MEDICAL LABORATORY EVALUATION

PARTICIPANT SUMMARY

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Chemistry
2019 MLE-M1

ACP | Medical Laboratory Evaluation

Total Commitment to Education and Service
Provided by ACP, Inc.

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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	± 20%
Acetone	80% Consensus
Albumin	± 10%
Alcohol	± 25%
Alpha-fetoprotein	± 3 SD
Alkaline Phosphatase	± 30%
ALT (SGPT)	± 20%
Ammonia	± 2 SD or 5% *
Amylase	± 30%
Apoliprotein A1	± 30%
Apoliprotein B	± 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% *
C-Peptide	± 2 SD
CA 125	± 2 SD or 30% *
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 30%
Chloride	± 5%
Cholesterol	± 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%
Digoxin	± 0.2 mg/dL or 20% *
Estradiol	± 2 SD
Ferritin	± 30%
Folate	± 1.0 ng/mL or 30%*
FSH	± 25%
Gentamicin	± 25%
GGT	± 2 SD or 20% *
Glucose, Serum	± 6 mg/dL or 10% *
Glucose, Whole Blood	± 12 mg/dL or 20% *
Glycohemoglobin	± 6%
HDL Cholesterol	± 30%
HCG, Serum—Qualitative	80% Consensus
HCG, Serum—Quantitative	± 3 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	± 2 SD
Phenobarbital	± 20%
Phenytoin	± 25%
Phosphorus	± 0.3 mg/dL or 10.7% *
Potassium	± 0.5 mmol/L
Progesterone	± 30%
Prolactin	± 3.6 ng/mL or 30% *
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	± 20%
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%
Testosterone, Bioavailable	± 3 SD
Testosterone, Free	± 3 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%
Vitamin B_{12}	± 30%
Vitamin D	± 2 SD
Troponin I	± 2 SD or 30% *
Troponin T	± 30%

*Whichever is greater

Sodium (mmol/L)

	Specimen IST-1						Specimen IST-2					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	99	132.0	0.5	0.4	132	128 - 136	100	155.8	0.7	0.4	156	151 - 160
All i-STAT Instruments	99	132.0	0.5	0.4	132	128 - 136	100	155.8	0.7	0.4	156	151 - 160
i-STAT - waived	96	132.1	0.7	0.5	132	128 - 137	93	155.8	0.7	0.5	156	151 - 160
	Specimen IST-3						**Specimen IST-4**					
All Method	90	126.2	0.5	0.4	126	122 - 131	92	137.9	0.8	0.6	138	133 - 142
All i-STAT Instruments	90	126.2	0.5	0.4	126	122 - 131	92	137.9	0.8	0.6	138	133 - 142
i-STAT - waived	82	126.2	0.5	0.4	126	122 - 131	84	137.9	0.8	0.6	138	133 - 142
	Specimen IST-5											
All Method	89	131.9	0.6	0.5	132	127 - 136						
All i-STAT Instruments	89	131.9	0.6	0.5	132	127 - 136						
i-STAT - waived	81	131.9	0.6	0.5	132	127 - 136						

Potassium (mmol/L)

	Specimen IST-1						Specimen IST-2					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	98	3.40	0.01	0.0	3.4	2.9 - 3.9	101	4.60	0.01	0.0	4.6	4.1 - 5.1
All i-STAT Instruments	98	3.40	0.01	0.0	3.4	2.9 - 3.9	101	4.60	0.01	0.0	4.6	4.1 - 5.1
i-STAT - moderate	10	3.40	0.01	0.0	3.4	2.9 - 3.9	10	4.59	0.03	0.7	4.6	4.0 - 5.1
i-STAT - waived	88	3.40	0.01	0.0	3.4	2.9 - 3.9	92	4.60	0.01	0.0	4.6	4.1 - 5.1
	Specimen IST-3						**Specimen IST-4**					
All Method	92	2.24	0.05	2.2	2.2	1.7 - 2.8	89	4.40	0.01	0.0	4.4	3.9 - 4.9
All i-STAT Instruments	92	2.24	0.05	2.2	2.2	1.7 - 2.8	89	4.40	0.01	0.0	4.4	3.9 - 4.9
i-STAT - moderate	10	2.22	0.04	1.9	2.2	1.7 - 2.8	10	4.39	0.03	0.7	4.4	3.8 - 4.9
i-STAT - waived	82	2.24	0.05	2.2	2.2	1.7 - 2.8	80	4.40	0.01	0.0	4.4	3.9 - 4.9
	Specimen IST-5											
All Method	83	3.40	0.01	0.0	3.4	2.9 - 3.9						
All i-STAT Instruments	83	3.40	0.01	0.0	3.4	2.9 - 3.9						
i-STAT - moderate	10	3.40	0.01	0.0	3.4	2.9 - 3.9						
i-STAT - waived	82	3.41	0.03	0.9	3.4	2.9 - 4.0						

Chloride (mmol/L)

	Specimen IST-1						Specimen IST-2					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	102	112.2	0.7	0.6	112	106 - 118	103	97.1	0.8	0.8	97	92 - 102
All i-STAT Instruments	102	112.2	0.7	0.6	112	106 - 118	103	97.1	0.8	0.8	97	92 - 102
i-STAT - moderate	10	112.2	0.8	0.7	112	106 - 118	10	96.7	0.9	1.0	97	91 - 102
i-STAT - waived	92	112.2	0.6	0.6	112	106 - 118	93	97.2	0.8	0.8	97	92 - 103

	Specimen IST-3						Specimen IST-4					
All Method	90	79.7	0.7	0.8	80	75 - 84	91	91.5	0.7	0.7	92	86 - 97
All i-STAT Instruments	90	79.7	0.7	0.8	80	75 - 84	91	91.5	0.7	0.7	92	86 - 97
i-STAT - moderate	10	79.4	0.7	0.9	80	75 - 84	10	91.4	0.7	0.8	92	86 - 96
i-STAT - waived	80	79.8	0.7	0.8	80	75 - 84	81	91.5	0.7	0.7	92	86 - 97

	Specimen IST-5					
All Method	89	112.0	0.7	0.6	112	106 - 118
All i-STAT Instruments	89	112.0	0.7	0.6	112	106 - 118
i-STAT - moderate	10	112.3	0.7	0.6	112	106 - 118
i-STAT - waived	79	111.9	0.7	0.6	112	106 - 118

tCO_2 (mmol/L)

	Specimen IST-1						Specimen IST-2					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	96	18.4	0.7	3.6	18	14 - 23	98	25.2	0.8	3.3	25	20 - 31
All i-STAT Instruments	96	18.4	0.7	3.6	18	14 - 23	98	25.2	0.8	3.3	25	20 - 31
i-STAT - waived	88	18.4	0.6	3.4	18	14 - 23	90	25.1	0.9	3.4	25	20 - 31

	Specimen IST-3						Specimen IST-4					
All Method	90	23.2	0.8	3.5	23	18 - 28	88	27.7	1.0	3.6	28	22 - 34
All i-STAT Instruments	90	23.2	0.8	3.5	23	18 - 28	88	27.7	1.0	3.6	28	22 - 34
i-STAT - waived	82	23.1	0.8	3.5	23	18 - 28	80	27.7	1.0	3.6	28	22 - 34

	Specimen IST-5					
All Method	85	18.3	0.6	3.0	18	14 - 22
All i-STAT Instruments	85	18.3	0.6	3.0	18	14 - 22
i-STAT - waived	81	18.2	0.7	4.1	18	14 - 22

Urea Nitrogen (BUN) (mg/dL)

	Specimen IST-1						Specimen IST-2					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	104	5.3	0.5	8.6	5	3 - 8	104	53.2	1.0	1.9	53	48 - 59
All i-STAT Instruments	104	5.3	0.5	8.6	5	3 - 8	104	53.2	1.0	1.9	53	48 - 59
i-STAT - waived	95	5.3	0.5	8.7	5	3 - 8	95	53.2	1.0	1.9	53	48 - 59
	Specimen IST-3						**Specimen IST-4**					
All Method	90	9.0	0.1	0.0	9	7 - 11	91	34.3	0.6	1.6	34	31 - 38
All i-STAT Instruments	90	9.0	0.1	0.0	9	7 - 11	91	34.3	0.6	1.6	34	31 - 38
i-STAT - waived	82	9.0	0.1	0.0	9	7 - 11	81	34.3	0.5	1.5	34	31 - 38
	Specimen IST-5											
All Method	92	5.3	0.5	9.0	5	3 - 8						
All i-STAT Instruments	92	5.3	0.5	9.0	5	3 - 8						
i-STAT - waived	83	5.4	0.5	9.0	5	3 - 8						

Glucose (mg/dL)

	Specimen IST-1						Specimen IST-2					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	104	36.7	1.0	2.7	37	30 - 43	103	195.7	2.2	1.1	196	176 - 216
All i-STAT Instruments	104	36.7	1.0	2.7	37	30 - 43	103	195.7	2.2	1.1	196	176 - 216
i-STAT - waived	95	36.7	1.0	2.6	36	30 - 43	95	195.7	2.2	1.1	196	176 - 216
	Specimen IST-3						**Specimen IST-4**					
All Method	89	50.5	0.8	1.6	50	44 - 57	91	86.6	1.5	1.7	86	77 - 96
All i-STAT Instruments	89	50.5	0.8	1.6	50	44 - 57	91	86.6	1.5	1.7	86	77 - 96
i-STAT - waived	81	50.4	0.8	1.6	50	44 - 57	81	86.5	1.2	1.4	86	77 - 96
	Specimen IST-5											
All Method	89	36.4	0.7	1.8	36	30 - 43						
All i-STAT Instruments	89	36.4	0.7	1.8	36	30 - 43						
i-STAT - waived	82	36.4	0.7	1.9	36	30 - 43						

Hematocrit (percent)

	Specimen IST-1						Specimen IST-2					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	17	19.0	0.7	3.7	19	17 - 21	17	32.6	1.0	3.1	33	30 - 35
All i-STAT Instruments	17	19.0	0.7	3.7	19	17 - 21	17	32.6	1.0	3.1	33	30 - 35
i-STAT - waived	16	19.0	0.7	3.8	19	17 - 21	16	32.7	1.0	3.1	33	30 - 35
	Specimen IST-3						**Specimen IST-4**					
All Method	12	15.0	0.1	0.0	15	14 - 16	12	36.1	0.4	1.0	36	33 - 39
All i-STAT Instruments	12	15.0	0.1	0.0	15	14 - 16	12	36.1	0.4	1.0	36	33 - 39
i-STAT - waived	10	15.0	0.1	0.0	15	14 - 16	10	36.1	0.4	1.0	36	33 - 39
	Specimen IST-5											
All Method	12	19.0	0.5	2.8	19	17 - 21						
All i-STAT Instruments	12	19.0	0.5	2.8	19	17 - 21						
i-STAT - waived	10	19.0	0.6	3.0	19	17 - 21						

Hemoglobin (g/dL)

	Specimen IST-1						Specimen IST-2					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	17	6.48	0.25	3.8	6.5	6.0 - 7.0	17	11.11	0.35	3.2	11.2	10.3 - 11.9
All i-STAT Instruments	17	6.48	0.25	3.8	6.5	6.0 - 7.0	17	11.11	0.35	3.2	11.2	10.3 - 11.9
i-STAT - waived	16	6.48	0.26	4.0	6.5	6.0 - 7.0	16	11.12	0.36	3.3	11.2	10.3 - 11.9
	Specimen IST-3						**Specimen IST-4**					
All Method	12	5.10	0.01	0.0	5.1	4.7 - 5.5	12	12.25	0.14	1.2	12.2	11.3 - 13.2
All i-STAT Instruments	12	5.10	0.01	0.0	5.1	4.7 - 5.5	12	12.25	0.14	1.2	12.2	11.3 - 13.2
i-STAT - waived	10	5.10	0.01	0.0	5.1	4.7 - 5.5	10	12.26	0.15	1.2	12.2	11.3 - 13.2
	Specimen IST-5											
All Method	12	6.49	0.19	2.9	6.5	6.0 - 7.0						
All i-STAT Instruments	12	6.49	0.19	2.9	6.5	6.0 - 7.0						
i-STAT - waived	10	6.49	0.20	3.1	6.5	6.0 - 7.0						

Creatinine (mg/dL)

	Specimen IST-1						Specimen IST-2					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	112	6.82	0.24	3.5	6.8	5.7 - 7.9	113	4.61	0.12	2.7	4.6	3.9 - 5.3
All i-STAT Instruments	112	6.82	0.24	3.5	6.8	5.7 - 7.9	113	4.61	0.12	2.7	4.6	3.9 - 5.3
i-STAT - waived	103	6.83	0.23	3.4	6.8	5.8 - 7.9	104	4.60	0.12	2.7	4.6	3.9 - 5.3
	Specimen IST-3						**Specimen IST-4**					
All Method	91	0.37	0.05	13.0	0.4	0.0 - 0.7	89	2.45	0.07	3.0	2.4	2.0 - 2.9
All i-STAT Instruments	91	0.37	0.05	13.0	0.4	0.0 - 0.7	89	2.45	0.07	3.0	2.4	2.0 - 2.9
i-STAT - waived	82	0.37	0.05	13.0	0.4	0.0 - 0.7	81	2.45	0.08	3.1	2.4	2.0 - 2.9
	Specimen IST-5											
All Method	88	6.80	0.17	2.5	6.8	5.7 - 7.9						
All i-STAT Instruments	88	6.80	0.17	2.5	6.8	5.7 - 7.9						
i-STAT - waived	80	6.80	0.17	2.5	6.8	5.7 - 7.9						

Ionized Calcium (mmol/L)

	Specimen IST-1						Specimen IST-2					
Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	96	2.464	0.022	0.9	2.46	2.39 - 2.54	96	0.948	0.008	0.8	0.95	0.92 - 0.98
All i-STAT Instruments	96	2.464	0.022	0.9	2.46	2.39 - 2.54	95	0.948	0.007	0.7	0.95	0.92 - 0.97
i-STAT - waived	88	2.464	0.023	0.9	2.46	2.39 - 2.54	87	0.947	0.007	0.8	0.95	0.92 - 0.97
	Specimen IST-3						**Specimen IST-4**					
All Method	87	0.594	0.007	1.1	0.59	0.57 - 0.62	86	1.282	0.008	0.6	1.28	1.25 - 1.31
All i-STAT Instruments	87	0.594	0.007	1.1	0.59	0.57 - 0.62	86	1.282	0.008	0.6	1.28	1.25 - 1.31
i-STAT - waived	79	0.595	0.007	1.1	0.59	0.57 - 0.62	78	1.283	0.008	0.6	1.28	1.25 - 1.31
	Specimen IST-5											
All Method	87	2.473	0.020	0.8	2.47	2.41 - 2.54						
All i-STAT Instruments	87	2.473	0.020	0.8	2.47	2.41 - 2.54						
i-STAT - waived	79	2.473	0.021	0.8	2.47	2.41 - 2.54						

Albumin (g/dL)

	Specimen CH-1						Specimen CH-2					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	221	2.98	0.25	8.3	3.1	2.6 - 3.3	218	1.91	0.18	9.5	1.9	1.7 - 2.1
All Bromocresol Green Reagents	155	3.09	0.20	6.6	3.1	2.7 - 3.4	154	1.94	0.20	10.4	2.0	1.7 - 2.2
All Bromocresol Purple Reagents	60	2.70	0.08	3.1	2.7	2.4 - 3.0	58	1.82	0.07	4.0	1.8	1.6 - 2.0
Abaxis Piccolo												
Abaxis Piccolo - waived	18	2.67	0.09	3.3	2.7	2.4 - 3.0	17	1.88	0.09	4.7	1.9	1.6 - 2.1
All Chemistry Instruments	25	2.68	0.09	3.3	2.7	2.4 - 3.0	24	1.88	0.08	4.1	1.9	1.6 - 2.1
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	25	3.21	0.09	2.7	3.2	2.8 - 3.6	25	2.10	0.07	3.5	2.1	1.8 - 2.4
Beckman AU												
Beckman AU systems	32	3.11	0.06	2.1	3.1	2.7 - 3.5	32	1.90	0.05	2.8	1.9	1.7 - 2.1
Horiba ABX Pentra												
Horiba ABX Pentra 400	18	3.11	0.12	3.7	3.1	2.7 - 3.5	17	2.08	0.08	3.9	2.1	1.8 - 2.3
Roche Integra												
Roche Integra	19	3.18	0.11	3.4	3.2	2.8 - 3.5	19	1.95	0.07	3.6	1.9	1.7 - 2.2
Siemens Healthcare												
Siemens Dimension	33	2.71	0.08	2.9	2.7	2.4 - 3.0	33	1.78	0.05	3.1	1.8	1.6 - 2.0
All Chemistry Instruments	34	2.71	0.08	2.8	2.7	2.4 - 3.0	34	1.78	0.05	3.0	1.8	1.6 - 2.0
VITROS												
VITROS 250,350,400 500,700,750,950	28	2.76	0.10	3.7	2.8	2.4 - 3.1	28	1.59	0.09	5.6	1.6	1.4 - 1.8
All Chemistry Instruments	30	2.75	0.11	3.9	2.8	2.4 - 3.1	30	1.59	0.09	5.4	1.6	1.4 - 1.8

Albumin (g/dL)

	Specimen CH-3						Specimen CH-4					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	203	4.07	0.31	7.5	4.1	3.6 - 4.5	199	6.66	0.41	6.1	6.6	5.9 - 7.4
All Bromocresol Green Reagents	155	4.20	0.19	4.6	4.2	3.7 - 4.7	152	6.71	0.44	6.5	6.7	6.0 - 7.4
All Bromocresol Purple Reagents	43	3.61	0.13	3.7	3.6	3.2 - 4.0	43	6.52	0.31	4.8	6.6	5.8 - 7.2
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	3.4	3.2 - 4.0	3	-	-	-	5.9	5.8 - 7.2
All Chemistry Instruments	8	-	-	-	3.4	3.0 - 3.8	8	-	-	-	5.9	5.3 - 6.6
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	25	4.29	0.10	2.4	4.3	3.8 - 4.8	24	6.78	0.16	2.3	6.8	6.0 - 7.5
Beckman AU												
Beckman AU systems	32	4.19	0.09	2.2	4.2	3.7 - 4.7	33	6.69	0.36	5.4	6.6	6.0 - 7.4
Horiba ABX Pentra												
Horiba ABX Pentra 400	18	4.12	0.17	4.0	4.1	3.7 - 4.6	18	7.33	0.32	4.3	7.3	6.5 - 8.1
Roche Integra												
Roche Integra	19	4.33	0.16	3.6	4.3	3.8 - 4.8	19	6.54	0.40	6.1	6.6	5.8 - 7.2
Siemens Healthcare												
Siemens Dimension	32	3.66	0.07	1.9	3.7	3.2 - 4.1	32	6.68	0.13	1.9	6.7	6.0 - 7.4
All Chemistry Instruments	33	3.66	0.07	1.9	3.7	3.2 - 4.1	33	6.67	0.13	1.9	6.7	6.0 - 7.4
VITROS												
VITROS 250,350,400 500,700,750,950	28	4.02	0.14	3.4	4.0	3.6 - 4.5	27	6.41	0.21	3.2	6.5	5.7 - 7.1
All Chemistry Instruments	30	4.01	0.15	3.6	4.0	3.6 - 4.5	29	6.38	0.23	3.5	6.5	5.7 - 7.1

Albumin (g/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	202	5.39	0.40	7.5	5.5	4.8 - 6.0
All Bromocresol Green Reagents	153	5.55	0.23	4.1	5.6	4.9 - 6.2
All Bromocresol Purple Reagents	43	4.76	0.25	5.2	4.8	4.2 - 5.3
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	4.3	4.2 - 5.3
All Chemistry Instruments	8	-	-	-	4.3	3.8 - 4.8
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	25	5.63	0.12	2.2	5.6	5.0 - 6.2
Beckman AU						
Beckman AU systems	32	5.55	0.12	2.2	5.6	4.9 - 6.2
Horiba ABX Pentra						
Horiba ABX Pentra 400	18	5.27	0.22	4.1	5.3	4.7 - 5.8
Roche Integra						
Roche Integra	19	5.65	0.19	3.4	5.6	5.0 - 6.3
Siemens Healthcare						
Siemens Dimension	33	4.87	0.11	2.2	4.9	4.3 - 5.4
All Chemistry Instruments	34	4.87	0.11	2.2	4.9	4.3 - 5.4
VITROS						
VITROS 250,350,400 500,700,750,950	27	5.56	0.21	3.8	5.6	5.0 - 6.2
All Chemistry Instruments	29	5.55	0.21	3.8	5.6	4.9 - 6.2

Bilirubin, Direct (mg/dL)

Reagent/Instrument	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	132	0.58	0.23	39.1	0.6	0.1 - 1.1	131	0.17	0.09	49.3	0.2	0.0 - 0.4
All Alfa Wassermann Reagents	17	0.74	0.13	18.0	0.7	0.4 - 1.0	17	0.24	0.05	20.9	0.2	0.1 - 0.4
All Roche Reagents	23	0.42	0.04	9.3	0.4	0.3 - 0.5	23	0.13	0.05	36.1	0.1	0.0 - 0.3
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	17	0.74	0.13	18.0	0.7	0.4 - 1.0	17	0.24	0.05	20.9	0.2	0.1 - 0.4
Beckman AU												
Beckman AU systems	22	0.72	0.07	9.5	0.7	0.5 - 0.9	20	0.20	0.01	0.0	0.2	0.1 - 0.3
Roche Integra												
Roche Integra	13	0.42	0.04	10.4	0.4	0.3 - 0.6	13	0.10	0.01	0.0	0.1	0.0 - 0.2
Siemens Healthcare												
Siemens Dimension	24	0.42	0.05	11.6	0.4	0.3 - 0.6	23	0.10	0.01	0.0	0.1	0.0 - 0.2
All Chemistry Instruments	26	0.42	0.05	12.2	0.4	0.3 - 0.6	25	0.10	0.01	0.0	0.1	0.0 - 0.2
VITROS-BuBc and Bc												
VITROS 250,350,400 500,700,750,950	16	0.53	0.37	70.0	0.7	0.0 - 1.3	16	0.21	0.16	76.6	0.3	0.0 - 0.6
All Chemistry Instruments	17	0.52	0.36	70.4	0.7	0.0 - 1.3	17	0.20	0.17	82.9	0.3	0.0 - 0.6

Reagent/Instrument	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	133	1.01	0.31	30.9	1.1	0.3 - 1.7	129	0.15	0.13	85.7	0.1	0.0 - 0.5
All Alfa Wassermann Reagents	17	1.29	0.16	12.2	1.3	0.9 - 1.7	17	0.32	0.05	16.6	0.3	0.2 - 0.5
All Roche Reagents	23	0.76	0.08	10.4	0.7	0.5 - 1.0	23	0.09	0.09	99.9	0.1	0.0 - 0.3
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	17	1.29	0.16	12.2	1.3	0.9 - 1.7	17	0.32	0.05	16.6	0.3	0.2 - 0.5
Beckman AU												
Beckman AU systems	22	1.20	0.10	8.7	1.2	0.9 - 1.5	22	0.08	0.04	48.3	0.1	0.0 - 0.2
Roche Integra												
Roche Integra	13	0.80	0.07	8.8	0.8	0.6 - 1.0	13	0.02	0.04	190.0	0.0	0.0 - 0.2
Siemens Healthcare												
Siemens Dimension	25	0.78	0.06	8.0	0.8	0.6 - 1.0	25	0.08	0.04	44.5	0.1	0.0 - 0.2
All Chemistry Instruments	27	0.79	0.07	8.5	0.8	0.6 - 1.0	27	0.09	0.04	42.5	0.1	0.0 - 0.2
VITROS-BuBc and Bc												
VITROS 250,350,400 500,700,750,950	17	0.92	0.47	51.4	1.1	0.0 - 1.9	16	0.31	0.24	75.6	0.4	0.0 - 0.8
All Chemistry Instruments	18	0.93	0.46	49.6	1.1	0.0 - 1.9	17	0.31	0.23	73.4	0.4	0.0 - 0.8

Bilirubin, Direct (mg/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	133	1.48	0.42	28.3	1.5	0.6 - 2.4
All Alfa Wassermann Reagents	17	1.81	0.20	11.3	1.8	1.3 - 2.3
All Roche Reagents	23	1.12	0.13	11.4	1.2	0.8 - 1.4
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	17	1.81	0.20	11.3	1.8	1.3 - 2.3
Beckman AU						
Beckman AU systems	22	1.66	0.14	8.5	1.7	1.3 - 2.0
Roche Integra						
Roche Integra	13	1.22	0.08	6.6	1.2	1.0 - 1.4
Siemens Healthcare						
Siemens Dimension	25	1.16	0.10	8.2	1.2	0.9 - 1.4
All Chemistry Instruments	27	1.17	0.09	7.9	1.2	0.9 - 1.4
VITROS-BuBc and Bc						
VITROS 250,350,400 500,700,750,950	17	1.51	0.67	44.6	1.8	0.1 - 2.9
All Chemistry Instruments	18	1.53	0.66	43.0	1.8	0.2 - 2.9

Bilirubin, Total (mg/dL)

	Specimen CH-1						Specimen CH-2					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	214	1.51	0.17	11.2	1.5	1.1 - 2.0	212	0.37	0.10	26.0	0.4	0.0 - 0.8
All Alfa Wassermann Reagents	28	1.79	0.12	6.5	1.8	1.3 - 2.2	28	0.47	0.05	9.8	0.5	0.0 - 0.9
All Horiba Pentra Reagents	17	1.45	0.07	4.9	1.5	1.0 - 1.9	17	0.32	0.05	16.6	0.3	0.0 - 0.8
All Roche T. bili Special Reagents	25	1.36	0.08	5.6	1.4	0.9 - 1.8	23	0.30	0.01	0.0	0.3	0.0 - 0.7
Abaxis Piccolo												
Abaxis Piccolo - waived	16	1.40	0.14	10.1	1.4	1.0 - 1.8	15	0.49	0.05	10.6	0.5	0.0 - 0.9
All Chemistry Instruments	23	1.41	0.13	9.1	1.4	1.0 - 1.9	22	0.49	0.05	9.6	0.5	0.0 - 0.9
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	27	1.79	0.12	6.6	1.8	1.3 - 2.2	27	0.47	0.04	9.4	0.5	0.0 - 0.9
Beckman AU												
Beckman AU systems	31	1.57	0.09	5.4	1.6	1.1 - 2.0	31	0.40	0.04	10.3	0.4	0.0 - 0.8
Horiba ABX Pentra												
Horiba ABX Pentra 400	17	1.45	0.07	4.9	1.5	1.0 - 1.9	17	0.32	0.05	16.6	0.3	0.0 - 0.8
Roche Integra-T. bili Gen.3												
Roche Integra	13	1.33	0.08	5.6	1.3	0.9 - 1.8	12	0.30	0.01	0.0	0.3	0.0 - 0.7
All Chemistry Instruments	15	1.33	0.07	5.4	1.3	0.9 - 1.8	14	0.30	0.01	0.0	0.3	0.0 - 0.7
Siemens Healthcare												
Siemens Dimension	32	1.47	0.10	6.8	1.5	1.0 - 1.9	33	0.33	0.06	17.7	0.3	0.0 - 0.8
All Chemistry Instruments	33	1.47	0.10	6.8	1.5	1.0 - 1.9	34	0.33	0.06	17.7	0.3	0.0 - 0.8
VITROS - TBIL												
VITROS 250,350,400 500,700,750,950	28	1.55	0.14	9.2	1.6	1.1 - 2.0	28	0.30	0.10	32.7	0.3	0.0 - 0.7
All Chemistry Instruments	30	1.54	0.14	9.1	1.6	1.1 - 2.0	30	0.29	0.10	33.4	0.3	0.0 - 0.7

Bilirubin, Total (mg/dL)

	Specimen CH-3						Specimen CH-4					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	199	2.77	0.28	10.1	2.7	2.2 - 3.4	199	0.48	0.12	25.9	0.5	0.0 - 0.9
All Alfa Wassermann Reagents	28	3.23	0.16	4.8	3.2	2.5 - 3.9	28	0.65	0.06	8.8	0.7	0.2 - 1.1
All Horiba Pentra Reagents	17	2.62	0.12	4.6	2.6	2.0 - 3.2	17	0.44	0.05	11.3	0.4	0.0 - 0.9
All Roche T. bili Special Reagents	25	2.48	0.14	5.7	2.5	1.9 - 3.0	25	0.34	0.05	14.7	0.3	0.0 - 0.8
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	2.6	2.2 - 3.4	3	-	-	-	0.5	0.0 - 0.9
All Chemistry Instruments	8	-	-	-	2.5	1.9 - 3.0	8	-	-	-	0.5	0.1 - 0.9
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	27	3.23	0.16	4.9	3.2	2.5 - 3.9	27	0.66	0.05	7.6	0.7	0.2 - 1.1
Beckman AU												
Beckman AU systems	32	2.80	0.16	5.6	2.8	2.2 - 3.4	30	0.50	0.01	0.0	0.5	0.1 - 0.9
Horiba ABX Pentra												
Horiba ABX Pentra 400	17	2.62	0.12	4.6	2.6	2.0 - 3.2	17	0.44	0.05	11.3	0.4	0.0 - 0.9
Roche Integra-T. bili Gen.3												
Roche Integra	13	2.43	0.13	5.1	2.5	1.9 - 3.0	13	0.32	0.04	11.9	0.3	0.0 - 0.8
All Chemistry Instruments	15	2.45	0.12	5.1	2.5	1.9 - 3.0	15	0.33	0.05	14.0	0.3	0.0 - 0.8
Siemens Healthcare												
Siemens Dimension	33	2.71	0.16	6.1	2.7	2.1 - 3.3	32	0.37	0.06	15.6	0.4	0.0 - 0.8
All Chemistry Instruments	34	2.71	0.16	6.0	2.7	2.1 - 3.3	33	0.37	0.06	15.4	0.4	0.0 - 0.8
VITROS - TBIL												
VITROS 250,350,400 500,700,750,950	28	2.88	0.21	7.3	2.9	2.3 - 3.5	27	0.59	0.09	15.1	0.6	0.1 - 1.0
All Chemistry Instruments	30	2.87	0.21	7.2	2.9	2.2 - 3.5	29	0.59	0.09	14.9	0.6	0.1 - 1.0

