

# MEDICAL LABORATORY EVALUATION

## PARTICIPANT SUMMARY

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Chemistry  
2020 MLE-M1



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  $\pm$  the limits listed below.

Acetaminophen	$\pm 20\%$	Lactate (Lactic Acid)	$\pm 0.4 \text{ mmol/L or } 3 \text{ SD}^*$
Acetone	80% Consensus	LDL Cholesterol	$\pm 2 \text{ SD or } 30\%^*$
Albumin	$\pm 10\%$	Lipase	$\pm 30\%$
Alcohol	$\pm 25\%$	LH	$\pm 2 \text{ SD or } 20\%^*$
Alpha-fetoprotein	$\pm 3 \text{ SD}$	Lithium	$\pm 0.3 \text{ mmol/L or } 20\%^*$
Alkaline Phosphatase	$\pm 30\%$	Magnesium	$\pm 25\%$
ALT (SGPT)	$\pm 20\%$	Myoglobin	$\pm 2 \text{ SD or } 30\%^*$
Ammonia	$\pm 2 \text{ SD or } 5\%^*$	NT-proBNP	$\pm 2 \text{ SD or } 25\%^*$
Amylase	$\pm 30\%$	Parathyroid Hormone, Intact	$\pm 2 \text{ SD}$
Apolipoprotein A1	$\pm 30\%$	Phenobarbital	$\pm 20\%$
Apolipoprotein B	$\pm 30\%$	Phenytoin	$\pm 25\%$
AST (SGOT)	$\pm 20\%$	Phosphorus	$\pm 0.3 \text{ mg/dL or } 10.7\%^*$
B-Type Natriuretic Peptide (BNP)	$\pm 2 \text{ SD or } 25\%^*$	Potassium	$\pm 0.5 \text{ mmol/L}$
Beta-2 Microglobulin	$\pm 3 \text{ SD}$	Prealbumin	$\pm 25\%$
Bilirubin, Direct	$\pm 2 \text{ SD}$	Progesterone	$\pm 30\%$
Bilirubin, Total	$\pm 0.4 \text{ mg/dL or } 20\%^*$	Prolactin	$\pm 3.6 \text{ ng/mL or } 30\%^*$
Bilirubin, Neonatal (Total)	$\pm 0.4 \text{ mg/dL or } 20\%^*$	Protein, Total (Serum)	$\pm 10\%$
C-Peptide	$\pm 2 \text{ SD}$	Protein, Total (Urine)	$\pm 44\%$
CA 125	$\pm 2 \text{ SD or } 30\%^*$	PSA	$\pm 0.9 \text{ ng/mL or } 30\%^*$
CA 15-3	$\pm 2 \text{ SD or } 30\%^*$	PSA, Free	$\pm 0.9 \text{ ng/mL or } 30\%^*$
CA 19-9	$\pm 2 \text{ SD or } 30\%^*$	pCO <sub>2</sub>	$\pm 5 \text{ mmHg or } 8\%^*$
CA 27/29	$\pm 2 \text{ SD or } 30\%^*$	pH	$\pm 0.04$
Calcium	$\pm 1.0 \text{ mg/dL}$	pO <sub>2</sub>	$\pm 3 \text{ SD}$
Calcium, Ionized	$\pm 3 \text{ SD}$	Salicylate	$\pm 20\%$
Carbamazepine	$\pm 25\%$	SHBG	$\pm 3 \text{ SD}$
CEA	$\pm 1.2 \text{ ng/mL } 30\%$	Sodium	$\pm 4.0 \text{ mmol/L}$
Chloride	$\pm 5\%$	T <sub>3</sub> Uptake (% Uptake)	$\pm 3 \text{ SD}$
Cholesterol	$\pm 10\%$	T3, Free	$\pm 3 \text{ SD}$
CK-MB (Quantitative)	$\pm 3 \text{ SD}$	T4, Free	$\pm 3 \text{ SD}$
CO <sub>2</sub>	$\pm 20\%$	tCO <sub>2</sub>	$\pm 20\%$
Cortisol	$\pm 25\%$	Testosterone	$\pm 30\%$
Creatine Kinase	$\pm 30\%$	Testosterone, Bioavailable	$\pm 3 \text{ SD}$
Creatinine (Serum)	$\pm 0.3 \text{ mg/dL or } 15\%^*$	Testosterone, Free	$\pm 3 \text{ SD}$
Creatinine (Urine)	$\pm 17\%$	Theophylline	$\pm 25\%$
D-Dimer	$\pm 2 \text{ SD or } 30\%^*$	Thyroglobulin	$\pm 2 \text{ SD}$
DHEA-S	$\pm 30\%$	Thyroglobulin Antibody	$\pm 3 \text{ SD}$
Digoxin	$\pm 0.2 \text{ mg/dL or } 20\%^*$	Thyroid Peroxidase Antibody (TPO)	$\pm 3 \text{ SD}$
Estradiol	$\pm 2 \text{ SD}$	Thyroxine, Total T <sub>4</sub>	$\pm 1.0 \mu\text{g/dL or } 20\%^*$
Ferritin	$\pm 30\%$	TIBC	$\pm 2 \text{ SD or } 20\%^*$
Folate	$\pm 1.0 \text{ ng/mL or } 30\%^*$	Transferrin	$\pm 10\%$
FSH	$\pm 25\%$	Triglyceride	$\pm 25\%$
Gentamicin	$\pm 25\%$	Triiodothyronine, Total T <sub>3</sub>	$\pm 3 \text{ SD}$
GGT	$\pm 2 \text{ SD or } 20\%^*$	Troponin I	$\pm 2 \text{ SD or } 30\%^*$
Glucose, Serum	$\pm 6 \text{ mg/dL or } 10\%^*$	Troponin T	$\pm 2 \text{ SD or } 30\%^*$
Glucose, Whole Blood	$\pm 12 \text{ mg/dL or } 20\%^*$	TSH	$\pm 3 \text{ SD}$
Glycohemoglobin	$\pm 5\%$	UIBC	$\pm 2 \text{ SD or } 20\%^*$
HDL Cholesterol	$\pm 30\%$	Urea Nitrogen	$\pm 2.0 \text{ mg/dL or } 9\%^*$
HCG, Serum—Qualitative	80% Consensus	Uric Acid	$\pm 17\%$
HCG, Serum—Quantitative	$\pm 3 \text{ SD}$	Urine Drug Screen	80% Consensus
Hematocrit	$\pm 6\%$	Valproic Acid	$\pm 25\%$
Hemoglobin	$\pm 7\%$	Vancomycin	$\pm 25\%$
Homocysteine	$\pm 30\%$	Vitamin B <sub>12</sub>	$\pm 30\%$
Insulin	$\pm 2 \text{ SD}$	Vitamin D	$\pm 2 \text{ SD}$
Iron	$\pm 20\%$		
Lactate Dehydrogenase	$\pm 20\%$		

\*Whichever is greater

## Sodium (mmol/L)

Instrument	Specimen IST-1							Specimen IST-2						
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range		
All Method	88	125.0	0.5	0.4	125	120 - 129	89	147.2	0.6	0.4	147	143 - 152		
All i-STAT Instruments	88	125.0	0.5	0.4	125	120 - 129	89	147.2	0.6	0.4	147	143 - 152		
i-STAT - moderate	64	124.9	0.4	0.3	125	120 - 129	63	147.1	0.5	0.3	147	143 - 152		
i-STAT - waived	27	125.3	0.8	0.7	125	121 - 130	27	147.6	0.9	0.6	147	143 - 152		
Specimen IST-3							Specimen IST-4							
All Method	81	168.3	0.9	0.5	168	164 - 173	82	144.8	0.6	0.4	145	140 - 149		
All i-STAT Instruments	81	168.3	0.9	0.5	168	164 - 173	82	144.8	0.6	0.4	145	140 - 149		
i-STAT - moderate	63	168.2	0.7	0.4	168	164 - 173	64	144.7	0.5	0.4	145	140 - 149		
i-STAT - waived	19	168.9	1.4	0.8	169	164 - 173	19	145.2	0.8	0.5	145	141 - 150		
Specimen IST-5														
All Method	82	125.0	0.5	0.4	125	121 - 130								
All i-STAT Instruments	82	125.0	0.5	0.4	125	121 - 130								
i-STAT - moderate	63	124.9	0.4	0.3	125	120 - 129								
i-STAT - waived	19	125.4	0.5	0.4	125	121 - 130								

## Potassium (mmol/L)

Instrument	Specimen IST-1							Specimen IST-2						
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range		
All Method	85	2.80	0.01	0.0	2.8	2.3 - 3.3	91	4.24	0.05	1.2	4.2	3.7 - 4.8		
All i-STAT Instruments	85	2.80	0.01	0.0	2.8	2.3 - 3.3	91	4.24	0.05	1.2	4.2	3.7 - 4.8		
i-STAT - moderate	61	2.80	0.01	0.0	2.8	2.3 - 3.3	63	4.25	0.05	1.2	4.2	3.7 - 4.8		
i-STAT - waived	28	2.79	0.04	1.3	2.8	2.2 - 3.3	28	4.22	0.04	1.0	4.2	3.7 - 4.8		
Specimen IST-3							Specimen IST-4							
All Method	83	6.50	0.04	0.6	6.5	5.9 - 7.0	76	6.10	0.01	0.0	6.1	5.6 - 6.6		
All i-STAT Instruments	83	6.50	0.04	0.6	6.5	5.9 - 7.0	76	6.10	0.01	0.0	6.1	5.6 - 6.6		
i-STAT - moderate	57	6.50	0.01	0.0	6.5	6.0 - 7.0	58	6.10	0.01	0.0	6.1	5.6 - 6.6		
i-STAT - waived	20	6.49	0.06	0.9	6.5	5.9 - 7.0	20	6.11	0.03	0.5	6.1	5.6 - 6.7		
Specimen IST-5														
All Method	76	2.80	0.01	0.0	2.8	2.3 - 3.3								
All i-STAT Instruments	76	2.80	0.01	0.0	2.8	2.3 - 3.3								
i-STAT - moderate	59	2.80	0.01	0.0	2.8	2.3 - 3.3								
i-STAT - waived	20	2.79	0.04	1.3	2.8	2.2 - 3.3								

## **Chloride (mmol/L)**

<b>Instrument</b>	Specimen IST-1						Specimen IST-2					
	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>
All Method	88	75.4	0.6	0.8	75	71 - 80	87	84.9	0.5	0.6	85	80 - 90
All i-STAT Instruments	88	75.4	0.6	0.8	75	71 - 80	87	84.9	0.5	0.6	85	80 - 90
i-STAT - moderate	62	75.4	0.6	0.8	75	71 - 80	61	85.0	0.5	0.6	85	80 - 90
i-STAT - waived	27	75.3	0.9	1.2	75	71 - 80	27	84.7	0.7	0.8	85	80 - 89
<b>Specimen IST-3</b>												
All Method	82	115.9	0.7	0.6	116	110 - 122	82	103.3	0.7	0.6	103	98 - 109
All i-STAT Instruments	82	115.9	0.7	0.6	116	110 - 122	82	103.3	0.7	0.6	103	98 - 109
i-STAT - moderate	63	115.8	0.7	0.6	116	110 - 122	63	103.3	0.7	0.6	103	98 - 109
i-STAT - waived	19	115.9	0.6	0.5	116	110 - 122	19	103.1	0.6	0.6	103	97 - 109
<b>Specimen IST-5</b>												
All Method	83	75.4	0.7	0.9	75	71 - 80						
All i-STAT Instruments	83	75.4	0.7	0.9	75	71 - 80						
i-STAT - moderate	64	75.4	0.7	1.0	75	71 - 80						
i-STAT - waived	19	75.3	0.6	0.8	75	71 - 80						

## **tCO<sub>2</sub> (mmol/L)**

<b>Instrument</b>	Specimen IST-1						Specimen IST-2					
	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>
All Method	85	24.2	1.1	4.4	24	19 - 29	85	20.9	0.8	4.0	21	16 - 26
All i-STAT Instruments	85	24.2	1.1	4.4	24	19 - 29	85	20.9	0.8	4.0	21	16 - 26
i-STAT - moderate	62	24.2	1.0	4.2	24	19 - 29	62	20.9	0.9	4.1	21	16 - 26
i-STAT - waived	23	24.2	1.2	4.9	24	19 - 30	23	21.0	0.8	3.6	21	16 - 26
<b>Specimen IST-3</b>												
All Method	79	23.8	1.0	4.1	24	19 - 29	80	17.1	0.7	3.8	17	13 - 21
All i-STAT Instruments	79	23.8	1.0	4.1	24	19 - 29	80	17.1	0.7	3.8	17	13 - 21
i-STAT - moderate	61	23.7	1.0	4.2	24	18 - 29	62	17.1	0.7	3.9	17	13 - 21
i-STAT - waived	18	24.1	0.9	3.6	24	19 - 29	18	16.9	0.6	3.5	17	13 - 21
<b>Specimen IST-5</b>												
All Method	78	24.2	0.8	3.5	24	19 - 30						
All i-STAT Instruments	78	24.2	0.8	3.5	24	19 - 30						
i-STAT - moderate	61	24.2	0.9	3.6	24	19 - 29						
i-STAT - waived	18	24.2	1.1	4.5	24	19 - 30						

### Urea Nitrogen (BUN) (mg/dL)

<u>Instrument</u>	Specimen IST-1							Specimen IST-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	91	66.0	1.2	1.9	66	60 - 72	90	36.1	0.5	1.4	36	32 - 40		
All i-STAT Instruments	91	66.0	1.2	1.9	66	60 - 72	90	36.1	0.5	1.4	36	32 - 40		
i-STAT - moderate	63	66.0	1.2	1.9	66	60 - 72	62	36.1	0.4	1.2	36	32 - 40		
i-STAT - waived	28	66.1	1.2	1.8	66	60 - 73	28	36.1	0.6	1.7	36	32 - 40		
Specimen IST-3							Specimen IST-4							
All Method	83	16.0	0.4	2.3	16	14 - 19	83	21.0	0.5	2.2	21	18 - 23		
All i-STAT Instruments	83	16.0	0.4	2.3	16	14 - 19	83	21.0	0.5	2.2	21	18 - 23		
i-STAT - moderate	56	16.0	0.1	0.0	16	14 - 18	63	21.0	0.5	2.3	21	18 - 23		
i-STAT - waived	20	16.1	0.4	2.8	16	14 - 19	20	21.0	0.5	2.2	21	19 - 23		
Specimen IST-5														
All Method	81	66.2	1.0	1.6	66	60 - 73								
All i-STAT Instruments	81	66.2	1.0	1.6	66	60 - 73								
i-STAT - moderate	61	66.1	1.0	1.5	66	60 - 73								
i-STAT - waived	20	66.5	1.2	1.8	67	60 - 73								

### Glucose (mg/dL)

<u>Instrument</u>	Specimen IST-1							Specimen IST-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	91	177.6	1.5	0.8	178	159 - 196	91	130.9	1.3	1.0	131	117 - 145		
All i-STAT Instruments	91	177.6	1.5	0.8	178	159 - 196	91	130.9	1.3	1.0	131	117 - 145		
i-STAT - moderate	63	177.6	1.4	0.8	178	159 - 196	62	130.8	1.1	0.9	131	117 - 144		
i-STAT - waived	28	177.7	1.7	0.9	177	159 - 196	28	131.3	1.5	1.2	131	118 - 145		
Specimen IST-3							Specimen IST-4							
All Method	83	76.3	1.1	1.5	76	68 - 84	81	85.8	1.0	1.2	86	77 - 95		
All i-STAT Instruments	83	76.3	1.1	1.5	76	68 - 84	81	85.8	1.0	1.2	86	77 - 95		
i-STAT - moderate	62	76.3	1.0	1.3	76	68 - 84	61	85.9	1.1	1.2	86	77 - 95		
i-STAT - waived	20	76.3	1.4	1.8	76	68 - 84	20	85.7	0.9	1.0	86	77 - 95		
Specimen IST-5														
All Method	82	177.4	1.3	0.7	177	159 - 196								
All i-STAT Instruments	82	177.4	1.3	0.7	177	159 - 196								
i-STAT - moderate	62	177.5	1.2	0.7	177	159 - 196								
i-STAT - waived	20	177.3	1.5	0.8	177	159 - 196								

## Hematocrit (percent)

Instrument	Specimen IST-1							Specimen IST-2						
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range		
All Method	10	21.0	0.1	0.0	21	19 - 23	10	36.4	0.7	1.9	37	34 - 39		
All i-STAT Instruments	10	21.0	0.1	0.0	21	19 - 23	10	36.4	0.7	1.9	37	34 - 39		
i-STAT - waived	10	21.0	0.1	0.0	21	19 - 23	10	36.4	0.7	1.9	37	34 - 39		
Specimen IST-3							Specimen IST-4							
All Method	10	29.3	0.6	2.0	29	27 - 32	10	25.3	0.6	2.3	25	23 - 27		
All i-STAT Instruments	10	29.3	0.6	2.0	29	27 - 32	10	25.3	0.6	2.3	25	23 - 27		
i-STAT - waived	10	29.3	0.6	2.0	29	27 - 32	10	25.3	0.6	2.3	25	23 - 27		
Specimen IST-5														
All Method	10	20.7	0.6	2.8	21	19 - 22								
All i-STAT Instruments	10	20.7	0.6	2.8	21	19 - 22								
i-STAT - waived	10	20.7	0.6	2.8	21	19 - 22								

## Hemoglobin (g/dL)

Instrument	Specimen IST-1							Specimen IST-2						
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range		
All Method	10	7.10	0.01	0.0	7.1	6.6 - 7.6	10	12.33	0.25	2.0	12.2	11.4 - 13.2		
All i-STAT Instruments	10	7.10	0.01	0.0	7.1	6.6 - 7.6	10	12.33	0.25	2.0	12.2	11.4 - 13.2		
i-STAT - waived	10	7.10	0.01	0.0	7.1	6.6 - 7.6	10	12.33	0.25	2.0	12.2	11.4 - 13.2		
Specimen IST-3							Specimen IST-4							
All Method	10	10.00	0.17	1.7	9.9	9.3 - 10.7	10	8.60	0.17	2.0	8.5	7.9 - 9.3		
All i-STAT Instruments	10	10.00	0.17	1.7	9.9	9.3 - 10.7	10	8.60	0.17	2.0	8.5	7.9 - 9.3		
i-STAT - waived	10	10.00	0.17	1.7	9.9	9.3 - 10.7	10	8.60	0.17	2.0	8.5	7.9 - 9.3		
Specimen IST-5														
All Method	10	7.00	0.17	2.5	7.1	6.5 - 7.5								
All i-STAT Instruments	10	7.00	0.17	2.5	7.1	6.5 - 7.5								
i-STAT - waived	10	7.00	0.17	2.5	7.1	6.5 - 7.5								

## Creatinine (mg/dL)

Instrument	Specimen IST-1						Specimen IST-2					
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range
All Method	97	3.82	0.13	3.4	3.8	3.2 - 4.4	97	1.67	0.06	3.8	1.7	1.3 - 2.0
All i-STAT Instruments	97	3.82	0.13	3.4	3.8	3.2 - 4.4	97	1.67	0.06	3.8	1.7	1.3 - 2.0
i-STAT - moderate	60	3.83	0.12	3.1	3.8	3.2 - 4.5	60	1.68	0.07	3.9	1.7	1.3 - 2.0
i-STAT - waived	37	3.80	0.15	3.9	3.8	3.2 - 4.4	37	1.66	0.06	3.6	1.7	1.3 - 2.0
Specimen IST-3						Specimen IST-4						
All Method	81	0.77	0.05	6.8	0.8	0.4 - 1.1	81	1.11	0.04	3.8	1.1	0.8 - 1.5
All i-STAT Instruments	81	0.77	0.05	6.8	0.8	0.4 - 1.1	81	1.11	0.04	3.8	1.1	0.8 - 1.5
i-STAT - moderate	60	0.76	0.05	6.8	0.8	0.4 - 1.1	60	1.11	0.04	3.8	1.1	0.8 - 1.5
i-STAT - waived	21	0.78	0.05	6.9	0.8	0.4 - 1.1	21	1.11	0.04	3.9	1.1	0.8 - 1.5
Specimen IST-5												
All Method	81	3.85	0.11	2.9	3.8	3.2 - 4.5						
All i-STAT Instruments	81	3.85	0.11	2.9	3.8	3.2 - 4.5						
i-STAT - moderate	60	3.85	0.11	2.9	3.8	3.2 - 4.5						
i-STAT - waived	21	3.85	0.12	3.0	3.8	3.2 - 4.5						

## **Ionized Calcium (mmol/L)**

<b>Instrument</b>	Specimen IST-1						Specimen IST-2					
	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>
All Method	65	2.086	0.019	0.9	2.09	2.02 - 2.15	66	1.169	0.007	0.6	1.17	1.14 - 1.20
All i-STAT Instruments	65	2.086	0.019	0.9	2.09	2.02 - 2.15	66	1.169	0.007	0.6	1.17	1.14 - 1.20
i-STAT - moderate	45	2.084	0.018	0.9	2.08	2.02 - 2.14	46	1.168	0.006	0.5	1.17	1.14 - 1.19
i-STAT - waived	20	2.090	0.021	1.0	2.09	2.02 - 2.16	20	1.171	0.009	0.8	1.17	1.14 - 1.20
Specimen IST-3						Specimen IST-4						
All Method	60	0.849	0.006	0.7	0.85	0.83 - 0.87	60	0.757	0.006	0.8	0.76	0.73 - 0.78
All i-STAT Instruments	60	0.849	0.006	0.7	0.85	0.83 - 0.87	60	0.757	0.006	0.8	0.76	0.73 - 0.78
i-STAT - moderate	46	0.849	0.006	0.7	0.85	0.83 - 0.87	45	0.757	0.006	0.8	0.76	0.73 - 0.78
i-STAT - waived	14	0.849	0.006	0.7	0.85	0.83 - 0.87	15	0.756	0.006	0.8	0.76	0.73 - 0.78
Specimen IST-5												
All Method	59	2.087	0.017	0.8	2.09	2.03 - 2.14						
All i-STAT Instruments	59	2.087	0.017	0.8	2.09	2.03 - 2.14						
i-STAT - moderate	44	2.089	0.016	0.8	2.09	2.04 - 2.14						
i-STAT - waived	15	2.083	0.018	0.9	2.08	2.02 - 2.14						

## Albumin (g/dL)

<u>Reagent/Instrument</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	185	2.05	0.15	7.5	2.1	1.8 - 2.3	184	5.28	0.45	8.5	5.5	4.7 - 5.9		
All Bromocresol Green Reagents	139	2.07	0.16	7.9	2.1	1.8 - 2.3	136	5.49	0.23	4.1	5.5	4.9 - 6.1		
All Bromocresol Purple Reagents	43	1.97	0.07	3.7	2.0	1.7 - 2.2	43	4.63	0.33	7.0	4.8	4.1 - 5.1		
Abaxis Piccolo														
Abaxis Piccolo - waived	11	1.98	0.06	3.0	2.0	1.7 - 2.2	11	4.18	0.15	3.5	4.2	3.7 - 4.6		
All Chemistry Instruments	13	1.99	0.06	3.2	2.0	1.7 - 2.2	14	4.14	0.67	16.2	4.2	3.7 - 4.6		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	20	2.18	0.06	2.9	2.2	1.9 - 2.4	20	5.47	0.11	2.0	5.5	4.9 - 6.1		
Beckman AU														
Beckman AU systems	28	2.07	0.07	3.2	2.1	1.8 - 2.3	29	5.51	0.15	2.7	5.5	4.9 - 6.1		
ELITechGroup Envoy 500														
ELITechGroup Envoy 500	5	2.30	0.01	0.0	2.3	2.0 - 2.6	5	5.52	0.08	1.5	5.5	4.9 - 6.1		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	19	2.18	0.15	6.9	2.2	1.9 - 2.5	18	5.07	0.25	5.0	5.1	4.5 - 5.6		
All Chemistry Instruments	20	2.18	0.15	6.8	2.2	1.9 - 2.4	19	5.06	0.25	4.9	5.1	4.5 - 5.6		
Roche cobas c 501														
Roche cobas 6000 / c 501	9	2.21	0.12	5.3	2.2	1.9 - 2.5	9	5.77	0.12	2.1	5.8	5.1 - 6.4		
Roche Integra														
Roche Integra	17	2.09	0.04	2.0	2.1	1.8 - 2.4	17	5.62	0.09	1.6	5.6	5.0 - 6.2		
Siemens Healthcare														
Siemens Dimension	28	1.95	0.07	3.6	1.9	1.7 - 2.2	28	4.77	0.08	1.6	4.8	4.2 - 5.3		
All Chemistry Instruments	29	1.95	0.07	3.5	1.9	1.7 - 2.2	29	4.77	0.08	1.6	4.8	4.2 - 5.3		
VITROS														
VITROS 250,350,400 500,700,750,950	23	1.78	0.08	4.7	1.8	1.6 - 2.0	23	5.53	0.23	4.2	5.5	4.9 - 6.1		
All Chemistry Instruments	24	1.78	0.08	4.6	1.8	1.6 - 2.0	24	5.53	0.23	4.1	5.5	4.9 - 6.1		

## Albumin (g/dL)

<u>Reagent/Instrument</u>	Specimen CH-3							Specimen CH-4						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	171	7.29	0.60	8.2	7.3	6.5 - 8.1	175	3.11	0.22	7.0	3.2	2.8 - 3.5		
All Bromocresol Green Reagents	134	7.31	0.65	8.9	7.3	6.5 - 8.1	139	3.19	0.17	5.2	3.2	2.8 - 3.6		
All Bromocresol Purple Reagents	35	7.25	0.35	4.9	7.3	6.5 - 8.0	33	2.80	0.09	3.3	2.8	2.5 - 3.1		
Abaxis Piccolo														
Abaxis Piccolo - waived	3	-	-	-	6.4	6.0 - 7.4	3	-	-	-	2.7	2.5 - 3.1		
All Chemistry Instruments	5	6.68	0.63	9.4	6.4	6.0 - 7.4	5	2.80	0.23	8.4	2.7	2.5 - 3.1		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	19	8.01	0.13	1.7	8.0	7.2 - 8.9	20	3.25	0.07	2.1	3.3	2.9 - 3.6		
Beckman AU														
Beckman AU systems	24	7.31	0.47	6.4	7.2	6.5 - 8.1	29	3.20	0.10	3.2	3.2	2.8 - 3.6		
ELITechGroup Envoy 500														
ELITechGroup Envoy 500	5	7.20	0.16	2.2	7.2	6.4 - 8.0	5	3.40	0.07	2.1	3.4	3.0 - 3.8		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	7.76	0.47	6.1	7.9	6.9 - 8.6	19	3.18	0.23	7.3	3.2	2.8 - 3.5		
All Chemistry Instruments	19	7.75	0.46	5.9	7.8	6.9 - 8.6	20	3.18	0.23	7.1	3.2	2.8 - 3.5		
Roche cobas c 501														
Roche cobas 6000 / c 501	9	7.56	0.74	9.8	7.4	6.8 - 8.4	9	3.39	0.12	3.4	3.4	3.0 - 3.8		
Roche Integra														
Roche Integra	17	7.28	0.35	4.8	7.3	6.5 - 8.1	17	3.28	0.05	1.6	3.3	2.9 - 3.7		
Siemens Healthcare														
Siemens Dimension	28	7.36	0.14	1.9	7.4	6.6 - 8.1	27	2.80	0.06	2.3	2.8	2.5 - 3.1		
All Chemistry Instruments	29	7.34	0.16	2.2	7.4	6.6 - 8.1	28	2.80	0.07	2.4	2.8	2.5 - 3.1		
VITROS														
VITROS 250,350,400 500,700,750,950	23	6.47	0.26	4.0	6.5	5.8 - 7.2	23	2.96	0.07	2.4	3.0	2.6 - 3.3		
All Chemistry Instruments	24	6.45	0.27	4.2	6.5	5.8 - 7.1	24	2.96	0.07	2.4	3.0	2.6 - 3.3		

**Albumin (g/dL)****Specimen CH-5**

<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	177	4.12	0.29	7.0	4.2	3.7 - 4.6
All Bromocresol Green Reagents	135	4.25	0.14	3.3	4.2	3.8 - 4.7
All Bromocresol Purple Reagents	33	3.63	0.12	3.3	3.7	3.2 - 4.0
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	3.3	3.2 - 4.0
All Chemistry Instruments	5	3.60	0.37	10.4	3.5	3.2 - 4.0
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	20	4.26	0.09	2.2	4.3	3.8 - 4.7
Beckman AU						
Beckman AU systems	29	4.24	0.12	2.9	4.2	3.8 - 4.7
ELITechGroup Envoy 500						
ELITechGroup Envoy 500	5	4.30	0.07	1.6	4.3	3.8 - 4.8
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	19	4.09	0.27	6.7	4.1	3.6 - 4.5
All Chemistry Instruments	19	4.04	0.19	4.8	4.1	3.6 - 4.5
Roche cobas c 501						
Roche cobas 6000 / c 501	9	4.46	0.09	2.0	4.5	4.0 - 5.0
Roche Integra						
Roche Integra	17	4.32	0.06	1.5	4.3	3.8 - 4.8
Siemens Healthcare						
Siemens Dimension	28	3.66	0.08	2.1	3.7	3.2 - 4.1
All Chemistry Instruments	29	3.66	0.08	2.3	3.7	3.2 - 4.1
VITROS						
VITROS 250,350,400 500,700,750,950	23	4.18	0.10	2.4	4.2	3.7 - 4.6
All Chemistry Instruments	24	4.18	0.10	2.4	4.2	3.7 - 4.7

## Bilirubin, Direct (mg/dL)

<b><u>Reagent/Instrument</u></b>	Specimen CH-1							Specimen CH-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	107	0.05	0.06	123.4	0.0	0.0 - 0.2	110	1.42	0.42	29.8	1.5	0.5 - 2.3		
All Alfa Wassermann Reagents	10	0.10	0.01	0.0	0.1	0.0 - 0.2	11	1.91	0.16	8.3	1.9	1.5 - 2.3		
All Roche Reagents	22	0.10	0.10	99.5	0.1	0.0 - 0.3	22	1.09	0.18	16.7	1.1	0.7 - 1.5		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	10	0.10	0.01	0.0	0.1	0.0 - 0.2	11	1.91	0.16	8.3	1.9	1.5 - 2.3		
Beckman AU														
Beckman AU systems	19	0.00	0.01	0.0	0.0	0.0 - 0.1	21	1.51	0.12	7.8	1.5	1.2 - 1.8		
Roche Integra														
Roche Integra	11	0.02	0.04	222.5	0.0	0.0 - 0.1	11	1.25	0.07	5.5	1.2	1.1 - 1.4		
Siemens Healthcare														
Siemens Dimension	19	0.04	0.05	113.8	0.0	0.0 - 0.2	20	1.06	0.07	6.4	1.1	0.9 - 1.2		
All Chemistry Instruments	21	0.04	0.05	112.4	0.0	0.0 - 0.2	22	1.07	0.07	6.7	1.1	0.9 - 1.3		
VITROS-BuBc and Bc														
VITROS 250,350,400 500,700,750,950	11	0.12	0.26	223.3	0.0	0.0 - 0.7	13	1.27	0.66	52.0	1.5	0.0 - 2.6		
<b><u>Reagent/Instrument</u></b>	Specimen CH-3							Specimen CH-4						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	108	0.21	0.15	69.3	0.2	0.0 - 0.6	111	0.45	0.19	43.5	0.4	0.0 - 0.9		
All Alfa Wassermann Reagents	11	0.55	0.19	35.1	0.5	0.1 - 1.0	11	0.69	0.05	7.8	0.7	0.5 - 0.8		
All Roche Reagents	22	0.15	0.05	35.0	0.1	0.0 - 0.3	22	0.32	0.05	16.4	0.3	0.2 - 0.5		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	11	0.55	0.19	35.1	0.5	0.1 - 1.0	11	0.69	0.05	7.8	0.7	0.5 - 0.8		
Beckman AU														
Beckman AU systems	21	0.17	0.05	29.0	0.2	0.0 - 0.3	21	0.53	0.06	10.8	0.5	0.4 - 0.7		
Roche Integra														
Roche Integra	10	0.10	0.01	0.0	0.1	0.0 - 0.2	11	0.35	0.05	14.7	0.4	0.2 - 0.5		
Siemens Healthcare														
Siemens Dimension	19	0.10	0.01	0.0	0.1	0.0 - 0.2	20	0.32	0.04	11.6	0.3	0.2 - 0.4		
All Chemistry Instruments	21	0.10	0.01	0.0	0.1	0.0 - 0.2	22	0.32	0.04	13.3	0.3	0.2 - 0.5		
VITROS-BuBc and Bc														
VITROS 250,350,400 500,700,750,950	13	0.42	0.48	113.4	0.4	0.0 - 1.4	13	0.24	0.21	86.5	0.2	0.0 - 0.7		

