

# MEDICAL LABORATORY EVALUATION

## PARTICIPANT SUMMARY

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Chemistry  
2021 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	$\pm 15\%$ or $2.5 \mu\text{g/mL}^*$	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	$\pm 5\%$ or $10 \mu\text{mol/L}^*$	NT-proBNP	$\pm 2 \text{ SD}$ or $25\%^*$
Amylase	$\pm 30\%$	Parathyroid Hormone, Intact	$\pm 30\%$ or $2 \text{ SD}^*$
AST (SGOT)	$\pm 20\%$	Phenobarbital	$\pm 20\%$
B-Type Natriuretic Peptide (BNP)	$\pm 2 \text{ SD}$ or $25\%^*$	Phenytoin	$\pm 25\%$
Beta-2 Microglobulin	$\pm 3 \text{ SD}$	Phosphorus	$\pm 0.3 \text{ mg/dL}$ or $10\%^*$
Bilirubin, Direct	$\pm 2 \text{ SD}$	Potassium	$\pm 0.5 \text{ mmol/L}$
Bilirubin, Total	$\pm 0.4 \text{ mg/dL}$ or $20\%^*$	Prealbumin	$\pm 25\%$
Bilirubin, Neonatal (Total)	$\pm 0.4 \text{ mg/dL}$ or $20\%^*$	Progesterone	$\pm 25\%$
Blood Lead	$\pm 4 \mu\text{g/dL}$ or $\pm 10\%^*$	Prolactin	$\pm 20\%$
C-Peptide	$\pm 2 \text{ SD}$	Protein, Total (Serum)	$\pm 10\%$
CA 125	$\pm 2 \text{ SD}$ or $20\%^*$	Protein, Total (Urine)	$\pm 44\%$
CA 15-3	$\pm 2 \text{ SD}$ or $30\%^*$	PSA	$\pm 0.9 \text{ ng/mL}$ or $30\%^*$
CA 19-9	$\pm 2 \text{ SD}$ or $30\%^*$	PSA, Free	$\pm 0.9 \text{ ng/mL}$ or $30\%^*$
CA 27/29	$\pm 2 \text{ SD}$ or $30\%^*$	pCO <sub>2</sub>	$\pm 5 \text{ mmHg}$ or $8\%^*$
Calcium	$\pm 1.0 \text{ mg/dL}$	pH	$\pm 0.04$
Calcium, Ionized	$\pm 3 \text{ SD}$	pO <sub>2</sub>	$\pm 3 \text{ SD}$
Carbamazepine	$\pm 25\%$	Salicylate	$\pm 25\%$
CEA	$\pm 1.2 \text{ ng/mL}$ $20\%$	SHBG	$\pm 3 \text{ SD}$
Chloride	$\pm 5\%$	Sodium	$\pm 4.0 \text{ mmol/L}$
Cholesterol, Total	$\pm 10\%$	T <sub>3</sub> Uptake (% Uptake)	$\pm 3 \text{ SD}$
CK-MB (Quantitative)	$\pm 3 \text{ SD}$	T3, Free	$\pm 3 \text{ SD}$
CO <sub>2</sub>	$\pm 20\%$	T4, Free	$\pm 3 \text{ SD}$
Cortisol	$\pm 25\%$	tCO <sub>2</sub>	$\pm 20\%$
Creatine Kinase	$\pm 30\%$	Testosterone	$\pm 30\%$ or $20 \text{ ng/dL}^*$
Creatinine (Serum)	$\pm 0.3 \text{ mg/dL}$ or $15\%^*$	Testosterone, Bioavailable	$\pm 3 \text{ SD}$
Creatinine (Urine)	$\pm 17\%$	Testosterone, Free	$\pm 2 \text{ SD}$
D-Dimer	$\pm 2 \text{ SD}$ or $30\%^*$	Theophylline	$\pm 25\%$
DHEA-S	$\pm 30\%$ or $2 \text{ SD}^*$	Thyroglobulin	$\pm 2 \text{ SD}$
Digoxin	$\pm 0.2 \text{ mg/dL}$ or $20\%^*$	Thyroglobulin Antibody	$\pm 3 \text{ SD}$
Estradiol	$\pm 30\%$ or $2 \text{ SD}^*$	Thyroid Peroxidase Antibody (TPO)	$\pm 3 \text{ SD}$
Ferritin	$\pm 20\%$	Thyroxine, Total T <sub>4</sub>	$\pm 1.0 \mu\text{g/dL}$ or $20\%^*$
Folate	$\pm 1.0 \text{ ng/mL}$ or $30\%^*$	TIBC	$\pm 2 \text{ SD}$ or $20\%^*$
FSH	$\pm 18\%$ or $2 \text{ SD}^*$	Transferrin	$\pm 10\%$
Gentamicin	$\pm 25\%$ or $1.0 \mu\text{g/mL}^*$	Triglyceride	$\pm 25\%$
GGT	$\pm 2 \text{ SD}$ or $15\%^*$	Triiodothyronine, Total T <sub>3</sub>	$\pm 3 \text{ SD}$
Glucose, Serum	$\pm 6 \text{ mg/dL}$ or $10\%^*$	Troponin I	$\pm 2 \text{ SD}$ or $30\%^*$
Glucose, Whole Blood	$\pm 6 \text{ mg/dL}$ or $20\%^*$	Troponin T	$\pm 2 \text{ SD}$ or $30\%^*$
Glycohemoglobin	$\pm 5\%$	TSH	$\pm 3 \text{ SD}$
HDL Cholesterol	$\pm 30\%$	UIBC	$\pm 2 \text{ SD}$ or $20\%^*$
HCG, Serum—Qualitative	80% Consensus	Urea Nitrogen	$\pm 2.0 \text{ mg/dL}$ or $9\%^*$
HCG, Serum—Quantitative	$\pm 18\%$ or $2 \text{ SD}^*$	Uric Acid	$\pm 17\%$
Hematocrit	$\pm 6\%$	Urine Drug Screen	80% Consensus
Hemoglobin	$\pm 7\%$	Valproic Acid	$\pm 25\%$
Homocysteine	$\pm 30\%$	Vancomycin	$\pm 25\%$ or $1.0 \mu\text{g/mL}^*$
Insulin	$\pm 2 \text{ SD}$	Vitamin B <sub>12</sub>	$\pm 25\%$
Iron	$\pm 20\%$	Vitamin D	$\pm 2 \text{ SD}$
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	106	138.5	0.6	0.4	138	134 - 143	103	125.1	0.4	0.3	125	121 - 130		
All i-STAT Instruments	106	138.5	0.6	0.4	138	134 - 143	103	125.1	0.4	0.3	125	121 - 130		
i-STAT - moderate	89	138.4	0.5	0.4	138	134 - 143	87	125.1	0.4	0.3	125	121 - 130		
i-STAT - waived	17	138.8	0.7	0.5	139	134 - 143	17	125.3	0.7	0.5	125	121 - 130		
Specimen IST-3														
All Method	102	147.5	0.5	0.3	148	143 - 152	99	168.3	0.5	0.3	168	164 - 173		
All i-STAT Instruments	102	147.5	0.5	0.3	148	143 - 152	99	168.3	0.5	0.3	168	164 - 173		
i-STAT - moderate	89	147.5	0.5	0.3	147	143 - 152	88	168.3	0.5	0.3	168	164 - 173		
i-STAT - waived	13	147.6	0.5	0.3	148	143 - 152	13	168.7	0.8	0.4	169	164 - 173		
Specimen IST-5														
All Method	101	138.6	0.5	0.4	139	134 - 143								
All i-STAT Instruments	101	138.6	0.5	0.4	139	134 - 143								
i-STAT - moderate	88	138.6	0.5	0.4	139	134 - 143								
i-STAT - waived	13	138.5	0.5	0.4	139	134 - 143								

## Potassium (mmol/L)

Instrument	Specimen IST-1							Specimen IST-2						
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range		
All Method	98	3.80	0.01	0.0	3.8	3.3 - 4.3	106	2.79	0.03	1.1	2.8	2.2 - 3.3		
All i-STAT Instruments	98	3.80	0.01	0.0	3.8	3.3 - 4.3	106	2.79	0.03	1.1	2.8	2.2 - 3.3		
i-STAT - moderate	83	3.80	0.01	0.0	3.8	3.3 - 4.3	82	2.80	0.01	0.0	2.8	2.3 - 3.3		
i-STAT - waived	15	3.80	0.01	0.0	3.8	3.3 - 4.3	16	2.78	0.04	1.4	2.8	2.2 - 3.3		
Specimen IST-3														
All Method	100	4.23	0.04	1.1	4.2	3.7 - 4.8	101	6.48	0.04	0.6	6.5	5.9 - 7.0		
All i-STAT Instruments	100	4.23	0.04	1.1	4.2	3.7 - 4.8	101	6.48	0.04	0.6	6.5	5.9 - 7.0		
i-STAT - moderate	88	4.23	0.04	1.1	4.2	3.7 - 4.8	89	6.48	0.04	0.7	6.5	5.9 - 7.0		
i-STAT - waived	12	4.23	0.05	1.1	4.2	3.7 - 4.8	12	6.50	0.01	0.0	6.5	6.0 - 7.0		
Specimen IST-5														
All Method	91	3.80	0.01	0.0	3.8	3.3 - 4.3								
All i-STAT Instruments	91	3.80	0.01	0.0	3.8	3.3 - 4.3								
i-STAT - moderate	79	3.80	0.01	0.0	3.8	3.3 - 4.3								
i-STAT - waived	12	3.80	0.01	0.0	3.8	3.3 - 4.3								

## **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	106	86.5	0.7	0.8	86	82 - 91	104	75.2	0.6	0.8	75	71 - 79
All i-STAT Instruments	106	86.5	0.7	0.8	86	82 - 91	104	75.2	0.6	0.8	75	71 - 79
i-STAT - moderate	91	86.5	0.7	0.8	87	82 - 91	89	75.2	0.6	0.8	75	71 - 80
i-STAT - waived	15	86.2	0.8	0.9	86	81 - 91	15	75.1	0.7	1.0	75	71 - 79
<b>Specimen IST-3</b>												
All Method	102	84.5	0.6	0.7	85	80 - 89	102	115.6	0.8	0.6	116	109 - 122
All i-STAT Instruments	102	84.5	0.6	0.7	85	80 - 89	102	115.6	0.8	0.6	116	109 - 122
i-STAT - moderate	91	84.5	0.6	0.7	84	80 - 89	91	115.6	0.8	0.7	116	109 - 122
i-STAT - waived	11	84.5	0.5	0.6	85	80 - 89	11	115.3	0.5	0.4	115	109 - 122
<b>Specimen IST-5</b>												
All Method	100	86.3	0.6	0.7	86	82 - 91						
All i-STAT Instruments	100	86.3	0.6	0.7	86	82 - 91						
i-STAT - moderate	89	86.3	0.6	0.7	86	82 - 91						
i-STAT - waived	11	86.3	0.6	0.7	86	81 - 91						

