15 - 20
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	26.5	1.2	4.3	26	24 - 29	18	18.8	0.9	5.0	19	16 - 21
Beckman AU												
Beckman AU systems	24	26.9	1.1	4.1	27	24 - 30	23	19.2	0.7	3.8	19	17 - 22
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	24.1	1.1	4.6	24	21 - 27	17	16.7	0.7	4.1	17	14 - 19
Roche Integra												
Roche Integra	12	26.4	0.9	3.4	27	24 - 29	12	18.5	0.8	4.3	19	16 - 21
Siemens Healthcare												
Siemens Dimension	21	26.3	0.8	3.0	26	23 - 29	21	18.3	0.9	5.0	18	16 - 21
All Chemistry Instruments	22	26.3	0.8	2.9	26	23 - 29	22	18.3	0.9	4.9	18	16 - 21
VITROS												
VITROS 250,350,400 500,700,750,950	12	22.1	0.5	2.3	22	20 - 25	12	15.5	0.5	3.4	16	13 - 18
All Chemistry Instruments	18	21.9	0.8	3.5	22	19 - 24	18	15.3	0.6	3.9	15	13 - 18

Urea Nitrogen (mg/dL)

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	137	33.2	2.5	7.6	34	30 - 37
All Alfa Wassermann Reagents	18	34.4	1.3	3.9	34	31 - 38
All Horiba Pentra Reagents	17	31.1	1.3	4.2	31	28 - 34
All Roche Reagents	20	34.6	0.8	2.4	35	31 - 38
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	32	30 - 37
All Chemistry Instruments	4	-	-	-	32	29 - 35
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	18	34.4	1.3	3.9	34	31 - 38
Beckman AU						
Beckman AU systems	24	35.1	1.1	3.2	35	31 - 39
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	17	31.1	1.3	4.2	31	28 - 34
Roche Integra						
Roche Integra	12	34.6	0.9	2.6	35	31 - 38
Siemens Healthcare						
Siemens Dimension	21	34.5	1.0	3.0	34	31 - 38
All Chemistry Instruments	22	34.5	1.0	2.9	34	31 - 38
VITROS						
VITROS 250,350,400 500,700,750,950	12	28.7	0.5	1.7	29	26 - 32
All Chemistry Instruments	18	28.3	0.8	2.7	29	25 - 31

Uric Acid (mg/dL)

Reagent/Instrument	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	89	8.80	0.35	3.9	8.8	7.3 - 10.3	86	1.95	0.22	11.5	1.9	1.6 - 2.3
All Alfa Wassermann Reagents	10	8.63	0.43	5.0	8.7	7.1 - 10.1	10	2.85	0.22	7.8	2.8	2.3 - 3.4
All Roche Reagents	17	8.72	0.26	3.0	8.8	7.2 - 10.2	17	1.80	0.06	3.4	1.8	1.4 - 2.2
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	10	8.63	0.43	5.0	8.7	7.1 - 10.1	10	2.85	0.22	7.8	2.8	2.3 - 3.4
Beckman AU												
Beckman AU systems	15	9.01	0.24	2.7	9.0	7.4 - 10.6	15	1.97	0.13	6.8	2.0	1.6 - 2.4
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	12	8.77	0.22	2.5	8.7	7.2 - 10.3	12	1.88	0.10	5.5	1.9	1.5 - 2.3
Roche Integra												
Roche Integra	11	8.87	0.13	1.4	8.9	7.3 - 10.4	11	1.83	0.05	2.6	1.8	1.5 - 2.2
Siemens Healthcare												
Siemens Dimension	15	8.53	0.19	2.2	8.6	7.0 - 10.0	15	1.88	0.11	6.1	1.9	1.5 - 2.2
All Chemistry Instruments	16	8.56	0.22	2.6	8.6	7.1 - 10.1	16	1.89	0.12	6.5	1.9	1.5 - 2.3

Reagent/Instrument	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	91	6.56	0.26	4.0	6.5	5.4 - 7.7	89	4.71	0.17	3.6	4.7	3.9 - 5.6
All Alfa Wassermann Reagents	10	6.54	0.28	4.2	6.6	5.4 - 7.7	10	4.90	0.27	5.6	4.8	4.0 - 5.8
All Roche Reagents	17	6.47	0.22	3.4	6.5	5.3 - 7.6	17	4.64	0.14	3.0	4.7	3.8 - 5.5
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	10	6.54	0.28	4.2	6.6	5.4 - 7.7	10	4.90	0.27	5.6	4.8	4.0 - 5.8
Beckman AU												
Beckman AU systems	15	6.69	0.21	3.1	6.6	5.5 - 7.9	15	4.77	0.17	3.5	4.7	3.9 - 5.6
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	12	6.54	0.18	2.7	6.5	5.4 - 7.7	12	4.69	0.12	2.6	4.7	3.8 - 5.5
Roche Integra												
Roche Integra	11	6.59	0.14	2.1	6.6	5.4 - 7.8	11	4.70	0.09	1.9	4.7	3.9 - 5.5
Siemens Healthcare												
Siemens Dimension	15	6.41	0.12	1.8	6.4	5.3 - 7.5	15	4.61	0.11	2.4	4.6	3.8 - 5.4
All Chemistry Instruments	16	6.43	0.13	2.1	6.4	5.3 - 7.6	16	4.62	0.12	2.5	4.6	3.8 - 5.5

Uric Acid (mg/dL)

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	88	8.35	0.33	3.9	8.3	6.9 - 9.8
All Alfa Wassermann Reagents	10	8.13	0.32	3.9	8.2	6.7 - 9.6
All Roche Reagents	16	8.28	0.28	3.4	8.3	6.8 - 9.7
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	10	8.13	0.32	3.9	8.2	6.7 - 9.6
Beckman AU						
Beckman AU systems	15	8.53	0.27	3.2	8.4	7.0 - 10.0
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	12	8.33	0.21	2.5	8.3	6.9 - 9.8
Roche Integra						
Roche Integra	10	8.43	0.18	2.2	8.5	6.9 - 9.9
Siemens Healthcare						
Siemens Dimension	15	8.13	0.21	2.5	8.1	6.7 - 9.6
All Chemistry Instruments	16	8.18	0.26	3.2	8.2	6.7 - 9.6

Chloride (mmol/L)

Method/Instrument	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	138	113.3	3.0	2.6	113	107 - 120	143	88.4	2.8	3.1	88	83 - 93
Abaxis Piccolo												
Abaxis Piccolo - waived	10	116.2	2.3	1.9	116	110 - 123	10	94.7	1.8	1.9	94	89 - 100
Abaxis Piccolo	5	114.8	2.8	2.4	115	109 - 121	5	94.0	0.1	0.0	94	89 - 99
All Chemistry Instruments	15	115.8	2.4	2.1	116	109 - 122	15	94.5	1.6	1.6	94	89 - 100
ISE Diluted												
Beckman AU systems	24	110.4	1.2	1.1	111	104 - 116	24	88.1	1.1	1.2	88	83 - 93
Roche cobas 6000 / c 501	8	111.4	1.5	1.4	112	105 - 117	8	86.1	0.8	1.0	86	81 - 91
Roche Integra	12	118.7	4.9	4.1	117	112 - 125	12	90.3	2.1	2.3	90	85 - 95
Siemens Dimension QuickLyte - Xpand/EXL	17	114.5	1.2	1.1	115	108 - 121	16	87.1	1.1	1.2	87	82 - 92
All Chemistry Instruments	73	112.8	3.0	2.7	112	107 - 119	72	87.8	1.6	1.8	88	83 - 93
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	16	116.3	0.9	0.8	116	110 - 123	17	87.6	1.6	1.8	88	83 - 93
Horiba ABX Pentra 400 / C400	12	113.0	4.6	4.1	112	107 - 119	16	85.6	2.7	3.2	86	81 - 90
All Chemistry Instruments	34	114.4	3.4	3.0	115	108 - 121	38	86.7	2.3	2.7	87	82 - 92
VITROS												
VITROS 250,350,400 500,700,750,950	12	111.6	1.2	1.1	112	106 - 118	12	89.3	1.6	1.8	89	84 - 94
VITROS XT 3400	5	112.8	1.7	1.5	113	107 - 119	5	90.0	1.4	1.6	90	85 - 95
All Chemistry Instruments	18	112.0	1.5	1.4	112	106 - 118	18	89.5	1.5	1.7	89	85 - 94

Method/Instrument	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	131	105.0	2.6	2.5	105	99 - 111	130	98.1	2.3	2.3	98	93 - 104
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	109	103 - 115	3	-	-	-	103	97 - 109
Abaxis Piccolo	2	-	-	-	111	103 - 115	2	-	-	-	104	97 - 109
All Chemistry Instruments	5	109.0	2.2	2.0	110	103 - 115	5	103.0	1.4	1.4	104	97 - 109
ISE Diluted												
Beckman AU systems	23	103.2	0.9	0.8	103	98 - 109	23	97.3	0.7	0.7	97	92 - 103
Roche cobas 6000 / c 501	8	103.5	0.8	0.7	104	98 - 109	8	96.6	1.2	1.2	97	91 - 102
Roche Integra	12	109.4	2.6	2.4	109	103 - 115	12	101.8	2.5	2.4	101	96 - 107
Siemens Dimension QuickLyte - Xpand/EXL	16	105.6	0.8	0.8	106	100 - 111	17	98.4	0.8	0.8	98	93 - 104
All Chemistry Instruments	73	104.9	2.5	2.4	104	99 - 111	71	97.9	1.6	1.6	98	93 - 103
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	17	105.8	1.6	1.5	106	100 - 112	17	98.5	1.6	1.6	99	93 - 104
Horiba ABX Pentra 400 / C400	16	104.1	5.0	4.8	104	98 - 110	16	96.1	3.9	4.1	96	91 - 101
All Chemistry Instruments	38	104.7	3.6	3.4	105	99 - 110	38	97.3	3.0	3.1	98	92 - 103
VITROS												
VITROS 250,350,400 500,700,750,950	12	104.7	1.2	1.2	105	99 - 110	12	97.9	3.0	3.0	98	93 - 103
VITROS XT 3400	5	105.0	2.0	1.9	104	99 - 111	5	99.0	1.4	1.4	99	94 - 104
All Chemistry Instruments	18	104.8	1.4	1.3	105	99 - 111	17	99.0	1.7	1.7	99	94 - 104

Chloride (mmol/L)

Specimen CH-10

Method/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	131	111.8	3.1	2.7	111	106 - 118
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	113	107 - 120
Abaxis Piccolo	2	-	-	-	115	107 - 120
All Chemistry Instruments	5	113.5	1.3	1.1	114	107 - 120
ISE Diluted						
Beckman AU systems	23	109.5	0.7	0.6	109	104 - 115
Roche cobas 6000 / c 501	8	110.4	0.7	0.7	110	104 - 116
Roche Integra	12	117.7	3.6	3.0	117	111 - 124
Siemens Dimension QuickLyte - Xpand/EXL	16	113.0	1.0	0.9	113	107 - 119
All Chemistry Instruments	74	111.8	3.2	2.9	111	106 - 118
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	17	114.1	1.4	1.2	114	108 - 120
Horiba ABX Pentra 400 / C400	13	110.3	4.3	3.9	110	104 - 116
All Chemistry Instruments	35	112.1	3.4	3.1	113	106 - 118
VITROS						
VITROS 250,350,400 500,700,750,950	12	110.9	1.7	1.5	111	105 - 117
VITROS XT 3400	5	111.0	1.4	1.3	111	105 - 117
All Chemistry Instruments	18	111.0	1.6	1.4	111	105 - 117

CO_2 (mmol/L)

	Specimen CH-6						Specimen CH-7					
Method/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	135	30.7	2.6	8.4	31	24 - 37	136	16.1	1.8	11.0	16	12 - 20
Abaxis Piccolo												
Abaxis Piccolo - waived	9	30.7	1.0	3.3	31	24 - 37	9	15.6	0.7	4.7	15	12 - 19
Abaxis Piccolo	5	30.0	1.4	4.7	31	24 - 36	5	16.0	0.8	5.1	16	12 - 20
All Chemistry Instruments	13	30.5	1.1	3.7	31	24 - 37	13	15.7	0.8	4.8	16	12 - 19
Enzymatic Reagent												
Alfa Wassermann ACE Alera/Axcel	11	29.7	3.1	10.5	29	23 - 36	11	15.6	2.6	16.5	15	12 - 19
Beckman AU systems	18	33.1	1.5	4.6	34	26 - 40	19	16.8	1.6	9.6	17	13 - 21
Horiba ABX Pentra 400 / C400	14	29.4	2.2	7.6	30	23 - 36	14	16.1	1.1	6.7	17	12 - 20
Roche cobas 6000 / c 501	6	28.0	1.5	5.5	28	22 - 34	6	14.7	1.2	8.3	15	11 - 18
Roche Integra	11	30.0	1.9	6.3	30	24 - 36	11	15.7	1.6	9.9	16	12 - 19
Siemens Dimension	17	32.8	2.4	7.2	33	26 - 40	17	17.6	1.6	9.2	18	14 - 22
All Chemistry Instruments	85	31.1	2.8	9.1	31	24 - 38	85	16.5	1.8	11.1	17	13 - 20
ISE Diluted												
All Chemistry Instruments	10	30.1	3.6	12.1	29	24 - 37	10	15.4	1.3	8.8	16	12 - 19
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	5	32.6	2.3	7.1	33	26 - 40	5	17.0	1.2	7.2	17	13 - 21
All Chemistry Instruments	10	31.6	2.5	7.9	32	25 - 38	10	16.7	1.6	9.4	17	13 - 21
VITROS												
VITROS 250,350,400 500,700,750,950	12	29.4	1.4	4.9	29	23 - 36	12	14.7	1.6	11.0	15	11 - 18
VITROS XT 3400	5	28.5	1.0	3.5	29	22 - 35	5	15.3	1.0	6.3	16	12 - 19
All Chemistry Instruments	18	29.2	1.3	4.4	29	23 - 36	18	14.7	1.5	9.9	15	11 - 18

CO_2 (mmol/L)

	Specimen CH-8						Specimen CH-9					
All Method	127	25.9	2.7	10.4	26	20 - 32	126	21.5	2.3	10.7	22	17 - 26
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	25	19 - 29	3	-	-	-	21	17 - 26
Abaxis Piccolo	2	-	-	-	21	19 - 29	2	-	-	-	21	17 - 26
All Chemistry Instruments	5	24.0	2.2	9.0	25	19 - 29	5	21.5	1.0	4.7	21	17 - 26
Enzymatic Reagent												
Alfa Wassermann ACE Alera/Axcel	11	25.8	3.3	12.6	25	20 - 31	11	21.6	2.4	11.2	21	17 - 26
Beckman AU systems	18	27.8	1.4	4.9	28	22 - 34	18	22.9	1.1	4.9	23	18 - 28
Horiba ABX Pentra 400 / C400	14	25.1	1.5	5.8	26	20 - 31	14	20.8	1.5	7.1	21	16 - 25
Roche cobas 6000 / c 501	6	23.2	1.7	7.4	23	18 - 28	6	19.3	1.5	7.8	19	15 - 24
Roche Integra	11	24.9	1.6	6.6	25	19 - 30	11	20.0	3.2	15.8	20	16 - 24
Siemens Dimension	17	27.9	2.0	7.2	28	22 - 34	17	23.4	1.5	6.2	24	18 - 29
All Chemistry Instruments	85	26.4	2.5	9.7	26	21 - 32	83	22.1	2.0	9.0	22	17 - 27
ISE Diluted												
All Chemistry Instruments	10	25.7	3.4	13.2	25	20 - 31	10	20.9	2.0	9.4	21	16 - 26
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	5	28.2	2.5	8.8	29	22 - 34	5	23.2	1.1	4.7	24	18 - 28
All Chemistry Instruments	10	27.4	2.6	9.5	28	21 - 33	10	22.6	1.8	8.1	24	18 - 28
VITROS												
VITROS 250,350,400 500,700,750,950	12	23.8	1.9	7.9	24	19 - 29	12	19.0	1.9	9.8	20	15 - 23
VITROS XT 3400	5	23.5	1.0	4.3	24	18 - 29	5	18.8	2.5	13.3	20	15 - 23
All Chemistry Instruments	18	23.6	1.6	6.7	24	18 - 29	18	18.9	1.8	9.8	20	15 - 23

CO_2 (mmol/L)

Specimen CH-10

Method/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	127	29.6	3.1	10.6	30	23 - 36
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	27	21 - 32
Abaxis Piccolo	2	-	-	-	24	21 - 32
All Chemistry Instruments	5	26.5	1.7	6.5	27	21 - 32
Enzymatic Reagent						
Alfa Wassermann ACE Alera/Axcel	11	29.8	2.6	8.8	31	23 - 36
Beckman AU systems	18	31.8	2.0	6.2	32	25 - 39
Horiba ABX Pentra 400 / C400	14	28.3	2.2	7.6	29	22 - 34
Roche cobas 6000 / c 501	6	27.0	1.5	5.7	27	21 - 33
Roche Integra	11	27.8	2.0	7.2	27	22 - 34
Siemens Dimension	17	31.9	2.5	7.9	32	25 - 39
All Chemistry Instruments	85	30.0	2.9	9.8	30	24 - 36
ISE Diluted						
All Chemistry Instruments	10	29.7	3.9	13.1	29	23 - 36
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	5	32.6	2.4	7.4	32	26 - 40
All Chemistry Instruments	10	31.5	3.1	9.7	32	25 - 38
VITROS						
VITROS 250,350,400 500,700,750,950	12	26.8	2.5	9.4	27	21 - 33
VITROS XT 3400	5	28.0	2.0	7.1	29	22 - 34
All Chemistry Instruments	18	27.2	2.3	8.3	28	21 - 33

Potassium (mmol/L)

Method/Instrument	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	144	6.63	0.16	2.5	6.6	6.1 - 7.2	144	2.89	0.09	3.0	2.9	2.3 - 3.4
Abaxis Piccolo												
Abaxis Piccolo - waived	10	6.81	0.25	3.6	6.9	6.3 - 7.4	10	2.97	0.13	4.2	3.0	2.4 - 3.5
Abaxis Piccolo	5	6.58	0.19	2.9	6.7	6.0 - 7.1	5	3.13	0.34	10.9	3.2	2.6 - 3.7
All Chemistry Instruments	15	6.74	0.25	3.7	6.7	6.2 - 7.3	15	3.01	0.21	6.9	3.0	2.5 - 3.6
ISE Diluted												
Beckman AU systems	24	6.52	0.11	1.6	6.5	6.0 - 7.1	23	2.89	0.03	1.2	2.9	2.3 - 3.4
Roche cobas 6000 / c 501	8	6.73	0.07	1.1	6.7	6.2 - 7.3	8	2.94	0.07	2.5	2.9	2.4 - 3.5
Roche Integra	12	6.58	0.06	0.9	6.6	6.0 - 7.1	12	2.90	0.01	0.0	2.9	2.4 - 3.4
Siemens Dimension QuickLyte - Xpand/EXL	18	6.64	0.08	1.2	6.6	6.1 - 7.2	18	2.84	0.05	1.8	2.8	2.3 - 3.4
All Chemistry Instruments	76	6.59	0.11	1.7	6.6	6.0 - 7.1	71	2.88	0.05	1.6	2.9	2.3 - 3.4
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	16	6.78	0.13	1.9	6.8	6.2 - 7.3	16	2.87	0.11	3.8	2.9	2.3 - 3.4
Horiba ABX Pentra 400 / C400	17	6.49	0.28	4.4	6.5	5.9 - 7.0	16	2.89	0.06	2.0	2.9	2.3 - 3.4
All Chemistry Instruments	38	6.62	0.26	4.0	6.6	6.1 - 7.2	37	2.89	0.10	3.4	2.9	2.3 - 3.4
VITROS												
VITROS 250,350,400 500,700,750,950	12	6.63	0.11	1.6	6.6	6.1 - 7.2	12	2.87	0.05	1.7	2.9	2.3 - 3.4
VITROS XT 3400	5	6.65	0.06	0.9	6.7	6.1 - 7.2	5	2.90	0.01	0.0	2.9	2.4 - 3.4
All Chemistry Instruments	18	6.63	0.11	1.6	6.6	6.1 - 7.2	18	2.87	0.06	2.1	2.9	2.3 - 3.4

Method/Instrument	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	132	5.35	0.09	1.8	5.4	4.8 - 5.9	133	4.37	0.08	1.7	4.4	3.8 - 4.9
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	5.5	5.3 - 6.3	3	-	-	-	4.7	4.2 - 5.3
Abaxis Piccolo	2	-	-	-	6.3	5.3 - 6.3	2	-	-	-	5.2	4.2 - 5.3
All Chemistry Instruments	5	5.80	0.38	6.6	5.7	5.3 - 6.3	5	4.78	0.33	6.9	4.8	4.2 - 5.3
ISE Diluted												
Beckman AU systems	24	5.32	0.08	1.4	5.3	4.8 - 5.9	24	4.34	0.06	1.3	4.3	3.8 - 4.9
Roche cobas 6000 / c 501	8	5.46	0.05	0.9	5.5	4.9 - 6.0	8	4.45	0.05	1.2	4.5	3.9 - 5.0
Roche Integra	12	5.37	0.07	1.2	5.4	4.8 - 5.9	12	4.40	0.06	1.4	4.4	3.9 - 4.9
Siemens Dimension QuickLyte - Xpand/EXL	18	5.39	0.05	1.0	5.4	4.8 - 5.9	18	4.39	0.05	1.1	4.4	3.8 - 4.9
All Chemistry Instruments	75	5.37	0.08	1.4	5.4	4.8 - 5.9	77	4.37	0.07	1.5	4.4	3.8 - 4.9
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	16	5.38	0.06	1.1	5.4	4.8 - 5.9	16	4.36	0.06	1.4	4.4	3.8 - 4.9
Horiba ABX Pentra 400 / C400	16	5.23	0.11	2.2	5.2	4.7 - 5.8	17	4.29	0.09	2.2	4.3	3.7 - 4.8
All Chemistry Instruments	37	5.30	0.12	2.3	5.3	4.8 - 5.8	38	4.33	0.10	2.2	4.3	3.8 - 4.9
VITROS												
VITROS 250,350,400 500,700,750,950	12	5.37	0.09	1.7	5.4	4.8 - 5.9	12	4.39	0.07	1.5	4.4	3.8 - 4.9
VITROS XT 3400	5	5.38	0.05	0.9	5.4	4.8 - 5.9	5	4.43	0.05	1.1	4.4	3.9 - 5.0
All Chemistry Instruments	18	5.36	0.08	1.6	5.4	4.8 - 5.9	18	4.39	0.08	1.7	4.4	3.8 - 4.9

Potassium (mmol/L)

Specimen CH-10

Method/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	134	6.36	0.13	2.0	6.4	5.8 - 6.9
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	6.5	6.1 - 7.2
Abaxis Piccolo	2	-	-	-	7.2	6.1 - 7.2
All Chemistry Instruments	5	6.68	0.36	5.4	6.6	6.1 - 7.2
ISE Diluted						
Beckman AU systems	24	6.28	0.08	1.2	6.3	5.7 - 6.8
Roche cobas 6000 / c 501	8	6.49	0.06	1.0	6.5	5.9 - 7.0
Roche Integra	12	6.35	0.05	0.8	6.4	5.8 - 6.9
Siemens Dimension QuickLyte - Xpand/EXL	17	6.41	0.06	0.9	6.4	5.9 - 7.0
All Chemistry Instruments	76	6.35	0.10	1.5	6.4	5.8 - 6.9
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	16	6.48	0.10	1.6	6.5	5.9 - 7.0
Horiba ABX Pentra 400 / C400	17	6.22	0.18	2.9	6.2	5.7 - 6.8
All Chemistry Instruments	38	6.33	0.20	3.2	6.4	5.8 - 6.9
VITROS						
VITROS 250,350,400 500,700,750,950	12	6.38	0.10	1.6	6.4	5.8 - 6.9
VITROS XT 3400	5	6.38	0.05	0.8	6.4	5.8 - 6.9
All Chemistry Instruments	18	6.37	0.10	1.5	6.4	5.8 - 6.9

Sodium (mmol/L)

Technical tip: Incomplete or incorrect method reporting is a common cause of proficiency test failure, especially when it comes to the electrolytes. If your test method is "ISE Direct", it should be reported as ISE Undiluted on your MLE test result form (TRF). If your test method is "ISE Indirect", it should be reported as ISE Diluted on your MLE TRF. Be sure to check your package insert for the correct test method, or contact the manufacturer of the instrument or reagent.