**Bilirubin, Direct (mg/dL)****Specimen CH-5**

<b><u>Reagent/Instrument</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>
All Method	110	0.88	0.29	33.4	0.9	0.2 - 1.5
All Alfa Wassermann Reagents	11	1.25	0.11	9.0	1.2	1.0 - 1.5
All Roche Reagents	22	0.67	0.10	14.6	0.7	0.4 - 0.9
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	11	1.25	0.11	9.0	1.2	1.0 - 1.5
Beckman AU						
Beckman AU systems	20	1.01	0.06	5.5	1.0	0.8 - 1.2
Roche Integra						
Roche Integra	11	0.75	0.05	6.9	0.8	0.6 - 0.9
Siemens Healthcare						
Siemens Dimension	20	0.66	0.05	7.8	0.7	0.5 - 0.8
All Chemistry Instruments	22	0.66	0.06	8.8	0.7	0.5 - 0.8
VITROS-BuBc and Bc						
VITROS 250,350,400 500,700,750,950	13	0.65	0.31	47.5	0.8	0.0 - 1.3

## Bilirubin, Total (mg/dL)

<u><b>Reagent/Instrument</b></u>	Specimen CH-1							Specimen CH-2						
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>		
All Method	184	0.12	0.06	52.7	0.1	0.0 - 0.6	184	4.72	0.46	9.8	4.6	3.7 - 5.7		
All Alfa Wassermann Reagents	25	0.16	0.05	29.9	0.2	0.0 - 0.6	25	5.52	0.23	4.2	5.5	4.4 - 6.7		
All Horiba Pentra Reagents	20	0.09	0.05	57.6	0.1	0.0 - 0.5	20	4.49	0.28	6.2	4.5	3.5 - 5.4		
All Roche T. bili Special Reagents	24	0.13	0.08	63.5	0.1	0.0 - 0.6	24	4.35	0.21	4.7	4.3	3.4 - 5.3		
Abaxis Piccolo														
Abaxis Piccolo - waived	11	0.26	0.05	19.1	0.3	0.0 - 0.7	11	4.48	0.17	3.7	4.5	3.5 - 5.4		
All Chemistry Instruments	13	0.25	0.05	20.4	0.3	0.0 - 0.7	13	4.57	0.28	6.2	4.5	3.6 - 5.5		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	24	0.17	0.05	28.9	0.2	0.0 - 0.6	24	5.52	0.23	4.2	5.5	4.4 - 6.7		
Beckman AU														
Beckman AU systems	27	0.10	0.01	0.0	0.1	0.0 - 0.5	28	4.48	0.20	4.4	4.5	3.5 - 5.4		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	20	0.09	0.05	57.6	0.1	0.0 - 0.5	20	4.49	0.28	6.2	4.5	3.5 - 5.4		
Roche Integra-T. bili Gen.3														
Roche Integra	11	0.07	0.06	88.9	0.1	0.0 - 0.5	11	4.39	0.26	5.9	4.3	3.5 - 5.3		
All Chemistry Instruments	13	0.09	0.08	82.3	0.1	0.0 - 0.5	13	4.36	0.25	5.7	4.3	3.4 - 5.3		
Siemens Healthcare														
Siemens Dimension	25	0.10	0.01	0.0	0.1	0.0 - 0.5	27	4.77	0.20	4.3	4.8	3.8 - 5.8		
All Chemistry Instruments	26	0.10	0.01	0.0	0.1	0.0 - 0.5	28	4.78	0.20	4.2	4.8	3.8 - 5.8		
VITROS - TBIL														
VITROS 250,350,400 500,700,750,950	23	0.10	0.01	0.0	0.1	0.0 - 0.5	23	4.80	0.39	8.2	4.7	3.8 - 5.8		
All Chemistry Instruments	24	0.10	0.01	0.0	0.1	0.0 - 0.5	24	4.81	0.39	8.0	4.7	3.8 - 5.8		

## Bilirubin, Total (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-3							Specimen CH-4						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	174	0.65	0.14	21.7	0.6	0.2 - 1.1	175	1.42	0.19	13.2	1.4	1.0 - 1.9		
All Alfa Wassermann Reagents	25	0.88	0.06	7.3	0.9	0.4 - 1.3	25	1.74	0.10	5.7	1.8	1.3 - 2.2		
All Horiba Pentra Reagents	19	0.59	0.07	11.9	0.6	0.1 - 1.0	20	1.33	0.13	10.1	1.3	0.9 - 1.8		
All Roche T. bili Special Reagents	24	0.50	0.06	11.8	0.5	0.1 - 0.9	24	1.29	0.09	6.8	1.3	0.8 - 1.7		
Abaxis Piccolo														
Abaxis Piccolo - waived	3	-	-	-	0.7	0.2 - 1.1	3	-	-	-	-	1.5	1.0 - 1.9	
All Chemistry Instruments	5	-	-	-	0.7	0.3 - 1.2	5	-	-	-	-	1.5	1.1 - 2.0	
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	24	0.88	0.07	7.5	0.9	0.4 - 1.3	24	1.74	0.10	5.8	1.8	1.3 - 2.2		
Beckman AU														
Beckman AU systems	28	0.65	0.06	8.8	0.7	0.2 - 1.1	28	1.44	0.08	5.8	1.5	1.0 - 1.9		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	19	0.59	0.07	11.9	0.6	0.1 - 1.0	20	1.33	0.13	10.1	1.3	0.9 - 1.8		
Roche Integra-T. bili Gen.3														
Roche Integra	11	0.50	0.06	12.6	0.5	0.1 - 0.9	11	1.32	0.10	7.4	1.3	0.9 - 1.8		
All Chemistry Instruments	13	0.50	0.06	11.5	0.5	0.1 - 0.9	13	1.32	0.09	6.8	1.3	0.9 - 1.8		
Siemens Healthcare														
Siemens Dimension	27	0.55	0.06	10.6	0.5	0.1 - 1.0	27	1.41	0.09	6.4	1.4	1.0 - 1.9		
All Chemistry Instruments	28	0.55	0.06	10.5	0.5	0.1 - 1.0	28	1.41	0.09	6.3	1.4	1.0 - 1.9		
VITROS - TBIL														
VITROS 250,350,400 500,700,750,950	23	0.74	0.09	12.7	0.7	0.3 - 1.2	23	1.28	0.15	11.5	1.3	0.8 - 1.7		
All Chemistry Instruments	24	0.74	0.09	12.5	0.7	0.3 - 1.2	24	1.28	0.14	11.3	1.3	0.8 - 1.7		

## Bilirubin, Total (mg/dL)

### Specimen CH-5

<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	174	2.87	0.30	10.3	2.8	2.2 - 3.5
All Alfa Wassermann Reagents	25	3.42	0.17	4.9	3.4	2.7 - 4.1
All Horiba Pentra Reagents	20	2.73	0.17	6.3	2.8	2.1 - 3.3
All Roche T. bili Special Reagents	24	2.62	0.19	7.1	2.6	2.0 - 3.2
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	2.9	2.2 - 3.5
All Chemistry Instruments	5	-	-	-	2.9	2.3 - 3.6
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	24	3.42	0.17	5.0	3.4	2.7 - 4.2
Beckman AU						
Beckman AU systems	28	2.81	0.13	4.5	2.8	2.2 - 3.4
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	20	2.73	0.17	6.3	2.8	2.1 - 3.3
Roche Integra-T. bili Gen.3						
Roche Integra	11	2.68	0.20	7.4	2.6	2.1 - 3.3
All Chemistry Instruments	13	2.66	0.19	7.1	2.6	2.1 - 3.2
Siemens Healthcare						
Siemens Dimension	27	2.87	0.16	5.5	2.9	2.2 - 3.5
All Chemistry Instruments	28	2.88	0.16	5.4	2.9	2.3 - 3.5
VITROS - TBIL						
VITROS 250,350,400 500,700,750,950	23	2.82	0.23	8.1	2.8	2.2 - 3.4
All Chemistry Instruments	24	2.82	0.22	7.9	2.8	2.2 - 3.4

## Calcium (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-1						Specimen CH-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	187	7.27	0.24	3.3	7.3	6.2 - 8.3	188	13.22	0.40	3.0	13.2	12.2 - 14.3
All Arsenazo Methods	80	7.33	0.26	3.6	7.3	6.3 - 8.4	80	13.08	0.34	2.6	13.1	12.0 - 14.1
All CPC Methods	103	7.22	0.21	3.0	7.2	6.2 - 8.3	103	13.33	0.39	2.9	13.4	12.3 - 14.4
Abaxis Piccolo												
Abaxis Piccolo - waived	11	7.56	0.30	4.0	7.6	6.5 - 8.6	11	12.63	0.28	2.2	12.6	11.6 - 13.7
All Chemistry Instruments	13	7.57	0.30	4.0	7.6	6.5 - 8.6	13	12.62	0.27	2.1	12.6	11.6 - 13.7
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	25	7.41	0.20	2.7	7.4	6.4 - 8.5	25	13.08	0.27	2.1	13.1	12.0 - 14.1
Beckman AU												
Beckman AU systems	30	7.22	0.23	3.2	7.3	6.2 - 8.3	30	13.41	0.44	3.3	13.5	12.4 - 14.5
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	16	7.20	0.17	2.4	7.2	6.2 - 8.2	16	13.36	0.30	2.2	13.4	12.3 - 14.4
Roche Integra												
Roche Integra	17	7.26	0.17	2.3	7.3	6.2 - 8.3	17	13.38	0.35	2.6	13.4	12.3 - 14.4
Siemens Healthcare												
Siemens Dimension	27	7.13	0.23	3.2	7.1	6.1 - 8.2	27	13.14	0.38	2.9	13.1	12.1 - 14.2
All Chemistry Instruments	29	7.14	0.23	3.2	7.1	6.1 - 8.2	29	13.13	0.37	2.8	13.1	12.1 - 14.2
VITROS												
VITROS 250,350,400 500,700,750,950	23	7.25	0.12	1.7	7.3	6.2 - 8.3	23	13.16	0.19	1.4	13.2	12.1 - 14.2
All Chemistry Instruments	24	7.25	0.12	1.7	7.3	6.2 - 8.3	24	13.16	0.18	1.4	13.2	12.1 - 14.2

## Calcium (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-3							Specimen CH-4						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	178	11.62	0.42	3.6	11.7	10.6 - 12.7	176	9.17	0.26	2.8	9.2	8.1 - 10.2		
All Arsenazo Methods	71	11.70	0.38	3.3	11.8	10.7 - 12.8	72	9.28	0.26	2.8	9.3	8.2 - 10.3		
All CPC Methods	103	11.56	0.43	3.8	11.6	10.5 - 12.6	102	9.10	0.24	2.6	9.1	8.1 - 10.2		
Abaxis Piccolo														
Abaxis Piccolo - waived	3	-	-	-	10.7	10.7 - 12.8	3	-	-	-	9.0	8.2 - 10.3		
All Chemistry Instruments	5	-	-	-	10.7	9.8 - 11.9	5	-	-	-	9.4	8.2 - 10.3		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	25	11.55	0.25	2.1	11.5	10.5 - 12.6	25	9.47	0.21	2.2	9.5	8.4 - 10.5		
Beckman AU														
Beckman AU systems	30	11.84	0.39	3.3	11.9	10.8 - 12.9	29	9.13	0.24	2.6	9.2	8.1 - 10.2		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	16	11.71	0.31	2.6	11.7	10.7 - 12.8	16	9.17	0.25	2.7	9.2	8.1 - 10.2		
Roche Integra														
Roche Integra	17	11.55	0.29	2.5	11.6	10.5 - 12.6	17	9.13	0.18	1.9	9.1	8.1 - 10.2		
Siemens Healthcare														
Siemens Dimension	27	11.10	0.27	2.5	11.1	10.1 - 12.1	27	8.95	0.25	2.8	8.9	7.9 - 10.0		
All Chemistry Instruments	29	11.10	0.27	2.4	11.1	10.0 - 12.1	29	8.95	0.24	2.7	8.9	7.9 - 10.0		
VITROS														
VITROS 250,350,400 500,700,750,950	23	11.93	0.23	1.9	11.9	10.9 - 13.0	23	9.26	0.14	1.5	9.3	8.2 - 10.3		
All Chemistry Instruments	24	11.93	0.22	1.9	11.9	10.9 - 13.0	24	9.25	0.14	1.5	9.3	8.2 - 10.3		

## Calcium (mg/dL)

	Specimen CH-5					
<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	176	10.97	0.28	2.5	11.0	9.9 - 12.0
All Arsenazo Methods	72	11.05	0.24	2.2	11.0	10.0 - 12.1
All CPC Methods	102	10.90	0.31	2.8	11.0	9.9 - 12.0
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	10.9	10.0 - 12.1
All Chemistry Instruments	5	-	-	-	10.9	9.8 - 11.9
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	25	11.18	0.26	2.3	11.2	10.1 - 12.2
Beckman AU						
Beckman AU systems	30	10.97	0.35	3.2	11.0	9.9 - 12.0
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	16	11.03	0.29	2.6	11.0	10.0 - 12.1
Roche Integra						
Roche Integra	17	10.95	0.21	1.9	11.0	9.9 - 12.0
Siemens Healthcare						
Siemens Dimension	27	10.73	0.28	2.6	10.7	9.7 - 11.8
All Chemistry Instruments	29	10.71	0.28	2.7	10.7	9.7 - 11.8
VITROS						
VITROS 250,350,400 500,700,750,950	23	11.07	0.16	1.4	11.1	10.0 - 12.1
All Chemistry Instruments	24	11.06	0.16	1.5	11.1	10.0 - 12.1

## Creatinine (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	185	0.51	0.08	15.8	0.5	0.2 - 0.9	188	4.71	0.30	6.4	4.7	4.0 - 5.5		
All Alfa Wassermann Reagents	26	0.63	0.08	12.4	0.6	0.3 - 1.0	26	4.45	0.18	4.1	4.5	3.7 - 5.2		
All Roche Reagents	28	0.49	0.07	13.4	0.5	0.1 - 0.8	28	4.45	0.30	6.8	4.3	3.7 - 5.2		
All VITROS Reagents	24	0.48	0.06	12.8	0.5	0.1 - 0.8	24	4.91	0.14	2.8	4.9	4.1 - 5.7		
Abaxis Piccolo														
Abaxis Piccolo - waived	11	0.60	0.09	14.9	0.6	0.3 - 0.9	11	4.98	0.22	4.4	5.0	4.2 - 5.8		
All Chemistry Instruments	13	0.61	0.09	14.2	0.6	0.3 - 1.0	13	4.92	0.25	5.1	5.0	4.1 - 5.7		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	25	0.63	0.08	12.6	0.6	0.3 - 1.0	25	4.44	0.18	4.0	4.5	3.7 - 5.2		
Beckman AU														
Beckman AU systems	30	0.49	0.04	8.2	0.5	0.1 - 0.8	29	4.66	0.10	2.2	4.7	3.9 - 5.4		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	0.44	0.05	11.5	0.4	0.1 - 0.8	18	4.54	0.22	4.9	4.6	3.8 - 5.3		
Roche Integra														
Roche Integra	17	0.50	0.01	0.0	0.5	0.2 - 0.8	17	4.33	0.14	3.3	4.3	3.6 - 5.0		
Siemens Healthcare														
Siemens Dimension	26	0.48	0.04	9.0	0.5	0.1 - 0.8	27	4.98	0.12	2.4	5.0	4.2 - 5.8		
All Chemistry Instruments	29	0.47	0.06	11.9	0.5	0.1 - 0.8	29	4.99	0.12	2.4	5.0	4.2 - 5.8		
VITROS - CREA														
VITROS 250,350,400 500,700,750,950	16	0.47	0.06	12.8	0.5	0.1 - 0.8	16	4.89	0.11	2.2	4.9	4.1 - 5.7		
All Chemistry Instruments	17	0.47	0.06	12.5	0.5	0.1 - 0.8	17	4.89	0.11	2.2	4.9	4.1 - 5.7		

## Creatinine (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-3							Specimen CH-4						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	176	0.67	0.08	11.5	0.7	0.3 - 1.0	176	1.84	0.09	4.8	1.8	1.5 - 2.2		
All Alfa Wassermann Reagents	25	0.70	0.06	8.2	0.7	0.4 - 1.0	26	1.88	0.08	4.4	1.9	1.5 - 2.2		
All Roche Reagents	28	0.65	0.06	8.9	0.6	0.3 - 1.0	28	1.81	0.09	5.0	1.8	1.5 - 2.2		
All VITROS Reagents	24	0.71	0.04	6.3	0.7	0.4 - 1.1	24	1.90	0.06	2.9	1.9	1.5 - 2.2		
Abaxis Piccolo														
Abaxis Piccolo - waived	3	-	-	-	0.5	0.3 - 1.0	3	-	-	-	-	1.5	1.5 - 2.2	
All Chemistry Instruments	5	-	-	-	0.7	0.3 - 1.0	5	-	-	-	-	1.8	1.4 - 2.1	
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	24	0.70	0.06	7.8	0.7	0.4 - 1.1	25	1.88	0.09	4.5	1.9	1.5 - 2.2		
Beckman AU														
Beckman AU systems	30	0.66	0.06	9.3	0.7	0.3 - 1.0	30	1.80	0.05	2.7	1.8	1.5 - 2.2		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	0.61	0.06	10.6	0.6	0.3 - 1.0	18	1.73	0.12	7.1	1.7	1.4 - 2.1		
Roche Integra														
Roche Integra	17	0.68	0.06	8.3	0.7	0.3 - 1.0	17	1.80	0.08	4.4	1.8	1.5 - 2.1		
Siemens Healthcare														
Siemens Dimension	27	0.69	0.05	7.9	0.7	0.3 - 1.0	27	1.84	0.07	4.0	1.8	1.5 - 2.2		
All Chemistry Instruments	29	0.70	0.07	9.7	0.7	0.4 - 1.1	29	1.84	0.07	4.0	1.8	1.5 - 2.2		
VITROS - CREA														
VITROS 250,350,400 500,700,750,950	16	0.72	0.04	5.6	0.7	0.4 - 1.1	16	1.89	0.04	2.3	1.9	1.5 - 2.2		
All Chemistry Instruments	17	0.72	0.04	5.5	0.7	0.4 - 1.1	17	1.89	0.04	2.3	1.9	1.5 - 2.2		

## Creatinine (mg/dL)

### Specimen CH-5

<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	179	3.12	0.16	5.0	3.1	2.6 - 3.6
All Alfa Wassermann Reagents	26	3.07	0.10	3.3	3.1	2.6 - 3.6
All Roche Reagents	28	3.02	0.14	4.7	3.0	2.5 - 3.5
All VITROS Reagents	24	3.30	0.10	2.9	3.3	2.8 - 3.8
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	3.3	2.6 - 3.6
All Chemistry Instruments	5	-	-	-	3.2	2.7 - 3.7
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	25	3.06	0.10	3.3	3.1	2.6 - 3.6
Beckman AU						
Beckman AU systems	30	3.06	0.09	2.9	3.1	2.6 - 3.6
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	2.99	0.13	4.3	3.0	2.5 - 3.5
Roche Integra						
Roche Integra	17	2.98	0.10	3.5	3.0	2.5 - 3.5
Siemens Healthcare						
Siemens Dimension	27	3.23	0.09	2.8	3.2	2.7 - 3.8
All Chemistry Instruments	29	3.23	0.09	2.8	3.2	2.7 - 3.8
VITROS - CREA						
VITROS 250,350,400 500,700,750,950	16	3.27	0.08	2.4	3.3	2.7 - 3.8
All Chemistry Instruments	17	3.28	0.08	2.5	3.3	2.7 - 3.8

## Glucose (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-1						Specimen CH-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	194	51.4	3.5	6.7	51	45 - 58	195	248.8	9.0	3.6	249	223 - 274
All Alfa Wassermann Reagents	27	56.0	1.5	2.7	56	50 - 62	28	255.3	5.8	2.3	256	229 - 281
All Horiba Pentra Reagents	18	50.6	2.6	5.2	51	44 - 57	18	242.0	10.4	4.3	243	217 - 267
All Roche Reagents	28	51.3	1.1	2.2	51	45 - 58	28	247.4	5.8	2.4	247	222 - 273
Abaxis Piccolo												
Abaxis Piccolo - waived	11	53.8	2.0	3.7	54	47 - 60	11	238.7	2.0	0.8	239	214 - 263
All Chemistry Instruments	13	53.8	2.0	3.7	54	47 - 60	12	238.6	1.9	0.8	239	214 - 263
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	26	55.9	1.4	2.5	56	49 - 62	27	255.1	5.9	2.3	255	229 - 281
Beckman AU												
Beckman AU systems	30	51.5	2.2	4.3	51	45 - 58	30	246.2	8.8	3.6	247	221 - 271
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	50.6	2.6	5.2	51	44 - 57	18	242.0	10.4	4.3	243	217 - 267
Roche Integra												
Roche Integra	17	51.5	1.2	2.3	51	45 - 58	17	246.6	5.8	2.4	246	221 - 272
Siemens Healthcare												
Siemens Dimension	27	51.5	1.6	3.2	52	45 - 58	27	248.6	6.2	2.5	249	223 - 274
All Chemistry Instruments	29	51.4	1.7	3.2	52	45 - 58	29	248.5	6.1	2.5	249	223 - 274
VITROS												
VITROS 250,350,400 500,700,750,950	23	45.3	1.6	3.6	45	39 - 52	23	255.9	4.1	1.6	256	230 - 282
All Chemistry Instruments	24	45.3	1.6	3.5	45	39 - 52	24	255.8	4.0	1.6	256	230 - 282

## Glucose (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-3							Specimen CH-4						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	180	59.9	4.9	8.2	59	53 - 66	179	110.7	4.9	4.4	111	99 - 122		
All Alfa Wassermann Reagents	28	65.5	1.8	2.8	66	58 - 73	28	117.3	2.7	2.3	117	105 - 129		
All Horiba Pentra Reagents	18	55.0	2.7	4.9	55	49 - 61	18	108.0	5.5	5.1	108	97 - 119		
All Roche Reagents	28	56.1	1.5	2.6	56	50 - 63	28	110.9	2.6	2.3	111	99 - 123		
Abaxis Piccolo														
Abaxis Piccolo - waived	3	-	-	-	57	53 - 66	3	-	-	-	107	99 - 122		
All Chemistry Instruments	5	-	-	-	57	51 - 64	5	-	-	-	107	95 - 118		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	27	65.5	1.8	2.8	65	58 - 73	27	117.2	2.7	2.3	117	105 - 129		
Beckman AU														
Beckman AU systems	30	55.5	2.1	3.8	55	49 - 62	30	110.7	4.2	3.8	111	99 - 122		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	55.0	2.7	4.9	55	49 - 61	18	108.0	5.5	5.1	108	97 - 119		
Roche Integra														
Roche Integra	17	55.8	1.4	2.6	55	49 - 62	17	111.4	2.4	2.2	111	100 - 123		
Siemens Healthcare														
Siemens Dimension	27	64.7	2.3	3.5	64	58 - 72	27	110.7	2.9	2.6	111	99 - 122		
All Chemistry Instruments	29	64.7	2.3	3.5	64	58 - 72	29	110.6	3.0	2.7	110	99 - 122		
VITROS														
VITROS 250,350,400 500,700,750,950	23	62.6	2.4	3.8	63	56 - 69	23	105.7	2.7	2.5	106	95 - 117		
All Chemistry Instruments	24	62.5	2.4	3.9	63	56 - 69	24	105.7	2.6	2.5	106	95 - 117		

## Glucose (mg/dL)

	Specimen CH-5					
<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	179	170.2	6.5	3.8	170	153 - 188
All Alfa Wassermann Reagents	28	178.5	3.7	2.1	179	160 - 197
All Horiba Pentra Reagents	18	165.6	7.3	4.4	166	149 - 183
All Roche Reagents	28	170.5	4.6	2.7	170	153 - 188
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	164	153 - 188
All Chemistry Instruments	5	-	-	-	164	147 - 181
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	27	178.3	3.7	2.1	178	160 - 197
Beckman AU						
Beckman AU systems	30	169.5	6.1	3.6	170	152 - 187
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	165.6	7.3	4.4	166	149 - 183
Roche Integra						
Roche Integra	17	170.5	4.3	2.5	169	153 - 188
Siemens Healthcare						
Siemens Dimension	27	170.4	3.3	1.9	170	153 - 188
All Chemistry Instruments	29	169.9	3.6	2.1	170	152 - 187
VITROS						
VITROS 250,350,400 500,700,750,950	23	166.3	3.8	2.3	167	149 - 183
All Chemistry Instruments	24	166.2	3.7	2.3	167	149 - 183

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

<u>Reagent/Instrument</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	72	31.3	2.5	8.0	31	25 - 38	76	226.7	20.2	8.9	223	181 - 273		
All Roche Reagents	14	32.1	1.7	5.4	32	25 - 39	14	228.1	4.0	1.8	228	182 - 274		
Beckman AU														
Beckman AU systems	17	33.6	2.1	6.2	33	26 - 41	18	249.6	6.6	2.6	251	199 - 300		
Siemens Healthcare														
Siemens Dimension	17	30.7	0.9	3.0	31	24 - 37	17	217.1	2.0	0.9	217	173 - 261		
All Chemistry Instruments	18	30.6	1.1	3.6	31	24 - 37	18	216.9	2.0	0.9	217	173 - 261		
	Specimen CH-3							Specimen CH-4						
All Method	72	186.7	10.1	5.4	185	149 - 225	76	89.5	5.8	6.5	89	71 - 108		
All Roche Reagents	14	185.4	2.6	1.4	186	148 - 223	14	92.1	2.2	2.4	92	73 - 111		
Beckman AU														
Beckman AU systems	18	199.3	5.7	2.9	202	159 - 240	17	96.5	2.9	3.0	97	77 - 116		
Siemens Healthcare														
Siemens Dimension	17	180.4	1.8	1.0	180	144 - 217	17	87.0	1.3	1.5	87	69 - 105		
All Chemistry Instruments	18	180.5	1.8	1.0	181	144 - 217	18	87.2	1.4	1.6	87	69 - 105		
	Specimen CH-5													
All Method	75	148.2	11.2	7.6	148	118 - 178								
All Roche Reagents	14	150.1	2.4	1.6	150	120 - 181								
Beckman AU														
Beckman AU systems	18	160.8	5.2	3.2	162	128 - 193								
Siemens Healthcare														
Siemens Dimension	17	142.6	2.3	1.6	143	114 - 172								
All Chemistry Instruments	18	142.7	2.3	1.6	143	114 - 172								

**Lactate (Lactic Acid) (mmol/L)**

<b>Method</b>	Specimen CH-1							Specimen CH-2						
	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>		
All Method	5	0.16	0.11	71.3	0.2	0.0 - 0.6	5	14.72	0.69	4.7	14.9	12.6 - 16.9		
<b>Specimen CH-3</b>														
All Method	5	0.22	0.08	38.0	0.2	0.0 - 0.5	5	4.84	0.61	12.6	4.6	3.0 - 6.7		
<b>Specimen CH-4</b>														
<b>Specimen CH-5</b>														
All Method	5	9.08	0.19	2.1	9.1	8.5 - 9.7								
<b>Magnesium (mg/dL)</b>														
<b>Reagent/Instrument</b>	Specimen CH-1							Specimen CH-2						
	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>		
All Method	95	1.28	0.08	6.4	1.3	0.9 - 1.7	97	4.67	0.30	6.5	4.7	3.5 - 5.9		
All Horiba Pentra Reagents	15	1.24	0.19	15.2	1.2	0.9 - 1.6	15	4.41	0.42	9.5	4.4	3.3 - 5.6		
All Roche Reagents	22	1.28	0.04	3.4	1.3	0.9 - 1.6	22	4.52	0.18	3.9	4.5	3.3 - 5.7		
Beckman AU														
Beckman AU systems	16	1.31	0.06	4.4	1.3	0.9 - 1.7	16	4.78	0.18	3.8	4.7	3.5 - 6.0		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	15	1.24	0.19	15.2	1.2	0.9 - 1.6	15	4.41	0.42	9.5	4.4	3.3 - 5.6		
Roche Integra														
Roche Integra	13	1.28	0.04	2.9	1.3	0.9 - 1.7	13	4.43	0.14	3.1	4.4	3.3 - 5.6		
Siemens Healthcare														
Siemens Dimension	16	1.28	0.09	7.3	1.3	0.9 - 1.6	16	4.87	0.15	3.1	4.9	3.6 - 6.1		
All Chemistry Instruments	17	1.28	0.10	7.4	1.3	0.9 - 1.7	17	4.89	0.17	3.4	4.9	3.6 - 6.2		
VITROS														
VITROS 250,350,400 500,700,750,950	10	1.31	0.10	7.6	1.3	0.9 - 1.7	10	5.11	0.25	4.8	5.1	3.8 - 6.4		

**Magnesium (mg/dL)**

<b><u>Reagent/Instrument</u></b>	Specimen CH-3							Specimen CH-4						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	96	1.41	0.12	8.7	1.4	1.0 - 1.8	98	2.33	0.13	5.5	2.3	1.7 - 3.0		
All Horiba Pentra Reagents	15	1.44	0.17	12.0	1.5	1.0 - 1.8	15	2.23	0.18	8.1	2.2	1.6 - 2.8		
All Roche Reagents	22	1.41	0.06	4.3	1.4	1.0 - 1.8	22	2.29	0.09	3.9	2.3	1.7 - 2.9		
Beckman AU														
Beckman AU systems	15	1.43	0.05	3.2	1.4	1.0 - 1.8	16	2.34	0.07	3.1	2.3	1.7 - 3.0		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	15	1.44	0.17	12.0	1.5	1.0 - 1.8	15	2.23	0.18	8.1	2.2	1.6 - 2.8		
Roche Integra														
Roche Integra	13	1.40	0.06	4.1	1.4	1.0 - 1.8	13	2.27	0.08	3.3	2.3	1.7 - 2.9		
Siemens Healthcare														
Siemens Dimension	16	1.38	0.10	7.6	1.4	1.0 - 1.8	16	2.37	0.11	4.8	2.4	1.7 - 3.0		
All Chemistry Instruments	17	1.40	0.13	9.1	1.4	1.0 - 1.8	17	2.37	0.11	4.7	2.4	1.7 - 3.0		
VITROS														
VITROS 250,350,400 500,700,750,950	10	1.25	0.13	10.2	1.3	0.9 - 1.6	10	2.50	0.08	3.3	2.5	1.8 - 3.2		
<b>Specimen CH-5</b>														
All Method	99	3.36	0.18	5.5	3.4	2.5 - 4.3								
All Horiba Pentra Reagents	15	3.19	0.18	5.5	3.2	2.3 - 4.0								
All Roche Reagents	22	3.28	0.11	3.3	3.3	2.4 - 4.2								
Beckman AU														
Beckman AU systems	16	3.41	0.09	2.5	3.4	2.5 - 4.3								
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	15	3.19	0.18	5.5	3.2	2.3 - 4.0								
Roche Integra														
Roche Integra	13	3.25	0.10	3.0	3.2	2.4 - 4.1								
Siemens Healthcare														
Siemens Dimension	16	3.45	0.13	3.8	3.4	2.5 - 4.4								
All Chemistry Instruments	17	3.46	0.13	3.8	3.4	2.5 - 4.4								
VITROS														
VITROS 250,350,400 500,700,750,950	10	3.67	0.13	3.4	3.7	2.7 - 4.6								