## **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	103	25.9	1.1	4.1	26	20 - 32	104	23.8	1.1	4.5	24	19 - 29
All i-STAT Instruments	103	25.9	1.1	4.1	26	20 - 32	104	23.8	1.1	4.5	24	19 - 29
i-STAT - moderate	88	26.0	1.0	4.0	26	20 - 32	89	23.8	1.1	4.5	24	19 - 29
i-STAT - waived	15	25.5	1.2	4.7	25	20 - 31	15	23.8	1.1	4.5	24	19 - 29
<b>Specimen IST-3</b>												
All Method	99	21.5	0.9	4.4	22	17 - 26	97	24.7	1.0	3.9	25	19 - 30
All i-STAT Instruments	99	21.5	0.9	4.4	22	17 - 26	97	24.7	1.0	3.9	25	19 - 30
i-STAT - moderate	89	21.5	0.9	4.2	22	17 - 26	87	24.7	1.0	4.0	25	19 - 30
i-STAT - waived	10	21.8	1.2	5.6	22	17 - 27	10	24.7	0.9	3.8	25	19 - 30
<b>Specimen IST-5</b>												
All Method	95	25.9	1.0	4.0	26	20 - 32						
All i-STAT Instruments	95	25.9	1.0	4.0	26	20 - 32						
i-STAT - moderate	85	25.9	1.0	3.8	26	20 - 32						
i-STAT - waived	10	25.8	1.5	5.7	26	20 - 31						

### 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	104	61.0	1.3	2.2	61	55 - 67	104	67.7	1.4	2.0	68	61 - 74		
All i-STAT Instruments	104	61.0	1.3	2.2	61	55 - 67	104	67.7	1.4	2.0	68	61 - 74		
i-STAT - moderate	89	61.0	1.4	2.3	61	55 - 67	88	67.7	1.4	2.1	68	61 - 74		
i-STAT - waived	15	61.1	0.9	1.5	61	55 - 67	16	67.6	1.0	1.5	67	61 - 74		
Specimen IST-3							Specimen IST-4							
All Method	101	37.1	0.8	2.1	37	33 - 41	102	16.3	0.5	2.9	16	14 - 19		
All i-STAT Instruments	101	37.1	0.8	2.1	37	33 - 41	102	16.3	0.5	2.9	16	14 - 19		
i-STAT - moderate	90	37.0	0.8	2.1	37	33 - 41	90	16.3	0.5	3.0	16	14 - 19		
i-STAT - waived	11	37.2	0.8	2.0	37	33 - 41	12	16.3	0.5	2.8	16	14 - 19		
Specimen IST-5														
All Method	99	61.3	1.0	1.6	61	55 - 67								
All i-STAT Instruments	99	61.3	1.0	1.6	61	55 - 67								
i-STAT - moderate	87	61.3	1.0	1.6	61	55 - 67								
i-STAT - waived	12	61.4	0.7	1.1	62	55 - 67								

### 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	103	145.2	1.1	0.7	145	130 - 160	104	175.9	1.2	0.7	176	158 - 194		
All i-STAT Instruments	103	145.2	1.1	0.7	145	130 - 160	104	175.9	1.2	0.7	176	158 - 194		
i-STAT - moderate	87	145.2	1.0	0.7	145	130 - 160	88	176.1	1.2	0.7	176	158 - 194		
i-STAT - waived	16	145.3	1.4	1.0	145	130 - 160	16	175.3	0.8	0.5	175	157 - 193		
Specimen IST-3							Specimen IST-4							
All Method	102	129.9	1.4	1.1	130	116 - 143	101	74.9	1.0	1.4	75	67 - 83		
All i-STAT Instruments	102	129.9	1.4	1.1	130	116 - 143	101	74.9	1.0	1.4	75	67 - 83		
i-STAT - moderate	88	129.8	1.2	0.9	130	116 - 143	90	75.0	1.0	1.4	75	67 - 83		
i-STAT - waived	12	130.7	1.8	1.4	130	117 - 144	12	75.1	1.6	2.1	75	67 - 83		
Specimen IST-5														
All Method	100	145.2	1.0	0.7	145	130 - 160								
All i-STAT Instruments	100	145.2	1.0	0.7	145	130 - 160								
i-STAT - moderate	88	145.2	1.0	0.7	145	130 - 160								
i-STAT - waived	12	145.1	1.3	0.9	146	130 - 160								

## Hematocrit (percent)

<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	20	25.6	0.7	2.7	26	24 - 28	20	21.0	0.6	2.9	21	19 - 23		
All i-STAT Instruments	20	25.6	0.7	2.7	26	24 - 28	20	21.0	0.6	2.9	21	19 - 23		
i-STAT - moderate	11	25.7	0.8	3.1	26	24 - 28	11	21.2	0.6	2.8	21	19 - 23		
i-STAT - waived	10	24.9	1.8	7.2	25	23 - 27	10	21.1	1.4	6.9	21	19 - 23		
<b>Specimen IST-3</b>														
All Method	17	36.2	0.7	1.8	36	34 - 39	17	29.9	0.7	2.2	30	28 - 32		
All i-STAT Instruments	17	36.2	0.7	1.8	36	34 - 39	17	29.9	0.7	2.2	30	28 - 32		
i-STAT - moderate	11	36.4	0.8	2.2	36	34 - 39	11	30.1	0.7	2.3	30	28 - 32		
i-STAT - waived	6	36.0	0.1	0.0	36	33 - 39	6	29.7	0.5	1.7	30	27 - 32		
<b>Specimen IST-5</b>														
All Method	17	25.5	0.7	2.8	25	23 - 28								
All i-STAT Instruments	17	25.5	0.7	2.8	25	23 - 28								
i-STAT - moderate	11	25.7	0.8	3.1	26	24 - 28								
i-STAT - waived	6	25.2	0.4	1.6	25	23 - 27								

## Hemoglobin (g/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	20	8.69	0.23	2.6	8.7	8.0 - 9.3	20	7.10	0.21	3.0	7.1	6.6 - 7.6		
All i-STAT Instruments	20	8.69	0.23	2.6	8.7	8.0 - 9.3	20	7.10	0.21	3.0	7.1	6.6 - 7.6		
i-STAT - moderate	11	8.74	0.27	3.1	8.8	8.1 - 9.4	11	7.18	0.22	3.1	7.1	6.6 - 7.7		
i-STAT - waived	10	8.45	0.60	7.1	8.5	7.8 - 9.1	10	7.15	0.49	6.9	7.1	6.6 - 7.7		
<b>Specimen IST-3</b>														
All Method	17	12.29	0.24	1.9	12.2	11.4 - 13.2	17	10.18	0.20	1.9	10.2	9.4 - 10.9		
All i-STAT Instruments	17	12.29	0.24	1.9	12.2	11.4 - 13.2	17	10.18	0.20	1.9	10.2	9.4 - 10.9		
i-STAT - moderate	11	12.35	0.29	2.3	12.2	11.4 - 13.3	11	10.23	0.21	2.1	10.2	9.5 - 11.0		
i-STAT - waived	6	12.20	0.01	0.0	12.2	11.3 - 13.1	6	10.10	0.15	1.5	10.2	9.3 - 10.9		
<b>Specimen IST-5</b>														
All Method	17	8.67	0.24	2.8	8.5	8.0 - 9.3								
All i-STAT Instruments	17	8.67	0.24	2.8	8.5	8.0 - 9.3								
i-STAT - moderate	11	8.74	0.27	3.1	8.8	8.1 - 9.4								
i-STAT - waived	6	8.55	0.12	1.4	8.5	7.9 - 9.2								

## Creatinine (mg/dL)

<b><i>Instrument</i></b>	<b>Specimen IST-1</b>						<b>Specimen IST-2</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>	<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	117	6.31	0.24	3.7	6.3	5.3 - 7.3	117	3.70	0.11	3.0	3.7	3.1 - 4.3
All i-STAT Instruments	117	6.31	0.24	3.7	6.3	5.3 - 7.3	117	3.70	0.11	3.0	3.7	3.1 - 4.3
i-STAT - moderate	89	6.34	0.24	3.8	6.3	5.3 - 7.3	89	3.71	0.11	3.0	3.7	3.1 - 4.3
i-STAT - waived	28	6.22	0.20	3.3	6.2	5.2 - 7.2	28	3.67	0.11	3.0	3.7	3.1 - 4.3
<b>Specimen IST-3</b>							<b>Specimen IST-4</b>					
All Method	100	1.62	0.06	3.6	1.6	1.3 - 2.0	97	0.71	0.03	4.1	0.7	0.4 - 1.1
All i-STAT Instruments	100	1.62	0.06	3.6	1.6	1.3 - 2.0	97	0.71	0.03	4.1	0.7	0.4 - 1.1
i-STAT - moderate	89	1.62	0.06	3.5	1.6	1.3 - 2.0	79	0.70	0.01	0.0	0.7	0.4 - 1.0
i-STAT - waived	11	1.58	0.06	3.8	1.6	1.2 - 1.9	10	0.71	0.03	4.5	0.7	0.4 - 1.1
<b>Specimen IST-5</b>												
All Method	98	6.33	0.20	3.1	6.3	5.3 - 7.3						
All i-STAT Instruments	98	6.33	0.20	3.1	6.3	5.3 - 7.3						
i-STAT - moderate	87	6.35	0.20	3.1	6.3	5.3 - 7.3						
i-STAT - waived	11	6.23	0.18	2.9	6.2	5.2 - 7.2						

### **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	102	2.171	0.025	1.1	2.17	2.09 - 2.25	102	2.065	0.025	1.2	2.06	1.99 - 2.15
All i-STAT Instruments	102	2.171	0.025	1.1	2.17	2.09 - 2.25	102	2.065	0.025	1.2	2.06	1.99 - 2.15
i-STAT - moderate	89	2.170	0.025	1.2	2.17	2.09 - 2.25	89	2.065	0.026	1.2	2.06	1.98 - 2.15
i-STAT - waived	14	2.169	0.040	1.8	2.17	2.04 - 2.29	14	2.071	0.030	1.5	2.06	1.97 - 2.17
Specimen IST-3							Specimen IST-4					
All Method	95	1.171	0.011	1.0	1.17	1.13 - 1.21	95	0.851	0.008	0.9	0.85	0.82 - 0.88
All i-STAT Instruments	95	1.171	0.011	1.0	1.17	1.13 - 1.21	95	0.851	0.008	0.9	0.85	0.82 - 0.88
i-STAT - moderate	88	1.171	0.011	1.0	1.17	1.13 - 1.21	87	0.851	0.008	0.9	0.85	0.82 - 0.88
i-STAT - waived	8	-	-	-	1.17	1.13 - 1.21	9	-	-	-	0.86	0.82 - 0.88
Specimen IST-5												
All Method	95	2.179	0.021	1.0	2.18	2.11 - 2.25						
All i-STAT Instruments	95	2.179	0.021	1.0	2.18	2.11 - 2.25						
i-STAT - moderate	86	2.178	0.021	1.0	2.18	2.11 - 2.25						
i-STAT - waived	9	-	-	-	2.19	2.11 - 2.25						