	Specimen CH-6						Specimen CH-7					
Method/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	144	155.1	3.0	1.9	155	151 - 160	147	121.7	2.5	2.0	122	117 - 126
Abaxis Piccolo												
Abaxis Piccolo - waived	10	160.8	3.6	2.2	161	156 - 165	10	125.0	1.3	1.1	125	121 - 129
Abaxis Piccolo	3	-	-	-	164	157 - 166	5	124.8	2.2	1.8	125	120 - 129
All Chemistry Instruments	13	161.7	3.6	2.2	163	157 - 166	15	124.9	1.5	1.2	125	120 - 129
ISE Diluted												
Beckman AU systems	24	153.2	1.8	1.2	153	149 - 158	24	122.0	1.7	1.4	122	118 - 126
Roche cobas 6000 / c 501	8	154.0	1.3	0.9	154	150 - 158	8	122.0	1.1	0.9	122	118 - 126
Roche Integra	12	153.0	1.5	1.0	153	149 - 157	12	122.0	1.1	0.9	122	118 - 126
Siemens Dimension QuickLyte - Xpand/EXL	18	153.9	1.7	1.1	154	149 - 158	18	124.2	1.3	1.1	124	120 - 129
All Chemistry Instruments	76	153.5	1.6	1.0	154	149 - 158	76	122.6	1.7	1.4	122	118 - 127
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	17	155.9	1.7	1.1	156	151 - 160	17	118.1	1.2	1.0	118	114 - 123
Horiba ABX Pentra 400 / C400	16	155.3	3.3	2.1	156	151 - 160	16	119.2	1.6	1.3	119	115 - 124
All Chemistry Instruments	37	155.8	2.2	1.4	156	151 - 160	38	119.1	1.9	1.6	119	115 - 124
VITROS												
VITROS 250,350,400 500,700,750,950	12	157.6	1.2	0.8	158	153 - 162	12	121.5	1.3	1.1	122	117 - 126
VITROS XT 3400	5	156.5	1.3	0.8	157	152 - 161	5	120.0	0.8	0.7	120	116 - 124
All Chemistry Instruments	18	157.3	1.5	1.0	158	153 - 162	18	121.2	1.4	1.1	121	117 - 126

	Specimen CH-8						Specimen CH-9					
All Method	133	143.4	1.8	1.3	143	139 - 148	136	134.8	1.9	1.4	135	130 - 139
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	150	145 - 153	3	-	-	-	139	134 - 143
Abaxis Piccolo	2	-	-	-	149	145 - 153	2	-	-	-	138	134 - 143
All Chemistry Instruments	5	149.0	2.2	1.4	150	145 - 153	5	138.5	1.3	0.9	139	134 - 143
ISE Diluted												
Beckman AU systems	24	142.8	1.8	1.3	143	138 - 147	24	134.7	1.6	1.2	135	130 - 139
Roche cobas 6000 / c 501	8	143.4	0.7	0.5	144	139 - 148	8	135.0	0.8	0.6	135	131 - 139
Roche Integra	12	142.6	1.3	0.9	143	138 - 147	12	134.8	1.1	0.8	135	130 - 139
Siemens Dimension QuickLyte - Xpand/EXL	18	144.1	1.1	0.8	144	140 - 149	18	136.2	1.3	0.9	136	132 - 141
All Chemistry Instruments	75	143.3	1.3	0.9	143	139 - 148	74	135.1	1.2	0.9	135	131 - 140
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	16	141.8	1.1	0.8	142	137 - 146	17	132.4	0.9	0.7	133	128 - 137
Horiba ABX Pentra 400 / C400	16	142.8	2.4	1.6	143	138 - 147	16	133.8	2.4	1.8	134	129 - 138
All Chemistry Instruments	37	142.4	1.9	1.4	142	138 - 147	38	133.4	2.1	1.6	133	129 - 138
VITROS												
VITROS 250,350,400 500,700,750,950	12	145.6	1.5	1.0	145	141 - 150	12	136.0	1.7	1.2	136	132 - 140
VITROS XT 3400	5	144.0	1.4	1.0	145	140 - 148	5	134.8	1.5	1.1	135	130 - 139
All Chemistry Instruments	18	145.1	1.7	1.2	145	141 - 150	18	135.8	1.7	1.2	136	131 - 140

Sodium (mmol/L)

Specimen CH-10

Method/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	135	152.5	2.5	1.6	152	148 - 157
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	158	155 - 163
Abaxis Piccolo	2	-	-	-	159	155 - 163
All Chemistry Instruments	5	159.0	1.4	0.9	159	155 - 163
ISE Diluted						
Beckman AU systems	23	151.7	1.3	0.8	152	147 - 156
Roche cobas 6000 / c 501	8	152.5	0.9	0.6	153	148 - 157
Roche Integra	12	150.9	1.4	0.9	151	146 - 155
Siemens Dimension QuickLyte - Xpand/EXL	17	152.2	1.5	1.0	152	148 - 157
All Chemistry Instruments	74	151.7	1.5	1.0	152	147 - 156
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	16	152.4	0.8	0.5	153	148 - 157
Horiba ABX Pentra 400 / C400	16	153.0	2.6	1.7	154	149 - 157
All Chemistry Instruments	38	152.4	2.4	1.6	153	148 - 157
VITROS						
VITROS 250,350,400 500,700,750,950	12	156.2	2.1	1.3	156	152 - 161
VITROS XT 3400	5	154.5	1.3	0.8	155	150 - 159
All Chemistry Instruments	18	155.8	1.9	1.2	156	151 - 160

TIBC – Calculated (µg/dL)

Method/Instrument	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	11	272.2	65.3	24.0	298	141 - 403	11	86.4	25.5	29.5	96	35 - 138
Other Calculation Specified												
All Chemistry Instruments	6	298.5	46.4	15.5	314	205 - 392	6	90.8	21.3	23.5	96	48 - 134

Method/Instrument	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	11	211.2	49.0	23.2	234	113 - 310	11	159.4	37.9	23.8	177	83 - 236
Other Calculation Specified												
All Chemistry Instruments	6	232.2	35.1	15.1	244	161 - 303	6	174.8	28.4	16.2	185	118 - 232

Method/Instrument	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	11	260.1	61.5	23.7	289	137 - 384
Other Calculation Specified						
All Chemistry Instruments	6	287.0	44.3	15.4	304	198 - 376

TIBC – Direct (µg/dL)

Method/Instrument	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	14	283.1	57.8	20.4	278	167 - 399	14	94.4	43.9	46.5	95	6 - 183
Siemens Healthcare												
Siemens Dimension	8	245.0	11.7	4.8	243	196 - 294	8	60.4	11.4	18.9	62	37 - 84
VITROS												
All Chemistry Instruments	5	440.7	37.1	8.4	444	352 - 529	5	115.0	7.0	6.1	112	92 - 138

Method/Instrument	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	14	218.5	50.3	23.0	221	117 - 320	14	171.6	45.1	26.3	172	81 - 262
Siemens Healthcare												
Siemens Dimension	8	180.9	14.8	8.2	182	144 - 218	8	136.0	8.6	6.3	135	108 - 164
VITROS												
All Chemistry Instruments	5	323.0	18.0	5.6	328	258 - 388	5	238.0	8.7	3.7	242	190 - 286

Method/Instrument	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	14	273.1	54.6	20.0	269	163 - 383
Siemens Healthcare						
Siemens Dimension	8	236.8	10.5	4.4	235	189 - 285
VITROS						
All Chemistry Instruments	5	421.3	5.7	1.3	423	337 - 506

UIBC – Direct (µg/dL)

Method/Instrument	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	22	136.9	10.9	8.0	139	109 - 165	21	64.0	7.8	12.1	65	48 - 80
All Roche Reagents	7	128.4	7.4	5.7	128	102 - 155	7	57.0	7.6	13.4	54	41 - 73
Beckman AU												
Beckman AU systems	13	143.8	6.7	4.7	142	115 - 173	13	67.8	5.1	7.6	69	54 - 82

Method/Instrument	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	22	114.0	7.6	6.7	116	91 - 137	21	93.5	7.5	8.1	96	74 - 113
All Roche Reagents	7	108.3	4.2	3.9	108	86 - 130	6	87.7	8.1	9.3	87	70 - 106
Beckman AU												
Beckman AU systems	13	118.8	5.1	4.3	118	95 - 143	13	97.5	4.6	4.8	98	77 - 117

Method/Instrument	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	22	132.7	9.4	7.1	133	106 - 160
All Roche Reagents	7	126.3	6.6	5.2	124	101 - 152
Beckman AU						
Beckman AU systems	13	138.3	6.4	4.7	140	110 - 166

ALT (SGPT) (IU/L)

	Specimen CH-6						Specimen CH-7					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	143	209.4	14.5	6.9	210	167 - 252	142	19.4	2.4	12.5	19	15 - 24
All Alfa Wassermann Reagents	19	207.7	3.5	1.7	208	166 - 250	19	21.2	2.1	10.1	22	16 - 26
All Horiba Pentra Reagents	18	225.9	5.7	2.5	225	180 - 272	17	19.4	0.9	4.8	20	15 - 24
All Roche Reagents	21	213.4	5.9	2.8	213	170 - 257	21	18.8	0.9	5.0	19	15 - 23
All Siemens Healthcare	6	231.7	14.0	6.0	227	185 - 279	6	21.3	1.2	5.7	22	17 - 26
Abaxis Piccolo												
Abaxis Piccolo - waived	10	191.7	4.2	2.2	192	153 - 231	10	21.8	3.6	16.6	22	17 - 27
All Chemistry Instruments	14	193.4	4.7	2.4	194	154 - 233	14	21.5	3.5	16.3	22	17 - 26
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	19	207.7	3.5	1.7	208	166 - 250	19	21.2	2.1	10.1	22	16 - 26
Beckman AU												
Beckman AU systems	24	195.9	7.8	4.0	197	156 - 236	24	17.3	0.6	3.7	17	13 - 21
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	225.9	5.7	2.5	225	180 - 272	17	19.4	0.9	4.8	20	15 - 24
Roche cobas c 501												
Roche cobas 6000 / c 501	8	215.9	5.9	2.8	217	172 - 260	8	19.3	0.5	2.4	19	15 - 24
Roche Integra												
Roche Integra	12	210.9	4.4	2.1	212	168 - 254	12	18.4	1.1	5.9	18	14 - 23
Siemens Healthcare												
Siemens Dimension	5	226.2	4.5	2.0	225	180 - 272	5	21.0	1.0	4.8	21	16 - 26
Siemens Healthcare ALTi												
Siemens Dimension	17	229.2	5.1	2.2	229	183 - 276	17	21.8	2.4	10.8	22	17 - 27
VITROS ALTV												
VITROS 250,350,400 500,700,750,950	12	197.3	6.7	3.4	199	157 - 237	12	16.9	0.7	4.0	17	13 - 21
All Chemistry Instruments	16	196.8	6.2	3.1	197	157 - 237	16	16.8	0.7	3.9	17	13 - 21

ALT (SGPT) (IU/L)

	Specimen CH-8						Specimen CH-9					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	133	148.2	10.1	6.8	148	118 - 178	131	97.3	6.7	6.9	98	77 - 117
All Alfa Wassermann Reagents	19	146.1	3.2	2.2	147	116 - 176	18	96.1	2.5	2.6	95	76 - 116
All Horiba Pentra Reagents	18	159.2	4.6	2.9	159	127 - 192	18	104.3	3.1	3.0	103	83 - 126
All Roche Reagents	21	149.6	4.1	2.8	149	119 - 180	21	98.0	2.7	2.7	98	78 - 118
All Siemens Healthcare	6	164.5	9.0	5.5	163	131 - 198	6	119.8	30.0	25.1	107	95 - 144
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	133	118 - 178	3	-	-	-	85	77 - 117
All Chemistry Instruments	4	-	-	-	135	107 - 162	4	-	-	-	88	71 - 107
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	19	146.1	3.2	2.2	147	116 - 176	18	96.1	2.5	2.6	95	76 - 116
Beckman AU												
Beckman AU systems	24	137.4	4.2	3.1	138	109 - 165	23	89.9	2.5	2.7	90	71 - 108
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	159.2	4.6	2.9	159	127 - 192	18	104.3	3.1	3.0	103	83 - 126
Roche cobas c 501												
Roche cobas 6000 / c 501	8	150.8	3.5	2.3	151	120 - 181	8	98.6	2.3	2.4	99	78 - 119
Roche Integra												
Roche Integra	12	148.0	3.4	2.3	148	118 - 178	12	97.1	2.5	2.5	98	77 - 117
Siemens Healthcare												
Siemens Dimension	5	161.0	3.1	1.9	161	128 - 194	5	120.0	33.6	28.0	106	96 - 144
Siemens Healthcare ALTi												
Siemens Dimension	17	161.7	4.2	2.6	161	129 - 195	17	106.4	2.8	2.6	106	85 - 128
VITROS ALTV												
VITROS 250,350,400 500,700,750,950	12	140.0	4.0	2.9	142	112 - 168	12	92.0	1.8	2.0	93	73 - 111
All Chemistry Instruments	16	139.4	3.9	2.8	140	111 - 168	16	91.4	1.9	2.1	91	73 - 110

ALT (SGPT) (IU/L)

Specimen CH-10

Instrument/Reagent	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	133	198.8	13.6	6.8	198	159 - 239
All Alfa Wassermann Reagents	19	196.2	4.4	2.2	196	156 - 236
All Horiba Pentra Reagents	18	214.8	4.7	2.2	214	171 - 258
All Roche Reagents	21	200.9	5.8	2.9	201	160 - 242
All Siemens Healthcare	6	221.0	11.7	5.3	220	176 - 266
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	176	159 - 239
All Chemistry Instruments	4	-	-	-	179	143 - 216
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	19	196.2	4.4	2.2	196	156 - 236
Beckman AU						
Beckman AU systems	24	185.2	5.5	3.0	185	148 - 223
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	214.8	4.7	2.2	214	171 - 258
Roche cobas c 501						
Roche cobas 6000 / c 501	8	203.6	5.0	2.4	204	162 - 245
Roche Integra						
Roche Integra	12	198.1	4.5	2.3	198	158 - 238
Siemens Healthcare						
Siemens Dimension	5	216.6	5.1	2.4	220	173 - 260
Siemens Healthcare ALTi						
Siemens Dimension	17	215.6	4.5	2.1	215	172 - 259
VITROS ALTV						
VITROS 250,350,400 500,700,750,950	12	186.9	5.1	2.7	189	149 - 225
All Chemistry Instruments	16	185.6	5.4	2.9	188	148 - 223

Alkaline Phosphatase (IU/L)

	Specimen CH-6						Specimen CH-7					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	148	274.5	48.7	17.7	290	192 - 357	146	45.9	4.3	9.5	46	32 - 60
All Alfa Wassermann Reagents	18	283.1	16.1	5.7	284	198 - 368	18	44.0	2.2	4.9	44	30 - 58
All Horiba Pentra Reagents	18	311.9	17.8	5.7	315	218 - 406	18	50.0	3.9	7.7	50	35 - 65
All Roche Reagents	21	315.1	11.6	3.7	315	220 - 410	21	47.7	2.2	4.7	48	33 - 62
Abaxis Piccolo												
Abaxis Piccolo - waived	10	217.7	9.0	4.1	218	152 - 284	10	50.2	4.0	7.9	50	35 - 66
All Chemistry Instruments	14	218.1	9.9	4.6	218	152 - 284	14	50.8	5.6	11.0	50	35 - 67
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	283.1	16.1	5.7	284	198 - 368	18	44.0	2.2	4.9	44	30 - 58
Beckman AU												
Beckman AU systems	24	269.1	22.4	8.3	271	188 - 350	24	40.4	3.4	8.4	41	28 - 53
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	311.9	17.8	5.7	315	218 - 406	18	50.0	3.9	7.7	50	35 - 65
Roche Integra												
Roche Integra	12	314.5	12.7	4.0	314	220 - 409	12	47.5	2.4	5.1	48	33 - 62
Siemens Healthcare ALPi												
Siemens Dimension	15	315.4	8.5	2.7	316	220 - 411	15	46.9	2.3	4.8	47	32 - 61
VITROS												
VITROS 250,350,400 500,700,750,950	12	178.4	9.9	5.6	179	124 - 232	12	46.6	2.6	5.5	46	32 - 61
All Chemistry Instruments	18	180.7	10.2	5.6	182	126 - 235	18	46.7	2.2	4.8	47	32 - 61

Alkaline Phosphatase (IU/L)

	Specimen CH-8						Specimen CH-9					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	138	209.4	28.6	13.7	216	146 - 273	138	148.5	16.5	11.1	151	103 - 193
All Alfa Wassermann Reagents	18	209.2	11.4	5.5	210	146 - 272	18	146.6	9.0	6.1	147	102 - 191
All Horiba Pentra Reagents	18	230.5	12.9	5.6	234	161 - 300	18	162.0	9.8	6.0	165	113 - 211
All Roche Reagents	21	233.8	9.1	3.9	235	163 - 304	21	162.7	6.2	3.8	163	113 - 212
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	174	146 - 273	3	-	-	-	130	103 - 193
All Chemistry Instruments	4	-	-	-	168	117 - 218	4	-	-	-	128	89 - 167
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	209.2	11.4	5.5	210	146 - 272	18	146.6	9.0	6.1	147	102 - 191
Beckman AU												
Beckman AU systems	24	197.5	16.4	8.3	196	138 - 257	24	137.0	11.4	8.3	137	95 - 179
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	230.5	12.9	5.6	234	161 - 300	18	162.0	9.8	6.0	165	113 - 211
Roche Integra												
Roche Integra	12	234.4	10.5	4.5	234	164 - 305	12	163.2	7.1	4.4	162	114 - 213
Siemens Healthcare ALPi												
Siemens Dimension	15	233.3	6.1	2.6	235	163 - 304	15	162.3	4.1	2.5	161	113 - 212
VITROS												
VITROS 250,350,400 500,700,750,950	12	158.2	7.7	4.9	157	110 - 206	12	126.0	4.8	3.8	127	88 - 164
All Chemistry Instruments	18	159.7	7.4	4.6	160	111 - 208	18	126.5	5.0	4.0	127	88 - 165

Alkaline Phosphatase (IU/L)