### **Phosphorus (mg/dL)**

<b><u>Reagent/Instrument</u></b>	Specimen CH-1							Specimen CH-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	72	1.52	0.12	7.7	1.5	1.2 - 1.9	70	5.57	0.23	4.2	5.6	4.9 - 6.2		
All Roche Reagents	17	1.48	0.08	5.5	1.5	1.1 - 1.8	17	5.41	0.16	3.0	5.4	4.8 - 6.0		
Beckman AU														
Beckman AU systems	16	1.44	0.12	8.4	1.5	1.1 - 1.8	16	5.49	0.26	4.8	5.5	4.9 - 6.1		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	8	1.59	0.12	7.9	1.6	1.2 - 1.9	8	5.88	0.22	3.7	5.9	5.2 - 6.6		
Roche cobas c 501														
Roche cobas 6000 / c 501	5	1.54	0.05	3.6	1.5	1.2 - 1.9	5	5.52	0.11	2.0	5.5	4.9 - 6.2		
Roche Integra														
Roche Integra	11	1.45	0.08	5.6	1.5	1.1 - 1.8	11	5.34	0.13	2.4	5.3	4.7 - 6.0		
Siemens Healthcare														
Siemens Dimension	11	1.54	0.07	4.4	1.5	1.2 - 1.9	11	5.67	0.12	2.1	5.6	5.0 - 6.3		
All Chemistry Instruments														
All Chemistry Instruments	12	1.52	0.09	6.2	1.5	1.2 - 1.9	12	5.66	0.12	2.2	5.6	5.0 - 6.3		
VITROS														
VITROS 250,350,400 500,700,750,950	7	1.67	0.10	5.7	1.7	1.3 - 2.0	7	5.76	0.10	1.7	5.8	5.1 - 6.4		

	Specimen CH-3						Specimen CH-4					
All Method	72	1.74	0.24	13.5	1.7	1.4 - 2.1	71	2.75	0.14	5.3	2.7	2.4 - 3.1
All Roche Reagents	17	1.61	0.09	5.6	1.6	1.3 - 2.0	17	2.69	0.09	3.2	2.7	2.3 - 3.0
Beckman AU												
Beckman AU systems	16	1.61	0.12	7.5	1.6	1.3 - 2.0	16	2.68	0.17	6.5	2.7	2.3 - 3.0
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	8	2.04	0.11	5.2	2.1	1.7 - 2.4	8	2.91	0.15	5.0	3.0	2.6 - 3.3
Roche cobas c 501												
Roche cobas 6000 / c 501	5	1.66	0.09	5.4	1.6	1.3 - 2.0	5	2.72	0.08	3.1	2.7	2.4 - 3.1
Roche Integra												
Roche Integra	11	1.57	0.08	5.0	1.6	1.2 - 1.9	11	2.66	0.08	3.0	2.6	2.3 - 3.0
Siemens Healthcare												
Siemens Dimension	11	1.85	0.11	6.1	1.8	1.5 - 2.2	11	2.79	0.13	4.7	2.8	2.4 - 3.1
All Chemistry Instruments	12	1.82	0.15	8.1	1.8	1.5 - 2.2	12	2.77	0.15	5.4	2.8	2.4 - 3.1
VITROS												
VITROS 250,350,400 500,700,750,950	7	2.10	0.19	9.1	2.1	1.8 - 2.4	7	2.91	0.07	2.4	2.9	2.6 - 3.3

## Phosphorus (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-5					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	72	3.94	0.22	5.5	3.9	3.5 - 4.4
All Roche Reagents	17	3.84	0.09	2.4	3.8	3.4 - 4.3
Beckman AU						
Beckman AU systems	16	3.90	0.23	5.8	3.9	3.4 - 4.4
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	8	4.25	0.21	5.0	4.3	3.7 - 4.8
Roche cobas c 501						
Roche cobas 6000 / c 501	5	3.86	0.11	3.0	3.9	3.4 - 4.3
Roche Integra						
Roche Integra	11	3.81	0.07	1.8	3.8	3.4 - 4.3
Siemens Healthcare						
Siemens Dimension	11	4.04	0.13	3.2	4.0	3.6 - 4.5
All Chemistry Instruments						
VITROS	12	4.01	0.16	3.9	4.0	3.5 - 4.5
VITROS 250,350,400 500,700,750,950	7	4.04	0.10	2.4	4.0	3.6 - 4.5

## Protein, Total (g/dL)

<u>Reagent/Instrument</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	180	2.84	0.12	4.1	2.8	2.5 - 3.2	181	9.80	0.39	3.9	9.8	8.8 - 10.8		
All Alfa Wassermann Reagents	25	2.84	0.10	3.5	2.8	2.5 - 3.2	25	9.98	0.23	2.3	10.0	8.9 - 11.0		
All Horiba Pentra Reagents	19	2.77	0.10	3.6	2.8	2.4 - 3.1	19	9.74	0.30	3.0	9.8	8.7 - 10.8		
All Roche Reagents	28	2.81	0.10	3.6	2.8	2.5 - 3.1	28	9.63	0.26	2.7	9.6	8.6 - 10.6		
Abaxis Piccolo														
Abaxis Piccolo - waived	11	2.96	0.10	3.5	3.0	2.6 - 3.3	11	10.05	0.25	2.5	10.1	9.0 - 11.1		
All Chemistry Instruments	13	2.95	0.11	3.6	3.0	2.6 - 3.3	13	10.05	0.23	2.3	10.1	9.0 - 11.1		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	24	2.84	0.10	3.6	2.8	2.5 - 3.2	24	9.98	0.23	2.3	10.0	8.9 - 11.0		
Beckman AU														
Beckman AU systems	29	2.80	0.15	5.3	2.8	2.5 - 3.1	28	9.65	0.19	1.9	9.7	8.6 - 10.7		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	19	2.77	0.10	3.6	2.8	2.4 - 3.1	19	9.74	0.30	3.0	9.8	8.7 - 10.8		
Roche Integra														
Roche Integra	17	2.78	0.09	3.2	2.8	2.5 - 3.1	17	9.50	0.19	2.0	9.5	8.5 - 10.5		
Siemens Healthcare														
Siemens Dimension	26	2.93	0.09	3.0	2.9	2.6 - 3.3	26	10.31	0.17	1.6	10.3	9.2 - 11.4		
All Chemistry Instruments	27	2.93	0.09	3.0	2.9	2.6 - 3.3	27	10.31	0.16	1.6	10.3	9.2 - 11.4		
VITROS														
VITROS 250,350,400 500,700,750,950	23	2.85	0.07	2.6	2.8	2.5 - 3.2	23	9.33	0.24	2.6	9.3	8.3 - 10.3		
All Chemistry Instruments	24	2.85	0.07	2.5	2.9	2.5 - 3.2	24	9.33	0.24	2.6	9.4	8.3 - 10.3		

## Protein, Total (g/dL)

<u>Reagent/Instrument</u>	Specimen CH-3						Specimen CH-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	170	11.84	0.50	4.2	11.8	10.6 - 13.1	172	5.01	0.17	3.4	5.0	4.5 - 5.6
All Alfa Wassermann Reagents	25	11.95	0.35	2.9	11.9	10.7 - 13.2	25	5.12	0.14	2.7	5.1	4.6 - 5.7
All Horiba Pentra Reagents	19	11.50	0.33	2.8	11.6	10.3 - 12.7	19	4.94	0.15	3.0	5.0	4.4 - 5.5
All Roche Reagents	28	11.50	0.30	2.6	11.6	10.3 - 12.7	28	4.95	0.15	2.9	5.0	4.4 - 5.5
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	11.9	10.6 - 13.1	3	-	-	-	5.0	4.5 - 5.6
All Chemistry Instruments	5	-	-	-	11.9	10.7 - 13.2	5	-	-	-	5.1	4.5 - 5.6
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	24	11.94	0.36	3.0	11.9	10.7 - 13.2	24	5.11	0.14	2.7	5.1	4.6 - 5.7
Beckman AU												
Beckman AU systems	27	11.56	0.23	2.0	11.6	10.4 - 12.8	28	4.88	0.10	2.0	4.9	4.3 - 5.4
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	19	11.50	0.33	2.8	11.6	10.3 - 12.7	19	4.94	0.15	3.0	5.0	4.4 - 5.5
Roche Integra												
Roche Integra	17	11.36	0.23	2.0	11.3	10.2 - 12.5	17	4.88	0.11	2.3	4.9	4.3 - 5.4
Siemens Healthcare												
Siemens Dimension	25	12.54	0.25	2.0	12.5	11.2 - 13.8	26	5.18	0.10	1.9	5.2	4.6 - 5.8
All Chemistry Instruments	26	12.52	0.27	2.1	12.5	11.2 - 13.8	27	5.19	0.10	1.9	5.2	4.6 - 5.8
VITROS												
VITROS 250,350,400 500,700,750,950	23	12.01	0.53	4.4	12.0	10.8 - 13.3	23	4.96	0.17	3.5	4.9	4.4 - 5.5
All Chemistry Instruments	24	11.97	0.56	4.6	12.0	10.7 - 13.2	24	4.96	0.17	3.5	4.9	4.4 - 5.5

## Protein, Total (g/dL)

### Specimen CH-5

<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	172	7.10	0.25	3.6	7.1	6.3 - 7.9
All Alfa Wassermann Reagents	25	7.26	0.20	2.8	7.2	6.5 - 8.0
All Horiba Pentra Reagents	19	6.98	0.22	3.1	7.0	6.2 - 7.7
All Roche Reagents	28	7.00	0.19	2.7	7.0	6.3 - 7.7
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	7.1	6.3 - 7.9
All Chemistry Instruments	5	-	-	-	7.1	6.4 - 7.9
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	24	7.26	0.21	2.8	7.2	6.5 - 8.0
Beckman AU						
Beckman AU systems	28	6.95	0.13	1.8	7.0	6.2 - 7.7
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	19	6.98	0.22	3.1	7.0	6.2 - 7.7
Roche Integra						
Roche Integra	17	6.89	0.11	1.7	6.9	6.2 - 7.6
Siemens Healthcare						
Siemens Dimension	26	7.41	0.13	1.7	7.4	6.6 - 8.2
All Chemistry Instruments	27	7.40	0.13	1.7	7.4	6.6 - 8.2
VITROS						
VITROS 250,350,400 500,700,750,950	23	6.97	0.22	3.1	7.0	6.2 - 7.7
All Chemistry Instruments	24	6.97	0.21	3.1	7.0	6.2 - 7.7

### Urea Nitrogen (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	185	6.1	0.8	13.4	6	4 - 9	187	43.3	3.4	7.8	44	39 - 48		
All Alfa Wassermann Reagents	27	6.3	0.5	7.4	6	4 - 9	26	44.2	1.0	2.2	44	40 - 49		
All Horiba Pentra Reagents	19	5.9	0.5	8.8	6	3 - 8	19	41.0	1.6	3.8	41	37 - 45		
All Roche Reagents	26	6.0	0.1	0.0	6	4 - 8	28	44.8	1.4	3.2	45	40 - 49		
Abaxis Piccolo														
Abaxis Piccolo - waived	11	6.4	0.5	7.9	6	4 - 9	11	42.5	1.1	2.7	42	38 - 47		
All Chemistry Instruments	13	6.3	0.5	7.6	6	4 - 9	13	42.5	1.1	2.5	43	38 - 47		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	23	6.3	0.5	7.5	6	4 - 9	22	44.0	0.8	1.9	44	40 - 49		
Beckman AU														
Beckman AU systems	29	6.5	0.7	10.6	6	4 - 9	28	45.9	1.2	2.6	46	41 - 51		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	19	5.9	0.5	8.8	6	3 - 8	19	41.0	1.6	3.8	41	37 - 45		
Roche Integra														
Roche Integra	17	6.1	0.3	5.4	6	4 - 9	17	45.3	1.3	2.9	45	41 - 50		
Siemens Healthcare														
Siemens Dimension	26	6.4	0.6	10.0	6	4 - 9	27	45.5	1.2	2.7	46	41 - 50		
All Chemistry Instruments	28	6.4	0.6	9.8	6	4 - 9	29	45.5	1.2	2.7	46	41 - 50		
VITROS														
VITROS 250,350,400 500,700,750,950	23	4.5	0.5	11.3	5	2 - 7	23	36.0	0.9	2.6	36	32 - 40		
All Chemistry Instruments	24	4.5	0.5	11.4	5	2 - 7	24	36.0	0.9	2.5	36	32 - 40		

### Urea Nitrogen (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-3							Specimen CH-4						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	178	6.3	0.8	13.5	6	4 - 9	178	17.3	1.4	8.1	18	15 - 20		
All Alfa Wassermann Reagents	27	6.1	0.5	7.8	6	4 - 9	27	17.9	0.6	3.6	18	15 - 20		
All Horiba Pentra Reagents	19	6.2	0.7	11.5	6	4 - 9	19	16.5	0.5	3.1	17	14 - 19		
All Roche Reagents	28	6.5	0.5	7.8	7	4 - 9	28	17.5	0.5	2.9	17	15 - 20		
Abaxis Piccolo														
Abaxis Piccolo - waived	3	-	-	-	6	4 - 9	3	-	-	-	16	15 - 20		
All Chemistry Instruments	5	-	-	-	6	4 - 8	5	-	-	-	16	14 - 19		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	23	6.1	0.4	6.9	6	4 - 9	23	17.9	0.6	3.5	18	15 - 20		
Beckman AU														
Beckman AU systems	29	6.8	0.5	7.9	7	4 - 9	29	18.2	0.8	4.4	18	16 - 21		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	19	6.2	0.7	11.5	6	4 - 9	19	16.5	0.5	3.1	17	14 - 19		
Roche Integra														
Roche Integra	17	6.6	0.5	7.7	7	4 - 9	17	17.5	0.5	2.9	18	15 - 20		
Siemens Healthcare														
Siemens Dimension	27	6.7	0.7	9.7	7	4 - 9	27	18.0	0.9	5.2	18	15 - 20		
All Chemistry Instruments	29	6.8	0.6	9.4	7	4 - 9	29	18.0	0.9	5.0	18	15 - 20		
VITROS														
VITROS 250,350,400 500,700,750,950	23	4.9	0.4	8.5	5	2 - 7	23	14.5	0.6	4.1	14	12 - 17		
All Chemistry Instruments	24	4.9	0.4	9.2	5	2 - 7	24	14.5	0.6	4.1	14	12 - 17		

### Urea Nitrogen (mg/dL)

#### Specimen CH-5

<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	178	28.5	2.3	8.2	29	25 - 32
All Alfa Wassermann Reagents	27	29.3	0.9	3.1	29	26 - 32
All Horiba Pentra Reagents	19	26.8	1.1	4.0	27	24 - 30
All Roche Reagents	28	29.2	0.7	2.5	29	26 - 32
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	27	25 - 32
All Chemistry Instruments	5	-	-	-	27	25 - 31
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	22	29.1	0.7	2.4	29	26 - 32
Beckman AU						
Beckman AU systems	28	30.3	1.0	3.4	30	27 - 33
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	19	26.8	1.1	4.0	27	24 - 30
Roche Integra						
Roche Integra	17	29.4	0.6	2.1	29	26 - 32
Siemens Healthcare						
Siemens Dimension	27	29.9	1.1	3.8	30	27 - 33
All Chemistry Instruments	29	29.9	1.1	3.7	30	27 - 33
VITROS						
VITROS 250,350,400 500,700,750,950	23	23.8	0.9	3.7	24	21 - 26
All Chemistry Instruments	24	23.8	0.9	3.7	24	21 - 26

## Uric Acid (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-1						Specimen CH-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	119	1.76	0.37	20.9	1.7	1.4 - 2.1	118	10.56	0.50	4.7	10.5	8.7 - 12.4
All Alfa Wassermann Reagents	15	2.75	0.12	4.3	2.7	2.2 - 3.3	16	10.32	0.35	3.4	10.3	8.5 - 12.1
All Roche Reagents	22	1.59	0.07	4.3	1.6	1.3 - 1.9	22	10.37	0.39	3.8	10.4	8.6 - 12.2
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	15	2.75	0.12	4.3	2.7	2.2 - 3.3	16	10.32	0.35	3.4	10.3	8.5 - 12.1
Beckman AU												
Beckman AU systems	21	1.75	0.10	5.9	1.7	1.4 - 2.1	21	10.70	0.29	2.7	10.7	8.8 - 12.6
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	11	1.65	0.08	5.0	1.7	1.3 - 2.0	11	10.24	0.30	2.9	10.2	8.4 - 12.0
Roche Integra												
Roche Integra	12	1.63	0.06	3.8	1.6	1.3 - 2.0	12	10.62	0.33	3.1	10.7	8.8 - 12.5
Siemens Healthcare												
Siemens Dimension	18	1.67	0.08	4.6	1.7	1.3 - 2.0	17	10.45	0.66	6.3	10.2	8.6 - 12.3
All Chemistry Instruments	20	1.67	0.07	4.5	1.7	1.3 - 2.0	18	10.46	0.64	6.1	10.3	8.6 - 12.3
VITROS												
VITROS 250,350,400 500,700,750,950	13	1.48	0.08	5.4	1.5	1.2 - 1.8	13	10.68	0.21	2.0	10.7	8.8 - 12.5
All Chemistry Instruments	14	1.49	0.08	5.2	1.5	1.2 - 1.8	14	10.67	0.20	1.9	10.7	8.8 - 12.5
Specimen CH-3						Specimen CH-4						
All Method	121	2.00	0.42	20.7	1.9	1.6 - 2.4	119	4.41	0.24	5.3	4.4	3.6 - 5.2
All Alfa Wassermann Reagents	16	3.02	0.17	5.6	3.0	2.5 - 3.6	16	4.79	0.21	4.3	4.8	3.9 - 5.7
All Roche Reagents	22	1.75	0.06	3.4	1.8	1.4 - 2.1	22	4.31	0.16	3.7	4.4	3.5 - 5.1
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	16	3.02	0.17	5.6	3.0	2.5 - 3.6	16	4.79	0.21	4.3	4.8	3.9 - 5.7
Beckman AU												
Beckman AU systems	20	1.86	0.07	3.7	1.8	1.5 - 2.2	21	4.45	0.16	3.5	4.4	3.6 - 5.3
Horiba ABX Pentra												
Horiba ABX Pentra 400	11	1.72	0.10	5.7	1.7	1.4 - 2.1	11	4.24	0.10	2.4	4.2	3.5 - 5.0
Roche Integra												
Roche Integra	12	1.78	0.05	2.5	1.8	1.4 - 2.1	12	4.42	0.08	1.9	4.4	3.6 - 5.2
Siemens Healthcare												
Siemens Dimension	19	2.01	0.13	6.5	2.0	1.6 - 2.4	19	4.24	0.13	3.0	4.2	3.5 - 5.0
All Chemistry Instruments	21	1.99	0.13	6.7	2.0	1.6 - 2.4	21	4.23	0.12	2.9	4.2	3.5 - 5.0
VITROS												
VITROS 250,350,400 500,700,750,950	13	1.87	0.12	6.3	1.9	1.5 - 2.2	13	4.31	0.10	2.4	4.3	3.5 - 5.1
All Chemistry Instruments	14	1.87	0.11	6.1	1.9	1.5 - 2.2	14	4.31	0.10	2.3	4.3	3.5 - 5.1

## Uric Acid (mg/dL)

<b><u>Reagent/Instrument</u></b>		<b>Specimen CH-5</b>				
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>
All Method	121	7.03	0.31	4.4	7.0	5.8 - 8.3
All Alfa Wassermann Reagents	16	7.01	0.27	3.9	7.0	5.8 - 8.3
All Roche Reagents	22	6.97	0.24	3.5	7.0	5.7 - 8.2
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	16	7.01	0.27	3.9	7.0	5.8 - 8.3
Beckman AU						
Beckman AU systems	21	7.13	0.23	3.2	7.1	5.9 - 8.4
Horiba ABX Pentra						
Horiba ABX Pentra 400	11	6.84	0.17	2.6	6.9	5.6 - 8.0
Roche Integra						
Roche Integra	12	7.14	0.15	2.1	7.2	5.9 - 8.4
Siemens Healthcare						
Siemens Dimension	19	6.86	0.13	1.8	6.9	5.6 - 8.1
All Chemistry Instruments	21	6.87	0.18	2.6	6.9	5.7 - 8.1
VITROS						
VITROS 250,350,400 500,700,750,950	13	6.98	0.14	2.0	7.0	5.7 - 8.2
All Chemistry Instruments	14	6.99	0.14	1.9	7.0	5.7 - 8.2

## Chloride (mmol/L)

<u>Method/Instrument</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	184	90.5	2.8	3.1	90	85 - 95	181	120.7	4.6	3.8	120	114 - 127		
Abaxis Piccolo														
Abaxis Piccolo - waived	12	97.3	0.8	0.8	97	92 - 103	12	119.0	1.2	1.0	119	113 - 125		
All Chemistry Instruments	13	97.2	0.8	0.8	97	92 - 103	14	119.6	2.0	1.7	119	113 - 126		
ISE Diluted														
Beckman AU systems	28	91.1	0.9	1.0	91	86 - 96	28	115.6	1.2	1.0	115	109 - 122		
Roche Integra	17	90.4	2.2	2.4	91	85 - 95	17	122.2	3.1	2.5	122	116 - 129		
Siemens Dimension QuickLyte - Xpand/EXL	21	87.3	0.9	1.0	87	82 - 92	21	124.9	1.7	1.3	125	118 - 132		
All Chemistry Instruments	93	89.8	2.3	2.5	90	85 - 95	94	120.2	5.0	4.2	120	114 - 127		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	24	89.7	1.9	2.1	90	85 - 95	24	124.4	1.6	1.3	124	118 - 131		
Horiba ABX Pentra 400 / C400	18	88.9	2.2	2.4	90	84 - 94	14	124.0	4.7	3.8	126	117 - 131		
All Chemistry Instruments	50	89.5	2.0	2.3	90	85 - 94	46	123.6	3.8	3.0	124	117 - 130		
VITROS														
VITROS 250,350,400 500,700,750,950	23	91.7	1.4	1.6	92	87 - 97	23	117.3	1.6	1.4	117	111 - 124		
All Chemistry Instruments	24	91.7	1.4	1.5	92	87 - 97	24	117.3	1.6	1.4	117	111 - 124		
Specimen CH-3														
All Method	175	87.1	3.8	4.3	88	82 - 92	175	99.1	2.1	2.2	99	94 - 105		
Abaxis Piccolo														
Abaxis Piccolo - waived	3	-	-	-	96	90 - 101	3	-	-	-	104	98 - 109		
All Chemistry Instruments	5	-	-	-	96	90 - 101	5	-	-	-	104	98 - 109		
ISE Diluted														
Beckman AU systems	28	88.1	0.9	1.0	88	83 - 93	28	98.3	1.0	1.0	98	93 - 104		
Roche Integra	16	83.4	1.8	2.2	84	79 - 88	17	100.2	2.2	2.2	100	95 - 106		
Siemens Dimension QuickLyte - Xpand/EXL	21	81.5	0.8	1.0	82	77 - 86	21	98.6	0.7	0.8	99	93 - 104		
All Chemistry Instruments	94	85.7	3.8	4.5	86	81 - 90	91	98.7	1.7	1.8	99	93 - 104		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	22	89.1	1.7	1.9	90	84 - 94	24	99.3	1.6	1.6	100	94 - 105		
Horiba ABX Pentra 400 / C400	18	85.7	2.1	2.4	86	81 - 90	18	98.9	3.4	3.4	100	93 - 104		
All Chemistry Instruments	48	87.6	2.5	2.8	88	83 - 92	50	99.1	2.3	2.4	100	94 - 105		
VITROS														
VITROS 250,350,400 500,700,750,950	23	89.7	1.1	1.2	90	85 - 95	23	99.2	1.5	1.5	99	94 - 105		
All Chemistry Instruments	24	89.7	1.0	1.2	90	85 - 95	24	99.1	1.5	1.5	99	94 - 105		

## **Chloride (mmol/L)**

### **Specimen CH-5**

<b><u>Method/Instrument</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>
All Method	173	108.4	2.8	2.6	108	102 - 114
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	110	104 - 116
All Chemistry Instruments	5	-	-	-	110	104 - 116
ISE Diluted						
Beckman AU systems	27	106.3	1.0	0.9	106	100 - 112
Roche Integra	17	110.2	2.5	2.3	110	104 - 116
Siemens Dimension QuickLyte - Xpand/EXL	21	110.0	1.2	1.1	110	104 - 116
All Chemistry Instruments	93	108.2	2.9	2.7	108	102 - 114
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	24	110.3	1.3	1.2	110	104 - 116
Horiba ABX Pentra 400 / C400	18	108.9	4.9	4.5	109	103 - 115
All Chemistry Instruments	50	109.5	3.3	3.0	110	104 - 115
VITROS						
VITROS 250,350,400 500,700,750,950	23	106.9	1.5	1.4	107	101 - 113
All Chemistry Instruments	24	106.9	1.5	1.4	107	101 - 113

## CO<sub>2</sub> (mmol/L)

<b><u>Method/Instrument</u></b>	Specimen CH-1							Specimen CH-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	178	12.2	1.6	12.8	12	9 - 15	179	34.9	3.8	10.9	35	27 - 42		
Abaxis Piccolo														
Abaxis Piccolo - waived	12	12.7	3.6	28.2	12	10 - 16	11	31.1	1.2	3.9	31	24 - 38		
All Chemistry Instruments	13	11.7	1.4	12.3	11	9 - 15	13	31.6	1.7	5.4	32	25 - 38		
Enzymatic Reagent														
Alfa Wassermann ACE Alera/Axcel	13	12.5	2.3	18.7	13	9 - 15	14	35.0	4.6	13.3	37	28 - 42		
Beckman AU systems	23	12.3	0.8	6.1	12	9 - 15	25	36.8	4.6	12.6	39	29 - 45		
Horiba ABX Pentra 400 / C400	13	12.8	1.2	9.1	13	10 - 16	13	34.3	2.9	8.4	35	27 - 42		
Roche Integra	15	11.0	0.8	7.7	11	8 - 14	16	32.7	2.1	6.4	33	26 - 40		
Siemens Dimension	20	13.3	1.3	9.4	13	10 - 16	20	37.7	1.6	4.3	37	30 - 46		
All Chemistry Instruments	105	12.3	1.6	12.9	12	9 - 15	107	35.2	3.9	11.2	36	28 - 43		
ISE Diluted														
All Chemistry Instruments	14	12.4	1.9	15.4	12	9 - 15	14	36.4	5.4	14.7	35	29 - 44		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	10	12.1	1.3	10.6	12	9 - 15	10	35.3	2.8	7.8	35	28 - 43		
All Chemistry Instruments	19	12.1	1.5	12.6	12	9 - 15	19	35.2	3.8	10.8	35	28 - 43		
VITROS														
VITROS 250,350,400 500,700,750,950	23	11.7	1.2	10.5	12	9 - 14	23	34.5	2.7	7.7	36	27 - 42		
All Chemistry Instruments	24	11.7	1.2	10.3	12	9 - 15	24	34.6	2.7	7.7	36	27 - 42		
	Specimen CH-3							Specimen CH-4						
All Method	170	10.1	2.4	24.2	10	8 - 13	170	18.4	2.2	11.8	19	14 - 23		
Abaxis Piccolo														
Abaxis Piccolo - waived	3	-	-	-	10	8 - 13	3	-	-	-	19	15 - 23		
All Chemistry Instruments	5	-	-	-	10	8 - 13	5	-	-	-	19	15 - 23		
Enzymatic Reagent														
Alfa Wassermann ACE Alera/Axcel	14	10.4	1.9	18.3	10	8 - 13	14	17.6	2.3	13.1	17	14 - 22		
Beckman AU systems	24	11.1	1.1	10.3	11	8 - 14	25	18.4	2.5	13.7	19	14 - 23		
Horiba ABX Pentra 400	13	11.4	1.6	13.7	12	9 - 14	13	18.5	2.0	10.7	18	14 - 23		
Roche Integra	15	9.3	1.0	11.2	9	7 - 12	16	17.0	1.9	11.0	17	13 - 21		
Siemens Dimension	20	12.6	1.0	8.3	13	10 - 16	20	20.4	1.2	6.0	20	16 - 25		
All Chemistry Instruments	106	11.0	1.9	17.2	11	8 - 14	105	18.5	2.1	11.3	19	14 - 23		
ISE Diluted														
All Chemistry Instruments	12	9.5	1.6	16.5	10	7 - 12	14	19.0	2.8	14.9	19	15 - 23		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	10	11.0	1.6	14.2	11	8 - 14	10	19.1	1.7	9.1	19	15 - 23		
All Chemistry Instruments	19	10.8	2.0	18.0	11	8 - 14	19	19.1	2.4	12.4	19	15 - 23		
VITROS														
VITROS 250,350,400 500,700,750,950	23	6.1	1.1	17.8	6	4 - 8	23	16.7	1.5	8.7	17	13 - 21		
All Chemistry Instruments	24	6.1	1.1	17.4	6	4 - 8	24	16.8	1.5	8.7	17	13 - 21		

**CO<sub>2</sub> (mmol/L)****Specimen CH-5**

<b><u>Method/Instrument</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>
All Method	171	25.2	2.9	11.4	25	20 - 31
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	25	20 - 30
All Chemistry Instruments	5	-	-	-	25	20 - 30
Enzymatic Reagent						
Alfa Wassermann ACE Alera/Axcel	14	25.0	2.7	10.8	25	20 - 30
Beckman AU systems	24	26.5	1.8	6.8	27	21 - 32
Horiba ABX Pentra 400	13	24.8	2.6	10.6	25	19 - 30
Roche Integra	16	23.1	2.4	10.3	23	18 - 28
Siemens Dimension	20	28.1	1.5	5.4	28	22 - 34
All Chemistry Instruments	106	25.5	2.8	11.0	26	20 - 31
ISE Diluted						
All Chemistry Instruments	14	26.6	3.2	12.0	27	21 - 32
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	10	25.6	3.1	12.2	26	20 - 31
All Chemistry Instruments	19	25.5	3.5	13.6	26	20 - 31
VITROS						
VITROS 250,350,400 500,700,750,950	23	23.4	1.8	7.8	23	18 - 29
All Chemistry Instruments	24	23.5	1.9	7.9	23	18 - 29