## 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	178	3.51	0.32	9.1	3.6	3.1 - 3.9	170	7.20	0.62	8.6	7.3	6.4 - 8.0		
All Bromocresol Green Reagents	136	3.66	0.20	5.4	3.7	3.2 - 4.1	131	7.26	0.65	9.0	7.3	6.5 - 8.0		
All Bromocresol Purple Reagents	41	3.03	0.09	3.0	3.0	2.7 - 3.4	39	7.03	0.44	6.2	7.3	6.3 - 7.8		
Abaxis Piccolo														
Abaxis Piccolo - waived	15	2.97	0.10	3.3	3.0	2.6 - 3.3	13	6.49	0.05	0.8	6.5	5.8 - 7.2		
All Chemistry Instruments	17	2.96	0.09	3.1	3.0	2.6 - 3.3	15	6.49	0.05	0.7	6.5	5.8 - 7.2		
Abbott Architect Albumin (BCG)														
Abbott Architect	5	3.54	0.05	1.5	3.5	3.1 - 3.9	5	7.04	0.09	1.3	7.1	6.3 - 7.8		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	24	3.73	0.11	3.0	3.7	3.3 - 4.1	23	7.78	0.45	5.8	7.8	7.0 - 8.6		
Beckman AU														
Beckman AU systems	30	3.70	0.11	2.8	3.7	3.3 - 4.1	28	7.31	0.48	6.6	7.2	6.5 - 8.1		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	3.54	0.10	2.9	3.5	3.1 - 3.9	18	7.69	0.51	6.6	7.8	6.9 - 8.5		
Roche cobas c 501														
Roche cobas 6000 / c 501	9	3.91	0.16	4.1	3.9	3.5 - 4.4	8	7.60	0.70	9.2	7.6	6.8 - 8.4		
Roche Integra														
Roche Integra	13	3.88	0.11	2.7	3.9	3.4 - 4.3	13	7.35	0.45	6.1	7.4	6.6 - 8.1		
Siemens Healthcare														
Siemens Dimension	24	3.08	0.05	1.7	3.1	2.7 - 3.4	23	7.35	0.08	1.1	7.4	6.6 - 8.1		
VITROS														
VITROS 250,350,400 500,700,750,950	19	3.39	0.18	5.3	3.4	3.0 - 3.8	17	6.41	0.26	4.0	6.5	5.7 - 7.1		
All Chemistry Instruments	25	3.38	0.16	4.8	3.4	3.0 - 3.8	23	6.34	0.28	4.4	6.5	5.7 - 7.0		

## 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	167	1.69	0.16	9.4	1.7	1.5 - 1.9	167	5.27	0.39	7.5	5.4	4.7 - 5.8		
All Bromocresol Green Reagents	137	1.75	0.12	6.6	1.8	1.5 - 2.0	136	5.41	0.24	4.5	5.4	4.8 - 6.0		
All Bromocresol Purple Reagents	30	1.44	0.05	3.4	1.4	1.2 - 1.6	30	4.60	0.20	4.3	4.7	4.1 - 5.1		
Abaxis Piccolo														
Abaxis Piccolo - waived	5	1.50	0.01	0.0	1.5	1.3 - 1.7	5	4.28	0.18	4.2	4.2	3.8 - 4.8		
All Chemistry Instruments	6	1.50	0.01	0.0	1.5	1.3 - 1.7	6	4.27	0.16	3.8	4.2	3.8 - 4.7		
Abbott Architect Albumin (BCG)														
Abbott Architect	5	1.64	0.05	3.3	1.6	1.4 - 1.9	5	5.24	0.15	2.9	5.3	4.7 - 5.8		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	24	1.82	0.07	3.9	1.8	1.6 - 2.0	24	5.49	0.17	3.0	5.5	4.9 - 6.1		
Beckman AU														
Beckman AU systems	30	1.76	0.06	3.2	1.8	1.5 - 2.0	28	5.44	0.09	1.6	5.4	4.8 - 6.0		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	1.78	0.07	4.0	1.8	1.6 - 2.0	18	5.09	0.15	3.0	5.1	4.5 - 5.7		
Roche cobas c 501														
Roche cobas 6000 / c 501	9	1.82	0.11	6.0	1.8	1.6 - 2.1	9	5.63	0.17	2.9	5.6	5.0 - 6.2		
Roche Integra														
Roche Integra	13	1.80	0.06	3.2	1.8	1.6 - 2.0	13	5.65	0.14	2.5	5.7	5.0 - 6.3		
Siemens Healthcare														
Siemens Dimension	24	1.42	0.04	2.9	1.4	1.2 - 1.6	24	4.69	0.09	1.8	4.7	4.2 - 5.2		
VITROS														
VITROS 250,350,400 500,700,750,950	18	1.57	0.07	4.4	1.6	1.4 - 1.8	19	5.46	0.34	6.3	5.4	4.9 - 6.1		
All Chemistry Instruments	24	1.56	0.06	4.1	1.6	1.4 - 1.8	25	5.42	0.32	5.9	5.4	4.8 - 6.0		

**Albumin (g/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	167	2.66	0.23	8.8	2.7	2.3 - 3.0
All Bromocresol Green Reagents	136	2.74	0.16	5.8	2.8	2.4 - 3.1
All Bromocresol Purple Reagents	29	2.28	0.05	2.2	2.3	2.0 - 2.6
Abaxis Piccolo						
Abaxis Piccolo - waived	5	2.36	0.13	5.7	2.3	2.1 - 2.6
All Chemistry Instruments	6	2.33	0.14	5.9	2.3	2.0 - 2.6
Abbott Architect Albumin (BCG)						
Abbott Architect	5	2.64	0.05	2.1	2.6	2.3 - 3.0
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	24	2.81	0.09	3.4	2.8	2.5 - 3.1
Beckman AU						
Beckman AU systems	30	2.78	0.10	3.5	2.8	2.4 - 3.1
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	2.73	0.08	3.0	2.7	2.4 - 3.1
Roche cobas c 501						
Roche cobas 6000 / c 501	9	2.91	0.17	5.8	2.8	2.6 - 3.3
Roche Integra						
Roche Integra	13	2.91	0.08	2.6	2.9	2.6 - 3.2
Siemens Healthcare						
Siemens Dimension	24	2.28	0.05	2.3	2.3	2.0 - 2.6
VITROS						
VITROS 250,350,400 500,700,750,950	19	2.54	0.16	6.2	2.5	2.2 - 2.8
All Chemistry Instruments	24	2.49	0.11	4.4	2.5	2.2 - 2.8

## Bilirubin, Direct (mg/dL)

Reagent/Instrument	Specimen CH-1							Specimen CH-2						
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range		
All Method	104	0.78	0.28	35.5	0.8	0.2 - 1.4	103	0.17	0.13	77.4	0.1	0.0 - 0.5		
All Alfa Wassermann Reagents	11	1.17	0.21	17.9	1.1	0.7 - 1.6	11	0.40	0.04	11.2	0.4	0.3 - 0.5		
All Roche Reagents	18	0.60	0.09	15.1	0.6	0.4 - 0.8	17	0.12	0.09	75.0	0.1	0.0 - 0.3		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	11	1.17	0.21	17.9	1.1	0.7 - 1.6	11	0.40	0.04	11.2	0.4	0.3 - 0.5		
Beckman AU														
Beckman AU systems	22	0.86	0.07	8.5	0.9	0.7 - 1.1	20	0.10	0.01	0.0	0.1	0.0 - 0.2		
Siemens Healthcare														
Siemens Dimension	17	0.58	0.06	10.9	0.6	0.4 - 0.8	17	0.09	0.03	37.6	0.1	0.0 - 0.2		
All Chemistry Instruments	18	0.59	0.07	11.5	0.6	0.4 - 0.8	18	0.09	0.03	36.4	0.1	0.0 - 0.2		
VITROS-BuBc and Bc														
VITROS 250,350,400 500,700,750,950	11	0.42	0.27	64.0	0.5	0.0 - 1.0	11	0.26	0.18	68.4	0.3	0.0 - 0.7		
All Chemistry Instruments	12	0.43	0.26	60.1	0.5	0.0 - 1.0	12	0.27	0.17	64.6	0.3	0.0 - 0.7		

	Specimen CH-3							Specimen CH-4						
	Labs	Mean	SD	CV	Median	Range	Labs	Mean	SD	CV	Median	Range		
All Method	101	0.06	0.06	113.3	0.0	0.0 - 0.2	104	1.42	0.41	28.8	1.5	0.6 - 2.3		
All Alfa Wassermann Reagents	11	0.10	0.04	44.7	0.1	0.0 - 0.2	11	2.03	0.28	13.6	1.9	1.4 - 2.6		
All Roche Reagents	17	0.10	0.10	100.0	0.1	0.0 - 0.3	18	1.08	0.18	17.0	1.0	0.7 - 1.5		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	11	0.10	0.04	44.7	0.1	0.0 - 0.2	11	2.03	0.28	13.6	1.9	1.4 - 2.6		
Beckman AU														
Beckman AU systems	19	0.00	0.01	0.0	0.0	0.0 - 0.1	22	1.50	0.11	7.5	1.5	1.2 - 1.8		
Siemens Healthcare														
Siemens Dimension	17	0.06	0.05	88.8	0.1	0.0 - 0.2	17	1.03	0.09	8.9	1.0	0.8 - 1.3		
All Chemistry Instruments	18	0.06	0.05	84.4	0.1	0.0 - 0.2	18	1.03	0.09	8.8	1.0	0.8 - 1.3		
VITROS-BuBc and Bc														
VITROS 250,350,400 500,700,750,950	10	0.06	0.05	86.1	0.1	0.0 - 0.2	11	1.25	0.47	37.8	1.5	0.3 - 2.3		
All Chemistry Instruments	11	0.05	0.05	95.7	0.1	0.0 - 0.2	12	1.26	0.45	35.9	1.4	0.3 - 2.2		