Bilirubin, Total (mg/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	198	4.25	0.40	9.4	4.2	3.3 - 5.1
All Alfa Wassermann Reagents	27	4.86	0.16	3.3	4.9	3.8 - 5.9
All Horiba Pentra Reagents	17	4.01	0.17	4.3	4.0	3.2 - 4.9
All Roche T. bili Special Reagents	25	3.83	0.20	5.2	3.9	3.0 - 4.6
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	3.9	3.3 - 5.1
All Chemistry Instruments	8	-	-	-	3.8	3.0 - 4.6
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	26	4.86	0.17	3.4	4.9	3.8 - 5.9
Beckman AU						
Beckman AU systems	32	4.20	0.23	5.5	4.3	3.3 - 5.1
Horiba ABX Pentra						
Horiba ABX Pentra 400	17	4.01	0.17	4.3	4.0	3.2 - 4.9
Roche Integra-T. bili Gen.3						
Roche Integra	13	3.72	0.15	4.1	3.7	2.9 - 4.5
All Chemistry Instruments	15	3.75	0.16	4.4	3.7	2.9 - 4.5
Siemens Healthcare						
Siemens Dimension	33	4.22	0.23	5.5	4.2	3.3 - 5.1
All Chemistry Instruments	34	4.22	0.23	5.4	4.2	3.3 - 5.1
VITROS - TBIL						
VITROS 250,350,400 500,700,750,950	28	4.52	0.27	6.0	4.6	3.6 - 5.5
All Chemistry Instruments	30	4.51	0.27	5.9	4.6	3.6 - 5.5

Calcium (mg/dL)

	Specimen CH-1						Specimen CH-2					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	219	8.96	0.29	3.2	9.0	7.9 - 10.0	217	7.28	0.31	4.2	7.3	6.2 - 8.3
All Arsenazo Methods	101	8.99	0.31	3.4	9.0	7.9 - 10.0	100	7.30	0.38	5.2	7.3	6.3 - 8.4
All CPC Methods	112	8.93	0.28	3.1	8.9	7.9 - 10.0	111	7.25	0.21	2.9	7.3	6.2 - 8.3
Abaxis Piccolo												
Abaxis Piccolo - waived	18	9.20	0.19	2.1	9.2	8.2 - 10.2	17	7.55	0.30	4.0	7.5	6.5 - 8.6
All Chemistry Instruments	24	9.19	0.20	2.2	9.2	8.1 - 10.2	23	7.53	0.32	4.3	7.5	6.5 - 8.6
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	27	9.07	0.25	2.7	9.1	8.0 - 10.1	25	7.55	0.22	2.9	7.6	6.5 - 8.6
Beckman AU												
Beckman AU systems	33	8.94	0.17	1.9	9.0	7.9 - 10.0	33	7.24	0.14	2.0	7.3	6.2 - 8.3
Horiba ABX Pentra												
Horiba ABX Pentra 400	14	9.13	0.20	2.2	9.1	8.1 - 10.2	14	7.29	0.17	2.3	7.3	6.2 - 8.3
Roche Integra												
Roche Integra	19	9.06	0.22	2.5	9.0	8.0 - 10.1	18	7.32	0.23	3.2	7.3	6.3 - 8.4
Siemens Healthcare												
Siemens Dimension	31	8.73	0.25	2.9	8.7	7.7 - 9.8	32	7.18	0.23	3.2	7.2	6.1 - 8.2
All Chemistry Instruments	33	8.72	0.25	2.8	8.7	7.7 - 9.8	34	7.17	0.23	3.2	7.2	6.1 - 8.2
VITROS												
VITROS 250,350,400 500,700,750,950	27	8.90	0.17	2.0	8.9	7.9 - 10.0	27	7.09	0.17	2.4	7.1	6.0 - 8.1
All Chemistry Instruments	29	8.90	0.17	1.9	8.9	7.9 - 9.9	29	7.09	0.17	2.4	7.1	6.0 - 8.1

Calcium (mg/dL)

	Specimen CH-3						Specimen CH-4					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	201	10.64	0.36	3.3	10.7	9.6 - 11.7	201	8.09	0.37	4.5	8.1	7.0 - 9.1
All Arsenazo Methods	83	10.70	0.32	3.0	10.7	9.6 - 11.7	84	8.17	0.31	3.8	8.2	7.1 - 9.2
All CPC Methods	112	10.60	0.37	3.5	10.6	9.5 - 11.6	112	8.03	0.39	4.9	8.1	7.0 - 9.1
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	10.8	9.6 - 11.7	3	-	-	-	7.9	7.1 - 9.2
All Chemistry Instruments	7	-	-	-	10.8	9.7 - 11.8	7	-	-	-	7.9	6.8 - 8.9
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	26	10.88	0.24	2.2	10.9	9.8 - 11.9	27	8.41	0.24	2.9	8.4	7.4 - 9.5
Beckman AU												
Beckman AU systems	33	10.52	0.32	3.1	10.6	9.5 - 11.6	33	8.40	0.21	2.5	8.5	7.3 - 9.4
Horiba ABX Pentra												
Horiba ABX Pentra 400	14	10.94	0.28	2.5	10.9	9.9 - 12.0	14	8.17	0.21	2.6	8.2	7.1 - 9.2
Roche Integra												
Roche Integra	19	10.76	0.29	2.7	10.8	9.7 - 11.8	19	8.03	0.19	2.3	8.0	7.0 - 9.1
Siemens Healthcare												
Siemens Dimension	32	10.37	0.29	2.8	10.4	9.3 - 11.4	31	7.58	0.23	3.1	7.6	6.5 - 8.6
All Chemistry Instruments	34	10.36	0.28	2.7	10.3	9.3 - 11.4	33	7.57	0.23	3.1	7.6	6.5 - 8.6
VITROS												
VITROS 250,350,400 500,700,750,950	27	10.68	0.20	1.8	10.7	9.6 - 11.7	27	8.00	0.21	2.7	8.0	7.0 - 9.0
All Chemistry Instruments	29	10.68	0.20	1.8	10.7	9.6 - 11.7	29	8.01	0.21	2.6	8.0	7.0 - 9.1

Calcium (mg/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	201	12.78	0.40	3.1	12.8	11.7 - 13.8
All Arsenazo Methods	84	12.73	0.37	2.9	12.8	11.7 - 13.8
All CPC Methods	112	12.83	0.41	3.2	12.9	11.8 - 13.9
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	12.4	11.7 - 13.8
All Chemistry Instruments	7	-	-	-	12.4	11.2 - 13.3
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	27	12.75	0.27	2.1	12.7	11.7 - 13.8
Beckman AU						
Beckman AU systems	34	12.76	0.43	3.4	12.9	11.7 - 13.8
Horiba ABX Pentra						
Horiba ABX Pentra 400	14	13.14	0.32	2.4	13.1	12.1 - 14.2
Roche Integra						
Roche Integra	19	13.01	0.31	2.4	13.0	12.0 - 14.1
Siemens Healthcare						
Siemens Dimension	31	12.61	0.34	2.7	12.6	11.6 - 13.7
All Chemistry Instruments	33	12.59	0.34	2.7	12.6	11.5 - 13.6
VITROS						
VITROS 250,350,400 500,700,750,950	27	12.90	0.29	2.2	12.9	11.8 - 13.9
All Chemistry Instruments	29	12.89	0.28	2.2	12.9	11.8 - 13.9

Creatinine (mg/dL)

	Specimen CH-1						Specimen CH-2					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	218	1.84	0.10	5.4	1.8	1.5 - 2.2	217	0.52	0.10	18.9	0.5	0.2 - 0.9
All Alfa Wassermann Reagents	30	1.93	0.08	3.9	1.9	1.6 - 2.3	30	0.64	0.06	8.8	0.6	0.3 - 1.0
All Roche Reagents	29	1.80	0.10	5.6	1.8	1.5 - 2.2	29	0.49	0.07	13.7	0.5	0.1 - 0.8
All VITROS Reagents	30	1.83	0.08	4.3	1.8	1.5 - 2.2	30	0.49	0.04	8.2	0.5	0.1 - 0.8
Abaxis Piccolo												
Abaxis Piccolo - waived	18	1.88	0.16	8.3	1.9	1.5 - 2.2	17	0.66	0.15	22.8	0.6	0.3 - 1.0
All Chemistry Instruments	24	1.90	0.15	7.9	1.9	1.5 - 2.2	23	0.67	0.14	21.1	0.7	0.3 - 1.0
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	29	1.93	0.08	3.9	1.9	1.6 - 2.3	29	0.64	0.06	8.9	0.6	0.3 - 1.0
Beckman AU												
Beckman AU systems	33	1.80	0.05	2.8	1.8	1.5 - 2.1	34	0.46	0.05	11.7	0.5	0.1 - 0.8
Horiba ABX Pentra												
Horiba ABX Pentra 400	16	1.79	0.07	4.0	1.8	1.4 - 2.1	17	0.45	0.05	11.5	0.4	0.1 - 0.8
Roche Integra												
Roche Integra	19	1.78	0.09	5.2	1.8	1.4 - 2.1	19	0.48	0.05	10.4	0.5	0.1 - 0.8
Siemens Healthcare												
Siemens Dimension	31	1.85	0.07	3.7	1.8	1.5 - 2.2	32	0.47	0.06	12.3	0.5	0.1 - 0.8
All Chemistry Instruments	33	1.85	0.07	3.6	1.8	1.5 - 2.2	34	0.46	0.06	13.9	0.5	0.1 - 0.8
VITROS - CREA												
VITROS 250,350,400 500,700,750,950	20	1.83	0.07	4.0	1.8	1.5 - 2.2	20	0.49	0.04	9.1	0.5	0.1 - 0.8
All Chemistry Instruments	22	1.82	0.09	4.7	1.8	1.5 - 2.2	22	0.49	0.04	8.7	0.5	0.1 - 0.8

Creatinine (mg/dL)

	Specimen CH-3						Specimen CH-4					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	201	3.10	0.15	4.7	3.1	2.6 - 3.6	197	0.65	0.07	10.3	0.6	0.3 - 1.0
All Alfa Wassermann Reagents	30	3.13	0.15	4.9	3.1	2.6 - 3.6	30	0.68	0.06	9.5	0.7	0.3 - 1.0
All Roche Reagents	28	2.99	0.14	4.6	3.0	2.5 - 3.5	29	0.62	0.06	9.0	0.6	0.3 - 1.0
All VITROS Reagents	30	3.13	0.11	3.6	3.2	2.6 - 3.7	30	0.68	0.05	6.7	0.7	0.3 - 1.0
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	3.1	2.6 - 3.6	3	-	-	-	0.5	0.3 - 1.0
All Chemistry Instruments	7	-	-	-	3.1	2.6 - 3.6	7	-	-	-	0.6	0.3 - 1.0
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	29	3.12	0.16	5.0	3.1	2.6 - 3.6	29	0.69	0.06	9.3	0.7	0.3 - 1.0
Beckman AU												
Beckman AU systems	34	3.07	0.10	3.1	3.1	2.6 - 3.6	33	0.63	0.05	7.4	0.6	0.3 - 1.0
Horiba ABX Pentra												
Horiba ABX Pentra 400	17	3.05	0.15	4.8	3.1	2.5 - 3.6	17	0.59	0.04	7.2	0.6	0.2 - 0.9
Roche Integra												
Roche Integra	18	2.96	0.12	4.1	3.0	2.5 - 3.4	19	0.64	0.06	9.4	0.6	0.3 - 1.0
Siemens Healthcare												
Siemens Dimension	32	3.22	0.10	3.0	3.2	2.7 - 3.7	32	0.68	0.05	7.5	0.7	0.3 - 1.0
All Chemistry Instruments	34	3.22	0.09	2.9	3.2	2.7 - 3.8	34	0.68	0.05	7.3	0.7	0.3 - 1.0
VITROS - CREA												
VITROS 250,350,400 500,700,750,950	20	3.14	0.10	3.3	3.2	2.6 - 3.7	20	0.69	0.04	6.5	0.7	0.3 - 1.0
All Chemistry Instruments	22	3.12	0.12	3.9	3.2	2.6 - 3.6	22	0.69	0.05	6.8	0.7	0.3 - 1.0

Creatinine (mg/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	202	4.73	0.26	5.6	4.7	4.0 - 5.5
All Alfa Wassermann Reagents	30	4.68	0.20	4.2	4.7	3.9 - 5.4
All Roche Reagents	29	4.49	0.31	6.8	4.5	3.8 - 5.2
All VITROS Reagents	29	4.69	0.14	3.0	4.7	3.9 - 5.4
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	4.8	4.0 - 5.5
All Chemistry Instruments	7	-	-	-	5.0	4.2 - 5.8
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	29	4.67	0.20	4.2	4.7	3.9 - 5.4
Beckman AU						
Beckman AU systems	33	4.72	0.11	2.3	4.7	4.0 - 5.5
Horiba ABX Pentra						
Horiba ABX Pentra 400	17	4.67	0.25	5.3	4.7	3.9 - 5.4
Roche Integra						
Roche Integra	19	4.37	0.23	5.3	4.4	3.7 - 5.1
Siemens Healthcare						
Siemens Dimension	32	5.02	0.13	2.7	5.0	4.2 - 5.8
All Chemistry Instruments	34	5.03	0.13	2.7	5.0	4.2 - 5.8
VITROS - CREA						
VITROS 250,350,400 500,700,750,950	20	4.68	0.14	3.1	4.7	3.9 - 5.4
All Chemistry Instruments	22	4.65	0.18	4.0	4.7	3.9 - 5.4

Glucose (mg/dL)

	Specimen CH-1						Specimen CH-2					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	232	109.8	4.9	4.5	110	98 - 121	229	53.4	3.4	6.4	54	47 - 60
All Alfa Wassermann Reagents	31	115.6	3.6	3.2	116	104 - 128	31	57.7	1.3	2.3	58	51 - 64
All Horiba Pentra Reagents	17	108.4	3.5	3.2	109	97 - 120	17	52.5	2.3	4.4	52	46 - 59
All Roche Reagents	29	111.8	3.9	3.5	112	100 - 124	29	54.1	2.2	4.0	54	48 - 61
Abaxis Piccolo												
Abaxis Piccolo - waived	18	107.9	1.1	1.0	108	97 - 119	17	55.0	0.9	1.7	55	49 - 61
All Chemistry Instruments	24	108.0	1.1	1.0	108	97 - 119	23	55.0	0.9	1.6	55	49 - 61
Alere Cholestech LDX												
Alere Cholestech LDX - waived	11	105.2	4.9	4.7	104	94 - 116	10	54.9	10.0	18.2	52	48 - 61
All Chemistry Instruments	12	104.8	4.9	4.7	104	94 - 116	11	54.6	9.5	17.5	52	48 - 61
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	30	115.5	3.7	3.2	116	103 - 128	30	57.7	1.4	2.4	58	51 - 64
Beckman AU												
Beckman AU systems	34	111.8	3.5	3.1	113	100 - 123	34	54.0	1.7	3.2	54	48 - 61
Horiba ABX Pentra												
Horiba ABX Pentra 400	17	108.4	3.5	3.2	109	97 - 120	17	52.5	2.3	4.4	52	46 - 59
Roche Integra												
Roche Integra	19	112.4	4.1	3.7	113	101 - 124	19	54.7	2.3	4.1	55	48 - 61
Siemens Healthcare												
Siemens Dimension	32	110.1	2.3	2.1	110	99 - 122	32	53.7	1.6	3.0	54	47 - 60
All Chemistry Instruments	34	109.9	2.3	2.1	110	98 - 121	34	53.6	1.6	3.1	54	47 - 60
VITROS												
VITROS 250,350,400 500,700,750,950	26	103.4	3.0	2.9	104	93 - 114	27	47.4	1.9	4.1	47	41 - 54
All Chemistry Instruments	28	103.2	3.0	2.9	103	92 - 114	29	47.3	1.9	4.1	47	41 - 54

Glucose (mg/dL)

	Specimen CH-3						Specimen CH-4					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	204	166.7	6.7	4.0	167	150 - 184	205	62.8	4.4	6.9	62	56 - 70
All Alfa Wassermann Reagents	31	172.3	5.6	3.2	173	155 - 190	31	67.5	2.1	3.2	67	60 - 75
All Horiba Pentra Reagents	17	163.5	6.0	3.7	166	147 - 180	17	58.4	1.9	3.3	59	52 - 65
All Roche Reagents	29	169.3	5.7	3.3	170	152 - 187	29	59.6	2.1	3.5	60	53 - 66
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	163	150 - 184	3	-	-	-	61	56 - 70
All Chemistry Instruments	7	-	-	-	162	146 - 179	7	-	-	-	61	54 - 67
Alere Cholestech LDX												
Alere Cholestech LDX - waived	1	-	-	-	154	150 - 184	1	-	-	-	62	56 - 70
All Chemistry Instruments	2	-	-	-	155	139 - 171	2	-	-	-	64	57 - 70
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	30	172.1	5.5	3.2	173	154 - 190	30	67.5	2.2	3.2	67	60 - 75
Beckman AU												
Beckman AU systems	34	168.7	5.4	3.2	170	151 - 186	33	58.2	1.9	3.2	58	52 - 65
Horiba ABX Pentra												
Horiba ABX Pentra 400	17	163.5	6.0	3.7	166	147 - 180	17	58.4	1.9	3.3	59	52 - 65
Roche Integra												
Roche Integra	19	170.1	6.3	3.7	171	153 - 188	19	59.8	2.3	3.8	60	53 - 66
Siemens Healthcare												
Siemens Dimension	32	166.8	2.8	1.7	167	150 - 184	32	67.6	1.5	2.3	68	60 - 75
All Chemistry Instruments	34	166.8	3.0	1.8	167	150 - 184	34	67.4	1.8	2.7	68	60 - 75
VITROS												
VITROS 250,350,400 500,700,750,950	27	158.7	3.5	2.2	159	142 - 175	27	64.9	2.3	3.5	65	58 - 72
All Chemistry Instruments	29	158.7	3.3	2.1	159	142 - 175	29	64.7	2.3	3.5	64	58 - 72

Glucose (mg/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	202	243.2	7.8	3.2	244	218 - 268
All Alfa Wassermann Reagents	31	248.6	7.1	2.9	248	223 - 274
All Horiba Pentra Reagents	17	238.0	9.7	4.1	240	214 - 262
All Roche Reagents	29	245.7	8.4	3.4	247	221 - 271
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	232	218 - 268
All Chemistry Instruments	7	-	-	-	233	209 - 257
Alere Cholestech LDX						
Alere Cholestech LDX - waived	1	-	-	-	226	218 - 268
All Chemistry Instruments	2	-	-	-	235	211 - 259
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	30	248.4	7.1	2.9	248	223 - 274
Beckman AU						
Beckman AU systems	34	244.6	7.7	3.1	247	220 - 270
Horiba ABX Pentra						
Horiba ABX Pentra 400	17	238.0	9.7	4.1	240	214 - 262
Roche Integra						
Roche Integra	19	246.0	9.5	3.9	247	221 - 271
Siemens Healthcare						
Siemens Dimension	32	241.5	3.8	1.6	242	217 - 266
All Chemistry Instruments	34	241.2	3.9	1.6	242	217 - 266
VITROS						
VITROS 250,350,400 500,700,750,950	27	241.0	5.9	2.5	242	216 - 266
All Chemistry Instruments	29	241.2	5.7	2.4	242	217 - 266

Iron (µg/dL)

Reagent/Instrument	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	80	86.3	5.1	5.9	86	69 - 104	79	30.6	4.3	14.0	31	24 - 37
All Roche Reagents	14	86.2	2.3	2.6	87	68 - 104	14	32.8	2.0	6.1	33	26 - 40
Beckman AU												
Beckman AU systems	17	93.2	2.8	3.0	93	74 - 112	16	33.7	1.5	4.4	34	26 - 41
Siemens Healthcare												
Siemens Dimension	17	83.4	1.8	2.2	84	66 - 101	17	30.7	0.9	3.0	31	24 - 37
All Chemistry Instruments	17	83.8	1.1	1.4	84	67 - 101	18	30.8	0.9	3.1	31	24 - 37

Reagent/Instrument	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	81	142.2	10.5	7.4	140	113 - 171	77	182.0	11.2	6.2	180	145 - 219
All Roche Reagents	14	141.1	3.8	2.7	142	112 - 170	13	180.2	2.2	1.2	180	144 - 217
Beckman AU												
Beckman AU systems	17	152.8	4.3	2.8	154	122 - 184	17	192.0	4.0	2.1	193	153 - 231
Siemens Healthcare												
Siemens Dimension	18	136.3	2.5	1.8	136	109 - 164	18	175.4	3.3	1.9	176	140 - 211
All Chemistry Instruments	19	136.5	2.5	1.8	136	109 - 164	19	175.6	3.4	1.9	176	140 - 211

Reagent/Instrument	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	79	216.6	17.8	8.2	212	173 - 260
All Roche Reagents	14	214.1	5.1	2.4	215	171 - 257
Beckman AU						
Beckman AU systems	17	234.8	6.5	2.8	236	187 - 282
Siemens Healthcare						
Siemens Dimension	18	206.9	3.0	1.5	207	165 - 249
All Chemistry Instruments	19	207.2	3.2	1.5	207	165 - 249

Lactate (Lactic Acid) (mmol/L)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	6	2.22	0.18	8.3	2.3	1.6 - 2.8	6	0.22	0.15	67.9	0.3	0.0 - 0.7
	Specimen CH-3						**Specimen CH-4**					
All Method	6	4.15	0.12	3.0	4.1	3.7 - 4.6	6	0.75	0.05	7.3	0.8	0.5 - 1.0
	Specimen CH-5											
All Method	6	6.88	0.17	2.5	6.9	6.3 - 7.5						

Magnesium (mg/dL)

	Specimen CH-1						Specimen CH-2					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	103	2.19	0.12	5.3	2.2	1.6 - 2.8	104	1.18	0.09	7.3	1.2	0.8 - 1.5
All Horiba Pentra Reagents	13	2.20	0.19	8.5	2.2	1.6 - 2.8	13	1.18	0.15	12.4	1.2	0.8 - 1.5
All Roche Reagents	23	2.17	0.08	3.7	2.2	1.6 - 2.8	23	1.18	0.06	5.1	1.2	0.8 - 1.5
Beckman AU												
Beckman AU systems	21	2.18	0.08	3.5	2.2	1.6 - 2.8	21	1.18	0.04	3.4	1.2	0.8 - 1.5
Horiba ABX Pentra												
Horiba ABX Pentra 400	13	2.20	0.19	8.5	2.2	1.6 - 2.8	13	1.18	0.15	12.4	1.2	0.8 - 1.5
Roche Integra												
Roche Integra	14	2.14	0.06	3.0	2.2	1.6 - 2.7	14	1.16	0.05	4.4	1.2	0.8 - 1.5
Siemens Healthcare												
Siemens Dimension	18	2.19	0.09	4.3	2.2	1.6 - 2.8	18	1.16	0.09	7.9	1.2	0.8 - 1.5
All Chemistry Instruments	19	2.20	0.09	4.3	2.2	1.6 - 2.8	19	1.16	0.09	7.7	1.2	0.8 - 1.5
VITROS												
VITROS 250,350,400 500,700,750,950	13	2.33	0.09	4.1	2.3	1.7 - 3.0	13	1.24	0.08	6.2	1.3	0.9 - 1.6
All Chemistry Instruments	14	2.33	0.09	3.9	2.3	1.7 - 3.0	14	1.24	0.07	6.0	1.3	0.9 - 1.6

Magnesium (mg/dL)

Reagent/Instrument	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	104	3.19	0.16	5.0	3.2	2.3 - 4.0	103	1.37	0.11	8.2	1.4	1.0 - 1.8
All Horiba Pentra Reagents	13	3.10	0.18	5.9	3.2	2.3 - 3.9	13	1.39	0.10	6.9	1.4	1.0 - 1.8
All Roche Reagents	23	3.13	0.11	3.4	3.1	2.3 - 4.0	23	1.37	0.06	4.6	1.4	1.0 - 1.8
Beckman AU												
Beckman AU systems	21	3.18	0.13	4.2	3.2	2.3 - 4.0	21	1.36	0.07	5.0	1.4	1.0 - 1.7
Horiba ABX Pentra												
Horiba ABX Pentra 400	13	3.10	0.18	5.9	3.2	2.3 - 3.9	13	1.39	0.10	6.9	1.4	1.0 - 1.8
Roche Integra												
Roche Integra	14	3.08	0.08	2.6	3.1	2.3 - 3.9	14	1.35	0.07	4.8	1.3	1.0 - 1.7
Siemens Healthcare												
Siemens Dimension	18	3.24	0.12	3.7	3.3	2.4 - 4.1	18	1.39	0.10	7.2	1.4	1.0 - 1.8
All Chemistry Instruments	19	3.25	0.12	3.7	3.3	2.4 - 4.1	19	1.39	0.10	7.0	1.4	1.0 - 1.8
VITROS												
VITROS 250,350,400 500,700,750,950	13	3.42	0.10	2.9	3.4	2.5 - 4.3	13	1.22	0.08	6.8	1.2	0.9 - 1.6
All Chemistry Instruments	14	3.41	0.09	2.8	3.4	2.5 - 4.3	14	1.22	0.08	6.6	1.2	0.9 - 1.6

Reagent/Instrument	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	103	4.50	0.25	5.6	4.5	3.3 - 5.7
All Horiba Pentra Reagents	13	4.23	0.24	5.7	4.3	3.1 - 5.3
All Roche Reagents	22	4.38	0.13	3.0	4.3	3.2 - 5.5
Beckman AU						
Beckman AU systems	21	4.51	0.18	4.0	4.6	3.3 - 5.7
Horiba ABX Pentra						
Horiba ABX Pentra 400	13	4.23	0.24	5.7	4.3	3.1 - 5.3
Roche Integra						
Roche Integra	13	4.30	0.06	1.3	4.3	3.2 - 5.4
Siemens Healthcare						
Siemens Dimension	18	4.67	0.14	3.0	4.7	3.5 - 5.9
All Chemistry Instruments	19	4.68	0.14	3.0	4.7	3.5 - 5.9
VITROS						
VITROS 250,350,400 500,700,750,950	13	4.79	0.16	3.2	4.8	3.5 - 6.0
All Chemistry Instruments	14	4.79	0.15	3.1	4.8	3.5 - 6.0

Phosphorus (mg/dL)

Reagent/Instrument	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	80	2.56	0.14	5.4	2.6	2.2 - 2.9	81	1.55	0.12	8.0	1.5	1.2 - 1.9
All Alfa Wassermann Reagents	10	2.55	0.08	3.3	2.6	2.2 - 2.9	10	1.63	0.05	3.2	1.6	1.3 - 2.0
All Roche Reagents	18	2.49	0.08	3.2	2.5	2.1 - 2.8	18	1.48	0.07	4.8	1.5	1.1 - 1.8
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	10	2.55	0.08	3.3	2.6	2.2 - 2.9	10	1.63	0.05	3.2	1.6	1.3 - 2.0
Beckman AU												
Beckman AU systems	19	2.47	0.07	3.0	2.5	2.1 - 2.8	19	1.45	0.07	4.8	1.5	1.1 - 1.8
Horiba ABX Pentra												
Horiba ABX Pentra 400	11	2.76	0.08	2.9	2.8	2.4 - 3.1	11	1.70	0.06	3.4	1.7	1.4 - 2.0
Roche cobas c 501												
Roche cobas 6000 / c 501	10	2.54	0.05	2.2	2.5	2.2 - 2.9	10	1.50	0.07	4.7	1.5	1.2 - 1.8
Roche Integra												
Roche Integra	12	2.48	0.09	3.5	2.5	2.1 - 2.8	12	1.48	0.08	5.1	1.5	1.1 - 1.8
Siemens Healthcare												
Siemens Dimension	13	2.66	0.08	2.9	2.7	2.3 - 3.0	13	1.57	0.08	4.8	1.6	1.2 - 1.9
VITROS												
VITROS 250,350,400 500,700,750,950	10	2.69	0.11	3.9	2.7	2.3 - 3.0	10	1.67	0.11	6.7	1.7	1.3 - 2.0
All Chemistry Instruments	11	2.69	0.10	3.7	2.7	2.3 - 3.0	11	1.67	0.11	6.3	1.7	1.3 - 2.0

Reagent/Instrument	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	82	3.56	0.20	5.5	3.6	3.1 - 4.0	82	1.74	0.23	13.1	1.7	1.4 - 2.1
All Alfa Wassermann Reagents	10	3.43	0.15	4.4	3.4	3.0 - 3.9	10	1.47	0.18	11.9	1.6	1.1 - 1.8
All Roche Reagents	18	3.48	0.13	3.7	3.5	3.1 - 3.9	18	1.59	0.09	5.9	1.6	1.2 - 1.9
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	10	3.43	0.15	4.4	3.4	3.0 - 3.9	10	1.47	0.18	11.9	1.6	1.1 - 1.8
Beckman AU												
Beckman AU systems	20	3.45	0.15	4.5	3.5	3.0 - 3.9	19	1.60	0.11	6.6	1.6	1.3 - 1.9
Horiba ABX Pentra												
Horiba ABX Pentra 400	11	3.90	0.13	3.3	3.9	3.4 - 4.4	11	1.94	0.10	5.0	1.9	1.6 - 2.3
Roche cobas c 501												
Roche cobas 6000 / c 501	10	3.56	0.11	3.2	3.6	3.1 - 4.0	10	1.62	0.08	5.2	1.6	1.3 - 2.0
Roche Integra												
Roche Integra	12	3.44	0.12	3.6	3.5	3.0 - 3.9	12	1.58	0.10	6.5	1.6	1.2 - 1.9
Siemens Healthcare												
Siemens Dimension	13	3.66	0.07	1.8	3.7	3.2 - 4.1	13	1.86	0.07	3.5	1.9	1.5 - 2.2
VITROS												
VITROS 250,350,400 500,700,750,950	10	3.66	0.13	3.6	3.6	3.2 - 4.1	10	2.04	0.14	7.0	2.1	1.7 - 2.4
All Chemistry Instruments	11	3.66	0.13	3.5	3.7	3.2 - 4.1	11	2.05	0.14	6.6	2.1	1.7 - 2.4

Phosphorus (mg/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	83	4.93	0.25	5.1	5.0	4.3 - 5.5
All Alfa Wassermann Reagents	10	4.63	0.16	3.5	4.7	4.1 - 5.2
All Roche Reagents	18	4.80	0.17	3.5	4.8	4.2 - 5.4
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	10	4.63	0.16	3.5	4.7	4.1 - 5.2
Beckman AU						
Beckman AU systems	20	4.82	0.20	4.1	4.9	4.2 - 5.4
Horiba ABX Pentra						
Horiba ABX Pentra 400	11	5.31	0.11	2.0	5.3	4.7 - 5.9
Roche cobas c 501						
Roche cobas 6000 / c 501	10	4.94	0.09	1.8	5.0	4.4 - 5.5
Roche Integra						
Roche Integra	12	4.73	0.15	3.1	4.8	4.2 - 5.3
Siemens Healthcare						
Siemens Dimension	13	5.05	0.05	1.0	5.1	4.5 - 5.6
VITROS						
VITROS 250,350,400 500,700,750,950	10	5.13	0.17	3.4	5.1	4.5 - 5.7
All Chemistry Instruments	11	5.13	0.16	3.2	5.1	4.5 - 5.7

Protein, Total (g/dL)