## Potassium (mmol/L)

<u><b>Method/Instrument</b></u>	Specimen CH-1							Specimen CH-2						
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>		
All Method	182	2.58	0.08	2.9	2.6	2.0 - 3.1	186	7.38	0.24	3.2	7.4	6.8 - 7.9		
Abaxis Piccolo														
Abaxis Piccolo - waived	11	2.35	0.19	7.9	2.4	1.8 - 2.9	11	7.00	0.18	2.6	6.9	6.5 - 7.5		
All Chemistry Instruments	14	2.38	0.18	7.6	2.4	1.8 - 2.9	14	7.06	0.29	4.1	7.0	6.5 - 7.6		
ISE Diluted														
Beckman AU systems	28	2.60	0.05	2.0	2.6	2.1 - 3.2	28	7.20	0.12	1.6	7.2	6.7 - 7.7		
Roche Integra	17	2.59	0.03	1.3	2.6	2.0 - 3.1	17	7.24	0.07	1.0	7.3	6.7 - 7.8		
Siemens Dimension QuickLyte - Xpand/EXL	22	2.54	0.06	2.3	2.5	2.0 - 3.1	21	7.33	0.07	1.0	7.3	6.8 - 7.9		
All Chemistry Instruments	93	2.59	0.06	2.3	2.6	2.0 - 3.1	96	7.30	0.15	2.1	7.3	6.8 - 7.9		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	24	2.53	0.07	2.7	2.5	2.0 - 3.1	24	7.77	0.19	2.4	7.8	7.2 - 8.3		
Horiba ABX Pentra 400 / C400	19	2.62	0.07	2.7	2.6	2.1 - 3.2	19	7.40	0.17	2.3	7.4	6.9 - 7.9		
All Chemistry Instruments	51	2.58	0.08	3.3	2.6	2.0 - 3.1	51	7.57	0.26	3.5	7.6	7.0 - 8.1		
VITROS														
VITROS 250,350,400 500,700,750,950	23	2.61	0.05	2.0	2.6	2.1 - 3.2	23	7.50	0.11	1.5	7.5	7.0 - 8.1		
All Chemistry Instruments	24	2.61	0.05	1.9	2.6	2.1 - 3.2	23	7.50	0.11	1.5	7.5	7.0 - 8.1		
Specimen CH-3							Specimen CH-4							
All Method	175	2.70	0.15	5.6	2.7	2.2 - 3.3	175	3.99	0.08	2.0	4.0	3.4 - 4.5		
Abaxis Piccolo														
Abaxis Piccolo - waived	2	-	-	-	2.2	1.9 - 3.0	2	-	-	-	3.8	3.3 - 4.4		
All Chemistry Instruments	5	-	-	-	2.3	1.9 - 3.0	5	-	-	-	3.8	3.3 - 4.4		
ISE Diluted														
Beckman AU systems	28	2.61	0.04	1.6	2.6	2.1 - 3.2	27	3.95	0.05	1.3	3.9	3.4 - 4.5		
Roche Integra	17	2.60	0.01	0.0	2.6	2.1 - 3.1	16	4.00	0.01	0.0	4.0	3.5 - 4.5		
Siemens Dimension QuickLyte - Xpand/EXL	22	2.51	0.04	1.4	2.5	2.0 - 3.1	21	3.98	0.04	1.1	4.0	3.4 - 4.5		
All Chemistry Instruments	94	2.59	0.08	2.9	2.6	2.0 - 3.1	95	3.99	0.07	1.8	4.0	3.4 - 4.5		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	24	2.86	0.08	2.7	2.9	2.3 - 3.4	24	3.97	0.06	1.6	4.0	3.4 - 4.5		
Horiba ABX Pentra 400	18	2.84	0.08	2.8	2.8	2.3 - 3.4	18	3.93	0.08	1.9	3.9	3.4 - 4.5		
All Chemistry Instruments	50	2.83	0.10	3.5	2.8	2.3 - 3.4	50	3.96	0.07	1.8	4.0	3.4 - 4.5		
VITROS														
VITROS 250,350,400 500,700,750,950	23	2.86	0.08	2.7	2.9	2.3 - 3.4	23	4.07	0.08	1.9	4.1	3.5 - 4.6		
All Chemistry Instruments	24	2.86	0.08	2.7	2.9	2.3 - 3.4	24	4.07	0.08	1.9	4.1	3.5 - 4.6		

## Potassium (mmol/L)

	Specimen CH-5					
<u>Method/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	177	5.45	0.12	2.3	5.4	4.9 - 6.0
Abaxis Piccolo						
Abaxis Piccolo - waived	2	-	-	-	5.2	4.8 - 5.9
All Chemistry Instruments	5	-	-	-	5.2	4.8 - 5.9
ISE Diluted						
Beckman AU systems	28	5.35	0.08	1.6	5.4	4.8 - 5.9
Roche Integra	17	5.40	0.04	0.7	5.4	4.9 - 5.9
Siemens Dimension QuickLyte - Xpand/EXL	22	5.42	0.10	1.8	5.4	4.9 - 6.0
All Chemistry Instruments	96	5.41	0.10	1.8	5.4	4.9 - 6.0
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	24	5.57	0.10	1.8	5.6	5.0 - 6.1
Horiba ABX Pentra 400	19	5.39	0.12	2.2	5.4	4.8 - 5.9
All Chemistry Instruments	51	5.48	0.14	2.5	5.5	4.9 - 6.0
VITROS						
VITROS 250,350,400 500,700,750,950	23	5.54	0.11	1.9	5.5	5.0 - 6.1
All Chemistry Instruments	23	5.54	0.11	1.9	5.5	5.0 - 6.1

## 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.

<b>Method/Instrument</b>	Specimen CH-1							Specimen CH-2						
	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>		
All Method	187	120.4	2.7	2.2	121	116 - 125	188	169.1	3.7	2.2	169	165 - 174		
Abaxis Piccolo														
Abaxis Piccolo - waived	12	123.6	2.7	2.2	124	119 - 128	12	173.4	4.3	2.5	170	169 - 178		
All Chemistry Instruments	14	123.0	3.0	2.4	124	119 - 127	14	173.1	4.0	2.3	170	169 - 178		
ISE Diluted														
Beckman AU systems	28	119.7	1.4	1.2	120	115 - 124	28	166.0	2.5	1.5	166	161 - 170		
Roche Integra	17	120.3	1.3	1.1	121	116 - 125	17	165.5	1.7	1.0	166	161 - 170		
Siemens Dimension QuickLyte - Xpand/EXL	22	122.7	1.0	0.8	123	118 - 127	22	166.8	1.8	1.1	167	162 - 171		
All Chemistry Instruments	96	120.9	2.0	1.6	121	116 - 125	96	166.5	2.5	1.5	166	162 - 171		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	25	116.8	1.4	1.2	117	112 - 121	25	173.2	1.9	1.1	173	169 - 178		
Horiba ABX Pentra 400 / C400	17	117.9	1.4	1.2	118	113 - 122	18	172.3	2.3	1.3	172	168 - 177		
All Chemistry Instruments	49	117.6	1.9	1.6	118	113 - 122	50	172.3	2.4	1.4	173	168 - 177		
VITROS														
VITROS 250,350,400 500,700,750,950	23	122.6	1.0	0.8	123	118 - 127	23	170.7	1.6	0.9	171	166 - 175		
All Chemistry Instruments	24	122.6	1.0	0.8	123	118 - 127	24	170.7	1.6	0.9	171	166 - 175		
Specimen CH-3							Specimen CH14							
All Method	179	127.5	5.2	4.1	125	123 - 132	175	134.5	2.0	1.5	134	130 - 139		
Abaxis Piccolo														
Abaxis Piccolo - waived	3	-	-	-	130	127 - 136	3	-	-	-	137	132 - 141		
All Chemistry Instruments	5	-	-	-	131	127 - 136	5	-	-	-	137	132 - 141		
ISE Diluted														
Beckman AU systems	28	122.5	1.6	1.3	123	118 - 127	26	133.8	1.5	1.1	134	129 - 138		
Roche Integra	17	123.4	1.4	1.1	124	119 - 128	17	133.7	1.3	0.9	134	129 - 138		
Siemens Dimension QuickLyte - Xpand/EXL	22	123.8	1.2	1.0	124	119 - 128	21	136.0	1.6	1.2	136	131 - 140		
All Chemistry Instruments	94	123.3	1.7	1.3	123	119 - 128	93	134.5	1.7	1.2	134	130 - 139		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	25	131.4	2.0	1.5	132	127 - 136	25	132.8	1.5	1.1	133	128 - 137		
Horiba ABX Pentra 400	18	132.7	2.0	1.5	133	128 - 137	18	132.7	2.3	1.8	133	128 - 137		
All Chemistry Instruments	51	131.0	3.2	2.4	132	126 - 135	49	133.2	1.5	1.2	133	129 - 138		
VITROS														
VITROS 250,350,400 500,700,750,950	23	135.7	1.2	0.8	136	131 - 140	23	136.6	1.0	0.7	136	132 - 141		
All Chemistry Instruments	24	135.7	1.1	0.8	136	131 - 140	24	136.7	1.1	0.8	137	132 - 141		

## Sodium (mmol/L)

### Specimen CH-5

<u>Method/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	176	149.3	2.1	1.4	149	145 - 154
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	154	150 - 158
All Chemistry Instruments	5	-	-	-	154	150 - 158
ISE Diluted						
Beckman AU systems	28	148.2	1.9	1.3	148	144 - 153
Roche Integra	17	147.5	1.3	0.9	147	143 - 152
Siemens Dimension QuickLyte - Xpand/EXL	22	149.1	1.8	1.2	149	145 - 154
All Chemistry Instruments	95	148.6	1.8	1.2	148	144 - 153
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	25	149.8	1.9	1.2	150	145 - 154
Horiba ABX Pentra 400	18	149.8	2.9	1.9	150	145 - 154
All Chemistry Instruments	50	149.5	2.0	1.3	150	145 - 154
VITROS						
VITROS 250,350,400 500,700,750,950	23	151.4	1.3	0.9	151	147 - 156
All Chemistry Instruments	24	151.5	1.3	0.9	151	147 - 156

### TIBC – Calculated (µg/dL)

<u>Method/Instrument</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	10	91.3	11.3	12.4	96	68 - 114	10	344.0	86.9	25.3	391	170 - 518		
<b>Specimen CH-3</b>														
All Method	10	616.6	33.6	5.4	611	493 - 740	10	166.5	31.7	19.0	180	103 - 230		
<b>Specimen CH-4</b>														
All Method	10	241.7	54.7	22.6	273	132 - 352								

### TIBC – Direct (µg/dL)

<u>Method/Instrument</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	19	88.4	36.8	41.6	73	14 - 162	18	331.9	8.1	2.4	334	265 - 399		
Siemens Healthcare														
Siemens Dimension	12	66.0	7.4	11.2	65	51 - 81	12	331.3	9.0	2.7	329	265 - 398		
All Chemistry Instruments	13	66.2	7.1	10.8	66	51 - 81	13	331.4	8.7	2.6	330	265 - 398		
<b>Specimen CH-3</b>														
All Method	18	591.2	22.3	3.8	589	472 - 710	19	166.0	32.8	19.7	152	100 - 232		
Siemens Healthcare														
Siemens Dimension	12	588.3	14.6	2.5	586	470 - 706	12	146.1	4.4	3.0	146	116 - 176		
All Chemistry Instruments	13	590.0	15.2	2.6	586	472 - 708	13	146.7	4.8	3.3	146	117 - 177		
<b>Specimen CH-4</b>														
All Method	19	241.9	25.8	10.7	238	190 - 294								
Siemens Healthcare														
Siemens Dimension	12	226.5	12.4	5.5	226	181 - 272								
All Chemistry Instruments	13	227.5	12.4	5.4	226	181 - 273								
<b>Specimen CH-5</b>														

**UIBC – Direct (µg/dL)**

<b><u>Method/Instrument</u></b>	<b>Specimen CH-1</b>							<b>Specimen CH-2</b>						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	22	58.8	8.9	15.2	61	40 - 77	22	167.6	14.2	8.5	169	134 - 202		
All Roche Reagents	11	54.0	8.1	15.0	52	37 - 71	11	159.1	9.3	5.9	160	127 - 191		
Beckman AU														
Beckman AU systems	10	63.4	7.5	11.8	65	48 - 79	10	179.3	8.7	4.9	178	143 - 216		
<b>Specimen CH-3</b>							<b>Specimen CH-4</b>							
All Method	22	412.1	22.7	5.5	407	329 - 495	22	91.9	11.0	12.0	93	69 - 114		
All Roche Reagents	11	394.4	11.9	3.0	398	315 - 474	11	85.5	8.3	9.6	84	68 - 103		
Beckman AU														
Beckman AU systems	10	432.9	12.7	2.9	435	346 - 520	10	100.1	8.1	8.1	102	80 - 121		
<b>Specimen CH-5</b>														
All Method	22	126.4	12.8	10.1	128	100 - 152								
All Roche Reagents	11	119.1	12.7	10.6	117	93 - 145								
Beckman AU														
Beckman AU systems	10	134.5	8.0	6.0	137	107 - 162								

## ALT (SGPT) (IU/L)

<u>Instrument/Reagent</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	169	17.9	4.4	24.7	17	14 - 22	177	262.8	25.8	9.8	258	210 - 316		
All Alfa Wassermann Reagents	23	13.3	2.1	15.4	14	10 - 16	26	231.0	6.3	2.7	232	184 - 278		
All Horiba Pentra Reagents	20	20.2	1.5	7.6	20	16 - 25	19	308.7	8.5	2.7	309	246 - 371		
All Roche Reagents	28	16.8	0.8	4.7	17	13 - 21	28	267.4	8.2	3.1	267	213 - 321		
Abaxis Piccolo														
Abaxis Piccolo - waived	11	22.9	2.6	11.3	23	18 - 28	11	245.5	2.8	1.1	246	196 - 295		
All Chemistry Instruments	13	21.9	3.8	17.5	23	17 - 27	13	244.3	5.3	2.1	246	195 - 294		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	19	13.4	2.1	16.0	14	10 - 17	22	231.2	6.5	2.8	232	184 - 278		
Beckman AU														
Beckman AU systems	29	15.4	0.6	4.1	15	12 - 19	29	251.3	7.1	2.8	253	201 - 302		
ELITechGroup Envoy 500														
ELITechGroup Envoy 500	5	18.0	1.2	6.8	18	14 - 22	5	280.0	23.9	8.5	287	224 - 336		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	19	20.2	1.6	7.8	20	16 - 25	18	308.7	8.7	2.8	309	246 - 371		
All Chemistry Instruments	20	20.2	1.5	7.6	20	16 - 25	19	308.7	8.5	2.7	309	246 - 371		
Roche cobas c 501														
Roche cobas 6000 / c 501	9	17.2	0.4	2.6	17	13 - 21	9	274.6	5.2	1.9	273	219 - 330		
Roche Integra														
Roche Integra	17	16.5	0.9	5.3	16	13 - 20	17	263.0	6.8	2.6	264	210 - 316		
Siemens Healthcare														
Siemens Dimension	6	21.7	1.0	4.8	22	17 - 27	6	288.0	2.8	1.0	289	230 - 346		
Siemens Healthcare ALTi														
Siemens Dimension	21	21.8	2.3	10.4	22	17 - 27	21	286.7	6.5	2.3	285	229 - 345		
All Chemistry Instruments	22	21.7	2.2	10.3	22	17 - 27	22	287.0	6.5	2.3	285	229 - 345		
VITROS														
VITROS 250,350,400 500,700,750,950	9	37.6	3.2	8.4	37	30 - 46	9	253.2	6.4	2.5	251	202 - 304		
All Chemistry Instruments	10	37.7	3.0	8.0	37	30 - 46	10	253.7	6.2	2.4	254	202 - 305		
VITROS ALT														
VITROS 250,350,400 500,700,750,950	14	13.7	0.6	4.5	14	10 - 17	14	240.3	4.4	1.8	240	192 - 289		

## ALT (SGPT) (IU/L)

Instrument/Reagent	Specimen CH-3							Specimen CH-4						
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range		
All Method	162	25.4	5.0	19.7	25	20 - 31	170	93.5	10.9	11.7	93	74 - 113		
All Alfa Wassermann Reagents	19	16.5	2.2	13.5	17	13 - 20	26	79.0	3.8	4.8	78	63 - 95		
All Horiba Pentra Reagents	20	30.2	2.3	7.6	31	24 - 37	19	109.1	2.6	2.4	109	87 - 131		
All Roche Reagents	28	23.5	1.8	7.6	23	18 - 29	27	93.4	1.7	1.8	94	74 - 113		
Abaxis Piccolo														
Abaxis Piccolo - waived	3	-	-	-	32	23 - 36	3	-	-	-	90	70 - 106		
All Chemistry Instruments	5	29.2	7.0	23.9	32	23 - 36	5	87.6	7.2	8.2	90	70 - 106		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	16	17.1	3.6	20.8	18	13 - 21	22	79.3	4.0	5.1	79	63 - 96		
Beckman AU														
Beckman AU systems	30	24.8	1.4	5.6	25	19 - 30	29	86.5	2.7	3.1	87	69 - 104		
ELITechGroup Envoy 500														
ELITechGroup Envoy 500	5	29.0	1.2	4.2	29	23 - 35	5	101.4	4.1	4.0	100	81 - 122		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	19	30.4	2.2	7.3	31	24 - 37	18	108.9	2.6	2.4	109	87 - 131		
All Chemistry Instruments	20	30.2	2.3	7.6	31	24 - 37	19	109.1	2.6	2.4	109	87 - 131		
Roche cobas c 501														
Roche cobas 6000 / c 501	9	25.0	1.4	5.7	25	20 - 30	9	94.6	1.6	1.7	94	75 - 114		
Roche Integra														
Roche Integra	17	22.4	1.2	5.2	22	17 - 27	16	92.6	1.5	1.6	93	74 - 112		
Siemens Healthcare														
Siemens Dimension	5	31.4	0.9	2.8	31	25 - 38	6	103.0	2.1	2.0	104	82 - 124		
Siemens Healthcare ALTi														
Siemens Dimension	21	31.4	3.2	10.2	31	25 - 38	21	102.9	2.3	2.2	102	82 - 124		
All Chemistry Instruments	22	31.4	3.1	9.9	31	25 - 38	22	102.8	2.3	2.2	102	82 - 124		
VITROS														
VITROS 250,350,400 500,700,750,950	7	21.6	4.1	19.1	20	17 - 26	9	106.6	3.4	3.2	107	85 - 128		
All Chemistry Instruments	8	22.0	4.0	18.2	21	17 - 27	10	107.5	4.4	4.1	108	86 - 129		
VITROS ALT														
VITROS 250,350,400 500,700,750,950	14	24.5	1.1	4.5	25	19 - 30	14	84.3	2.5	3.0	84	67 - 102		

## ALT (SGPT) (IU/L)

	Specimen CH-5					
<b>Instrument/Reagent</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>
All Method	169	167.7	17.5	10.4	167	134 - 202
All Alfa Wassermann Reagents	24	146.1	3.0	2.1	147	116 - 176
All Horiba Pentra Reagents	19	196.6	5.3	2.7	196	157 - 236
All Roche Reagents	27	169.0	3.6	2.1	170	135 - 203
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	155	123 - 185
All Chemistry Instruments	5	153.8	5.6	3.7	155	123 - 185
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	21	146.7	4.1	2.8	147	117 - 177
Beckman AU						
Beckman AU systems	29	157.4	4.6	2.9	158	125 - 189
ELITechGroup Envoy 500						
ELITechGroup Envoy 500	5	184.2	5.9	3.2	183	147 - 222
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	196.8	5.4	2.8	196	157 - 237
All Chemistry Instruments	19	196.6	5.3	2.7	196	157 - 236
Roche cobas c 501						
Roche cobas 6000 / c 501	9	171.3	3.1	1.8	171	137 - 206
Roche Integra						
Roche Integra	17	166.6	4.6	2.7	167	133 - 200
Siemens Healthcare						
Siemens Dimension	6	187.3	5.3	2.8	186	149 - 225
Siemens Healthcare ALTi						
Siemens Dimension	21	184.6	4.0	2.2	185	147 - 222
All Chemistry Instruments	22	184.4	4.0	2.2	185	147 - 222
VITROS						
VITROS 250,350,400 500,700,750,950	9	173.0	5.5	3.2	174	138 - 208
All Chemistry Instruments	10	174.2	6.4	3.7	175	139 - 210
VITROS ALTv						
VITROS 250,350,400 500,700,750,950	14	152.1	3.3	2.2	153	121 - 183

## Alkaline Phosphatase (IU/L)

<u>Instrument/Reagent</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	182	34.6	3.5	10.2	34	24 - 45	182	322.4	69.1	21.4	345	225 - 420		
All Alfa Wassermann Reagents	25	33.5	2.6	7.8	33	23 - 44	25	342.4	17.6	5.2	345	239 - 446		
All Horiba Pentra Reagents	20	39.4	3.1	7.8	40	27 - 52	20	387.1	24.4	6.3	382	270 - 504		
All Roche Reagents	26	34.1	1.0	2.9	34	23 - 45	28	348.8	10.1	2.9	350	244 - 454		
Abaxis Piccolo														
Abaxis Piccolo - waived	11	32.8	2.9	8.9	34	22 - 43	11	238.8	10.0	4.2	239	167 - 311		
All Chemistry Instruments	13	32.9	2.8	8.4	34	23 - 43	14	234.4	58.5	25.0	239	164 - 305		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	21	33.8	2.7	8.1	34	23 - 44	21	343.1	19.0	5.5	345	240 - 447		
Beckman AU														
Beckman AU systems	29	30.6	2.1	7.0	31	21 - 40	29	323.7	20.2	6.2	324	226 - 421		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	20	39.4	3.1	7.8	40	27 - 52	20	387.1	24.4	6.3	382	270 - 504		
Roche Integra														
Roche Integra	16	33.9	2.2	6.5	34	23 - 45	16	348.8	12.7	3.6	350	244 - 454		
All Chemistry Instruments	17	33.9	2.1	6.3	34	23 - 45	17	348.6	12.3	3.5	350	244 - 454		
Siemens Healthcare ALPi														
Siemens Dimension	20	35.7	1.6	4.5	35	24 - 47	20	383.1	5.8	1.5	384	268 - 498		
All Chemistry Instruments	21	35.7	1.6	4.4	35	24 - 47	21	383.0	5.7	1.5	383	268 - 498		
VITROS														
VITROS 250,350,400 500,700,750,950	23	37.1	2.7	7.4	37	25 - 49	23	176.9	11.4	6.5	177	123 - 230		
All Chemistry Instruments	24	37.0	2.7	7.3	37	25 - 49	24	177.2	11.3	6.4	178	124 - 231		

## Alkaline Phosphatase (IU/L)

<u>Instrument/Reagent</u>	Specimen CH-3							Specimen CH-4						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	173	114.5	12.5	10.9	114	80 - 149	173	135.3	14.0	10.3	136	94 - 176		
All Alfa Wassermann Reagents	25	107.1	6.1	5.7	107	74 - 140	24	136.6	6.8	5.0	138	95 - 178		
All Horiba Pentra Reagents	20	125.1	7.3	5.8	127	87 - 163	20	153.5	10.1	6.6	152	107 - 200		
All Roche Reagents	28	114.4	3.4	3.0	114	80 - 149	28	136.7	4.0	3.0	137	95 - 178		
Abaxis Piccolo														
Abaxis Piccolo - waived	3	-	-	-	96	80 - 149	3	-	-	-	-	113	94 - 176	
All Chemistry Instruments	5	-	-	-	96	68 - 128	5	-	-	-	-	113	82 - 153	
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	21	107.3	6.5	6.1	108	75 - 140	20	136.8	7.3	5.4	138	95 - 178		
Beckman AU														
Beckman AU systems	29	100.8	6.6	6.5	102	70 - 132	29	125.8	7.6	6.0	128	88 - 164		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	20	125.1	7.3	5.8	127	87 - 163	20	153.5	10.1	6.6	152	107 - 200		
Roche Integra														
Roche Integra	16	113.9	4.3	3.8	114	79 - 149	16	136.8	4.7	3.4	137	95 - 178		
All Chemistry Instruments	17	113.9	4.2	3.7	114	79 - 149	17	136.5	4.6	3.4	137	95 - 178		
Siemens Healthcare ALPi														
Siemens Dimension	20	118.9	2.3	2.0	119	83 - 155	20	148.7	2.6	1.8	149	104 - 194		
All Chemistry Instruments	20	118.9	2.3	2.0	119	83 - 155	20	148.7	2.6	1.8	149	104 - 194		
VITROS														
VITROS 250,350,400 500,700,750,950	23	132.6	9.8	7.4	133	92 - 173	23	117.8	5.2	4.4	118	82 - 154		
All Chemistry Instruments	24	133.1	9.9	7.4	133	93 - 174	24	117.7	5.1	4.4	118	82 - 153		

## Alkaline Phosphatase (IU/L)

### Specimen CH-5

<u>Instrument/Reagent</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	174	223.7	32.7	14.6	230	156 - 291
All Alfa Wassermann Reagents	24	230.4	9.6	4.2	232	161 - 300
All Horiba Pentra Reagents	20	258.0	17.4	6.7	256	180 - 336
All Roche Reagents	28	231.3	7.2	3.1	231	161 - 301
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	169	156 - 291
All Chemistry Instruments	5	-	-	-	178	130 - 243
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	21	232.2	13.2	5.7	232	162 - 302
Beckman AU						
Beckman AU systems	29	213.9	13.2	6.2	217	149 - 279
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	20	258.0	17.4	6.7	256	180 - 336
Roche Integra						
Roche Integra	16	232.3	8.8	3.8	232	162 - 303
All Chemistry Instruments	17	232.0	8.6	3.7	232	162 - 302
Siemens Healthcare ALPi						
Siemens Dimension	20	254.5	3.3	1.3	255	178 - 331
All Chemistry Instruments	20	254.5	3.3	1.3	255	178 - 331
VITROS						
VITROS 250,350,400 500,700,750,950	23	161.9	9.4	5.8	163	113 - 211
All Chemistry Instruments	24	161.9	9.2	5.7	163	113 - 211

## AST (SGOT) (IU/L)

Instrument/Reagent	Specimen CH-1							Specimen CH-2						
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range		
All Method	155	98.3	7.7	7.8	100	78 - 118	156	304.9	41.0	13.4	305	243 - 366		
All Alfa Wassermann Reagents	25	93.4	6.5	7.0	93	74 - 113	25	274.7	8.6	3.1	273	219 - 330		
All Horiba Pentra Reagents	20	107.2	6.9	6.5	107	85 - 129	20	316.5	19.7	6.2	311	253 - 380		
All Roche Reagents	27	103.9	3.8	3.7	103	83 - 125	27	305.3	10.8	3.5	305	244 - 367		
Abaxis Piccolo														
Abaxis Piccolo - waived	11	99.8	3.2	3.2	100	79 - 120	11	287.0	9.0	3.1	287	229 - 345		
All Chemistry Instruments	13	99.1	4.2	4.2	100	79 - 119	13	285.8	10.9	3.8	287	228 - 343		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	21	93.7	7.1	7.6	95	74 - 113	21	275.2	9.2	3.4	274	220 - 331		
Beckman AU														
Beckman AU systems	30	89.2	4.4	4.9	88	71 - 108	30	266.2	12.8	4.8	265	212 - 320		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	19	107.3	7.1	6.6	107	85 - 129	19	316.8	20.2	6.4	312	253 - 381		
All Chemistry Instruments	20	107.2	6.9	6.5	107	85 - 129	20	316.5	19.7	6.2	311	253 - 380		
Roche Integra														
Roche Integra	16	104.2	3.6	3.5	104	83 - 126	16	304.0	11.7	3.9	304	243 - 365		
Siemens Healthcare														
Siemens Dimension	27	100.4	2.2	2.2	101	80 - 121	27	318.9	6.2	1.9	319	255 - 383		
All Chemistry Instruments	28	100.3	2.3	2.3	101	80 - 121	28	318.7	6.1	1.9	319	254 - 383		
VITROS														
VITROS 250,350,400 500,700,750,950	23	98.6	3.1	3.2	99	78 - 119	23	385.9	14.1	3.6	387	308 - 464		
All Chemistry Instruments	24	98.4	3.1	3.2	99	78 - 119	24	385.6	13.8	3.6	387	308 - 463		

## AST (SGOT) (IU/L)

Instrument/Reagent	Specimen CH-3						Specimen CH-4					
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range
All Method	148	41.0	4.9	11.9	40	32 - 50	148	158.2	13.6	8.6	162	126 - 190
All Alfa Wassermann Reagents	25	34.6	4.2	12.0	34	27 - 42	25	147.7	6.0	4.0	148	118 - 178
All Horiba Pentra Reagents	20	44.5	3.2	7.2	45	35 - 54	20	170.0	9.7	5.7	169	135 - 204
All Roche Reagents	27	40.0	1.7	4.2	40	32 - 49	27	163.0	5.0	3.0	163	130 - 196
Abaxis Piccolo												
Abaxis Piccolo - waived	3	-	-	-	49	32 - 50	3	-	-	-	153	126 - 190
All Chemistry Instruments	5	-	-	-	48	36 - 54	5	-	-	-	153	121 - 183
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	21	34.6	4.4	12.7	34	27 - 42	21	148.2	5.7	3.9	148	118 - 178
Beckman AU												
Beckman AU systems	30	39.0	1.6	4.1	39	31 - 47	28	140.1	4.5	3.2	141	112 - 169
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	19	44.5	3.3	7.4	44	35 - 54	19	169.9	10.0	5.9	168	135 - 204
All Chemistry Instruments	20	44.5	3.2	7.2	45	35 - 54	20	170.0	9.7	5.7	169	135 - 204
Roche Integra												
Roche Integra	16	39.1	1.3	3.4	39	31 - 47	16	163.0	5.5	3.4	163	130 - 196
Siemens Healthcare												
Siemens Dimension	27	38.1	1.6	4.3	38	30 - 46	27	167.2	3.8	2.3	168	133 - 201
All Chemistry Instruments	28	38.1	1.6	4.3	38	30 - 46	28	167.5	3.9	2.4	168	133 - 201
VITROS												
VITROS 250,350,400 500,700,750,950	23	46.3	1.7	3.8	47	37 - 56	23	172.7	5.8	3.4	172	138 - 208
All Chemistry Instruments	24	46.3	1.7	3.7	47	37 - 56	24	172.5	5.7	3.3	172	138 - 207

## AST (SGOT) (IU/L)

### Specimen CH-5

<b><u>Instrument/Reagent</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>
All Method	148	223.1	23.7	10.6	225	178 - 268
All Alfa Wassermann Reagents	25	206.0	7.0	3.4	206	164 - 248
All Horiba Pentra Reagents	20	235.8	13.1	5.6	234	188 - 283
All Roche Reagents	27	226.0	7.9	3.5	226	180 - 272
Abaxis Piccolo						
Abaxis Piccolo - waived	3	-	-	-	205	178 - 268
All Chemistry Instruments	5	-	-	-	205	165 - 249
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	21	206.1	7.5	3.6	206	164 - 248
Beckman AU						
Beckman AU systems	30	196.6	9.2	4.7	195	157 - 236
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	19	236.1	13.4	5.7	235	188 - 284
All Chemistry Instruments	20	235.8	13.1	5.6	234	188 - 283
Roche Integra						
Roche Integra	16	225.8	8.7	3.9	227	180 - 271
Siemens Healthcare						
Siemens Dimension	27	232.6	5.3	2.3	233	186 - 280
All Chemistry Instruments	28	233.0	5.6	2.4	233	186 - 280
VITROS						
VITROS 250,350,400 500,700,750,950	23	261.7	9.5	3.6	260	209 - 314
All Chemistry Instruments	24	261.5	9.3	3.5	260	209 - 314

## Creatine Kinase (IU/L)

<u>Instrument/Reagent</u>	Specimen CH-1						Specimen CH-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	71	27.8	4.4	16.0	27	19 - 37	71	397.9	41.8	10.5	407	278 - 518
All Alfa Wassermann Reagents	10	34.5	3.1	9.0	35	24 - 45	10	393.8	15.1	3.8	393	275 - 512
All Roche Reagents	11	28.9	1.6	5.5	29	20 - 38	11	413.4	18.4	4.5	419	289 - 538
Beckman AU												
Beckman AU systems	16	23.0	3.5	15.3	24	16 - 30	15	385.4	17.8	4.6	385	269 - 502
Siemens Healthcare CKI												
Siemens Dimension	17	27.1	1.4	5.1	27	18 - 36	17	429.1	9.9	2.3	433	300 - 558

	Specimen CH-3						Specimen CH-4					
All Method	70	200.0	14.5	7.2	203	140 - 261	70	148.0	10.8	7.3	152	103 - 193
All Alfa Wassermann Reagents	10	197.6	8.1	4.1	199	138 - 257	10	151.0	3.9	2.6	153	105 - 197
All Roche Reagents	11	204.5	7.7	3.8	206	143 - 266	11	152.1	6.1	4.0	153	106 - 198
Beckman AU												
Beckman AU systems	16	176.6	13.8	7.8	176	123 - 230	16	133.1	11.0	8.2	133	93 - 173
Siemens Healthcare CKI												
Siemens Dimension	17	207.2	5.8	2.8	207	145 - 270	17	153.8	2.4	1.6	153	107 - 200

	Specimen CH-5				
All Method	69	262.1	18.9	7.2	266
All Alfa Wassermann Reagents	10	260.5	7.8	3.0	263
All Roche Reagents	11	268.6	8.8	3.3	271
Beckman AU					
Beckman AU systems	16	241.0	18.4	7.6	240
Siemens Healthcare CKI					
Siemens Dimension	17	275.5	6.2	2.3	277
					192 - 359