**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	104	0.39	0.18	47.0	0.4	0.0 - 0.8
All Alfa Wassermann Reagents	11	0.63	0.14	22.6	0.6	0.3 - 1.0
All Roche Reagents	18	0.27	0.05	16.9	0.3	0.1 - 0.4
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	11	0.63	0.14	22.6	0.6	0.3 - 1.0
Beckman AU						
Beckman AU systems	22	0.45	0.07	14.9	0.5	0.3 - 0.6
Siemens Healthcare						
Siemens Dimension	17	0.29	0.04	14.6	0.3	0.2 - 0.4
All Chemistry Instruments	18	0.30	0.05	16.2	0.3	0.2 - 0.4
VITROS-BuBc and Bc						
VITROS 250,350,400 500,700,750,950	11	0.15	0.16	105.8	0.1	0.0 - 0.5
All Chemistry Instruments	12	0.16	0.16	98.8	0.2	0.0 - 0.5

### Bilirubin, 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	174	2.74	0.28	10.1	2.7	2.1 - 3.3	174	0.48	0.13	26.8	0.5	0.0 - 0.9		
All Alfa Wassermann Reagents	25	3.20	0.20	6.1	3.2	2.5 - 3.9	25	0.69	0.05	7.6	0.7	0.2 - 1.1		
All Horiba Pentra Reagents	18	2.64	0.31	11.8	2.7	2.1 - 3.2	18	0.41	0.05	11.5	0.4	0.0 - 0.9		
All Roche T. bili Special Reagents	20	2.52	0.19	7.4	2.5	2.0 - 3.1	20	0.34	0.06	17.6	0.3	0.0 - 0.8		
Abaxis Piccolo														
Abaxis Piccolo - waived	15	2.59	0.14	5.5	2.6	2.0 - 3.2	14	0.50	0.10	20.8	0.5	0.1 - 0.9		
All Chemistry Instruments	17	2.62	0.16	5.9	2.6	2.0 - 3.2	15	0.53	0.06	11.6	0.5	0.1 - 1.0		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	25	3.20	0.20	6.1	3.2	2.5 - 3.9	25	0.69	0.05	7.6	0.7	0.2 - 1.1		
Beckman AU														
Beckman AU systems	29	2.61	0.17	6.5	2.7	2.0 - 3.2	29	0.49	0.04	7.5	0.5	0.0 - 0.9		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	2.64	0.31	11.8	2.7	2.1 - 3.2	18	0.41	0.05	11.5	0.4	0.0 - 0.9		
Siemens Healthcare														
Siemens Dimension	23	2.75	0.21	7.7	2.7	2.2 - 3.4	23	0.37	0.06	15.1	0.4	0.0 - 0.8		
VITROS - TBIL														
VITROS 250,350,400 500,700,750,950	19	2.81	0.23	8.1	2.9	2.2 - 3.4	19	0.61	0.10	17.2	0.6	0.2 - 1.1		
All Chemistry Instruments	24	2.79	0.21	7.4	2.8	2.2 - 3.4	23	0.58	0.08	13.3	0.6	0.1 - 1.0		

## 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	159	0.11	0.06	55.3	0.1	0.0 - 0.6	163	5.41	0.54	10.1	5.3	4.3 - 6.5		
All Alfa Wassermann Reagents	24	0.17	0.05	28.9	0.2	0.0 - 0.6	25	6.25	0.42	6.8	6.1	5.0 - 7.6		
All Horiba Pentra Reagents	18	0.09	0.05	62.0	0.1	0.0 - 0.5	17	5.29	0.36	6.7	5.2	4.2 - 6.4		
All Roche T. bili Special Reagents	19	0.14	0.07	48.7	0.2	0.0 - 0.6	20	4.92	0.34	7.0	5.0	3.9 - 5.9		
Abaxis Piccolo														
Abaxis Piccolo - waived	5	-	-	-	0.3	0.0 - 0.6	5	-	-	-	5.3	4.3 - 6.5		
All Chemistry Instruments	6	-	-	-	0.3	0.1 - 0.9	6	-	-	-	5.3	4.2 - 6.4		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	24	0.17	0.05	28.9	0.2	0.0 - 0.6	25	6.25	0.42	6.8	6.1	5.0 - 7.6		
Beckman AU														
Beckman AU systems	27	0.10	0.01	0.0	0.1	0.0 - 0.5	29	4.99	0.30	5.9	5.0	3.9 - 6.0		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	0.09	0.05	62.0	0.1	0.0 - 0.5	17	5.29	0.36	6.7	5.2	4.2 - 6.4		
Siemens Healthcare														
Siemens Dimension	23	0.09	0.05	52.6	0.1	0.0 - 0.5	23	5.45	0.36	6.6	5.5	4.3 - 6.6		
VITROS - TBIL														
VITROS 250,350,400 500,700,750,950	16	0.10	0.01	0.0	0.1	0.0 - 0.5	19	5.64	0.39	6.8	5.6	4.5 - 6.8		
All Chemistry Instruments	22	0.09	0.04	40.7	0.1	0.0 - 0.5	24	5.65	0.35	6.2	5.7	4.5 - 6.8		

## 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	163	1.30	0.19	14.7	1.3	0.9 - 1.8
All Alfa Wassermann Reagents	25	1.55	0.13	8.5	1.6	1.1 - 2.0
All Horiba Pentra Reagents	18	1.28	0.18	14.2	1.3	0.8 - 1.7
All Roche T. bili Special Reagents	20	1.14	0.16	14.4	1.2	0.7 - 1.6
Abaxis Piccolo						
Abaxis Piccolo - waived	5	-	-	-	1.4	0.9 - 1.8
All Chemistry Instruments	6	-	-	-	1.4	1.1 - 1.9
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	25	1.55	0.13	8.5	1.6	1.1 - 2.0
Beckman AU						
Beckman AU systems	29	1.29	0.14	10.7	1.3	0.8 - 1.7
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	1.28	0.18	14.2	1.3	0.8 - 1.7
Siemens Healthcare						
Siemens Dimension	23	1.29	0.15	11.4	1.3	0.8 - 1.7
VITROS - TBIL						
VITROS 250,350,400 500,700,750,950	19	1.23	0.15	12.4	1.3	0.8 - 1.7
All Chemistry Instruments	24	1.21	0.15	12.0	1.2	0.8 - 1.7

## Calcium (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	179	10.07	0.28	2.8	10.1	9.0 - 11.1	178	6.89	0.35	5.1	6.9	5.8 - 7.9
All Arsenazo Methods	84	10.07	0.28	2.8	10.1	9.0 - 11.1	83	7.03	0.28	3.9	7.0	6.0 - 8.1
All CPC Methods	94	10.07	0.28	2.8	10.1	9.0 - 11.1	93	6.74	0.35	5.2	6.8	5.7 - 7.8
Abaxis Piccolo												
Abaxis Piccolo - waived	15	10.12	0.17	1.7	10.1	9.1 - 11.2	15	7.07	0.35	5.0	7.2	6.0 - 8.1
All Chemistry Instruments	17	10.11	0.19	1.8	10.1	9.1 - 11.2	17	7.04	0.35	4.9	7.1	6.0 - 8.1
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	25	10.04	0.34	3.4	9.9	9.0 - 11.1	25	7.19	0.25	3.5	7.2	6.1 - 8.2
Beckman AU												
Beckman AU systems	31	10.06	0.17	1.7	10.0	9.0 - 11.1	30	7.03	0.15	2.2	7.0	6.0 - 8.1
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	15	10.27	0.27	2.6	10.3	9.2 - 11.3	15	6.83	0.12	1.8	6.9	5.8 - 7.9
Roche Integra												
Roche Integra	13	10.22	0.20	2.0	10.2	9.2 - 11.3	13	6.77	0.39	5.7	6.7	5.7 - 7.8
Siemens Healthcare												
Siemens Dimension	22	9.76	0.23	2.3	9.8	8.7 - 10.8	23	6.28	0.24	3.9	6.3	5.2 - 7.3
All Chemistry Instruments	23	9.77	0.23	2.3	9.8	8.7 - 10.8	24	6.29	0.24	3.8	6.3	5.2 - 7.3
VITROS												
VITROS 250,350,400 500,700,750,950	19	10.17	0.18	1.7	10.1	9.1 - 11.2	19	6.89	0.16	2.3	6.9	5.8 - 7.9
All Chemistry Instruments	25	10.16	0.16	1.6	10.1	9.1 - 11.2	25	6.90	0.15	2.1	6.9	5.8 - 7.9

## 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	166	7.17	0.26	3.7	7.2	6.1 - 8.2	166	12.95	0.38	2.9	13.0	11.9 - 14.0
All Arsenazo Methods	72	7.20	0.33	4.6	7.2	6.1 - 8.2	72	12.86	0.39	3.0	12.9	11.8 - 13.9
All CPC Methods	94	7.13	0.20	2.8	7.1	6.1 - 8.2	93	13.02	0.36	2.7	13.1	12.0 - 14.1
Abaxis Piccolo												
Abaxis Piccolo - waived	5	-	-	-	7.4	6.1 - 8.2	5	-	-	-	12.4	11.8 - 13.9
All Chemistry Instruments	6	-	-	-	7.4	6.3 - 8.3	6	-	-	-	12.3	11.2 - 13.3
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	25	7.42	0.21	2.8	7.4	6.4 - 8.5	24	12.77	0.34	2.7	12.8	11.7 - 13.8
Beckman AU												
Beckman AU systems	31	7.03	0.13	1.8	7.0	6.0 - 8.1	30	13.11	0.28	2.1	13.1	12.1 - 14.2
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	15	7.17	0.19	2.7	7.2	6.1 - 8.2	15	13.27	0.35	2.6	13.3	12.2 - 14.3
Roche Integra												
Roche Integra	13	7.19	0.13	1.8	7.2	6.1 - 8.2	13	13.05	0.23	1.7	13.0	12.0 - 14.1
Siemens Healthcare												
Siemens Dimension	23	7.13	0.27	3.8	7.1	6.1 - 8.2	23	12.67	0.31	2.4	12.7	11.6 - 13.7
All Chemistry Instruments	24	7.14	0.27	3.7	7.2	6.1 - 8.2	24	12.66	0.30	2.4	12.7	11.6 - 13.7
VITROS												
VITROS 250,350,400 500,700,750,950	19	7.11	0.20	2.8	7.1	6.1 - 8.2	19	13.12	0.24	1.8	13.1	12.1 - 14.2
All Chemistry Instruments	25	7.10	0.18	2.5	7.1	6.1 - 8.2	25	13.10	0.22	1.7	13.1	12.1 - 14.2