	Specimen CH-1						Specimen CH-2					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	211	4.83	0.16	3.4	4.8	4.3 - 5.4	211	2.75	0.13	4.6	2.7	2.4 - 3.1
All Alfa Wassermann Reagents	28	4.89	0.19	3.9	4.9	4.3 - 5.4	27	2.77	0.09	3.3	2.8	2.4 - 3.1
All Horiba Pentra Reagents	16	4.79	0.11	2.4	4.8	4.3 - 5.3	16	2.69	0.06	2.3	2.7	2.4 - 3.0
All Roche Reagents	29	4.77	0.16	3.3	4.7	4.2 - 5.3	29	2.69	0.11	4.0	2.7	2.4 - 3.0
Abaxis Piccolo												
Abaxis Piccolo - waived	17	4.84	0.07	1.5	4.9	4.3 - 5.4	16	2.81	0.06	2.0	2.8	2.5 - 3.1
All Chemistry Instruments	24	4.84	0.07	1.4	4.9	4.3 - 5.4	23	2.81	0.05	1.9	2.8	2.5 - 3.1
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	27	4.89	0.19	4.0	4.9	4.3 - 5.4	26	2.77	0.09	3.4	2.8	2.4 - 3.1
Beckman AU												
Beckman AU systems	31	4.74	0.13	2.8	4.7	4.2 - 5.3	32	2.74	0.16	5.7	2.7	2.4 - 3.1
Horiba ABX Pentra												
Horiba ABX Pentra 400	16	4.79	0.11	2.4	4.8	4.3 - 5.3	16	2.69	0.06	2.3	2.7	2.4 - 3.0
Roche Integra												
Roche Integra	19	4.68	0.10	2.2	4.7	4.2 - 5.2	18	2.64	0.07	2.6	2.7	2.3 - 3.0
Siemens Healthcare												
Siemens Dimension	31	5.00	0.10	2.1	5.0	4.5 - 5.5	32	2.85	0.08	3.0	2.9	2.5 - 3.2
All Chemistry Instruments	32	5.01	0.11	2.1	5.0	4.5 - 5.6	33	2.84	0.09	3.1	2.9	2.5 - 3.2
VITROS												
VITROS 250,350,400 500,700,750,950	28	4.79	0.15	3.2	4.8	4.3 - 5.3	28	2.79	0.11	4.0	2.8	2.5 - 3.1
All Chemistry Instruments	30	4.77	0.16	3.3	4.8	4.2 - 5.3	30	2.78	0.13	4.5	2.8	2.4 - 3.1

Protein, Total (g/dL)

	Specimen CH-3						Specimen CH-4					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	195	6.89	0.24	3.5	6.9	6.2 - 7.6	194	10.99	0.49	4.5	11.0	9.8 - 12.1
All Alfa Wassermann Reagents	28	7.00	0.26	3.8	7.0	6.3 - 7.8	28	11.08	0.35	3.2	11.1	9.9 - 12.2
All Horiba Pentra Reagents	16	6.87	0.19	2.8	6.9	6.1 - 7.6	16	10.74	0.30	2.8	10.8	9.6 - 11.9
All Roche Reagents	29	6.78	0.21	3.1	6.8	6.1 - 7.5	29	10.57	0.30	2.9	10.6	9.5 - 11.7
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	6.9	6.2 - 7.6	3	-	-	-	10.8	9.8 - 12.1
All Chemistry Instruments	8	-	-	-	6.8	6.1 - 7.5	8	-	-	-	11.0	9.8 - 12.1
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	27	7.00	0.27	3.8	7.0	6.3 - 7.7	27	11.08	0.36	3.3	11.1	9.9 - 12.2
Beckman AU												
Beckman AU systems	31	6.77	0.17	2.5	6.8	6.0 - 7.5	31	10.62	0.31	3.0	10.6	9.5 - 11.7
Horiba ABX Pentra												
Horiba ABX Pentra 400	16	6.87	0.19	2.8	6.9	6.1 - 7.6	16	10.74	0.30	2.8	10.8	9.6 - 11.9
Roche Integra												
Roche Integra	19	6.68	0.16	2.4	6.7	6.0 - 7.4	19	10.45	0.29	2.8	10.5	9.4 - 11.5
Siemens Healthcare												
Siemens Dimension	32	7.17	0.14	2.0	7.2	6.4 - 7.9	32	11.36	0.21	1.8	11.4	10.2 - 12.5
All Chemistry Instruments	33	7.16	0.14	1.9	7.2	6.4 - 7.9	33	11.36	0.21	1.8	11.4	10.2 - 12.5
VITROS												
VITROS 250,350,400 500,700,750,950	28	6.76	0.17	2.5	6.7	6.0 - 7.5	28	11.67	0.44	3.8	11.8	10.5 - 12.9
All Chemistry Instruments	30	6.74	0.18	2.6	6.7	6.0 - 7.5	30	11.63	0.45	3.9	11.8	10.4 - 12.8

Protein, Total (g/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	194	9.60	0.37	3.8	9.6	8.6 - 10.6
All Alfa Wassermann Reagents	28	9.81	0.33	3.4	9.9	8.8 - 10.8
All Horiba Pentra Reagents	16	9.56	0.29	3.1	9.7	8.6 - 10.6
All Roche Reagents	29	9.36	0.30	3.2	9.4	8.4 - 10.3
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	9.5	8.6 - 10.6
All Chemistry Instruments	8	-	-	-	9.6	8.6 - 10.7
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	27	9.80	0.34	3.4	9.9	8.8 - 10.8
Beckman AU						
Beckman AU systems	31	9.43	0.25	2.7	9.4	8.4 - 10.4
Horiba ABX Pentra						
Horiba ABX Pentra 400	16	9.56	0.29	3.1	9.7	8.6 - 10.6
Roche Integra						
Roche Integra	19	9.23	0.24	2.7	9.3	8.3 - 10.2
Siemens Healthcare						
Siemens Dimension	31	10.03	0.18	1.8	10.1	9.0 - 11.1
All Chemistry Instruments	32	10.03	0.18	1.8	10.1	9.0 - 11.1
VITROS						
VITROS 250,350,400 500,700,750,950	28	9.41	0.26	2.8	9.4	8.4 - 10.4
All Chemistry Instruments	30	9.39	0.27	2.9	9.4	8.4 - 10.4

Urea Nitrogen (mg/dL)

	Specimen CH-1						Specimen CH-2					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	218	16.4	1.4	8.8	17	14 - 19	215	5.9	0.8	14.1	6	3 - 8
All Alfa Wassermann Reagents	30	16.7	0.9	5.6	17	14 - 19	30	6.3	0.8	12.5	6	4 - 9
All Horiba Pentra Reagents	17	16.2	0.8	5.0	16	14 - 19	17	6.0	0.7	11.8	6	4 - 8
All Roche Reagents	29	16.8	0.7	4.0	17	14 - 19	27	6.0	0.1	0.0	6	4 - 8
Abaxis Piccolo												
Abaxis Piccolo - waived	17	15.2	0.5	3.5	15	13 - 18	16	5.4	0.6	11.6	6	3 - 8
All Chemistry Instruments	23	15.3	0.6	3.7	15	13 - 18	22	5.4	0.6	10.9	5	3 - 8
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	27	16.6	0.8	5.1	17	14 - 19	27	6.2	0.8	12.7	6	4 - 9
Beckman AU												
Beckman AU systems	32	17.4	0.6	3.5	17	15 - 20	32	6.2	0.4	6.8	6	4 - 9
Horiba ABX Pentra												
Horiba ABX Pentra 400	17	16.2	0.8	5.0	16	14 - 19	17	6.0	0.7	11.8	6	4 - 8
Roche Integra												
Roche Integra	19	16.7	0.7	4.0	17	14 - 19	19	5.9	0.3	5.3	6	3 - 8
Siemens Healthcare												
Siemens Dimension	32	17.7	0.8	4.4	18	15 - 20	32	6.3	0.7	11.5	6	4 - 9
All Chemistry Instruments	34	17.7	0.8	4.2	18	15 - 20	34	6.2	0.7	11.2	6	4 - 9
VITROS												
VITROS 250,350,400 500,700,750,950	28	13.9	0.4	3.0	14	11 - 16	28	4.7	0.5	10.2	5	2 - 7
All Chemistry Instruments	30	13.9	0.4	3.1	14	11 - 16	30	4.6	0.5	10.6	5	2 - 7

Urea Nitrogen (mg/dL)

	Specimen CH-3						Specimen CH-4					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	202	27.1	2.1	7.9	28	24 - 30	200	6.0	0.9	14.9	6	3 - 8
All Alfa Wassermann Reagents	30	27.7	1.1	4.0	28	25 - 31	28	6.0	0.4	6.4	6	4 - 8
All Horiba Pentra Reagents	17	26.8	1.3	4.8	27	24 - 30	17	5.9	0.6	9.4	6	3 - 8
All Roche Reagents	29	27.5	0.8	3.0	28	25 - 30	29	6.1	0.4	6.7	6	4 - 9
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	25	24 - 30	3	-	-	-	5	3 - 8
All Chemistry Instruments	7	-	-	-	26	23 - 28	7	-	-	-	5	3 - 7
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	27	27.6	1.1	4.1	27	25 - 31	27	6.0	0.7	11.3	6	4 - 8
Beckman AU												
Beckman AU systems	32	28.3	0.8	3.0	28	25 - 31	32	6.4	0.5	7.7	6	4 - 9
Horiba ABX Pentra												
Horiba ABX Pentra 400	17	26.8	1.3	4.8	27	24 - 30	17	5.9	0.6	9.4	6	3 - 8
Roche Integra												
Roche Integra	19	27.4	0.9	3.3	28	24 - 30	19	6.1	0.4	6.7	6	4 - 9
Siemens Healthcare												
Siemens Dimension	31	28.7	0.9	3.2	29	26 - 32	32	6.5	1.0	14.6	7	4 - 9
All Chemistry Instruments	33	28.7	0.9	3.2	29	26 - 32	34	6.5	0.9	14.2	7	4 - 9
VITROS												
VITROS 250,350,400 500,700,750,950	28	22.9	0.6	2.6	23	20 - 25	28	4.8	0.5	10.9	5	2 - 7
All Chemistry Instruments	30	22.8	0.6	2.6	23	20 - 25	30	4.7	0.5	11.0	5	2 - 7

Urea Nitrogen (mg/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	201	41.5	3.0	7.3	42	37 - 46
All Alfa Wassermann Reagents	30	42.2	1.6	3.8	42	38 - 46
All Horiba Pentra Reagents	17	41.1	1.8	4.5	41	37 - 45
All Roche Reagents	29	42.2	1.5	3.6	43	38 - 47
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	39	37 - 46
All Chemistry Instruments	7	-	-	-	39	36 - 44
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	27	42.0	1.6	3.7	42	38 - 46
Beckman AU						
Beckman AU systems	33	43.1	1.6	3.6	43	39 - 47
Horiba ABX Pentra						
Horiba ABX Pentra 400	17	41.1	1.8	4.5	41	37 - 45
Roche Integra						
Roche Integra	19	42.2	1.6	3.8	43	38 - 47
Siemens Healthcare						
Siemens Dimension	32	43.8	1.3	3.1	44	39 - 48
All Chemistry Instruments	34	43.9	1.3	3.0	44	39 - 48
VITROS						
VITROS 250,350,400 500,700,750,950	28	35.6	0.9	2.6	35	32 - 39
All Chemistry Instruments	30	35.5	0.9	2.6	35	32 - 39

Uric Acid (mg/dL)

Reagent/Instrument	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	135	4.38	0.25	5.6	4.4	3.6 - 5.2	137	1.78	0.37	20.8	1.7	1.4 - 2.1
All Alfa Wassermann Reagents	18	4.87	0.21	4.2	4.9	4.0 - 5.8	18	2.79	0.16	5.6	2.8	2.3 - 3.3
All Roche Reagents	24	4.32	0.12	2.9	4.3	3.5 - 5.1	24	1.65	0.06	3.6	1.6	1.3 - 2.0
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	4.87	0.21	4.2	4.9	4.0 - 5.8	18	2.79	0.16	5.6	2.8	2.3 - 3.3
Beckman AU												
Beckman AU systems	26	4.37	0.10	2.4	4.4	3.6 - 5.2	27	1.75	0.08	4.9	1.8	1.4 - 2.1
Horiba ABX Pentra												
Horiba ABX Pentra 400	10	4.22	0.12	2.9	4.3	3.5 - 5.0	10	1.69	0.09	5.2	1.7	1.4 - 2.0
Roche Integra												
Roche Integra	14	4.39	0.09	2.0	4.4	3.6 - 5.2	14	1.67	0.06	3.7	1.7	1.3 - 2.0
Siemens Healthcare												
Siemens Dimension	24	4.25	0.15	3.5	4.2	3.5 - 5.0	24	1.72	0.12	7.2	1.7	1.4 - 2.1
All Chemistry Instruments	25	4.25	0.15	3.5	4.2	3.5 - 5.0	25	1.72	0.12	7.1	1.7	1.4 - 2.1
VITROS												
VITROS 250,350,400 500,700,750,950	15	4.26	0.15	3.5	4.2	3.5 - 5.0	15	1.54	0.08	5.4	1.5	1.2 - 1.9
All Chemistry Instruments	17	4.26	0.14	3.3	4.2	3.5 - 5.0	17	1.55	0.09	5.7	1.5	1.2 - 1.9

Reagent/Instrument	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	137	6.91	0.30	4.4	6.9	5.7 - 8.1	135	1.93	0.43	22.0	1.8	1.6 - 2.3
All Alfa Wassermann Reagents	18	7.18	0.39	5.5	7.3	5.9 - 8.5	18	3.09	0.16	5.1	3.1	2.5 - 3.7
All Roche Reagents	23	6.93	0.19	2.8	7.0	5.7 - 8.2	24	1.70	0.04	2.1	1.7	1.4 - 2.0
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	18	7.18	0.39	5.5	7.3	5.9 - 8.5	18	3.09	0.16	5.1	3.1	2.5 - 3.7
Beckman AU												
Beckman AU systems	26	6.95	0.16	2.2	7.0	5.7 - 8.2	25	1.80	0.08	4.7	1.8	1.4 - 2.2
Horiba ABX Pentra												
Horiba ABX Pentra 400	10	6.78	0.18	2.6	6.8	5.6 - 8.0	10	1.73	0.08	4.8	1.7	1.4 - 2.1
Roche Integra												
Roche Integra	14	7.05	0.12	1.7	7.1	5.8 - 8.3	14	1.71	0.04	2.1	1.7	1.4 - 2.1
Siemens Healthcare												
Siemens Dimension	24	6.70	0.17	2.5	6.7	5.5 - 7.9	24	1.85	0.13	7.1	1.8	1.5 - 2.2
All Chemistry Instruments	25	6.70	0.16	2.5	6.7	5.5 - 7.9	25	1.84	0.13	7.2	1.8	1.5 - 2.2
VITROS												
VITROS 250,350,400 500,700,750,950	15	6.85	0.16	2.3	6.9	5.6 - 8.1	15	1.80	0.09	5.1	1.8	1.4 - 2.2
All Chemistry Instruments	17	6.86	0.15	2.1	6.9	5.6 - 8.1	17	1.80	0.09	5.2	1.8	1.4 - 2.2

Uric Acid (mg/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	136	10.35	0.45	4.4	10.3	8.5 - 12.2
All Alfa Wassermann Reagents	17	10.45	0.51	4.9	10.7	8.6 - 12.3
All Roche Reagents	24	10.36	0.31	3.0	10.4	8.6 - 12.2
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	17	10.45	0.51	4.9	10.7	8.6 - 12.3
Beckman AU						
Beckman AU systems	27	10.34	0.35	3.4	10.4	8.5 - 12.2
Horiba ABX Pentra						
Horiba ABX Pentra 400	10	10.10	0.37	3.7	10.1	8.3 - 11.9
Roche Integra						
Roche Integra	14	10.56	0.24	2.3	10.6	8.7 - 12.4
Siemens Healthcare						
Siemens Dimension	23	10.07	0.56	5.5	10.0	8.3 - 11.8
All Chemistry Instruments	24	10.05	0.55	5.5	10.0	8.3 - 11.8
VITROS						
VITROS 250,350,400 500,700,750,950	15	10.51	0.23	2.2	10.5	8.7 - 12.4
All Chemistry Instruments	17	10.50	0.22	2.1	10.4	8.7 - 12.3

Chloride (mmol/L)

Method/Instrument	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	216	93.9	2.8	3.0	93	89 - 99	214	84.5	3.1	3.7	84	80 - 89
Abaxis Piccolo												
Abaxis Piccolo - waived	18	98.2	2.1	2.1	98	93 - 104	18	91.1	2.2	2.4	91	86 - 96
All Chemistry Instruments	26	98.2	2.0	2.0	99	93 - 104	24	90.7	1.6	1.7	91	86 - 96
ISE Diluted												
Beckman AU systems	33	92.7	1.0	1.0	92	88 - 98	33	84.7	0.8	1.0	85	80 - 89
Roche Integra	19	94.5	2.5	2.7	93	89 - 100	18	84.7	1.6	1.9	85	80 - 89
Siemens Dimension QuickLyte - Xpand/EXL	23	91.3	0.6	0.6	91	86 - 96	24	81.0	0.9	1.1	81	76 - 86
All Chemistry Instruments	106	92.6	2.0	2.2	92	87 - 98	107	83.3	2.3	2.7	84	79 - 88
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	25	94.4	1.4	1.5	94	89 - 100	24	83.0	1.1	1.4	83	78 - 88
Horiba ABX Pentra 400	15	95.3	2.6	2.7	96	90 - 101	15	84.2	1.4	1.6	85	79 - 89
All Chemistry Instruments	45	94.6	2.0	2.1	95	89 - 100	44	83.4	1.4	1.6	83	79 - 88
VITROS												
VITROS 250,350,400 500,700,750,950	27	93.3	1.6	1.7	93	88 - 98	27	85.3	1.4	1.7	85	81 - 90
All Chemistry Instruments	29	93.3	1.5	1.7	93	88 - 99	29	85.3	1.4	1.6	85	81 - 90

Method/Instrument	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	193	103.0	2.7	2.6	103	97 - 109	197	87.6	3.6	4.1	88	83 - 93
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	103	99 - 110	3	-	-	-	98	91 - 102
All Chemistry Instruments	8	-	-	-	105	99 - 110	8	-	-	-	98	91 - 102
ISE Diluted												
Beckman AU systems	33	100.8	1.0	1.0	101	95 - 106	33	88.3	1.0	1.1	88	83 - 93
Roche Integra	19	104.7	2.9	2.7	104	99 - 110	18	85.0	1.2	1.4	85	80 - 90
Siemens Dimension QuickLyte - Xpand/EXL	24	102.6	0.9	0.9	103	97 - 108	24	82.3	0.8	1.0	82	78 - 87
All Chemistry Instruments	104	102.2	2.4	2.3	102	97 - 108	109	86.1	3.3	3.9	86	81 - 91
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	25	104.0	1.4	1.3	104	98 - 110	25	89.1	1.7	1.9	89	84 - 94
Horiba ABX Pentra 400	15	107.2	3.9	3.6	108	101 - 113	15	86.9	1.5	1.7	87	82 - 92
All Chemistry Instruments	44	104.7	2.7	2.6	104	99 - 110	44	88.1	2.0	2.3	88	83 - 93
VITROS												
VITROS 250,350,400 500,700,750,950	27	102.2	1.7	1.7	103	97 - 108	27	90.4	1.4	1.5	91	85 - 95
All Chemistry Instruments	29	102.2	1.6	1.6	103	97 - 108	29	90.4	1.3	1.5	91	85 - 95

Chloride (mmol/L)

Specimen CH-5

Method/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	191	116.2	4.5	3.8	116	110 - 122
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	114	109 - 121
All Chemistry Instruments	8	-	-	-	114	109 - 121
ISE Diluted						
Beckman AU systems	32	111.3	1.5	1.3	111	105 - 117
Roche Integra	19	118.8	3.8	3.2	118	112 - 125
Siemens Dimension QuickLyte - Xpand/EXL	24	116.5	1.3	1.1	117	110 - 123
All Chemistry Instruments	107	115.2	4.3	3.7	115	109 - 121
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	25	119.4	2.0	1.6	120	113 - 126
Horiba ABX Pentra 400	11	125.3	4.5	3.6	125	119 - 132
All Chemistry Instruments	41	120.4	4.5	3.7	120	114 - 127
VITROS						
VITROS 250,350,400 500,700,750,950	27	115.0	2.0	1.8	115	109 - 121
All Chemistry Instruments	29	115.0	1.9	1.7	115	109 - 121

CO_2 (mmol/L)

Method/Instrument	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	208	18.2	2.2	12.2	18	14 - 22	207	11.4	1.9	16.3	11	9 - 14
Abaxis Piccolo												
Abaxis Piccolo - waived	16	17.5	0.7	4.2	18	14 - 21	15	10.1	0.9	8.8	10	8 - 13
All Chemistry Instruments	22	17.5	0.7	4.2	18	14 - 22	20	10.1	0.8	7.8	10	8 - 13
Enzymatic Reagent												
Alfa Wassermann ACE Alera/Axcel	15	19.7	2.1	10.4	20	15 - 24	15	13.0	1.6	12.0	13	10 - 16
Beckman AU systems	25	19.0	1.0	5.3	19	15 - 23	26	11.7	1.7	14.5	12	9 - 15
Horiba ABX Pentra 400	14	18.6	1.7	8.9	19	14 - 23	14	12.5	1.5	12.1	12	10 - 15
Roche Integra	16	17.3	1.9	10.9	18	13 - 21	16	11.0	1.2	11.0	11	8 - 14
Siemens Dimension	23	20.0	1.3	6.5	20	15 - 24	23	12.7	1.3	9.9	13	10 - 16
All Chemistry Instruments	111	19.0	1.7	9.0	19	15 - 23	113	12.2	1.5	12.7	12	9 - 15
ISE Diluted												
All Chemistry Instruments	20	18.0	2.7	15.1	18	14 - 22	20	11.5	1.8	15.4	12	9 - 14
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	10	19.0	2.3	11.9	19	15 - 23	10	12.4	1.5	12.1	12	9 - 15
All Chemistry Instruments	16	18.6	2.8	15.1	19	14 - 23	16	12.3	1.4	11.4	12	9 - 15
VITROS												
VITROS 250,350,400 500,700,750,950	27	15.8	1.4	8.6	16	12 - 19	27	9.2	1.2	13.2	9	7 - 12
All Chemistry Instruments	29	15.8	1.3	8.5	16	12 - 19	29	9.2	1.2	12.8	9	7 - 12

Method/Instrument	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	193	24.4	2.6	10.8	24	19 - 30	193	10.4	2.4	23.1	11	8 - 13
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	24	19 - 29	3	-	-	-	9	7 - 12
All Chemistry Instruments	7	-	-	-	24	19 - 29	7	-	-	-	9	7 - 12
Enzymatic Reagent												
Alfa Wassermann ACE Alera/Axcel	15	26.1	2.0	7.6	27	20 - 32	15	11.9	1.8	15.6	12	9 - 15
Beckman AU systems	25	25.4	1.6	6.1	26	20 - 31	25	10.8	1.9	17.9	11	8 - 13
Horiba ABX Pentra 400	14	24.9	1.8	7.4	25	19 - 30	14	12.1	1.3	10.6	12	9 - 15
Roche Integra	16	22.8	1.7	7.3	23	18 - 28	16	10.3	1.2	12.1	10	8 - 13
Siemens Dimension	23	26.1	1.7	6.6	26	20 - 32	23	12.2	1.4	11.6	13	9 - 15
All Chemistry Instruments	114	25.0	2.2	8.9	25	20 - 31	112	11.4	1.7	14.8	11	9 - 14
ISE Diluted												
All Chemistry Instruments	20	24.5	3.0	12.2	25	19 - 30	20	10.0	1.5	14.8	10	7 - 12
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	10	25.1	3.3	13.1	25	20 - 31	10	11.6	1.7	14.8	11	9 - 14
All Chemistry Instruments	16	24.7	3.5	14.3	25	19 - 30	16	11.4	1.8	15.7	11	9 - 14
VITROS												
VITROS 250,350,400 500,700,750,950	26	21.6	1.4	6.4	22	17 - 26	27	6.7	1.6	23.8	6	5 - 9
All Chemistry Instruments	28	21.6	1.3	6.2	22	17 - 26	29	6.7	1.6	23.1	6	5 - 9

CO_2 (mmol/L)

Specimen CH-5

Method/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	195	32.3	3.6	11.2	32	25 - 39
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	29	24 - 38
All Chemistry Instruments	7	-	-	-	30	24 - 38
Enzymatic Reagent						
Alfa Wassermann ACE Alera/Axcel	15	33.5	3.0	9.0	33	26 - 41
Beckman AU systems	26	33.7	4.1	12.1	35	26 - 41
Horiba ABX Pentra 400	14	32.2	2.6	8.1	32	25 - 39
Roche Integra	16	30.5	2.2	7.2	30	24 - 37
Siemens Dimension	23	34.8	2.4	7.0	35	27 - 42
All Chemistry Instruments	112	33.2	3.1	9.3	33	26 - 40
ISE Diluted						
All Chemistry Instruments	20	32.5	4.1	12.7	32	26 - 39
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	10	33.6	3.7	11.1	33	26 - 41
All Chemistry Instruments	16	32.8	4.2	12.9	32	26 - 40
VITROS						
VITROS 250,350,400 500,700,750,950	27	29.6	2.3	7.9	29	23 - 36
All Chemistry Instruments	29	29.6	2.3	7.6	29	23 - 36

Potassium (mmol/L)

Method/Instrument	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	216	3.97	0.12	3.1	4.0	3.4 - 4.5	210	2.60	0.10	3.8	2.6	2.0 - 3.1
Abaxis Piccolo												
Abaxis Piccolo - waived	16	3.76	0.12	3.2	3.8	3.2 - 4.3	16	2.32	0.17	7.3	2.3	1.8 - 2.9
All Chemistry Instruments	25	3.78	0.14	3.6	3.8	3.2 - 4.3	24	2.33	0.17	7.4	2.4	1.8 - 2.9
ISE Diluted												
Beckman AU systems	33	3.89	0.05	1.2	3.9	3.3 - 4.4	33	2.58	0.06	2.2	2.6	2.0 - 3.1
Roche Integra	19	3.97	0.06	1.4	4.0	3.4 - 4.5	18	2.60	0.01	0.0	2.6	2.1 - 3.1
Siemens Dimension QuickLyte - Xpand/EXL	24	3.94	0.06	1.5	3.9	3.4 - 4.5	24	2.55	0.07	2.6	2.5	2.0 - 3.1
All Chemistry Instruments	107	3.94	0.07	1.8	3.9	3.4 - 4.5	108	2.59	0.06	2.4	2.6	2.0 - 3.1
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	25	4.02	0.08	2.1	4.0	3.5 - 4.6	25	2.56	0.08	3.2	2.6	2.0 - 3.1
Horiba ABX Pentra 400	16	3.98	0.08	1.9	4.0	3.4 - 4.5	16	2.69	0.11	4.3	2.7	2.1 - 3.2
All Chemistry Instruments	47	4.00	0.08	2.1	4.0	3.4 - 4.5	47	2.61	0.11	4.2	2.6	2.1 - 3.2
VITROS												
VITROS 250,350,400 500,700,750,950	27	4.15	0.06	1.4	4.2	3.6 - 4.7	28	2.68	0.06	2.1	2.7	2.1 - 3.2
All Chemistry Instruments	29	4.14	0.06	1.4	4.1	3.6 - 4.7	30	2.68	0.06	2.1	2.7	2.1 - 3.2

Method/Instrument	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	202	5.38	0.16	3.0	5.4	4.8 - 5.9	200	2.70	0.15	5.7	2.7	2.1 - 3.2
Abaxis Piccolo												
Abaxis Piccolo - waived	2	-	-	-	5.0	4.6 - 5.7	2	-	-	-	2.6	1.9 - 3.0
All Chemistry Instruments	8	-	-	-	5.2	4.6 - 5.7	8	-	-	-	2.5	1.9 - 3.0
ISE Diluted												
Beckman AU systems	33	5.24	0.06	1.2	5.2	4.7 - 5.8	33	2.62	0.06	2.4	2.6	2.1 - 3.2
Roche Integra	18	5.34	0.05	0.9	5.3	4.8 - 5.9	19	2.62	0.04	1.6	2.6	2.1 - 3.2
Siemens Dimension QuickLyte - Xpand/EXL	24	5.35	0.06	1.1	5.3	4.8 - 5.9	24	2.54	0.06	2.3	2.5	2.0 - 3.1
All Chemistry Instruments	108	5.32	0.10	1.8	5.3	4.8 - 5.9	107	2.61	0.08	3.1	2.6	2.1 - 3.2
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	25	5.42	0.09	1.6	5.4	4.9 - 6.0	25	2.80	0.08	2.8	2.8	2.3 - 3.4
Horiba ABX Pentra 400	16	5.34	0.13	2.4	5.3	4.8 - 5.9	16	2.92	0.12	4.0	2.9	2.4 - 3.5
All Chemistry Instruments	47	5.38	0.12	2.2	5.4	4.8 - 5.9	47	2.83	0.13	4.5	2.8	2.3 - 3.4
VITROS												
VITROS 250,350,400 500,700,750,950	28	5.64	0.10	1.8	5.7	5.1 - 6.2	28	2.88	0.06	2.0	2.9	2.3 - 3.4
All Chemistry Instruments	30	5.63	0.10	1.8	5.6	5.1 - 6.2	30	2.87	0.06	2.0	2.9	2.3 - 3.4

Potassium (mmol/L)

Specimen CH-5

Method/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	203	7.28	0.27	3.8	7.2	6.7 - 7.8
Abaxis Piccolo						
Abaxis Piccolo - waived	2	-	-	-	7.0	6.4 - 7.5
All Chemistry Instruments	8	-	-	-	7.0	6.4 - 7.5
ISE Diluted						
Beckman AU systems	32	7.03	0.09	1.3	7.0	6.5 - 7.6
Roche Integra	18	7.20	0.06	0.8	7.2	6.7 - 7.7
Siemens Dimension QuickLyte - Xpand/EXL	24	7.20	0.08	1.1	7.2	6.6 - 7.7
All Chemistry Instruments	109	7.16	0.16	2.3	7.2	6.6 - 7.7
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	25	7.54	0.16	2.2	7.6	7.0 - 8.1
Horiba ABX Pentra 400	16	7.27	0.28	3.9	7.2	6.7 - 7.8
All Chemistry Instruments	48	7.38	0.27	3.7	7.4	6.8 - 7.9
VITROS						
VITROS 250,350,400 500,700,750,950	28	7.66	0.14	1.8	7.7	7.1 - 8.2
All Chemistry Instruments	30	7.65	0.14	1.9	7.7	7.1 - 8.2