**GGT (IU/L)**

Instrument/Reagent	Specimen CH-1						Specimen CH-2					
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range
All Method	41	16.3	5.1	31.0	14	6 - 27	41	212.4	35.1	16.5	201	142 - 283
All Roche Reagents	12	13.9	1.1	7.8	14	11 - 17	12	201.0	9.1	4.5	199	160 - 242
Beckman AU												
Beckman AU systems	10	12.4	0.7	5.6	12	9 - 15	10	177.6	4.2	2.4	179	142 - 214
Roche Integra												
Roche Integra	7	13.6	0.5	3.9	14	10 - 17	7	199.1	3.2	1.6	200	159 - 239
Siemens Healthcare												
Siemens Dimension	6	25.7	2.5	9.8	26	20 - 31	6	261.7	5.8	2.2	265	209 - 315
All Chemistry Instruments	7	25.9	2.3	9.1	27	20 - 32	7	262.9	6.1	2.3	265	210 - 316
Specimen CH-3							Specimen CH-4					
All Method	39	42.5	8.3	19.5	39	25 - 59	39	76.9	16.0	20.9	71	44 - 109
All Roche Reagents	12	38.8	2.5	6.4	38	31 - 47	12	70.8	3.4	4.8	70	56 - 85
Beckman AU												
Beckman AU systems	10	35.2	0.9	2.6	35	28 - 43	10	62.2	1.6	2.6	63	49 - 75
Roche Integra												
Roche Integra	7	38.3	1.0	2.5	38	30 - 46	7	70.3	0.8	1.1	70	56 - 85
Siemens Healthcare												
Siemens Dimension	6	57.8	1.9	3.4	59	46 - 70	6	98.0	1.4	1.4	98	78 - 118
All Chemistry Instruments	7	57.4	2.1	3.6	58	45 - 69	7	97.7	1.5	1.5	98	78 - 118
Specimen CH-5												
All Method	39	135.8	26.5	19.5	126	82 - 189						
All Roche Reagents	11	125.5	1.9	1.5	126	100 - 151						
Beckman AU												
Beckman AU systems	10	111.6	3.4	3.0	113	89 - 134						
Roche Integra												
Roche Integra	7	125.6	1.5	1.2	126	100 - 151						
Siemens Healthcare												
Siemens Dimension	6	169.7	3.1	1.9	169	135 - 204						
All Chemistry Instruments	7	169.7	2.9	1.7	170	135 - 204						

## Amylase (IU/L)

<b><i>Instrument/Reagent</i></b>	Specimen CH-1							Specimen CH-2						
	<b><i>Labs</i></b>	<b><i>Mean</i></b>	<b><i>SD</i></b>	<b><i>CV</i></b>	<b><i>Median</i></b>	<b><i>Range</i></b>	<b><i>Labs</i></b>	<b><i>Mean</i></b>	<b><i>SD</i></b>	<b><i>CV</i></b>	<b><i>Median</i></b>	<b><i>Range</i></b>		
All Method	50	14.8	6.7	45.5	13	10 - 20	50	178.9	25.4	14.2	184	125 - 233		
All Roche Reagents	11	13.8	0.4	2.9	14	9 - 18	11	181.7	3.2	1.8	183	127 - 237		
Beckman AU														
Beckman AU systems	11	9.0	0.9	9.9	9	6 - 12	11	156.3	5.3	3.4	157	109 - 204		
Roche Integra														
Roche Integra	6	13.8	0.4	3.0	14	9 - 18	6	181.2	4.2	2.3	183	126 - 236		
Siemens Healthcare														
Siemens Dimension	8	11.9	0.4	3.0	12	8 - 16	8	209.6	3.5	1.7	209	146 - 273		
VITROS														
VITROS 250,350,400 500,700,750,950	7	30.3	0.8	2.5	30	21 - 40	7	138.4	4.9	3.5	140	96 - 180		
	Specimen CH-3							Specimen CH-4						
	<b><i>Labs</i></b>	<b><i>Mean</i></b>	<b><i>SD</i></b>	<b><i>CV</i></b>	<b><i>Median</i></b>	<b><i>Range</i></b>	<b><i>Labs</i></b>	<b><i>Mean</i></b>	<b><i>SD</i></b>	<b><i>CV</i></b>	<b><i>Median</i></b>	<b><i>Range</i></b>		
All Method	48	95.4	17.4	18.2	95	66 - 125	48	61.6	9.8	15.9	64	43 - 81		
All Roche Reagents	11	99.5	12.1	12.1	104	69 - 130	11	63.6	1.4	2.3	64	44 - 83		
Beckman AU														
Beckman AU systems	11	72.9	3.3	4.5	72	51 - 95	11	53.4	2.1	3.9	53	37 - 70		
Roche Integra														
Roche Integra	6	95.0	15.5	16.3	102	66 - 124	6	63.8	1.9	3.0	65	44 - 83		
Siemens Healthcare														
Siemens Dimension	8	92.1	1.4	1.5	93	64 - 120	8	72.3	1.0	1.4	72	50 - 94		
VITROS														
VITROS 250,350,400 500,700,750,950	7	120.3	5.5	4.5	119	84 - 157	7	45.9	2.9	6.2	45	32 - 60		

**Amylase (IU/L)****Specimen CH-5**

All Method	48	111.5	16.7	15.0	114	78 - 146
All Roche Reagents	11	114.0	1.8	1.6	114	79 - 149
Beckman AU						
Beckman AU systems	11	97.6	3.7	3.8	97	68 - 127
Roche Integra						
Roche Integra	6	113.8	2.5	2.2	115	79 - 148
Siemens Healthcare						
Siemens Dimension	8	130.9	2.2	1.7	131	91 - 171
VITROS						
VITROS 250,350,400 500,700,750,950	7	85.6	5.1	6.0	84	59 - 112

### Lactate Dehydrogenase (IU/L)

<u>Instrument/Reagent</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	50	149.3	17.2	11.5	158	119 - 180	50	732.0	81.9	11.2	770	585 - 879		
All Horiba Pentra Reagents	7	156.4	7.4	4.7	158	125 - 188	7	760.1	25.3	3.3	762	608 - 913		
All Roche Reagents	21	161.9	4.6	2.9	161	129 - 195	21	784.0	17.8	2.3	780	627 - 941		
Beckman AU														
Beckman AU systems	10	129.6	6.0	4.6	131	103 - 156	10	646.3	26.4	4.1	648	517 - 776		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	7	156.4	7.4	4.7	158	125 - 188	7	760.1	25.3	3.3	762	608 - 913		
Roche cobas c 501														
Roche cobas 6000 / c 501	7	158.0	2.5	1.6	158	126 - 190	7	789.9	12.8	1.6	790	631 - 948		
Roche Integra														
Roche Integra	13	164.1	4.3	2.6	162	131 - 197	13	780.2	20.1	2.6	775	624 - 937		
Siemens Healthcare LDI														
Siemens Dimension	4	150.5	5.9	3.9	149	120 - 181	4	755.8	12.0	1.6	756	604 - 907		

### Lactate Dehydrogenase (IU/L)

	Specimen CH-3							Specimen CH-4						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	49	181.6	20.7	11.4	190	145 - 218	50	330.1	37.2	11.3	346	264 - 397		
All Horiba Pentra Reagents	7	190.0	4.6	2.4	190	152 - 228	7	341.9	8.7	2.6	341	273 - 411		
All Roche Reagents	21	192.9	6.1	3.2	192	154 - 232	21	356.6	9.1	2.6	356	285 - 428		
Beckman AU														
Beckman AU systems	10	149.2	27.9	18.7	158	119 - 180	10	288.0	11.4	4.0	290	230 - 346		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	7	190.0	4.6	2.4	190	152 - 228	7	341.9	8.7	2.6	341	273 - 411		
Roche cobas c 501														
Roche cobas 6000 / c 501	7	191.7	6.4	3.3	192	153 - 231	7	351.3	5.7	1.6	352	281 - 422		
Roche Integra														
Roche Integra	13	193.2	6.3	3.3	191	154 - 232	13	359.7	9.7	2.7	358	287 - 432		
Siemens Healthcare LDI														
Siemens Dimension	4	187.0	8.8	4.7	184	149 - 225	4	337.0	8.1	2.4	335	269 - 405		

**Lactate Dehydrogenase (IU/L)****Specimen CH-5**

All Method	50	507.0	57.1	11.3	535	405 - 609
All Horiba Pentra Reagents	7	524.9	25.7	4.9	519	419 - 630
All Roche Reagents	20	543.5	9.1	1.7	543	434 - 653
Beckman AU						
Beckman AU systems	10	444.4	18.3	4.1	446	355 - 534
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	7	524.9	25.7	4.9	519	419 - 630
Roche cobas c 501						
Roche cobas 6000 / c 501	7	544.4	6.5	1.2	544	435 - 654
Roche Integra						
Roche Integra	13	546.0	15.5	2.8	543	436 - 656
Siemens Healthcare LDI						
Siemens Dimension	4	525.3	10.7	2.0	525	420 - 631

## Lipase (IU/L)

<u>Instrument/Reagent</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	24	8.0	1.5	18.7	8	5 - 11	24	55.6	6.4	11.5	59	38 - 73		
All Roche Reagents	11	8.5	0.5	6.2	8	5 - 11	11	51.7	5.0	9.7	51	36 - 68		
Beckman AU														
Beckman AU systems	8	7.0	1.7	24.1	7	4 - 10	8	60.4	3.5	5.9	61	42 - 79		
Roche Integra														
Roche Integra	5	8.6	0.5	6.4	9	6 - 12	5	50.6	3.9	7.7	50	35 - 66		
Siemens Healthcare														
Siemens Dimension	6	42.7	3.8	8.9	43	29 - 56	6	221.0	21.6	9.8	221	154 - 288		
Specimen CH-3							Specimen CH-4							
All Method	23	57.7	2.4	4.1	59	40 - 76	24	22.4	2.0	8.7	24	15 - 30		
All Roche Reagents	11	58.5	1.6	2.7	58	40 - 76	11	21.5	1.6	7.6	21	15 - 29		
Beckman AU														
Beckman AU systems	8	56.6	2.9	5.1	58	39 - 74	8	22.9	1.2	5.4	23	16 - 30		
Roche Integra														
Roche Integra	5	58.4	2.2	3.8	57	40 - 76	5	21.2	1.6	7.8	21	14 - 28		
Siemens Healthcare														
Siemens Dimension	6	269.8	14.4	5.3	273	188 - 351	6	99.3	4.2	4.2	99	69 - 130		
Specimen CH-5														
All Method	24	36.9	3.9	10.7	39	25 - 48								
All Roche Reagents	11	34.6	2.9	8.4	34	24 - 46								
Beckman AU														
Beckman AU systems	8	39.3	1.8	4.7	40	27 - 52								
Roche Integra														
Roche Integra	5	34.0	1.9	5.5	34	23 - 45								
Siemens Healthcare														
Siemens Dimension	6	153.8	14.6	9.5	152	107 - 200								

### Alpha-fetoprotein (AFP) (ng/mL)

<u>Method</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	0.97	0.06	6.0	1.0	0.7 - 1.2	5	302.07	6.80	2.3	303.4	281.6 - 322.5		
Specimen CH-3														
All Method	5	5.37	0.06	1.1	5.4	5.1 - 5.6	5	98.70	4.16	4.2	97.2	86.2 - 111.2		
Specimen CH-4														
Specimen CH-5														
All Method	5	186.93	9.89	5.3	182.9	157.2 - 216.6								

### Cortisol (µg/dL)

<u>Method</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	13	3.87	0.31	7.9	3.9	2.9 - 4.9	13	31.68	2.18	6.9	31.7	23.7 - 39.6		
Beckman ACCESS / 2 / Dxl	7	3.83	0.20	5.2	3.9	2.8 - 4.8	7	30.74	1.89	6.2	30.4	23.0 - 38.5		
Specimen CH-3														
All Method	13	11.18	1.92	17.2	10.2	8.3 - 14.0	13	12.95	0.94	7.3	12.9	9.7 - 16.2		
Beckman ACCESS / 2 / Dxl	7	9.69	0.51	5.3	9.6	7.2 - 12.2	7	12.50	0.72	5.7	12.8	9.3 - 15.7		
Specimen CH-4														
Specimen CH-5														
All Method	13	21.38	1.36	6.4	21.1	16.0 - 26.8								
Beckman ACCESS / 2 / Dxl	7	20.93	1.10	5.3	21.0	15.6 - 26.2								

### T<sub>3</sub> Uptake (percent)

<u><b>Method</b></u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	11	49.84	4.41	8.8	49.6	36.6 - 63.1	11	41.98	2.93	7.0	42.0	33.1 - 50.8		
<b>Specimen CH-3</b>														
All Method	11	27.55	5.21	18.9	29.0	11.9 - 43.2	11	46.41	3.98	8.6	45.1	34.4 - 58.4		
<b>Specimen CH-5</b>														
All Method	11	44.02	3.89	8.8	42.2	32.3 - 55.7								

### Triiodothyronine (ng/mL)

<u><b>Method</b></u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	23	0.67	0.11	17.1	0.7	0.3 - 1.1	23	2.03	0.57	28.0	2.3	0.3 - 3.8		
All Roche Instruments	5	0.78	0.08	10.7	0.8	0.5 - 1.1	5	1.88	0.23	12.1	1.9	1.1 - 2.6		
All TOSOH Instruments	7	2.00	0.08	4.1	2.0	1.7 - 2.3	7	7.37	0.73	10.0	7.1	5.1 - 9.6		
Beckman ACCESS / 2 / Dxl	12	0.65	0.05	8.0	0.7	0.4 - 0.9	12	2.34	0.50	21.3	2.3	0.8 - 3.9		
TOSOH ST AIA PACK	6	2.02	0.08	3.7	2.0	1.7 - 2.3	6	7.42	0.79	10.7	7.1	5.0 - 9.8		
<b>Specimen CH-3</b>														
All Method	23	1.27	0.45	35.5	1.2	0.0 - 2.7	22	1.15	0.13	11.0	1.2	0.7 - 1.6		
All Roche Instruments	5	0.82	0.08	10.2	0.8	0.5 - 1.1	5	1.24	0.11	9.2	1.2	0.8 - 1.6		
All TOSOH Instruments	7	1.13	0.08	6.7	1.1	0.9 - 1.4	7	4.10	0.20	4.9	4.0	3.5 - 4.7		
Beckman ACCESS / 2 / Dxl	12	1.64	0.11	6.6	1.6	1.3 - 2.0	12	1.11	0.07	6.0	1.1	0.9 - 1.4		
TOSOH ST AIA PACK	6	1.13	0.08	7.2	1.2	0.8 - 1.4	6	4.12	0.21	5.2	4.1	3.4 - 4.8		
<b>Specimen CH-5</b>														
All Method	22	1.50	0.19	12.8	1.6	0.9 - 2.1								
All Roche Instruments	5	1.50	0.12	8.2	1.5	1.1 - 1.9								
All TOSOH Instruments	7	5.74	0.16	2.8	5.7	5.2 - 6.3								
Beckman ACCESS / 2 / Dxl	12	1.58	0.13	8.0	1.6	1.2 - 2.0								
TOSOH ST AIA PACK	6	5.72	0.16	2.8	5.7	5.2 - 6.2								

**Free T<sub>3</sub> (pg/mL)**

<b><u>Method</u></b>	<b>Specimen CH-1</b>						<b>Specimen CH-2</b>					
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>
All Method	31	1.71	0.34	19.8	1.8	0.6 - 2.8	31	5.18	0.76	14.6	5.0	2.9 - 7.5
All TOSOH Instruments	7	2.07	0.31	15.2	2.1	1.1 - 3.1	7	12.66	0.69	5.4	12.4	10.6 - 14.8
Beckman ACCESS / 2 / Dxl	18	1.76	0.19	10.7	1.8	1.1 - 2.4	18	4.76	0.23	4.8	4.8	4.0 - 5.5
TOSOH ST AIA PACK	5	2.14	0.29	13.5	2.1	1.2 - 3.1	5	12.70	0.82	6.4	12.4	10.2 - 15.2
<b>Specimen CH-3</b>												
All Method	30	2.54	0.28	11.0	2.7	1.7 - 3.4	31	3.43	0.32	9.4	3.4	2.4 - 4.5
All TOSOH Instruments	7	2.96	0.27	9.1	2.9	2.1 - 3.8	7	6.24	0.30	4.9	6.2	5.3 - 7.2
Beckman ACCESS / 2 / Dxl	18	2.69	0.18	6.5	2.7	2.1 - 3.3	18	3.27	0.17	5.4	3.3	2.7 - 3.8
TOSOH ST AIA	5	3.06	0.25	8.2	3.2	2.3 - 3.9	5	6.24	0.36	5.7	6.2	5.1 - 7.4
<b>Specimen CH-5</b>												
All Method	31	4.25	0.54	12.6	4.1	2.6 - 5.9						
All TOSOH Instruments	6	8.87	0.32	3.6	8.9	7.9 - 9.9						
Beckman ACCESS / 2 / Dxl	18	3.98	0.16	3.9	4.0	3.5 - 4.5						
TOSOH ST AIA	5	8.86	0.36	4.0	8.8	7.7 - 10.0						

## Thyroxine ( $\mu\text{g/dL}$ )

<b><u>Method</u></b>	Specimen CH-1						Specimen CH-2					
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>
All Method	15	2.05	0.32	15.9	1.8	1.0 - 3.1	15	13.05	1.24	9.5	12.9	10.4 - 15.7
All TOSOH Instruments	5	2.00	0.25	12.7	2.0	1.0 - 3.0	5	12.86	0.18	1.4	12.9	10.2 - 15.5
Beckman ACCESS / 2 / Dxl	9	1.50	0.26	17.6	1.5	0.5 - 2.5	9	12.64	0.74	5.8	13.0	10.1 - 15.2
Specimen CH-3							Specimen CH-4					
All Method	15	10.57	1.52	14.4	9.4	8.4 - 12.7	15	5.67	0.41	7.2	5.7	4.5 - 6.9
All TOSOH Instruments	5	9.62	0.55	5.8	9.4	7.6 - 11.6	5	5.54	0.17	3.0	5.5	4.4 - 6.7
Beckman ACCESS / 2 / Dxl	9	8.56	0.67	7.8	8.6	6.8 - 10.3	9	5.84	0.41	7.1	5.7	4.6 - 7.1
Specimen CH-5												
All Method	15	9.00	0.71	7.8	9.2	7.2 - 10.8						
All TOSOH Instruments	5	8.94	0.23	2.6	9.0	7.1 - 10.8						
Beckman ACCESS / 2 / Dxl	9	9.57	0.73	7.6	9.6	7.6 - 11.5						

## Free Thyroxine (ng/dL)

<b><u>Method</u></b>	Specimen CH-1						Specimen CH-2					
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>
All Method	120	0.88	0.11	12.5	0.9	0.5 - 1.3	122	3.30	0.78	23.6	3.4	0.9 - 5.7
All TOSOH Instruments	25	0.95	0.12	12.9	1.0	0.5 - 1.4	24	4.13	0.32	7.8	4.2	3.1 - 5.1
Abbott Architect	10	0.74	0.05	7.0	0.7	0.5 - 0.9	10	3.44	0.30	8.7	3.5	2.5 - 4.4
Beckman ACCESS / 2 / Dxl	47	0.86	0.07	8.0	0.9	0.6 - 1.1	46	2.53	0.13	5.3	2.5	2.1 - 3.0
Siemens Dimension	19	0.87	0.14	15.7	0.9	0.4 - 1.3	19	4.03	0.23	5.6	4.1	3.3 - 4.8
TOSOH ST AIA PACK	16	0.99	0.13	12.7	1.0	0.6 - 1.4	16	4.16	0.32	7.6	4.3	3.2 - 5.2
<b>Specimen CH-3</b>												
All Method	124	1.27	0.28	22.3	1.4	0.4 - 2.2	119	1.94	0.34	17.5	1.8	0.9 - 3.0
All TOSOH Instruments	24	1.50	0.12	8.0	1.5	1.1 - 1.9	24	2.40	0.13	5.6	2.4	2.0 - 2.9
Beckman ACCESS / 2 / Dxl	10	1.48	0.06	4.3	1.5	1.2 - 1.7	10	1.70	0.08	4.8	1.7	1.4 - 2.0
Siemens Dimension	46	1.00	0.07	7.3	1.0	0.7 - 1.3	46	1.64	0.09	5.7	1.6	1.3 - 2.0
TOSOH AIA PACK	19	1.31	0.18	14.1	1.4	0.7 - 1.9	19	2.15	0.13	5.9	2.2	1.7 - 2.6
TOSOH ST AIA PACK	16	1.50	0.09	6.0	1.5	1.2 - 1.8	16	2.44	0.10	3.9	2.4	2.1 - 2.8
<b>Specimen CH-5</b>												
All Method	122	2.66	0.56	21.2	2.6	0.9 - 4.4						
All TOSOH Instruments	24	3.32	0.27	8.0	3.3	2.5 - 4.2						
Beckman ACCESS / 2 / Dxl	10	2.59	0.17	6.4	2.6	2.0 - 3.1						
Siemens Dimension	47	2.10	0.18	8.5	2.1	1.5 - 2.7						
TOSOH AIA PACK	19	3.05	0.18	6.0	3.1	2.4 - 3.6						
TOSOH ST AIA PACK	16	3.36	0.28	8.3	3.4	2.5 - 4.3						

**TSH ( $\mu$ U/mL)**

<b>Method</b>	Specimen CH-1							Specimen CH-2						
	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>	<b>Labs</b>	<b>Mean</b>	<b>SD</b>	<b>CV</b>	<b>Median</b>	<b>Range</b>		
All Method	150	0.48	0.07	15.5	0.5	0.2 - 0.7	153	7.22	1.16	16.1	7.4	3.7 - 10.8		
All Abbott Instruments	11	0.38	0.04	10.6	0.4	0.2 - 0.6	11	7.02	0.65	9.3	7.3	5.0 - 9.0		
All Roche Instruments	11	0.60	0.04	7.5	0.6	0.4 - 0.8	11	6.35	0.29	4.5	6.3	5.4 - 7.3		
All TOSOH Instruments	32	0.53	0.05	9.7	0.5	0.3 - 0.7	32	8.12	0.52	6.3	8.2	6.5 - 9.7		
Abbott Architect	11	0.38	0.04	10.6	0.4	0.2 - 0.6	11	7.02	0.65	9.3	7.3	5.0 - 9.0		
Beckman ACCESS / 2 / Dxl	54	0.46	0.05	11.3	0.5	0.3 - 0.7	54	7.29	1.16	15.9	7.8	3.8 - 10.8		
Siemens Dimension	24	0.45	0.05	11.4	0.4	0.2 - 0.6	24	6.25	1.04	16.7	6.0	3.1 - 9.4		
TOSOH AIA PACK	13	0.52	0.04	8.4	0.5	0.3 - 0.7	13	8.12	0.23	2.9	8.2	7.4 - 8.9		
TOSOH ST AIA PACK	19	0.53	0.06	10.7	0.5	0.3 - 0.7	20	7.99	0.85	10.6	8.1	5.4 - 10.6		
Specimen CH-3							Specimen CH-4							
All Method	151	3.15	0.33	10.6	3.2	2.1 - 4.2	150	2.79	0.37	13.3	2.8	1.6 - 4.0		
All Abbott Instruments	11	2.85	0.25	8.8	2.9	2.1 - 3.7	11	2.52	0.23	9.0	2.6	1.8 - 3.2		
All Roche Instruments	11	3.34	0.17	5.2	3.4	2.8 - 3.9	11	2.84	0.10	3.6	2.8	2.5 - 3.2		
All TOSOH Instruments	33	3.32	0.36	11.0	3.4	2.2 - 4.5	33	3.17	0.30	9.4	3.2	2.2 - 4.1		
Abbott Architect	11	2.85	0.25	8.8	2.9	2.1 - 3.7	11	2.52	0.23	9.0	2.6	1.8 - 3.2		
Beckman ACCESS / 2 / Dxl	54	3.14	0.35	11.0	3.2	2.1 - 4.2	54	2.71	0.26	9.6	2.7	1.9 - 3.5		
Siemens Dimension	24	2.99	0.24	7.9	3.0	2.2 - 3.8	24	2.43	0.33	13.7	2.3	1.4 - 3.5		
TOSOH AIA PACK	13	3.38	0.20	5.8	3.4	2.7 - 4.0	13	3.16	0.26	8.2	3.1	2.3 - 4.0		
TOSOH ST AIA PACK	20	3.28	0.44	13.5	3.4	1.9 - 4.7	20	3.18	0.33	10.3	3.2	2.1 - 4.2		
Specimen CH-5														
All Method	153	4.84	0.73	15.1	5.0	2.6 - 7.1								
All Abbott Instruments	11	4.48	0.43	9.5	4.6	3.2 - 5.8								
All Roche Instruments	11	4.54	0.23	5.1	4.5	3.8 - 5.3								
All TOSOH Instruments	31	5.51	0.24	4.3	5.5	4.7 - 6.3								
Abbott Architect	11	4.48	0.43	9.5	4.6	3.2 - 5.8								
Beckman ACCESS / 2 / Dxl	54	4.83	0.56	11.6	5.0	3.1 - 6.6								
Siemens Dimension	24	4.18	0.61	14.5	4.1	2.3 - 6.0								
TOSOH AIA PACK	13	5.50	0.26	4.7	5.6	4.7 - 6.3								
TOSOH ST AIA PACK	20	5.52	0.46	8.4	5.5	4.1 - 6.9								

Serum hCG – Qualitative

<u>Method</u>	Specimen HCG-1		Specimen HCG-2	
	<u>Positive</u>	<u>Negative</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	137	-	137	-
AimStep Combo Pregnancy	1	-	1	-
Alere hCG Combo Cassette	2	-	2	-
Beckman ACCESS / 2 / Dxl	1	-	1	-
Beckman Coulter ICON 20 hCG	67	-	67	-
Beckman Coulter ICON 25 hCG	3	-	3	-
BTNX Rapid Response hCG	1	-	1	-
Cardinal Health SP Brand combo	12	-	12	-
CONSULT diagnostics hCG Combo	12	-	12	-
Henry Schein One Step + Combo	4	-	4	-
McKesson hCG Combo Cassette	1	-	1	-
Medline hCG Combo Test Cassette	2	-	2	-
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	-

**Serum hCG – Qualitative**

<b><u>Method</u></b>	Specimen HCG-3		Specimen HCG-4	
	<b><u>Positive</u></b>	<b><u>Negative</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>
ALL METHODS	136	1	-	137
AimStep Combo Pregnancy	1	-	-	1
Alere hCG Combo Cassette	2	-	-	2
Beckman ACCESS / 2 / Dxl	1	-	-	1
Beckman Coulter ICON 20 hCG	67	-	-	67
Beckman Coulter ICON 25 hCG	3	-	-	3
BTNX Rapid Response hCG	1	-	-	1
Cardinal Health SP Brand combo	12	-	-	12
CONSULT diagnostics hCG Combo	11	1	-	12
Henry Schein One Step + Combo	4	-	-	4
McKesson hCG Combo Cassette	1	-	-	1
Medline hCG Combo Test Cassette	2	-	-	2
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

## Serum hCG – Qualitative

### Specimen HCG-5

<u>Method</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	-	137
AimStep Combo Pregnancy	-	1
Alere hCG Combo Cassette	-	2
Beckman ACCESS / 2 / Dxl	-	1
Beckman Coulter ICON 20 hCG	-	67
Beckman Coulter ICON 25 hCG	-	3
BTNX Rapid Response hCG	-	1
Cardinal Health SP Brand combo	-	12
CONSULT diagnostics hCG Combo	-	12
Henry Schein One Step + Combo	-	4
McKesson hCG Combo Cassette	-	1
Medline hCG Combo Test Cassette	-	2
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

## Serum hCG – Quantitative (mIU/mL)

<u>Method</u>	Specimen HCG-1							Specimen HCG-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	16	1634.0	820.4	50.2	1218	0 - 4096	16	86.9	30.0	34.5	69	0 - 177		
Specimen HCG-3														
All Method	16	300.5	113.2	37.7	241	0 - 641	16	1.1	0.4	32.3	1	0 - 3		
Specimen HCG-4														
All Method	16	1.1	0.3	30.4	1	0 - 3								

## Cholesterol, Total (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	179	67.3	17.9	26.6	59	60 - 75	182	234.8	12.1	5.1	233	211 - 259		
All Alfa Wassermann Reagents	22	62.6	1.5	2.3	63	56 - 69	22	236.2	6.0	2.6	236	212 - 260		
All Horiba Pentra Reagents	13	58.5	1.8	3.1	59	52 - 65	13	228.3	5.1	2.2	230	205 - 252		
All Roche Reagents	17	57.8	2.0	3.5	58	51 - 64	17	227.9	6.6	2.9	229	205 - 251		
Alere Cholestech LDX														
Alere Cholestech LDX - waived	37	100.0	0.1	0.0	100	90 - 110	38	250.9	11.5	4.6	251	225 - 277		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	21	62.6	1.5	2.3	63	56 - 69	21	235.9	6.0	2.6	236	212 - 260		
Beckman AU														
Beckman AU systems	25	56.8	1.9	3.4	57	51 - 63	25	227.7	7.1	3.1	229	204 - 251		
ELITechGroup Envoy 500														
ELITechGroup Envoy 500	5	58.8	1.6	2.8	58	52 - 65	5	235.4	5.0	2.1	235	211 - 259		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	12	59.1	3.8	6.4	59	53 - 65	12	231.1	12.7	5.5	230	207 - 255		
All Chemistry Instruments	13	58.5	1.8	3.1	59	52 - 65	13	228.3	5.1	2.2	230	205 - 252		
Roche cobas c 501														
Roche cobas 6000 / c 501	8	58.0	2.4	4.2	59	52 - 64	8	227.9	7.3	3.2	230	205 - 251		
Roche Integra														
Roche Integra	8	57.4	1.8	3.1	58	51 - 64	8	227.4	6.7	2.9	229	204 - 251		
Siemens Healthcare														
Siemens Dimension	22	55.5	3.7	6.7	55	49 - 62	24	229.4	5.3	2.3	230	206 - 253		
All Chemistry Instruments	24	56.0	4.0	7.1	56	50 - 62	26	229.7	5.2	2.2	230	206 - 253		
VITROS														
VITROS 250,350,400 500,700,750,950	17	54.4	1.4	2.5	55	48 - 60	18	233.1	9.6	4.1	234	209 - 257		

## Cholesterol, Total (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-3							Specimen CH-4						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	144	278.6	16.2	5.8	275	250 - 307	144	111.1	4.7	4.2	111	99 - 123		
All Alfa Wassermann Reagents	22	279.0	5.4	1.9	279	251 - 307	22	116.5	3.0	2.5	116	104 - 129		
All Horiba Pentra Reagents	13	266.8	6.2	2.3	267	240 - 294	13	109.8	3.1	2.9	111	98 - 121		
All Roche Reagents	17	269.5	8.9	3.3	272	242 - 297	17	110.0	4.1	3.7	110	99 - 121		
Alere Cholestech LDX														
Alere Cholestech LDX - waived	5	329.4	33.3	10.1	318	296 - 363	5	114.2	7.8	6.8	117	102 - 126		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	22	279.8	7.1	2.6	279	251 - 308	21	116.5	3.0	2.6	116	104 - 129		
Beckman AU														
Beckman AU systems	25	272.6	8.5	3.1	273	245 - 300	25	108.9	3.7	3.4	109	97 - 120		
ELITechGroup Envoy 500														
ELITechGroup Envoy 500	5	271.8	5.3	2.0	272	244 - 299	5	115.0	6.5	5.7	112	103 - 127		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	12	270.3	16.3	6.0	268	243 - 298	12	111.3	7.0	6.3	111	100 - 123		
All Chemistry Instruments	13	266.8	6.2	2.3	267	240 - 294	13	109.8	3.1	2.9	111	98 - 121		
Roche cobas c 501														
Roche cobas 6000 / c 501	8	269.8	10.0	3.7	273	242 - 297	8	110.0	5.1	4.7	110	99 - 121		
Roche Integra														
Roche Integra	8	268.5	8.6	3.2	269	241 - 296	8	109.8	3.5	3.1	110	98 - 121		
Siemens Healthcare														
Siemens Dimension	24	270.9	7.5	2.8	272	243 - 299	24	108.5	3.7	3.4	109	97 - 120		
All Chemistry Instruments	26	271.0	7.4	2.7	272	243 - 299	26	108.5	3.6	3.3	109	97 - 120		
VITROS														
VITROS 250,350,400 500,700,750,950	18	310.3	14.6	4.7	310	279 - 342	18	110.2	4.0	3.6	110	99 - 122		