## 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	165	8.67	0.29	3.3	8.7	7.6 - 9.7
All Arsenazo Methods	72	8.73	0.36	4.1	8.7	7.7 - 9.8
All CPC Methods	93	8.65	0.22	2.5	8.6	7.6 - 9.7
Abaxis Piccolo						
Abaxis Piccolo - waived	5	-	-	-	9.1	7.7 - 9.8
All Chemistry Instruments	6	-	-	-	9.1	7.9 - 10.0
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	24	8.89	0.29	3.3	8.8	7.8 - 9.9
Beckman AU						
Beckman AU systems	31	8.58	0.16	1.8	8.6	7.5 - 9.6
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	15	8.82	0.26	2.9	8.8	7.8 - 9.9
Roche Integra						
Roche Integra	13	8.72	0.17	1.9	8.7	7.7 - 9.8
Siemens Healthcare						
Siemens Dimension	23	8.51	0.27	3.1	8.5	7.5 - 9.6
All Chemistry Instruments	24	8.52	0.26	3.1	8.5	7.5 - 9.6
VITROS						
VITROS 250,350,400 500,700,750,950	19	8.77	0.20	2.3	8.7	7.7 - 9.8
All Chemistry Instruments	25	8.73	0.20	2.3	8.7	7.7 - 9.8

## 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	177	2.79	0.14	4.9	2.8	2.3 - 3.3	179	5.81	0.56	9.7	5.6	4.9 - 6.7		
All Alfa Wassermann Reagents	26	2.76	0.10	3.6	2.8	2.3 - 3.2	26	5.42	0.20	3.8	5.4	4.6 - 6.3		
All Roche Reagents	23	2.72	0.11	4.1	2.7	2.3 - 3.2	24	5.57	0.29	5.1	5.5	4.7 - 6.5		
All VITROS Reagents	25	2.96	0.09	2.9	2.9	2.5 - 3.4	25	7.00	0.15	2.2	7.0	5.9 - 8.1		
Abaxis Piccolo														
Abaxis Piccolo - waived	15	2.89	0.14	4.9	2.9	2.4 - 3.4	15	6.02	0.15	2.5	6.1	5.1 - 7.0		
All Chemistry Instruments	17	2.87	0.15	5.2	2.9	2.4 - 3.4	17	5.99	0.17	2.8	6.1	5.0 - 6.9		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	26	2.76	0.10	3.6	2.8	2.3 - 3.2	26	5.42	0.20	3.8	5.4	4.6 - 6.3		
Beckman AU														
Beckman AU systems	32	2.75	0.09	3.2	2.8	2.3 - 3.2	30	5.52	0.10	1.7	5.5	4.6 - 6.4		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	17	2.62	0.12	4.7	2.6	2.2 - 3.1	17	5.33	0.24	4.4	5.3	4.5 - 6.2		
Roche Integra														
Roche Integra	13	2.71	0.05	1.8	2.7	2.3 - 3.2	13	5.48	0.12	2.2	5.5	4.6 - 6.4		
Siemens Healthcare														
Siemens Dimension	23	2.84	0.06	2.1	2.8	2.4 - 3.3	23	5.90	0.11	1.9	5.9	5.0 - 6.8		
All Chemistry Instruments	24	2.85	0.06	2.1	2.9	2.4 - 3.3	24	5.90	0.11	1.9	5.9	5.0 - 6.8		
VITROS - CREA														
VITROS 250,350,400 500,700,750,950	14	2.96	0.06	2.2	3.0	2.5 - 3.5	14	7.01	0.12	1.7	7.0	5.9 - 8.1		
All Chemistry Instruments	19	2.95	0.08	2.9	2.9	2.5 - 3.4	19	6.97	0.17	2.4	7.0	5.9 - 8.1		

## 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	168	0.58	0.10	16.7	0.6	0.2 - 0.9	168	4.84	0.38	7.8	4.8	4.1 - 5.6
All Alfa Wassermann Reagents	26	0.73	0.07	9.3	0.7	0.4 - 1.1	26	4.55	0.18	4.0	4.6	3.8 - 5.3
All Roche Reagents	24	0.56	0.08	13.7	0.6	0.2 - 0.9	24	4.58	0.30	6.5	4.5	3.8 - 5.3
All VITROS Reagents	25	0.56	0.06	10.1	0.6	0.2 - 0.9	25	5.39	0.16	3.0	5.4	4.5 - 6.2
Abaxis Piccolo												
Abaxis Piccolo - waived	5	-	-	-	0.6	0.2 - 0.9	5	-	-	-	5.0	4.1 - 5.6
All Chemistry Instruments	6	-	-	-	0.6	0.3 - 0.9	6	-	-	-	5.0	4.2 - 5.8
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	26	0.73	0.07	9.3	0.7	0.4 - 1.1	26	4.55	0.18	4.0	4.6	3.8 - 5.3
Beckman AU												
Beckman AU systems	30	0.52	0.04	7.8	0.5	0.2 - 0.9	32	4.76	0.19	3.9	4.8	4.0 - 5.5
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	0.51	0.08	15.3	0.5	0.2 - 0.9	17	4.58	0.20	4.4	4.6	3.8 - 5.3
Roche Integra												
Roche Integra	13	0.58	0.04	7.6	0.6	0.2 - 0.9	13	4.48	0.11	2.4	4.5	3.8 - 5.2
Siemens Healthcare												
Siemens Dimension	23	0.53	0.05	8.9	0.5	0.2 - 0.9	23	5.13	0.13	2.6	5.1	4.3 - 5.9
All Chemistry Instruments	24	0.53	0.05	10.1	0.5	0.2 - 0.9	24	5.14	0.13	2.6	5.2	4.3 - 6.0
VITROS - CREA												
VITROS 250,350,400 500,700,750,950	14	0.56	0.06	11.2	0.6	0.2 - 0.9	14	5.40	0.10	1.8	5.4	4.5 - 6.3
All Chemistry Instruments	19	0.57	0.06	10.2	0.6	0.2 - 0.9	19	5.37	0.16	3.0	5.4	4.5 - 6.2

## 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	165	1.73	0.09	5.1	1.7	1.4 - 2.1
All Alfa Wassermann Reagents	26	1.81	0.07	4.1	1.8	1.5 - 2.2
All Roche Reagents	24	1.71	0.10	6.0	1.7	1.4 - 2.1
All VITROS Reagents	25	1.78	0.06	3.4	1.8	1.4 - 2.1
Abaxis Piccolo						
Abaxis Piccolo - waived	5	-	-	-	1.8	1.4 - 2.1
All Chemistry Instruments	6	-	-	-	1.8	1.4 - 2.1
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	26	1.81	0.07	4.1	1.8	1.5 - 2.2
Beckman AU						
Beckman AU systems	32	1.68	0.06	3.3	1.7	1.3 - 2.0
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	17	1.63	0.12	7.1	1.7	1.3 - 2.0
Roche Integra						
Roche Integra	13	1.72	0.10	5.8	1.7	1.4 - 2.1
Siemens Healthcare						
Siemens Dimension	23	1.73	0.06	3.2	1.7	1.4 - 2.1
All Chemistry Instruments	24	1.73	0.06	3.2	1.7	1.4 - 2.1
VITROS - CREA						
VITROS 250,350,400 500,700,750,950	14	1.78	0.06	3.3	1.8	1.4 - 2.1
All Chemistry Instruments	19	1.76	0.06	3.4	1.8	1.4 - 2.1

## 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	187	143.3	5.5	3.8	143	128 - 158	187	49.3	4.8	9.8	50	43 - 56		
All Alfa Wassermann Reagents	27	150.0	4.7	3.1	151	135 - 165	27	55.7	1.6	2.9	56	49 - 62		
All Horiba Pentra Reagents	17	139.5	4.3	3.1	139	125 - 154	17	45.2	2.7	5.9	45	39 - 52		
All Roche Reagents	24	143.9	3.8	2.6	145	129 - 159	24	46.4	1.1	2.3	46	40 - 53		
Abaxis Piccolo														
Abaxis Piccolo - waived	15	140.9	2.2	1.5	141	126 - 155	15	50.3	1.4	2.9	50	44 - 57		
All Chemistry Instruments	17	140.7	2.1	1.5	141	126 - 155	17	50.8	1.9	3.7	51	44 - 57		
Abbott Architect														
Abbott Architect	5	136.8	1.6	1.2	136	123 - 151	5	44.0	1.0	2.3	44	38 - 50		
Alere Cholestech LDX														
Alere Cholestech LDX - waived	6	135.3	6.4	4.8	134	121 - 149	6	51.8	0.8	1.5	52	45 - 58		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	27	150.0	4.7	3.1	151	135 - 165	27	55.7	1.6	2.9	56	49 - 62		
Beckman AU														
Beckman AU systems	31	144.8	5.3	3.7	145	130 - 160	30	42.5	1.4	3.4	42	36 - 49		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	17	139.5	4.3	3.1	139	125 - 154	17	45.2	2.7	5.9	45	39 - 52		
Roche cobas c 501														
Roche cobas 6000 / c 501	9	140.6	2.8	2.0	140	126 - 155	9	45.8	1.1	2.4	46	39 - 52		
Roche Integra														
Roche Integra	13	146.0	2.5	1.7	145	131 - 161	13	46.8	0.8	1.8	47	40 - 53		
Siemens Healthcare														
Siemens Dimension	22	144.4	1.9	1.3	144	129 - 159	23	53.8	1.6	3.1	53	47 - 60		
All Chemistry Instruments	24	144.5	2.6	1.8	144	130 - 159	24	53.7	1.7	3.2	53	47 - 60		
VITROS														
VITROS 250,350,400 500,700,750,950	19	138.9	2.3	1.7	139	125 - 153	19	50.6	1.6	3.2	51	44 - 57		
All Chemistry Instruments	25	139.2	2.4	1.7	139	125 - 154	25	50.7	1.5	2.9	51	44 - 57		