Specimen CH-10

Instrument/Reagent	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	138	265.7	44.0	16.6	277	185 - 346
All Alfa Wassermann Reagents	18	267.4	15.2	5.7	270	187 - 348
All Horiba Pentra Reagents	18	296.1	17.0	5.7	299	207 - 385
All Roche Reagents	21	300.5	11.8	3.9	299	210 - 391
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	213	185 - 346
All Chemistry Instruments	4	-	-	-	211	145 - 271
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	18	267.4	15.2	5.7	270	187 - 348
Beckman AU						
Beckman AU systems	24	254.0	20.4	8.0	252	177 - 331
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	296.1	17.0	5.7	299	207 - 385
Roche Integra						
Roche Integra	12	300.5	13.5	4.5	296	210 - 391
Siemens Healthcare ALPi						
Siemens Dimension	15	303.5	8.3	2.7	303	212 - 395
VITROS						
VITROS 250,350,400 500,700,750,950	12	177.3	8.4	4.8	177	124 - 231
All Chemistry Instruments	18	178.6	7.8	4.3	180	125 - 233

AST (SGOT) (IU/L)

	Specimen CH-6						Specimen CH-7					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	127	254.0	29.4	11.6	254	203 - 305	125	109.3	9.6	8.8	110	87 - 132
All Alfa Wassermann Reagents	19	235.9	7.4	3.1	235	188 - 284	19	105.5	3.9	3.7	106	84 - 127
All Horiba Pentra Reagents	18	277.0	10.9	3.9	278	221 - 333	16	122.3	4.3	3.5	123	97 - 147
All Roche Reagents	21	257.0	9.4	3.7	255	205 - 309	21	114.0	4.9	4.3	113	91 - 137
Abaxis Piccolo												
Abaxis Piccolo - waived	10	236.6	7.6	3.2	239	189 - 284	10	105.6	3.8	3.6	106	84 - 127
All Chemistry Instruments	14	238.5	7.9	3.3	239	190 - 287	14	106.3	3.6	3.4	107	85 - 128
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	19	235.9	7.4	3.1	235	188 - 284	19	105.5	3.9	3.7	106	84 - 127
Beckman AU												
Beckman AU systems	24	218.3	8.4	3.8	221	174 - 262	24	96.0	3.8	4.0	96	76 - 116
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	277.0	10.9	3.9	278	221 - 333	16	122.3	4.3	3.5	123	97 - 147
Roche Integra												
Roche Integra	12	258.4	6.3	2.4	257	206 - 311	12	115.3	3.2	2.8	115	92 - 139
Siemens Healthcare												
Siemens Dimension	22	265.9	7.4	2.8	266	212 - 320	22	112.6	3.9	3.5	113	90 - 136
VITROS												
VITROS 250,350,400 500,700,750,950	12	301.4	11.9	4.0	302	241 - 362	12	112.1	5.4	4.8	110	89 - 135
All Chemistry Instruments	18	304.7	11.8	3.9	304	243 - 366	18	113.6	5.5	4.9	114	90 - 137

AST (SGOT) (IU/L)

	Specimen CH-8						Specimen CH-9					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	117	207.0	21.5	10.4	209	165 - 249	117	168.4	15.8	9.4	171	134 - 203
All Alfa Wassermann Reagents	19	193.9	5.8	3.0	195	155 - 233	19	160.5	5.5	3.4	161	128 - 193
All Horiba Pentra Reagents	18	228.3	9.0	3.9	230	182 - 274	18	186.9	7.3	3.9	189	149 - 225
All Roche Reagents	21	210.6	8.2	3.9	209	168 - 253	21	172.9	6.2	3.6	171	138 - 208
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	189	165 - 249	3	-	-	-	155	134 - 203
All Chemistry Instruments	4	-	-	-	194	156 - 235	4	-	-	-	159	127 - 192
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	19	193.9	5.8	3.0	195	155 - 233	19	160.5	5.5	3.4	161	128 - 193
Beckman AU												
Beckman AU systems	24	178.5	6.2	3.5	180	142 - 215	24	146.1	5.0	3.4	147	116 - 176
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	228.3	9.0	3.9	230	182 - 274	18	186.9	7.3	3.9	189	149 - 225
Roche Integra												
Roche Integra	12	211.8	5.1	2.4	210	169 - 255	12	173.8	3.6	2.1	172	139 - 209
Siemens Healthcare												
Siemens Dimension	22	216.1	6.2	2.9	216	172 - 260	22	175.1	5.0	2.9	176	140 - 211
VITROS												
VITROS 250,350,400 500,700,750,950	12	231.5	10.9	4.7	230	185 - 278	12	180.1	6.3	3.5	179	144 - 217
All Chemistry Instruments	18	234.1	10.6	4.5	233	187 - 281	18	182.2	7.7	4.2	180	145 - 219

AST (SGOT) (IU/L)

Specimen CH-10

Instrument/Reagent	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	117	247.3	28.6	11.6	248	197 - 297
All Alfa Wassermann Reagents	19	230.5	7.5	3.2	230	184 - 277
All Horiba Pentra Reagents	18	270.6	9.3	3.4	271	216 - 325
All Roche Reagents	21	248.6	9.6	3.9	247	198 - 299
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	221	197 - 297
All Chemistry Instruments	4	-	-	-	226	184 - 276
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	19	230.5	7.5	3.2	230	184 - 277
Beckman AU						
Beckman AU systems	24	211.5	7.8	3.7	213	169 - 254
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	270.6	9.3	3.4	271	216 - 325
Roche Integra						
Roche Integra	12	249.2	6.1	2.4	248	199 - 300
Siemens Healthcare						
Siemens Dimension	22	258.5	6.8	2.6	259	206 - 311
VITROS						
VITROS 250,350,400 500,700,750,950	12	290.8	15.8	5.4	288	232 - 349
All Chemistry Instruments	18	291.4	14.9	5.1	288	233 - 350

Creatine Kinase (IU/L)

	Specimen CH-6						Specimen CH-7					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	52	261.3	27.6	10.6	268	182 - 340	52	19.9	3.4	17.1	20	13 - 26
All Alfa Wassermann Reagents	6	249.7	12.1	4.8	245	174 - 325	6	26.0	1.7	6.4	25	18 - 34
All Roche Reagents	9	273.6	10.3	3.8	275	191 - 356	9	20.7	1.2	5.9	21	14 - 27
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	6	249.7	12.1	4.8	245	174 - 325	6	26.0	1.7	6.4	25	18 - 34
Beckman AU												
Beckman AU systems	10	248.2	30.3	12.2	252	173 - 323	10	16.4	2.6	15.8	17	11 - 22
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	6	271.3	12.2	4.5	270	189 - 353	6	20.3	2.3	11.1	21	14 - 27
Roche Integra												
Roche Integra	5	276.0	12.5	4.5	278	193 - 359	5	21.2	0.8	3.9	21	14 - 28
Siemens Healthcare CKI												
Siemens Dimension	12	278.1	12.9	4.7	282	194 - 362	12	18.3	2.4	13.2	17	12 - 24

	Specimen CH-8						Specimen CH-9					
All Method	51	187.9	15.8	8.4	192	131 - 245	51	122.2	10.1	8.3	125	85 - 159
All Alfa Wassermann Reagents	6	180.8	9.9	5.5	178	126 - 236	6	119.3	6.1	5.1	118	83 - 156
All Roche Reagents	9	194.8	5.9	3.0	195	136 - 254	9	127.6	4.5	3.5	127	89 - 166
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	6	180.8	9.9	5.5	178	126 - 236	6	119.3	6.1	5.1	118	83 - 156
Beckman AU												
Beckman AU systems	10	174.0	22.2	12.7	178	121 - 227	10	109.8	15.3	14.0	113	76 - 143
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	6	196.5	6.3	3.2	195	137 - 256	6	128.0	5.6	4.4	126	89 - 167
Roche Integra												
Roche Integra	5	196.8	6.8	3.5	198	137 - 256	5	128.4	6.0	4.7	127	89 - 167
Siemens Healthcare CKI												
Siemens Dimension	12	196.6	7.1	3.6	198	137 - 256	12	127.6	4.6	3.6	128	89 - 166

Creatine Kinase (IU/L) cont'd

Specimen CH-10

All Method	52	246.8	25.5	10.3	252	172 - 321
All Alfa Wassermann Reagents	6	232.5	14.3	6.2	237	162 - 303
All Roche Reagents	9	257.1	6.6	2.6	259	179 - 335
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	6	232.5	14.3	6.2	237	162 - 303
Beckman AU						
Beckman AU systems	10	235.8	27.3	11.6	238	165 - 307
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	6	260.8	14.9	5.7	253	182 - 340
Roche Integra						
Roche Integra	5	257.4	7.8	3.0	259	180 - 335
Siemens Healthcare CKI						
Siemens Dimension	12	263.8	9.5	3.6	265	184 - 343

GGT (IU/L)

Instrument/Reagent	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	28	176.9	28.6	16.2	170	119 - 235	29	19.3	6.2	32.0	17	6 - 32
All Roche Reagents	11	168.0	9.4	5.6	165	142 - 194	11	16.9	1.4	8.6	17	14 - 20
Roche Integra												
Roche Integra	7	168.1	5.9	3.5	166	142 - 194	7	16.9	1.6	9.3	17	13 - 21
Siemens Healthcare												
Siemens Dimension	5	216.4	5.0	2.3	214	183 - 249	5	28.8	1.3	4.5	29	24 - 34

Instrument/Reagent	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	28	129.3	25.3	19.5	122	78 - 180	27	84.9	15.6	18.3	79	53 - 116
All Roche Reagents	11	119.7	6.9	5.8	117	101 - 138	11	79.1	4.8	6.1	77	67 - 91
Roche Integra												
Roche Integra	7	119.4	4.9	4.1	119	101 - 138	7	79.0	3.6	4.6	78	67 - 91
Siemens Healthcare												
Siemens Dimension	5	155.0	3.7	2.4	153	131 - 179	5	105.0	3.2	3.1	103	89 - 121

Instrument/Reagent	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	27	168.3	27.3	16.2	158	113 - 223
All Roche Reagents	11	159.1	9.1	5.7	156	135 - 183
Roche Integra						
Roche Integra	7	158.7	6.8	4.3	156	134 - 183
Siemens Healthcare						
Siemens Dimension	5	204.2	6.6	3.3	201	173 - 235

Amylase (IU/L)

Instrument/Reagent	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	34	139.7	21.9	15.7	144	97 - 182	34	18.7	5.4	29.1	18	13 - 25
All Roche Reagents	7	142.1	2.6	1.8	143	99 - 185	7	17.7	0.5	2.8	18	12 - 24
Beckman AU												
Beckman AU systems	7	121.3	6.1	5.0	122	84 - 158	7	12.9	1.7	13.0	12	9 - 17
Siemens Healthcare												
Siemens Dimension	5	164.0	2.9	1.8	165	114 - 214	5	17.2	0.4	2.6	17	12 - 23
VITROS												
VITROS 250,350,400 500,700,750,950	5	104.0	4.8	4.7	103	72 - 136	5	30.0	0.1	0.0	30	21 - 39

Instrument/Reagent	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	33	99.1	16.0	16.2	102	69 - 129	33	66.1	10.5	15.8	69	46 - 86
All Roche Reagents	7	101.4	1.9	1.9	101	71 - 132	7	68.1	1.7	2.5	69	47 - 89
Beckman AU												
Beckman AU systems	7	85.6	4.4	5.1	87	59 - 112	7	57.0	3.0	5.3	58	39 - 75
Siemens Healthcare												
Siemens Dimension	5	116.2	1.1	0.9	116	81 - 152	5	76.8	1.3	1.7	77	53 - 100
VITROS												
VITROS 250,350,400 500,700,750,950	5	74.2	7.5	10.1	74	51 - 97	5	50.2	6.8	13.6	46	35 - 66

Instrument/Reagent	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	33	132.6	20.0	15.1	136	92 - 173
All Roche Reagents	7	134.1	4.2	3.1	135	93 - 175
Beckman AU						
Beckman AU systems	7	114.7	6.3	5.5	116	80 - 150
Siemens Healthcare						
Siemens Dimension	5	155.4	1.8	1.2	155	108 - 203
VITROS						
VITROS 250,350,400 500,700,750,950	5	103.0	4.4	4.3	103	72 - 134

Lactate Dehydrogenase (IU/L)

	Specimen CH-6						Specimen CH-7					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	37	606.8	78.5	12.9	635	485 - 729	36	114.5	13.4	11.7	118	91 - 138
All Horiba Pentra Reagents	6	627.7	24.9	4.0	625	502 - 754	6	118.0	7.8	6.6	118	94 - 142
All Roche Reagents	13	654.7	10.5	1.6	654	523 - 786	13	126.4	3.7	3.0	127	101 - 152
Beckman AU												
Beckman AU systems	8	539.0	19.8	3.7	536	431 - 647	8	101.8	4.4	4.3	102	81 - 123
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	6	627.7	24.9	4.0	625	502 - 754	6	118.0	7.8	6.6	118	94 - 142
Roche Integra												
Roche Integra	10	654.2	11.4	1.7	653	523 - 786	10	127.7	2.7	2.1	128	102 - 154

	Specimen CH-8						Specimen CH-9					
All Method	37	449.5	59.7	13.3	467	359 - 540	37	318.6	42.0	13.2	334	254 - 383
All Horiba Pentra Reagents	6	466.5	18.3	3.9	466	373 - 560	6	329.8	15.9	4.8	334	263 - 396
All Roche Reagents	13	485.9	9.4	1.9	488	388 - 584	13	344.4	7.3	2.1	346	275 - 414
Beckman AU												
Beckman AU systems	8	395.5	13.1	3.3	395	316 - 475	8	278.9	10.4	3.7	282	223 - 335
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	6	466.5	18.3	3.9	466	373 - 560	6	329.8	15.9	4.8	334	263 - 396
Roche Integra												
Roche Integra	10	487.1	9.3	1.9	489	389 - 585	10	346.3	5.6	1.6	349	277 - 416

	Specimen CH-10					
All Method	37	575.7	74.0	12.9	600	460 - 691
All Horiba Pentra Reagents	6	596.5	26.5	4.4	598	477 - 716
All Roche Reagents	13	617.5	12.3	2.0	618	494 - 742
Beckman AU						
Beckman AU systems	8	510.4	19.0	3.7	515	408 - 613
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	6	596.5	26.5	4.4	598	477 - 716
Roche Integra						
Roche Integra	10	618.4	11.1	1.8	620	494 - 743

Lipase (IU/L)

Instrument/Reagent	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range
	Specimen CH-6						Specimen CH-7					
All Method	14	52.5	6.5	12.4	57	36 - 69	14	13.1	1.2	9.4	14	9 - 18
All Roche Reagents	6	49.3	0.8	1.7	50	34 - 65	6	12.2	0.4	3.4	12	8 - 16
Beckman AU												
Beckman AU systems	5	58.0	5.0	8.6	58	40 - 76	5	13.4	1.1	8.5	13	9 - 18
	Specimen CH-8						Specimen CH-9					
All Method	14	39.6	4.4	11.1	43	27 - 52	14	28.9	3.5	11.9	30	20 - 38
All Roche Reagents	6	37.5	0.5	1.5	38	26 - 49	6	27.8	0.4	1.5	28	19 - 37
Beckman AU												
Beckman AU systems	5	43.2	0.4	1.0	43	30 - 57	5	31.0	2.6	8.5	32	21 - 41
	Specimen CH-10											
All Method	14	49.6	5.4	10.9	54	34 - 65						
All Roche Reagents	6	46.2	1.3	2.9	46	32 - 61						
Beckman AU												
Beckman AU systems	5	54.4	2.1	3.8	55	38 - 71						

Alpha-fetoprotein (AFP) (ng/mL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	10	246.16	12.48	5.1	240.4	208.7 - 283.7	10	1.00	0.58	58.3	0.8	0.0 - 2.8
All Roche Instruments	6	253.07	10.98	4.3	258.9	220.1 - 286.1	6	0.67	0.12	17.3	0.6	0.3 - 1.1
	Specimen CH-8						**Specimen CH-9**					
All Method	10	166.32	10.71	6.4	162.0	134.1 - 198.5	10	103.08	5.05	4.9	100.7	87.9 - 118.3
All Roche Instruments	6	172.30	9.76	5.7	173.5	143.0 - 201.6	6	105.13	5.89	5.6	107.7	87.4 - 122.8
	Specimen CH-10											
All Method	10	230.74	12.68	5.5	227.4	192.6 - 268.8						
All Roche Instruments	6	234.77	15.92	6.8	242.1	187.0 - 282.6						

Cortisol (µg/dL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	14	23.31	1.98	8.5	23.7	17.4 - 29.2	14	4.54	0.50	11.1	4.6	3.4 - 5.7
Beckman ACCESS / 2 / DxI	8	24.26	1.04	4.3	24.0	18.1 - 30.4	8	4.84	0.35	7.2	4.7	3.6 - 6.1
	Specimen CH-8						**Specimen CH-9**					
All Method	14	17.32	1.72	9.9	17.9	12.9 - 21.7	14	12.81	1.40	11.0	13.2	9.6 - 16.1
Beckman ACCESS / 2 / DxI	8	18.30	1.46	8.0	18.4	13.7 - 22.9	8	13.84	0.51	3.7	13.9	10.3 - 17.3
	Specimen CH-10											
All Method	14	22.08	2.21	10.0	22.0	16.5 - 27.6						
Beckman ACCESS / 2 / DxI	8	23.63	1.29	5.5	23.7	17.7 - 29.6						

T_3 Uptake (percent)

Method	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	8	45.08	3.70	8.2	43.9	33.9 - 56.2	8	51.03	5.71	11.2	51.3	33.8 - 68.2

Method	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	8	46.34	4.20	9.1	44.6	33.7 - 59.0	8	47.96	4.80	10.0	47.3	33.5 - 62.4

Method	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	8	45.08	4.60	10.2	43.4	31.2 - 58.9

Triiodothyronine (ng/mL)

Method	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	17	1.71	0.34	20.0	1.9	0.6 - 2.8	17	0.97	0.31	31.9	1.0	0.0 - 1.9
All TOSOH Instruments	6	7.12	0.35	5.0	7.0	6.0 - 8.2	6	4.23	0.25	5.9	4.3	3.4 - 5.0
Beckman ACCESS / 2 / DxI	9	1.91	0.15	7.6	1.9	1.4 - 2.4	9	0.93	0.10	10.7	0.9	0.6 - 1.3
TOSOH ST AIA PACK	5	7.04	0.34	4.8	7.0	6.0 - 8.1	5	4.16	0.19	4.7	4.3	3.5 - 4.8

Method	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	17	1.46	0.28	19.2	1.6	0.6 - 2.4	17	1.26	0.25	19.5	1.4	0.5 - 2.0
All TOSOH Instruments	6	6.47	0.37	5.7	6.4	5.3 - 7.6	6	5.50	0.28	5.0	5.4	4.6 - 6.4
Beckman ACCESS / 2 / DxI	9	1.58	0.10	6.2	1.6	1.2 - 1.9	9	1.31	0.08	6.0	1.3	1.0 - 1.6
TOSOH ST AIA PACK	5	6.34	0.22	3.5	6.4	5.6 - 7.0	5	5.40	0.14	2.6	5.3	4.9 - 5.9

Method	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	17	1.67	0.32	19.1	1.8	0.7 - 2.7
All TOSOH Instruments	6	7.05	0.32	4.6	7.0	6.0 - 8.1
Beckman ACCESS / 2 / DxI	9	1.84	0.12	6.7	1.8	1.4 - 2.3
TOSOH ST AIA PACK	5	7.04	0.36	5.1	7.0	5.9 - 8.2

Free T_3 (pg/mL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	29	4.80	0.57	11.9	4.8	3.0 - 6.6	29	3.01	0.41	13.5	3.0	1.7 - 4.3
All TOSOH Instruments	5	9.66	0.29	3.0	9.6	8.7 - 10.6	5	4.54	0.27	6.0	4.5	3.7 - 5.4
Beckman ACCESS / 2 / DxI	17	4.51	0.28	6.3	4.4	3.6 - 5.4	17	2.90	0.23	8.0	2.9	2.2 - 3.6

	Specimen CH-8						Specimen CH-9					
All Method	29	4.43	0.52	11.8	4.5	2.8 - 6.1	29	4.07	0.46	11.4	4.1	2.6 - 5.5
All TOSOH Instruments	5	8.34	0.23	2.8	8.4	7.6 - 9.1	5	7.06	0.24	3.4	7.2	6.3 - 7.8
Beckman ACCESS / 2 / DxI	17	4.16	0.25	6.1	4.2	3.4 - 5.0	17	3.85	0.26	6.6	3.8	3.0 - 4.7

	Specimen CH-10					
All Method	29	4.75	0.58	12.3	4.7	2.9 - 6.5
All TOSOH Instruments	5	9.46	0.23	2.4	9.4	8.7 - 10.2
Beckman ACCESS / 2 / DxI	17	4.42	0.22	5.1	4.3	3.7 - 5.1

Thyroxine (ng/dL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	14	10.11	1.31	13.0	10.4	8.0 - 12.2	15	2.18	0.42	19.5	2.3	1.1 - 3.2
All TOSOH Instruments	6	10.32	1.94	18.8	10.2	8.2 - 12.4	7	2.17	0.42	19.5	2.3	1.1 - 3.2
Beckman ACCESS / 2 / DxI	5	11.24	0.71	6.3	10.9	8.9 - 13.5	5	2.40	0.29	12.1	2.5	1.4 - 3.4
TOSOH ST AIA PACK	5	9.92	1.88	18.9	9.7	7.9 - 12.0	6	2.15	0.46	21.4	2.2	1.1 - 3.2