## Cholesterol, Total (mg/dL)

	Specimen CH-5					
<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	141	163.2	5.8	3.5	164	146 - 180
All Alfa Wassermann Reagents	22	168.5	4.0	2.4	168	151 - 186
All Horiba Pentra Reagents	13	160.6	3.3	2.0	161	144 - 177
All Roche Reagents	17	160.6	5.3	3.3	162	144 - 177
Alere Cholestech LDX						
Alere Cholestech LDX - waived	5	177.0	6.9	3.9	172	159 - 195
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	21	168.4	4.1	2.4	168	151 - 186
Beckman AU						
Beckman AU systems	25	160.8	4.8	3.0	160	144 - 177
ELITechGroup Envoy 500						
ELITechGroup Envoy 500	5	169.0	3.7	2.2	170	152 - 186
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	12	162.9	9.1	5.6	161	146 - 180
All Chemistry Instruments	13	160.6	3.3	2.0	161	144 - 177
Roche cobas c 501						
Roche cobas 6000 / c 501	8	160.0	6.0	3.8	162	144 - 176
Roche Integra						
Roche Integra	8	160.8	5.0	3.1	162	144 - 177
Siemens Healthcare						
Siemens Dimension	24	160.6	4.3	2.7	161	144 - 177
All Chemistry Instruments	26	160.8	4.4	2.7	161	144 - 177
VITROS						
VITROS 250,350,400 500,700,750,950	17	165.1	6.6	4.0	164	148 - 182

### LDL Cholesterol - Calculated (mg/dL)

<b><u>Method</u></b>	Specimen CH-1							Specimen CH-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	89	16.4	4.4	26.6	17	7 - 26	88	71.8	17.1	23.8	77	37 - 107		
Calculated-Trig/5														
Alere Cholestech LDX - waived	1	-	-	-	70	7 - 26	1	-	-	-	77	37 - 105		
Alfa Wassermann ACE Alera/Axcel	16	17.2	2.0	11.5	17	12 - 23	16	84.8	6.4	7.6	84	59 - 111		
Beckman AU systems	14	17.4	4.1	23.7	17	9 - 26	14	72.1	10.6	14.8	72	50 - 94		
Horiba ABX Pentra 400 / C400	10	19.5	1.9	9.7	20	13 - 26	10	82.9	6.3	7.6	82	58 - 108		
Siemens Dimension	9	13.2	4.3	32.5	14	4 - 22	10	71.0	6.5	9.2	71	49 - 93		
VITROS 250,350,400 500,700,750,950	13	11.5	1.5	12.6	12	8 - 16	11	43.2	15.2	35.2	42	12 - 74		
All Chemistry Instruments	83	16.4	4.5	27.1	17	7 - 26	82	71.1	16.8	23.6	76	37 - 105		
	Specimen CH-3							Specimen CH-4						
All Method	95	171.1	23.0	13.5	164	119 - 223	96	35.0	7.3	20.8	36	20 - 50		
Calculated-Trig/5														
Alere Cholestech LDX - waived	4	-	-	-	218	119 - 222	5	44.8	9.1	20.4	46	26 - 64		
Alfa Wassermann ACE Alera/Axcel	16	158.1	6.1	3.9	158	110 - 206	16	38.2	3.8	9.9	39	26 - 50		
Beckman AU systems	14	151.9	11.2	7.4	150	106 - 198	14	35.1	6.2	17.6	35	22 - 48		
Horiba ABX Pentra 400 / C400	10	148.9	7.1	4.8	149	104 - 194	10	39.6	2.9	7.3	40	27 - 52		
Siemens Dimension	10	196.4	5.7	2.9	196	137 - 256	10	29.1	4.0	13.6	29	20 - 38		
VITROS 250,350,400 500,700,750,950	13	186.7	16.2	8.7	188	130 - 243	13	27.5	4.6	16.8	27	18 - 37		
All Chemistry Instruments	88	170.5	22.9	13.5	164	119 - 222	89	34.7	7.2	20.7	35	20 - 50		
	Specimen CH-5													
All Method	96	50.8	11.1	21.8	52	28 - 74								
Calculated-Trig/5														
Alere Cholestech LDX - waived	5	59.0	15.3	25.9	63	28 - 90								
Alfa Wassermann ACE Alera/Axcel	16	59.2	4.7	7.9	59	41 - 77								
Beckman AU systems	14	52.2	6.7	12.9	51	36 - 68								
Horiba ABX Pentra 400 / C400	10	57.9	4.9	8.5	57	40 - 76								
Siemens Dimension	10	46.3	4.8	10.4	46	32 - 61								
VITROS 250,350,400 500,700,750,950	13	34.6	7.6	21.8	34	19 - 50								
All Chemistry Instruments	89	50.4	11.1	21.9	52	28 - 73								

### **LDL Cholesterol - Direct (mg/dL)**

## Cholesterol, HDL (mg/dL)

<b><u>Reagent/Instrument</u></b>	Specimen CH-1							Specimen CH-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	174	23.3	4.5	19.1	24	16 - 31	169	106.9	9.1	8.5	105	74 - 139		
All Dex-Sulfate 50,000 MW Methods	34	17.7	2.9	16.4	17	12 - 24	34	100.0	0.1	0.0	100	70 - 130		
All Direct Methods	103	24.8	3.6	14.6	26	17 - 33	102	107.4	8.7	8.1	109	75 - 140		
Alere Cholestech LDX														
Alere Cholestech LDX - waived	34	17.7	2.9	16.4	17	12 - 24	34	100.0	0.1	0.0	100	70 - 130		
Alfa Wass. ACE HDL-C / LDL-C														
Alfa Wassermann ACE Alera/Axcel	14	27.1	2.0	7.3	27	18 - 36	14	101.2	7.4	7.3	101	70 - 132		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	5	27.2	1.9	7.1	28	19 - 36	5	100.8	4.3	4.3	100	70 - 132		
Beckman AU														
Beckman AU systems	5	24.6	0.9	3.6	24	17 - 32	5	108.8	4.5	4.1	109	76 - 142		
Beckman AU Direct HDL / LDL														
Beckman AU systems	18	23.4	2.1	9.1	24	16 - 31	19	106.6	6.1	5.8	108	74 - 139		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	14	21.9	1.6	7.4	22	15 - 29	14	97.3	6.1	6.3	98	68 - 127		
Roche HDL Direct														
Roche cobas 6000 / c 501	7	26.6	1.0	3.7	27	18 - 35	7	118.6	1.4	1.2	118	82 - 155		
Roche Integra	6	25.5	1.4	5.4	26	17 - 34	6	116.0	3.4	2.9	118	81 - 151		
All Chemistry Instruments	14	26.1	1.2	4.6	26	18 - 34	14	117.4	2.6	2.3	118	82 - 153		
Siemens Automated HDL														
Siemens Dimension	23	27.8	1.4	5.0	28	19 - 37	22	110.8	2.9	2.6	111	77 - 145		
All Chemistry Instruments	25	27.8	1.3	4.8	28	19 - 37	24	111.2	3.2	2.9	111	77 - 145		
VITROS														
VITROS 250,350,400 500,700,750,950	5	24.0	1.0	4.2	24	16 - 32	5	118.0	5.4	4.6	120	82 - 154		
VITROS dHDL Slide														
VITROS 250,350,400 500,700,750,950	13	24.7	0.9	3.5	25	17 - 33	13	125.8	10.8	8.6	127	88 - 164		

### Cholesterol, HDL (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-3							Specimen CH-4						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	143	77.0	17.8	23.1	85	53 - 101	142	49.7	4.8	9.6	51	34 - 65		
All Dex-Sulfate 50,000 MW Methods	4	-	-	-	60	41 - 78	5	42.6	5.9	13.7	46	29 - 56		
All Direct Methods	105	75.1	19.2	25.6	85	52 - 98	104	49.6	5.1	10.3	51	34 - 65		
Alere Cholestech LDX														
Alere Cholestech LDX - waived	4	-	-	-	60	41 - 78	5	42.6	5.9	13.7	46	29 - 56		
Alfa Wass. ACE HDL-C / LDL-C														
Alfa Wassermann ACE Alera/Axcel	15	88.7	2.7	3.0	88	62 - 116	14	50.4	3.8	7.5	50	35 - 66		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	5	87.4	3.1	3.6	89	61 - 114	5	48.8	3.4	7.0	50	34 - 64		
Beckman AU														
Beckman AU systems	5	95.0	1.4	1.5	96	66 - 124	5	48.8	0.4	0.9	49	34 - 64		
Beckman AU Direct HDL / LDL														
Beckman AU systems	19	92.5	4.6	5.0	93	64 - 121	19	47.5	4.3	9.0	48	33 - 62		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	14	88.2	4.7	5.3	88	61 - 115	14	43.8	2.6	5.9	44	30 - 57		
Roche HDL Direct														
Roche cobas 6000 / c 501	7	64.0	1.3	2.0	64	44 - 84	7	54.1	1.1	2.0	54	37 - 71		
Roche Integra	6	61.0	2.3	3.7	62	42 - 80	6	53.2	2.2	4.2	54	37 - 70		
All Chemistry Instruments	14	62.7	2.3	3.6	63	43 - 82	14	53.6	1.7	3.2	54	37 - 70		
Siemens Automated HDL														
Siemens Dimension	22	48.2	1.9	3.9	49	33 - 63	22	53.6	1.7	3.2	53	37 - 70		
All Chemistry Instruments	24	48.4	2.0	4.1	49	33 - 63	24	53.6	1.7	3.1	53	37 - 70		
VITROS														
VITROS 250,350,400 500,700,750,950	5	81.6	7.1	8.7	85	57 - 107	5	51.0	1.2	2.4	51	35 - 67		
VITROS dHDL Slide														
VITROS 250,350,400 500,700,750,950	13	83.2	6.7	8.0	85	58 - 109	13	51.9	1.7	3.3	52	36 - 68		

## Cholesterol, HDL (mg/dL)

### Specimen CH-5

<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	143	76.5	7.2	9.4	76	53 - 100
All Dex-Sulfate 50,000 MW Methods	5	79.8	10.7	13.4	79	55 - 104
All Direct Methods	103	74.8	6.1	8.2	75	52 - 98
Alere Cholestech LDX						
Alere Cholestech LDX - waived	5	79.8	10.7	13.4	79	55 - 104
Alfa Wass. ACE HDL-C / LDL-C						
Alfa Wassermann ACE Alera/Axcel	14	72.4	4.5	6.2	73	50 - 95
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	5	72.0	4.1	5.7	73	50 - 94
Beckman AU						
Beckman AU systems	5	74.8	2.9	3.8	75	52 - 98
Beckman AU Direct HDL / LDL						
Beckman AU systems	19	72.2	4.3	5.9	72	50 - 94
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	14	67.4	3.6	5.3	68	47 - 88
Roche HDL Direct						
Roche cobas 6000 / c 501	7	82.9	1.1	1.3	83	58 - 108
Roche Integra	6	81.3	3.7	4.5	83	56 - 106
All Chemistry Instruments	13	82.6	1.2	1.4	83	57 - 108
Siemens Automated HDL						
Siemens Dimension	22	79.1	2.4	3.0	79	55 - 103
All Chemistry Instruments	24	79.3	2.3	3.0	79	55 - 104
VITROS						
VITROS 250,350,400 500,700,750,950	5	84.6	2.3	2.7	84	59 - 110
VITROS dHDL Slide						
VITROS 250,350,400 500,700,750,950	13	86.2	4.1	4.7	86	60 - 113

### Triglycerides (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	178	83.7	6.5	7.7	84	62 - 105	178	253.9	20.7	8.1	249	190 - 318		
All Alfa Wassermann Reagents	21	90.9	2.6	2.8	91	68 - 114	21	250.8	6.6	2.7	249	188 - 314		
All Horiba Pentra Reagents	14	84.4	4.4	5.2	85	63 - 106	14	237.1	7.7	3.3	237	177 - 297		
All Roche Reagents	17	83.2	2.9	3.4	83	62 - 105	17	232.6	7.3	3.1	233	174 - 291		
Alere Cholestech LDX														
Alere Cholestech LDX - waived	35	82.0	3.3	4.1	82	61 - 103	35	264.6	10.0	3.8	265	198 - 331		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	20	91.0	2.6	2.8	92	68 - 114	20	251.1	6.6	2.6	250	188 - 314		
Beckman AU														
Beckman AU systems	25	84.6	2.8	3.3	85	63 - 106	25	251.8	7.1	2.8	253	188 - 315		
ELITechGroup Envoy 500														
ELITechGroup Envoy 500	5	84.8	3.3	3.9	85	63 - 106	5	247.2	6.6	2.7	244	185 - 309		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	14	84.4	4.4	5.2	85	63 - 106	14	237.1	7.7	3.3	237	177 - 297		
Roche cobas c 501														
Roche cobas 6000 / c 501	8	82.4	2.8	3.4	83	61 - 103	8	231.0	7.4	3.2	232	173 - 289		
Roche Integra														
Roche Integra	8	84.6	2.3	2.7	84	63 - 106	8	235.5	6.1	2.6	234	176 - 295		
Siemens Healthcare														
Siemens Dimension	24	73.0	2.8	3.8	73	54 - 92	23	239.4	3.0	1.2	239	179 - 300		
All Chemistry Instruments	24	73.0	2.8	3.8	73	54 - 92	24	238.9	3.8	1.6	239	179 - 299		
VITROS														
VITROS 250,350,400 500,700,750,950	18	91.2	3.7	4.1	91	68 - 114	18	299.0	9.3	3.1	301	224 - 374		

## Triglycerides (mg/dL)

<u>Reagent/Instrument</u>	Specimen CH-3							Specimen CH-4						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	144	157.5	13.8	8.8	154	118 - 197	142	134.9	8.9	6.6	135	101 - 169		
All Alfa Wassermann Reagents	22	162.2	4.8	2.9	162	121 - 203	21	140.9	4.2	3.0	140	105 - 177		
All Horiba Pentra Reagents	14	146.5	4.6	3.2	148	109 - 184	14	132.1	5.0	3.8	132	99 - 166		
All Roche Reagents	17	153.1	4.1	2.7	153	114 - 192	17	131.8	4.6	3.5	132	98 - 165		
Alere Cholestech LDX														
Alere Cholestech LDX - waived	5	175.0	7.7	4.4	174	131 - 219	5	134.4	6.6	4.9	133	100 - 168		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	21	162.5	4.7	2.9	162	121 - 204	20	141.0	4.3	3.0	141	105 - 177		
Beckman AU														
Beckman AU systems	25	154.3	5.1	3.3	154	115 - 193	25	135.7	4.4	3.2	137	101 - 170		
ELITechGroup Envoy 500														
ELITechGroup Envoy 500	5	157.8	3.9	2.5	158	118 - 198	5	136.6	4.5	3.3	135	102 - 171		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	14	146.5	4.6	3.2	148	109 - 184	14	132.1	5.0	3.8	132	99 - 166		
Roche cobas c 501														
Roche cobas 6000 / c 501	8	153.4	4.8	3.1	154	115 - 192	8	130.6	4.5	3.4	132	97 - 164		
Roche Integra														
Roche Integra	8	153.4	3.3	2.2	153	115 - 192	8	133.9	3.9	2.9	133	100 - 168		
Siemens Healthcare														
Siemens Dimension	24	144.5	3.9	2.7	145	108 - 181	24	123.9	3.1	2.5	125	92 - 155		
All Chemistry Instruments	24	144.5	3.9	2.7	145	108 - 181	24	123.9	3.1	2.5	125	92 - 155		
VITROS														
VITROS 250,350,400 500,700,750,950	18	187.5	7.1	3.8	187	140 - 235	18	151.9	6.2	4.1	151	113 - 190		

## Triglycerides (mg/dL)

<u>Reagent/Instrument</u>		Specimen CH-5				
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	143	185.6	13.7	7.4	184	139 - 232
All Alfa Wassermann Reagents	21	189.0	5.6	3.0	189	141 - 237
All Horiba Pentra Reagents	14	178.4	6.0	3.4	178	133 - 223
All Roche Reagents	17	176.8	5.7	3.2	177	132 - 221
Alere Cholestech LDX						
Alere Cholestech LDX - waived	5	190.6	7.1	3.7	188	142 - 239
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	20	189.3	5.7	3.0	190	141 - 237
Beckman AU						
Beckman AU systems	25	186.4	6.4	3.4	188	139 - 233
ELITechGroup Envoy 500						
ELITechGroup Envoy 500	5	186.6	3.1	1.7	186	139 - 234
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	14	178.4	6.0	3.4	178	133 - 223
Roche cobas c 501						
Roche cobas 6000 / c 501	8	175.3	5.4	3.1	177	131 - 220
Roche Integra						
Roche Integra	8	179.4	4.9	2.7	180	134 - 225
Siemens Healthcare						
Siemens Dimension	24	174.0	3.4	1.9	174	130 - 218
All Chemistry Instruments						
VITROS	26	175.5	6.3	3.6	175	131 - 220
VITROS						
VITROS 250,350,400 500,700,750,950	17	214.8	7.2	3.3	214	161 - 269

**Acetaminophen (µg/mL)**

<b><u>Method</u></b>	Specimen CH-1							Specimen CH-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	5	18.75	0.07	0.4	18.8	14.0 - 23.5	5	132.35	1.63	1.2	132.4	99.2 - 165.5		
<b>Specimen CH-3</b>														
All Method	5	1.00	1.41	141.4	1.0	0.0 - 2.0	5	48.60	0.14	0.3	48.6	36.4 - 60.8		
<b>Specimen CH-5</b>														
All Method	5	83.80	0.42	0.5	83.8	62.8 - 104.8								

**Carbamazepine (µg/mL)**

<b><u>Method</u></b>	Specimen CH-1							Specimen CH-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	5	2.80	0.14	5.1	2.8	2.1 - 3.5	5	14.55	0.35	2.4	14.6	10.9 - 18.2		
<b>Specimen CH-3</b>														
All Method	5	1.60	0.14	8.8	1.6	1.2 - 2.0	5	6.10	0.01	0.0	6.1	4.5 - 7.7		
<b>Specimen CH-5</b>														
All Method	5	9.80	0.14	1.4	9.8	7.3 - 12.3								

**Digoxin (ng/mL)**

<b><u>Method</u></b>	Specimen CH-1							Specimen CH-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	5	0.33	0.15	45.8	0.3	0.1 - 0.6	5	1.97	0.45	22.9	2.0	1.5 - 2.4		
<b>Specimen CH-3</b>														
All Method	5	0.33	0.12	34.6	0.4	0.1 - 0.6	5	0.70	0.20	28.6	0.7	0.5 - 0.9		
<b>Specimen CH-4</b>														
<b>Specimen CH-5</b>														
All Method	5	1.23	0.31	24.8	1.3	0.9 - 1.5								

### Gentamicin ( $\mu\text{g/mL}$ )

<u>Method</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	0.50	0.42	84.9	0.5	0.0 - 1.5	5	9.25	0.35	3.8	9.3	6.9 - 11.6		
Specimen CH-3														
All Method	5	0.15	0.07	47.1	0.2	0.1 - 0.2	5	3.35	0.07	2.1	3.4	2.5 - 4.2		
Specimen CH-4														
Specimen CH-5														
All Method	5	5.85	0.21	3.6	5.9	4.3 - 7.4								

### Lithium (mmol/L)

<u>Method</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	0.30	0.01	0.0	0.3	0.0 - 0.6	5	2.60	0.14	5.4	2.6	2.0 - 3.2		
Specimen CH-3														
All Method	5	0.30	0.01	0.0	0.3	0.0 - 0.6	5	0.95	0.07	7.4	1.0	0.6 - 1.3		
Specimen CH-4														
Specimen CH-5														
All Method	5	1.65	0.07	4.3	1.7	1.3 - 2.0								

**Phenobarbital ( $\mu\text{g/mL}$ )**

<u><b>Method</b></u>	Specimen CH-1							Specimen CH-2							
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>			
All Method	1	-	-	-	6.7	Not graded	1	-	-	-	-	51.8	Not graded		
<b>Specimen CH-3</b>															
All Method	1	-	-	-	15.5	Not graded	1	-	-	-	-	19.8	Not graded		
<b>Specimen CH-5</b>															
All Method	1	-	-	-	34.0	Not graded									

**Phenytoin ( $\mu\text{g/mL}$ )**

<u><b>Method</b></u>	Specimen CH-1							Specimen CH-2						
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>		
All Method	5	7.08	0.67	9.5	7.2	5.3 - 8.9	5	28.78	1.53	5.3	29.4	21.5 - 36.0		
<b>Specimen CH-3</b>														
All Method	5	6.35	0.79	12.5	6.2	4.7 - 8.0	5	13.13	1.18	9.0	13.1	9.8 - 16.5		
<b>Specimen CH-5</b>														
All Method	5	20.38	1.38	6.8	20.5	15.2 - 25.5								

**Salicylate (mg/dL)**

<u>Method</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	1	-	-	-	7.9	Not graded	1	-	-	-	-	31.3	Not graded	
<b>Specimen CH-3</b>														
All Method	1	-	-	-	10.3	Not graded	1	-	-	-	-	14.7	Not graded	
<b>Specimen CH-4</b>														
<b>Specimen CH-5</b>														
All Method	1	-	-	-	21.4	Not graded								

**Theophylline (µg/mL)**

<u>Method</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	1	-	-	-	9.9	Not graded	1	-	-	-	-	34.6	Not graded	
<b>Specimen CH-3</b>														
All Method	1	-	-	-	6.8	Not graded	1	-	-	-	-	15.9	Not graded	
<b>Specimen CH-4</b>														
<b>Specimen CH-5</b>														
All Method	1	-	-	-	22.9	Not graded								

### Valproic Acid ( $\mu\text{g/mL}$ )

<u>Method</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	33.93	2.00	5.9	33.8	25.4 - 42.5	5	111.68	8.16	7.3	110.0	83.7 - 139.6		
<b>Specimen CH-3</b>														
All Method	5	23.78	0.56	2.3	23.9	17.8 - 29.8	5	57.10	2.04	3.6	57.2	42.8 - 71.4		
<b>Specimen CH-5</b>														
All Method	5	80.33	4.89	6.1	79.1	60.2 - 100.5								

### Vancomycin ( $\mu\text{g/mL}$ )

<u>Method</u>	Specimen CH-1							Specimen CH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	1.50	0.99	66.0	1.5	0.5 - 2.5	5	49.85	0.49	1.0	49.9	37.3 - 62.4		
<b>Specimen CH-3</b>														
All Method	5	1.65	0.35	21.4	1.7	1.2 - 2.1	5	18.00	0.71	3.9	18.0	13.5 - 22.5		
<b>Specimen CH-5</b>														
All Method	5	33.30	1.13	3.4	33.3	24.9 - 41.7								

### Apolipoprotein A1 (mg/dL)

<u>Method</u>	Specimen LP-1							Specimen LP-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	2	-	-	-	140	Not graded	2	-	-	-	-	272	Not graded	

### Apolipoprotein B (mg/dL)

<u>Method</u>	Specimen LP-1							Specimen LP-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	68.5	3.5	5.2	69	47 - 90	5	161.5	20.5	12.7	162	113 - 210		

### Neonatal Bilirubin, Total (mg/dL)

<u>Method</u>	Specimen NB-1							Specimen NB-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	28	0.06	0.10	169.7	0.0	0.0 - 0.5	27	15.25	0.71	4.6	15.3	12.2 - 18.4		
No Reagent Required														
Bilirubinometer / Unistat	16	0.00	0.01	0.0	0.0	0.0 - 0.4	16	15.60	0.56	3.6	15.8	12.4 - 18.8		
All Chemistry Instruments	21	0.06	0.11	196.2	0.0	0.0 - 0.5	20	15.49	0.58	3.7	15.5	12.3 - 18.6		
Specimen NB-3							Specimen NB-4							
All Method	28	5.87	0.31	5.3	6.0	4.6 - 7.1	27	16.96	0.68	4.0	17.1	13.5 - 20.4		
No Reagent Required														
Bilirubinometer / Unistat	17	5.79	0.32	5.5	5.9	4.6 - 7.0	16	17.16	0.56	3.3	17.3	13.7 - 20.6		
All Chemistry Instruments	21	5.85	0.32	5.5	6.0	4.6 - 7.1	20	17.05	0.62	3.6	17.2	13.6 - 20.5		
Specimen NB-5														
All Method	27	10.60	0.61	5.7	10.6	8.4 - 12.8								
No Reagent Required														
Bilirubinometer / Unistat	16	10.97	0.33	3.0	11.0	8.7 - 13.2								
All Chemistry Instruments	20	10.87	0.36	3.3	10.9	8.6 - 13.1								

### Bilirubin, Direct (mg/dL)

<u><b>Method</b></u>	Specimen NB-1							Specimen NB-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	10	0.05	0.07	133.3	0.0	0.0 - 0.2	10	5.43	0.51	9.4	5.4	4.4 - 6.5		
<b>Specimen NB-3</b>														
All Method	10	1.59	0.27	17.1	1.6	1.0 - 2.2	10	3.94	0.43	11.0	3.8	3.0 - 4.9		
<b>Specimen NB-5</b>														
All Method	10	4.97	0.42	8.4	4.8	4.1 - 5.9								

### Blood Gases – pH

<u><b>Method</b></u>	Specimen BG-1							Specimen BG-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	11	7.183	0.015	0.2	7.18	7.14 - 7.23	11	7.490	0.001	0.0	7.49	7.45 - 7.53		
<b>Specimen BG-3</b>														
All Method	11	7.487	0.006	0.1	7.49	7.44 - 7.53	11	7.473	0.006	0.1	7.47	7.43 - 7.52		
<b>Specimen BG-5</b>														
All Method	11	7.310	0.001	0.0	7.31	7.27 - 7.35								

### Blood Gases - pCO<sub>2</sub>(mmHg)

<u><b>Method</b></u>	Specimen BG-1							Specimen BG-2						
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>		
All Method	11	54.57	6.03	11.0	52.3	49.5 - 59.6	11	24.10	1.65	6.9	24.9	19.1 - 29.1		
Specimen BG-3														
All Method	11	27.07	3.09	11.4	28.7	22.0 - 32.1	11	19.87	1.79	9.0	20.8	14.8 - 24.9		
Specimen BG-4														
Specimen BG-5														
All Method	11	48.03	2.57	5.4	49.1	43.0 - 53.1								

### Blood Gases - pO<sub>2</sub>(mmHg)

<u><b>Method</b></u>	Specimen BG-1							Specimen BG-2						
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>		
All Method	11	89.00	8.72	9.8	85.0	62.8 - 115.2	11	136.67	3.79	2.8	135.0	125.3 - 148.1		
Specimen BG-3														
All Method	11	117.67	7.23	6.1	114.0	95.9 - 139.4	11	162.67	12.66	7.8	158.0	124.6 - 200.7		
Specimen BG-4														
Specimen BG-5														
All Method	11	186.33	5.51	3.0	189.0	169.8 - 202.9								

### 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: 2.1 mmol/L, 1.2 mmol/L, 0.86 mmol/L, 0.76 mmol/L, and 1.3 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: 75 mmol/L, 84 mmol/L, 116 mmol/L, 103 mmol/L, and 92 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: 2.7 mmol/L, 4.3 mmol/L, 6.6 mmol/L, 6.1 mmol/L, and 4.4 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: 126 mmol/L, 147 mmol/L, 169 mmol/L, 145 mmol/L, and 138 mmol/L, respectively.