## 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	170	46.4	3.4	7.3	47	40 - 53	170	242.0	7.8	3.2	242	217 - 267
All Alfa Wassermann Reagents	26	51.0	0.9	1.8	51	45 - 57	27	248.4	6.4	2.6	250	223 - 274
All Horiba Pentra Reagents	17	44.6	2.4	5.5	45	38 - 51	17	234.4	8.6	3.7	237	210 - 258
All Roche Reagents	24	46.2	1.2	2.7	46	40 - 53	24	240.5	5.3	2.2	240	216 - 265
Abaxis Piccolo												
Abaxis Piccolo - waived	5	51.2	1.9	3.8	52	45 - 58	5	234.6	3.1	1.3	236	211 - 259
All Chemistry Instruments	6	51.0	1.8	3.5	52	45 - 57	6	234.0	3.2	1.4	235	210 - 258
Abbott Architect												
Abbott Architect	5	43.4	0.5	1.3	43	37 - 50	5	232.6	4.2	1.8	231	209 - 256
Alere Cholestech LDX												
Alere Cholestech LDX - waived	1	-	-	-	50	40 - 53	1	-	-	-	229	217 - 267
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	26	51.0	0.9	1.8	51	45 - 57	27	248.4	6.4	2.6	250	223 - 274
Beckman AU												
Beckman AU systems	31	46.9	1.7	3.7	47	40 - 53	31	242.3	8.0	3.3	240	218 - 267
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	44.6	2.4	5.5	45	38 - 51	17	234.4	8.6	3.7	237	210 - 258
Roche cobas c 501												
Roche cobas 6000 / c 501	9	45.2	1.1	2.4	45	39 - 52	9	237.3	5.6	2.4	239	213 - 262
Roche Integra												
Roche Integra	13	46.8	0.9	1.9	47	40 - 53	13	242.2	4.2	1.7	242	218 - 267
Siemens Healthcare												
Siemens Dimension	23	46.7	1.0	2.2	47	40 - 53	23	241.7	4.1	1.7	241	217 - 266
All Chemistry Instruments												
All Chemistry Instruments	24	46.6	1.2	2.7	47	40 - 53	24	241.3	4.4	1.8	241	217 - 266
VITROS												
VITROS 250,350,400 500,700,750,950	19	40.9	1.6	3.9	41	34 - 47	19	245.3	4.6	1.9	245	220 - 270
All Chemistry Instruments												
All Chemistry Instruments	25	41.0	1.5	3.6	41	34 - 47	25	245.8	4.6	1.9	246	221 - 271

## 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	168	96.2	4.3	4.4	96	86 - 106
All Alfa Wassermann Reagents	27	102.4	2.7	2.6	102	92 - 113
All Horiba Pentra Reagents	17	93.2	3.9	4.2	95	83 - 103
All Roche Reagents	23	95.8	2.4	2.5	96	86 - 106
Abaxis Piccolo						
Abaxis Piccolo - waived	5	96.0	2.3	2.4	95	86 - 106
All Chemistry Instruments	6	95.8	2.1	2.2	95	86 - 106
Abbott Architect						
Abbott Architect	5	91.2	0.8	0.9	91	82 - 101
Alere Cholestech LDX						
Alere Cholestech LDX - waived	1	-	-	-	87	86 - 106
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	27	102.4	2.7	2.6	102	92 - 113
Beckman AU						
Beckman AU systems	31	96.7	3.1	3.2	96	87 - 107
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	17	93.2	3.9	4.2	95	83 - 103
Roche cobas c 501						
Roche cobas 6000 / c 501	9	93.7	1.8	1.9	93	84 - 104
Roche Integra						
Roche Integra	12	97.3	1.4	1.5	97	87 - 108
Siemens Healthcare						
Siemens Dimension	22	96.2	2.0	2.0	96	86 - 106
All Chemistry Instruments	23	96.0	2.2	2.3	96	86 - 106
VITROS						
VITROS 250,350,400 500,700,750,950	19	92.3	2.2	2.3	92	83 - 102
All Chemistry Instruments	25	92.4	2.2	2.3	92	83 - 102

## 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	71	120.7	9.0	7.4	120	96 - 145	70	185.5	16.3	8.8	182	148 - 223		
All Alfa Wassermann Reagents	5	110.6	0.9	0.8	110	88 - 133	5	169.0	4.4	2.6	168	135 - 203		
All Roche Reagents	10	120.5	4.2	3.5	121	96 - 145	10	179.5	4.3	2.4	180	143 - 216		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	5	110.6	0.9	0.8	110	88 - 133	5	169.0	4.4	2.6	168	135 - 203		
Beckman AU														
Beckman AU systems	19	129.2	3.8	3.0	130	103 - 155	19	191.3	6.1	3.2	192	153 - 230		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	7	109.9	4.7	4.3	109	87 - 132	7	174.4	6.4	3.7	174	139 - 210		
Roche cobas c 501														
Roche cobas 6000 / c 501	6	122.5	2.7	2.2	123	98 - 147	6	180.3	3.8	2.1	181	144 - 217		
Siemens Healthcare														
Siemens Dimension	14	115.4	2.4	2.1	115	92 - 139	14	174.8	1.7	1.0	175	139 - 210		
VITROS														
All Chemistry Instruments	8	132.1	4.4	3.3	132	105 - 159	8	228.6	6.4	2.8	226	182 - 275		
Specimen CH-3							Specimen CH-4							
All Method	70	31.0	3.2	10.5	31	24 - 38	71	213.9	18.7	8.7	209	171 - 257		
All Alfa Wassermann Reagents	5	29.0	2.0	6.9	30	23 - 35	5	191.2	2.8	1.5	190	152 - 230		
All Roche Reagents	10	33.6	4.7	14.1	35	26 - 41	10	211.3	5.4	2.6	212	169 - 254		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	5	29.0	2.0	6.9	30	23 - 35	5	191.2	2.8	1.5	190	152 - 230		
Beckman AU														
Beckman AU systems	19	32.5	3.1	9.5	33	26 - 40	19	230.4	5.0	2.2	232	184 - 277		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	7	29.0	3.4	11.8	29	23 - 35	7	193.6	6.8	3.5	191	154 - 233		
Roche cobas c 501														
Roche cobas 6000 / c 501	6	35.3	4.8	13.7	35	28 - 43	6	211.7	5.7	2.7	211	169 - 255		
Siemens Healthcare														
Siemens Dimension	14	31.1	1.0	3.2	31	24 - 38	14	199.6	2.7	1.4	200	159 - 240		
VITROS														
All Chemistry Instruments	8	27.8	3.8	13.6	28	22 - 34	8	244.9	8.9	3.6	243	195 - 294		

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

	<b>Specimen CH-5</b>					
All Method	71	76.8	4.9	6.4	77	61 - 93
All Alfa Wassermann Reagents	5	71.8	2.5	3.5	72	57 - 87
All Roche Reagents	10	78.2	3.2	4.1	79	62 - 94
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	5	71.8	2.5	3.5	72	57 - 87
Beckman AU						
Beckman AU systems	18	81.8	2.4	2.9	82	65 - 99
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	7	69.7	3.7	5.3	69	55 - 84
Roche cobas c 501						
Roche cobas 6000 / c 501	6	80.2	1.8	2.3	79	64 - 97
Siemens Healthcare						
Siemens Dimension	14	74.0	1.7	2.2	74	59 - 89
VITROS						
All Chemistry Instruments	8	80.6	3.0	3.7	81	64 - 97

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

<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	7	3.50	0.26	7.5	3.5	2.7 - 4.3	7	0.22	0.08	34.7	0.2	0.0 - 0.5		
Siemens Healthcare														
Siemens Dimension	5	3.53	0.33	9.4	3.6	2.5 - 4.6	5	0.23	0.10	42.6	0.3	0.0 - 0.6		
<b>Specimen CH-3</b>							<b>Specimen CH-4</b>							
All Method	7	0.32	0.04	12.9	0.3	0.1 - 0.5	7	6.80	0.15	2.3	6.8	6.3 - 7.3		
Siemens Healthcare														
Siemens Dimension	5	0.33	0.05	15.4	0.3	0.1 - 0.5	5	6.80	0.18	2.7	6.8	6.2 - 7.4		
<b>Specimen CH-5</b>														
All Method	7	1.93	0.10	5.3	1.9	1.6 - 2.3								
Siemens Healthcare														
Siemens Dimension	5	1.90	0.08	4.3	1.9	1.6 - 2.2								
<b>Magnesium (mg/dL)</b>														
<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	92	2.98	0.16	5.4	3.0	2.2 - 3.8	91	1.39	0.10	7.5	1.4	1.0 - 1.8		
All Horiba Pentra Reagents	15	2.83	0.14	4.9	2.8	2.1 - 3.6	14	1.39	0.14	10.1	1.4	1.0 - 1.8		
All Roche Reagents	18	2.92	0.10	3.4	2.9	2.1 - 3.7	18	1.42	0.09	6.1	1.4	1.0 - 1.8		
Beckman AU														
Beckman AU systems	17	2.98	0.07	2.2	3.0	2.2 - 3.8	16	1.41	0.04	3.1	1.4	1.0 - 1.8		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	15	2.83	0.14	4.9	2.8	2.1 - 3.6	14	1.39	0.14	10.1	1.4	1.0 - 1.8		
Roche Integra														
Roche Integra	10	2.90	0.11	3.6	2.9	2.1 - 3.7	10	1.41	0.10	7.1	1.4	1.0 - 1.8		
Siemens Healthcare														
Siemens Dimension	14	3.04	0.06	2.1	3.0	2.2 - 3.8	14	1.42	0.04	3.0	1.4	1.0 - 1.8		
VITROS														
All Chemistry Instruments	13	3.26	0.16	4.8	3.3	2.4 - 4.1	13	1.32	0.10	7.5	1.3	0.9 - 1.7		

## Magnesium (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	92	1.36	0.10	7.4	1.4	1.0 - 1.8	93	4.56	0.28	6.0	4.6	3.4 - 5.8		
All Horiba Pentra Reagents	15	1.29	0.11	8.2	1.3	0.9 - 1.7	15	4.27	0.23	5.4	4.2	3.2 - 5.4		
All Roche Reagents	18	1.33	0.06	4.5	1.3	0.9 - 1.7	18	4.47	0.14	3.0	4.5	3.3 - 5.6		
Beckman AU														
Beckman AU systems	17	1.35	0.05	3.8	1.3	1.0 - 1.7	17	4.55	0.09	2.1	4.5	3.4 - 5.7		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	15	1.29	0.11	8.2	1.3	0.9 - 1.7	15	4.27	0.23	5.4	4.2	3.2 - 5.4		
Roche Integra														
Roche Integra	10	1.32	0.06	4.8	1.3	0.9 - 1.7	10	4.42	0.14	3.2	4.4	3.3 - 5.6		
Siemens Healthcare														
Siemens Dimension	14	1.39	0.07	4.8	1.4	1.0 - 1.8	14	4.76	0.10	2.1	4.7	3.5 - 6.0		
VITROS														
All Chemistry Instruments	13	1.48	0.10	6.9	1.5	1.1 - 1.9	13	4.97	0.18	3.7	5.0	3.7 - 6.3		
<b>Specimen CH-5</b>														
All Method	93	2.20	0.14	6.3	2.2	1.6 - 2.8								
All Horiba Pentra Reagents	15	2.09	0.12	6.0	2.1	1.5 - 2.7								
All Roche Reagents	18	2.16	0.09	4.0	2.2	1.6 - 2.7								
Beckman AU														
Beckman AU systems	17	2.19	0.04	2.0	2.2	1.6 - 2.8								
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	15	2.09	0.12	6.0	2.1	1.5 - 2.7								
Roche Integra														
Roche Integra	10	2.15	0.08	4.0	2.2	1.6 - 2.7								
Siemens Healthcare														
Siemens Dimension	14	2.26	0.09	4.2	2.3	1.6 - 2.9								
VITROS														
All Chemistry Instruments	13	2.40	0.14	5.6	2.4	1.8 - 3.0								