	Specimen CH-8						Specimen CH-9					
All Method	15	7.75	1.05	13.5	7.9	6.1 - 9.3	15	5.55	0.58	10.5	5.8	4.4 - 6.7
All TOSOH Instruments	7	8.14	1.35	16.6	8.1	6.5 - 9.8	7	5.77	0.57	9.9	5.8	4.6 - 7.0
Beckman ACCESS / 2 / DxI	5	9.04	1.07	11.8	8.4	7.2 - 10.9	5	6.90	0.82	11.8	6.7	5.5 - 8.3
TOSOH ST AIA PACK	6	8.15	1.48	18.1	7.9	6.5 - 9.8	6	5.77	0.63	10.9	5.7	4.6 - 7.0

	Specimen CH-10					
All Method	15	9.53	0.96	10.0	9.8	7.6 - 11.5
All TOSOH Instruments	7	9.63	1.23	12.8	9.1	7.7 - 11.6
Beckman ACCESS / 2 / DxI	5	10.98	0.97	8.8	11.0	8.7 - 13.2
TOSOH ST AIA PACK	6	9.72	1.33	13.6	9.5	7.7 - 11.7

Free Thyroxine (ng/dL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	98	2.78	0.63	22.6	2.6	0.8 - 4.7	97	0.97	0.16	16.6	0.9	0.4 - 1.5
All TOSOH Instruments	18	3.50	0.24	7.0	3.5	2.7 - 4.3	18	1.14	0.11	10.1	1.2	0.7 - 1.5
Beckman ACCESS / 2 / DxI	39	2.23	0.09	4.0	2.2	1.9 - 2.6	39	0.88	0.06	6.7	0.9	0.7 - 1.1
Siemens Dimension	13	3.08	0.12	4.0	3.1	2.7 - 3.5	12	0.99	0.07	6.7	1.0	0.7 - 1.2
TOSOH ST AIA PACK	13	3.47	0.24	6.8	3.5	2.7 - 4.2	13	1.14	0.12	10.5	1.2	0.7 - 1.5
	Specimen CH-8						**Specimen CH-9**					
All Method	99	2.35	0.55	23.5	2.1	0.6 - 4.1	98	1.87	0.41	22.2	1.7	0.6 - 3.2
All TOSOH Instruments	17	3.05	0.14	4.5	3.1	2.6 - 3.5	18	2.41	0.15	6.0	2.4	1.9 - 2.9
Beckman ACCESS / 2 / DxI	38	1.91	0.08	4.2	1.9	1.6 - 2.2	39	1.58	0.08	4.9	1.6	1.3 - 1.9
Siemens Dimension	13	2.55	0.11	4.1	2.6	2.2 - 2.9	12	2.03	0.10	4.8	2.0	1.7 - 2.4
TOSOH ST AIA PACK	13	3.02	0.22	7.1	3.0	2.3 - 3.7	13	2.41	0.15	6.2	2.4	1.9 - 2.9
	Specimen CH-10											
All Method	99	2.71	0.59	22.0	2.5	0.9 - 4.5						
All TOSOH Instruments	17	3.46	0.15	4.5	3.5	2.9 - 4.0						
Beckman ACCESS / 2 / DxI	39	2.18	0.10	4.4	2.2	1.8 - 2.5						
Siemens Dimension	13	3.02	0.14	4.7	3.0	2.5 - 3.5						
TOSOH ST AIA PACK	13	3.40	0.25	7.5	3.4	2.6 - 4.2						

TSH (μU/mL)

Method	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	122	6.40	0.77	12.0	6.5	4.1 - 8.8	118	0.30	0.06	18.7	0.3	0.1 - 0.5
All Abbott Instruments	10	5.63	0.19	3.4	5.7	5.0 - 6.2	9	0.22	0.04	19.8	0.2	0.0 - 0.4
All Roche Instruments	10	6.38	0.31	4.8	6.4	5.4 - 7.4	10	0.38	0.04	11.1	0.4	0.2 - 0.6
All TOSOH Instruments	24	7.23	0.36	4.9	7.3	6.1 - 8.4	24	0.34	0.07	19.1	0.3	0.1 - 0.6
Abbott Architect	10	5.63	0.19	3.4	5.7	5.0 - 6.2	9	0.22	0.04	19.8	0.2	0.0 - 0.4
Beckman ACCESS / 2 / DxI	43	6.46	0.64	10.0	6.7	4.5 - 8.4	41	0.30	0.01	0.0	0.3	0.2 - 0.4
Qualigen FastPack	5	6.70	0.41	6.2	6.6	5.4 - 8.0	5	0.28	0.08	29.9	0.3	0.0 - 0.6
Roche cobas e 411	5	6.58	0.26	3.9	6.5	5.8 - 7.4	5	0.38	0.04	11.8	0.4	0.2 - 0.6
Roche cobas e 601/ e 602	5	6.18	0.22	3.5	6.3	5.5 - 6.9	5	0.38	0.04	11.8	0.4	0.2 - 0.6
Siemens Dimension	19	5.59	0.33	6.0	5.5	4.5 - 6.6	19	0.27	0.05	16.5	0.3	0.1 - 0.5
TOSOH AIA PACK	8	7.15	0.18	2.5	7.1	6.6 - 7.7	8	0.33	0.05	14.2	0.3	0.1 - 0.5
TOSOH ST AIA PACK	16	7.28	0.42	5.7	7.4	6.0 - 8.6	16	0.35	0.07	20.9	0.3	0.1 - 0.6

Method	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	122	4.50	0.60	13.4	4.6	2.6 - 6.4	122	2.92	0.37	12.5	2.9	1.8 - 4.1
All Abbott Instruments	10	3.91	0.19	4.9	3.9	3.3 - 4.5	10	2.56	0.13	4.9	2.6	2.1 - 3.0
All Roche Instruments	10	4.68	0.24	5.2	4.7	3.9 - 5.5	10	3.13	0.16	5.2	3.2	2.6 - 3.7
All TOSOH Instruments	23	5.17	0.33	6.4	5.2	4.1 - 6.2	24	3.33	0.15	4.4	3.3	2.8 - 3.8
Abbott Architect	10	3.91	0.19	4.9	3.9	3.3 - 4.5	10	2.56	0.13	4.9	2.6	2.1 - 3.0
Beckman ACCESS / 2 / DxI	43	4.51	0.41	9.1	4.5	3.2 - 5.8	43	2.89	0.24	8.4	2.9	2.1 - 3.7
Qualigen FastPack	5	4.74	0.30	6.3	4.7	3.8 - 5.7	5	3.04	0.18	6.0	3.0	2.4 - 3.6
Roche cobas e 411	5	4.86	0.18	3.7	4.8	4.3 - 5.5	5	3.26	0.09	2.7	3.2	2.9 - 3.6
Roche cobas e 601/ e 602	5	4.50	0.14	3.1	4.6	4.0 - 5.0	5	3.00	0.10	3.3	3.0	2.7 - 3.3
Siemens Dimension	19	3.86	0.33	8.7	3.8	2.8 - 4.9	19	2.52	0.21	8.2	2.5	1.8 - 3.2
TOSOH AIA PACK	8	5.16	0.32	6.1	5.1	4.2 - 6.2	8	3.28	0.09	2.7	3.3	3.0 - 3.6
TOSOH ST AIA PACK	15	5.17	0.35	6.7	5.2	4.1 - 6.3	16	3.36	0.16	4.9	3.4	2.8 - 3.9

Method	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	123	6.03	0.75	12.5	6.1	3.7 - 8.3
All Abbott Instruments	10	5.28	0.32	6.0	5.3	4.3 - 6.3
All Roche Instruments	10	6.13	0.33	5.3	6.2	5.1 - 7.2
All TOSOH Instruments	24	6.83	0.28	4.1	6.8	5.9 - 7.7
Abbott Architect	10	5.28	0.32	6.0	5.3	4.3 - 6.3
Beckman ACCESS / 2 / DxI	43	6.05	0.58	9.6	6.1	4.3 - 7.8
Qualigen FastPack	5	6.20	0.33	5.3	6.1	5.2 - 7.2
Roche cobas e 411	5	6.36	0.22	3.4	6.3	5.7 - 7.1
Roche cobas e 601/ e 602	5	5.90	0.24	4.2	6.0	5.1 - 6.7
Siemens Dimension	19	5.16	0.45	8.8	5.1	3.7 - 6.6
TOSOH AIA PACK	8	6.89	0.25	3.6	6.9	6.1 - 7.7
TOSOH ST AIA PACK	16	6.81	0.30	4.4	6.8	5.8 - 7.8

Serum hCG – Qualitative

	Specimen HCG-6			Specimen HCG-7		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
ALL METHODS	124	-	124	124	124	-
AimStep Combo Pregnancy	1	-	1	1	1	-
Alere hCG Combo Cassette	2	-	2	2	2	-
Beckman Coulter ICON 20 hCG	68	-	68	68	68	-
Beckman Coulter ICON 25 hCG	6	-	6	6	6	-
BTNX Rapid Response hCG	1	-	1	1	1	-
Cardinal Health SP Brand combo	9	-	9	9	9	-
CONSULT diagnostics hCG Combo	8	-	8	8	8	-
Henry Schein One Step + Combo	6	-	6	6	6	-
McKesson hCG Combo Cassette	4	-	4	4	4	-
Medline hCG Combo Test Cassette	2	-	2	2	2	-
Quidel QuickVue + One-Step	4	-	4	4	4	-
Quidel QuickVue One-Step Combo	9	-	9	9	9	-
Sekisui OSOM hCG Combo Test	2	-	2	2	2	-
Stanbio QUPID Plus	2	-	2	2	2	-

	Specimen HCG-8			Specimen HCG-9		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
ALL METHODS	124	-	124	124	124	-
AimStep Combo Pregnancy	1	-	1	1	1	-
Alere hCG Combo Cassette	2	-	2	2	2	-
Beckman Coulter ICON 20 hCG	68	-	68	68	68	-
Beckman Coulter ICON 25 hCG	6	-	6	6	6	-
BTNX Rapid Response hCG	1	-	1	1	1	-
Cardinal Health SP Brand combo	9	-	9	9	9	-
CONSULT diagnostics hCG Combo	8	-	8	8	8	-
Henry Schein One Step + Combo	6	-	6	6	6	-
McKesson hCG Combo Cassette	4	-	4	4	4	-
Medline hCG Combo Test Cassette	2	-	2	2	2	-
Quidel QuickVue + One-Step	4	-	4	4	4	-
Quidel QuickVue One-Step Combo	9	-	9	9	9	-
Sekisui OSOM hCG Combo Test	2	-	2	2	2	-
Stanbio QUPID Plus	2	-	2	2	2	-

Serum hCG – Qualitative

Specimen HCG-10

Method	*Labs*	*Positive*	*Negative*
ALL METHODS	124	124	-
AimStep Combo Pregnancy	1	1	-
Alere hCG Combo Cassette	2	2	-
Beckman Coulter ICON 20 hCG	68	68	-
Beckman Coulter ICON 25 hCG	6	6	-
BTNX Rapid Response hCG	1	1	-
Cardinal Health SP Brand combo	9	9	-
CONSULT diagnostics hCG Combo	8	8	-
Henry Schein One Step + Combo	6	6	-
McKesson hCG Combo Cassette	4	4	-
Medline hCG Combo Test Cassette	2	2	-
Quidel QuickVue + One-Step	4	4	-
Quidel QuickVue One-Step Combo	9	9	-
Sekisui OSOM hCG Combo Test	2	2	-
Stanbio QUPID Plus	2	2	-

Serum hCG – Quantitative (mIU/mL)

Specimen HCG-6

Method	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	14	1.2	0.4	35.1	1	0 - 3

Specimen HCG-7

Labs	*Mean*	*SD*	*CV*	*Median*	*Range*
13	1091.3	209.4	19.2	1034	672 - 1511

Specimen HCG-8

All Method	14	1.2	0.4	35.1	1	0 - 3

Specimen HCG-9

14	54.6	5.9	10.8	54	42 - 67

Specimen HCG-10

All Method	14	222.6	27.8	12.5	227	167 - 279

Cholesterol, Total (mg/dL)

	Specimen CH-6						Specimen CH-7					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	136	200.8	6.0	3.0	201	180 - 221	136	74.3	14.9	20.1	68	66 - 82
All Alfa Wassermann Reagents	14	200.3	5.3	2.6	202	180 - 221	14	68.3	2.1	3.0	69	61 - 76
All Horiba Pentra Reagents	13	199.5	8.3	4.2	201	179 - 220	13	66.6	3.0	4.5	67	59 - 74
All Roche Reagents	10	202.0	3.1	1.5	202	181 - 223	10	66.2	1.2	1.9	66	59 - 73
Alere Cholestech LDX												
Alere Cholestech LDX - waived	33	199.7	5.6	2.8	200	179 - 220	32	100.0	0.1	0.0	100	90 - 110
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	14	200.3	5.3	2.6	202	180 - 221	14	68.3	2.1	3.0	69	61 - 76
Beckman AU												
Beckman AU systems	19	200.3	5.5	2.7	200	180 - 221	19	66.2	2.5	3.7	66	59 - 73
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	13	199.5	8.3	4.2	201	179 - 220	13	66.6	3.0	4.5	67	59 - 74
Roche Integra												
Roche Integra	5	200.8	3.1	1.6	200	180 - 221	5	66.8	1.3	2.0	67	60 - 74
Siemens Healthcare												
Siemens Dimension	18	203.3	3.2	1.6	204	182 - 224	19	67.6	2.1	3.2	67	60 - 75
All Chemistry Instruments	20	201.6	6.1	3.0	204	181 - 222	19	67.6	2.1	3.2	67	60 - 75
VITROS												
VITROS 250,350,400 500,700,750,950	11	198.5	9.1	4.6	201	178 - 219	11	60.2	2.4	4.1	60	54 - 67
All Chemistry Instruments	15	200.3	8.5	4.2	201	180 - 221	15	59.8	2.2	3.7	60	53 - 66

Cholesterol, Total (mg/dL)

	Specimen CH-8						Specimen CH-9					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	106	156.7	4.7	3.0	157	141 - 173	107	120.9	4.0	3.3	122	108 - 134
All Alfa Wassermann Reagents	14	157.1	4.1	2.6	158	141 - 173	14	122.5	3.3	2.7	123	110 - 135
All Horiba Pentra Reagents	13	156.0	6.0	3.8	157	140 - 172	13	121.5	4.5	3.7	122	109 - 134
All Roche Reagents	10	156.8	2.9	1.8	157	141 - 173	10	121.2	2.6	2.2	122	109 - 134
Alere Cholestech LDX												
Alere Cholestech LDX - waived	3	-	-	-	156	141 - 173	3	-	-	-	115	108 - 134
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	14	157.1	4.1	2.6	158	141 - 173	14	122.5	3.3	2.7	123	110 - 135
Beckman AU												
Beckman AU systems	19	156.6	4.5	2.9	157	140 - 173	19	121.0	4.4	3.6	122	108 - 134
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	13	156.0	6.0	3.8	157	140 - 172	13	121.5	4.5	3.7	122	109 - 134
Roche Integra												
Roche Integra	5	156.2	3.1	2.0	157	140 - 172	5	120.4	2.5	2.1	120	108 - 133
Siemens Healthcare												
Siemens Dimension	20	157.9	3.6	2.3	158	142 - 174	20	121.6	3.1	2.5	122	109 - 134
All Chemistry Instruments	21	157.3	4.2	2.7	158	141 - 174	21	121.3	3.3	2.7	122	109 - 134
VITROS												
VITROS 250,350,400 500,700,750,950	11	154.1	7.2	4.7	157	138 - 170	11	118.6	4.7	3.9	121	106 - 131
All Chemistry Instruments	15	154.2	6.2	4.1	156	138 - 170	15	117.9	4.2	3.6	117	106 - 130

Cholesterol, Total (mg/dL)

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	106	192.7	5.8	3.0	193	173 - 212
All Alfa Wassermann Reagents	14	190.8	5.4	2.8	192	171 - 210
All Horiba Pentra Reagents	13	190.6	6.6	3.5	192	171 - 210
All Roche Reagents	10	192.7	4.9	2.6	192	173 - 212
Alere Cholestech LDX						
Alere Cholestech LDX - waived	3	-	-	-	201	173 - 212
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	14	190.8	5.4	2.8	192	171 - 210
Beckman AU						
Beckman AU systems	19	192.4	6.2	3.2	192	173 - 212
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	13	190.6	6.6	3.5	192	171 - 210
Roche Integra						
Roche Integra	5	192.0	5.4	2.8	191	172 - 212
Siemens Healthcare						
Siemens Dimension	20	193.4	5.2	2.7	194	174 - 213
All Chemistry Instruments	21	192.8	5.6	2.9	193	173 - 213
VITROS						
VITROS 250,350,400 500,700,750,950	11	191.8	7.7	4.0	193	172 - 212
All Chemistry Instruments	15	192.7	6.8	3.5	195	173 - 212

LDL Cholesterol - Calculated (mg/dL)

Method	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	93	59.0	12.6	21.4	60	33 - 85	71	14.0	6.7	47.6	14	0 - 28
Calculated-Trig/5												
Alere Cholestech LDX - waived	25	61.9	8.3	13.3	61	43 - 81	1	-	-	-	23	0 - 28
Alfa Wassermann ACE Alera/Axcel	10	66.9	4.1	6.2	66	46 - 87	10	16.2	2.3	14.5	16	11 - 22
Beckman AU systems	12	63.4	8.2	12.9	62	44 - 83	12	18.2	4.3	23.8	18	9 - 27
Horiba ABX Pentra 400 / C400	9	71.4	5.0	7.0	72	50 - 93	9	21.0	2.5	12.1	20	14 - 28
Siemens Dimension	12	47.3	3.1	6.6	48	33 - 62	12	7.8	2.7	33.9	8	2 - 14
VITROS 250,350,400 500,700,750,950	6	37.0	18.9	51.0	43	0 - 75	7	4.7	2.2	47.0	5	0 - 10
All Chemistry Instruments	89	59.5	12.0	20.2	61	35 - 84	67	14.1	6.6	46.9	15	0 - 28

Method	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	73	43.3	12.2	28.1	46	18 - 68	73	32.8	9.6	29.4	33	13 - 53
Calculated-Trig/5												
Alere Cholestech LDX - waived	3	-	-	-	47	19 - 68	3	-	-	-	35	13 - 53
Alfa Wassermann ACE Alera/Axcel	10	50.6	2.7	5.3	50	35 - 66	10	38.0	3.8	10.1	38	26 - 50
Beckman AU systems	12	49.8	7.1	14.2	47	34 - 65	12	38.1	5.9	15.5	38	26 - 50
Horiba ABX Pentra 400 / C400	9	56.6	4.1	7.2	56	39 - 74	9	43.1	2.6	6.1	42	30 - 57
Siemens Dimension	12	33.5	2.8	8.4	34	23 - 44	12	22.3	3.4	15.1	23	15 - 29
VITROS 250,350,400 500,700,750,950	7	29.3	11.9	40.5	28	5 - 54	7	23.1	6.9	29.9	22	9 - 37
All Chemistry Instruments	69	43.7	12.0	27.4	46	19 - 68	69	33.0	9.5	28.9	34	13 - 53

Method	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	71	54.7	15.1	27.6	56	24 - 85
Calculated-Trig/5						
Alere Cholestech LDX - waived	2	-	-	-	66	29 - 83
Alfa Wassermann ACE Alera/Axcel	10	63.2	5.4	8.6	62	44 - 83
Beckman AU systems	12	61.3	7.4	12.2	60	42 - 80
Horiba ABX Pentra 400 / C400	9	69.7	4.1	5.9	70	48 - 91
Siemens Dimension	12	43.3	3.1	7.2	43	30 - 57
VITROS 250,350,400 500,700,750,950	6	36.5	18.1	49.6	37	0 - 73
All Chemistry Instruments	66	56.0	13.4	24.0	59	29 - 83

LDL Cholesterol - Direct (mg/dL)

Method	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	29	56.5	18.2	32.3	55	20 - 93	29	16.8	6.6	39.0	16	3 - 30
Beckman AU Direct HDL / LDL												
Beckman AU systems	10	39.9	2.1	5.3	41	27 - 52	10	10.7	0.5	4.5	11	7 - 14
Siemens Automated LDL												
Siemens Dimension	8	60.9	5.7	9.4	60	42 - 80	8	19.5	4.0	20.3	19	11 - 28

Method	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	29	43.3	13.9	32.2	41	15 - 72	29	32.9	11.1	33.6	31	10 - 55
Beckman AU Direct HDL / LDL												
Beckman AU systems	10	30.5	1.8	5.8	31	21 - 40	10	22.7	1.3	5.9	23	15 - 30
Siemens Automated LDL												
Siemens Dimension	8	47.0	4.5	9.7	47	32 - 62	8	36.0	4.0	11.0	36	25 - 47

Method	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	29	53.4	17.7	33.1	51	18 - 89
Beckman AU Direct HDL / LDL						
Beckman AU systems	10	38.0	2.1	5.5	39	26 - 50
Siemens Automated LDL						
Siemens Dimension	8	57.4	5.6	9.7	57	40 - 75

Cholesterol, HDL (mg/dL)