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-1						Specimen CH-2					
Method/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	219	128.5	3.4	2.6	128	124 - 133	212	114.1	3.6	3.1	113	110 - 119
Abaxis Piccolo												
Abaxis Piccolo - waived	18	132.7	3.0	2.3	132	128 - 137	11	120.2	1.5	1.3	120	116 - 125
All Chemistry Instruments	26	133.0	2.6	2.0	133	128 - 137	17	120.2	1.3	1.1	120	116 - 125
ISE Diluted												
Beckman AU systems	32	125.1	1.1	0.9	125	121 - 130	33	111.9	1.6	1.4	112	107 - 116
Roche Integra	17	126.8	0.7	0.5	127	122 - 131	18	112.8	0.6	0.6	113	108 - 117
Siemens Dimension QuickLyte - Xpand/EXL	24	128.4	1.3	1.0	128	124 - 133	25	115.7	1.7	1.4	116	111 - 120
All Chemistry Instruments	108	126.9	1.9	1.5	127	122 - 131	111	113.5	2.2	1.9	113	109 - 118
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	26	126.6	1.9	1.5	126	122 - 131	26	109.3	1.4	1.3	109	105 - 114
Horiba ABX Pentra 400	15	127.6	1.6	1.3	128	123 - 132	15	112.1	1.4	1.3	113	108 - 117
All Chemistry Instruments	46	126.8	1.9	1.5	126	122 - 131	46	110.4	2.1	1.9	110	106 - 115
VITROS												
VITROS 250,350,400 500,700,750,950	28	133.2	1.6	1.2	133	129 - 138	28	118.5	1.6	1.3	118	114 - 123
All Chemistry Instruments	30	133.1	1.6	1.2	133	129 - 138	30	118.4	1.6	1.4	118	114 - 123

	Specimen CH-3						Specimen CH-4					
All Method	203	142.7	3.5	2.5	142	138 - 147	203	130.0	5.2	4.0	128	126 - 135
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	148	144 - 153	3	-	-	-	133	130 - 139
All Chemistry Instruments	8	-	-	-	148	144 - 153	8	-	-	-	134	130 - 139
ISE Diluted												
Beckman AU systems	33	139.4	1.2	0.9	140	135 - 144	33	124.9	1.5	1.2	125	120 - 129
Roche Integra	18	140.3	0.9	0.6	140	136 - 145	18	126.5	0.6	0.5	126	122 - 131
Siemens Dimension QuickLyte - Xpand/EXL	25	142.1	2.0	1.4	141	138 - 147	25	127.0	1.6	1.3	127	123 - 132
All Chemistry Instruments	109	140.7	1.9	1.4	140	136 - 145	107	126.0	2.0	1.6	126	122 - 130
ISE Undiluted												
Alfa Wassermann ACE Alera/Axcel	26	142.1	1.1	0.8	142	138 - 147	26	132.5	1.3	1.0	132	128 - 137
Horiba ABX Pentra 400	15	144.2	2.4	1.6	144	140 - 149	15	134.9	2.1	1.6	135	130 - 139
All Chemistry Instruments	44	142.3	1.5	1.1	142	138 - 147	45	132.9	2.5	1.9	133	128 - 137
VITROS												
VITROS 250,350,400 500,700,750,950	28	148.4	1.7	1.2	148	144 - 153	28	138.6	1.9	1.3	139	134 - 143
All Chemistry Instruments	30	148.4	1.7	1.2	148	144 - 153	30	138.6	1.9	1.3	139	134 - 143

Sodium (mmol/L)

Specimen CH-5

Method/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	203	162.9	5.4	3.3	161	158 - 167
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	167	163 - 172
All Chemistry Instruments	8	-	-	-	167	163 - 172
ISE Diluted						
Beckman AU systems	32	157.4	1.4	0.9	157	153 - 162
Roche Integra	18	159.1	0.8	0.5	159	155 - 164
Siemens Dimension QuickLyte - Xpand/EXL	25	159.5	1.5	1.0	160	155 - 164
All Chemistry Instruments	106	158.6	2.2	1.4	159	154 - 163
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	25	167.2	1.6	1.0	167	163 - 172
Horiba ABX Pentra 400	15	168.1	4.0	2.4	167	164 - 173
All Chemistry Instruments	46	166.5	3.9	2.3	167	162 - 171
VITROS						
VITROS 250,350,400 500,700,750,950	28	169.8	2.4	1.4	169	165 - 174
All Chemistry Instruments	30	169.7	2.4	1.4	169	165 - 174

TIBC – Calculated (µg/dL)

Method/Instrument	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	13	168.5	32.3	19.1	176	104 - 234	13	91.5	12.7	13.9	91	65 - 117

Method/Instrument	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	13	244.2	54.7	22.4	266	134 - 354	13	569.5	27.3	4.8	581	455 - 684

Method/Instrument	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	13	344.6	85.5	24.8	380	173 - 516

TIBC – Direct (µg/dL)

Method/Instrument	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	23	165.3	34.2	20.7	152	96 - 234	23	92.4	36.8	39.8	80	18 - 166
Siemens Healthcare												
Siemens Dimension	14	143.1	7.5	5.2	143	114 - 172	14	71.2	11.6	16.3	76	48 - 95
All Chemistry Instruments	15	142.7	7.4	5.2	142	114 - 172	15	71.3	11.2	15.7	75	48 - 94

Method/Instrument	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	23	231.4	28.3	12.2	226	174 - 289	23	549.4	23.1	4.2	560	439 - 660
Siemens Healthcare												
Siemens Dimension	14	216.1	10.0	4.6	218	172 - 260	14	558.5	12.7	2.3	562	446 - 671
All Chemistry Instruments	15	214.7	11.2	5.2	218	171 - 258	15	559.1	12.4	2.2	563	447 - 671

Method/Instrument	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	23	319.6	18.3	5.7	318	255 - 384
Siemens Healthcare						
Siemens Dimension	14	311.6	9.3	3.0	312	249 - 374
All Chemistry Instruments	15	313.7	11.9	3.8	313	250 - 377

UIBC – Direct (µg/dL)

	Specimen CH-1						Specimen CH-2					
Method/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	25	96.3	9.5	9.8	99	77 - 116	25	65.4	8.8	13.5	68	47 - 84
All Roche Reagents	12	91.4	7.9	8.6	92	73 - 110	12	61.7	8.3	13.5	65	45 - 79
Beckman AU												
Beckman AU systems	11	103.3	3.6	3.5	103	82 - 124	11	70.8	5.2	7.4	71	56 - 85

	Specimen CH-3						Specimen CH-4					
All Method	25	128.0	12.8	10.0	130	102 - 154	25	375.4	22.4	6.0	375	300 - 451
All Roche Reagents	12	123.3	7.9	6.4	126	98 - 148	12	364.7	16.7	4.6	360	291 - 438
Beckman AU												
Beckman AU systems	11	138.3	5.2	3.7	139	110 - 166	11	393.5	11.4	2.9	393	314 - 473

	Specimen CH-5					
All Method	25	170.8	14.7	8.6	173	136 - 205
All Roche Reagents	12	165.5	8.8	5.3	165	132 - 199
Beckman AU						
Beckman AU systems	11	182.3	7.3	4.0	186	145 - 219

ALT (SGPT) (IU/L)

	Specimen CH-1						Specimen CH-2					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	211	85.7	10.7	12.5	85	68 - 103	205	20.0	7.6	37.9	18	16 - 25
All Alfa Wassermann Reagents	27	69.7	2.9	4.2	69	55 - 84	26	13.7	2.7	19.4	13	10 - 17
All Horiba Pentra Reagents	18	98.2	4.7	4.8	98	78 - 118	18	19.8	1.7	8.8	20	15 - 24
All Roche Reagents	30	84.9	2.0	2.3	85	67 - 102	29	16.8	1.0	5.7	17	13 - 21
Abaxis Piccolo												
Abaxis Piccolo - waived	17	82.8	2.8	3.3	83	66 - 100	16	23.6	3.0	12.9	24	18 - 29
All Chemistry Instruments	24	82.9	2.6	3.1	83	66 - 100	23	23.0	2.8	12.2	23	18 - 28
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	23	69.8	3.1	4.5	69	55 - 84	22	13.8	2.9	20.8	13	11 - 17
Beckman AU												
Beckman AU systems	33	78.1	2.7	3.4	78	62 - 94	33	15.4	0.6	4.0	15	12 - 19
Horiba ABX Pentra												
Horiba ABX Pentra 400	18	98.2	4.7	4.8	98	78 - 118	18	19.8	1.7	8.8	20	15 - 24
Roche Integra												
Roche Integra	20	84.4	2.1	2.4	84	67 - 102	20	16.3	1.2	7.5	16	13 - 20
Siemens Healthcare ALTi												
Siemens Dimension	25	92.2	1.6	1.7	93	73 - 111	27	19.7	1.5	7.7	20	15 - 24
All Chemistry Instruments	27	91.7	2.3	2.5	92	73 - 111	28	19.6	1.6	8.0	20	15 - 24
VITROS												
VITROS 250,350,400 500,700,750,950	26	99.8	7.5	7.5	101	79 - 120	26	37.9	8.4	22.2	40	30 - 46
All Chemistry Instruments	25	101.2	3.0	3.0	101	80 - 122	28	38.3	8.2	21.4	41	30 - 46

ALT (SGPT) (IU/L)

	Specimen CH-3						Specimen CH-4					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	194	151.5	15.4	10.1	154	121 - 182	193	22.6	6.8	29.9	23	18 - 28
All Alfa Wassermann Reagents	28	128.7	4.0	3.1	129	102 - 155	27	8.8	2.9	32.6	8	7 - 11
All Horiba Pentra Reagents	18	175.2	7.6	4.3	175	140 - 211	18	27.7	2.1	7.4	27	22 - 34
All Roche Reagents	30	152.8	3.4	2.2	152	122 - 184	30	21.4	1.4	6.6	21	17 - 26
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	143	112 - 170	3	-	-	-	30	23 - 35
All Chemistry Instruments	8	-	-	-	141	112 - 170	8	-	-	-	30	23 - 35
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	24	128.7	4.1	3.2	129	102 - 155	23	8.7	3.0	34.7	8	6 - 11
Beckman AU												
Beckman AU systems	32	140.0	3.8	2.7	140	111 - 168	33	21.9	1.0	4.5	22	17 - 27
Horiba ABX Pentra												
Horiba ABX Pentra 400	18	175.2	7.6	4.3	175	140 - 211	18	27.7	2.1	7.4	27	22 - 34
Roche Integra												
Roche Integra	20	152.0	3.4	2.3	151	121 - 183	20	20.9	1.2	5.9	21	16 - 26
Siemens Healthcare ALTi												
Siemens Dimension	26	163.1	2.9	1.8	164	130 - 196	27	28.5	2.3	8.2	28	22 - 35
All Chemistry Instruments	27	162.9	3.0	1.8	163	130 - 196	28	28.5	2.3	8.0	28	22 - 35
VITROS												
VITROS 250,350,400 500,700,750,950	24	161.3	4.0	2.5	162	129 - 194	26	26.2	3.5	13.3	26	20 - 32
All Chemistry Instruments	26	161.5	3.9	2.4	162	129 - 194	27	26.2	3.4	13.1	26	20 - 32

ALT (SGPT) (IU/L)

Specimen CH-5

Instrument/Reagent	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	195	237.4	22.8	9.6	238	189 - 285
All Alfa Wassermann Reagents	28	204.9	5.8	2.8	206	163 - 246
All Horiba Pentra Reagents	18	278.0	12.4	4.5	276	222 - 334
All Roche Reagents	30	240.9	5.1	2.1	240	192 - 290
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	220	175 - 264
All Chemistry Instruments	8	-	-	-	221	175 - 264
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	24	204.8	5.9	2.9	205	163 - 246
Beckman AU						
Beckman AU systems	32	222.6	5.7	2.6	222	178 - 268
Horiba ABX Pentra						
Horiba ABX Pentra 400	18	278.0	12.4	4.5	276	222 - 334
Roche Integra						
Roche Integra	20	239.5	5.2	2.2	239	191 - 288
Siemens Healthcare ALTi						
Siemens Dimension	27	257.3	3.5	1.4	257	205 - 309
All Chemistry Instruments	28	256.9	4.1	1.6	257	205 - 309
VITROS						
VITROS 250,350,400 500,700,750,950	26	237.6	7.2	3.0	239	190 - 286
All Chemistry Instruments	28	237.9	7.1	3.0	239	190 - 286

Alkaline Phosphatase (IU/L)

	Specimen CH-1						Specimen CH-2					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	217	122.1	11.8	9.7	122	85 - 159	214	35.4	3.8	10.8	36	24 - 46
All Alfa Wassermann Reagents	28	124.1	9.0	7.2	125	86 - 162	28	34.3	2.5	7.2	35	24 - 45
All Horiba Pentra Reagents	18	136.1	5.6	4.1	135	95 - 177	18	39.2	3.3	8.4	40	27 - 51
All Roche Reagents	30	128.2	3.8	3.0	129	89 - 167	29	35.9	1.3	3.6	36	25 - 47
Abaxis Piccolo												
Abaxis Piccolo - waived	17	109.8	5.7	5.2	111	76 - 143	16	35.1	4.4	12.7	36	24 - 46
All Chemistry Instruments	24	108.5	5.8	5.4	108	75 - 142	23	35.4	4.0	11.2	36	24 - 47
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	24	124.7	9.5	7.6	127	87 - 163	24	34.4	2.6	7.6	35	24 - 45
Beckman AU												
Beckman AU systems	32	114.1	6.3	5.6	114	79 - 149	32	30.9	1.9	6.3	31	21 - 41
Horiba ABX Pentra												
Horiba ABX Pentra 400	18	136.1	5.6	4.1	135	95 - 177	18	39.2	3.3	8.4	40	27 - 51
Roche Integra												
Roche Integra	19	128.7	3.7	2.9	129	90 - 168	18	36.1	1.4	3.9	36	25 - 47
All Chemistry Instruments	20	128.8	3.6	2.8	130	90 - 168	19	36.1	1.4	3.8	36	25 - 47
Siemens Healthcare ALPi												
Siemens Dimension	25	136.2	5.5	4.0	136	95 - 178	25	37.0	4.0	10.9	37	25 - 49
All Chemistry Instruments	26	136.4	5.5	4.0	137	95 - 178	25	37.5	3.2	8.5	37	26 - 49
VITROS												
VITROS 250,350,400 500,700,750,950	27	112.0	3.6	3.2	112	78 - 146	28	37.9	2.9	7.6	38	26 - 50
All Chemistry Instruments	29	111.8	3.6	3.2	112	78 - 146	30	37.7	2.9	7.7	38	26 - 50

Alkaline Phosphatase (IU/L)

	Specimen CH-3						Specimen CH-4					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	199	202.3	25.0	12.4	208	141 - 263	199	110.0	11.8	10.7	112	77 - 144
All Alfa Wassermann Reagents	28	208.1	15.6	7.5	211	145 - 271	28	103.9	7.7	7.4	105	72 - 136
All Horiba Pentra Reagents	17	228.1	8.8	3.8	225	159 - 297	18	119.4	4.9	4.1	119	83 - 156
All Roche Reagents	30	214.7	6.2	2.9	215	150 - 280	30	113.1	3.5	3.1	113	79 - 148
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	171	141 - 263	3	-	-	-	93	77 - 144
All Chemistry Instruments	8	-	-	-	170	119 - 222	8	-	-	-	95	66 - 124
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	24	209.1	16.3	7.8	215	146 - 272	24	104.1	8.2	7.8	105	72 - 136
Beckman AU												
Beckman AU systems	32	191.2	10.4	5.4	191	133 - 249	32	96.3	5.4	5.6	97	67 - 126
Horiba ABX Pentra												
Horiba ABX Pentra 400	17	228.1	8.8	3.8	225	159 - 297	18	119.4	4.9	4.1	119	83 - 156
Roche Integra												
Roche Integra	19	215.8	6.3	2.9	216	151 - 281	19	113.1	4.1	3.6	113	79 - 148
All Chemistry Instruments	20	216.1	6.3	2.9	217	151 - 281	20	113.2	4.0	3.5	114	79 - 148
Siemens Healthcare ALPi												
Siemens Dimension	25	230.1	6.9	3.0	229	161 - 300	25	116.3	4.0	3.5	116	81 - 152
All Chemistry Instruments	26	230.5	7.1	3.1	230	161 - 300	26	116.5	4.1	3.5	116	81 - 152
VITROS												
VITROS 250,350,400 500,700,750,950	28	164.3	8.8	5.4	166	115 - 214	27	124.0	5.6	4.5	124	86 - 162
All Chemistry Instruments	30	164.5	8.6	5.2	166	115 - 214	29	124.2	5.4	4.4	124	86 - 162

Alkaline Phosphatase (IU/L)

Specimen CH-5

Instrument/Reagent	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	200	298.7	50.0	16.7	315	209 - 389
All Alfa Wassermann Reagents	28	313.7	22.2	7.1	320	219 - 408
All Horiba Pentra Reagents	18	343.1	13.3	3.9	343	240 - 447
All Roche Reagents	30	324.0	9.7	3.0	323	226 - 422
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	242	209 - 389
All Chemistry Instruments	8	-	-	-	241	168 - 313
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	24	313.3	23.4	7.5	320	219 - 408
Beckman AU						
Beckman AU systems	32	289.1	14.9	5.1	291	202 - 376
Horiba ABX Pentra						
Horiba ABX Pentra 400	18	343.1	13.3	3.9	343	240 - 447
Roche Integra						
Roche Integra	19	326.5	10.3	3.2	327	228 - 425
All Chemistry Instruments	20	326.9	10.2	3.1	328	228 - 425
Siemens Healthcare ALPi						
Siemens Dimension	25	350.0	8.5	2.4	349	244 - 455
All Chemistry Instruments	26	350.4	8.6	2.5	349	245 - 456
VITROS						
VITROS 250,350,400 500,700,750,950	28	204.1	10.7	5.2	203	142 - 266
All Chemistry Instruments	29	203.3	8.8	4.3	203	142 - 265

AST (SGOT) (IU/L)

	Specimen CH-1						Specimen CH-2					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	185	154.3	11.9	7.7	157	123 - 186	183	100.7	8.4	8.4	102	80 - 121
All Alfa Wassermann Reagents	27	143.3	5.0	3.5	144	114 - 172	28	95.3	6.6	6.9	96	76 - 115
All Horiba Pentra Reagents	18	167.7	9.3	5.5	167	134 - 202	18	111.2	6.7	6.0	111	88 - 134
All Roche Reagents	29	162.0	5.7	3.5	162	129 - 195	29	107.1	4.6	4.3	109	85 - 129
Abaxis Piccolo												
Abaxis Piccolo - waived	17	153.9	3.4	2.2	154	123 - 185	16	101.1	3.6	3.6	102	80 - 122
All Chemistry Instruments	24	154.0	3.6	2.3	154	123 - 185	23	101.2	3.4	3.4	102	80 - 122
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	23	143.5	5.2	3.6	144	114 - 173	24	95.4	7.0	7.3	96	76 - 115
Beckman AU												
Beckman AU systems	32	138.3	4.4	3.2	139	110 - 167	33	91.1	4.4	4.9	92	72 - 110
Horiba ABX Pentra												
Horiba ABX Pentra 400	18	167.7	9.3	5.5	167	134 - 202	18	111.2	6.7	6.0	111	88 - 134
Roche Integra												
Roche Integra	19	160.8	5.1	3.1	162	128 - 194	19	106.2	4.3	4.1	105	84 - 128
Siemens Healthcare												
Siemens Dimension	33	161.3	4.0	2.5	162	129 - 194	33	104.5	2.6	2.5	104	83 - 126
All Chemistry Instruments	34	161.4	3.9	2.4	162	129 - 194	34	104.5	2.6	2.5	104	83 - 126
VITROS												
VITROS 250,350,400 500,700,750,950	28	160.1	5.0	3.1	160	128 - 193	28	101.0	3.4	3.4	101	80 - 122
All Chemistry Instruments	30	159.8	4.9	3.1	159	127 - 192	30	100.8	3.5	3.4	101	80 - 121

AST (SGOT) (IU/L)

	Specimen CH-3						Specimen CH-4					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	168	211.6	18.8	8.9	216	169 - 254	167	35.1	4.6	13.2	34	28 - 43
All Alfa Wassermann Reagents	27	194.9	6.3	3.2	195	155 - 234	28	27.5	3.3	12.0	28	22 - 34
All Horiba Pentra Reagents	18	227.2	12.6	5.6	225	181 - 273	18	38.9	2.6	6.7	38	31 - 47
All Roche Reagents	29	219.5	8.0	3.6	219	175 - 264	29	34.3	1.8	5.3	35	27 - 42
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	202	169 - 254	3	-	-	-	37	28 - 43
All Chemistry Instruments	8	-	-	-	205	163 - 246	8	-	-	-	40	31 - 48
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	23	194.8	6.5	3.3	195	155 - 234	24	27.5	3.5	12.8	28	22 - 34
Beckman AU												
Beckman AU systems	32	187.6	5.7	3.1	188	150 - 226	33	33.1	1.4	4.3	33	26 - 40
Horiba ABX Pentra												
Horiba ABX Pentra 400	18	227.2	12.6	5.6	225	181 - 273	18	38.9	2.6	6.7	38	31 - 47
Roche Integra												
Roche Integra	19	217.9	7.4	3.4	218	174 - 262	19	33.5	1.7	5.0	33	26 - 41
Siemens Healthcare												
Siemens Dimension	33	218.5	5.4	2.5	218	174 - 263	32	32.1	1.9	5.8	32	25 - 39
All Chemistry Instruments	34	218.6	5.3	2.4	218	174 - 263	33	32.1	1.9	5.8	32	25 - 39
VITROS												
VITROS 250,350,400 500,700,750,950	28	232.6	7.7	3.3	231	186 - 280	28	39.6	1.4	3.5	40	31 - 48
All Chemistry Instruments	30	232.2	7.7	3.3	230	185 - 279	30	39.5	1.4	3.4	40	31 - 48

AST (SGOT) (IU/L)

Specimen CH-5

Instrument/Reagent	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	168	287.2	36.6	12.8	287	229 - 345
All Alfa Wassermann Reagents	27	255.8	9.1	3.6	259	204 - 307
All Horiba Pentra Reagents	18	301.9	16.6	5.5	298	241 - 363
All Roche Reagents	29	289.2	10.0	3.5	291	231 - 348
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	268	229 - 345
All Chemistry Instruments	8	-	-	-	270	216 - 325
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	23	255.6	9.1	3.6	259	204 - 307
Beckman AU						
Beckman AU systems	32	248.7	7.8	3.2	249	198 - 299
Horiba ABX Pentra						
Horiba ABX Pentra 400	18	301.9	16.6	5.5	298	241 - 363
Roche Integra						
Roche Integra	19	286.4	8.5	3.0	286	229 - 344
Siemens Healthcare						
Siemens Dimension	33	293.0	7.1	2.4	292	234 - 352
All Chemistry Instruments	34	293.2	7.1	2.4	293	234 - 352
VITROS						
VITROS 250,350,400 500,700,750,950	28	351.8	12.5	3.5	348	281 - 423
All Chemistry Instruments	30	350.3	13.4	3.8	347	280 - 421

Creatine Kinase (IU/L)

Instrument/Reagent	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	83	104.8	7.5	7.1	107	73 - 137	83	17.7	3.4	19.1	18	12 - 23
All Alfa Wassermann Reagents	12	108.3	3.1	2.9	108	75 - 141	11	23.9	3.8	16.0	24	16 - 32
All Roche Reagents	13	110.5	2.8	2.6	110	77 - 144	13	18.6	0.8	4.1	19	13 - 25
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	10	108.5	3.4	3.1	109	75 - 142	10	32.6	25.3	77.7	26	22 - 43
Beckman AU												
Beckman AU systems	17	97.4	3.4	3.5	97	68 - 127	18	15.1	2.0	13.6	15	10 - 20
Siemens Healthcare CKI												
Siemens Dimension	18	108.2	1.9	1.8	108	75 - 141	18	16.3	1.4	8.6	17	11 - 22

Instrument/Reagent	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	83	190.1	14.0	7.4	193	133 - 248	83	111.9	8.5	7.6	112	78 - 146
All Alfa Wassermann Reagents	12	191.0	5.3	2.8	191	133 - 249	12	116.3	4.2	3.6	116	81 - 152
All Roche Reagents	13	201.0	5.8	2.9	202	140 - 262	13	111.4	4.6	4.2	110	77 - 145
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	10	191.2	5.6	2.9	191	133 - 249	10	116.6	4.4	3.8	116	81 - 152
Beckman AU												
Beckman AU systems	17	179.1	5.8	3.2	180	125 - 233	17	102.1	4.4	4.3	102	71 - 133
Siemens Healthcare CKI												
Siemens Dimension	18	200.0	3.4	1.7	200	140 - 260	18	110.6	3.6	3.3	111	77 - 144

Instrument/Reagent	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	85	294.9	30.6	10.4	298	206 - 384
All Alfa Wassermann Reagents	12	294.3	8.4	2.9	296	206 - 383
All Roche Reagents	13	317.1	10.6	3.3	316	221 - 413
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	10	293.7	9.1	3.1	295	205 - 382
Beckman AU						
Beckman AU systems	17	283.5	9.5	3.4	284	198 - 369
Siemens Healthcare CKI						
Siemens Dimension	18	316.3	4.8	1.5	315	221 - 412

GGT (IU/L)

Instrument/Reagent	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	62	69.7	18.1	26.0	65	33 - 106	62	16.6	5.2	31.1	14	6 - 27
All Roche Reagents	14	65.1	2.8	4.3	65	52 - 79	14	14.4	0.8	5.9	14	11 - 18
Beckman AU												
Beckman AU systems	12	57.2	2.0	3.5	57	45 - 69	12	12.6	0.5	4.2	13	10 - 16
Roche cobas c 501												
Roche cobas 6000 / c 501	10	65.2	4.4	6.7	63	52 - 79	10	14.6	0.9	6.1	14	11 - 18
Roche Integra												
Roche Integra	11	64.9	1.6	2.5	65	51 - 78	11	14.1	0.8	5.9	14	11 - 17
Siemens Healthcare												
Siemens Dimension	10	90.0	2.1	2.3	91	72 - 108	10	26.2	2.0	7.8	27	20 - 32
All Chemistry Instruments	11	90.6	2.4	2.7	91	72 - 109	11	26.4	2.0	7.5	27	21 - 32

Instrument/Reagent	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	62	124.3	28.0	22.5	116	68 - 181	62	35.3	7.2	20.3	32	20 - 50
All Roche Reagents	14	115.1	5.0	4.3	115	92 - 139	14	32.2	1.4	4.4	32	25 - 39
Beckman AU												
Beckman AU systems	12	101.1	4.0	3.9	102	80 - 122	12	29.2	1.1	3.7	29	23 - 36
Roche cobas c 501												
Roche cobas 6000 / c 501	10	114.2	7.9	6.9	111	91 - 138	10	32.4	2.2	6.8	31	25 - 39
Roche Integra												
Roche Integra	11	115.1	2.7	2.4	116	92 - 139	11	31.9	0.6	2.0	32	25 - 39
Siemens Healthcare												
Siemens Dimension	10	154.7	3.2	2.1	156	123 - 186	10	49.8	2.1	4.3	51	39 - 60
All Chemistry Instruments	11	155.4	3.6	2.3	156	124 - 187	11	50.0	2.0	4.0	51	40 - 60

Instrument/Reagent	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	62	193.9	40.8	21.0	180	112 - 276
All Roche Reagents	14	180.8	7.1	3.9	180	144 - 217
Beckman AU						
Beckman AU systems	12	159.9	6.2	3.8	161	127 - 192
Roche cobas c 501						
Roche cobas 6000 / c 501	10	180.4	12.2	6.8	176	144 - 217
Roche Integra						
Roche Integra	11	180.5	2.6	1.4	181	144 - 217
Siemens Healthcare						
Siemens Dimension	10	239.2	4.2	1.7	240	191 - 288
All Chemistry Instruments	11	240.6	5.3	2.2	240	192 - 289

Amylase (IU/L)

	Specimen CH-1						Specimen CH-2					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	63	54.8	9.4	17.2	57	38 - 72	63	15.6	6.2	40.0	14	10 - 21
All Roche Reagents	11	58.4	1.8	3.1	58	40 - 76	11	15.4	0.5	3.3	15	10 - 20
Abaxis Piccolo												
Abaxis Piccolo - waived	10	49.4	19.8	40.1	58	34 - 65	10	14.2	0.8	5.9	14	9 - 19
All Chemistry Instruments	11	50.3	17.9	35.5	58	35 - 66	11	14.2	0.8	5.3	14	9 - 19
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	10	60.8	2.8	4.6	60	42 - 80	10	13.6	0.9	6.6	13	9 - 18
Beckman AU												
Beckman AU systems	14	48.9	2.6	5.2	49	34 - 64	14	10.4	1.3	12.3	10	7 - 14
Horiba ABX Pentra												
Horiba ABX Pentra 400	11	60.2	4.2	7.0	59	42 - 79	11	15.8	0.4	2.8	16	11 - 21
Roche Integra												
Roche Integra	10	59.3	1.2	2.0	60	41 - 78	10	15.7	0.5	3.3	16	10 - 21
Siemens Healthcare												
Siemens Dimension	10	64.1	1.3	2.0	64	44 - 84	10	12.7	0.7	5.6	13	8 - 17
VITROS												
VITROS 250,350,400 500,700,750,950	10	38.9	3.1	8.1	38	27 - 51	10	30.0	0.1	0.0	30	21 - 39
All Chemistry Instruments	11	38.0	3.9	10.4	38	26 - 50	11	30.0	0.1	0.0	30	21 - 39

Amylase (IU/L)

	Specimen CH-3						Specimen CH-4					
All Method	59	97.6	16.1	16.5	103	68 - 127	60	84.6	14.4	17.0	85	59 - 110
All Roche Reagents	11	102.4	2.7	2.6	103	71 - 134	11	94.3	2.0	2.1	94	65 - 123
Abaxis Piccolo												
Abaxis Piccolo - waived	2	-	-	-	103	68 - 127	2	-	-	-	74	59 - 110
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	10	107.6	4.2	3.9	108	75 - 140	10	84.2	1.9	2.3	85	58 - 110
Beckman AU												
Beckman AU systems	14	87.4	4.3	4.9	86	61 - 114	14	65.2	5.1	7.8	64	45 - 85
Horiba ABX Pentra												
Horiba ABX Pentra 400	11	107.6	5.5	5.1	109	75 - 140	11	96.6	3.6	3.8	98	67 - 126
Roche Integra												
Roche Integra	10	104.3	1.0	1.0	104	73 - 136	10	95.2	1.9	2.0	95	66 - 124
Siemens Healthcare												
Siemens Dimension	10	114.7	2.8	2.5	116	80 - 150	10	83.2	1.5	1.8	83	58 - 109
VITROS												
VITROS 250,350,400 500,700,750,950	10	71.5	2.8	3.9	72	50 - 93	10	102.8	3.8	3.7	104	71 - 134
All Chemistry Instruments	11	70.4	4.1	5.8	71	49 - 92	11	102.8	3.6	3.5	103	71 - 134