### Blood Gases – Lactate (mmol/L)

<u><b>Method</b></u>	Specimen BG-1							Specimen BG-2						
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>		
All Method	5	4.70	0.14	3.0	4.7	4.2 - 5.2	5	1.50	0.14	9.3	1.5	1.0 - 2.0		
Specimen BG-3														
All Method	5	1.03	0.10	9.7	1.0	0.6 - 1.5	5	1.25	0.07	5.6	1.3	1.2 - 1.3		
Specimen BG-5														
All Method	5	0.83	0.11	13.2	0.8	0.5 - 1.2								

### Afinion Glycohemoglobin (percent)

<u><b>Method</b></u>	Specimen AFN-1							Specimen AFN-2						
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>		
All Method	82	8.07	0.24	3.0	8.0	7.6 - 8.5	82	6.05	0.19	3.1	6.0	5.7 - 6.4		
All Alere Afinion Analyzers	79	8.07	0.25	3.1	8.0	7.6 - 8.5	79	6.05	0.19	3.1	6.0	5.7 - 6.4		
Alere Afinion 2	11	7.90	0.65	8.2	8.0	7.5 - 8.3	11	6.25	0.62	10.0	6.1	5.9 - 6.6		
Alere Afinion AS100	68	8.06	0.25	3.1	8.0	7.6 - 8.5	68	6.04	0.19	3.2	6.0	5.7 - 6.4		

## Glycohemoglobin (percent)

Method	Specimen GH-1							Specimen GH-2						
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range		
All Method	117	6.07	0.24	4.0	6.1	5.7 - 6.4	118	7.29	0.28	3.8	7.3	6.9 - 7.7		
All Bio-Rad Methods	5	6.50	0.19	2.9	6.5	6.1 - 6.9	5	7.54	0.15	2.0	7.6	7.1 - 8.0		
All Enzymatic A1c Methods	4	5.38	0.26	4.9	5.5	5.1 - 5.7	4	6.73	0.10	1.4	6.8	6.3 - 7.1		
All Hemoglobin A1c Methods	114	6.09	0.23	3.8	6.1	5.7 - 6.4	114	7.31	0.26	3.6	7.3	6.9 - 7.7		
All Roche Methods	9	5.79	0.21	3.7	5.9	5.4 - 6.1	9	7.02	0.15	2.1	7.0	6.6 - 7.4		
All TOSOH Methods	16	5.94	0.12	2.0	5.9	5.6 - 6.3	16	6.94	0.12	1.7	7.0	6.5 - 7.3		
Beckman AU A1c	9	6.11	0.14	2.2	6.2	5.8 - 6.5	9	7.30	0.16	2.2	7.3	6.9 - 7.7		
Bio-Rad D-10 HbA1C	5	6.50	0.19	2.9	6.5	6.1 - 6.9	5	7.54	0.15	2.0	7.6	7.1 - 8.0		
Roche Integra A1C	5	5.92	0.08	1.4	5.9	5.6 - 6.3	5	7.06	0.13	1.9	7.0	6.7 - 7.5		
Siemens DCA Vantage	54	6.15	0.18	2.9	6.1	5.8 - 6.5	53	7.39	0.17	2.3	7.4	7.0 - 7.8		
Siemens Dimension HB1C	13	6.14	0.43	7.0	6.1	5.8 - 6.5	13	7.35	0.48	6.5	7.4	6.9 - 7.8		
TOSOH G8	16	5.94	0.12	2.0	5.9	5.6 - 6.3	16	6.94	0.12	1.7	7.0	6.5 - 7.3		

## Whole Blood Glucose (mg/dL)

Method	Specimen WBG-1							Specimen WBG-2						
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range		
All Method	258	268.6	31.0	11.5	276	214 - 323	257	393.9	40.2	10.2	405	315 - 473		
All Abbott Methods	32	250.9	18.2	7.3	250	200 - 302	33	384.2	25.9	6.8	377	307 - 462		
All Arkay Methods	17	270.1	10.1	3.8	269	216 - 325	16	370.9	17.8	4.8	369	296 - 446		
All Bayer Methods	24	219.3	12.7	5.8	219	175 - 264	24	335.3	25.1	7.5	332	268 - 403		
All Hemocue Methods	59	292.1	8.3	2.9	291	233 - 351	55	416.7	17.2	4.1	422	333 - 501		
All Lifescan Methods	9	308.7	14.2	4.6	310	246 - 371	9	439.2	22.6	5.1	440	351 - 528		
All Roche Methods	27	282.3	8.1	2.9	282	225 - 339	26	425.2	8.7	2.0	423	340 - 511		
Abbott FreeStyle Lite/Freedom Lite	7	267.9	12.3	4.6	264	214 - 322	7	392.9	20.9	5.3	384	314 - 472		
Abbott FreeStyle Precision Pro	18	261.5	57.9	22.1	239	209 - 314	17	382.3	27.7	7.2	382	305 - 459		
Abbott Precision XceedPro	9	252.6	13.0	5.2	253	202 - 304	9	381.1	27.3	7.2	370	304 - 458		
Arkay Platinum	17	270.1	10.1	3.8	269	216 - 325	16	370.9	17.8	4.8	369	296 - 446		
Bayer Contour	24	219.3	12.7	5.8	219	175 - 264	24	335.3	25.1	7.5	332	268 - 403		
HemoCue Glucose 201	56	291.9	8.2	2.8	291	233 - 351	51	417.3	15.8	3.8	422	333 - 501		
Home Diagnostics True Balance / TrueTrack	15	558.0	18.7	3.3	560	446 - 670	5	596.0	5.5	0.9	600	476 - 716		
Lifescan One Touch Ultra/2/Mini	9	308.7	14.2	4.6	310	246 - 371	9	439.2	22.6	5.1	440	351 - 528		
Medline EvenCare G2 / G3	15	256.1	32.0	12.5	259	204 - 308	14	335.4	19.4	5.8	333	268 - 403		
NOVA Biomedical StatStrip	20	233.8	9.8	4.2	234	187 - 281	20	357.5	17.3	4.8	362	286 - 429		
Quintet / AC	29	298.0	12.3	4.1	297	238 - 358	28	420.4	19.0	4.5	426	336 - 505		
Roche Accu-Chek Aviva	5	276.8	4.8	1.7	279	221 - 333	5	421.6	3.5	0.8	422	337 - 506		
Roche Accu-Chek Inform II	9	284.6	6.6	2.3	285	227 - 342	9	425.2	8.2	1.9	423	340 - 511		
Roche Accu-Chek Performa	12	284.0	9.0	3.2	285	227 - 341	12	424.3	15.9	3.8	424	339 - 510		
True Metrix Pro	16	248.6	18.1	7.3	253	198 - 299	17	421.4	19.1	4.5	417	337 - 506		

### Whole Blood Glucose (mg/dL)

<u><b>Method</b></u>	Specimen WBG-3							Specimen WBG-4						
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>		
All Method	8	62.5	8.1	12.9	62	50 - 75	8	174.8	15.9	9.1	175	139 - 210		
All Lifescan Methods	3	-	-	-	60	49 - 75	3	-	-	-	193	151 - 228		
All Roche Methods	2	-	-	-	72	57 - 87	2	-	-	-	174	138 - 209		
Lifescan One Touch Ultra/2/Mini	3	-	-	-	60	50 - 75	3	-	-	-	193	139 - 210		
Medline EvenCare G2 / G3	1	-	-	-	63	50 - 75	1	-	-	-	174	139 - 210		
Roche Accu-Chek Inform II	1	-	-	-	73	50 - 75	1	-	-	-	175	139 - 210		
Roche Accu-Chek Performa	1	-	-	-	71	50 - 75	1	-	-	-	172	139 - 210		
True Metrix Pro	1	-	-	-	53	50 - 75	1	-	-	-	151	139 - 210		
Specimen WBG-5														
<u><b>Method</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>								
All Method	8	429.8	19.9	4.6	429	343 - 516								
All Lifescan Methods	3	-	-	-	436	353 - 531								
All Roche Methods	2	-	-	-	436	348 - 524								
Lifescan One Touch Ultra/2/Mini	3	-	-	-	436	343 - 516								
Medline EvenCare G2 / G3	1	-	-	-	399	343 - 516								
Roche Accu-Chek Inform II	1	-	-	-	435	343 - 516								
Roche Accu-Chek Performa	1	-	-	-	437	343 - 516								
True Metrix Pro	1	-	-	-	418	343 - 516								

**C-Peptide (ng/mL)**

<u>Method</u>	Specimen CIP-1							Specimen CIP-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	0.540	0.095	17.6	0.51	0.34 - 0.74	5	17.880	1.348	7.5	17.60	15.18 - 20.58		

**Insulin ( $\mu$ U/mL)**

<u>Method</u>	Specimen CIP-1							Specimen CIP-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	12	22.48	7.96	35.4	19.0	6.5 - 38.4	12	144.86	42.95	29.7	138.1	58.9 - 230.8		
Beckman ACCESS / 2 / Dxl	6	17.85	1.95	10.9	17.9	13.9 - 21.8	6	135.03	15.37	11.4	127.5	104.2 - 165.8		

**Parathyroid Hormone, Intact (pg/mL)**

<u>Method</u>	Specimen CIP-1							Specimen CIP-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	31	40.3	5.4	13.3	39	29 - 52	31	374.6	49.8	13.3	364	275 - 475		
All TOSOH Instruments	7	45.3	5.3	11.6	45	34 - 56	7	416.6	30.4	7.3	414	355 - 478		
Beckman ACCESS / 2 / Dxl	15	38.5	2.2	5.6	38	34 - 43	15	356.7	16.2	4.5	355	324 - 390		

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

<u>Method</u>	Specimen CIP-1							Specimen CIP-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	100	18.18	4.42	24.3	17.1	9.3 - 27.1	98	110.04	20.52	18.7	111.5	68.9 - 151.1		
All Roche Instruments	10	16.78	4.07	24.2	18.0	8.6 - 25.0	9	84.33	20.68	24.5	100.0	42.9 - 125.8		
All TOSOH Instruments	15	22.69	1.57	6.9	23.0	19.5 - 25.9	14	116.45	7.66	6.6	120.0	101.1 - 131.8		
Abbott Architect	7	15.77	1.03	6.5	15.9	13.7 - 17.9	7	106.64	6.81	6.4	105.9	93.0 - 120.3		
Beckman ACCESS / 2 / Dxl	45	15.67	2.48	15.9	15.5	10.7 - 20.7	45	117.78	10.72	9.1	116.0	96.3 - 139.3		
Qualigen FastPack	5	24.66	3.47	14.1	24.0	17.7 - 31.6	5	66.66	7.34	11.0	68.1	51.9 - 81.4		
Roche cobas e 411	6	15.82	4.36	27.6	15.2	7.0 - 24.6	5	79.80	22.31	28.0	86.4	35.1 - 124.5		
Siemens Dimension	6	17.22	1.14	6.6	17.2	14.9 - 19.5	6	91.72	6.55	7.1	92.4	78.6 - 104.9		
TOSOH AIA PACK	5	22.50	1.23	5.5	23.0	20.0 - 25.0	5	119.40	1.34	1.1	120.0	116.7 - 122.1		
TOSOH ST AIA PACK	10	22.79	1.77	7.8	23.0	19.2 - 26.4	9	114.81	9.27	8.1	120.0	96.2 - 133.4		

### Bioavailable Testosterone (ng/dL)

<b><u>Method</u></b>	Specimen SHB-1							Specimen SHB-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	1	-	-	-	358	Not graded	1	-	-	-	-	109	Not graded	

### Free Testosterone (pg/mL)

<b><u>Method</u></b>	Specimen SHB-1							Specimen SHB-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	7	19.30	20.24	104.9	11.2	0.0 - 59.8	7	8.28	8.89	107.4	4.0	0.0 - 26.1		
In-house calculation	5	27.45	31.04	113.1	27.5	0.0 - 89.6	5	12.65	12.66	100.1	12.7	0.0 - 38.0		

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

<b><u>Method</u></b>	Specimen SHB-1							Specimen SHB-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	14	68.634	4.101	6.0	68.00	56.33 - 80.94	14	39.399	2.430	6.2	38.85	32.10 - 46.69		
Beckman ACCESS / 2 / Dxl	11	69.627	3.963	5.7	69.60	57.73 - 81.52	11	39.309	2.610	6.6	38.70	31.47 - 47.14		

### Testosterone (ng/dL)

<b><u>Method</u></b>	Specimen SHB-1							Specimen SHB-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	13	815.3	57.6	7.1	811	570 - 1060	13	220.8	15.4	7.0	219	154 - 288		
Beckman ACCESS / 2 / Dxl	10	801.6	45.2	5.6	792	561 - 1043	10	215.3	12.5	5.8	216	150 - 280		

**BNP (pg/mL)**

<u><b>Method</b></u>	Specimen CK-1							Specimen CK-2						
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>		
All Method	24	2834.42	860.77	30.4	1160.0	1112.8 - 4556.0	24	93.38	23.58	25.3	55.6	46.2 - 140.6		
Quidel Triage	15	1139.27	207.03	18.2	1110.0	725.2 - 1553.4	15	49.79	6.31	12.7	49.3	37.1 - 62.5		
Specimen CK-3							Specimen CK-4							
All Method	17	1597.76	443.01	27.7	680.5	711.7 - 2483.8	17	787.24	213.51	27.1	342.5	360.2 - 1214.3		
Quidel Triage	10	554.57	96.09	17.3	502.0	362.3 - 746.8	10	286.00	45.03	15.7	272.0	195.9 - 376.1		
Specimen CK-5														
All Method	17	4459.62	810.59	18.2	2605.0	2838.4 - 6080.8								
Quidel Triage	10	1941.43	541.89	27.9	1830.0	857.6 - 3025.3								

**CK-MB (ng/mL)**

<u><b>Method</b></u>	Specimen CK-1							Specimen CK-2						
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>		
All Method	24	52.33	9.90	18.9	25.6	22.6 - 82.1	24	6.55	0.84	12.8	3.5	4.0 - 9.1		
Quidel Triage	15	20.14	3.93	19.5	20.1	8.3 - 32.0	15	2.74	0.58	21.0	2.7	1.0 - 4.5		
Specimen CK-3							Specimen CK-4							
All Method	17	29.31	5.14	17.5	14.2	13.8 - 44.8	17	17.14	2.71	15.8	10.0	9.0 - 25.3		
Quidel Triage	10	12.11	2.54	21.0	11.7	4.4 - 19.8	10	7.24	1.48	20.4	6.9	2.8 - 11.7		
Specimen CK-5														
All Method	17	99.95	21.29	21.3	46.7	36.0 - 163.9								
Quidel Triage	10	38.65	6.69	17.3	37.1	18.5 - 58.8								

### D-Dimer (ng/mL)

<b><u>Method</u></b>	Specimen CK-1							Specimen CK-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	5	466.5	13.4	2.9	925	326 - 607	5	274.0	25.5	9.3	183	191 - 357		
Instrumentation Laborartory (IL) ACL Series	5	466.5	13.4	2.9	467	326 - 607	5	274.0	25.5	9.3	274	191 - 357		
Quidel Triage	92	924.7	80.3	8.7	926	647 - 1203	92	183.9	28.3	15.4	183	127 - 241		
Specimen CK-3							Specimen CK-4							
All Method	4	-	-	-	618	252 - 468	4	-	-	-	-	403	222 - 414	
Instrumentation Laborartory (IL) ACL Series	4	-	-	-	360	252 - 468	4	-	-	-	-	318	222 - 414	
Quidel Triage	88	614.5	67.1	10.9	619	430 - 799	88	396.5	51.2	12.9	403	277 - 516		
Specimen CK-5														
All Method	4	-	-	-	1520	539 - 1001								
Instrumentation Laborartory (IL) ACL Series	4	-	-	-	770	539 - 1001								
Quidel Triage	88	1522.9	163.1	10.7	1540	1066 - 1980								
D-Dimer ( $\mu$ gFEU/mL)														
<b><u>Method</u></b>	Specimen CK-1							Specimen CK-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	-	-	-	-	-	-	-	-	-	-	-	-	-	
Beckman AU systems	-	-	-	-	-	-	-	-	-	-	-	-	-	
Specimen CK-3							Specimen CK-4							
All Method	-	-	-	-	-	-	-	-	-	-	-	-	-	
Beckman AU systems	-	-	-	-	-	-	-	-	-	-	-	-	-	
Specimen CK-5														
All Method	-	-	-	-	-	-	-	-	-	-	-	-	-	
Beckman AU systems	-	-	-	-	-	-	-	-	-	-	-	-	-	

### Myoglobin (ng/mL)

<u><b>Method</b></u>	Specimen CK-1							Specimen CK-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	16	240.67	50.66	21.1	217.7	139.3 - 342.0	16	35.37	3.60	10.2	41.6	24.7 - 46.0		
Alere Triage	11	227.00	43.51	19.2	220.0	139.9 - 314.1	11	41.75	7.01	16.8	42.1	27.7 - 55.8		
Specimen CK-3														
All Method	16	139.37	19.92	14.3	138.0	97.5 - 181.2	16	84.20	11.99	14.2	93.1	58.9 - 109.5		
Alere Triage	11	142.18	26.39	18.6	139.0	89.4 - 195.0	11	96.30	15.68	16.3	96.6	64.9 - 127.7		
Specimen CK-4														
Specimen CK-5														
All Method	16	462.47	101.81	22.0	370.5	258.8 - 666.1								
Alere Triage	11	342.91	73.84	21.5	333.0	195.2 - 490.6								

### NT-proBNP (pg/mL)

<u><b>Method</b></u>	Specimen CK-1							Specimen CK-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	12	1668.3	511.8	30.7	1771	644 - 2692	12	36.8	16.0	43.6	36	4 - 69		
Roche cobas e 601/e 602	5	2080.0	36.8	1.8	2080	1560 - 2600	5	50.5	3.5	7.0	51	37 - 64		
Siemens Dimension NT-proBNP	5	1256.5	326.0	25.9	1257	604 - 1909	5	23.0	1.4	6.1	23	17 - 29		
Specimen CK-3														
All Method	12	752.0	369.1	49.1	752	13 - 1491	12	381.0	205.1	53.8	381	0 - 792		
Roche cobas e 601/e 602	4	-	-	-	1013	13 - 1491	4	-	-	-	526	0 - 792		
Siemens Dimension NT-proBNP	4	-	-	-	491	13 - 1491	4	-	-	-	236	0 - 792		
Specimen CK-4														
Specimen CK-5														
All Method	12	3330.0	1575.4	47.3	3330	179 - 6481								
Roche cobas e 601/e 602	4	-	-	-	4444	179 - 6481								
Siemens Dimension NT-proBNP	4	-	-	-	2216	179 - 6481								

## Troponin I (ng/mL)

<b><u>Method</u></b>	Specimen CK-1						Specimen CK-2					
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>
All Method	28	8.676	7.713	88.9	5.27	0.00 - 24.11	27	0.109	0.094	87.0	0.05	0.00 - 0.30
All HS Troponin I Methods	7	30.434	11.597	38.1	27.90	7.23 - 53.63	7	0.466	0.327	70.1	0.28	0.00 - 1.12
All Non-HS Troponin I Methods	21	5.243	0.843	16.1	5.08	3.55 - 6.93	21	0.060	0.014	23.5	0.05	0.03 - 0.09
Quidel Triage	14	5.681	1.447	25.5	5.33	2.78 - 8.58	14	0.050	0.001	0.0	0.05	0.03 - 0.07
Siemens Dimension	5	4.822	0.231	4.8	4.83	3.37 - 6.27	5	0.080	0.001	0.0	0.08	0.05 - 0.11
Specimen CK-3							Specimen CK-4					
All Method	28	3.931	3.881	98.7	2.45	0.00 - 11.70	28	1.726	1.882	109.0	1.09	0.00 - 5.50
All HS Troponin I Methods	7	15.869	7.174	45.2	13.40	1.52 - 30.22	7	7.710	3.905	50.7	6.40	0.00 - 15.53
All Non-HS Troponin I Methods	22	2.260	0.533	23.6	2.42	1.19 - 3.33	22	0.915	0.238	26.0	0.88	0.43 - 1.39
Alere Triage	14	2.156	0.640	29.7	2.05	0.87 - 3.44	14	0.773	0.174	22.5	0.73	0.42 - 1.13
Siemens Dimension	5	2.382	0.138	5.8	2.45	1.66 - 3.10	5	1.176	0.057	4.8	1.20	0.82 - 1.53
Specimen CK-5												
All Method	30	23.014	23.168	100.7	12.15	0.00 - 69.36						
All HS Troponin I Methods	7	60.401	20.759	34.4	58.30	18.88 - 101.92						
All Non-HS Troponin I Methods	22	11.939	2.858	23.9	11.30	6.22 - 17.66						
Alere Triage	14	12.726	3.109	24.4	11.50	6.50 - 18.95						
Siemens Dimension	5	9.722	0.678	7.0	9.43	6.80 - 12.64						

**Troponin T (ng/mL)**

<b><u>Method</u></b>	Specimen CK-1							Specimen CK-2						
	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>	<b><u>Labs</u></b>	<b><u>Mean</u></b>	<b><u>SD</u></b>	<b><u>CV</u></b>	<b><u>Median</u></b>	<b><u>Range</u></b>		
All Method	5	0.7020	0.1300	18.5	0.702	0.312 - 1.092	5	0.1070	0.0400	37.3	0.107	0.074 - 0.140		
<b>Specimen CK-3</b>														
All Method	5	0.4010	0.1000	24.9	0.401	0.280 - 0.522	5	0.2510	0.0800	31.9	0.251	0.011 - 0.491		
<b>Specimen CK-4</b>														
All Method	5	1.2850	0.2500	19.5	1.285	0.899 - 1.671								

### PSA (ng/mL)

<u>Method</u>	Specimen PS-1							Specimen PS-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	93	0.673	0.085	12.6	0.68	0.00 - 1.58	91	28.927	3.965	13.7	29.61	20.24 - 37.61		
All TOSOH Instruments	23	0.660	0.046	7.0	0.66	0.00 - 1.57	23	24.212	1.085	4.5	24.41	16.94 - 31.48		
Beckman ACCESS / 2 / Dxl	15	0.754	0.042	5.6	0.75	0.00 - 1.66	15	32.678	2.006	6.1	32.62	22.87 - 42.49		
Beckman ACCESS Hybritech PSA	13	0.734	0.068	9.3	0.76	0.00 - 1.64	13	31.162	2.703	8.7	31.49	21.81 - 40.51		
Siemens Dimension TPSA	14	0.651	0.049	7.5	0.64	0.00 - 1.56	14	29.876	1.591	5.3	29.91	20.91 - 38.84		
TOSOH ST AIA PACK	14	0.671	0.045	6.7	0.68	0.00 - 1.58	14	24.375	1.179	4.8	24.85	17.06 - 31.69		

### Beta-2 microglobulin

<u>Method</u>	Specimen TM-1							Specimen TM-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	3.648	0.207	5.7	3.60	3.02 - 4.27	5	0.334	0.096	28.8	0.31	0.04 - 0.63		

### CA 125 (U/mL)

<u>Method</u>	Specimen TM-1							Specimen TM-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	9	172.9	31.9	18.5	207	109 - 237	9	11.4	2.0	17.5	14	7 - 16		
All TOSOH Instruments	8	239.9	15.7	6.5	244	167 - 312	7	16.0	0.6	3.6	16	11 - 21		
TOSOH ST AIA PACK	8	239.9	15.7	6.5	244	167 - 312	7	16.0	0.6	3.6	16	11 - 21		

### CA 15-3 (U/mL)

<u>Method</u>	Specimen TM-1							Specimen TM-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	7	137.3	53.8	39.2	131	29 - 245	7	15.9	6.4	40.5	13	3 - 29		

### CA 19-9 (U/mL)

<u>Method</u>	Specimen TM-1							Specimen TM-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	8	199.3	87.5	43.9	195	24 - 375	8	11.1	1.7	15.5	11	7 - 15		

**CA 27/29 (U/mL)**

<u><b>Method</b></u>	Specimen TM-1						Specimen TM-2					
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>
All Method	7	734.9	161.4	22.0	769	412 - 1058	7	35.4	3.6	10.0	35	24 - 47
All TOSOH Instruments	7	734.9	161.4	22.0	769	412 - 1058	7	35.4	3.6	10.0	35	24 - 47
TOSOH ST AIA PACK	7	734.9	161.4	22.0	769	412 - 1058	7	35.4	3.6	10.0	35	24 - 47

**CEA (ng/mL)**

<u><b>Method</b></u>	Specimen TM-1						Specimen TM-2					
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>
All Method	8	49.96	5.11	10.2	53.9	34.9 - 65.0	8	1.09	0.20	18.0	1.3	0.0 - 2.3
All TOSOH Instruments	8	57.36	3.50	6.1	57.7	40.1 - 74.6	8	1.40	0.11	7.6	1.4	0.2 - 2.6
TOSOH ST AIA PACK	8	57.36	3.50	6.1	57.7	40.1 - 74.6	8	1.40	0.11	7.6	1.4	0.2 - 2.6

**Free PSA (ng/mL)**

<u><b>Method</b></u>	Specimen TM-1						Specimen TM-2					
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>
All Method	8	8.754	1.099	12.6	8.90	6.12 - 11.38	8	0.022	0.024	107.9	0.01	0.00 - 0.93

**PSA (ng/mL)**

<u><b>Method</b></u>	Specimen TM-1						Specimen TM-2					
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>
All Method	28	7.466	1.455	19.5	7.43	5.22 - 9.71	28	0.075	0.023	30.8	0.07	0.00 - 0.98

**Thyroglobulin (ng/mL)**

<u><b>Method</b></u>	Specimen TM-1						Specimen TM-2					
	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>	<u><b>Labs</b></u>	<u><b>Mean</b></u>	<u><b>SD</b></u>	<u><b>CV</b></u>	<u><b>Median</b></u>	<u><b>Range</b></u>
All Method	7	62.13	16.77	27.0	67.3	28.5 - 95.7	7	2.15	1.04	48.4	2.6	0.0 - 4.3
Beckman ACCESS / 2 / Dxl	5	70.00	7.07	10.1	72.6	55.8 - 84.2	5	2.67	0.15	5.7	2.7	2.3 - 3.0

### CEA (ng/mL)

<u>Method</u>	Specimen SC-1						Specimen SC-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	15	1.16	0.18	15.7	1.4	0.0 - 2.4	15	36.88	3.67	10.0	38.2	25.8 - 48.0
TOSOH AIA PACK	10	1.53	0.10	6.3	1.6	0.3 - 2.8	10	40.03	1.45	3.6	40.2	28.0 - 52.1

### DHEA-S (µg/dL)

<u>Method</u>	Specimen SC-1						Specimen SC-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	80.55	15.17	18.8	76.0	56.3 - 104.8	13	537.15	67.43	12.6	526.9	376.0 - 698.3
Beckman ACCESS / 2 / Dxl	10	74.06	8.01	10.8	74.2	51.8 - 96.3	10	523.12	51.41	9.8	524.9	366.1 - 680.1

### Estradiol (pg/mL)

<u>Method</u>	Specimen SC-1						Specimen SC-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	33	33.1	9.8	29.6	28	13 - 53	33	610.3	184.8	30.3	561	240 - 980
All TOSOH Instruments	10	41.6	2.5	6.0	41	36 - 47	10	915.8	83.4	9.1	922	748 - 1083
Beckman ACCESS / 2 / Dxl	12	34.2	10.0	29.2	29	14 - 55	12	520.8	63.0	12.1	493	394 - 647

### Ferritin (ng/mL)

<u>Method</u>	Specimen SC-1						Specimen SC-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	33	26.2	3.3	12.7	19	18 - 35	33	232.7	35.9	15.4	193	162 - 303
All Roche Instruments	10	28.2	1.7	6.1	28	19 - 37	10	269.4	7.9	2.9	270	188 - 351
All TOSOH Instruments	19	17.6	1.1	6.4	18	12 - 23	19	179.3	9.6	5.4	176	125 - 234
Beckman ACCESS / 2 / Dxl	29	18.2	1.4	7.8	18	12 - 24	28	188.8	9.8	5.2	191	132 - 246
Siemens Dimension	11	27.9	1.1	4.1	27	19 - 37	11	235.0	12.8	5.4	231	164 - 306
TOSOH ST AIA PACK	15	17.7	1.0	5.8	18	12 - 24	15	179.5	9.2	5.1	176	125 - 234

### Folate (ng/mL)

<u>Method</u>	Specimen SC-1							Specimen SC-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	21	1.07	0.71	66.5	0.5	0.0 - 2.1	20	9.66	3.95	40.9	10.7	6.7 - 12.6		
All Roche Instruments	6	2.02	0.04	2.0	2.0	1.0 - 3.1	6	9.30	0.72	7.8	9.4	6.5 - 12.1		
All Siemens Dimension Instruments	8	0.61	0.21	34.3	0.6	0.0 - 1.7	8	6.29	0.56	8.9	6.5	4.4 - 8.2		
All TOSOH Instruments	9	0.52	0.07	12.8	0.5	0.0 - 1.6	9	6.10	0.81	13.3	6.4	4.2 - 8.0		
Abbott Architect	5	0.84	0.69	82.7	0.4	0.0 - 1.9	4	-	-	-	-	16.8	11.6 - 21.8	
Beckman ACCESS / 2 / Dxl	25	0.42	0.41	98.5	0.3	0.0 - 1.5	25	12.49	0.99	7.9	12.8	8.7 - 16.3		
Siemens Dimension	6	0.63	0.24	38.2	0.6	0.0 - 1.7	6	6.25	0.58	9.2	6.5	4.3 - 8.2		
TOSOH AIA PACK	5	0.54	0.09	16.6	0.5	0.0 - 1.6	5	6.28	1.01	16.1	6.4	4.3 - 8.2		

### FSH (mIU/mL)

<u>Method</u>	Specimen SC-1							Specimen SC-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	26	4.61	0.44	9.5	4.6	3.4 - 5.8	27	51.36	5.81	11.3	51.7	38.5 - 64.2		
Beckman ACCESS / 2 / Dxl	14	4.71	0.27	5.6	4.7	3.5 - 5.9	14	54.42	3.31	6.1	54.7	40.8 - 68.1		

### Homocysteine (μmol/L)

<u>Method</u>	Specimen SC-1							Specimen SC-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	5.6	0.9	16.0	6	3 - 8	5	47.6	6.3	13.3	48	33 - 62		

### LH (mIU/mL)

<u>Method</u>	Specimen SC-1							Specimen SC-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	24	2.38	0.43	18.0	2.3	1.5 - 3.3	23	65.27	8.12	12.4	63.4	49.0 - 81.6		
Beckman ACCESS / 2 / Dxl	15	2.37	0.25	10.7	2.4	1.8 - 2.9	15	60.53	3.98	6.6	59.3	48.4 - 72.7		

### Prealbumin (mg/dL)

<u>Method</u>	Specimen SC-1							Specimen SC-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	2	-	-	-	11.0	Not graded	2	-	-	-	22.5	Not graded		

### Progesterone (ng/mL)

<u>Method</u>	Specimen SC-1							Specimen SC-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	15	2.53	0.39	15.6	2.4	1.7 - 3.3	15	40.73	6.01	14.8	40.0	28.5 - 53.0		
Beckman ACCESS / 2 / Dxl	10	2.49	0.38	15.3	2.4	1.7 - 3.3	10	38.53	1.51	3.9	38.5	26.9 - 50.1		

### Prolactin (ng/mL)

<u>Method</u>	Specimen SC-1							Specimen SC-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	21	2.40	0.22	9.0	2.4	0.0 - 6.0	20	67.59	4.54	6.7	68.3	47.3 - 87.9		
Beckman ACCESS / 2 / Dxl	14	2.42	0.21	8.6	2.4	0.0 - 6.1	14	68.01	4.02	5.9	69.0	47.6 - 88.5		

### Testosterone (ng/dL)

<u>Method</u>	Specimen SC-1							Specimen SC-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	50	148.8	28.7	19.3	143	104 - 194	52	1438.8	257.6	17.9	1408	1007 - 1871		
All Roche Instruments	5	161.6	6.0	3.7	164	113 - 211	5	1498.8	2.7	0.2	1500	1049 - 1949		
All TOSOH Instruments	14	164.7	29.6	18.0	159	115 - 215	14	1773.2	112.1	6.3	1760	1241 - 2306		
Abbott Architect	6	131.8	15.5	11.8	128	92 - 172	6	1007.5	3.7	0.4	1009	705 - 1310		
Beckman ACCESS / 2 / Dxl	21	131.6	10.6	8.0	130	92 - 172	21	1339.7	106.0	7.9	1363	937 - 1742		
TOSOH ST AIA PACK	10	170.5	28.6	16.8	164	119 - 222	10	1803.6	98.5	5.5	1782	1262 - 2345		

### Transferrin (mg/dL)

<u>Method</u>	Specimen SC-1							Specimen SC-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	9	97.1	3.0	3.1	98	87 - 107	9	208.0	8.2	4.0	207	187 - 229		

### Vitamin B<sub>12</sub> (pg/mL)

<u>Method</u>	Specimen SC-1							Specimen SC-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	78	130.7	30.6	23.4	121	91 - 170	78	1281.9	228.5	17.8	1256	897 - 1667		
All Roche Instruments	8	168.8	20.2	12.0	165	118 - 220	8	1630.9	98.0	6.0	1627	1141 - 2121		
All TOSOH Instruments	13	144.7	25.6	17.7	148	101 - 189	13	1460.2	136.5	9.3	1468	1022 - 1899		
Abbott Architect	5	149.4	36.3	24.3	152	104 - 195	5	1446.2	163.6	11.3	1436	1012 - 1881		
Beckman ACCESS / 2 / Dxl	37	107.4	9.9	9.2	107	75 - 140	37	1100.0	94.2	8.6	1091	770 - 1430		
Siemens Dimension	8	166.4	15.0	9.0	170	116 - 217	8	1403.0	28.7	2.0	1410	982 - 1824		
TOSOH AIA PACK	8	146.3	29.7	20.3	152	102 - 191	8	1491.6	153.4	10.3	1494	1044 - 1940		
TOSOH ST AIA PACK	5	142.2	20.1	14.2	141	99 - 185	5	1409.8	97.7	6.9	1413	986 - 1833		

### Serum Alcohol (mg/dL)

<u>Method</u>	Specimen ETH-1							Specimen ETH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
ALL METHODS	5	290.3	39.5	13.6	276	217 - 363	5	67.7	3.2	4.8	69	50 - 85		
ALL METHODS	5	6.7	2.9	43.3	5	5 - 9	5	197.0	10.8	5.5	200	147 - 247		
ALL METHODS	5	109.7	0.6	0.5	110	82 - 138								

## Acetone

<u>Method</u>	Specimen ETH-1					Specimen ETH-2				
	<u>Labs</u>	<u>Negative</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>Labs</u>	<u>Negative</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>
ALL METHODS	7	7	-	-	-	7	-	-	-	7
Biorex Labs K-CHECK	6	6	-	-	-	6	-	-	-	6
Germaine Laboratories AimTab	1	1	-	-	-	1	-	-	-	1
Specimen ETH-3						Specimen ETH-4				
ALL METHODS	7	7	-	-	-	7	-	1	2	4
Biorex Labs K-CHECK	6	6	-	-	-	6	-	-	2	4
Germaine Laboratories AimTab	1	1	-	-	-	1	-	1	-	-
Specimen ETH-5										
ALL METHODS	7	7	-	-	-					
Biorex Labs K-CHECK	6	6	-	-	-					
Germaine Laboratories AimTab	1	1	-	-	-					

## Thyroglobulin Antibody (IU/mL)

<u>Method</u>	Specimen THY-1						Specimen THY-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	17	4.412	7.315	165.8	0.10	0.00 - 26.36	16	499.781	168.508	33.7	571.70	0.00 - 1005.31
Beckman ACCESS / 2 / Dxl	10	0.160	0.267	167.2	0.10	0.00 - 0.97	10	619.320	48.455	7.8	629.20	473.95 - 764.69

## Thyroid Peroxidase Antibody (TPO) (IU/mL)

<u>Method</u>	Specimen THY-1						Specimen THY-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	22	3.705	8.427	227.4	0.00	0.00 - 28.99	21	91.159	82.526	90.5	60.70	0.00 - 338.74
Beckman ACCESS / 2 / Dxl	13	0.039	0.094	238.5	0.00	0.00 - 0.32	13	59.738	5.728	9.6	60.40	42.55 - 76.93

### Ammonia ( $\mu\text{mol/L}$ )

<u>Method</u>	Specimen AMM-1							Specimen AMM-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	146.0	15.6	10.7	146	114 - 178	5	57.5	4.9	8.6	58	47 - 68		