## Phosphorus (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	71	3.89	0.15	3.9	3.9	3.5 - 4.3	70	1.97	0.25	12.4	1.9	1.6 - 2.3		
All Roche Reagents	14	3.81	0.10	2.7	3.8	3.4 - 4.2	14	1.77	0.13	7.2	1.7	1.4 - 2.1		
Beckman AU														
Beckman AU systems	16	3.89	0.10	2.6	3.9	3.5 - 4.3	15	1.85	0.12	6.4	1.8	1.5 - 2.2		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	8	4.14	0.07	1.8	4.2	3.7 - 4.6	8	2.16	0.24	11.3	2.2	1.8 - 2.5		
Roche cobas c 501														
Roche cobas 6000 / c 501	5	3.82	0.11	2.9	3.9	3.4 - 4.3	5	1.80	0.14	7.9	1.7	1.5 - 2.1		
Roche Integra														
Roche Integra	8	3.81	0.11	3.0	3.8	3.4 - 4.2	8	1.75	0.13	7.5	1.7	1.4 - 2.1		
Siemens Healthcare														
Siemens Dimension	11	3.91	0.08	2.1	3.9	3.5 - 4.4	11	2.00	0.14	7.1	2.0	1.7 - 2.3		
VITROS														
VITROS 250,350,400 500,700,750,950	6	3.92	0.12	3.0	3.9	3.5 - 4.4	6	2.30	0.15	6.7	2.3	2.0 - 2.6		
All Chemistry Instruments	10	3.91	0.10	2.5	3.9	3.5 - 4.4	10	2.35	0.14	5.8	2.4	2.0 - 2.7		

	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	71	1.75	0.12	7.0	1.7	1.4 - 2.1	69	6.03	0.28	4.7	6.0	5.4 - 6.7		
All Roche Reagents	14	1.71	0.09	5.0	1.7	1.4 - 2.1	14	5.93	0.13	2.2	5.9	5.3 - 6.6		
Beckman AU														
Beckman AU systems	15	1.67	0.07	4.2	1.7	1.3 - 2.0	15	6.11	0.21	3.4	6.1	5.4 - 6.8		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	8	1.83	0.07	3.9	1.8	1.5 - 2.2	8	6.23	0.68	11.0	6.5	5.6 - 6.9		
Roche cobas c 501														
Roche cobas 6000 / c 501	5	1.70	0.10	5.9	1.7	1.4 - 2.0	5	6.00	0.10	1.7	6.0	5.4 - 6.6		
Roche Integra														
Roche Integra	8	1.74	0.07	4.3	1.8	1.4 - 2.1	8	5.89	0.15	2.5	5.9	5.2 - 6.5		
Siemens Healthcare														
Siemens Dimension	11	1.68	0.10	5.8	1.7	1.3 - 2.0	11	6.07	0.14	2.3	6.0	5.4 - 6.7		
VITROS														
VITROS 250,350,400 500,700,750,950	6	1.88	0.17	9.1	1.9	1.5 - 2.2	6	6.17	0.15	2.4	6.2	5.5 - 6.8		
All Chemistry Instruments	10	1.90	0.13	7.0	1.9	1.6 - 2.2	10	6.10	0.19	3.1	6.2	5.4 - 6.8		

## 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	71	2.85	0.14	4.9	2.8	2.5 - 3.2
All Roche Reagents	14	2.78	0.10	3.5	2.8	2.4 - 3.1
Beckman AU						
Beckman AU systems	16	2.84	0.14	4.8	2.8	2.5 - 3.2
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	8	3.03	0.07	2.3	3.0	2.7 - 3.4
Roche cobas c 501						
Roche cobas 6000 / c 501	5	2.78	0.13	4.7	2.8	2.4 - 3.1
Roche Integra						
Roche Integra	8	2.79	0.08	3.0	2.8	2.4 - 3.1
Siemens Healthcare						
Siemens Dimension	11	2.81	0.07	2.5	2.8	2.5 - 3.2
VITROS						
VITROS 250,350,400 500,700,750,950	6	3.00	0.13	4.2	3.0	2.7 - 3.3
All Chemistry Instruments	10	2.99	0.10	3.3	3.0	2.6 - 3.3

## 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	173	6.04	0.20	3.2	6.0	5.4 - 6.7	168	11.83	0.47	4.0	11.8	10.6 - 13.1
All Alfa Wassermann Reagents	25	6.14	0.16	2.7	6.1	5.5 - 6.8	23	11.81	0.31	2.6	11.8	10.6 - 13.0
All Horiba Pentra Reagents	17	6.09	0.16	2.7	6.0	5.4 - 6.7	17	11.70	0.34	2.9	11.7	10.5 - 12.9
All Roche Reagents	23	5.97	0.16	2.8	6.0	5.3 - 6.6	24	11.36	0.40	3.5	11.3	10.2 - 12.5
Abaxis Piccolo												
Abaxis Piccolo - waived	15	6.02	0.07	1.1	6.0	5.4 - 6.7	15	12.03	0.26	2.1	12.0	10.8 - 13.3
All Chemistry Instruments	17	6.01	0.07	1.2	6.0	5.4 - 6.7	17	12.03	0.24	2.0	12.0	10.8 - 13.3
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	25	6.14	0.16	2.7	6.1	5.5 - 6.8	23	11.81	0.31	2.6	11.8	10.6 - 13.0
Beckman AU												
Beckman AU systems	30	5.97	0.11	1.9	6.0	5.3 - 6.6	28	11.64	0.23	2.0	11.7	10.4 - 12.9
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	6.09	0.16	2.7	6.0	5.4 - 6.7	17	11.70	0.34	2.9	11.7	10.5 - 12.9
Roche Integra												
Roche Integra	13	5.82	0.20	3.4	5.8	5.2 - 6.5	13	11.15	0.40	3.5	11.2	10.0 - 12.3
Siemens Healthcare												
Siemens Dimension	22	6.30	0.10	1.7	6.3	5.6 - 7.0	22	12.51	0.24	1.9	12.6	11.2 - 13.8
VITROS												
VITROS 250,350,400 500,700,750,950	19	5.87	0.13	2.3	5.8	5.2 - 6.5	18	11.96	0.39	3.3	12.0	10.7 - 13.2
All Chemistry Instruments	24	5.87	0.15	2.6	5.8	5.2 - 6.5	23	11.91	0.46	3.9	12.0	10.7 - 13.2

## 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	161	2.76	0.12	4.5	2.8	2.4 - 3.1	163	9.29	0.33	3.6	9.3	8.3 - 10.3
All Alfa Wassermann Reagents	24	2.78	0.08	3.0	2.8	2.5 - 3.1	25	9.48	0.22	2.3	9.5	8.5 - 10.5
All Horiba Pentra Reagents	17	2.74	0.05	1.9	2.7	2.4 - 3.1	17	9.37	0.23	2.5	9.4	8.4 - 10.4
All Roche Reagents	24	2.70	0.13	4.6	2.7	2.4 - 3.0	24	9.05	0.28	3.1	9.1	8.1 - 10.0
Abaxis Piccolo												
Abaxis Piccolo - waived	5	-	-	-	2.9	2.4 - 3.1	5	-	-	-	9.3	8.3 - 10.3
All Chemistry Instruments	6	-	-	-	2.9	2.5 - 3.2	6	-	-	-	9.4	8.3 - 10.3
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	24	2.78	0.08	3.0	2.8	2.5 - 3.1	25	9.48	0.22	2.3	9.5	8.5 - 10.5
Beckman AU												
Beckman AU systems	30	2.76	0.16	5.7	2.7	2.4 - 3.1	30	9.19	0.20	2.2	9.2	8.2 - 10.2
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	17	2.74	0.05	1.9	2.7	2.4 - 3.1	17	9.37	0.23	2.5	9.4	8.4 - 10.4
Roche Integra												
Roche Integra	13	2.63	0.13	4.8	2.6	2.3 - 2.9	13	8.90	0.26	3.0	8.9	8.0 - 9.8
Siemens Healthcare												
Siemens Dimension	22	2.85	0.07	2.6	2.9	2.5 - 3.2	22	9.73	0.14	1.5	9.8	8.7 - 10.8
VITROS												
VITROS 250,350,400 500,700,750,950	19	2.81	0.08	3.0	2.8	2.5 - 3.1	19	9.11	0.30	3.3	9.0	8.1 - 10.1
All Chemistry Instruments	24	2.79	0.09	3.3	2.8	2.5 - 3.1	24	9.09	0.31	3.4	9.1	8.1 - 10.0

## 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	161	4.45	0.16	3.7	4.5	4.0 - 4.9
All Alfa Wassermann Reagents	24	4.54	0.14	3.0	4.5	4.0 - 5.0
All Horiba Pentra Reagents	17	4.48	0.14	3.1	4.5	4.0 - 5.0
All Roche Reagents	24	4.36	0.18	4.2	4.4	3.9 - 4.8
Abaxis Piccolo						
Abaxis Piccolo - waived	5	-	-	-	4.5	4.0 - 4.9
All Chemistry Instruments	6	-	-	-	4.5	4.0 - 5.0
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	24	4.54	0.14	3.0	4.5	4.0 - 5.0
Beckman AU						
Beckman AU systems	30	4.37	0.09	2.1	4.4	3.9 - 4.9
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	17	4.48	0.14	3.1	4.5	4.0 - 5.0
Roche Integra						
Roche Integra	13	4.26	0.18	4.1	4.3	3.8 - 4.7
Siemens Healthcare						
Siemens Dimension	22	4.62	0.09	1.9	4.6	4.1 - 5.1
VITROS						
VITROS 250,350,400 500,700,750,950	19	4.44	0.14	3.2	4.4	3.9 - 4.9
All Chemistry Instruments	24	4.43	0.15	3.4	4.4	3.9 - 4.9