	Specimen CH-5					
All Method	60	154.4	24.3	15.7	158	108 - 201
All Roche Reagents	11	161.5	3.9	2.4	162	113 - 210
Abaxis Piccolo						
Abaxis Piccolo - waived	2	-	-	-	155	108 - 201
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	10	170.6	7.1	4.2	171	119 - 222
Beckman AU						
Beckman AU systems	14	137.9	6.2	4.5	137	96 - 180
Horiba ABX Pentra						
Horiba ABX Pentra 400	11	168.8	8.5	5.0	170	118 - 220
Roche Integra						
Roche Integra	10	163.8	2.5	1.5	164	114 - 213
Siemens Healthcare						
Siemens Dimension	10	180.9	3.4	1.9	180	126 - 236
VITROS						
VITROS 250,350,400 500,700,750,950	10	114.9	3.8	3.3	117	80 - 150
All Chemistry Instruments	11	115.9	4.6	4.0	117	81 - 151

Lactate Dehydrogenase (IU/L)

	Specimen CH-1						Specimen CH-2					
Instrument/Reagent	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	66	298.4	26.9	9.0	311	238 - 359	66	137.8	16.2	11.8	146	110 - 166
All Horiba Pentra Reagents	12	305.2	16.4	5.4	299	244 - 367	12	144.0	1.9	1.3	143	115 - 173
All Roche Reagents	21	318.9	8.4	2.6	317	255 - 383	21	150.8	4.2	2.8	149	120 - 181
Beckman AU												
Beckman AU systems	10	256.7	12.7	5.0	258	205 - 309	10	119.0	7.2	6.1	120	95 - 143
Horiba ABX Pentra												
Horiba ABX Pentra 400	10	305.2	16.4	5.4	299	244 - 367	10	144.0	1.9	1.3	143	115 - 173
Roche cobas c 501												
Roche cobas 6000 / c 501	11	317.3	8.7	2.8	317	253 - 381	11	148.6	3.3	2.2	148	118 - 179
Roche Integra												
Roche Integra	13	319.5	8.7	2.7	317	255 - 384	13	152.3	4.3	2.8	152	121 - 183
Siemens Healthcare LDI												
Siemens Dimension	10	293.4	4.8	1.6	293	234 - 353	10	137.4	6.4	4.7	137	109 - 165
VITROS												
VITROS 250,350,400 500,700,750,950	10	918.3	7.1	0.8	921	734 - 1102	10	456.0	5.9	1.3	456	364 - 548
All Chemistry Instruments	11	922.4	11.1	1.2	923	737 - 1107	11	459.4	9.2	2.0	458	367 - 552

Lactate Dehydrogenase (IU/L)

	Specimen CH-3						Specimen CH-4					
All Method	66	455.0	40.1	8.8	471	364 - 547	66	149.0	14.8	10.0	155	119 - 179
All Horiba Pentra Reagents	12	468.0	17.9	3.8	459	374 - 562	12	161.6	5.0	3.1	160	129 - 194
All Roche Reagents	21	484.0	13.4	2.8	481	387 - 581	21	157.9	4.9	3.1	159	126 - 190
Beckman AU												
Beckman AU systems	10	391.2	19.7	5.0	393	312 - 470	10	128.3	6.7	5.2	130	102 - 154
Horiba ABX Pentra												
Horiba ABX Pentra 400	10	468.0	17.9	3.8	459	374 - 562	10	161.6	5.0	3.1	160	129 - 194
Roche cobas c 501												
Roche cobas 6000 / c 501	11	481.4	12.4	2.6	480	385 - 578	11	157.6	4.8	3.0	159	126 - 190
Roche Integra												
Roche Integra	13	484.9	14.6	3.0	483	387 - 582	13	157.6	5.1	3.2	157	126 - 190
Siemens Healthcare LDI												
Siemens Dimension	10	456.0	12.9	2.8	458	364 - 548	10	149.6	3.7	2.5	151	119 - 180
VITROS												
VITROS 250,350,400 500,700,750,950	10	1380.5	20.4	1.5	1378	1104 - 1657	10	471.8	28.4	6.0	480	377 - 567
All Chemistry Instruments	11	1387.8	24.0	1.7	1387	1110 - 1666	11	463.6	30.6	6.6	476	370 - 557

	Specimen CH-5					
All Method	66	653.4	53.1	8.1	675	522 - 785
All Horiba Pentra Reagents	12	664.6	23.9	3.6	678	531 - 798
All Roche Reagents	21	689.9	20.5	3.0	690	551 - 828
Beckman AU						
Beckman AU systems	10	569.7	27.7	4.9	576	455 - 684
Horiba ABX Pentra						
Horiba ABX Pentra 400	10	664.6	23.9	3.6	678	531 - 798
Roche cobas c 501						
Roche cobas 6000 / c 501	11	696.7	19.0	2.7	699	557 - 837
Roche Integra						
Roche Integra	13	685.2	21.3	3.1	681	548 - 823
Siemens Healthcare LDI						
Siemens Dimension	10	663.0	12.2	1.8	664	530 - 796
VITROS						
VITROS 250,350,400 500,700,750,950	10	1967.3	55.9	2.8	1966	1573 - 2361
All Chemistry Instruments	11	1963.0	49.4	2.5	1946	1570 - 2356

Lipase (IU/L)

Instrument/Reagent	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	46	26.5	4.5	16.9	28	18 - 35	46	13.2	2.9	22.3	13	9 - 18
All Roche Reagents	11	24.0	1.4	5.9	24	16 - 32	11	12.9	0.6	5.0	13	9 - 17
Beckman AU												
Beckman AU systems	10	27.8	4.2	15.0	26	19 - 37	10	12.4	3.3	27.0	12	8 - 17
Siemens Healthcare												
Siemens Dimension	11	106.7	10.5	9.9	107	74 - 139	11	55.7	7.5	13.5	57	38 - 73
VITROS												
All Chemistry Instruments	10	265.8	10.2	3.8	261	186 - 346	10	115.4	2.1	1.8	115	80 - 151

Instrument/Reagent	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	46	39.3	6.2	15.7	43	27 - 52	46	52.3	5.1	9.8	56	36 - 69
All Roche Reagents	11	34.5	2.2	6.4	36	24 - 45	11	54.6	2.9	5.4	55	38 - 72
Beckman AU												
Beckman AU systems	10	41.9	4.6	10.9	42	29 - 55	10	50.9	4.4	8.7	49	35 - 67
Siemens Healthcare												
Siemens Dimension	11	156.6	10.8	6.9	153	109 - 204	11	244.3	10.9	4.5	248	171 - 318
VITROS												
All Chemistry Instruments	10	400.0	10.1	2.5	396	280 - 520	10	206.6	6.3	3.0	203	144 - 269

Instrument/Reagent	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	46	54.9	8.8	16.1	60	38 - 72
All Roche Reagents	11	47.3	3.2	6.7	48	33 - 62
Beckman AU						
Beckman AU systems	10	59.6	5.7	9.5	58	41 - 78
Siemens Healthcare						
Siemens Dimension	11	219.3	17.4	7.9	216	153 - 286
VITROS						
All Chemistry Instruments	10	560.6	16.7	3.0	557	392 - 729

Alpha-fetoprotein (AFP) (ng/mL)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	102.95	6.83	6.6	102.8	82.4 - 123.5	5	0.95	0.25	26.5	1.0	0.1 - 1.8
	Specimen CH-3						**Specimen CH-4**					
All Method	5	199.85	18.23	9.1	197.4	145.1 - 254.6	5	6.25	0.24	3.8	6.2	5.5 - 7.0
	Specimen CH-5											
All Method	5	320.20	30.54	9.5	317.2	228.5 - 411.9						

Cortisol (µg/dL)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	11	13.48	0.89	6.6	13.3	10.1 - 16.9	11	4.81	0.34	7.0	4.8	3.6 - 6.1
	Specimen CH-3						**Specimen CH-4**					
All Method	11	22.04	1.71	7.7	22.2	16.5 - 27.6	11	11.51	1.58	13.7	11.3	8.6 - 14.4
	Specimen CH-5											
All Method	11	31.50	1.94	6.2	31.8	23.6 - 39.4						

T_3 Uptake (percent)

Method	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	13	46.15	4.04	8.8	45.3	34.0 - 58.3	12	47.94	4.54	9.5	47.6	34.3 - 61.6

Method	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	13	44.16	4.02	9.1	43.7	32.0 - 56.3	13	28.09	4.52	16.1	27.0	14.5 - 41.7

Method	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	13	42.47	4.08	9.6	41.8	30.2 - 54.7

Triiodothyronine (ng/mL)

Method	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	26	1.19	0.17	14.0	1.3	0.6 - 1.7	26	0.84	0.18	21.6	0.9	0.2 - 1.4
All TOSOH Instruments	12	3.33	0.29	8.6	3.3	2.4 - 4.2	12	1.95	0.16	8.2	1.9	1.4 - 2.5
Beckman ACCESS / 2 / DxI	12	1.18	0.14	11.9	1.2	0.7 - 1.7	12	0.81	0.12	14.4	0.8	0.4 - 1.2
TOSOH ST AIA PACK	10	3.23	0.10	2.9	3.3	2.9 - 3.6	10	1.91	0.13	7.0	1.9	1.5 - 2.4

Method	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	26	1.45	0.29	20.2	1.6	0.5 - 2.4	26	1.15	0.46	39.6	1.1	0.0 - 2.6
All TOSOH Instruments	12	4.21	0.47	11.1	4.1	2.8 - 5.7	12	1.05	0.09	8.8	1.1	0.7 - 1.4
Beckman ACCESS / 2 / DxI	12	1.58	0.19	12.0	1.6	1.0 - 2.2	12	1.53	0.18	11.9	1.5	0.9 - 2.1
TOSOH ST AIA PACK	10	4.06	0.17	4.2	4.1	3.5 - 4.6	10	1.07	0.08	7.1	1.1	0.8 - 1.3

Method	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	26	1.79	0.53	29.5	2.1	0.2 - 3.4
All TOSOH Instruments	12	5.11	0.51	10.1	5.0	3.5 - 6.7
Beckman ACCESS / 2 / DxI	12	2.14	0.30	14.1	2.1	1.2 - 3.1
TOSOH ST AIA PACK	10	4.94	0.20	4.0	4.9	4.3 - 5.6

Free T_3 (pg/mL)

Method	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	43	3.70	0.36	9.8	3.8	2.6 - 4.8	43	2.41	0.30	12.2	2.5	1.5 - 3.4
All Roche Instruments	10	3.78	0.22	5.7	3.9	3.1 - 4.5	10	2.18	0.18	8.2	2.2	1.6 - 2.8
All TOSOH Instruments	12	6.60	0.25	3.8	6.6	5.8 - 7.4	12	3.53	0.33	9.3	3.6	2.5 - 4.6
Beckman ACCESS / 2 / DxI	18	3.52	0.25	7.1	3.5	2.7 - 4.3	18	2.50	0.28	11.1	2.5	1.6 - 3.4
TOSOH ST AIA PACK	10	6.58	0.31	4.7	6.6	5.6 - 7.6	10	3.50	0.32	9.0	3.5	2.5 - 4.5

Method	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	43	4.24	0.41	9.6	4.3	3.0 - 5.5	43	2.42	0.32	13.1	2.5	1.4 - 3.4
All Abbott Instruments	10	4.68	0.31	6.7	4.7	3.7 - 5.7	10	2.22	0.19	8.7	2.2	1.6 - 2.8
All TOSOH Instruments	12	8.60	0.63	7.4	8.7	6.6 - 10.6	12	2.88	0.25	8.9	2.9	2.1 - 3.7
Beckman ACCESS / 2 / DxI	18	4.06	0.22	5.5	4.1	3.3 - 4.8	18	2.50	0.26	10.4	2.5	1.7 - 3.3
TOSOH ST AIA	10	8.56	0.80	9.4	8.6	6.1 - 11.0	10	2.90	0.32	11.2	2.9	1.9 - 3.9

Method	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	43	4.72	0.61	12.9	4.7	2.8 - 6.6
All Abbott Instruments	10	5.62	0.30	5.4	5.8	4.7 - 6.6
All TOSOH Instruments	12	10.94	0.89	8.2	11.2	8.2 - 13.7
Beckman ACCESS / 2 / DxI	18	4.46	0.24	5.4	4.4	3.7 - 5.2
TOSOH ST AIA	10	10.90	1.15	10.6	11.2	7.4 - 14.4

Thyroxine (µg/dL)

Method	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	36	6.08	0.41	6.7	6.2	4.8 - 7.3	36	2.18	0.26	12.1	2.1	1.1 - 3.2
All TOSOH Instruments	12	6.24	0.33	5.3	6.2	4.9 - 7.5	12	2.19	0.09	4.1	2.2	1.1 - 3.2
Beckman ACCESS / 2 / DxI	11	6.05	0.37	6.1	6.1	4.8 - 7.3	11	1.78	0.30	17.0	1.9	0.7 - 2.8
Siemens Dimension	10	6.16	0.50	8.2	6.0	4.9 - 7.4	10	2.22	0.30	13.7	2.4	1.2 - 3.3
TOSOH ST AIA PACK	10	6.15	0.24	3.9	6.2	4.9 - 7.4	10	2.20	0.09	4.1	2.2	1.2 - 3.2

Method	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	36	9.39	0.62	6.6	9.5	7.5 - 11.3	36	9.12	3.57	39.1	9.6	7.2 - 11.0
All TOSOH Instruments	12	9.49	0.47	4.9	9.7	7.5 - 11.4	12	9.91	0.43	4.4	9.9	7.9 - 11.9
Beckman ACCESS / 2 / DxI	11	9.34	0.59	6.3	9.4	7.4 - 11.3	11	7.79	0.43	5.6	7.9	6.2 - 9.4
Siemens Dimension	10	9.84	0.42	4.2	9.9	7.8 - 11.9	10	12.20	0.60	5.0	12.2	9.7 - 14.7
TOSOH ST AIA PACK	10	9.42	0.47	5.0	9.6	7.5 - 11.4	10	9.97	0.45	4.5	10.1	7.9 - 12.0

Method	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	36	12.34	3.96	32.1	13.0	9.8 - 14.9
All TOSOH Instruments	12	13.51	1.13	8.3	13.3	10.8 - 16.3
Beckman ACCESS / 2 / DxI	11	12.45	0.76	6.1	12.7	9.9 - 15.0
Siemens Dimension	10	14.98	0.65	4.3	14.8	11.9 - 18.0
TOSOH ST AIA PACK	10	13.58	1.22	9.0	13.9	10.8 - 16.3

Free Thyroxine (ng/dL)

Method	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	139	2.03	0.39	19.1	2.0	0.8 - 3.2	138	0.92	0.14	15.8	0.9	0.4 - 1.4
All Roche Instruments	10	2.07	0.12	5.6	2.1	1.7 - 2.5	10	0.96	0.07	7.3	1.0	0.7 - 1.2
All TOSOH Instruments	30	2.42	0.22	9.1	2.5	1.7 - 3.1	29	0.96	0.11	11.3	1.0	0.6 - 1.3
Abbott Architect	11	1.81	0.13	7.2	1.8	1.4 - 2.2	11	0.80	0.04	5.6	0.8	0.6 - 1.0
Beckman ACCESS / 2 / DxI	49	1.70	0.10	6.0	1.7	1.3 - 2.1	48	0.86	0.06	7.4	0.9	0.6 - 1.1
Siemens Dimension	21	2.18	0.17	7.8	2.2	1.6 - 2.7	21	0.90	0.07	8.3	0.9	0.6 - 1.2
TOSOH AIA PACK	12	2.33	0.23	9.9	2.4	1.6 - 3.1	12	0.90	0.10	10.6	0.9	0.6 - 1.2
TOSOH ST AIA PACK	18	2.47	0.20	8.1	2.5	1.8 - 3.1	17	1.01	0.10	9.6	1.0	0.7 - 1.3

Method	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	138	2.76	0.54	19.5	2.7	1.1 - 4.4	140	1.28	0.27	21.2	1.3	0.4 - 2.1
All Roche Instruments	10	2.93	0.16	5.6	2.9	2.4 - 3.5	10	1.61	0.11	6.8	1.6	1.2 - 2.0
All TOSOH Instruments	29	3.31	0.32	9.8	3.4	2.3 - 4.3	29	1.50	0.13	8.9	1.5	1.0 - 2.0
Abbott Architect	11	2.75	0.20	7.1	2.7	2.1 - 3.4	11	1.59	0.14	8.6	1.6	1.1 - 2.1
Beckman ACCESS / 2 / DxI	47	2.21	0.11	5.0	2.2	1.8 - 2.6	48	1.04	0.06	5.8	1.0	0.8 - 1.3
Siemens Dimension	21	3.09	0.15	4.9	3.1	2.6 - 3.6	22	1.30	0.12	9.1	1.3	0.9 - 1.7
TOSOH AIA PACK	12	3.18	0.35	11.2	3.3	2.1 - 4.3	12	1.43	0.13	9.0	1.5	1.0 - 1.9
TOSOH ST AIA PACK	17	3.41	0.27	7.9	3.4	2.6 - 4.3	17	1.55	0.11	7.2	1.6	1.2 - 1.9

Method	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	138	3.47	0.78	22.4	3.7	1.1 - 5.9
All Roche Instruments	10	3.81	0.19	4.9	3.8	3.2 - 4.4
All TOSOH Instruments	29	4.26	0.33	7.6	4.3	3.2 - 5.3
Abbott Architect	11	3.85	0.41	10.7	4.0	2.6 - 5.1
Beckman ACCESS / 2 / DxI	48	2.69	0.14	5.1	2.7	2.2 - 3.2
Siemens Dimension	21	4.08	0.29	7.0	4.1	3.2 - 5.0
TOSOH AIA PACK	12	4.12	0.34	8.2	4.1	3.1 - 5.2
TOSOH ST AIA PACK	17	4.36	0.29	6.5	4.4	3.5 - 5.3

TSH (μU/mL)

Method	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	171	2.60	0.32	12.1	2.5	1.6 - 3.6	172	0.43	0.07	16.2	0.4	0.2 - 0.7
All Abbott Instruments	13	2.26	0.12	5.3	2.3	1.9 - 2.7	13	0.35	0.05	14.7	0.4	0.1 - 0.6
All Roche Instruments	12	2.71	0.10	3.7	2.7	2.4 - 3.1	12	0.55	0.05	9.5	0.6	0.3 - 0.8
All TOSOH Instruments	41	2.98	0.24	8.0	3.0	2.2 - 3.7	41	0.49	0.04	8.7	0.5	0.3 - 0.7
Abbott Architect	13	2.26	0.12	5.3	2.3	1.9 - 2.7	13	0.35	0.05	14.7	0.4	0.1 - 0.6
Beckman ACCESS / 2 / DxI	58	2.46	0.17	7.0	2.5	1.9 - 3.0	52	0.40	0.01	0.0	0.4	0.3 - 0.5
Siemens Dimension	27	2.41	0.17	7.1	2.4	1.8 - 3.0	27	0.43	0.06	12.8	0.4	0.2 - 0.6
TOSOH AIA PACK	17	2.92	0.23	7.8	2.9	2.2 - 3.7	17	0.48	0.04	8.1	0.5	0.3 - 0.7
TOSOH ST AIA PACK	24	3.01	0.24	8.0	3.0	2.2 - 3.8	24	0.49	0.04	9.2	0.5	0.3 - 0.7

Method	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	172	4.52	0.53	11.8	4.4	2.9 - 6.2	173	2.72	0.27	10.0	2.7	1.9 - 3.6
All Abbott Instruments	13	4.01	0.24	5.9	4.1	3.2 - 4.8	13	2.42	0.25	10.3	2.5	1.6 - 3.2
All Roche Instruments	12	4.45	0.17	3.8	4.5	3.9 - 5.0	12	2.86	0.15	5.3	2.9	2.4 - 3.4
All TOSOH Instruments	40	5.15	0.36	7.0	5.2	4.0 - 6.3	41	2.96	0.24	8.2	3.0	2.2 - 3.7
Abbott Architect	13	4.01	0.24	5.9	4.1	3.2 - 4.8	13	2.42	0.25	10.3	2.5	1.6 - 3.2
Beckman ACCESS / 2 / DxI	57	4.29	0.30	7.1	4.3	3.3 - 5.3	58	2.64	0.23	8.7	2.7	1.9 - 3.4
Siemens Dimension	27	4.20	0.36	8.5	4.1	3.1 - 5.3	27	2.71	0.20	7.3	2.7	2.1 - 3.4
TOSOH AIA PACK	17	5.08	0.42	8.2	5.2	3.8 - 6.4	17	2.92	0.24	8.2	3.0	2.2 - 3.7
TOSOH ST AIA PACK	24	5.14	0.40	7.9	5.2	3.9 - 6.4	24	2.99	0.25	8.3	3.0	2.2 - 3.8

Method	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	173	6.74	0.91	13.5	6.7	4.0 - 9.5
All Abbott Instruments	13	6.22	0.29	4.7	6.2	5.3 - 7.1
All Roche Instruments	12	6.25	0.29	4.6	6.3	5.3 - 7.2
All TOSOH Instruments	41	7.51	0.61	8.1	7.5	5.6 - 9.4
Abbott Architect	13	6.22	0.29	4.7	6.2	5.3 - 7.1
Beckman ACCESS / 2 / DxI	58	6.57	0.85	12.9	6.6	4.0 - 9.2
Siemens Dimension	27	6.30	0.79	12.6	6.1	3.9 - 8.7
TOSOH AIA PACK	17	7.43	0.53	7.2	7.5	5.8 - 9.1
TOSOH ST AIA PACK	24	7.57	0.66	8.7	7.5	5.5 - 9.6

Serum hCG – Qualitative

	Specimen HCG-1		Specimen HCG-2	
Method	***Positive***	***Negative***	***Positive***	***Negative***
ALL METHODS	142	-	-	142
AimStep Combo Pregnancy	1	-	-	1
Alere hCG Cassette	1	-	-	1
Beckman ACCESS / 2 / DxI	1	-	-	1
Beckman Coulter ICON 20 hCG	69	-	-	69
Beckman Coulter ICON 25 hCG	4	-	-	4
BTNX Rapid Response hCG	2	-	-	2
Cardinal Health SP Brand combo	12	-	-	12
CONSULT diagnostics hCG Combo	10	-	-	10
Henry Schein One Step + Combo	4	-	-	4
i-STAT - moderate	2	-	-	2
McKesson hCG Combo Cassette	1	-	-	1
Medline hCG Combo Test Cassette	2	-	-	2
NDC Pro Advantage	1	-	-	1
PSS Select hCG Combo	1	-	-	1
Quidel QuickVue + One-Step	8	-	-	8
Quidel QuickVue One-Step Combo	15	-	-	15
Quidel QuickVue Semi-Q hCG	1	-	-	1
Sekisui OSOM hCG Combo Test	3	-	-	3
Stanbio QUPID Plus	3	-	-	3
TOSOH ST AIA PACK	1	-	-	1

Serum hCG – Qualitative

	Specimen HCG-3		Specimen HCG-4	
ALL METHODS	-	142	142	-
AimStep Combo Pregnancy	-	1	1	-
Alere hCG Cassette	-	1	1	-
Beckman ACCESS / 2 / DxI	-	1	1	-
Beckman Coulter ICON 20 hCG	-	69	69	-
Beckman Coulter ICON 25 hCG	-	4	4	-
BTNX Rapid Response hCG	-	2	2	-
Cardinal Health SP Brand combo	-	12	12	-
CONSULT diagnostics hCG Combo	-	10	10	-
Henry Schein One Step + Combo	-	4	4	-
i-STAT - moderate	-	2	2	-
McKesson hCG Combo Cassette	-	1	1	-
Medline hCG Combo Test Cassette	-	2	2	-
NDC Pro Advantage	-	1	1	-
PSS Select hCG Combo	-	1	1	-
Quidel QuickVue + One-Step	-	8	8	-
Quidel QuickVue One-Step Combo	-	15	15	-
Quidel QuickVue Semi-Q hCG	-	1	1	-
Sekisui OSOM hCG Combo Test	-	3	3	-
Stanbio QUPID Plus	-	3	3	-
TOSOH ST AIA PACK	-	1	1	-

Serum hCG – Qualitative

Specimen HCG-5

Method	*Positive*	*Negative*
ALL METHODS	142	-
AimStep Combo Pregnancy	1	-
Alere hCG Cassette	1	-
Beckman ACCESS / 2 / DxI	1	-
Beckman Coulter ICON 20 hCG	69	-
Beckman Coulter ICON 25 hCG	4	-
BTNX Rapid Response hCG	2	-
Cardinal Health SP Brand combo	12	-
CONSULT diagnostics hCG Combo	10	-
Henry Schein One Step + Combo	4	-
i-STAT - moderate	2	-
McKesson hCG Combo Cassette	1	-
Medline hCG Combo Test Cassette	2	-
NDC Pro Advantage	1	-
PSS Select hCG Combo	1	-
Quidel QuickVue + One-Step	8	-
Quidel QuickVue One-Step Combo	15	-
Quidel QuickVue Semi-Q hCG	1	-
Sekisui OSOM hCG Combo Test	3	-
Stanbio QUPID Plus	3	-
TOSOH ST AIA PACK	1	-

Serum hCG – Quantitative (mIU/mL)

	Specimen HCG-1						Specimen HCG-2					
Method	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	19	238.8	25.9	10.8	241	161 - 317	20	1.4	1.4	98.6	1	0 - 6
	Specimen HCG-3						**Specimen HCG-4**					
All Method	20	1.4	1.3	93.4	1	0 - 6	19	239.5	26.3	11.0	246	160 - 319
	Specimen HCG-5											
All Method	20	1221.9	224.9	18.4	1185	547 - 1897						

Cholesterol, Total (mg/dL)

	Specimen CH-1						Specimen CH-2					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	203	106.4	5.1	4.8	106	95 - 118	206	66.4	17.7	26.7	60	59 - 74
All Alfa Wassermann Reagents	27	108.9	3.2	2.9	109	97 - 120	27	62.6	1.8	2.8	62	56 - 69
All Horiba Pentra Reagents	12	108.3	3.8	3.5	108	97 - 120	12	60.8	2.5	4.1	61	54 - 67
All Roche Reagents	19	105.4	3.4	3.2	105	94 - 116	19	59.0	1.6	2.6	59	53 - 65
Alere Cholestech LDX												
Alere Cholestech LDX - waived	39	112.1	6.2	5.5	112	100 - 124	38	100.0	0.1	0.0	100	90 - 110
All Chemistry Instruments	40	111.9	6.2	5.5	112	100 - 124	39	100.0	0.1	0.0	100	90 - 110
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	26	108.7	3.1	2.9	109	97 - 120	26	62.5	1.7	2.6	62	56 - 69
Beckman AU												
Beckman AU systems	27	103.7	3.9	3.7	105	93 - 115	27	57.3	2.3	4.0	58	51 - 63
Horiba ABX Pentra												
Horiba ABX Pentra 400	12	108.3	3.8	3.5	108	97 - 120	12	60.8	2.5	4.1	61	54 - 67
Roche Integra												
Roche Integra	11	104.5	3.7	3.6	104	94 - 116	11	58.9	1.8	3.0	59	53 - 65
Siemens Healthcare												
Siemens Dimension	29	104.3	3.0	2.9	104	93 - 115	28	57.5	2.8	4.9	57	51 - 64
All Chemistry Instruments	31	104.6	3.2	3.0	104	94 - 116	30	57.7	2.9	5.0	58	51 - 64
VITROS												
VITROS 250,350,400 500,700,750,950	23	100.8	3.7	3.6	102	90 - 111	23	47.1	3.6	7.7	45	42 - 52
All Chemistry Instruments	24	100.8	3.6	3.5	102	90 - 111	24	47.3	3.6	7.6	45	42 - 52

Cholesterol, Total (mg/dL)

	Specimen CH-3						Specimen CH-4					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	163	152.5	4.7	3.1	152	137 - 168	164	260.0	12.5	4.8	258	233 - 286
All Alfa Wassermann Reagents	28	154.3	4.4	2.8	154	138 - 170	28	258.9	7.6	2.9	259	233 - 285
All Horiba Pentra Reagents	12	154.8	5.5	3.6	154	139 - 171	12	256.8	10.1	3.9	255	231 - 283
All Roche Reagents	18	152.1	2.9	1.9	151	136 - 168	19	252.9	5.0	2.0	253	227 - 279
Alere Cholestech LDX												
Alere Cholestech LDX - waived	4	-	-	-	165	145 - 179	4	-	-	-	293	262 - 321
All Chemistry Instruments	5	-	-	-	163	145 - 179	5	-	-	-	292	262 - 321
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	27	154.2	4.4	2.9	154	138 - 170	27	258.7	7.6	2.9	258	232 - 285
Beckman AU												
Beckman AU systems	25	150.1	3.1	2.1	151	135 - 166	26	252.0	9.1	3.6	254	226 - 278
Horiba ABX Pentra												
Horiba ABX Pentra 400	12	154.8	5.5	3.6	154	139 - 171	12	256.8	10.1	3.9	255	231 - 283
Roche Integra												
Roche Integra	11	150.9	4.7	3.1	151	135 - 167	11	252.7	5.9	2.3	253	227 - 279
Siemens Healthcare												
Siemens Dimension	29	150.4	3.9	2.6	150	135 - 166	29	258.0	4.9	1.9	257	232 - 284
All Chemistry Instruments	31	150.6	3.8	2.6	150	135 - 166	31	258.2	5.0	1.9	257	232 - 285
VITROS												
VITROS 250,350,400 500,700,750,950	23	151.9	4.9	3.2	152	136 - 168	23	279.5	12.2	4.4	280	251 - 308
All Chemistry Instruments	24	152.0	4.9	3.2	153	136 - 168	24	280.3	12.5	4.5	281	252 - 309

Cholesterol, Total (mg/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	162	214.1	6.8	3.2	214	192 - 236
All Alfa Wassermann Reagents	27	214.3	6.1	2.9	215	192 - 236
All Horiba Pentra Reagents	12	216.9	8.4	3.9	215	195 - 239
All Roche Reagents	19	212.6	5.8	2.7	212	191 - 234
Alere Cholestech LDX						
Alere Cholestech LDX - waived	4	-	-	-	236	212 - 260
All Chemistry Instruments	5	-	-	-	238	212 - 260
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	26	213.8	5.7	2.7	214	192 - 236
Beckman AU						
Beckman AU systems	26	210.7	5.9	2.8	213	189 - 232
Horiba ABX Pentra						
Horiba ABX Pentra 400	12	216.9	8.4	3.9	215	195 - 239
Roche Integra						
Roche Integra	11	210.5	6.0	2.8	211	189 - 232
Siemens Healthcare						
Siemens Dimension	27	211.7	3.9	1.8	211	190 - 233
All Chemistry Instruments	29	211.9	3.8	1.8	211	190 - 234
VITROS						
VITROS 250,350,400 500,700,750,950	23	216.7	6.8	3.1	215	195 - 239
All Chemistry Instruments	24	217.1	6.8	3.2	216	195 - 239