### Adulterated Urine – Specific Gravity

<u>Method</u>	Specimen AUR-1							Specimen AUR-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
ALL METHODS	5	1.0045	0.0001	0.0	1.005	0.994 - 1.015	5	1.0050	0.0001	0.0	1.005	0.995 - 1.015		

### Adulterated Urine – Specific Gravity Interpretation

<u>Method</u>	Specimen AUR-1				Specimen AUR-2				
	<u>Labs</u>	<u>Normal</u>	<u>Abnormal</u>		<u>Labs</u>	<u>Normal</u>	<u>Abnormal</u>	<u>Labs</u>	<u>Normal</u>
ALL METHODS	5	5	-		5	5	-		
Carolina Chemistries BiOlis	2	2	-		2	2	-		
CLIAwaived, Inc. Drug Test	1	1	-		1	1	-		
Indiko Plus	1	1	-		1	1	-		
USDiagnostics UScreen Cup	1	1	-		1	1	-		

### Adulterated Urine – pH

<u>Method</u>	Specimen AUR-1							Specimen AUR-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
ALL METHODS	5	4.95	1.34	27.1	5.0	3.9 - 6.0	5	5.15	1.20	23.3	5.2	4.1 - 6.2		

### Adulterated Urine – pH Interpretation

<u>Method</u>	Specimen AUR-1				Specimen AUR-2				
	<u>Labs</u>	<u>Normal</u>	<u>Abnormal</u>	<u>Labs</u>	<u>Normal</u>	<u>Abnormal</u>	<u>Labs</u>	<u>Normal</u>	<u>Abnormal</u>
ALL METHODS	5	-	5	5	5	-	5	5	-
Beckman AU	1	-	1	1	1	-	1	1	-
Carolina Chemistries BiOlis	1	-	1	1	1	-	1	1	-
Indiko Plus	2	-	2	2	2	-	2	2	-
USDiagnostics UScreen Cup	1	-	1	1	1	-	1	1	-

### Adulterated Urine – Creatinine (mg/dL)

<u>Method</u>	Specimen AUR-1							Specimen AUR-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	10.30	0.99	9.6	10.3	7.3 - 13.3	5	39.10	19.94	51.0	39.1	32.4 - 45.8		

### Adulterated Urine – Creatinine Interpretation

<u>Method</u>	Specimen AUR-1				Specimen AUR-2				
	<u>Labs</u>	<u>Normal</u>	<u>Abnormal</u>	<u>Labs</u>	<u>Normal</u>	<u>Abnormal</u>	<u>Labs</u>	<u>Normal</u>	<u>Abnormal</u>
ALL METHODS	5	-	5	5	5	-	5	5	-
Beckman AU	1	-	1	1	1	-	1	1	-
Carolina Chemistries BiOlis	1	-	1	1	1	-	1	1	-
Indiko Plus	2	-	2	2	2	-	2	2	-
USDiagnostics UScreen Cup	1	-	1	1	1	-	1	1	-

#### Adulterated Urine – Nitrite Interpretation

<u>Method</u>	Specimen AUR-1			Specimen AUR-2		
	<u>Labs</u>	<u>Normal</u>	<u>Abnormal</u>	<u>Labs</u>	<u>Normal</u>	<u>Abnormal</u>
ALL METHODS	1	1	-	1	1	-

#### Adulterated Urine – Oxidants Interpretation

<u>Method</u>	Specimen AUR-1			Specimen AUR-2		
	<u>Labs</u>	<u>Negative/ Normal</u>	<u>Positive/ Abnormal</u>	<u>Labs</u>	<u>Negative/ Normal</u>	<u>Positive/ Abnormal</u>
ALL METHODS	2	2	-	2	2	-
Beckman AU	1	1	-	1	1	-
CLIAwaived, Inc. Drug Test	1	1	-	1	1	-

**Ethyl Glucuronide (EtG) (ng/mL)**

<u>Method</u>	<u>Labs</u>	Specimen ETG-1		Specimen ETG-2		
		<u>Positive</u>	<u>Negative</u>	<u>Positive</u>	<u>Negative</u>	
All Methods	2	-	2	2	2	-
Cut-off 500						
Beckman AU	1	-	1	1	1	-
Medica EasyRA	1	-	1	1	1	-
All Cut-off 500	2	-	2	2	2	-

**Urine Drug Screen****Acetaminophen (µg/mL)**

<u>Method</u>	<u>Labs</u>	Specimen UDS-1		Specimen UDS-2		
		<u>Positive</u>	<u>Negative</u>	<u>Positive</u>	<u>Negative</u>	
All Methods	1	-	1	1	1	-

**Amphetamines (ng/mL)**

<u><b>Method</b></u>	Specimen UDS-1			Specimen UDS-2		
	<u><b>Labs</b></u>	<u><b>Positive</b></u>	<u><b>Negative</b></u>	<u><b>Labs</b></u>	<u><b>Positive</b></u>	<u><b>Negative</b></u>
All Methods	99	1	98	99	1	98
Cut-off 300						
Beckman AU	1	-	1	1	-	1
All Cut-off 300	1	-	1	1	-	1
Cut-off 500						
Alere iCup	2	1	1	2	1	1
Beckman AU	1	-	1	1	-	1
CLIWaived, Inc. Drug Test	1	-	1	1	-	1
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Indiko Plus	4	-	4	4	-	4
McKesson Drug Panel	1	-	1	1	-	1
MEDTOX Diagnostics	3	-	3	3	-	3
Microgenics DRI	1	-	1	1	-	1
Mindray BS-200/BS-480	1	-	1	1	-	1
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	2	-	2	2	-	2
Siemens Dimension	1	-	1	1	-	1
Synermed IR 500	1	-	1	1	-	1
All Cut-off 500	21	1	20	21	1	20
Cut-off 1000						
Alere iCassette	3	-	3	3	-	3
Alere iCup	1	-	1	1	-	1
Beckman AU	2	-	2	2	-	2
BMC QuickTox Drug Screen	23	-	23	23	-	23
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
Clarity Diagnostics Urine Panels/Cassettes	1	-	1	1	-	1
CLIWaived, Inc. Drug Test	4	-	4	4	-	4
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	6	-	6	6	-	6
Germaine Laboratories AimScreen	1	-	1	1	-	1
Healgen Scientific Urine Drug Test	1	-	1	1	-	1
Jant Accutest MultiDrug Screen	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	4	-	4	4	-	4
Medica EasyRA	1	-	1	1	-	1
Microgenics DRI	4	-	4	4	-	4
Noble Medical Inc.	2	-	2	2	-	2
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Roche cobas 6000 / c 501	1	-	1	1	-	1
Siemens EMIT II Plus	1	-	1	1	-	1
Siemens Viva-E	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	6	-	6	6	-	6

**Amphetamines/Methamphetamines (ng/mL)**

<b><u>Method</u></b>	Specimen UDS-1			Specimen UDS-2		
	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>
All Methods	14	-	14	14	-	14
Cut-off 300						
Beckman AU	1	-	1	1	-	1
Roche Integra	1	-	1	1	-	1
All Cut-off 300	2	-	2	2	-	2
Cut-off 500						
Beckman AU	2	-	2	2	-	2
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
Medica EasyRA	1	-	1	1	-	1
USDiagnostics UScreen Cup	1	-	1	1	-	1
All Cut-off 500	7	-	7	7	-	7
Cut-off 1000						
Abbott Architect	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Siemens EMIT II Plus	1	-	1	1	-	1
All Cut-off 1000	3	-	3	3	-	3

## Barbiturates (ng/mL)

<u><b>Method</b></u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	83	1	82	83	1	82
Cut-off 100						
Beckman AU	1	-	1	1	-	1
Noble Medical Inc.	1	-	1	1	-	1
All Cut-off 100	2	-	2	2	-	2
Cut-off 200						
Abbott Architect	1	-	1	1	-	1
Beckman AU	5	-	5	5	-	5
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Indiko Plus	2	-	2	2	-	2
Medica EasyRA	1	-	1	1	-	1
MEDTOX Diagnostics	3	-	3	3	-	3
Microgenics DRI	3	-	3	3	-	3
Roche Integra	2	-	2	2	-	2
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	24	-	24	24	-	24
Cut-off 300						
Alere iCassette	3	-	3	3	-	3
Alere iCup	3	1	2	3	1	2
BMC QuickTox Drug Screen	23	-	23	23	-	23
CLIAwaived, Inc. Drug Test	4	-	4	4	-	4
Confirm Biosciences DoA Test	1	-	1	1	-	1
Jant Accutest MultiDrug Screen	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	5	-	5	5	-	5
Microgenics DRI	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	3	-	3	3	-	3
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	6	-	6	6	-	6
All Cut-off 300	54	1	53	54	1	53

**Benzodiazepines (ng/mL)**

<b><u>Method</u></b>	Specimen UDS-1			Specimen UDS-2		
	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>
All Methods	102	101	1	102	1	101
Cut-off 100						
Beckman AU	1	1	-	1	-	1
Roche Integra	1	1	-	1	-	1
All Cut-off 100	2	2	-	2	-	2
Cut-off 150						
Immunalysis	1	1	-	1	-	1
MEDTOX Diagnostics	3	3	-	3	-	3
All Cut-off 150	4	4	-	4	-	4
Cut-off 200						
Abbott Architect	1	1	-	1	-	1
Beckman AU	5	5	-	5	-	5
Confirm Biosciences DoA Test	1	1	-	1	-	1
Indiko Plus	5	5	-	5	-	5
Medica EasyRA	1	1	-	1	-	1
Microgenics DRI	5	5	-	5	-	5
Mindray BS-200/BS-480	1	1	-	1	-	1
Siemens Dimension	1	1	-	1	-	1
Siemens EMIT II Plus	3	3	-	3	-	3
Synermed IR 500	1	1	-	1	-	1
All Cut-off 200	24	24	-	24	-	24
Cut-off 300						
Alere iCassette	3	3	-	3	-	3
Alere iCup	3	2	1	3	1	2
Alere iScreen	1	1	-	1	-	1
Alfa Scientific Instant-View	1	1	-	1	-	1
BMC QuickTox Drug Screen	23	23	-	23	-	23
CLIAwaived, Inc. Drug Test	5	5	-	5	-	5
Confirm Biosciences DoA Test	1	1	-	1	-	1
First Sign Drugs of Abuse	7	7	-	7	-	7
Jant Accutest MultiDrug Screen	1	1	-	1	-	1
McKesson Consult Drug Panel	1	1	-	1	-	1
McKesson Drug Panel	5	5	-	5	-	5
Microgenics CEDIA	1	1	-	1	-	1
Noble Medical Inc.	1	1	-	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	3	3	-	3	-	3
Roche cobas 6000 / c 501	1	1	-	1	-	1
USDiagnostics One Step Multi-Drug	2	2	-	2	-	2
USDiagnostics UScreen Cup	6	6	-	6	-	6
All Cut-off 300	66	65	1	66	1	65

## Buprenorphine (ng/mL)

<u><b>Method</b></u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	41	-	41	41	-	41
Cut-off 5						
Beckman AU	3	-	3	3	-	3
Confirm Biosciences DoA Test	1	-	1	1	-	1
Immunalysis	1	-	1	1	-	1
Indiko Plus	3	-	3	3	-	3
Medica EasyRA	1	-	1	1	-	1
Microgenics CEDIA	2	-	2	2	-	2
Microgenics DRI	1	-	1	1	-	1
Siemens EMIT II Plus	2	-	2	2	-	2
Synermed IR 500	1	-	1	1	-	1
All Cut-off 5	15	-	15	15	-	15
Cut-off 10						
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
Jant Accutest MultiDrug Screen	1	-	1	1	-	1
McKesson Drug Panel	2	-	2	2	-	2
MEDTOX Diagnostics	1	-	1	1	-	1
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	2	-	2	2	-	2
USDiagnostics One Step Multi-Drug	1	-	1	1	-	1
USDiagnostics UScreen Cup	5	-	5	5	-	5
All Cut-off 10	20	-	20	20	-	20
Cut-off 20						
Indiko Plus	1	-	1	1	-	1
Microgenics CEDIA	2	-	2	2	-	2
All Cut-off 20	3	-	3	3	-	3

## Cannabinoids (THC) (ng/mL)

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	102	1	101	101	1	100
Cut-off 20						
Roche Integra	1	-	1	1	-	1
All Cut-off 20	1	-	1	1	-	1
Cut-off 50						
Abbott Architect	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	4	1	3	4	1	3
Alfa Scientific Instant-View	7	-	7	7	-	7
Beckman AU	5	-	5	5	-	5
BMC QuickTox Drug Screen	23	-	23	23	-	23
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	4	-	4	4	-	4
Confirm Biosciences DoA Test	2	-	2	2	-	2
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
Indiko Plus	4	-	4	3	-	3
Jant Accutest MultiDrug Screen	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	5	-	5	5	-	5
Medica EasyRA	1	-	1	1	-	1
MEDTOX Diagnostics	3	-	3	3	-	3
Microgenics DRI	6	-	6	6	-	6
Mindray BS-200/BS-480	1	-	1	1	-	1
Noble Medical Inc.	3	-	3	3	-	3
Premier Biotech Bio-Cup/Bio-Dip	3	-	3	3	-	3
Roche cobas 6000 / c 501	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
Siemens EMIT II Plus	3	-	3	3	-	3
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	6	-	6	6	-	6
All Cut-off 50	98	1	97	97	1	96
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1

**Carisoprodol (ng/mL)**

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	1	-	1	1	-	1
Cut-off 100						
Immunalysis	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1

**Cocaine Metabolites (ng/mL)**

<b><u>Method</u></b>	Specimen UDS-1			Specimen UDS-2		
	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>
All Methods	117	1	116	117	1	116
Cut-off 50						
First Sign Drugs of Abuse	2	-	2	2	-	2
All Cut-off 50	2	-	2	2	-	2
Cut-off 100						
Beckman AU	1	-	1	1	-	1
Lin-Zhi International	1	-	1	1	-	1
All Cut-off 100	2	-	2	2	-	2
Cut-off 150						
Alere iCup	2	1	1	2	1	1
Beckman AU	3	-	3	3	-	3
CLIAwaived, Inc. Drug Test	1	-	1	1	-	1
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	2	-	2	2	-	2
Indiko Plus	3	-	3	3	-	3
McKesson Drug Panel	1	-	1	1	-	1
Medica EasyRA	1	-	1	1	-	1
MEDTOX Diagnostics	3	-	3	3	-	3
Microgenics DRI	2	-	2	2	-	2
Noble Medical Inc.	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
Synermed IR 500	1	-	1	1	-	1
All Cut-off 150	25	1	24	25	1	24

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

	Specimen UDS-1		Specimen UDS-2	
<b>Cut-off 300</b>				
Abbott Architect	1	-	1	1
Alere iCassette	3	-	3	3
Alere iCup	2	-	2	2
Alfa Scientific Instant-View	7	-	7	7
Beckman AU	2	-	2	2
BMC QuickTox Drug Screen	23	-	23	23
Carolina Chemistries BioLis 24i	1	-	1	1
CLIAwaived, Inc. Drug Test	4	-	4	4
Confirm Biosciences DoA Test	1	-	1	1
First Sign Drugs of Abuse	3	-	3	3
Germaine Laboratories AimScreen	4	-	4	4
Healgen Scientific Urine Drug Test	1	-	1	1
Indiko Plus	1	-	1	1
Jant Accutest MultiDrug Screen	1	-	1	1
McKesson Consult Drug Panel	1	-	1	1
McKesson Drug Panel	4	-	4	4
Medica EasyRA	1	-	1	1
Microgenics DRI	5	-	5	5
Noble Medical Inc.	2	-	2	2
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1
Roche cobas 6000 / c 501	1	-	1	1
Roche Integra	1	-	1	1
Siemens EMIT II Plus	3	-	3	3
USDiagnostics One Step Multi-Drug	2	-	2	2
USDiagnostics UScreen Cup	6	-	6	6
All Cut-off 300	82	-	82	82

**Cotinine (ng/mL)**

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	1	-	1	1	1	-

**EDDP (ng/mL)**

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	4	-	4	4	-	4
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 150						
Microgenics DRI	1	-	1	1	-	1
All Cut-off 150	1	-	1	1	-	1
Cut-off 300						
Immunalysis	1	-	1	1	-	1
All Cut-off 300	1	-	1	1	-	1
Cut-off 1000						
Indiko Plus	1	-	1	1	-	1
All Cut-off 1000	1	-	1	1	-	1

**Ethanol (Alcohol) (mg/dL)**

<b><u>Method</u></b>	Specimen UDS-1			Specimen UDS-2		
	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>
All Methods	14	-	14	12	12	-
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 40						
Siemens EMIT II Plus	1	-	1	1	1	-
All Cut-off 40	1	-	1	1	1	-
Cut-off 100						
Beckman AU	1	-	1	1	1	-
Carolina Chemistries BioLis 24i	1	-	1	1	1	-
Indiko Plus	1	-	1	1	1	-
Microgenics DRI	5	-	5	4	4	-
All Cut-off 100	8	-	8	7	7	-

**Fentanyl (ng/mL)**

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	6	-	6	6	-	6
Cut-off 2						
Immunalysis	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
Medica EasyRA	1	-	1	1	-	1
Microgenics DRI	3	-	3	3	-	3
All Cut-off 2	6	-	6	6	-	6

**Hydrocodone (ng/mL)**

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	2	2	-	2	-	2
Cut-off 300						
Indiko Plus	1	1	-	1	-	1
Microgenics DRI	1	1	-	1	-	1
All Cut-off 300	2	2	-	2	-	2

**LSD (ng/mL)**

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	1	-	1	1	-	1

**MDMA (ng/mL)**

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	57	1	56	57	1	56
Cut-off 100						
First Sign Drugs of Abuse	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 500						
Alere iCup	3	1	2	3	1	2
Beckman AU	1	-	1	1	-	1
BMC QuickTox Drug Screen	23	-	23	23	-	23
CLIWaived, Inc. Drug Test	4	-	4	4	-	4
Confirm Biosciences DoA Test	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
Jant Accutest MultiDrug Screen	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	4	-	4	4	-	4
Microgenics DRI	1	-	1	1	-	1
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	3	-	3	3	-	3
Siemens EMIT II Plus	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	6	-	6	6	-	6
All Cut-off 500	53	1	52	53	1	52

**Meperidine (ng/mL)**

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	1	-	1	1	-	1

**Methadone (ng/mL)**

<u><b>Method</b></u>	Specimen UDS-1			Specimen UDS-2		
	<u><b>Labs</b></u>	<u><b>Positive</b></u>	<u><b>Negative</b></u>	<u><b>Labs</b></u>	<u><b>Positive</b></u>	<u><b>Negative</b></u>
All Methods	83	1	82	83	1	82
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 150						
Siemens EMIT II Plus	1	-	1	1	-	1
All Cut-off 150	1	-	1	1	-	1
Cut-off 200						
MEDTOX Diagnostics	3	-	3	3	-	3
All Cut-off 200	3	-	3	3	-	3
Cut-off 300						
Abbott Architect	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	3	1	2	3	1	2
Beckman AU	3	-	3	3	-	3
BMC QuickTox Drug Screen	23	-	23	23	-	23
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	3	-	3	3	-	3
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Indiko Plus	2	-	2	2	-	2
Jant Accutest MultiDrug Screen	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	4	-	4	4	-	4
Medica EasyRA	1	-	1	1	-	1
Microgenics DRI	6	-	6	6	-	6
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	2	-	2	2	-	2
Roche cobas 6000 / c 501	1	-	1	1	-	1
Roche Integra	1	-	1	1	-	1
Siemens EMIT II Plus	2	-	2	2	-	2
Synermed IR 500	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	6	-	6	6	-	6
All Cut-off 300	71	1	70	71	1	70
Cut-off 1000						
CLIAwaived, Inc. Drug Test	1	-	1	1	-	1
All Cut-off 1000	1	-	1	1	-	1

**Methamphetamines (ng/mL)**

<b><u>Method</u></b>	Specimen UDS-1			Specimen UDS-2		
	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>
All Methods	71	1	70	71	1	70
Cut-off 300						
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
All Cut-off 300	1	-	1	1	-	1
Cut-off 500						
Alere iCup	2	1	1	2	1	1
Beckman AU	1	-	1	1	-	1
BMC QuickTox Drug Screen	23	-	23	23	-	23
CLIAwaived, Inc. Drug Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Lin-Zhi International	1	-	1	1	-	1
McKesson Drug Panel	1	-	1	1	-	1
Medica EasyRA	1	-	1	1	-	1
MEDTOX Diagnostics	3	-	3	3	-	3
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
All Cut-off 500	36	1	35	36	1	35
Cut-off 1000						
Alere iCassette	3	-	3	3	-	3
Alere iCup	2	-	2	2	-	2
Alfa Scientific Instant-View	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	4	-	4	4	-	4
Jant Accutest MultiDrug Screen	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	3	-	3	3	-	3
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	6	-	6	6	-	6
All Cut-off 1000	30	-	30	30	-	30

**Methanol (mg/dL)**

	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	1	-	1	1	-	1

**Methaqualone (ng/mL)**

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
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)**

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	9	-	9	9	-	9
Cut-off 10						
Beckman AU	1	-	1	1	-	1
Indiko Plus	3	-	3	3	-	3
Medica EasyRA	1	-	1	1	-	1
Microgenics CEDIA	3	-	3	3	-	3
Siemens Viva-E	1	-	1	1	-	1
All Cut-off 10	9	-	9	9	-	9

**Opiates (Morphine Trihydrate) (ng/mL)**

<b><u>Method</u></b>	Specimen UDS-1			Specimen UDS-2		
	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>
All Methods	120	115	5	120	2	118
Cut-off 100						
Beckman AU	1	1	-	1	-	1
Lin-Zhi International	1	1	-	1	-	1
MEDTOX Diagnostics	2	2	-	2	-	2
All Cut-off 100	4	4	-	4	-	4
Cut-off 300						
Abbott Architect	1	1	-	1	-	1
Alere iCup	2	1	1	2	1	1
Alere iScreen	1	1	-	1	-	1
Alfa Scientific Instant-View	2	2	-	2	-	2
Beckman AU	4	4	-	4	-	4
BMC QuickTox Drug Screen	23	23	-	23	-	23
Carolina Chemistries BioLis 24i	1	1	-	1	-	1
CLIAwaived, Inc. Drug Test	2	2	-	2	-	2
Confirm Biosciences DoA Test	2	2	-	2	-	2
First Sign Drugs of Abuse	1	1	-	1	-	1
Indiko Plus	4	4	-	4	-	4
Jant Accutest MultiDrug Screen	1	1	-	1	-	1
McKesson Consult Drug Panel	1	1	-	1	-	1
McKesson Drug Panel	4	3	1	4	1	3
Medica EasyRA	2	2	-	2	-	2
Microgenics DRI	6	5	1	6	-	6
Mindray BS-200/BS-480	1	1	-	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	2	2	-	2	-	2

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

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
Roche cobas 6000 / c 501	1	1	-	1	-	1
Roche Integra	2	2	-	2	-	2
Siemens Dimension	1	1	-	1	-	1
Siemens EMIT II Plus	3	3	-	3	-	3
Synermed IR 500	1	1	-	1	-	1
USDiagnostics One Step Multi-Drug	1	1	-	1	-	1
USDiagnostics UScreen Cup	6	6	-	6	-	6
All Cut-off 300	75	72	3	75	2	73
Cut-off 2000						
Alere iCassette	3	3	-	3	-	3
Alere iCup	2	1	1	2	-	2
Alfa Scientific Instant-View	5	5	-	5	-	5
Beckman AU	1	1	-	1	-	1
CLIAwaived, Inc. Drug Test	3	3	-	3	-	3
First Sign Drugs of Abuse	6	5	1	6	-	6
Germaine Laboratories AimScreen	4	4	-	4	-	4
Healgen Scientific Urine Drug Test	1	1	-	1	-	1
McKesson Drug Panel	1	1	-	1	-	1
MEDTOX Diagnostics	1	1	-	1	-	1
Microgenics DRI	1	1	-	1	-	1
Noble Medical Inc.	3	3	-	3	-	3
Premier Biotech Bio-Cup/Bio-Dip	1	1	-	1	-	1
USDiagnostics One Step Multi-Drug	1	1	-	1	-	1
All Cut-off 2000	34	32	2	34	-	34

## Oxycodone (ng/mL)

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	83	1	82	83	82	1
Cut-off 100						
Alere iCassette	2	-	2	2	2	-
Alere iCup	3	1	2	3	2	1
Alere iScreen	1	-	1	1	1	-
Beckman AU	4	-	4	4	4	-
BMC QuickTox Drug Screen	23	-	23	23	23	-
Carolina Chemistries BioLis 24i	1	-	1	1	1	-
CLIAwaived, Inc. Drug Test	4	-	4	4	4	-
Confirm Biosciences DoA Test	2	-	2	2	2	-
First Sign Drugs of Abuse	1	-	1	1	1	-
Immunalysis	1	-	1	1	1	-
Jant Accutest MultiDrug Screen	1	-	1	1	1	-
McKesson Consult Drug Panel	1	-	1	1	1	-
McKesson Drug Panel	3	-	3	3	3	-
Medica EasyRA	2	-	2	2	2	-
MEDTOX Diagnostics	3	-	3	3	3	-
Microgenics DRI	3	-	3	3	3	-
Noble Medical Inc.	1	-	1	1	1	-
Premier Biotech Bio-Cup/Bio-Dip	3	-	3	3	3	-
Roche cobas 6000 / c 501	1	-	1	1	1	-
Roche Integra	2	-	2	2	2	-
Siemens EMIT II Plus	2	-	2	2	2	-
USDiagnostics One Step Multi-Drug	1	-	1	1	1	-
USDiagnostics UScreen Cup	6	-	6	6	6	-
All Cut-off 100	71	1	70	71	70	1
Cut-off 300						
Indiko Plus	3	-	3	3	3	-
Microgenics DRI	3	-	3	3	3	-
All Cut-off 300	6	-	6	6	6	-

### Phencyclidine (PCP) (ng/mL)

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	76	74	2	76	-	76
Cut-off 25						
Abbott Architect	1	1	-	1	-	1
Alere iCassette	3	2	1	3	-	3
Alere iCup	2	2	-	2	-	2
Beckman AU	4	4	-	4	-	4
BMC QuickTox Drug Screen	23	23	-	23	-	23
Clarity Diagnostics Urine Panels/Cassettes	1	1	-	1	-	1
CLIAwaived, Inc. Drug Test	2	2	-	2	-	2
Confirm Biosciences DoA Test	2	2	-	2	-	2
First Sign Drugs of Abuse	1	1	-	1	-	1
Germaine Laboratories AimScreen	1	1	-	1	-	1
Healgen Scientific Urine Drug Test	1	1	-	1	-	1
Indiko Plus	1	1	-	1	-	1
Jant Accutest MultiDrug Screen	1	1	-	1	-	1
McKesson Consult Drug Panel	1	1	-	1	-	1
McKesson Drug Panel	5	5	-	5	-	5
Medica EasyRA	1	1	-	1	-	1
MEDTOX Diagnostics	3	3	-	3	-	3
Microgenics DRI	2	2	-	2	-	2
Noble Medical Inc.	3	3	-	3	-	3
Premier Biotech Bio-Cup/Bio-Dip	3	3	-	3	-	3
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	6	6	-	6	-	6
All Cut-off 25	73	71	2	73	-	73
Cut-off 100						
Beckman AU	1	1	-	1	-	1
All Cut-off 100	1	1	-	1	-	1

**Propoxyphene (ng/mL)**

<u><b>Method</b></u>	Specimen UDS-1			Specimen UDS-2		
	<u><b>Labs</b></u>	<u><b>Positive</b></u>	<u><b>Negative</b></u>	<u><b>Labs</b></u>	<u><b>Positive</b></u>	<u><b>Negative</b></u>
All Methods	13	-	13	13	-	13
Cut-off 300						
Abbott Architect	1	-	1	1	-	1
Beckman AU	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
McKesson Drug Panel	2	-	2	2	-	2
MEDTOX Diagnostics	3	-	3	3	-	3
Microgenics DRI	1	-	1	1	-	1
Siemens EMIT II Plus	1	-	1	1	-	1
All Cut-off 300	12	-	12	12	-	12

**Tramadol (ng/mL)**

	Specimen UDS-1			Specimen UDS-2		
	<u><b>Labs</b></u>	<u><b>Positive</b></u>	<u><b>Negative</b></u>	<u><b>Labs</b></u>	<u><b>Positive</b></u>	<u><b>Negative</b></u>
All Methods	2	-	2	2	-	2
Cut-off 200						
Confirm Biosciences DoA Test	1	-	1	1	-	1
Immunalysis	1	-	1	1	-	1
All Cut-off 200	2	-	2	2	-	2

### Tricyclic Antidepressants (ng/mL)

<u>Method</u>	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	18	-	18	18	-	18
Cut-off 300						
MEDTOX Diagnostics	3	-	3	3	-	3
All Cut-off 300	3	-	3	3	-	3
Cut-off 1000						
Alere iCassette	1	-	1	1	-	1
Alere iCup	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	2	-	2	2	-	2
First Sign Drugs of Abuse	1	-	1	1	-	1
Jant Accutest MultiDrug Screen	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	5	-	5	5	-	5
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
USDiagnostics UScreen Cup	1	-	1	1	-	1
All Cut-off 1000	14	-	14	14	-	14

### Zolpidem (mg/dL)

	Specimen UDS-1			Specimen UDS-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	1	-	1	1	-	1

### Urine Amylase (U/L)

<u>Method</u>	Specimen UCH-1							Specimen UCH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	1	-	-	-	328	Not graded	1	-	-	-	-	132	Not graded	

### Urine Calcium (mg/dL)

<u>Method</u>	Specimen UCH-1							Specimen UCH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	4.80	0.71	14.7	4.8	3.3 - 6.3	5	8.90	0.28	3.2	8.9	6.1 - 11.7		

### Urine Chloride (mmol/L)

<u>Method</u>	Specimen UCH-1							Specimen UCH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	1	-	-	-	236	Not graded	1	-	-	-	-	75	Not graded	

### Urine Creatinine (mg/dL)

<u>Method</u>	Specimen UCH-1							Specimen UCH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	8	184.03	12.02	6.5	187.7	152.7 - 215.4	8	62.44	5.23	8.4	63.1	51.8 - 73.1		

### Urine Glucose (mg/dL)

<u>Method</u>	Specimen UCH-1							Specimen UCH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	1	-	-	-	266	Not graded	1	-	-	-	-	23	Not graded	

### Urine Magnesium (mg/dL)

<u>Method</u>	Specimen UCH-1							Specimen UCH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	1	-	-	-	9.2	Not graded	1	-	-	-	-	3.0	Not graded	

### Urine Osmolality (mOsm/kg)

<u>Method</u>	Specimen UCH-1						Specimen UCH-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	1	-	-	-	824	Not graded	1	-	-	-	382	Not graded

### Urine Phosphorus (mg/dL)

<u>Method</u>	Specimen UCH-1						Specimen UCH-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	1	-	-	-	55.8	Not graded	1	-	-	-	18.6	Not graded

### Urine Potassium (mmol/L)

<u>Method</u>	Specimen UCH-1						Specimen UCH-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	1	-	-	-	92	Not graded	1	-	-	-	21	Not graded

**Urine Sodium (mmol/L)**

<u>Method</u>	Specimen UCH-1							Specimen UCH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	5	179.5	0.7	0.4	180	132 - 227	5	92.5	0.7	0.8	93	68 - 117		

**Urine Total Protein (mg/dL)**

<u>Method</u>	Specimen UCH-1							Specimen UCH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	6	88.65	1.66	1.9	88.4	49.6 - 127.7	6	11.82	4.64	39.3	10.9	6.6 - 17.1		

**Urine Urea Nitrogen (mg/dL)**

<u>Method</u>	Specimen UCH-1							Specimen UCH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	1	-	-	-	677	Not graded	1	-	-	-	-	368	Not graded	

**Urine Uric Acid (mg/dL)**

<u>Method</u>	Specimen UCH-1							Specimen UCH-2						
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>		
All Method	1	-	-	-	9.2	Not graded	1	-	-	-	-	4.9	Not graded	

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