	Specimen CH-6						Specimen CH-7					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	135	95.4	11.8	12.4	94	66 - 125	134	28.9	8.3	28.6	30	20 - 38
All Dex-Sulfate 50,000 MW Methods	33	94.6	5.3	5.6	96	66 - 123	31	17.0	2.1	12.5	17	11 - 23
All Direct Methods	87	93.7	13.0	13.8	89	65 - 122	87	32.2	6.0	18.7	30	22 - 42
Alere Cholestech LDX												
Alere Cholestech LDX - waived	33	94.6	5.3	5.6	96	66 - 123	31	17.0	2.1	12.5	17	11 - 23
Alfa Wass. ACE HDL-C / LDL-C												
Alfa Wassermann ACE Alera/Axcel	14	83.8	4.4	5.2	86	58 - 109	14	31.6	1.4	4.4	32	22 - 42
All Chemistry Instruments	15	84.1	4.4	5.2	86	58 - 110	15	31.3	1.6	5.2	32	21 - 41
Beckman AU Direct HDL / LDL												
Beckman AU systems	17	88.4	4.9	5.5	89	61 - 115	17	28.6	2.0	7.1	28	20 - 38
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	13	81.0	4.0	4.9	83	56 - 106	13	26.5	1.9	7.0	27	18 - 35
Roche HDL Direct												
All Chemistry Instruments	9	110.8	4.4	4.0	110	77 - 145	9	34.6	1.1	3.3	34	24 - 45
Siemens Automated HDL												
Siemens Dimension	18	110.7	3.5	3.2	110	77 - 144	18	42.2	1.0	2.5	42	29 - 55
All Chemistry Instruments	19	110.5	3.5	3.2	110	77 - 144	19	42.1	1.1	2.7	42	29 - 55
VITROS dHDL Slide												
VITROS 250,350,400 500,700,750,950	10	113.2	14.5	12.8	109	79 - 148	10	34.7	1.3	3.6	35	24 - 46
All Chemistry Instruments	13	111.8	12.9	11.5	108	78 - 146	13	34.4	1.4	4.0	35	24 - 45

Cholesterol, HDL (mg/dL)

	Specimen CH-8						Specimen CH-9					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	106	74.2	10.7	14.4	70	51 - 97	106	56.7	8.7	15.3	53	39 - 74
All Dex-Sulfate 50,000 MW Methods	3	-	-	-	65	46 - 88	3	-	-	-	49	33 - 63
All Direct Methods	87	73.1	11.0	15.1	69	51 - 96	87	56.4	9.3	16.4	53	39 - 74
Alere Cholestech LDX												
Alere Cholestech LDX - waived	3	-	-	-	65	51 - 97	3	-	-	-	49	39 - 74
Alfa Wass. ACE HDL-C / LDL-C												
Alfa Wassermann ACE Alera/Axcel	14	66.4	2.8	4.2	67	46 - 87	14	52.2	1.8	3.5	53	36 - 68
All Chemistry Instruments	15	66.5	2.7	4.1	67	46 - 87	15	52.2	1.7	3.3	52	36 - 68
Beckman AU Direct HDL / LDL												
Beckman AU systems	17	67.5	3.7	5.4	68	47 - 88	17	51.1	2.9	5.6	51	35 - 67
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	13	61.8	3.8	6.2	63	43 - 81	13	48.0	3.3	6.8	49	33 - 63
Roche HDL Direct												
All Chemistry Instruments	9	86.6	2.8	3.2	86	60 - 113	9	66.1	2.9	4.4	66	46 - 86
Siemens Automated HDL												
Siemens Dimension	18	88.6	2.5	2.8	88	61 - 116	18	70.4	1.6	2.3	70	49 - 92
All Chemistry Instruments	19	88.4	2.6	2.9	88	61 - 115	19	70.2	1.8	2.5	70	49 - 92
VITROS dHDL Slide												
VITROS 250,350,400 500,700,750,950	10	82.9	3.1	3.8	84	58 - 108	10	61.4	2.7	4.4	62	42 - 80
All Chemistry Instruments	13	83.0	3.2	3.9	84	58 - 108	13	60.9	2.6	4.3	61	42 - 80

Cholesterol, HDL (mg/dL)

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	106	91.8	13.2	14.3	88	64 - 120
All Dex-Sulfate 50,000 MW Methods	3	-	-	-	90	63 - 119
All Direct Methods	87	89.8	13.0	14.5	84	62 - 117
Alere Cholestech LDX						
Alere Cholestech LDX - waived	3	-	-	-	90	64 - 120
Alfa Wass. ACE HDL-C / LDL-C						
Alfa Wassermann ACE Alera/Axcel	14	80.7	4.3	5.3	82	56 - 105
All Chemistry Instruments	15	81.1	4.4	5.5	83	56 - 106
Beckman AU Direct HDL / LDL						
Beckman AU systems	17	83.4	4.4	5.3	83	58 - 109
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	13	77.0	5.1	6.7	76	53 - 101
Roche HDL Direct						
All Chemistry Instruments	9	106.0	4.2	4.0	105	74 - 138
Siemens Automated HDL						
Siemens Dimension	18	107.3	3.3	3.1	106	75 - 140
All Chemistry Instruments	19	107.0	3.4	3.2	106	74 - 140
VITROS dHDL Slide						
VITROS 250,350,400 500,700,750,950	10	105.1	8.2	7.8	105	73 - 137
All Chemistry Instruments	13	104.8	7.5	7.2	104	73 - 137

Triglycerides (mg/dL)

	Specimen CH-6						Specimen CH-7					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	137	241.7	14.7	6.1	240	181 - 303	136	96.3	6.6	6.9	97	72 - 121
All Alfa Wassermann Reagents	14	247.0	7.6	3.1	248	185 - 309	14	104.1	2.9	2.7	104	78 - 131
All Horiba Pentra Reagents	13	241.6	10.8	4.4	240	181 - 303	13	97.7	3.6	3.7	98	73 - 123
All Roche Reagents	10	240.7	4.6	1.9	241	180 - 301	10	98.8	1.6	1.6	99	74 - 124
Alere Cholestech LDX												
Alere Cholestech LDX - waived	32	230.9	10.7	4.6	230	173 - 289	31	90.9	3.8	4.2	92	68 - 114
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	14	247.0	7.6	3.1	248	185 - 309	14	104.1	2.9	2.7	104	78 - 131
Beckman AU												
Beckman AU systems	19	247.4	8.0	3.2	249	185 - 310	19	99.9	4.0	4.0	101	74 - 125
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	13	241.6	10.8	4.4	240	181 - 303	13	97.7	3.6	3.7	98	73 - 123
Roche Integra												
Roche Integra	5	239.6	3.6	1.5	241	179 - 300	5	99.4	1.7	1.7	99	74 - 125
Siemens Healthcare												
Siemens Dimension	20	232.4	3.0	1.3	232	174 - 291	20	88.2	1.8	2.0	88	66 - 111
All Chemistry Instruments	20	232.4	3.0	1.3	232	174 - 291	20	88.2	1.8	2.0	88	66 - 111
VITROS												
VITROS 250,350,400 500,700,750,950	11	273.0	6.2	2.3	274	204 - 342	11	104.9	3.1	2.9	104	78 - 132
All Chemistry Instruments	15	270.3	7.2	2.7	273	202 - 338	15	103.7	3.4	3.3	103	77 - 130

Triglycerides (mg/dL)

	Specimen CH-8						Specimen CH-9					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	107	197.0	10.7	5.4	196	147 - 247	108	158.0	8.7	5.5	159	118 - 198
All Alfa Wassermann Reagents	14	200.7	5.9	2.9	202	150 - 251	14	162.7	4.0	2.5	162	122 - 204
All Horiba Pentra Reagents	13	195.8	7.2	3.7	194	146 - 245	13	158.9	6.0	3.8	158	119 - 199
All Roche Reagents	10	195.4	3.1	1.6	195	146 - 245	10	158.3	3.0	1.9	159	118 - 198
Alere Cholestech LDX												
Alere Cholestech LDX - waived	3	-	-	-	191	147 - 247	3	-	-	-	153	118 - 198
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	14	200.7	5.9	2.9	202	150 - 251	14	162.7	4.0	2.5	162	122 - 204
Beckman AU												
Beckman AU systems	18	200.1	6.1	3.0	200	150 - 251	19	158.8	5.9	3.7	159	119 - 199
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	13	195.8	7.2	3.7	194	146 - 245	13	158.9	6.0	3.8	158	119 - 199
Roche Integra												
Roche Integra	5	195.4	3.4	1.7	196	146 - 245	5	157.8	2.9	1.9	157	118 - 198
Siemens Healthcare												
Siemens Dimension	20	185.5	3.0	1.6	186	139 - 232	20	146.6	2.4	1.6	147	109 - 184
All Chemistry Instruments	20	185.5	3.0	1.6	186	139 - 232	20	146.6	2.4	1.6	147	109 - 184
VITROS												
VITROS 250,350,400 500,700,750,950	11	216.5	5.8	2.7	218	162 - 271	11	172.4	4.9	2.8	172	129 - 216
All Chemistry Instruments	15	214.3	6.1	2.9	212	160 - 268	15	170.8	4.9	2.9	169	128 - 214

Triglycerides (mg/dL)

Specimen CH-10

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	108	235.5	13.9	5.9	235	176 - 295
All Alfa Wassermann Reagents	14	237.0	6.4	2.7	236	177 - 297
All Horiba Pentra Reagents	13	233.3	8.8	3.8	232	174 - 292
All Roche Reagents	10	231.4	3.7	1.6	232	173 - 290
Alere Cholestech LDX						
Alere Cholestech LDX - waived	3	-	-	-	234	176 - 295
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	14	237.0	6.4	2.7	236	177 - 297
Beckman AU						
Beckman AU systems	19	237.4	7.7	3.3	239	178 - 297
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	13	233.3	8.8	3.8	232	174 - 292
Roche Integra						
Roche Integra	5	231.8	4.3	1.9	234	173 - 290
Siemens Healthcare						
Siemens Dimension	20	223.0	4.0	1.8	223	167 - 279
All Chemistry Instruments	20	223.0	4.0	1.8	223	167 - 279
VITROS						
VITROS 250,350,400 500,700,750,950	11	262.7	7.1	2.7	264	197 - 329
All Chemistry Instruments	15	259.7	8.0	3.1	260	194 - 325

Acetaminophen (µg/mL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	4	-	-	-	96.3	Not graded	4	-	-	-	6.5	Not graded

	Specimen CH-8						Specimen CH-9					
All Method	4	-	-	-	66.3	Not graded	4	-	-	-	53.8	Not graded

	Specimen CH-10					
All Method	4	-	-	-	92.6	Not graded

Carbamazepine (µg/mL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	4	-	-	-	13.1	Not graded	4	-	-	-	3.9	Not graded

	Specimen CH-8						Specimen CH-9					
All Method	4	-	-	-	10.4	Not graded	4	-	-	-	7.3	Not graded

	Specimen CH-10					
All Method	4	-	-	-	13.7	Not graded

Digoxin (ng/mL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	4	-	-	-	2.04	Not graded	4	-	-	-	0.20	Not graded

	Specimen CH-8						Specimen CH-9					
All Method	4	-	-	-	1.64	Not graded	4	-	-	-	1.01	Not graded

	Specimen CH-10					
All Method	4	-	-	-	2.02	Not graded

Gentamicin (µg/mL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	4	-	-	-	9.25	Not graded	4	-	-	-	1.24	Not graded
	Specimen CH-8						**Specimen CH-9**					
All Method	4	-	-	-	6.33	Not graded	4	-	-	-	4.53	Not graded
	Specimen CH-10											
All Method	4	-	-	-	9.08	Not graded						

Lithium (mmol/L)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	4	-	-	-	1.7	Not graded	4	-	-	-	0.3	Not graded
	Specimen CH-8						**Specimen CH-9**					
All Method	4	-	-	-	1.2	Not graded	4	-	-	-	0.9	Not graded
	Specimen CH-10											
All Method	4	-	-	-	1.6	Not graded						

Phenobarbital (µg/mL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	3	-	-	-	36.2	Not graded	3	-	-	-	5.4	Not graded
	Specimen CH-8						**Specimen CH-9**					
All Method	3	-	-	-	26.8	Not graded	3	-	-	-	18.1	Not graded
	Specimen CH-10											
All Method	3	-	-	-	34.8	Not graded						

Phenytoin (µg/mL)

Method	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	4	-	-	-	24.1	Not graded	4	-	-	-	7.4	Not graded

Method	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	4	-	-	-	18.6	Not graded	4	-	-	-	13.0	Not graded

Method	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	4	-	-	-	25.6	Not graded

Salicylate (mg/dL)

Method	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	4	-	-	-	29.7	Not graded	4	-	-	-	6.4	Not graded

Method	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	4	-	-	-	21.7	Not graded	4	-	-	-	15.1	Not graded

Method	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	4	-	-	-	28.7	Not graded

Theophylline (µg/mL)

Method	Specimen CH-6 Labs	Mean	SD	CV	Median	Range	Specimen CH-7 Labs	Mean	SD	CV	Median	Range
All Method	3	-	-	-	31.7	Not graded	3	-	-	-	10.4	Not graded

Method	Specimen CH-8 Labs	Mean	SD	CV	Median	Range	Specimen CH-9 Labs	Mean	SD	CV	Median	Range
All Method	3	-	-	-	25.1	Not graded	3	-	-	-	17.1	Not graded

Method	Specimen CH-10 Labs	Mean	SD	CV	Median	Range
All Method	3	-	-	-	33.7	Not graded

Valproic Acid (µg/mL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	4	-	-	-	95.4	Not graded	4	-	-	-	35.4	Not graded

	Specimen CH-8						Specimen CH-9					
All Method	4	-	-	-	75.6	Not graded	4	-	-	-	52.9	Not graded

	Specimen CH-10					
All Method	4	-	-	-	98.5	Not graded

Vancomycin (µg/mL)

	Specimen CH-6						Specimen CH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	4	-	-	-	34.7	Not graded	4	-	-	-	4.0	Not graded

	Specimen CH-8						Specimen CH-9					
All Method	4	-	-	-	23.6	Not graded	4	-	-	-	17.7	Not graded

	Specimen CH-10					
All Method	4	-	-	-	34.2	Not graded

Blood Lead (µg/dL)

	Specimen LED-3						Specimen LED-4					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	28.32	2.79	9.9	28.9	24.3 - 32.4	12	11.80	0.91	7.7	11.8	7.8 - 15.8
All Magellan Diagnostics Methods	12	28.32	2.79	9.9	28.9	24.3 - 32.4	12	11.80	0.91	7.7	11.8	7.8 - 15.8
Magellan Diagnostics LeadCare II	12	28.32	2.79	9.9	28.9	24.3 - 32.4	12	11.80	0.91	7.7	11.8	7.8 - 15.8

Neonatal Bilirubin, Total (mg/dL)

Method	Specimen NB-6 Labs	Mean	SD	CV	Median	Range	Specimen NB-7 Labs	Mean	SD	CV	Median	Range
All Method	20	0.14	0.22	165.2	0.0	0.0 - 0.6	20	18.18	0.94	5.2	18.3	14.5 - 21.9
No Reagent Required												
Bilirubinometer / Reichart UNISTAT	13	0.00	0.01	0.0	0.0	0.0 - 0.4	13	18.48	0.66	3.6	18.3	14.7 - 22.2
All Chemistry Instruments	17	0.11	0.21	189.5	0.0	0.0 - 0.6	17	18.11	1.01	5.6	18.2	14.4 - 21.8

Method	Specimen NB-8 Labs	Mean	SD	CV	Median	Range	Specimen NB-9 Labs	Mean	SD	CV	Median	Range
All Method	20	10.94	0.46	4.2	11.0	8.7 - 13.2	20	15.80	0.51	3.2	15.8	12.6 - 19.0
No Reagent Required												
Bilirubinometer / Unistat	13	11.12	0.33	3.0	11.1	8.8 - 13.4	13	15.99	0.51	3.2	16.1	12.7 - 19.2
All Chemistry Instruments	17	11.03	0.40	3.7	11.1	8.8 - 13.3	17	15.85	0.53	3.3	15.8	12.6 - 19.1

Method	Specimen NB-10 Labs	Mean	SD	CV	Median	Range
All Method	20	5.91	0.34	5.7	5.9	4.7 - 7.1
No Reagent Required						
Bilirubinometer / Unistat	13	5.75	0.27	4.7	5.8	4.5 - 6.9
All Chemistry Instruments	17	5.84	0.31	5.4	5.8	4.6 - 7.1

Bilirubin, Direct (mg/dL)

Method	Specimen NB-6 Labs	Mean	SD	CV	Median	Range	Specimen NB-7 Labs	Mean	SD	CV	Median	Range
All Method	6	0.10	0.15	154.9	0.1	0.0 - 0.5	7	3.37	0.59	17.6	3.3	2.1 - 4.6

Method	Specimen NB-8 Labs	Mean	SD	CV	Median	Range	Specimen NB-9 Labs	Mean	SD	CV	Median	Range
All Method	7	4.23	0.59	13.9	4.0	3.0 - 5.5	7	5.07	0.65	12.8	5.0	3.7 - 6.4

Method	Specimen NB-10 Labs	Mean	SD	CV	Median	Range
All Method	7	1.00	0.32	31.6	0.9	0.3 - 1.7

Blood Gases – pH

	Specimen BG-6						Specimen BG-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	10	7.160	0.026	0.4	7.17	7.12 - 7.20	10	7.290	0.017	0.2	7.30	7.25 - 7.33
	Specimen BG-8						**Specimen BG-9**					
All Method	10	7.157	0.025	0.4	7.16	7.11 - 7.20	10	7.487	0.023	0.3	7.50	7.44 - 7.53
	Specimen BG-10											
All Method	10	7.470	0.026	0.4	7.48	7.43 - 7.51						

Blood Gases - pCO_2 (mmHg)

	Specimen BG-6						Specimen BG-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	10	66.23	2.70	4.1	65.2	60.9 - 71.6	10	22.07	1.77	8.0	21.2	17.0 - 27.1
	Specimen BG-8						**Specimen BG-9**					
All Method	10	58.67	3.80	6.5	57.1	53.6 - 63.7	10	30.50	2.42	8.0	30.1	25.5 - 35.5
	Specimen BG-10											
All Method	10	25.93	2.94	11.3	25.4	20.9 - 31.0						

Blood Gases - pO_2 (mmHg)

Method	Labs	Mean	SD	CV	Median	Range
Specimen BG-6						
All Method	10	84.17	7.52	8.9	88.0	61.6 - 106.8
Specimen BG-7						
All Method	10	164.33	14.01	8.5	165.0	122.2 - 206.4
Specimen BG-8						
All Method	10	71.80	9.06	12.6	76.0	44.6 - 99.0
Specimen BG-9						
All Method	10	112.33	2.52	2.2	112.0	104.7 - 119.9
Specimen BG-10						
All Method	10	140.00	9.17	6.5	138.0	112.5 - 167.5

Blood Gases – Ionized Calcium (mmol/L)

One participant reported results for Blood Gases-Ionized Calcium. The vendor mean assay values for specimens BG-6 through BG-10 are: 2.10 mmol/L, 0.82 mmol/L, 2.00 mmol/L, 0.90 mmol/L, and 1.10 mmol/L, respectively.

Blood Gases - Chloride (mmol/L)

One participant reported results for Blood Gases-Chloride. The vendor mean assay values for specimens BG-6 through BG-10 are: 87 mmol/L, 109 mmol/L, 75 mmol/L, 107 mmol/L, and 83 mmol/L, respectively.

Blood Gases - Potassium (mmol/L)

One participant reported results for Blood Gases-Potassium. The vendor mean assay values for specimens BG-6 through BG-10 are: 3.8 mmol/L, 6.1 mmol/L, 2.7 mmol/L, 6.6 mmol/L, and 4.2 mmol/L, respectively.

Blood Gases – Sodium (mmol/L)

One participant reported results for Blood Gases-Sodium. The vendor mean assay values for specimens BG-6 through BG-10 are: 140 mmol/L, 145 mmol/L, 124 mmol/L, 160 mmol/L, and 146 mmol/L, respectively.