LDL Cholesterol - Calculated (mg/dL)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	144	35.8	10.1	28.2	35	15 - 56	94	14.8	6.0	40.7	15	2 - 27
Calculated-Trig/5												
Alere Cholestech LDX - waived	34	49.4	5.2	10.4	50	34 - 65	3	-	-	-	44	2 - 27
Alfa Wassermann ACE Alera/Axcel	17	35.8	4.9	13.7	35	25 - 47	17	17.3	2.3	13.1	18	12 - 23
Beckman AU systems	18	30.9	4.9	15.9	31	21 - 41	18	14.8	3.0	20.3	15	8 - 21
Siemens Dimension	13	26.9	5.1	19.0	26	16 - 38	13	12.1	4.1	34.2	12	3 - 21
VITROS 250,350,400 500,700,750,950	18	25.6	4.2	16.5	27	17 - 34	7	-	-	-	1	2 - 27
All Chemistry Instruments	137	35.9	10.2	28.4	35	15 - 57	89	14.8	5.9	40.1	15	2 - 27

	Specimen CH-3						Specimen CH-4					
All Method	110	48.1	10.2	21.2	49	27 - 69	107	151.8	16.7	11.0	151	106 - 198
Calculated-Trig/5												
Alere Cholestech LDX - waived	3	-	-	-	62	27 - 69	3	-	-	-	206	106 - 198
Alfa Wassermann ACE Alera/Axcel	17	56.2	5.9	10.5	57	39 - 74	17	145.3	7.1	4.9	145	101 - 189
Beckman AU systems	18	45.6	6.9	15.2	46	31 - 60	18	134.0	8.9	6.6	137	93 - 175
Siemens Dimension	13	41.8	7.3	17.5	41	27 - 57	13	174.8	6.9	3.9	173	122 - 228
VITROS 250,350,400 500,700,750,950	18	38.9	7.0	18.1	40	24 - 53	17	158.3	10.2	6.4	157	110 - 206
All Chemistry Instruments	104	47.8	10.4	21.7	47	27 - 69	101	151.7	17.0	11.2	151	106 - 198

	Specimen CH-5					
All Method	101	67.1	15.1	22.5	68	36 - 98
Calculated-Trig/5						
Alere Cholestech LDX - waived	1	-	-	-	73	36 - 97
Alfa Wassermann ACE Alera/Axcel	17	80.8	8.6	10.6	83	56 - 105
Beckman AU systems	18	64.3	9.6	14.9	67	45 - 84
Siemens Dimension	13	62.3	8.5	13.6	61	43 - 82
VITROS 250,350,400 500,700,750,950	15	47.3	8.7	18.4	46	29 - 65
All Chemistry Instruments	96	66.9	15.0	22.5	67	36 - 97

LDL Cholesterol - Direct (mg/dL)

Method	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	62	39.8	8.7	21.9	39	22 - 58	62	22.9	5.0	21.8	23	12 - 33
Alfa Wass. ACE HDL-C / LDL-C												
Alfa Wassermann ACE Alera/Axcel	10	38.8	1.9	5.0	39	27 - 51	10	22.2	2.2	9.8	23	15 - 29
Beckman AU Direct HDL / LDL												
Beckman AU systems	13	31.0	1.5	4.9	31	21 - 41	13	18.0	0.9	5.1	18	12 - 24
Roche LDL Direct												
All Chemistry Instruments	11	54.8	2.0	3.6	55	38 - 72	11	31.6	0.9	2.8	32	22 - 42
Siemens Automated LDL												
Siemens Dimension	12	39.8	2.8	7.0	40	27 - 52	12	23.2	1.9	8.4	24	16 - 31

Method	Specimen CH-3 Labs	Mean	SD	CV	Median	Range	Specimen CH-4 Labs	Mean	SD	CV	Median	Range
All Method	62	56.0	12.1	21.5	55	31 - 81	62	119.6	22.8	19.1	121	73 - 166
Alfa Wass. ACE HDL-C / LDL-C												
Alfa Wassermann ACE Alera/Axcel	10	54.4	3.6	6.7	54	38 - 71	10	119.4	10.3	8.6	119	83 - 156
Beckman AU Direct HDL / LDL												
Beckman AU systems	13	43.8	2.0	4.5	44	30 - 57	13	92.7	7.5	8.1	94	64 - 121
Roche LDL Direct												
All Chemistry Instruments	11	77.2	1.9	2.4	77	54 - 101	11	153.9	6.1	4.0	154	107 - 201
Siemens Automated LDL												
Siemens Dimension	12	56.1	4.0	7.2	55	39 - 73	12	123.8	6.1	5.0	124	86 - 161

Method	Specimen CH-5 Labs	Mean	SD	CV	Median	Range
All Method	62	77.7	16.7	21.5	76	44 - 112
Alfa Wass. ACE HDL-C / LDL-C						
Alfa Wassermann ACE Alera/Axcel	10	75.0	4.4	5.9	74	52 - 98
Beckman AU Direct HDL / LDL						
Beckman AU systems	13	61.6	3.1	5.0	61	43 - 81
Roche LDL Direct						
All Chemistry Instruments	11	108.0	3.2	3.0	109	75 - 141
Siemens Automated LDL						
Siemens Dimension	12	77.5	4.8	6.1	76	54 - 101

Cholesterol, HDL (mg/dL)

	Specimen CH-1						Specimen CH-2					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	200	47.1	6.5	13.9	48	32 - 62	198	24.3	4.6	19.0	26	17 - 32
All Dex-Sulfate 50,000 MW Methods	38	38.2	4.4	11.6	38	26 - 50	39	17.1	3.5	20.7	15	11 - 23
All Direct Methods	118	49.4	5.2	10.6	49	34 - 65	115	26.4	2.7	10.3	27	18 - 35
Alere Cholestech LDX												
Alere Cholestech LDX - waived	37	38.1	4.4	11.6	38	26 - 50	38	16.8	3.1	18.4	15	11 - 22
All Chemistry Instruments	38	38.2	4.4	11.6	38	26 - 50	39	17.1	3.5	20.7	15	11 - 23
Alfa Wass. ACE HDL-C / LDL-C												
Alfa Wassermann ACE Alera/Axcel	19	47.5	3.1	6.6	48	33 - 62	19	26.7	1.7	6.5	27	18 - 35
Beckman AU Direct HDL / LDL												
Beckman AU systems	21	47.3	3.3	7.0	47	33 - 62	21	25.0	1.3	5.4	25	17 - 33
Horiba ABX Pentra												
Horiba ABX Pentra 400	12	45.4	2.9	6.5	47	31 - 60	12	24.1	1.5	6.2	24	16 - 32
Roche HDL Direct												
All Chemistry Instruments	15	54.1	1.8	3.3	54	37 - 71	15	27.7	1.0	3.5	28	19 - 36
Siemens Automated HDL												
Siemens Dimension	27	54.2	1.9	3.5	54	37 - 71	27	29.0	1.3	4.6	29	20 - 38
All Chemistry Instruments	29	54.4	2.0	3.7	54	38 - 71	29	29.1	1.3	4.6	29	20 - 38
VITROS dHDL Slide												
VITROS 250,350,400 500,700,750,950	17	48.4	2.1	4.3	49	33 - 63	17	25.6	1.4	5.3	26	17 - 34
All Chemistry Instruments	18	48.3	2.1	4.3	49	33 - 63	18	25.6	1.3	5.2	26	17 - 34

Cholesterol, HDL (mg/dL)

	Specimen CH-3						Specimen CH-4					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	163	72.7	7.2	9.9	72	50 - 95	163	77.0	13.6	17.6	82	53 - 101
All Dex-Sulfate 50,000 MW Methods	5	-	-	-	69	48 - 90	5	-	-	-	59	40 - 76
All Direct Methods	117	72.5	7.8	10.7	70	50 - 95	117	74.7	14.6	19.5	81	52 - 98
Alere Cholestech LDX												
Alere Cholestech LDX - waived	4	-	-	-	68	50 - 95	4	-	-	-	59	53 - 101
All Chemistry Instruments	5	-	-	-	69	48 - 90	5	-	-	-	59	40 - 76
Alfa Wass. ACE HDL-C / LDL-C												
Alfa Wassermann ACE Alera/Axcel	19	66.7	4.1	6.2	67	46 - 87	19	83.5	3.3	4.0	83	58 - 109
Beckman AU Direct HDL / LDL												
Beckman AU systems	19	69.6	1.9	2.8	70	48 - 91	21	87.5	5.1	5.9	86	61 - 114
Horiba ABX Pentra												
Horiba ABX Pentra 400	12	66.2	3.9	5.9	68	46 - 87	12	88.1	4.9	5.5	88	61 - 115
Roche HDL Direct												
All Chemistry Instruments	15	80.9	3.0	3.7	81	56 - 106	15	65.9	1.4	2.1	66	46 - 86
Siemens Automated HDL												
Siemens Dimension	27	79.2	3.2	4.0	79	55 - 103	27	56.7	2.3	4.0	57	39 - 74
All Chemistry Instruments	28	79.3	3.2	4.0	79	55 - 104	29	56.9	2.3	4.1	57	39 - 75
VITROS dHDL Slide												
VITROS 250,350,400 500,700,750,950	17	76.3	3.6	4.7	77	53 - 100	17	85.7	5.4	6.3	84	59 - 112
All Chemistry Instruments	18	76.2	3.5	4.6	77	53 - 100	18	85.4	5.4	6.4	84	59 - 112

Cholesterol, HDL (mg/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	159	105.0	10.7	10.2	105	73 - 137
All Dex-Sulfate 50,000 MW Methods	4	-	-	-	100	70 - 130
All Direct Methods	115	103.6	10.1	9.8	104	72 - 135
Alere Cholestech LDX						
Alere Cholestech LDX - waived	3	-	-	-	100	73 - 137
All Chemistry Instruments	4	-	-	-	100	70 - 130
Alfa Wass. ACE HDL-C / LDL-C						
Alfa Wassermann ACE Alera/Axcel	19	93.1	6.6	7.1	93	65 - 121
Beckman AU Direct HDL / LDL						
Beckman AU systems	21	103.0	6.1	5.9	102	72 - 134
Horiba ABX Pentra						
Horiba ABX Pentra 400	12	95.9	5.6	5.8	98	67 - 125
Roche HDL Direct						
All Chemistry Instruments	15	115.5	3.8	3.3	115	80 - 151
Siemens Automated HDL						
Siemens Dimension	27	111.7	4.0	3.5	111	78 - 146
All Chemistry Instruments	29	111.7	3.8	3.4	111	78 - 146
VITROS dHDL Slide						
VITROS 250,350,400 500,700,750,950	17	118.1	9.0	7.7	118	82 - 154
All Chemistry Instruments	18	117.3	9.3	7.9	118	82 - 153

Triglycerides (mg/dL)

	Specimen CH-1						Specimen CH-2					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	200	125.5	7.0	5.6	126	94 - 157	204	88.6	5.9	6.6	89	66 - 111
All Alfa Wassermann Reagents	26	127.6	5.5	4.3	127	95 - 160	28	93.4	5.0	5.3	93	70 - 117
All Horiba Pentra Reagents	12	128.7	4.5	3.5	129	96 - 161	12	91.8	4.2	4.6	93	68 - 115
All Roche Reagents	17	124.5	3.0	2.4	126	93 - 156	18	90.8	3.3	3.6	91	68 - 114
Alere Cholestech LDX												
Alere Cholestech LDX - waived	36	127.0	6.9	5.4	127	95 - 159	37	89.5	3.3	3.7	90	67 - 112
All Chemistry Instruments	37	126.9	6.8	5.4	127	95 - 159	38	89.6	3.2	3.6	90	67 - 112
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	25	127.4	5.6	4.4	127	95 - 160	27	93.2	5.0	5.3	93	69 - 117
Beckman AU												
Beckman AU systems	27	124.1	3.5	2.9	125	93 - 156	27	87.4	2.9	3.3	88	65 - 110
Horiba ABX Pentra												
Horiba ABX Pentra 400	12	128.7	4.5	3.5	129	96 - 161	12	91.8	4.2	4.6	93	68 - 115
Roche Integra												
Roche Integra	10	125.8	6.5	5.1	125	94 - 158	10	91.4	4.1	4.4	92	68 - 115
Siemens Healthcare												
Siemens Dimension	29	115.8	3.2	2.8	116	86 - 145	29	79.1	2.3	2.9	79	59 - 99
All Chemistry Instruments	31	116.6	4.6	4.0	117	87 - 146	29	79.1	2.3	2.9	79	59 - 99
VITROS												
VITROS 250,350,400 500,700,750,950	23	132.7	3.4	2.6	134	99 - 166	23	91.6	2.8	3.1	92	68 - 115
All Chemistry Instruments	24	132.3	3.9	2.9	134	99 - 166	23	91.6	2.8	3.1	92	68 - 115

Triglycerides (mg/dL)

	Specimen CH-3						Specimen CH-4					
Reagent/Instrument	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	165	160.9	9.0	5.6	160	120 - 202	165	151.5	9.9	6.6	150	113 - 190
All Alfa Wassermann Reagents	28	159.8	5.8	3.6	160	119 - 200	28	152.8	5.5	3.6	153	114 - 191
All Horiba Pentra Reagents	12	163.0	3.4	2.1	163	122 - 204	12	149.0	2.9	1.9	149	111 - 187
All Roche Reagents	18	157.8	5.5	3.5	156	118 - 198	18	150.4	5.2	3.5	151	112 - 188
Alere Cholestech LDX												
Alere Cholestech LDX - waived	4	-	-	-	162	121 - 203	4	-	-	-	166	128 - 214
All Chemistry Instruments	5	-	-	-	163	121 - 203	5	-	-	-	165	128 - 214
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	27	159.7	5.9	3.7	160	119 - 200	27	152.6	5.5	3.6	153	114 - 191
Beckman AU												
Beckman AU systems	27	160.0	4.6	2.9	161	120 - 201	27	147.7	4.3	2.9	149	110 - 185
Horiba ABX Pentra												
Horiba ABX Pentra 400	12	163.0	3.4	2.1	163	122 - 204	12	149.0	2.9	1.9	149	111 - 187
Roche Integra												
Roche Integra	10	158.2	7.1	4.5	155	118 - 198	10	150.2	6.7	4.5	149	112 - 188
Siemens Healthcare												
Siemens Dimension	28	153.1	2.8	1.9	153	114 - 192	29	141.1	3.4	2.4	141	105 - 177
All Chemistry Instruments	29	152.7	3.5	2.3	153	114 - 191	31	142.1	5.1	3.6	141	106 - 178
VITROS												
VITROS 250,350,400 500,700,750,950	23	176.5	4.9	2.8	177	132 - 221	23	169.0	4.4	2.6	169	126 - 212
All Chemistry Instruments	24	176.3	4.9	2.8	177	132 - 221	24	168.8	4.4	2.6	169	126 - 211

Triglycerides (mg/dL)

Specimen CH-5

Reagent/Instrument	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	165	208.5	14.9	7.2	205	156 - 261
All Alfa Wassermann Reagents	28	202.4	6.6	3.3	203	151 - 253
All Horiba Pentra Reagents	12	206.7	5.0	2.4	206	155 - 259
All Roche Reagents	18	196.6	7.3	3.7	197	147 - 246
Alere Cholestech LDX						
Alere Cholestech LDX - waived	4	-	-	-	221	163 - 273
All Chemistry Instruments	5	-	-	-	219	163 - 273
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	27	202.1	6.6	3.3	202	151 - 253
Beckman AU						
Beckman AU systems	26	207.8	4.8	2.3	208	155 - 260
Horiba ABX Pentra						
Horiba ABX Pentra 400	12	206.7	5.0	2.4	206	155 - 259
Roche Integra						
Roche Integra	10	197.7	7.3	3.7	197	148 - 248
Siemens Healthcare						
Siemens Dimension	28	200.3	3.0	1.5	200	150 - 251
All Chemistry Instruments	29	200.9	4.4	2.2	200	150 - 252
VITROS						
VITROS 250,350,400 500,700,750,950	23	237.7	6.9	2.9	239	178 - 298
All Chemistry Instruments	24	237.6	6.8	2.9	239	178 - 297

Acetaminophen (µg/mL)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	48.30	0.85	1.8	48.3	36.2 - 60.4	5	18.75	0.49	2.6	18.8	14.0 - 23.5
	Specimen CH-3						**Specimen CH-4**					
All Method	5	78.35	0.49	0.6	78.4	58.7 - 98.0	5	0.10	0.14	141.4	0.1	0.0 - 0.2
	Specimen CH-5											
All Method	5	127.15	5.16	4.1	127.2	95.3 - 159.0						

Carbamazepine (µg/mL)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	6	6.40	0.56	8.7	6.3	4.8 - 8.0	6	3.20	0.20	6.3	3.2	2.4 - 4.0
	Specimen CH-3						**Specimen CH-4**					
All Method	6	9.53	0.45	4.7	9.5	7.1 - 12.0	6	3.37	0.12	3.4	3.3	2.5 - 4.3
	Specimen CH-5											
All Method	6	13.87	0.71	5.1	14.0	10.4 - 17.4						

Digoxin (ng/mL)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	12	1.20	0.15	12.7	1.3	0.9 - 1.5	12	0.74	0.11	15.3	0.8	0.5 - 1.0
	Specimen CH-3						**Specimen CH-4**					
All Method	12	1.71	0.22	12.8	1.8	1.3 - 2.1	12	0.67	0.15	22.3	0.7	0.4 - 0.9
	Specimen CH-5											
All Method	12	2.53	0.26	10.1	2.6	2.0 - 3.1						

Gentamicin (µg/mL)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	3.00	0.01	0.0	3.0	2.2 - 3.8	5	0.75	0.07	9.4	0.8	0.5 - 1.0
	Specimen CH-3						**Specimen CH-4**					
All Method	5	5.05	0.21	4.2	5.1	3.7 - 6.4	5	0.60	0.01	0.0	0.6	0.4 - 0.8
	Specimen CH-5											
All Method	5	8.40	0.01	0.0	8.4	6.3 - 10.5						

Lithium (mmol/L)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	0.75	0.07	9.4	0.8	0.4 - 1.1	5	0.15	0.07	47.1	0.2	0.0 - 0.5
	Specimen CH-3						**Specimen CH-4**					
All Method	5	1.40	0.01	0.0	1.4	1.1 - 1.7	5	0.20	0.01	0.0	0.2	0.0 - 0.5
	Specimen CH-5											
All Method	5	2.30	0.01	0.0	2.3	1.8 - 2.8						

Phenobarbital (µg/mL)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	16.15	1.63	10.1	16.2	12.9 - 19.4	5	5.80	0.71	12.2	5.8	4.6 - 7.0
	Specimen CH-3						**Specimen CH-4**					
All Method	5	25.95	1.20	4.6	26.0	20.7 - 31.2	5	19.00	1.70	8.9	19.0	15.2 - 22.8
	Specimen CH-5											
All Method	5	39.65	0.78	2.0	39.7	31.7 - 47.6						

Phenytoin (µg/mL)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	11	13.02	0.36	2.7	13.0	9.7 - 16.3	11	6.90	0.30	4.3	7.0	5.1 - 8.7
	Specimen CH-3						**Specimen CH-4**					
All Method	11	19.34	1.05	5.4	19.0	14.5 - 24.2	11	7.62	0.78	10.2	7.7	5.7 - 9.6
	Specimen CH-5											
All Method	11	27.84	2.02	7.3	27.8	20.8 - 34.8						

Salicylate (mg/dL)

Method	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	1	-	-	-	8.6	Not graded	1	-	-	-	22.9	Not graded
	Specimen CH-3						**Specimen CH-4**					
All Method	1	-	-	-	18.9	Not graded	1	-	-	-	12.9	Not graded
	Specimen CH-5											
All Method	1	-	-	-	17.5	Not graded						

Theophylline (µg/mL)

Method	Specimen CH-1 Labs	Mean	SD	CV	Median	Range	Specimen CH-2 Labs	Mean	SD	CV	Median	Range
All Method	5	16.75	0.07	0.4	16.8	12.5 - 21.0	5	8.95	0.35	4.0	9.0	6.7 - 11.2
	Specimen CH-3						**Specimen CH-4**					
All Method	5	25.05	0.92	3.7	25.1	18.7 - 31.4	5	9.75	0.49	5.1	9.8	7.3 - 12.2
	Specimen CH-5											
All Method	5	34.35	0.07	0.2	34.4	25.7 - 43.0						

Valproic Acid (µg/mL)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	6	49.48	3.41	6.9	50.7	37.1 - 61.9	6	29.63	2.29	7.7	30.0	22.2 - 37.1
	Specimen CH-3						**Specimen CH-4**					
All Method	6	67.70	4.66	6.9	69.1	50.7 - 84.7	6	32.43	2.17	6.7	32.5	24.3 - 40.6
	Specimen CH-5											
All Method	6	93.03	2.70	2.9	92.3	69.7 - 116.3						

Vancomycin (µg/mL)

	Specimen CH-1						Specimen CH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	17.10	0.01	0.0	17.1	12.8 - 21.4	5	2.70	0.57	21.0	2.7	2.0 - 3.4
	Specimen CH-3						**Specimen CH-4**					
All Method	5	29.70	0.01	0.0	29.7	22.2 - 37.2	5	1.55	0.07	4.6	1.6	1.1 - 2.0
	Specimen CH-5											
All Method	5	47.50	1.27	2.7	47.5	35.6 - 59.4						

Apolipoprotein A1 (mg/dL)

	Specimen LP-1						Specimen LP-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	-	Not graded	1	-	-	-	-	Not graded

Apolipoprotein B (mg/dL)

	Specimen LP-1						Specimen LP-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	62.8	9.1	14.6	60	43 - 82	5	116.3	22.1	19.0	108	81 - 152

Neonatal Bilirubin, Total (mg/dL)

	Specimen NB-1						Specimen NB-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	30	16.97	0.99	5.8	17.4	13.5 - 20.4	29	11.67	0.68	5.8	11.9	9.3 - 14.1
No Reagent Required												
Bilirubinometer / Unistat	15	17.59	0.33	1.9	17.6	14.0 - 21.2	15	12.05	0.31	2.6	12.1	9.6 - 14.5
All Chemistry Instruments	23	17.27	0.78	4.5	17.5	13.8 - 20.8	23	11.83	0.62	5.3	12.0	9.4 - 14.3

	Specimen NB-3						Specimen NB-4					
All Method	30	0.07	0.11	164.2	0.0	0.0 - 0.5	30	18.65	0.94	5.0	18.9	14.9 - 22.4
No Reagent Required												
Bilirubinometer / Unistat	15	0.00	0.01	0.0	0.0	0.0 - 0.4	15	19.21	0.36	1.9	19.3	15.3 - 23.1
All Chemistry Instruments	23	0.06	0.12	202.7	0.0	0.0 - 0.5	22	18.97	0.66	3.5	19.1	15.1 - 22.8

	Specimen NB-5					
All Method	28	7.48	0.27	3.6	7.5	5.9 - 9.0
No Reagent Required						
Bilirubinometer / Unistat	15	7.59	0.21	2.7	7.6	6.0 - 9.2
All Chemistry Instruments	23	7.49	0.30	3.9	7.5	5.9 - 9.0

Bilirubin, Direct (mg/dL)

	Specimen NB-1						Specimen NB-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	10	6.53	0.42	6.5	6.6	5.6 - 7.4	10	5.47	1.62	29.6	5.0	2.2 - 8.8
	Specimen NB-3						**Specimen NB-4**					
All Method	10	0.05	0.07	133.3	0.0	0.0 - 0.2	10	4.50	0.33	7.3	4.4	3.8 - 5.2
	Specimen NB-5											
All Method	10	2.15	1.67	77.8	1.6	0.0 - 5.5						

Blood Gases – pH

	Specimen BG-1						Specimen BG-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	11	6.916	0.011	0.2	6.92	6.87 - 6.96	11	7.308	0.008	0.1	7.31	7.26 - 7.35
i-STAT	11	6.916	0.011	0.2	6.92	6.87 - 6.96	11	7.308	0.008	0.1	7.31	7.26 - 7.35
	Specimen BG-3						**Specimen BG-4**					
All Method	11	7.294	0.011	0.2	7.29	7.25 - 7.34	11	7.312	0.004	0.1	7.31	7.27 - 7.36
i-STAT	11	7.294	0.011	0.2	7.29	7.25 - 7.34	11	7.312	0.004	0.1	7.31	7.27 - 7.36
	Specimen BG-5											
All Method	11	6.908	0.011	0.2	6.91	6.86 - 6.95						
i-STAT	11	6.908	0.011	0.2	6.91	6.86 - 6.95						

Blood Gases - pCO_2 (mmHg)

	Specimen BG-1						Specimen BG-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	11	67.30	4.72	7.0	69.3	61.9 - 72.7	11	42.46	2.07	4.9	43.2	37.4 - 47.5
i-STAT	11	67.30	4.72	7.0	69.3	61.9 - 72.7	11	42.46	2.07	4.9	43.2	37.4 - 47.5
	Specimen BG-3						**Specimen BG-4**					
All Method	11	41.26	2.97	7.2	42.4	36.2 - 46.3	11	47.78	2.86	6.0	48.5	42.7 - 52.8
i-STAT	11	41.26	2.97	7.2	42.4	36.2 - 46.3	11	47.78	2.86	6.0	48.5	42.7 - 52.8
	Specimen BG-5											
All Method	11	68.30	4.25	6.2	68.9	62.8 - 73.8						
i-STAT	11	68.30	4.25	6.2	68.9	62.8 - 73.8						

Blood Gases - pO_2 (mmHg)

	Specimen BG-1						Specimen BG-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	11	58.00	5.52	9.5	61.0	41.4 - 74.6	11	164.60	3.36	2.0	164.0	154.5 - 174.7
i-STAT	11	58.00	5.52	9.5	61.0	41.4 - 74.6	11	164.60	3.36	2.0	164.0	154.5 - 174.7
	Specimen BG-3						**Specimen BG-4**					
All Method	11	76.40	4.39	5.8	76.0	63.2 - 89.6	11	194.60	3.91	2.0	195.0	182.8 - 206.4
i-STAT	11	76.40	4.39	5.8	76.0	63.2 - 89.6	11	194.60	3.91	2.0	195.0	182.8 - 206.4
	Specimen BG-5											
All Method	11	59.80	11.17	18.7	64.0	26.2 - 93.4						
i-STAT	11	59.80	11.17	18.7	64.0	26.2 - 93.4						

Blood Gases – Ionized Calcium (mmol/L)

One participant reported results for Blood Gases-Ionized Calcium. The vendor mean assay values for specimens BG-1 through BG-5 are: >2.5 mmol/L, 0.96 mmol/L, 0.6 mmol/L, 1.3 mmol/L, and >2.5 mmolL, respectively.

Blood Gases - Chloride (mmol/L)

One participant reported results for Blood Gases-Chloride. The vendor mean assay values for specimens BG-1 through BG-5 are: 111 mmol/L, 97 mmol/L, 80 mmol/L, 90 mmol/L, and 111 mmol/L, respectively.

Blood Gases - Potassium (mmol/L)

One participant reported results for Blood Gases-Potassium. The vendor mean assay values for specimens BG-1 through BG-5 are: 3.4 mmol/L, 4.6 mmol/L, 2.3 mmol/L, 4.4 mmol/L, and 3.4 mmol/L, respectively.

Blood Gases – Sodium (mmol/L)

One participant reported results for Blood Gases-Sodium. The vendor mean assay values for specimens BG-1 through BG-5 are: 132 mmol/L, 155 mmol/L, 126 mmol/L, 138 mmol/L, and 132 mmol/L, respectively.

Blood Gases – Lactate (mmol/L)

	Specimen BG-1						Specimen BG-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	6	5.00	0.10	2.0	5.0	4.7 - 5.3	6	2.23	0.06	2.6	2.2	2.0 - 2.5
i-STAT	6	5.00	0.10	2.0	5.0	4.7 - 5.3	6	2.23	0.06	2.6	2.2	2.0 - 2.5
	Specimen BG-3						**Specimen BG-4**					
All Method	6	6.43	0.06	0.9	6.4	6.2 - 6.7	6	0.67	0.06	8.7	0.7	0.4 - 0.9
i-STAT	6	6.43	0.06	0.9	6.4	6.2 - 6.7	6	0.67	0.06	8.7	0.7	0.4 - 0.9
	Specimen BG-5											
All Method	6	5.00	0.17	3.5	4.9	4.4 - 5.6						
i-STAT	6	5.00	0.17	3.5	4.9	4.4 - 5.6						

Afinion Glycohemoglobin (percent)

	Specimen AFN-1						Specimen AFN-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	87	6.27	0.12	2.0	6.3	5.8 - 6.7	87	8.13	0.15	1.9	8.1	7.6 - 8.7
All Alere Afinion Analyzers	84	6.26	0.12	1.9	6.3	5.8 - 6.7	84	8.12	0.15	1.9	8.1	7.6 - 8.7
Alere Afinion AS100	79	6.26	0.12	2.0	6.3	5.8 - 6.7	80	8.12	0.14	1.8	8.1	7.6 - 8.7

Glycohemoglobin (percent)

	Specimen GH-1						Specimen GH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	143	8.47	0.33	3.9	8.5	7.9 - 9.0	139	5.66	0.20	3.6	5.7	5.3 - 6.0
All Hemoglobin A1c Methods	141	8.47	0.33	3.9	8.5	7.9 - 9.0	137	5.66	0.21	3.6	5.7	5.3 - 6.0
All TOSOH Methods	22	8.41	0.19	2.2	8.5	7.9 - 9.0	22	5.75	0.12	2.1	5.8	5.4 - 6.1
Beckman AU A1c	10	8.04	0.37	4.6	8.0	7.5 - 8.6	10	5.59	0.31	5.5	5.6	5.2 - 6.0
Siemens DCA Vantage	62	8.54	0.25	2.9	8.6	8.0 - 9.1	60	5.63	0.14	2.5	5.6	5.2 - 6.0
Siemens Dimension HB1C	16	8.14	0.23	2.8	8.2	7.6 - 8.7	16	5.68	0.16	2.8	5.7	5.3 - 6.1
TOSOH G8	22	8.41	0.19	2.2	8.5	7.9 - 9.0	22	5.75	0.12	2.1	5.8	5.4 - 6.1

Whole Blood Glucose (mg/dL)

	Specimen WBG-1						Specimen WBG-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	280	203.7	24.3	11.9	209	162 - 245	280	97.2	17.8	18.3	95	77 - 117
All Abbott Methods	33	191.0	11.9	6.2	192	152 - 230	33	84.2	5.6	6.6	85	67 - 102
All Arkray Methods	16	225.3	31.1	13.8	211	180 - 271	16	107.6	3.8	3.5	109	86 - 130
All Bayer Methods	30	166.8	9.7	5.8	168	133 - 201	31	74.5	4.7	6.3	73	59 - 90
All Hemocue Methods	70	221.6	7.3	3.3	222	177 - 266	69	121.1	6.2	5.1	122	96 - 146
All Lifescan Methods	17	225.6	14.9	6.6	229	180 - 271	17	95.6	5.1	5.3	96	76 - 115
All Roche Methods	28	208.4	5.3	2.5	209	166 - 251	28	98.8	2.1	2.2	99	79 - 119
Abbott FreeStyle Lite/Freedom Lite	10	188.4	10.1	5.4	189	150 - 227	10	87.4	3.4	3.9	88	69 - 105
Abbott Precision XceedPro	24	192.7	12.3	6.4	195	154 - 232	24	83.8	5.7	6.8	84	67 - 101
Arkray Platinum	16	225.3	31.1	13.8	211	180 - 271	16	107.6	3.8	3.5	109	86 - 130
Bayer Contour	30	166.8	9.7	5.8	168	133 - 201	31	74.5	4.7	6.3	73	59 - 90
HemoCue Glucose 201	70	221.6	7.3	3.3	222	177 - 266	69	121.1	6.2	5.1	122	96 - 146
Home Diagnostics True Balance / TrueTrack	14	421.4	75.8	18.0	463	337 - 506	13	233.1	28.4	12.2	245	186 - 280
Lifescan One Touch Ultra/2/Mini	15	229.9	8.6	3.8	233	183 - 276	15	96.5	4.4	4.6	96	77 - 116
Medline EvenCare G2 / G3	13	202.2	18.5	9.2	203	161 - 243	12	94.4	6.0	6.3	93	75 - 114
NOVA Biomedical StatStrip	20	174.1	6.2	3.5	174	139 - 209	20	83.3	4.5	5.4	84	66 - 100
Quintet / AC	30	212.1	7.8	3.7	212	169 - 255	31	91.7	6.2	6.8	92	73 - 111
Roche Accu-Chek Aviva	11	184.5	42.2	22.9	202	147 - 222	10	94.4	8.3	8.8	97	75 - 114
Roche Accu-Chek Inform II	10	208.1	4.9	2.4	209	166 - 250	10	98.8	2.3	2.3	99	79 - 119
Roche Accu-Chek Performa	14	209.2	5.4	2.6	209	167 - 252	14	99.1	2.1	2.1	99	79 - 119
True Metrix Pro	13	182.2	7.8	4.3	182	145 - 219	13	80.7	3.9	4.9	81	64 - 97

	Specimen WBG-3						Specimen WBG-4					
All Method	26	308.9	29.0	9.4	307	247 - 371	26	53.8	12.6	23.5	50	41 - 66
All Abbott Methods	1	-	-	-	246	196 - 296	1	-	-	-	43	31 - 55
All Hemocue Methods	1	-	-	-	298	238 - 358	1	-	-	-	88	70 - 106
All Lifescan Methods	12	330.5	17.0	5.1	338	264 - 397	12	47.5	6.7	14.1	46	35 - 60
All Roche Methods	3	-	-	-	300	240 - 360	3	-	-	-	61	48 - 73
Abbott Precision XceedPro	1	-	-	-	246	247 - 371	1	-	-	-	43	41 - 66
HemoCue Glucose 201	1	-	-	-	298	247 - 371	1	-	-	-	88	41 - 66
Lifescan One Touch Ultra/2/Mini	10	330.5	17.0	5.1	338	264 - 397	10	47.5	6.7	14.1	46	35 - 60
Medline EvenCare G2 / G3	1	-	-	-	271	247 - 371	1	-	-	-	51	41 - 66
Roche Accu-Chek Inform II	2	-	-	-	300	247 - 371	2	-	-	-	61	41 - 66
Roche Accu-Chek Performa	1	-	-	-	301	247 - 371	1	-	-	-	60	41 - 66

Whole Blood Glucose (mg/dL) cont'd

Specimen WBG-5

Method	*Labs*	*Mean*	*SD*	*CV*	*Median*	*Range*
All Method	26	95.5	10.2	10.7	98	76 - 115
All Abbott Methods	1	-	-	-	75	60 - 90
All Hemocue Methods	1	-	-	-	121	96 - 146
All Lifescan Methods	12	94.7	4.6	4.9	97	75 - 114
All Roche Methods	3	-	-	-	98	77 - 117
Abbott Precision XceedPro	1	-	-	-	75	76 - 115
HemoCue Glucose 201	1	-	-	-	121	76 - 115
Lifescan One Touch Ultra/2/Mini	10	94.7	4.6	4.9	97	75 - 114
Medline EvenCare G2 / G3	1	-	-	-	88	76 - 115
Roche Accu-Chek Inform II	2	-	-	-	98	76 - 115
Roche Accu-Chek Performa	1	-	-	-	96	76 - 115

C-Peptide (ng/mL)

	Specimen CIP-1						Specimen CIP-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	16.243	0.746	4.6	16.04	14.74 - 17.74	5	0.523	0.087	16.6	0.54	0.34 - 0.70

Insulin (μU/mL)

	Specimen CIP-1						Specimen CIP-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	14	109.66	12.74	11.6	109.1	84.1 - 135.2	15	7.56	1.44	19.0	7.6	4.6 - 10.5
Beckman ACCESS / 2 / DxI	10	101.39	7.96	7.8	100.5	85.4 - 117.4	10	7.63	0.51	6.7	7.5	6.6 - 8.7

Parathyroid Hormone, Intact (pg/mL)

	Specimen CIP-1						Specimen CIP-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	34	113.5	30.4	26.8	113	52 - 175	35	16.0	5.1	32.0	17	5 - 27
All TOSOH Instruments	11	127.5	17.4	13.6	131	92 - 163	11	17.5	2.8	16.2	18	11 - 24
Beckman ACCESS / 2 / DxI	15	108.7	28.4	26.2	106	51 - 166	15	14.9	3.7	24.8	15	7 - 23

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

	Specimen CIP-1						Specimen CIP-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	111	95.39	20.96	22.0	97.5	53.4 - 137.4	111	18.00	6.54	36.3	16.0	4.9 - 31.1
All Roche Instruments	11	72.36	19.15	26.5	60.0	34.0 - 110.7	11	12.14	2.39	19.7	12.1	7.3 - 17.0
All TOSOH Instruments	18	114.01	4.59	4.0	113.7	104.8 - 123.2	18	29.21	2.52	8.6	30.1	24.1 - 34.3
Abbott Architect	8	90.84	7.92	8.7	93.2	74.9 - 106.7	8	13.04	1.08	8.3	13.3	10.8 - 15.3
Beckman ACCESS / 2 / DxI	45	99.85	11.27	11.3	98.8	77.3 - 122.4	45	15.44	2.66	17.3	15.3	10.1 - 20.8
Qualigen FastPack	6	57.47	5.94	10.3	59.9	45.5 - 69.4	6	22.83	7.65	33.5	19.8	7.5 - 38.2
Roche cobas e 411	7	68.00	16.83	24.8	60.0	34.3 - 101.7	7	11.87	3.01	25.4	11.5	5.8 - 17.9
Siemens Dimension	6	69.05	1.85	2.7	68.9	65.3 - 72.8	6	16.13	1.30	8.1	16.3	13.5 - 18.8
TOSOH AIA PACK	7	113.24	4.20	3.7	114.1	104.8 - 121.7	7	29.19	1.40	4.8	30.1	26.3 - 32.0
TOSOH ST AIA PACK	11	114.50	4.96	4.3	113.3	104.5 - 124.5	11	29.22	3.11	10.6	30.7	23.0 - 35.5

Bioavailable Testosterone (ng/dL)

	Specimen SHB-1						Specimen SHB-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	162	Not graded	1	-	-	-	113	Not graded

Free Testosterone (pg/mL)

	Specimen SHB-1						Specimen SHB-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	7.05	2.19	31.1	7.1	2.6 - 11.5	5	5.60	2.40	42.9	5.6	0.7 - 10.5

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

	Specimen SHB-1						Specimen SHB-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	15	62.043	5.832	9.4	61.50	44.54 - 79.54	15	38.058	3.526	9.3	37.80	27.48 - 48.64
Beckman ACCESS / 2 / DxI	8	63.338	6.114	9.7	62.25	44.99 - 81.68	8	38.988	3.112	8.0	38.45	29.65 - 48.33

Testosterone (ng/dL)

	Specimen SHB-1						Specimen SHB-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	517.7	132.9	25.7	467	362 - 674	19	294.3	94.7	32.2	259	206 - 383
All Siemens Immulite Instruments	7	735.3	66.5	9.0	733	514 - 956	7	446.0	85.6	19.2	470	312 - 580
Beckman ACCESS / 2 / DxI	8	428.1	33.9	7.9	418	299 - 557	8	234.5	18.6	7.9	229	164 - 305
Siemens Immulite/1000	5	735.3	66.5	9.0	733	514 - 956	5	446.0	85.6	19.2	470	312 - 580

BNP (pg/mL)

	Specimen CK-1						Specimen CK-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	33	2032.59	741.66	36.5	1110.0	549.2 - 3516.0	33	63.07	19.58	31.0	59.9	23.9 - 102.3
Alere Triage	18	1061.50	140.17	13.2	1015.0	781.1 - 1341.9	18	64.02	9.12	14.2	61.9	45.7 - 82.3
i-STAT - moderate	10	2603.00	240.59	9.2	2562.0	1952.2 - 3253.8	10	51.00	5.60	11.0	52.5	38.2 - 63.8
	Specimen CK-3						**Specimen CK-4**					
All Method	24	3743.83	1341.53	35.8	2095.0	1060.7 - 6426.9	24	4510.92	952.54	21.1	3980.0	2605.8 - 6416.0
Alere Triage	12	1738.33	354.03	20.4	1635.0	1030.2 - 2446.4	12	3120.00	680.65	21.8	2810.0	1758.7 - 4481.3
i-STAT - moderate	10	4588.00	184.24	4.0	4572.5	3441.0 - 5735.0	10	5000.00	0.01	0.0	5000.0	3750.0 - 6250.0
	Specimen CK-5											
All Method	24	1096.55	368.71	33.6	663.0	359.1 - 1834.0						
Alere Triage	12	562.50	102.43	18.2	542.5	357.6 - 767.4						
i-STAT - moderate	10	1327.00	62.92	4.7	1306.0	995.2 - 1658.8						

CK-MB (ng/mL)

	Specimen CK-1						Specimen CK-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	27	29.95	6.81	22.7	20.9	9.5 - 50.4	27	5.79	1.39	24.0	4.2	1.6 - 10.0
Alere Triage	15	10.15	2.26	22.3	9.7	3.3 - 17.0	15	1.73	0.39	22.4	1.7	0.5 - 2.9
Beckman ACCESS / 2 / DxI	10	34.33	1.74	5.1	33.5	29.1 - 39.6	10	6.79	0.40	5.9	6.8	5.5 - 8.0
	Specimen CK-3						**Specimen CK-4**					
All Method	27	55.06	11.84	21.5	35.7	19.5 - 90.6	27	106.37	25.21	23.7	71.1	30.7 - 182.1
Alere Triage	15	17.93	3.13	17.4	17.4	8.5 - 27.4	15	33.17	3.94	11.9	32.7	21.3 - 45.0
Beckman ACCESS / 2 / DxI	10	61.93	2.39	3.9	61.7	54.7 - 69.2	10	119.46	3.13	2.6	119.8	110.0 - 128.9
	Specimen CK-5											
All Method	27	17.31	4.01	23.2	12.6	5.2 - 29.4						
Alere Triage	15	5.49	1.09	19.9	5.6	2.2 - 8.8						
Beckman ACCESS / 2 / DxI	10	20.00	0.73	3.6	19.8	17.8 - 22.2						

D-Dimer (ng/mL)

	Specimen CK-1						Specimen CK-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	30	615.5	12.0	2.0	907	430 - 801	30	419.5	24.7	5.9	633	293 - 546
Alere Triage	20	911.1	88.9	9.8	922	637 - 1185	20	664.0	83.7	12.6	640	464 - 864
Instrumentation Laborartory (IL) ACL Series	5	615.5	12.0	2.0	616	430 - 801	5	419.5	24.7	5.9	420	293 - 546
	Specimen CK-3						**Specimen CK-4**					
All Method	17	-	-	-	1180	Not graded	17	-	-	-	1890	Not graded
Alere Triage	15	1250.0	112.1	9.0	1180	875 - 1625	15	1904.7	247.7	13.0	1890	1333 - 2477
Instrumentation Laborartory (IL) ACL Series	1	-	-	-	762	Not graded	1	-	-	-	1011	Not graded
	Specimen CK-5											
All Method	17	-	-	-	746	Not graded						
Alere Triage	15	746.5	70.4	9.4	748	522 - 971						
Instrumentation Laborartory (IL) ACL Series	1	-	-	-	506	Not graded						

D-Dimer (µgFEU/mL)

	Specimen CK-1						Specimen CK-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	13	0.4513	0.0368	8.2	0.435	0.315 - 0.587	13	0.1975	0.0249	12.6	0.195	0.138 - 0.257
Beckman AU systems	11	0.4513	0.0368	8.2	0.435	0.315 - 0.587	11	0.1975	0.0249	12.6	0.195	0.138 - 0.257
	Specimen CK-3						**Specimen CK-4**					
All Method	13	0.7525	0.0509	6.8	0.735	0.526 - 0.979	13	1.3738	0.0674	4.9	1.370	0.961 - 1.786
Beckman AU systems	11	0.7525	0.0509	6.8	0.735	0.526 - 0.979	11	1.3738	0.0674	4.9	1.370	0.961 - 1.786
	Specimen CK-5											
All Method	13	0.3050	0.0334	10.9	0.300	0.213 - 0.397						
Beckman AU systems	11	0.3050	0.0334	10.9	0.300	0.213 - 0.397						

Myoglobin (ng/mL)

	Specimen CK-1						Specimen CK-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	16	125.80	29.03	23.1	130.0	67.7 - 183.9	16	29.53	4.53	15.4	32.2	20.4 - 38.6
Alere Triage	12	133.67	12.42	9.3	132.0	93.5 - 173.8	12	32.70	5.14	15.7	32.4	22.4 - 43.0
	Specimen CK-3						**Specimen CK-4**					
All Method	16	217.53	52.63	24.2	217.5	112.2 - 322.8	16	421.63	123.45	29.3	342.0	174.7 - 668.6
Alere Triage	12	213.25	28.59	13.4	217.5	149.2 - 277.3	12	356.27	38.90	10.9	342.0	249.3 - 463.2
	Specimen CK-5											
All Method	16	75.03	17.51	23.3	81.6	39.9 - 110.1						
Alere Triage	12	85.01	14.27	16.8	85.0	56.4 - 113.6						

NT-proBNP (pg/mL)

	Specimen CK-1						Specimen CK-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	7	742.0	325.3	43.8	655	91 - 1393	7	32.7	19.7	60.2	25	0 - 72
Siemens Dimension NT-proBNP	5	562.0	131.5	23.4	562	298 - 826	5	21.5	4.9	23.0	22	11 - 32
	Specimen CK-3						**Specimen CK-4**					
All Method	5	1201.0	195.2	16.2	1201	810 - 1592	5	2643.5	327.4	12.4	2644	1982 - 3305
Siemens Dimension NT-proBNP	5	1201.0	195.2	16.2	1201	810 - 1592	5	2643.5	327.4	12.4	2644	1982 - 3305
	Specimen CK-5											
All Method	5	260.0	65.1	25.0	260	129 - 391						
Siemens Dimension NT-proBNP	5	260.0	65.1	25.0	260	129 - 391						

Troponin I (ng/mL)

Method	Specimen CK-1 Labs	Mean	SD	CV	Median	Range	Specimen CK-2 Labs	Mean	SD	CV	Median	Range
All Method	47	4.942	5.179	104.8	2.73	0.00 - 15.31	47	0.110	0.109	99.8	0.06	0.00 - 0.33
All HS Troponin I Methods	13	15.147	9.706	64.1	14.53	0.00 - 34.56	13	0.368	0.319	86.5	0.29	0.00 - 1.01
All Non-HS Troponin I Methods	16	2.561	0.284	11.1	2.62	1.79 - 3.33	16	0.067	0.014	21.3	0.07	0.03 - 0.10
Alere Triage	15	2.381	0.650	27.3	2.33	1.08 - 3.69	15	0.050	0.001	0.0	0.05	0.03 - 0.07
Beckman ACCESS / 2 / DxI	10	2.751	0.147	5.3	2.73	1.92 - 3.58	10	0.076	0.005	6.8	0.08	0.05 - 0.10
Siemens Dimension	10	2.264	0.090	4.0	2.25	1.58 - 2.95	10	0.050	0.010	20.0	0.05	0.03 - 0.07

Method	Specimen CK-3 Labs	Mean	SD	CV	Median	Range	Specimen CK-4 Labs	Mean	SD	CV	Median	Range
All Method	47	11.568	10.657	92.1	6.26	0.00 - 32.89	47	23.060	19.570	84.9	14.62	0.00 - 62.21
All HS Troponin I Methods	13	31.675	16.246	51.3	31.49	0.00 - 64.17	13	59.285	31.720	53.5	45.20	0.00 - 122.73
All Non-HS Troponin I Methods	16	5.499	0.871	15.8	5.91	3.75 - 7.25	16	12.817	3.136	24.5	14.38	6.54 - 19.09
Alere Triage	15	6.844	1.551	22.7	6.38	3.74 - 9.95	15	13.732	3.039	22.1	13.70	7.65 - 19.81
Beckman ACCESS / 2 / DxI	10	6.128	0.290	4.7	6.10	4.28 - 7.97	10	15.122	0.780	5.2	15.03	10.58 - 19.66
Siemens Dimension	10	4.480	0.107	2.4	4.43	3.13 - 5.83	10	9.042	0.229	2.5	9.01	6.32 - 11.76

Method	Specimen CK-5 Labs	Mean	SD	CV	Median	Range
All Method	47	2.219	2.581	116.3	1.16	0.00 - 7.39
All HS Troponin I Methods	13	7.379	5.227	70.8	6.46	0.00 - 17.84
All Non-HS Troponin I Methods	16	1.199	0.104	8.7	1.19	0.83 - 1.56
Alere Triage	15	0.746	0.218	29.2	0.70	0.31 - 1.19
Beckman ACCESS / 2 / DxI	10	1.259	0.074	5.9	1.25	0.88 - 1.64
Siemens Dimension	10	1.112	0.049	4.4	1.13	0.77 - 1.45

Troponin T (ng/mL)

	Specimen CK-1						Specimen CK-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	0.2950	0.1089	36.9	0.295	0.077 - 0.513	5	0.0690	0.0339	49.2	0.069	0.001 - 0.137
	Specimen CK-3						**Specimen CK-4**					
All Method	5	0.4790	0.2673	55.8	0.479	0.000 - 1.014	5	0.9240	0.4327	46.8	0.924	0.058 - 1.790
	Specimen CK-5											
All Method	5	0.1830	0.0792	43.3	0.183	0.024 - 0.342						

PSA (ng/mL)

	Specimen PS-1						Specimen PS-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	107	26.282	3.887	14.8	27.05	18.39 - 34.17	111	0.496	0.069	14.0	0.50	0.00 - 1.40
All TOSOH Instruments	25	21.414	1.036	4.8	21.30	14.98 - 27.84	25	0.480	0.035	7.3	0.49	0.00 - 1.38
Abbott Architect	10	23.823	2.011	8.4	23.36	16.67 - 30.97	10	0.372	0.021	5.6	0.38	0.00 - 1.28
Beckman ACCESS / 2 / DxI	18	29.018	2.020	7.0	29.28	20.31 - 37.73	18	0.560	0.027	4.9	0.56	0.00 - 1.46
Beckman ACCESS Hybritech PSA	17	29.156	1.383	4.7	29.14	20.40 - 37.91	17	0.557	0.038	6.9	0.56	0.00 - 1.46
Siemens Dimension TPSA	16	26.721	1.296	4.8	26.79	18.70 - 34.74	17	0.448	0.041	9.2	0.44	0.00 - 1.35
TOSOH AIA PACK	12	21.764	1.607	7.4	21.31	15.23 - 28.30	12	0.482	0.043	9.0	0.49	0.00 - 1.39
TOSOH ST AIA PACK	14	21.444	1.153	5.4	21.31	15.01 - 27.88	13	0.478	0.027	5.5	0.48	0.00 - 1.38

Beta-2 microglobulin

	Specimen TM-1						Specimen TM-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	6	1.287	0.071	5.6	1.28	1.07 - 1.51	6	0.628	0.132	21.0	0.59	0.23 - 1.03

CA 125 (U/mL)

	Specimen TM-1						Specimen TM-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	16	50.4	11.5	22.9	66	27 - 74	16	13.0	3.5	27.3	16	5 - 21
All TOSOH Instruments	12	69.9	3.3	4.7	70	48 - 91	12	15.8	0.9	5.6	16	11 - 21
TOSOH ST AIA PACK	10	69.3	3.1	4.5	69	48 - 91	10	15.7	1.0	6.1	16	10 - 21

CA 15-3 (U/mL)

	Specimen TM-1						Specimen TM-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	11	35.6	19.2	54.0	25	0 - 75	11	16.0	6.3	39.4	14	3 - 29

CA 19-9 (U/mL)

	Specimen TM-1						Specimen TM-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	7	54.7	21.2	38.7	47	12 - 98	7	11.4	1.5	13.2	11	8 - 15

CA 27/29 (U/mL)

	Specimen TM-1						Specimen TM-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	16	141.3	9.6	6.8	142	98 - 184	16	37.9	4.1	10.7	39	26 - 50
All TOSOH Instruments	12	141.3	9.6	6.8	142	98 - 184	12	37.9	4.1	10.7	39	26 - 50
TOSOH ST AIA PACK	10	140.4	10.0	7.1	139	98 - 183	10	37.6	4.3	11.4	38	26 - 49

CEA (ng/mL)

	Specimen TM-1						Specimen TM-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	14	12.46	2.81	22.6	12.5	8.7 - 16.2	14	3.25	0.36	11.1	3.7	2.0 - 4.5
All TOSOH Instruments	11	12.44	0.57	4.6	12.4	8.7 - 16.2	11	3.93	0.20	5.1	3.9	2.7 - 5.2
TOSOH ST AIA PACK	10	12.40	0.55	4.4	12.4	8.6 - 16.2	10	3.94	0.20	5.0	3.9	2.7 - 5.2

Free PSA (ng/mL)

	Specimen TM-1						Specimen TM-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	11	3.428	0.557	16.2	3.48	2.39 - 4.46	11	1.787	0.266	14.9	1.84	0.88 - 2.69

PSA (ng/mL)

	Specimen TM-1						Specimen TM-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	30	3.638	0.644	17.7	3.58	2.54 - 4.73	30	2.086	0.340	16.3	2.09	1.18 - 2.99

Thyroglobulin (ng/mL)

	Specimen TM-1						Specimen TM-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	7	27.50	9.27	33.7	22.4	8.9 - 46.1	6	2.60	1.94	74.8	2.8	0.0 - 6.5
Beckman ACCESS / 2 / DxI	4	-	-	-	22.2	8.9 - 46.1	5	3.00	2.17	72.3	4.1	0.0 - 7.4

CEA (ng/mL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	15	40.40	4.90	12.1	44.5	28.2 - 52.6	15	1.08	0.13	11.7	1.1	0.0 - 2.3
TOSOH AIA PACK	10	44.96	1.11	2.5	44.6	31.4 - 58.5	10	1.22	0.18	14.7	1.2	0.0 - 2.5

DHEA-S (µg/dL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	17	492.55	45.40	9.2	494.2	344.7 - 640.4	17	88.73	12.52	14.1	88.6	62.1 - 115.4
Beckman ACCESS / 2 / DxI	11	493.51	23.89	4.8	494.2	345.4 - 641.6	11	90.08	7.15	7.9	88.9	63.0 - 117.1

Estradiol (pg/mL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	27	575.5	165.2	28.7	511	245 - 906	27	46.5	18.3	39.4	42	9 - 84
Beckman ACCESS / 2 / DxI	12	522.3	65.7	12.6	510	390 - 654	12	44.9	10.9	24.3	42	23 - 67

Ferritin (ng/mL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	37	305.7	36.3	11.9	242	213 - 398	37	32.5	3.9	12.0	24	22 - 43
All TOSOH Instruments	23	221.2	13.7	6.2	223	154 - 288	23	22.3	1.1	5.1	22	15 - 29
Beckman ACCESS / 2 / DxI	30	233.7	14.2	6.1	235	163 - 304	29	22.7	1.7	7.4	23	15 - 30
Siemens Dimension	11	306.2	17.7	5.8	304	214 - 399	11	34.6	1.8	5.2	35	24 - 46
TOSOH ST AIA PACK	14	222.4	14.2	6.4	224	155 - 290	14	22.4	1.3	5.7	22	15 - 30

Folate (ng/mL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	42	8.74	3.84	43.9	10.3	6.1 - 11.4	42	0.97	0.67	68.8	0.7	0.0 - 2.0
All Siemens Dimension Instruments	12	5.93	0.65	11.0	6.0	4.1 - 7.8	12	0.78	0.22	27.9	0.7	0.0 - 1.8
All TOSOH Instruments	10	5.43	1.04	19.1	5.4	3.8 - 7.1	10	1.06	0.33	31.3	1.0	0.0 - 2.1
Abbott Architect	10	11.94	2.80	23.4	10.9	8.3 - 15.6	10	0.78	0.76	97.8	0.4	0.0 - 1.8
Beckman ACCESS / 2 / DxI	25	10.77	0.45	4.1	10.7	7.5 - 14.1	25	0.47	0.33	71.3	0.4	0.0 - 1.5
Siemens Dimension	11	5.76	0.60	10.5	5.9	4.0 - 7.5	11	0.71	0.20	27.3	0.7	0.0 - 1.8

FSH (mIU/mL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	28	66.58	7.35	11.0	66.4	49.9 - 83.3	28	7.16	1.21	16.9	7.0	5.3 - 9.0
Beckman ACCESS / 2 / DxI	13	67.72	7.29	10.8	69.8	50.7 - 84.7	13	7.32	0.87	11.9	7.4	5.4 - 9.2

Homocysteine (μmol/L)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	11	54.4	7.1	13.1	50	38 - 71	11	6.6	0.9	13.6	6	4 - 9

LH (mIU/mL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	23	67.69	9.82	14.5	66.8	48.0 - 87.4	23	3.76	0.63	16.6	3.7	2.5 - 5.1
Beckman ACCESS / 2 / DxI	13	60.70	3.41	5.6	60.9	48.5 - 72.9	13	3.83	0.31	8.2	3.7	3.0 - 4.6

Progesterone (ng/mL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	18	41.86	8.78	21.0	40.7	29.2 - 54.5	19	2.52	0.33	13.2	2.5	1.7 - 3.3

Prolactin (ng/mL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	19	61.41	7.31	11.9	60.6	42.9 - 79.9	18	3.49	0.36	10.4	3.5	0.0 - 7.1

Testosterone (ng/dL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	75	1402.6	276.5	19.7	1372	981 - 1824	75	118.8	21.3	17.9	111	83 - 155
All Siemens Immulite Instruments	11	1564.6	76.4	4.9	1600	1095 - 2034	11	183.6	24.9	13.6	182	128 - 239
All TOSOH Instruments	21	1810.2	122	6.7	1841	1267 - 2354	21	132.0	18.2	13.8	126	92 - 172
Abbott Architect	10	1079.2	185.6	17.2	1009	755 - 1403	10	100.1	8.0	8.0	98	70 - 131
Beckman ACCESS / 2 / DxI	29	1289.5	130	10.1	1295	902 - 1677	29	107.3	5.0	4.7	107	75 - 140
TOSOH AIA PACK	10	1693.2	50	3	1710	1185 - 2202	10	128.7	18.0	14.0	122	90 - 168
TOSOH ST AIA PACK	11	1875.2	98.2	5.2	1877	1312 - 2438	11	134.2	19.1	14.2	129	93 - 175

Transferrin (mg/dL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	10	283.8	4.8	1.7	285	255 - 313	10	121.7	2.3	1.9	121	109 - 134

Vitamin B_{12} (pg/mL)

	Specimen SC-1						Specimen SC-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	89	1393.4	249.2	17.9	1392	975 - 1812	89	170.9	34.3	20.1	166	119 - 223
All Roche Instruments	11	1756.6	165.1	9.4	1743	1229 - 2284	11	186.4	23.2	12.5	184	130 - 243
All TOSOH Instruments	21	1460.9	63.4	4.3	1465	1022 - 1900	21	189.3	24.3	12.9	186	132 - 247
Abbott Architect	10	1698.6	72.3	4.3	1734	1188 - 2209	10	188.7	19.2	10.2	186	132 - 246
Beckman ACCESS / 2 / DxI	36	1175.5	108.3	9.2	1201	822 - 1529	36	142.0	12.2	8.6	142	99 - 185
Siemens Dimension	11	1546.8	47.1	3.0	1532	1082 - 2011	11	231.3	18.7	8.1	229	161 - 301
TOSOH AIA PACK	10	1450.4	52.0	3.6	1452	1015 - 1886	10	186.2	17.9	9.6	191	130 - 243
TOSOH ST AIA PACK	11	1481.8	84.6	5.7	1484	1037 - 1927	11	195.4	35.8	18.3	180	136 - 255

Serum Alcohol (mg/dL)

Method	Specimen ETH-1 Labs	Mean	SD	CV	Median	Range	Specimen ETH-2 Labs	Mean	SD	CV	Median	Range
ALL METHODS	5	63.0	5.3	8.4	65	47 - 79	5	320.0	33.6	10.5	332	240 - 400

Method	Specimen ETH-3 Labs	Mean	SD	CV	Median	Range	Specimen ETH-4 Labs	Mean	SD	CV	Median	Range
ALL METHODS	5	5.0	2.0	40.0	5	3 - 7	5	66.7	0.6	0.9	67	50 - 84

Method	Specimen ETH-5 Labs	Mean	SD	CV	Median	Range
ALL METHODS	5	17.3	1.5	8.8	17	12 - 22

Acetone

Method	Specimen ETH-1 Labs	Negative	Small	Moderate	Large	Specimen ETH-2 Labs	Negative	Small	Moderate	Large
ALL METHODS	15	-	1	1	12	15	15	-	-	-
Biorex Labs K-CHECK	12	-	-	1	11	12	12	-	-	-
Germaine Laboratories AimTab	1	-	1	-	-	1	1	-	-	-
Siemens Acetest	2	-	-	-	2	2	2	-	-	-

Method	Specimen ETH-3 Labs	Negative	Small	Moderate	Large	Specimen ETH-4 Labs	Negative	Small	Moderate	Large
ALL METHODS	15	15	-	-	-	15	1	3	9	2
Biorex Labs K-CHECK	12	12	-	-	-	12	-	3	7	2
Germaine Laboratories AimTab	1	1	-	-	-	1	1	-	-	-
Siemens Acetest	2	2	-	-	-	2	-	-	2	-