Blood Gases – Lactate (mmol/L)

Method	Specimen BG-6 Labs	Mean	SD	CV	Median	Range	Specimen BG-7 Labs	Mean	SD	CV	Median	Range
All Method	5	4.15	0.92	22.2	4.2	1.3 - 7.0	5	0.80	0.28	35.4	0.8	0.0 - 1.7

Method	Specimen BG-8 Labs	Mean	SD	CV	Median	Range	Specimen BG-9 Labs	Mean	SD	CV	Median	Range
All Method	5	5.30	0.85	16.0	5.3	2.7 - 7.9	5	1.30	0.42	32.6	1.3	0.0 - 2.6

Method	Specimen BG-10 Labs	Mean	SD	CV	Median	Range
All Method	5	1.90	0.71	37.2	1.9	0.0 - 4.1

Afinion Glycohemoglobin (percent)

Method	Specimen AFN-3 Labs	Mean	SD	CV	Median	Range	Specimen AFN-4 Labs	Mean	SD	CV	Median	Range
All Method	75	8.27	0.12	1.4	8.3	7.8 - 8.7	78	6.15	0.12	1.9	6.1	5.8 - 6.5
All Alere Afinion Analyzers	75	8.27	0.12	1.4	8.3	7.8 - 8.7	78	6.15	0.12	1.9	6.1	5.8 - 6.5
Alere Afinion 2	21	8.28	0.12	1.4	8.3	7.8 - 8.7	20	6.17	0.12	1.9	6.1	5.8 - 6.5
Alere Afinion AS100	57	8.28	0.15	1.8	8.3	7.8 - 8.7	58	6.14	0.12	1.9	6.1	5.8 - 6.5

Glycohemoglobin (percent)

	Specimen GH-3						Specimen GH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	96	6.83	0.21	3.0	6.8	6.4 - 7.2	94	10.56	0.32	3.0	10.5	10.0 - 11.1
All Bio-Rad Methods	5	6.87	0.21	3.0	6.8	6.5 - 7.3	4	-	-	-	10.8	10.2 - 11.3
All Enzymatic A1c Methods	7	6.51	0.37	5.6	6.6	6.1 - 6.9	6	10.15	0.86	8.5	10.5	9.6 - 10.7
All Hemoglobin A1c Methods	85	6.85	0.22	3.2	6.8	6.5 - 7.2	83	10.56	0.32	3.1	10.5	10.0 - 11.1
All Roche Methods	7	6.61	0.22	3.3	6.6	6.2 - 7.0	7	10.81	0.30	2.8	10.9	10.2 - 11.4
All TOSOH Methods	14	6.76	0.09	1.4	6.8	6.4 - 7.2	14	10.31	0.10	1.0	10.3	9.7 - 10.9
Abbott Architect Hb A1C	3	6.63	0.06	0.9	6.6	6.3 - 7.0	5	10.53	0.06	0.5	10.5	10.0 - 11.1
Beckman AU A1c	6	6.68	0.15	2.2	6.7	6.3 - 7.1	6	10.63	0.36	3.4	10.6	10.1 - 11.2
Bio-Rad D-10 HbA1C	5	6.87	0.21	3.0	6.8	6.5 - 7.3	4	-	-	-	10.8	10.0 - 11.1
Roche cobas c501 HbA1c	5	6.53	0.23	3.5	6.4	6.2 - 6.9	5	10.63	0.38	3.6	10.8	10.1 - 11.2
Roche Integra A1C	5	6.68	0.22	3.3	6.6	6.3 - 7.1	5	10.95	0.17	1.6	10.9	10.4 - 11.5
Siemens DCA Vantage	38	6.93	0.21	3.0	6.9	6.5 - 7.3	37	10.63	0.33	3.1	10.6	10.0 - 11.2
Siemens Dimension HA1C	9	6.97	0.26	3.7	6.9	6.6 - 7.4	9	10.47	0.19	1.9	10.5	9.9 - 11.0
Siemens Dimension HB1C	5	6.83	0.13	1.8	6.8	6.4 - 7.2	5	10.25	0.24	2.3	10.4	9.7 - 10.8
TOSOH G8	14	6.76	0.09	1.4	6.8	6.4 - 7.2	14	10.31	0.10	1.0	10.3	9.7 - 10.9

Whole Blood Glucose (mg/dL)

	Specimen WBG-6						Specimen WBG-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	285	202.3	22.7	11.2	209	161 - 243	285	109.3	18.9	17.3	109	87 - 132
All Abbott Methods	36	191.7	18.4	9.6	186	153 - 231	35	96.8	8.6	8.8	95	77 - 117
All Arkray Methods	13	231.5	25.9	11.2	226	185 - 278	13	130.7	6.6	5.0	130	104 - 157
All Bayer Methods	20	170.8	11.2	6.5	169	136 - 205	21	86.0	5.6	6.5	84	68 - 104
All Hemocue Methods	55	219.0	7.1	3.2	219	175 - 263	55	131.2	8.0	6.1	133	104 - 158
All Lifescan Methods	20	224.4	11.8	5.3	223	179 - 270	20	111.7	5.0	4.5	112	89 - 135
All Roche Methods	26	210.0	11.8	5.6	213	167 - 252	25	111.7	5.2	4.7	113	89 - 135
Abbott FreeStyle Lite/Freedom Lite	6	203.7	7.1	3.5	203	162 - 245	6	105.5	4.8	4.5	104	84 - 127
Abbott FreeStyle Precision Pro	24	189.7	21.0	11.1	184	151 - 228	24	94.7	8.7	9.2	92	75 - 114
Abbott Precision XceedPro	6	187.7	8.9	4.7	186	150 - 226	5	96.6	4.0	4.2	96	77 - 116
Arkray Platinum	13	231.5	25.9	11.2	226	185 - 278	13	130.7	6.6	5.0	130	104 - 157
Bayer Contour / Plus	16	165.9	5.7	3.4	165	132 - 200	18	84.2	3.7	4.4	83	67 - 102
HemoCue Glucose 201	54	218.9	7.1	3.2	219	175 - 263	54	131.0	8.0	6.1	133	104 - 158
Home Diagnostics True Balance / TrueTrack	8	471.6	19.6	4.2	471	377 - 566	8	281.1	9.6	3.4	282	224 - 338
Lifescan One Touch Ultra/2/Mini	20	224.4	11.8	5.3	223	179 - 270	20	111.7	5.0	4.5	112	89 - 135
Medline EvenCare G2 / G3	18	213.9	22.4	10.5	214	171 - 257	18	118.6	5.6	4.7	118	94 - 143
NOVA Biomedical StatStrip	26	177.5	8.7	4.9	178	142 - 214	24	94.9	6.9	7.3	94	75 - 114
Quintet / AC	27	218.4	9.8	4.5	218	174 - 263	26	109.0	6.6	6.1	110	87 - 131
Roche Accu-Chek Inform II	7	202.9	41.1	20.3	219	162 - 244	7	125.4	29.8	23.8	114	100 - 151
Roche Accu-Chek Performa	14	211.4	8.9	4.2	212	169 - 254	14	111.8	5.4	4.8	112	89 - 135
True Metrix Pro	39	184.3	9.4	5.1	185	147 - 222	38	94.3	5.9	6.2	94	75 - 114

Whole Blood Glucose (mg/dL)

	Specimen WBG-8						Specimen WBG-9					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	175.2	8.7	5.0	177	140 - 211	19	102.1	5.1	5.0	103	81 - 123
All Lifescan Methods	13	178.2	7.2	4.0	177	142 - 214	13	102.0	4.2	4.1	102	81 - 123
All Roche Methods	5	172.4	2.3	1.3	172	137 - 207	5	105.2	1.3	1.2	106	84 - 127
Lifescan One Touch Ultra/2/Mini	13	178.2	7.2	4.0	177	142 - 214	13	102.0	4.2	4.1	102	81 - 123
Roche Accu-Chek Inform II	1	-	-	-	176	137 - 207	1	-	-	-	106	84 - 127
Roche Accu-Chek Performa	4	-	-	-	172	137 - 207	4	-	-	-	106	84 - 127

	Specimen WBG-10					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	331.6	10.0	3.0	330	265 - 398
All Lifescan Methods	13	330.2	10.7	3.2	329	264 - 397
All Roche Methods	5	336.4	7.9	2.4	341	269 - 404
Lifescan One Touch Ultra/2/Mini	13	330.2	10.7	3.2	329	264 - 397
Roche Accu-Chek Inform II	1	-	-	-	324	269 - 404
Roche Accu-Chek Performa	4	-	-	-	341	269 - 404

C-Peptide (ng/mL)

	Specimen CIP-3						Specimen CIP-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	2.440	0.470	19.2	2.39	1.50 - 3.38	5	4.768	0.602	12.6	4.61	3.56 - 5.98

Insulin (μU/mL)

	Specimen CIP-3						Specimen CIP-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	38.35	11.08	28.9	43.4	16.1 - 60.6	12	69.58	22.40	32.2	78.1	24.7 - 114.4
All TOSOH Instruments	5	127.15	3.61	2.8	127.2	119.9 - 134.4	5	203.45	4.03	2.0	203.5	195.3 - 211.6
Beckman ACCESS / 2 / DxI	5	42.55	4.70	11.1	43.2	33.1 - 52.0	5	79.70	7.98	10.0	78.1	63.7 - 95.7

Parathyroid Hormone, Intact (pg/mL)

	Specimen CIP-3						Specimen CIP-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	29	85.3	14.9	17.5	84	55 - 116	29	139.4	25.5	18.3	139	88 - 191
All Roche Methods	5	61.8	3.6	5.8	61	43 - 81	5	100.8	4.5	4.5	100	70 - 131
All TOSOH Instruments	5	88.0	4.5	5.1	89	61 - 115	5	147.8	8.2	5.6	149	103 - 193
Beckman ACCESS / 2 / DxI	12	81.3	5.0	6.1	82	56 - 106	12	136.3	8.7	6.4	135	95 - 178

Vitamin D (25-Hydroxy) (ng/mL)

	Specimen CIP-3						Specimen CIP-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	81	33.55	4.96	14.8	33.4	23.6 - 43.5	81	51.95	6.65	12.8	52.6	38.6 - 65.3
All Roche Instruments	9	33.42	5.99	17.9	35.2	21.4 - 45.5	9	54.76	8.64	15.8	55.7	37.4 - 72.1
All TOSOH Instruments	12	37.38	2.31	6.2	37.2	32.7 - 42.0	12	54.13	3.21	5.9	53.6	47.7 - 60.6
All VITROS Instruments	5	46.33	14.86	32.1	41.1	16.5 - 76.1	5	57.53	9.29	16.1	62.0	38.9 - 76.2
Abbott Architect	7	35.17	7.92	22.5	33.1	19.3 - 51.1	7	49.10	8.21	16.7	51.0	32.6 - 65.6
Beckman ACCESS / 2 / DxI	34	32.10	2.61	8.1	32.5	26.8 - 37.4	35	52.05	4.10	7.9	52.7	43.8 - 60.3
Roche cobas e 411	5	32.44	7.51	23.2	35.2	17.4 - 47.5	5	52.42	10.48	20.0	55.7	31.4 - 73.4
Roche cobas e 601/ e 602	5	34.65	4.11	11.9	34.1	26.4 - 42.9	5	57.68	5.67	9.8	57.2	46.3 - 69.1
Siemens Dimension	5	30.56	1.45	4.8	30.3	27.6 - 33.5	5	45.30	1.75	3.9	45.2	41.7 - 48.9
TOSOH ST AIA PACK	9	37.66	2.61	6.9	37.6	32.4 - 42.9	9	54.47	3.67	6.7	53.8	47.1 - 61.9

Bioavailable Testosterone (ng/dL)

	Specimen SHB-3						Specimen SHB-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	3	-	-	-	342.3	Not graded	13	-	-	-	227.6	Not graded

Free Testosterone (pg/mL)

	Specimen SHB-3						Specimen SHB-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	3	-	-	-	146.0	Not graded	13	-	-	-	97.1	Not graded

Sex Hormone Binding Globulin (SHBG) (nmol/L)

	Specimen SHB-3						Specimen SHB-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	13	81.488	6.813	8.4	80.40	61.04 - 101.93	13	54.354	7.185	13.2	55.35	32.79 - 75.92
Beckman ACCESS / 2 / DxI	10	83.178	6.822	8.2	80.70	62.71 - 103.65	10	56.689	3.873	6.8	55.80	45.07 - 68.31

Testosterone (ng/dL)

	Specimen SHB-3						Specimen SHB-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	13	852.8	137.2	16.1	822	596 - 1109	12	535.0	38.0	7.1	534	374 - 696
Beckman ACCESS / 2 / DxI	10	803.7	54.1	6.7	822	562 - 1045	10	525.5	33.7	6.4	524	367 - 684

BNP (pg/mL)

Method	Labs	Mean	SD	CV	Median	Range
Specimen CK-6						
All Method	17	4533.11	534.15	11.8	2490.0	3399.8 - 5666.4
i-STAT - moderate	5	4949.25	101.50	2.1	5000.0	3711.9 - 6186.6
Quidel Triage	10	2164.00	335.20	15.5	2105.0	1493.5 - 2834.5
Specimen CK-7						
All Method	17	1223.27	289.85	23.7	687.0	643.5 - 1803.0
i-STAT - moderate	5	1441.25	141.08	9.8	1399.5	1080.9 - 1801.6
Quidel Triage	10	604.40	55.99	9.3	609.0	453.3 - 755.5
Specimen CK-8						
All Method	17	616.81	160.14	26.0	496.1	296.5 - 937.1
i-STAT - moderate	5	730.00	93.79	12.8	755.0	542.4 - 917.6
Quidel Triage	10	304.25	25.06	8.2	303.0	228.1 - 380.4
Specimen CK-9						
All Method	17	91.04	26.71	29.3	72.5	37.6 - 144.5
i-STAT - moderate	5	110.25	11.84	10.7	104.5	82.6 - 137.9
Quidel Triage	10	45.55	5.85	12.8	45.7	33.8 - 57.3
Specimen CK-10						
All Method	17	2449.41	594.05	24.3	1807.0	1261.3 - 3637.6
i-STAT - moderate	5	2849.50	406.69	14.3	2963.0	2036.1 - 3662.9
Quidel Triage	10	1252.50	68.98	5.5	1245.0	939.3 - 1565.7

CK-MB (ng/mL)

Method	Labs	Mean	SD	CV	Median	Range
Specimen CK-6						
All Method	18	80.42	20.05	24.9	37.9	20.2 - 140.6
Quidel Triage	11	32.35	5.87	18.2	30.9	14.7 - 50.0
Specimen CK-7						
All Method	18	24.50	5.88	24.0	11.5	6.8 - 42.2
Quidel Triage	11	9.95	1.70	17.1	9.8	4.8 - 15.1
Specimen CK-8						
All Method	18	15.13	3.48	23.0	6.3	4.6 - 25.6
Quidel Triage	11	5.64	0.96	17.0	5.6	2.7 - 8.6
Specimen CK-9						
All Method	18	6.28	1.25	19.9	2.5	2.5 - 10.1
Quidel Triage	11	2.34	0.26	11.0	2.3	1.5 - 3.2
Specimen CK-10						
All Method	18	42.73	10.19	23.8	19.0	12.1 - 73.3
Quidel Triage	11	17.26	2.99	17.3	18.3	8.2 - 26.3

D-Dimer (ng/mL)

	Specimen CK-6						Specimen CK-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	13	1379.2	140.0	10.1	1390	965 - 1793	13	511.5	47.6	9.3	502	358 - 665
	Specimen CK-8						**Specimen CK-9**					
All Method	13	290.4	40.1	13.8	298	203 - 378	13	154.4	21.9	14.2	151	108 - 201
	Specimen CK-10											
All Method	13	794.6	73.6	9.3	797	556 - 1034						

Myoglobin (ng/mL)

	Specimen CK-6						Specimen CK-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	13	393.95	24.54	6.2	352.0	275.7 - 512.2	13	121.45	3.18	2.6	123.7	85.0 - 157.9
Quidel Triage	9	350.00	56.35	16.1	338.0	237.3 - 462.7	9	133.00	23.51	17.7	125.0	85.9 - 180.1
	Specimen CK-8						**Specimen CK-9**					
All Method	13	73.95	0.07	0.1	78.2	51.7 - 96.2	13	30.40	3.54	11.6	32.9	21.2 - 39.6
Quidel Triage	9	80.11	10.20	12.7	79.6	56.0 - 104.2	9	35.20	4.89	13.9	36.7	24.6 - 45.8
	Specimen CK-10											
All Method	13	213.50	6.22	2.9	209.1	149.4 - 277.6						
Quidel Triage	9	211.11	30.95	14.7	197.0	147.7 - 274.5						

NT-proBNP (pg/mL)

Method	Specimen CK-6 Labs	Mean	SD	CV	Median	Range	Specimen CK-7 Labs	Mean	SD	CV	Median	Range
All Method	14	3458.0	1651.9	47.8	3372	154 - 6762	14	749.0	459.8	61.4	725	0 - 1669
All Roche Methods	6	4883.0	251.7	5.2	4883	3662 - 6104	6	1145.5	72.8	6.4	1146	859 - 1432
Roche cobas e 601/ e 602	5	4883.0	251.7	5.2	4883	3662 - 6104	5	1145.5	72.8	6.4	1146	859 - 1432
Siemens Dimension NT-proBNP	5	2033.0	8.5	0.4	2033	1524 - 2542	5	352.5	4.9	1.4	353	264 - 441

Method	Specimen CK-8 Labs	Mean	SD	CV	Median	Range	Specimen CK-9 Labs	Mean	SD	CV	Median	Range
All Method	7	302.3	259.5	85.8	156	0 - 822	7	29.3	24.0	81.7	16	0 - 78
All Roche Methods	1	-	-	-	602	451 - 753	1	-	-	-	57	42 - 72
Roche cobas e 601/ e 602	1	-	-	-	602	0 - 822	1	-	-	-	57	0 - 78
Siemens Dimension NT-proBNP	5	152.5	4.9	3.2	153	114 - 191	5	15.5	0.7	4.6	16	11 - 20

Method	Specimen CK-10 Labs	Mean	SD	CV	Median	Range
All Method	7	1333.0	848.0	63.6	858	0 - 3029
All Roche Methods	1	-	-	-	2312	1734 - 2890
Roche cobas e 601/ e 602	1	-	-	-	2312	0 - 3029
Siemens Dimension NT-proBNP	5	843.5	20.5	2.4	844	632 - 1055

Troponin I (ng/mL)

Method	Specimen CK-6 Labs	Mean	SD	CV	Median	Range	Specimen CK-7 Labs	Mean	SD	CV	Median	Range
All Method	37	31.220	31.390	100.5	11.50	0.00 - 94.01	37	7.697	9.381	121.9	2.34	0.00 - 26.46
All HS Troponin I Methods	6	86.178	19.175	22.2	85.36	47.82 - 124.53	6	24.385	7.705	31.6	23.80	8.97 - 39.80
All Non-HS Troponin I Methods	18	10.488	2.415	23.0	10.02	5.65 - 15.32	18	2.051	1.134	55.3	1.64	0.00 - 4.32
Beckman ACCESS / 2 / DxI	5	10.985	0.465	4.2	11.00	7.68 - 14.29	5	1.960	0.102	5.2	1.94	1.37 - 2.55
i-STAT - moderate	5	45.960	4.746	10.3	46.94	32.17 - 59.75	5	10.245	1.036	10.1	10.65	7.17 - 13.32
Quidel Triage	11	9.075	1.139	12.6	8.55	6.35 - 11.80	11	1.446	0.370	25.6	1.43	0.70 - 2.19
Siemens Dimension	5	15.007	0.816	5.4	14.95	10.50 - 19.51	5	4.390	0.036	0.8	4.38	3.07 - 5.71

Method	Specimen CK-8 Labs	Mean	SD	CV	Median	Range	Specimen CK-9 Labs	Mean	SD	CV	Median	Range
All Method	37	3.793	5.188	136.8	0.98	0.00 - 14.17	37	0.210	0.281	133.7	0.08	0.00 - 0.78
All HS Troponin I Methods	6	12.935	4.977	38.5	12.96	2.98 - 22.89	6	0.682	0.334	49.0	0.68	0.01 - 1.36
All Non-HS Troponin I Methods	18	0.828	0.603	72.9	0.50	0.00 - 2.04	18	0.056	0.019	34.1	0.05	0.01 - 0.10
Beckman ACCESS / 2 / DxI	5	0.905	0.068	7.5	0.91	0.63 - 1.18	5	0.043	0.005	11.7	0.04	0.02 - 0.06
i-STAT - moderate	5	4.828	0.189	3.9	4.82	3.37 - 6.28	5	0.238	0.032	13.5	0.24	0.16 - 0.31
Quidel Triage	11	0.462	0.083	17.9	0.46	0.29 - 0.63	11	0.050	0.001	0.0	0.05	0.03 - 0.07
Siemens Dimension	5	2.067	0.015	0.7	2.07	1.44 - 2.69	5	0.097	0.006	5.9	0.10	0.06 - 0.13

Method	Specimen CK-10 Labs	Mean	SD	CV	Median	Range
All Method	37	15.544	16.800	108.1	5.40	0.00 - 49.15
All HS Troponin I Methods	6	45.130	12.584	27.9	45.34	19.96 - 70.30
All Non-HS Troponin I Methods	18	4.956	1.844	37.2	4.49	1.26 - 8.65
Beckman ACCESS / 2 / DxI	5	4.473	0.347	7.8	4.49	3.13 - 5.82
i-STAT - moderate	5	21.725	1.118	5.1	21.96	15.20 - 28.25
Quidel Triage	11	4.125	0.886	21.5	4.16	2.35 - 5.90
Siemens Dimension	5	8.650	0.255	3.0	8.71	6.05 - 11.25

Troponin T (ng/mL)

	Specimen CK-6						Specimen CK-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	1.7405	0.3967	22.8	1.741	0.947 - 2.534	5	0.5695	0.1336	23.5	0.570	0.302 - 0.837
Roche cobas e 601/ e 602	5	1.7405	0.3967	22.8	1.741	0.947 - 2.534	5	0.5695	0.1336	23.5	0.570	0.302 - 0.837

	Specimen CK-8						Specimen CK-9					
All Method	5	0.3595	0.0870	24.2	0.360	0.185 - 0.534	5	0.0110	0.0014	12.9	0.011	0.007 - 0.015
Roche cobas e 601/ e 602	5	0.3595	0.0870	24.2	0.360	0.185 - 0.534	5	0.0110	0.0014	12.9	0.011	0.007 - 0.015

	Specimen CK-10					
All Method	5	0.9690	0.2135	22.0	0.969	0.541 - 1.397
Roche cobas e 601/ e 602	5	0.9690	0.2135	22.0	0.969	0.541 - 1.397

PSA (ng/mL)

	Specimen PS-3						Specimen PS-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	80	11.012	2.526	22.9	11.40	7.70 - 14.32	80	21.142	4.418	20.9	22.32	14.79 - 27.49
All Beckman Instruments	21	11.867	0.715	6.0	11.80	8.30 - 15.43	21	23.035	1.529	6.6	23.37	16.12 - 29.95
All Roche Instruments	6	12.110	0.539	4.5	12.18	8.47 - 15.75	6	23.515	1.209	5.1	23.88	16.46 - 30.57
All TOSOH Instruments	15	8.030	0.353	4.4	8.11	5.62 - 10.44	15	15.442	0.552	3.6	15.43	10.80 - 20.08
Abbott Architect	6	9.767	1.044	10.7	9.61	6.83 - 12.70	6	19.537	2.249	11.5	19.11	13.67 - 25.40
Beckman ACCESS / 2 / DxI	13	12.107	0.637	5.3	12.11	8.47 - 15.74	13	23.444	1.285	5.5	23.61	16.41 - 30.48
Beckman ACCESS Hybritech PSA	8	11.476	0.696	6.1	11.58	8.03 - 14.92	8	22.370	1.742	7.8	22.25	15.65 - 29.09
NanoEnTek FREND	5	17.667	0.234	1.3	17.62	12.36 - 22.97	5	25.000	0.001	0.0	25.00	17.50 - 32.50
Qualigen FastPack	5	14.050	2.499	17.8	14.10	9.83 - 18.27	5	28.825	5.239	18.2	28.65	20.17 - 37.48
Roche cobas e 411	5	11.950	0.783	6.6	11.69	8.36 - 15.54	5	22.787	1.274	5.6	22.61	15.95 - 29.63
Roche cobas e 601/ e 602	5	12.270	0.191	1.6	12.29	8.58 - 15.96	5	24.243	0.663	2.7	24.17	16.97 - 31.52
Siemens Dimension TPSA	12	11.849	1.019	8.6	12.03	8.29 - 15.41	12	23.432	1.531	6.5	23.40	16.40 - 30.47
TOSOH AIA PACK	5	8.130	0.147	1.8	8.17	5.69 - 10.57	5	15.534	0.151	1.0	15.53	10.87 - 20.20
TOSOH ST AIA PACK	10	7.980	0.419	5.2	8.08	5.58 - 10.38	10	15.396	0.676	4.4	15.33	10.77 - 20.02

Beta-2 microglobulin

	Specimen TM-3						Specimen TM-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	7	2.356	0.148	6.3	2.30	1.91 - 2.80	7	1.628	0.077	4.7	1.60	1.39 - 1.86

CA 125 (U/mL)

	Specimen TM-3						Specimen TM-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	16	96.2	10.6	11.0	108	74 - 118	16	67.2	6.7	10.0	75	53 - 81
All TOSOH Instruments	12	120.6	7.0	5.8	121	96 - 145	12	83.9	5.8	6.9	83	67 - 101
TOSOH ST AIA PACK	10	120.6	7.0	5.8	121	96 - 145	10	83.9	5.8	6.9	83	67 - 101

CA 15-3 (U/mL)

	Specimen TM-3						Specimen TM-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	10	117.8	34.5	29.3	131	48 - 187	10	88.6	29.8	33.6	95	29 - 149

CA 19-9 (ng/mL)

	Specimen TM-3						Specimen TM-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	10	160.1	38.3	23.9	164	83 - 237	10	111.8	27.7	24.8	113	56 - 168

CA 27/29 (U/mL)

	Specimen TM-3						Specimen TM-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	7	218.9	21.7	9.9	228	153 - 285	7	154.9	12.2	7.9	150	108 - 202
All TOSOH Instruments	7	218.9	21.7	9.9	228	153 - 285	7	154.9	12.2	7.9	150	108 - 202
TOSOH ST AIA PACK	7	218.9	21.7	9.9	228	153 - 285	7	154.9	12.2	7.9	150	108 - 202

CEA (U/mL)

	Specimen TM-3						Specimen TM-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	14	45.60	4.24	9.3	53.3	36.4 - 54.8	14	31.23	2.41	7.7	36.1	24.9 - 37.5
All TOSOH Instruments	12	56.01	2.13	3.8	56.0	44.8 - 67.3	12	38.69	1.46	3.8	38.4	30.9 - 46.5
TOSOH ST AIA PACK	10	56.01	2.13	3.8	56.0	44.8 - 67.3	10	38.69	1.46	3.8	38.4	30.9 - 46.5

Free PSA (ng/mL)

	Specimen TM-3						Specimen TM-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	10	7.674	1.009	13.1	7.72	5.37 - 9.98	10	5.080	0.746	14.7	5.23	3.55 - 6.61

PSA (ng/mL)

	Specimen TM-3						Specimen TM-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	34	7.294	1.562	21.4	7.60	5.10 - 9.49	34	4.798	1.014	21.1	4.95	3.35 - 6.24
All Beckman Instruments	11	8.228	0.864	10.5	8.49	5.75 - 10.70	11	5.394	0.537	10.0	5.52	3.77 - 7.02
All TOSOH Instruments	12	5.513	0.382	6.9	5.55	3.85 - 7.17	12	3.620	0.240	6.6	3.64	2.53 - 4.71
Beckman ACCESS / 2 / DxI	10	7.936	0.973	12.3	8.20	5.55 - 10.32	10	5.234	0.627	12.0	5.33	3.66 - 6.81
TOSOH ST AIA PACK	10	5.513	0.382	6.9	5.55	3.85 - 7.17	10	3.620	0.240	6.6	3.64	2.53 - 4.71

Thyroglobulin (ng/mL)

	Specimen TM-3						Specimen TM-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	7	51.13	4.34	8.5	52.8	42.4 - 59.9	7	35.48	1.28	3.6	35.7	32.9 - 38.1
Beckman ACCESS / 2 / DxI	5	51.13	4.34	8.5	52.8	42.4 - 59.9	5	35.48	1.28	3.6	35.7	32.9 - 38.1

CEA (ng/mL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	8	10.08	1.92	19.1	13.4	8.0 - 12.1	8	19.80	5.22	26.4	29.1	15.8 - 23.8
All TOSOH Instruments	5	20.23	0.72	3.6	20.4	16.1 - 24.3	5	37.80	1.36	3.6	38.0	30.2 - 45.4

DHEA-S (µg/dL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	174.15	10.85	6.2	177.7	121.9 - 226.4	13	296.11	39.80	13.4	297.1	207.2 - 385.0
Beckman ACCESS / 2 / DxI	10	176.26	8.51	4.8	179.4	123.3 - 229.2	10	291.31	16.05	5.5	297.5	203.9 - 378.8

Estradiol (pg/mL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	25	215.0	64.6	30.1	202	85 - 345	25	363.8	111.2	30.6	321	141 - 587
All TOSOH Instruments	5	332.6	18.9	5.7	346	232 - 433	5	567.8	29.8	5.2	566	397 - 739
Beckman ACCESS / 2 / DxI	13	199.8	7.8	3.9	202	139 - 260	13	321.8	15.0	4.7	321	225 - 419

Ferritin (ng/mL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	28	84.9	11.4	13.4	63	67 - 102	28	149.8	19.8	13.2	113	119 - 180
All Abbott Instruments	7	89.4	5.0	5.6	91	71 - 108	7	157.3	10.9	7.0	159	125 - 189
All Roche Instruments	7	89.4	2.1	2.3	89	71 - 108	7	158.4	4.4	2.7	156	126 - 191
All TOSOH Instruments	19	60.5	2.4	4.0	61	48 - 73	19	110.2	3.8	3.4	111	88 - 133
Abbott Architect	5	88.0	5.1	5.8	88	70 - 106	5	153.2	10.3	6.7	158	122 - 184
Beckman ACCESS / 2 / DxI	23	60.4	4.7	7.8	61	48 - 73	23	106.1	8.2	7.7	106	84 - 128
Siemens Dimension	8	89.5	7.1	7.9	88	71 - 108	8	155.4	12.1	7.8	154	124 - 187
TOSOH ST AIA PACK	15	60.8	2.1	3.5	61	48 - 73	15	110.7	3.3	3.0	111	88 - 133

Folate (ng/mL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	22	2.05	0.44	21.7	2.3	1.0 - 3.1	22	3.99	1.20	30.1	5.0	2.7 - 5.2
All Roche Instruments	8	2.01	0.04	1.8	2.0	1.0 - 3.1	8	3.28	0.47	14.5	3.5	2.2 - 4.3
All Siemens Dimension Instruments	5	1.68	0.11	6.5	1.7	0.6 - 2.7	5	2.96	0.40	13.4	3.1	1.9 - 4.0
All TOSOH Instruments	7	1.40	0.23	16.5	1.4	0.4 - 2.4	7	2.61	0.32	12.4	2.6	1.6 - 3.7
Abbott Architect	6	2.50	0.49	19.8	2.7	1.5 - 3.5	6	5.65	0.48	8.4	5.8	3.9 - 7.4
Beckman ACCESS / 2 / DxI	20	2.73	0.33	12.3	2.8	1.7 - 3.8	20	5.90	0.56	9.5	6.0	4.1 - 7.7
Roche cobas e 601/ e 602	5	2.02	0.04	2.2	2.0	1.0 - 3.1	5	3.60	0.17	4.8	3.5	2.5 - 4.7

FSH (mIU/mL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	26	22.17	1.88	8.5	22.8	18.1 - 26.2	26	35.28	2.97	8.4	35.4	28.9 - 41.7
All TOSOH Instruments	7	22.87	0.88	3.8	23.4	18.7 - 27.0	7	35.14	1.29	3.7	35.2	28.8 - 41.5
Beckman ACCESS / 2 / DxI	14	22.70	1.30	5.7	23.0	18.6 - 26.8	14	36.61	1.73	4.7	36.4	30.0 - 43.2

Homocysteine (μmol/L)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	6	19.3	1.2	6.0	20	13 - 26	6	31.0	2.0	6.5	31	21 - 41

LH (mIU/mL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	24	17.24	1.83	10.6	16.8	13.5 - 21.0	24	30.78	3.86	12.5	29.3	23.0 - 38.6
Beckman ACCESS / 2 / DxI	15	16.38	0.50	3.0	16.3	13.1 - 19.7	15	28.58	1.34	4.7	28.5	22.8 - 34.3

Prealbumin (mg/dL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	2	-	-	-	12	Not graded	2	-	-	-	14	Not graded

Progesterone (ng/mL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	15.94	3.03	19.0	15.7	11.9 - 20.0	19	28.24	4.73	16.8	28.2	21.1 - 35.3
Beckman ACCESS / 2 / DxI	10	15.07	1.29	8.6	15.7	11.3 - 18.9	10	27.48	2.07	7.5	27.8	20.6 - 34.4

Prolactin (ng/mL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	21	18.61	1.48	8.0	18.5	14.8 - 22.4	21	35.36	2.34	6.6	35.4	28.2 - 42.5
Beckman ACCESS / 2 / DxI	13	18.20	0.60	3.3	17.9	14.5 - 21.9	13	34.47	1.33	3.8	34.4	27.5 - 41.4

Testosterone (ng/dL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	46	487.3	72.2	14.8	459	341 - 634	47	855.2	133.2	15.6	803	598 - 1112
All Roche Instruments	5	514.0	27.5	5.4	516	359 - 669	5	875.6	40.1	4.6	890	612 - 1139
All TOSOH Instruments	11	590.3	31.3	5.3	584	413 - 768	11	1068.5	36.0	3.4	1056	747 - 1390
Abbott Architect	6	529.0	260.7	49.3	435	370 - 688	6	748.7	94.3	12.6	779	524 - 974
Beckman ACCESS / 2 / DxI	22	438.3	20.8	4.7	438	306 - 570	22	779.7	35.9	4.6	784	545 - 1014
Roche cobas e 601/ e 602	5	514.0	27.5	5.4	516	359 - 669	5	875.6	40.1	4.6	890	612 - 1139
TOSOH ST AIA PACK	7	576.0	18.5	3.2	577	403 - 749	7	1053.4	31.0	2.9	1045	737 - 1370

Transferrin (mg/dL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	9	121.4	4.9	4.0	122	109 - 134	9	145.9	5.2	3.6	148	131 - 161

Vitamin B_{12} (pg/mL)

	Specimen SC-3						Specimen SC-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	73	427.9	87.3	20.4	402	320 - 535	73	745.5	130.6	17.5	702	559 - 932
All Abbott Instruments	8	447.9	31.4	7.0	448	335 - 560	8	815.8	44.0	5.4	806	611 - 1020
All Roche Instruments	7	476.4	76.7	16.1	505	357 - 596	8	819.8	104.9	12.8	862	614 - 1025
All Siemens Dimension Instruments	7	470.7	21.9	4.6	477	353 - 589	7	811.9	28.1	3.5	823	608 - 1015
All TOSOH Instruments	12	564.8	42.9	7.6	563	423 - 706	12	963.3	88.5	9.2	946	722 - 1205
Abbott Architect	7	443.0	30.5	6.9	440	332 - 554	7	803.9	30.7	3.8	793	602 - 1005
Beckman ACCESS / 2 / DxI	34	355.7	23.9	6.7	356	266 - 445	34	633.3	43.7	6.9	630	474 - 792
Roche cobas e 601/ e 602	5	518.8	21.7	4.2	516	389 - 649	5	890.6	34.1	3.8	881	667 - 1114
Siemens Dimension	6	473.8	22.2	4.7	481	355 - 593	6	815.8	28.5	3.5	825	611 - 1020
TOSOH AIA PACK	7	564.0	25.3	4.5	563	423 - 705	7	959.7	52.2	5.4	963	719 - 1200
TOSOH ST AIA PACK	5	565.8	64.0	11.3	552	424 - 708	5	968.4	131.9	13.6	939	726 - 1211

Serum Alcohol (mg/dL)

	Specimen ETH-6						Specimen ETH-7					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	3	-	-	-	7	Not graded	3	-	-	-	117	Not graded

	Specimen ETH-8						Specimen ETH-9					
All Method	3	-	-	-	136	Not graded	3	-	-	-	23	Not graded

	Specimen ETH-10					
All Method	3	-	-	-	74	Not graded

Acetone

	Specimen ETH-6					Specimen ETH-7				
Method	***Labs***	***Negative***	***Small***	***Moderate***	***Large***	***Labs***	***Negative***	***Small***	***Moderate***	***Large***
ALL METHODS	10	10	-	-	-	10	10	-	-	-
Biorex Labs K-CHECK	10	10	-	-	-	10	10	-	-	-

	Specimen ETH-8					Specimen ETH-9				
ALL METHODS	10	-	-	1	9	10	10	-	-	-
Biorex Labs K-CHECK	10	-	-	1	9	10	10	-	-	-

	Specimen ETH-10				
ALL METHODS	10	-	3	6	1
Biorex Labs K-CHECK	10	-	3	6	1

Thyroglobulin Antibody (IU/mL)

	Specimen THY-3						Specimen THY-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	18	3.145	6.189	196.8	0.10	0.00 - 21.72	18	837.169	239.220	28.6	768.50	119.50 - 1554.84
All Abbott Methods	5	0.812	1.295	159.5	0.06	0.00 - 4.70	5	726.476	34.336	4.7	730.50	623.46 - 829.49
Abbott Architect	5	1.015	1.400	138.0	0.53	0.00 - 5.22	5	721.653	37.641	5.2	719.46	608.72 - 834.58
Beckman ACCESS / 2 / DxI	8	0.300	0.414	138.0	0.10	0.00 - 1.55	8	1050.413	114.174	10.9	1052.00	707.88 - 1392.94

Thryoid Peroxidase Antibody (TPO) (IU/mL)

	Specimen THY-3						Specimen THY-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	21	3.840	8.589	223.7	0.23	0.00 - 29.61	21	141.476	35.394	25.0	133.90	35.29 - 247.66
All Abbott Methods	5	0.800	1.304	163.0	0.00	0.00 - 4.72	5	176.992	6.864	3.9	179.40	156.39 - 197.59
Abbott Architect	5	1.000	1.414	141.4	0.50	0.00 - 5.25	5	177.078	7.923	4.5	179.95	153.30 - 200.85
Beckman ACCESS / 2 / DxI	10	0.160	0.283	176.7	0.00	0.00 - 1.01	10	126.270	7.552	6.0	124.40	103.61 - 148.93

Ammonia (µmol/L)

	Specimen AMM-3						Specimen AMM-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	3	-	-	-	45	Not graded	3	-	-	-	135	Not graded

Ethyl Glucuronide (EtG) (ng/mL)

	Specimen ETG-3			Specimen ETG-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	3	-	3	3	3	-
Cut-off 500						
Beckman AU	1	-	1	1	1	-
ImmTox	1	-	1	1	1	-
Indiko Plus	1	-	1	1	1	-
All Cut-off 500	3	-	3	3	3	-

Adulterated Urine – Specific Gravity

	Specimen AUR-3						Specimen AUR-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
ALL METHODS	3	-	-	-	1.004	Not graded	3	-	-	-	1.005	Not graded

Adulterated Urine – Specific Gravity Interpretation

	Specimen AUR-3			Specimen AUR-4		
Method	***Labs***	***Normal***	***Abnormal***	***Labs***	***Normal***	***Abnormal***
ALL METHODS	2	2	-	2	2	-
Carolina Chemistries BiOlis	2	2	-	2	2	-

Adulterated Urine – pH

	Specimen AUR-3						Specimen AUR-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
ALL METHODS	5	2.87	0.81	28.2	3.0	1.8 - 3.9	5	5.75	0.21	3.7	5.8	4.7 - 6.8

Adulterated Urine – pH Interpretation

	Specimen AUR-3			Specimen AUR-4		
Method	***Labs***	***Normal***	***Abnormal***	***Labs***	***Normal***	***Abnormal***
ALL METHODS	4	-	4	4	4	-
Axiom Diagnostics	1	-	1	1	1	-
Carolina Chemistries BiOlis	2	-	2	2	2	-
Siemens Viva-E	1	-	1	1	1	-

Adulterated Urine – Creatinine (mg/dL)

	Specimen AUR-3						Specimen AUR-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	3	-	-	-	57.7	Not graded	3	-	-	-	4.6	Not graded

Adulterated Urine – Creatinine Interpretation

	Specimen AUR-3			Specimen AUR-4		
Method	***Labs***	***Normal***	***Abnormal***	***Labs***	***Normal***	***Abnormal***
ALL METHODS	4	4	-	4	-	4
Beckman AU	1	1	-	1	-	1
Carolina Chemistries BiOlis	1	1	-	1	-	1
ImmTox	2	2	-	2	-	2

Adulterated Urine – Nitrite Interpretation

	Specimen AUR-3			Specimen AUR-4		
Method	***Labs***	***Normal***	***Abnormal***	***Labs***	***Normal***	***Abnormal***
ALL METHODS	2	2	-	2	-	2
Beckman AU	1	1	-	1	-	1
Siemens Viva-E	1	1	-	1	-	1

Adulterated Urine – Oxidants Interpretation

	Specimen AUR-3			Specimen AUR-4		
Method	***Labs***	***Negative/ Normal***	***Positive/ Abnormal***	***Labs***	***Negative/ Normal***	***Positive/ Abnormal***
ALL METHODS	2	2	-	2	-	2
Beckman AU	1	1	-	1	-	1
Siemens Viva-E	1	1	-	1	-	1

Urine Drug Screen

Acetaminophen (µg/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	3	-	3	3	3	-

Amphetamines (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	96	92	4	96	3	93
Cut-off 100						
McKesson Drug Panel	1	1	-	1	-	1
All Cut-off 100	1	1	-	1	-	1
Cut-off 300						
Beckman AU	1	1	-	1	-	1
Siemens Viva-E	1	1	-	1	-	1
All Cut-off 300	2	2	-	2	-	2
Cut-off 500						
CLIAwaived, Inc. Drug Test	6	6	-	6	-	6
First Sign Drugs of Abuse	1	1	-	1	-	1
ImmTox	1	1	-	1	-	1
Indiko Plus	1	1	-	1	-	1
MEDTOX Diagnostics	3	3	-	3	-	3
Microgenics DRI	1	1	-	1	-	1
Noble Medical Inc.	1	1	-	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	1	-	1	-	1
Siemens Dimension	1	1	-	1	-	1
Synermed IR 500	1	1	-	1	-	1
USDiagnostics UScreen Cup	2	1	1	2	1	1
All Cut-off 500	19	18	1	19	1	18
Cut-off 1000						
12 Panel Now	1	1	-	1	-	1
Alere iCassette	3	3	-	3	-	3
Alere iCup	2	2	-	2	-	2
Alere iScreen	23	23	-	23	-	23
Alfa Scientific Instant-View	1	1	-	1	-	1

Amphetamines (ng/mL) cont'd

	Specimen UDS-3			Specimen UDS-4		
	Labs	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
Beckman AU	1	1	-	1	-	1
BluRapids Multi-Drug Urine Test Cup	1	1	-	1	-	1
Carolina Chemistries BioLis 24i	2	2	-	2	-	2
CLIAwaived, Inc. Drug Test	1	1	-	1	-	1
Confirm Biosciences DoA Test	1	1	-	1	-	1
First Sign Drugs of Abuse	3	3	-	3	-	3
Germaine Labs AimScreen	2	1	1	2	-	2
Immunalysis	1	1	-	1	-	1
Lin-Zhi International	1	1	-	1	-	1
McKesson Consult Drug Panel	2	2	-	2	-	2
McKesson Drug Panel	7	7	-	7	-	7
Microgenics DRI	2	2	-	2	-	2
Noble Medical Inc.	1	1	-	1	-	1
Roche cobas 6000 / c 501	1	1	-	1	-	1
Siemens EMIT II Plus	1	1	-	1	-	1
Siemens Viva-E	1	1	-	1	-	1
USDiagnostics One Step Multi-Drug	2	2	-	2	-	2
USDiagnostics UScreen Cup	10	8	2	10	2	8
All Cut-off 1000	72	69	3	72	2	70