Method	Specimen ETH-5 Labs	Negative	Small	Moderate	Large
ALL METHODS	15	15	-	-	-
Biorex Labs K-CHECK	12	12	-	-	-
Germaine Laboratories AimTab	1	1	-	-	-
Siemens Acetest	2	2	-	-	-

Thyroglobulin Antibody (IU/mL)

	Specimen THY-1						Specimen THY-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	18	3.154	7.058	223.8	0.10	0.00 - 24.33	18	579.719	221.745	38.3	447.60	0.00 - 1244.96
Beckman ACCESS / 2 / DxI	10	0.130	0.275	211.6	0.05	0.00 - 0.96	10	800.870	53.107	6.6	811.50	641.54 - 960.20

Thryoid Peroxidase Antibody (TPO) (IU/mL)

	Specimen THY-1						Specimen THY-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	20	5.738	9.907	172.7	0.00	0.00 - 35.46	19	42.294	60.630	143.4	17.90	0.00 - 224.19
Beckman ACCESS / 2 / DxI	11	3.523	7.866	223.3	0.00	0.00 - 27.13	10	16.630	1.746	10.5	15.95	11.39 - 21.87

Ammonia (µmol/L)

	Specimen AMM-1						Specimen AMM-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	308.0	4.2	1.4	308	292 - 324	5	50.5	2.1	4.2	51	46 - 55
Siemens Dimension	5	308.0	4.2	1.4	308	292 - 324	5	50.5	2.1	4.2	51	46 - 55

Adulterated Urine – Specific Gravity

	Specimen AUR-1						Specimen AUR-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
ALL METHODS	6	1.0060	0.0017	0.2	1.005	0.996 - 1.016	6	1.0043	0.0040	0.4	1.005	0.994 - 1.015

Adulterated Urine – Specific Gravity Interpretation

	Specimen AUR-1			Specimen AUR-2		
Method	***Labs***	***Normal***	***Abnormal***	***Labs***	***Normal***	***Abnormal***
ALL METHODS	3	3	-	3	2	1
CLIAwaived, Inc. Drug Test	1	1	-	1	1	-
Indiko Plus	1	1	-	1	1	-
McKesson Consult Drug Panel	1	1	-	1	-	1

Adulterated Urine – pH

	Specimen AUR-1						Specimen AUR-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
ALL METHODS	6	4.43	0.6	13.6	4.5	3.8 - 5.1	6	6.97	0.06	0.8	7	6.3 - 7.6

Adulterated Urine – pH Interpretation

	Specimen AUR-1			Specimen AUR-2		
Method	***Labs***	***Normal***	***Abnormal***	***Labs***	***Normal***	***Abnormal***
ALL METHODS	5	3	2	5	5	-
Carolina Chemistries BiOlis	2	1	1	2	2	-
CLIAwaived, Inc. Drug Test	1	1	-	1	1	-
Indiko Plus	1	-	1	1	1	-
McKesson Consult Drug Panel	1	1	-	1	1	-

Adulterated Urine – Creatinine (mg/dL)

	Specimen AUR-1						Specimen AUR-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	58.30	2.69	4.6	57.5	48.3 - 68.3	6	7.14	1.65	23.1	6.4	4.1 - 10.2
Beckman AU	4	-	-	-	57.5	48.3 - 68.3	5	6.20	0.28	4.6	6.2	3.2 - 9.2

Adulterated Urine – Creatinine Interpretation

	Specimen AUR-1			Specimen AUR-2		
Method	***Labs***	***Normal***	***Abnormal***	***Labs***	***Normal***	***Abnormal***
ALL METHODS	6	6	-	6	-	6
Beckman AU	1	1	-	1	-	1
Carolina Chemistries BiOlis	1	1	-	1	-	1
ImmTox	1	1	-	1	-	1
Indiko Plus	2	2	-	2	-	2
McKesson Consult Drug Panel	1	1	-	1	-	1

Adulterated Urine – Nitrite Interpretation

	Specimen AUR-1			Specimen AUR-2		
Method	***Labs***	***Normal***	***Abnormal***	***Labs***	***Normal***	***Abnormal***
ALL METHODS	1	1	-	1	-	1
McKesson Consult Drug Panel	1	1	-	1	-	1

Adulterated Urine – Oxidants Interpretation

	Specimen AUR-1			Specimen AUR-2		
Method	***Labs***	***Negative/ Normal***	***Positive/ Abnormal***	***Labs***	***Negative/ Normal***	***Positive/ Abnormal***
ALL METHODS	3	3	-	3	-	3
Beckman AU	1	1	-	1	-	1
CLIAwaived, Inc. Drug Test	1	1	-	1	-	1
McKesson Consult Drug Panel	1	1	-	1	-	1

Ethyl Glucuronide (EtG) (ng/mL)

	Specimen ETG-1			Specimen ETG-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	2	-	2	2	2	-
Cut-off 500						
Beckman AU	1	-	1	1	1	-
All Cut-off 500	1	-	1	1	1	-

Urine Drug Screen

Acetaminophen (µg/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	5	-	5	5	3	2

UDS-2 is an ungraded challenge due to lack of participant consensus.

Amphetamines (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	97	-	97	96	-	96
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 500						
Alere iCup	4	-	4	4	-	4
CLIAwaived, Inc. Drug Test	2	-	2	2	-	2
ImmTox	1	-	1	1	-	1
Indiko Plus	2	-	2	2	-	2
McKesson Consult Drug Panel	5	-	5	5	-	5
MEDTOX Diagnostics	6	-	6	6	-	6
Mindray BS-200/BS-480	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	2	-	2	2	-	2
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
All Cut-off 500	27	-	27	27	-	27
Cut-off 1000						
Abbott Architect	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	2	-	2	2	-	2
Amedica Biotech AmediCheck	1	-	1	1	-	1
Beckman AU	1	-	1	1	-	1
BMC QuickTox Drug Screen	23	-	23	23	-	23
Carolina Chemistries BioLis 24i	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	2	-	2	2	-	2
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	3	-	3	3	-	3
Germaine Laboratories AimScreen	1	-	1	1	-	1
Integrated E-Z Split Key Cup / II	1	-	1	1	-	1
Lin-Zhi International	3	-	3	3	-	3
McKesson Drug Panel	1	-	1	1	-	1
Microgenics DRI	4	-	4	4	-	4
Noble Medical Inc.	2	-	2	2	-	2
Precision DX Drug Test	1	-	1	1	-	1
Roche Cobas 8000 / c502	1	-	1	1	-	1
Siemens EMIT II Plus	1	-	1	1	-	1
Siemens Viva-E	1	-	1	1	-	1
Signify ER Drug Screen Test	1	-	1	-	-	-
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	1	-	1	1	-	1
All Cut-off 1000	59	-	59	58	-	58

Amphetamines/Methamphetamines (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	12	-	12	12	-	12
Cut-off 100						
Beckman AU	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						
Beckman AU	2	-	2	2	-	2
Siemens EMIT II Plus	1	-	1	1	-	1
All Cut-off 500	3	-	3	3	-	3
Cut-off 1000						
First Sign Drugs of Abuse	1	-	1	1	-	1
Microgenics DRI	2	-	2	2	-	2
Siemens EMIT II Plus	1	-	1	1	-	1
All Cut-off 1000	4	-	4	4	-	4

Barbiturates (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	84	-	84	83	-	83
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 200						
Abbott Architect	1	-	1	1	-	1
Beckman AU	3	-	3	3	-	3
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
ImmTox	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
Lin-Zhi International	1	-	1	1	-	1
MEDTOX Diagnostics	6	-	6	6	-	6
Microgenics DRI	2	-	2	2	-	2
Roche Cobas 8000 / c502	1	-	1	1	-	1
Roche Integra	3	-	3	3	-	3
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	26	-	26	26	-	26
Cut-off 300						
Alere iCassette	3	-	3	3	-	3
Alere iCup	6	-	6	6	-	6
Amedica Biotech AmediCheck	1	-	1	1	-	1
BMC QuickTox Drug Screen	23	-	23	23	-	23
CLIAwaived, Inc. Drug Test	4	-	4	4	-	4
Confirm Biosciences DoA Test	1	-	1	1	-	1
McKesson Consult Drug Panel	5	-	5	5	-	5
McKesson Drug Panel	1	-	1	1	-	1
Microgenics DRI	1	-	1	1	-	1
Precision DX Drug Test	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	2	-	2	2	-	2
Signify ER Drug Screen Test	1	-	1	-	-	-
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	1	-	1	1	-	1
All Cut-off 300	52	-	52	51	-	51

Benzodiazepines (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	101	100	1	99	-	99
Cut-off 100						
Beckman AU	1	1	-	1	-	1
Roche Integra	2	2	-	2	-	2
All Cut-off 100	3	3	-	3	-	3
Cut-off 150						
Medica EasyRA	1	1	-	1	-	1
MEDTOX Diagnostics	6	6	-	6	-	6
Premier Biotech Bio-Cup/Bio-Dip	1	1	-	1	-	1
All Cut-off 150	8	8	-	8	-	8
Cut-off 200						
Abbott Architect	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	2	2	-	2	-	2
Lin-Zhi International	3	3	-	3	-	3
Microgenics DRI	3	3	-	3	-	3
Mindray BS-200/BS-480	1	1	-	1	-	1
Roche Cobas 8000 / c502	1	1	-	1	-	1
Siemens Dimension	1	1	-	1	-	1
Siemens EMIT II Plus	4	4	-	4	-	4
Synermed IR 500	1	1	-	1	-	1
All Cut-off 200	22	22	-	22	-	22
Cut-off 300						
Alere iCassette	3	3	-	3	-	3
Alere iCup	6	5	1	6	-	6
Alere iScreen	1	1	-	1	-	1
Alere Triage	1	1	-	1	-	1
Amedica Biotech AmediCheck	1	1	-	1	-	1
BMC QuickTox Drug Screen	22	22	-	22	-	22
CLIAwaived, Inc. Drug Test	4	4	-	4	-	4
Confirm Biosciences DoA Test	1	1	-	1	-	1
First Sign Drugs of Abuse	3	3	-	3	-	3
Healgen Scientific Urine Drug Test	1	1	-	1	-	1
McKesson Consult Drug Panel	5	5	-	5	-	5
McKesson Drug Panel	1	1	-	1	-	1
Microgenics CEDIA	1	1	-	1	-	1
Precision DX Drug Test	1	1	-	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	2	2	-	1	-	1
Signify ER Drug Screen Test	1	1	-	-	-	-
USDiagnostics One Step Multi-Drug	2	2	-	2	-	2
USDiagnostics UScreen Cup	1	1	-	1	-	1
All Cut-off 300	57	56	1	55	-	55

Buprenorphine (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	42	-	42	42	-	42
Cut-off 5						
Beckman AU	2	-	2	2	-	2
ImmTox	2	-	2	2	-	2
Indiko Plus	2	-	2	2	-	2
Lin-Zhi International	3	-	3	3	-	3
Medica EasyRA	1	-	1	1	-	1
Microgenics CEDIA	3	-	3	3	-	3
Siemens EMIT II Plus	2	-	2	2	-	2
Synermed IR 500	1	-	1	1	-	1
All Cut-off 5	16	-	16	16	-	16
Cut-off 10						
Alere iCup	2	-	2	2	-	2
Alere Triage	1	-	1	1	-	1
Chemtron Biotech	1	-	1	1	-	1
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
McKesson Consult Drug Panel	5	-	5	5	-	5
McKesson Drug Panel	1	-	1	1	-	1
MEDTOX Diagnostics	3	-	3	3	-	3
Microgenics CEDIA	1	-	1	1	-	1
Precision DX Drug Test	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	2	-	2	2	-	2
USDiagnostics One Step Multi-Drug	1	-	1	1	-	1
All Cut-off 10	24	-	24	24	-	24

Cannabinoids (THC) (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	103	-	103	102	-	102
Cut-off 20						
Integrated E-Z Split Key Cup / II	1	-	1	1	-	1
Roche Integra	1	-	1	1	-	1
All Cut-off 20	2	-	2	2	-	2
Cut-off 50						
Abbott Architect	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	7	-	7	7	-	7
Alere Triage	1	-	1	1	-	1
Alfa Scientific Instant-View	5	-	5	5	-	5
Amedica Biotech AmediCheck	1	-	1	1	-	1
Beckman AU	3	-	3	3	-	3
BMC QuickTox Drug Screen	22	-	22	22	-	22
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 Laboratories AimScreen	4	-	4	4	-	4
Healgen Scientific Urine Drug Test	1	-	1	1	-	1
ImmTox	2	-	2	2	-	2
Indiko Plus	2	-	2	2	-	2
Lin-Zhi International	3	-	3	3	-	3
McKesson Consult Drug Panel	5	-	5	5	-	5
McKesson Drug Panel	1	-	1	1	-	1
MEDTOX Diagnostics	6	-	6	6	-	6
Microgenics DRI	4	-	4	4	-	4
Mindray BS-200/BS-480	1	-	1	1	-	1
Noble Medical Inc.	2	-	2	2	-	2
Premier Biotech Bio-Cup/Bio-Dip	2	-	2	2	-	2
Roche Cobas 8000 / c502	1	-	1	1	-	1
Roche Integra	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
Siemens EMIT II Plus	4	-	4	4	-	4
Signify ER Drug Screen Test	1	-	1	-	-	-
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	1	-	1	1	-	1
All Cut-off 50	95	-	95	94	-	94
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1

Carisoprodol (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	2	-	2	2	-	2
Cut-off 100						
ImmTox	1	-	1	1	-	1
Immunalysis	1	-	1	1	-	1
All Cut-off 100	2	-	2	2	-	2

Cocaine Metabolites (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	114	1	113	113	-	113
Cut-off 100						
Beckman AU	1	-	1	1	-	1
Medica EasyRA	1	-	1	1	-	1
All Cut-off 100	2	-	2	2	-	2
Cut-off 150						
Alere iCup	4	-	4	4	-	4
Beckman AU	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	2	-	2	2	-	2
ImmTox	2	-	2	2	-	2
Indiko Plus	1	-	1	1	-	1
McKesson Consult Drug Panel	5	-	5	5	-	5
MEDTOX Diagnostics	6	-	6	6	-	6
Premier Biotech Bio-Cup/Bio-Dip	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 150	29	-	29	29	-	29

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

	Specimen UDS-1			Specimen UDS-2		
Cut-off 300						
Abbott Architect	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	3	-	3	3	-	3
Alere Triage	1	-	1	1	-	1
Alfa Scientific Instant-View	5	-	5	5	-	5
Amedica Biotech AmediCheck	1	-	1	1	-	1
Beckman AU	1	1	-	1	-	1
BMC QuickTox Drug Screen	22	-	22	22	-	22
Carolina Chemistries BioLis 24i	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	2	-	2	2	-	2
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	3	-	3	3	-	3
Germaine Laboratories AimScreen	4	-	4	4	-	4
Healgen Scientific Urine Drug Test	1	-	1	1	-	1
Integrated E-Z Split Key Cup / II	1	-	1	1	-	1
Lin-Zhi International	3	-	3	3	-	3
McKesson Drug Panel	1	-	1	1	-	1
Microgenics DRI	5	-	5	5	-	5
Noble Medical Inc.	2	-	2	2	-	2
Precision DX Drug Test	1	-	1	1	-	1
Roche Cobas 8000 / c502	1	-	1	1	-	1
Roche Integra	2	-	2	2	-	2
Siemens EMIT II Plus	2	-	2	2	-	2
Signify ER Drug Screen Test	1	-	1	-	-	-
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	1	-	1	1	-	1
All Cut-off 300	72	1	71	71	-	71

Cotinine (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	2	2	-	2	-	2

EDDP (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	5	-	5	5	-	5
Cut-off 100						
ImmTox	1	-	1	1	-	1
Immunalysis	1	-	1	1	-	1
All Cut-off 100	2	-	2	2	-	2
Cut-off 300						
Microgenics DRI	2	-	2	2	-	2
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-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	13	-	13	13	13	-
Cut-off 3						
Roche Cobas 8000 / c502	1	-	1	1	1	-
All Cut-off 3	1	-	1	1	1	-
Cut-off 10						
Abbott Architect	1	-	1	1	1	-
Siemens EMIT II Plus	1	-	1	1	1	-
All Cut-off 10	2	-	2	2	2	-
Cut-off 20						
Microgenics DRI	1	-	1	1	1	-
Siemens EMIT II Plus	1	-	1	1	1	-
All Cut-off 20	2	-	2	2	2	-
Cut-off 50						
Beckman AU	1	-	1	1	1	-
All Cut-off 50	1	-	1	1	1	-
Cut-off 100						
Beckman AU	1	-	1	1	1	-
Carolina Chemistries BioLis 24i	1	-	1	1	1	-
ImmTox	1	-	1	1	1	-
Indiko Plus	1	-	1	1	1	-
Lin-Zhi International	2	-	2	2	2	-
Microgenics DRI	1	-	1	1	1	-
All Cut-off 100	7	-	7	7	7	-

Fentanyl (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	5	-	5	5	-	5
Cut-off 2						
ImmTox	2	-	2	2	-	2
Lin-Zhi International	1	-	1	1	-	1
Medica EasyRA	1	-	1	1	-	1
Microgenics DRI	1	-	1	1	-	1
All Cut-off 2	5	-	5	5	-	5

Hydrocodone (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	2	1	1	2	-	2

UDS-1 is an ungraded challenge due to lack of participant consensus.

LSD (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	1	-	1	1	-	1

MDMA (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	56	-	56	55	-	55
Cut-off 100						
First Sign Drugs of Abuse	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 500						
Alere iCassette	1	-	1	1	-	1
Alere iCup	6	-	6	6	-	6
Amedica Biotech AmediCheck	1	-	1	1	-	1
Beckman AU	1	-	1	1	-	1
BMC QuickTox Drug Screen	22	-	22	22	-	22
CLIAwaived, Inc. Drug Test	4	-	4	4	-	4
Confirm Biosciences DoA Test	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
McKesson Consult Drug Panel	5	-	5	5	-	5
McKesson Drug Panel	1	-	1	1	-	1
Microgenics DRI	2	-	2	2	-	2
Precision DX Drug Test	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	2	-	2	2	-	2
Siemens EMIT II Plus	1	-	1	1	-	1
Signify ER Drug Screen Test	1	-	1	-	-	-
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	1	-	1	1	-	1
All Cut-off 500	53	-	53	52	-	52

Meperidine (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	1	-	1	1	-	1

Methadone (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	84	-	84	84	-	84
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 150						
Siemens EMIT II Plus	2	-	2	2	-	2
All Cut-off 150	2	-	2	2	-	2
Cut-off 200						
MEDTOX Diagnostics	5	-	5	5	-	5
All Cut-off 200	5	-	5	5	-	5
Cut-off 300						
Abbott Architect	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	6	-	6	6	-	6
Amedica Biotech AmediCheck	1	-	1	1	-	1
Beckman AU	3	-	3	3	-	3
BMC QuickTox Drug Screen	22	-	22	22	-	22
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
Lin-Zhi International	3	-	3	3	-	3
McKesson Consult Drug Panel	5	-	5	5	-	5
McKesson Drug Panel	1	-	1	1	-	1
Microgenics DRI	6	-	6	6	-	6
Precision DX Drug Test	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	2	-	2	2	-	2
Roche Integra	2	-	2	2	-	2
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	1	-	1	1	-	1
All Cut-off 300	70	-	70	70	-	70
Cut-off 1000						
Indiko Plus	1	-	1	1	-	1
All Cut-off 1000	1	-	1	1	-	1

Methamphetamines (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	71	-	71	71	-	71
Cut-off 500						
Alere iCup	4	-	4	4	-	4
Alere Triage	1	-	1	1	-	1
BMC QuickTox Drug Screen	22	-	22	22	-	22
CLIAwaived, Inc. Drug Test	2	-	2	2	-	2
ImmTox	2	-	2	2	-	2
Lin-Zhi International	1	-	1	1	-	1
McKesson Consult Drug Panel	5	-	5	5	-	5
MEDTOX Diagnostics	5	-	5	5	-	5
Premier Biotech Bio-Cup/Bio-Dip	2	-	2	2	-	2
Siemens EMIT II Plus	1	-	1	1	-	1
All Cut-off 500	45	-	45	45	-	45
Cut-off 1000						
Alere iCassette	3	-	3	3	-	3
Alere iCup	3	-	3	3	-	3
Amedica Biotech AmediCheck	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	2	-	2	2	-	2
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Healgen Scientific Urine Drug Test	1	-	1	1	-	1
McKesson Drug Panel	1	-	1	1	-	1
Precision DX Drug Test	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	1	-	1	1	-	1
All Cut-off 1000	17	-	17	17	-	17

Methanol (mg/dL)

	Specimen UDS-1			Specimen UDS-2		
	Labs	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	1	-	1	1	-	1

Methaqualone (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	1	-	1	1	1	-
Cut-off 300						
Microgenics DRI	1	-	1	1	1	-
All Cut-off 300	1	-	1	1	1	-

6-MAM (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	6	-	6	6	-	6
Cut-off 10						
Beckman AU	1	-	1	1	-	1
ImmTox	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
Microgenics CEDIA	1	-	1	1	-	1
Siemens EMIT II Plus	1	-	1	1	-	1
Siemens Viva-E	1	-	1	1	-	1
All Cut-off 10	6	-	6	6	-	6

Opiates (Morphine Trihydrate) (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	120	18	102	118	2	116
Cut-off 100						
Beckman AU	1	-	1	1	-	1
Medica EasyRA	1	1	-	1	-	1
MEDTOX Diagnostics	5	4	1	5	-	5
Siemens Dimension	1	1	-	1	1	-
All Cut-off 100	8	6	2	8	1	7
Cut-off 300						
Abbott Architect	1	-	1	1	-	1
Alere iCup	4	-	4	4	-	4
Alere iScreen	1	1	-	1	-	1
Alere Triage	1	-	1	1	-	1
Alfa Scientific Instant-View	3	3	-	3	-	3
Beckman AU	4	-	4	4	-	4
BMC QuickTox Drug Screen	22	-	22	22	-	22
Carolina Chemistries BioLis 24i	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	1	-	1	1	-	1
Confirm Biosciences DoA Test	1	-	1	1	-	1
ImmTox	2	-	2	2	-	2
Indiko Plus	2	-	2	2	-	2
Lin-Zhi International	3	-	3	3	-	3
McKesson Consult Drug Panel	5	-	5	5	-	5
McKesson Drug Panel	1	-	1	1	-	1
Microgenics DRI	4	-	4	4	-	4
Mindray BS-200/BS-480	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	2	1	1	2	-	2
Roche Cobas 8000 / c502	1	-	1	1	-	1
Roche Integra	3	-	3	3	-	3
Siemens EMIT II Plus	4	-	4	4	-	4
Signify ER Drug Screen Test	1	-	1	-	-	-
Synermed IR 500	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	1	-	1	1	-	1
All Cut-off 300	71	5	66	70	-	70
Cut-off 1000						
Microgenics DRI	1	-	1	1	-	1
All Cut-off 1000	1	-	1	1	-	1

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

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
Cut-off 2000						
Alere iCassette	3	-	3	3	-	3
Alere iCup	3	-	3	3	-	3
Alfa Scientific Instant-View	2	2	-	2	1	1
Amedica Biotech AmediCheck	1	1	-	1	-	1
CLIAwaived, Inc. Drug Test	3	-	3	3	-	3
First Sign Drugs of Abuse	3	-	3	3	-	3
Germaine Laboratories AimScreen	4	-	4	4	-	4
Healgen Scientific Urine Drug Test	1	-	1	1	-	1
Integrated E-Z Split Key Cup / II	1	-	1	1	-	1
Microgenics DRI	1	-	1	1	-	1
Noble Medical Inc.	2	-	2	2	-	2
Precision DX Drug Test	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	1	-	-	-	-
USDiagnostics One Step Multi-Drug	1	-	1	1	-	1
USDiagnostics UScreen Cup	1	1	-	1	-	1
All Cut-off 2000	28	5	23	27	1	26

Oxycodone (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	83	-	83	83	83	-
Cut-off 100						
Alere iCassette	2	-	2	2	2	-
Alere iCup	6	-	6	6	6	-
Alere iScreen	1	-	1	1	1	-
Alere Triage	1	-	1	1	1	-
Amedica Biotech AmediCheck	1	-	1	1	1	-
Beckman AU	3	-	3	3	3	-
BMC QuickTox Drug Screen	22	-	22	22	22	-
Carolina Chemistries BioLis 24i	1	-	1	1	1	-
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	-
ImmTox	2	-	2	2	2	-
Lin-Zhi International	2	-	2	2	2	-
McKesson Consult Drug Panel	5	-	5	5	5	-
McKesson Drug Panel	1	-	1	1	1	-
Medica EasyRA	1	-	1	1	1	-
MEDTOX Diagnostics	5	-	5	5	5	-
Microgenics DRI	6	-	6	6	6	-
Precision DX Drug Test	1	-	1	1	1	-
Premier Biotech Bio-Cup/Bio-Dip	2	-	2	3	3	-
Roche Integra	2	-	2	2	2	-
Siemens EMIT II Plus	1	-	1	1	1	-
Signify ER Drug Screen Test	1	-	1	-	-	-
USDiagnostics One Step Multi-Drug	1	-	1	1	1	-
USDiagnostics UScreen Cup	1	-	1	1	1	-
All Cut-off 100	74	-	74	74	74	-
Cut-off 300				1	1	-
Carolina Chemistries BioLis 24i	1	-	1	1	1	-
Indiko Plus	1	-	1	1	1	-
Microgenics DRI	1	-	1	1	1	-
All Cut-off 300	3	-	3	3	3	-

Phencyclidine (PCP) (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	80	79	1	78	-	78
Cut-off 25						
Abbott Architect	1	1	-	1	-	1
Alere iCassette	3	3	-	3	-	3
Alere iCup	5	5	-	5	-	5
Amedica Biotech AmediCheck	1	1	-	1	-	1
Beckman AU	3	3	-	3	-	3
BMC QuickTox Drug Screen	22	22	-	22	-	22
Carolina Chemistries BioLis 24i	1	1	-	1	-	1
CLIAwaived, Inc. Drug Test	3	2	1	3	-	3
Confirm Biosciences DoA Test	1	1	-	1	-	1
First Sign Drugs of Abuse	1	1	-	1	-	1
Germaine Laboratories AimScreen	1	1	-	1	-	1
ImmTox	2	2	-	2	-	2
Integrated E-Z Split Key Cup / II	1	1	-	1	-	1
McKesson Consult Drug Panel	5	5	-	5	-	5
McKesson Drug Panel	1	1	-	1	-	1
MEDTOX Diagnostics	6	6	-	6	-	6
Microgenics DRI	3	3	-	3	-	3
Noble Medical Inc.	2	2	-	2	-	2
Precision DX Drug Test	1	1	-	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	3	3	-	2	-	2
Roche Cobas 8000 / c502	1	1	-	1	-	1
Siemens EMIT II Plus	3	3	-	3	-	3
Signify ER Drug Screen Test	1	1	-	-	-	-
Synermed IR 500	1	1	-	1	-	1
USDiagnostics One Step Multi-Drug	2	2	-	2	-	2
USDiagnostics UScreen Cup	1	1	-	1	-	1
All Cut-off 25	75	74	1	73	-	73
Cut-off 100						
Beckman AU	1	1	-	1	-	1
All Cut-off 100	1	1	-	1	-	1

Propoxyphene (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	25	-	25	24	-	24
Cut-off 300						
Abbott Architect	1	-	1	1	-	1
Alere iCassette	2	-	2	2	-	2
Alere iCup	2	-	2	2	-	2
Beckman AU	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	1	-	1	1	-	1
McKesson Consult Drug Panel	5	-	5	5	-	5
McKesson Drug Panel	1	-	1	1	-	1
MEDTOX Diagnostics	5	-	5	5	-	5
Microgenics DRI	1	-	1	1	-	1
Siemens EMIT II Plus	1	-	1	1	-	1
Signify ER Drug Screen Test	1	-	1	-	-	-
All Cut-off 300	23	-	23	22	-	22

Tramadol (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
	Labs	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	5	-	5	5	-	5
Cut-off 200						
ImmTox	2	-	2	2	-	2
Immunalysis	1	-	1	1	-	1
Siemens EMIT II Plus	1	-	1	1	-	1
All Cut-off 200	4	-	4	4	-	4

Tricyclic Antidepressants (ng/mL)

	Specimen UDS-1			Specimen UDS-2		
Method	***Labs***	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	25	-	25	24	-	24
Cut-off 300						
MEDTOX Diagnostics	5	-	5	5	-	5
All Cut-off 300	5	-	5	5	-	5
Cut-off 1000						
Alere iCassette	2	-	2	2	-	2
Alere iCup	4	-	4	4	-	4
Amedica Biotech AmediCheck	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
McKesson Consult Drug Panel	5	-	5	5	-	5
McKesson Drug Panel	1	-	1	1	-	1
Signify ER Drug Screen Test	1	-	1	-	-	-
USDiagnostics UScreen Cup	1	-	1	1	-	1
All Cut-off 1000	17	-	17	16	-	16

Zolpidem (mg/dL)

	Specimen UDS-1			Specimen UDS-2		
	Labs	***Positive***	***Negative***	***Labs***	***Positive***	***Negative***
All Methods	1	-	1	1	-	1

Urine Amylase (U/L)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	123	Not graded	1	-	-	-	205	Not graded

Urine Calcium (mg/dL)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	9.30	0.01	0.0	9.3	6.4 - 12.2	5	7.35	0.21	2.9	7.4	5.0 - 9.7

Urine Chloride (mmol/L)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	78	Not graded	1	-	-	-	172	Not graded

Urine Creatinine (mg/dL)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	8	70.69	6.58	9.3	71.0	58.6 - 82.8	8	124.70	11.91	9.6	126.4	103.5 - 145.9

Urine Glucose (mg/dL)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	22	Not graded	1	-	-	-	143	Not graded

Urine Magnesium (mg/dL)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	3.2	Not graded	1	-	-	-	6.0	Not graded

Urine Osmolality (mOsm/kg)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	395	Not graded	1	-	-	-	603	Not graded

Urine Phosphorus (mg/dL)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	17.9	Not graded	1	-	-	-	35.0	Not graded

Urine Potassium (mmol/L)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	23.0	Not graded	1	-	-	-	64.5	Not graded

Urine Sodium (mmol/L)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	5	86.5	2.1	2.5	87	64 - 109	5	132.0	4.2	3.2	132	97 - 167

Urine Total Protein (mg/dL)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	7	9.91	2.27	22.9	8.9	5.5 - 14.3	7	48.89	35.13	71.9	35.0	27.3 - 70.4

Urine Urea Nitrogen (mg/dL)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	405	Not graded	1	-	-	-	547	Not graded

Urine Uric Acid (mg/dL)

	Specimen UCH-1						Specimen UCH-2					
Method	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***	***Labs***	***Mean***	***SD***	***CV***	***Median***	***Range***
All Method	1	-	-	-	4.5	Not graded	1	-	-	-	6.2	Not graded

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