Amphetamines/Methamphetamines (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	12	10	2	12	-	12
Cut-off 100						
McKesson Drug Panel	1	1	-	1	-	1
All Cut-off 100	1	1	-	1	-	1
Cut-off 300						
Roche Integra	1	1	-	1	-	1
All Cut-off 300	1	1	-	1	-	1
Cut-off 500						
Abbott Alinity	1	1	-	1	-	1
Beckman AU	1	1	-	1	-	1
First Sign Drugs of Abuse	1	1	-	1	-	1
Mindray BS-200/BS-480	1	1	-	1	-	1
USDiagnostics UScreen Cup	1	-	1	1	-	1
All Cut-off 500	5	4	1	5	-	5
Cut-off 1000						
Beckman AU	1	-	1	1	-	1
McKesson Consult Drug Panel	1	1	-	1	-	1
Microgenics DRI	2	2	-	2	-	2
All Cut-off 1000	4	3	1	4	-	4

Barbiturates (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	81	2	79	81	2	79
Cut-off 100						
Beckman AU	1	-	1	1	-	1
McKesson Drug Panel	1	-	1	1	-	1
All Cut-off 100	2	-	2	2	-	2
Cut-off 200						
Abbott Alinity	1	-	1	1	-	1
Beckman AU	3	-	3	3	-	3
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
MEDTOX Diagnostics	3	-	3	3	-	3
Microgenics DRI	2	-	2	2	-	2
Roche Integra	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
Siemens EMIT II Plus	2	-	2	2	-	2
Synermed IR 500	1	-	1	1	-	1
All Cut-off 200	17	-	17	17	-	17
Cut-off 300						
12 Panel Now	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	2	-	2	2	-	2
Alere iScreen	23	-	23	23	-	23
CLIAwaived, Inc. Drug Test	7	-	7	7	-	7
Confirm Biosciences DoA Test	1	-	1	1	-	1
Immunalysis	1	-	1	1	-	1
McKesson Consult Drug Panel	2	-	2	2	-	2
McKesson Drug Panel	7	-	7	7	-	7
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	9	2	7	9	2	7
All Cut-off 300	61	2	59	61	2	59

Benzodiazepines (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	101	3	98	101	3	98
Cut-off 100						
Beckman AU	1	-	1	1	-	1
McKesson Drug Panel	1	-	1	1	-	1
Roche Integra	1	-	1	1	-	1
All Cut-off 100	3	-	3	3	-	3
Cut-off 150						
MEDTOX Diagnostics	3	-	3	3	-	3
All Cut-off 150	3	-	3	3	-	3
Cut-off 200						
Abbott Alinity	1	-	1	1	-	1
Beckman AU	3	-	3	3	-	3
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
ImmTox	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
Microgenics DRI	6	-	6	6	-	6
Mindray BS-200/BS-480	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
Siemens EMIT II Plus	3	-	3	3	-	3
Synermed IR 500	1	-	1	1	-	1
All Cut-off 200	19	-	19	19	-	19
Cut-off 300						
12 Panel Now	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	2	-	2	2	-	2
Alere iScreen	23	-	23	23	-	23
Alfa Scientific Instant-View	3	-	3	3	-	3
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	7	-	7	7	-	7
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	4	-	4	4	-	4
Immunalysis	1	-	1	1	-	1
McKesson Consult Drug Panel	2	-	2	2	-	2
McKesson Drug Panel	7	-	7	7	-	7
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Roche cobas 6000 / c 501	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	12	3	9	12	3	9
All Cut-off 300	74	3	71	74	3	71

Buprenorphine (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	39	1	38	39	1	38
Cut-off 5						
Beckman AU	2	-	2	2	-	2
Indiko Plus	1	-	1	1	-	1
Microgenics CEDIA	3	-	3	3	-	3
Microgenics DRI	1	-	1	1	-	1
Siemens EMIT II Plus	2	1	1	2	1	1
All Cut-off 5	9	1	8	9	1	8
Cut-off 10						
12 Panel Now	1	-	1	1	-	1
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
Chemtron Biotech	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	7	-	7	7	-	7
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	4	-	4	4	-	4
MEDTOX Diagnostics	3	-	3	3	-	3
Microgenics CEDIA	1	-	1	1	-	1
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	1	-	1	1	-	1
USDiagnostics UScreen Cup	4	-	4	4	-	4
All Cut-off 10	28	-	28	28	-	28
Cut-off 20						
Microgenics CEDIA	1	-	1	1	-	1
All Cut-off 20	1	-	1	1	-	1

Cannabinoids (THC) (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	97	2	95	97	2	95
Cut-off 20						
Roche Integra	1	-	1	1	-	1
All Cut-off 20	1	-	1	1	-	1
Cut-off 50						
12 Panel Now	1	-	1	1	-	1
Abbott Alinity	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	2	-	2	2	-	2
Alere iScreen	23	-	23	23	-	23
Alfa Scientific Instant-View	9	-	9	9	-	9
Beckman AU	3	-	3	3	-	3
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	4	-	4	4	-	4
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Germaine Labs AimScreen	4	-	4	4	-	4
ImmTox	1	-	1	1	-	1
Immunalysis	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
Lin-Zhi International	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	7	-	7	7	-	7
MEDTOX Diagnostics	3	-	3	3	-	3
Microgenics DRI	3	-	3	3	-	3
Mindray BS-200/BS-480	1	-	1	1	-	1
Noble Medical Inc.	2	-	2	2	-	2
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Roche cobas 6000 / c 501	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
Siemens EMIT II Plus	2	-	2	2	-	2
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	9	2	7	9	2	7
All Cut-off 50	93	2	91	93	2	91
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1

Carisoprodol (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	3	-	3	3	-	3

Cocaine Metabolites (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	114	3	111	114	3	111
Cut-off 50						
First Sign Drugs of Abuse	1	-	1	1	-	1
All Cut-off 50	1	-	1	1	-	1
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 150						
Abbott Alinity	1	-	1	1	-	1
Beckman AU	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	6	-	6	6	-	6
First Sign Drugs of Abuse	1	-	1	1	-	1
ImmTox	2	-	2	2	-	2
Indiko Plus	1	-	1	1	-	1
MEDTOX Diagnostics	3	-	3	3	-	3
Microgenics DRI	1	-	1	1	-	1
Mindray BS-200/BS-480	1	-	1	1	-	1
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Roche Integra	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
Siemens EMIT II Plus	1	-	1	1	-	1
Synermed IR 500	1	-	1	1	-	1
USDiagnostics UScreen Cup	2	1	1	2	-	2
All Cut-off 150	26	1	25	26	-	26
Cut-off 300						
12 Panel Now	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	2	-	2	2	-	2
Alere iScreen	23	-	23	23	-	23

Cocaine Metabolites (ng/mL) (cont'd)

	Specimen UDS-3			Specimen UDS-4		
	Labs	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
Alfa Scientific Instant-View	9	-	9	9	-	9
Beckman AU	2	-	2	2	-	2
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	1	-	1	1	-	1
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Germaine Labs AimScreen	4	-	4	4	-	4
Immunalysis	1	-	1	1	-	1
Lin-Zhi International	1	-	1	1	-	1
McKesson Consult Drug Panel	2	-	2	2	-	2
McKesson Drug Panel	7	-	7	7	-	7
Microgenics DRI	4	-	4	4	-	4
Noble Medical Inc.	1	-	1	1	-	1
Roche cobas 6000 / c 501	1	-	1	1	-	1
Siemens EMIT II Plus	2	-	2	2	-	2
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	10	2	8	10	3	7
All Cut-off 300	82	2	80	82	3	79

Cotinine (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	3	-	3	3	3	-

EDDP (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	6	1	5	6	-	6
Cut-off 100						
ImmTox	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 150						
Microgenics DRI	1	-	1	1	-	1
All Cut-off 150	1	-	1	1	-	1
Cut-off 300						
Beckman AU	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
All Cut-off 300	2	-	2	2	-	2
Cut-off 1000						
Indiko Plus	1	-	1	1	-	1
All Cut-off 1000	1	-	1	1	-	1

Ethanol (Alcohol) (mg/dL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	9	-	9	9	8	1
Cut-off 10						
Abbott Alinity	1	-	1	1	1	-
Siemens EMIT II Plus	2	-	2	2	2	-
All Cut-off 10	3	-	3	3	3	-
Cut-off 20						
Beckman AU	1	-	1	1	-	1
All Cut-off 20	1	-	1	1	-	1
Cut-off 40						
Siemens EMIT II Plus	1	-	1	1	1	-
All Cut-off 40	1	-	1	1	1	-
Cut-off 100						
Carolina Chemistries BioLis 24i	1	-	1	1	1	-
Microgenics DRI	3	-	3	3	3	-
All Cut-off 100	4	-	4	4	4	-

Fentanyl (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	9	8	1	9	-	9
Cut-off 1						
Abbott Alinity	1	1	-	1	-	1
Immunalysis	1	1	-	1	-	1
Microgenics DRI	1	1	-	1	-	1
Siemens EMIT II Plus	1	1	-	1	-	1
All Cut-off 1	4	4	-	4	-	4
Cut-off 2						
Beckman AU	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	1	1	-	1	-	1
Microgenics DRI	2	2	-	2	-	2
All Cut-off 2	4	3	1	4	-	4

Hydrocodone (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	3	-	3	3	-	3

LSD (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	3	-	3	3	-	3

MDMA (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	62	59	3	62	1	61
Cut-off 100						
BluRapids Multi-Drug Urine Test Cup	1	1	-	1	-	1
McKesson Drug Panel	1	1	-	1	-	1
All Cut-off 100	2	2	-	2	-	2
Cut-off 500						
Alere iCup	2	1	1	2	-	2
Alere iScreen	23	23	-	23	-	23
Beckman AU	2	1	1	2	-	2
CLIAwaived, Inc. Drug Test	7	7	-	7	-	7
Confirm Biosciences DoA Test	1	1	-	1	-	1
First Sign Drugs of Abuse	1	1	-	1	-	1
McKesson Consult Drug Panel	2	2	-	2	-	2
McKesson Drug Panel	7	7	-	7	-	7
Microgenics DRI	1	1	-	1	-	1
Noble Medical Inc.	1	1	-	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	1	-	1	-	1
USDiagnostics One Step Multi-Drug	2	2	-	2	-	2
USDiagnostics UScreen Cup	9	8	1	9	1	8
All Cut-off 500	59	56	3	59	1	58

Meperidine (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	3	-	3	3	-	3

Methadone (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	87	3	84	87	2	85
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 150						
Beckman AU	1	-	1	1	-	1
Siemens EMIT II Plus	1	-	1	1	-	1
All Cut-off 150	2	-	2	2	-	2
Cut-off 200						
MEDTOX Diagnostics	3	-	3	3	-	3
All Cut-off 200	3	-	3	3	-	3
Cut-off 300						
12 Panel Now	1	-	1	1	-	1
Abbott Alinity	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	2	-	2	2	-	2
Alere iScreen	23	-	23	23	-	23
Beckman AU	2	-	2	2	-	2
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	6	-	6	6	-	6
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Immunalysis	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
Lin-Zhi International	1	-	1	1	-	1
McKesson Consult Drug Panel	2	-	2	2	-	2
McKesson Drug Panel	7	-	7	7	-	7
Microgenics DRI	4	-	4	4	-	4
Mindray BS-200/BS-480	1	-	1	1	-	1

Methadone (ng/mL) cont'd

	Specimen UDS-3			Specimen UDS-4		
	Labs	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Roche cobas 6000 / c 501	1	-	1	1	-	1
Roche Integra	1	-	1	1	-	1
Siemens EMIT II Plus	2	-	2	2	-	2
Synermed IR 500	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	9	3	6	9	2	7
All Cut-off 300	79	3	76	79	2	77
Cut-off 1000						
CLIAwaived, Inc. Drug Test	1	-	1	1	-	1
All Cut-off 1000	1	-	1	1	-	1

Methamphetamines (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	79	75	4	79	3	76
Cut-off 500						
Alere iScreen	23	22	1	23	-	23
CLIAwaived, Inc. Drug Test	6	6	-	6	-	6
First Sign Drugs of Abuse	1	1	-	1	-	1
ImmTox	2	2	-	2	-	2
Lin-Zhi International	1	1	-	1	-	1
MEDTOX Diagnostics	3	3	-	3	-	3
Noble Medical Inc.	1	1	-	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	1	-	1	-	1
USDiagnostics UScreen Cup	3	3	-	3	1	2
All Cut-off 500	41	40	1	41	1	40
Cut-off 1000						
12 Panel Now	1	-	1	1	-	1
Alere iCassette	3	3	-	3	-	3
Alere iCup	2	2	-	2	-	2
Alfa Scientific Instant-View	3	3	-	3	-	3
BluRapids Multi-Drug Urine Test Cup	1	1	-	1	-	1
CLIAwaived, Inc. Drug Test	1	1	-	1	-	1
Confirm Biosciences DoA Test	1	1	-	1	-	1
First Sign Drugs of Abuse	2	2	-	2	-	2
McKesson Consult Drug Panel	3	3	-	3	-	3
McKesson Drug Panel	6	6	-	6	-	6
USDiagnostics One Step Multi-Drug	2	2	-	2	-	2
USDiagnostics UScreen Cup	9	7	2	9	2	7
All Cut-off 1000	36	33	3	36	2	34

Methanol (mg/dL)

	Specimen UDS-3			Specimen UDS-4		
	Labs	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	3	-	3	3	-	3

Methaqualone (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	3	-	3	3	3	-

6-MAM (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	7	-	7	7	-	7
Cut-off 10						
Beckman AU	1	-	1	1	-	1
ImmTox	1	-	1	1	-	1
Immunalysis	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
Microgenics CEDIA	2	-	2	2	-	2
Siemens Viva-E	1	-	1	1	-	1
All Cut-off 10	7	-	7	7	-	7

Opiates (Morphine Trihydrate) (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	111	3	108	111	4	107
Cut-off 100						
Beckman AU	1	-	1	1	-	1
MEDTOX Diagnostics	1	-	1	1	-	1
All Cut-off 100	2	-	2	2	-	2
Cut-off 300						
12 Panel Now	1	-	1	1	-	1
Abbott Alinity	1	-	1	1	-	1
Alere iCup	1	-	1	1	-	1
Alere iScreen	23	-	23	23	-	23
Alfa Scientific Instant-View	2	-	2	2	-	2
Beckman AU	3	-	3	3	-	3
Carolina Chemistries BioLis 24i	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	5	-	5	5	-	5
Confirm Biosciences DoA Test	1	-	1	1	-	1
ImmTox	2	-	2	2	-	2
Indiko Plus	1	-	1	1	-	1
Lin-Zhi International	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	5	-	5	5	-	5
Microgenics DRI	5	-	5	5	-	5
Mindray BS-200/BS-480	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Roche cobas 6000 / c 501	1	-	1	1	-	1
Roche Integra	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
Siemens EMIT II Plus	3	-	3	3	-	3
Synermed IR 500	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	1	-	1	1	-	1
USDiagnostics UScreen Cup	11	2	9	11	3	8

Opiates (Morphine Trihydrate) (ng/mL) (cont'd)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Cut-off 300	76	2	74	76	3	73
Cut-off 2000						
Alere iCassette	3	-	3	3	-	3
Alere iCup	1	-	1	1	-	1
Alfa Scientific Instant-View	7	-	7	7	-	7
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	1	-	1	1	-	1
First Sign Drugs of Abuse	3	-	3	3	-	3
Germaine Labs AimScreen	4	-	4	4	-	4
Immunalysis	1	-	1	1	-	1
McKesson Drug Panel	2	-	2	2	-	2
MEDTOX Diagnostics	2	-	2	2	-	2
Noble Medical Inc.	2	-	2	2	-	2
USDiagnostics One Step Multi-Drug	1	-	1	1	-	1
USDiagnostics UScreen Cup	3	1	2	3	1	2
All Cut-off 2000	32	1	31	32	1	31

Oxycodone (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	84	1	83	84	81	3
Cut-off 100						
12 Panel Now	1	-	1	1	1	-
Alere iCassette	2	-	2	2	2	-
Alere iCup	2	-	2	2	2	-
Alere iScreen	24	-	24	24	24	-
Beckman AU	3	-	3	3	2	1
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	1	-
Carolina Chemistries BioLis 24i	1	-	1	1	1	-
CLIAwaived, Inc. Drug Test	7	-	7	7	7	-
Confirm Biosciences DoA Test	1	-	1	1	1	-
First Sign Drugs of Abuse	1	-	1	1	1	-
ImmTox	1	-	1	1	1	-
Indiko Plus	1	-	1	1	1	-
McKesson Consult Drug Panel	2	-	2	2	2	-
McKesson Drug Panel	7	-	7	7	7	-
MEDTOX Diagnostics	3	-	3	3	3	-
Microgenics DRI	5	-	5	5	5	-
Noble Medical Inc.	1	-	1	1	1	-
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	1	-
Roche cobas 6000 / c 501	1	-	1	1	1	-
Roche Integra	1	-	1	1	1	-
Siemens EMIT II Plus	2	-	2	2	2	-
USDiagnostics One Step Multi-Drug	1	-	1	1	1	-
USDiagnostics UScreen Cup	9	1	8	9	7	2
All Cut-off 100	79	1	78	79	76	3
Cut-off 300						
Carolina Chemistries BioLis 24i	1	-	1	1	1	-
Immunalysis	1	-	1	1	1	-
Microgenics DRI	1	-	1	1	1	-
All Cut-off 300	3	-	3	3	3	-

Phencyclidine (PCP) (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	77	2	75	77	2	75
Cut-off 25						
Abbott Alinity	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	1	-	1	1	-	1
Alere iScreen	23	-	23	23	-	23
Alfa Scientific Instant-View	1	-	1	1	-	1
Beckman AU	3	-	3	3	-	3
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	6	-	6	6	-	6
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Germaine Labs AimScreen	2	-	2	2	-	2
McKesson Consult Drug Panel	2	-	2	2	-	2
McKesson Drug Panel	7	-	7	7	-	7
MEDTOX Diagnostics	3	-	3	3	-	3
Microgenics DRI	1	-	1	1	-	1
Noble Medical Inc.	2	-	2	2	-	2
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Siemens EMIT II Plus	1	-	1	1	-	1
Synermed IR 500	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	9	2	7	9	2	7
All Cut-off 25	74	2	72	74	2	72
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1

Propoxyphene (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	16	-	16	16	-	16
Cut-off 300						
Abbott Alinity	1	-	1	1	-	1
Alere iCassette	1	-	1	1	-	1
Beckman AU	2	-	2	2	-	2
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	5	-	5	5	-	5
MEDTOX Diagnostics	3	-	3	3	-	3
All Cut-off 300	15	-	15	15	-	15

Tramadol (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
	Labs	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	3	-	3	3	-	3

Tricyclic Antidepressants (ng/mL)

	Specimen UDS-3			Specimen UDS-4		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	22	-	22	22	-	22
Cut-off 300						
MEDTOX Diagnostics	3	-	3	3	-	3
All Cut-off 300	3	-	3	3	-	3
Cut-off 1000						
Alere iCup	1	-	1	1	-	1
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	4	-	4	4	-	4
McKesson Consult Drug Panel	2	-	2	2	-	2
McKesson Drug Panel	7	-	7	7	-	7
USDiagnostics UScreen Cup	3	-	3	3	-	3
All Cut-off 1000	18	-	18	18	-	18

Zolpidem (mg/dL)

	Specimen UDS-3			Specimen UDS-4		
	Labs	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	3	-	3	3	-	3

Urine Amylase (U/L)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	3	-	-	-	304	Not graded	3	-	-	-	212	Not graded

Urine Calcium (mg/dL)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	4	-	-	-	4.3	Not graded	4	-	-	-	5.9	Not graded

Urine Chloride (mmol/L)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	4	-	-	-	280	Not graded	4	-	-	-	188	Not graded

Urine Creatinine (mg/dL)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	198.38	22.37	11.3	198.4	164.6 - 232.1	5	135.70	14.71	10.8	137.2	112.6 - 158.8

Urine Glucose (mg/dL)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	3	-	-	-	296	Not graded	3	-	-	-	161	Not graded

Urine Magnesium (mg/dL)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	2	-	-	-	11.4	Not graded	2	-	-	-	6.1	Not graded

Urine Osmolality (mOsm/kg)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	875	Not graded	1	-	-	-	651	Not graded

Urine Phosphorus (mg/dL)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	2	-	-	-	67.7	Not graded	2	-	-	-	41.2	Not graded

Urine Potassium (mmol/L)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	3	-	-	-	105	Not graded	3	-	-	-	67	Not graded

Urine Sodium (mmol/L)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	3	-	-	-	196	Not graded	3	-	-	-	135	Not graded

Urine Total Protein (mg/dL)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	79.70	10.18	12.8	79.7	44.6 - 114.8	5	43.70	8.63	19.7	43.7	24.4 - 63.0

Urine Urea Nitrogen (mg/dL)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	2	-	-	-	707	Not graded	2	-	-	-	557	Not graded

Urine Uric Acid (mg/dL)

	Specimen UCH-3						Specimen UCH-4					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	9.3	Not graded	1	-	-	-	7.0	Not graded

Medical Laboratory Evaluation
1300 L St NW Ste 201
Washington, DC 20005-4676
800-338-2746 • 202-261-4510 • Fax: 202-835-0440
www.aab-mle.org