### 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	178	24.3	1.8	7.5	25	22 - 27	176	6.7	0.8	12.1	7	4 - 9		
All Alfa Wassermann Reagents	26	24.8	0.9	3.6	25	22 - 28	25	6.4	0.5	7.8	6	4 - 9		
All Horiba Pentra Reagents	17	22.8	1.0	4.3	23	20 - 25	16	6.4	0.6	9.8	7	4 - 9		
All Roche Reagents	24	24.8	0.8	3.4	25	22 - 27	24	6.9	0.4	5.9	7	4 - 9		
Abaxis Piccolo														
Abaxis Piccolo - waived	15	23.6	0.6	2.7	24	21 - 26	15	7.5	0.6	8.6	7	5 - 10		
All Chemistry Instruments	17	23.6	0.6	2.6	24	21 - 26	17	7.4	0.6	8.3	7	5 - 10		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	26	24.8	0.9	3.6	25	22 - 28	25	6.4	0.5	7.8	6	4 - 9		
Beckman AU														
Beckman AU systems	30	25.9	0.8	3.2	26	23 - 29	30	7.2	0.4	5.3	7	5 - 10		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	17	22.8	1.0	4.3	23	20 - 25	16	6.4	0.6	9.8	7	4 - 9		
Roche Integra														
Roche Integra	13	24.7	0.8	3.0	25	22 - 27	13	7.0	0.4	5.8	7	5 - 9		
Siemens Healthcare														
Siemens Dimension	23	25.7	0.8	3.2	26	23 - 29	23	7.1	0.8	10.6	7	5 - 10		
All Chemistry Instruments	24	25.6	1.0	3.8	26	23 - 28	24	7.1	0.7	10.4	7	5 - 10		
VITROS														
VITROS 250,350,400 500,700,750,950	19	21.2	0.8	3.9	21	19 - 24	19	5.5	0.5	9.3	6	3 - 8		
All Chemistry Instruments	25	21.1	0.8	3.6	21	19 - 24	25	5.4	0.5	9.3	5	3 - 8		

### 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	163	6.4	0.8	12.9	7	4 - 9	167	42.7	3.0	7.0	43	38 - 47		
All Alfa Wassermann Reagents	24	6.6	0.6	9.8	7	4 - 9	26	43.5	1.4	3.1	44	39 - 48		
All Horiba Pentra Reagents	15	5.9	0.4	6.0	6	3 - 8	17	40.6	1.3	3.3	41	36 - 45		
All Roche Reagents	24	6.5	0.5	7.9	7	4 - 9	24	43.6	1.8	4.1	44	39 - 48		
Abaxis Piccolo														
Abaxis Piccolo - waived	5	-	-	-	7	4 - 9	5	-	-	-	42	38 - 47		
All Chemistry Instruments	6	-	-	-	7	4 - 9	6	-	-	-	43	38 - 47		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	24	6.6	0.6	9.8	7	4 - 9	26	43.5	1.4	3.1	44	39 - 48		
Beckman AU														
Beckman AU systems	30	6.9	0.4	5.3	7	4 - 9	30	45.0	2.0	4.4	45	40 - 50		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	15	5.9	0.4	6.0	6	3 - 8	17	40.6	1.3	3.3	41	36 - 45		
Roche Integra														
Roche Integra	13	6.6	0.5	7.7	7	4 - 9	13	43.9	2.1	4.8	44	39 - 48		
Siemens Healthcare														
Siemens Dimension	23	6.8	0.5	7.6	7	4 - 9	23	44.9	1.4	3.1	45	40 - 49		
All Chemistry Instruments	24	6.8	0.5	7.9	7	4 - 9	24	44.7	1.7	3.8	45	40 - 49		
VITROS														
VITROS 250,350,400 500,700,750,950	18	5.0	0.1	0.0	5	3 - 7	19	37.7	1.2	3.2	38	34 - 42		
All Chemistry Instruments	25	5.0	0.4	7.1	5	2 - 7	25	37.6	1.1	3.0	37	34 - 41		

## 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	165	15.6	1.3	8.2	16	13 - 18
All Alfa Wassermann Reagents	26	16.0	0.5	3.3	16	14 - 19
All Horiba Pentra Reagents	17	14.4	1.2	8.2	15	12 - 17
All Roche Reagents	23	15.8	0.5	3.1	16	13 - 18
Abaxis Piccolo						
Abaxis Piccolo - waived	5	-	-	-	15	13 - 18
All Chemistry Instruments	6	-	-	-	15	12 - 17
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	26	16.0	0.5	3.3	16	14 - 19
Beckman AU						
Beckman AU systems	30	16.5	0.7	4.4	16	14 - 19
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	17	14.4	1.2	8.2	15	12 - 17
Roche Integra						
Roche Integra	12	15.9	0.5	3.2	16	13 - 18
Siemens Healthcare						
Siemens Dimension	23	16.3	0.7	4.2	16	14 - 19
All Chemistry Instruments	24	16.2	0.7	4.4	16	14 - 19
VITROS						
VITROS 250,350,400 500,700,750,950	19	13.5	0.6	4.5	13	11 - 16
All Chemistry Instruments	25	13.4	0.6	4.3	13	11 - 16

## Uric Acid (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	115	6.27	0.25	4.0	6.3	5.2 - 7.4	117	2.02	0.44	21.9	1.9	1.6 - 2.4
All Alfa Wassermann Reagents	16	6.40	0.26	4.1	6.5	5.3 - 7.5	16	2.97	0.15	5.2	3.0	2.4 - 3.5
All Roche Reagents	20	6.14	0.18	2.9	6.1	5.0 - 7.2	20	1.72	0.05	3.0	1.7	1.4 - 2.1
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	16	6.40	0.26	4.1	6.5	5.3 - 7.5	16	2.97	0.15	5.2	3.0	2.4 - 3.5
Beckman AU												
Beckman AU systems	22	6.35	0.11	1.7	6.3	5.2 - 7.5	22	1.82	0.04	2.4	1.8	1.5 - 2.2
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	10	6.16	0.22	3.5	6.2	5.1 - 7.3	10	1.70	0.18	10.4	1.7	1.4 - 2.0
Roche Integra												
Roche Integra	10	6.24	0.16	2.6	6.3	5.1 - 7.4	10	1.73	0.07	3.9	1.7	1.4 - 2.1
Siemens Healthcare												
Siemens Dimension	18	6.07	0.11	1.9	6.1	5.0 - 7.1	18	1.98	0.14	6.8	2.0	1.6 - 2.4
All Chemistry Instruments	19	6.09	0.15	2.4	6.1	5.0 - 7.2	19	1.97	0.14	7.0	2.0	1.6 - 2.4
VITROS												
VITROS 250,350,400 500,700,750,950	10	6.34	0.12	1.9	6.4	5.2 - 7.5	10	2.04	0.18	9.0	2.0	1.6 - 2.4
All Chemistry Instruments	14	6.34	0.12	1.9	6.4	5.2 - 7.5	14	2.01	0.17	8.2	2.0	1.6 - 2.4
Specimen CH-3							Specimen CH-4					
All Method	117	1.94	0.42	21.7	1.8	1.6 - 2.3	116	10.58	0.53	5.0	10.6	8.7 - 12.4
All Alfa Wassermann Reagents	16	2.84	0.20	7.0	2.9	2.3 - 3.4	16	10.34	0.50	4.8	10.6	8.5 - 12.1
All Roche Reagents	20	1.70	0.06	3.8	1.7	1.4 - 2.0	20	10.42	0.33	3.2	10.4	8.6 - 12.2
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	16	2.84	0.20	7.0	2.9	2.3 - 3.4	16	10.34	0.50	4.8	10.6	8.5 - 12.1
Beckman AU												
Beckman AU systems	23	1.89	0.06	3.3	1.9	1.5 - 2.3	23	10.80	0.25	2.3	10.8	8.9 - 12.7
Horiba ABX Pentra												
Horiba ABX Pentra 400	10	1.71	0.16	9.3	1.7	1.4 - 2.1	10	10.53	0.38	3.6	10.5	8.7 - 12.4
Roche Integra												
Roche Integra	10	1.72	0.06	3.7	1.7	1.4 - 2.1	10	10.66	0.24	2.2	10.8	8.8 - 12.5
Siemens Healthcare												
Siemens Dimension	18	1.77	0.14	8.0	1.8	1.4 - 2.1	18	10.13	0.28	2.7	10.2	8.4 - 11.9
All Chemistry Instruments	19	1.77	0.14	7.9	1.8	1.4 - 2.1	19	10.16	0.30	3.0	10.2	8.4 - 11.9
VITROS												
VITROS 250,350,400 500,700,750,950	10	1.73	0.08	4.8	1.8	1.4 - 2.1	10	11.03	0.26	2.4	11.1	9.1 - 13.0
All Chemistry Instruments	14	1.71	0.09	5.5	1.7	1.4 - 2.1	14	11.00	0.25	2.3	11.0	9.1 - 12.9

## 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	114	4.11	0.22	5.4	4.1	3.4 - 4.9
All Alfa Wassermann Reagents	16	4.44	0.14	3.1	4.5	3.6 - 5.2
All Roche Reagents	20	3.96	0.13	3.3	3.9	3.2 - 4.7
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	16	4.44	0.14	3.1	4.5	3.6 - 5.2
Beckman AU						
Beckman AU systems	23	4.12	0.08	1.9	4.1	3.4 - 4.9
Horiba ABX Pentra						
Horiba ABX Pentra 400	10	3.98	0.18	4.6	4.0	3.3 - 4.7
Roche Integra						
Roche Integra	10	4.05	0.10	2.4	4.1	3.3 - 4.8
Siemens Healthcare						
Siemens Dimension	18	3.91	0.11	2.9	3.9	3.2 - 4.6
All Chemistry Instruments	19	3.94	0.16	4.0	3.9	3.2 - 4.7
VITROS						
VITROS 250,350,400 500,700,750,950	10	4.12	0.10	2.5	4.2	3.4 - 4.9
All Chemistry Instruments	14	4.09	0.11	2.7	4.1	3.3 - 4.8

## 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	171	104.6	2.9	2.8	104	99 - 110	173	88.7	4.3	4.9	89	84 - 94		
Abaxis Piccolo														
Abaxis Piccolo - waived	15	109.3	1.7	1.6	109	103 - 115	15	98.0	2.4	2.5	98	93 - 103		
All Chemistry Instruments	17	109.2	1.7	1.6	109	103 - 115	17	97.9	2.3	2.4	98	92 - 103		
ISE Diluted														
Beckman AU systems	30	102.4	1.3	1.3	102	97 - 108	30	88.9	1.1	1.2	89	84 - 94		
Roche Integra	13	109.4	4.4	4.0	108	103 - 115	13	85.5	0.8	0.9	86	81 - 90		
Siemens Dimension QuickLyte - Xpand/EXL	16	105.2	2.1	2.0	106	99 - 111	17	82.9	1.5	1.8	83	78 - 88		
All Chemistry Instruments	80	104.0	2.6	2.5	103	98 - 110	83	86.8	3.0	3.4	87	82 - 92		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	25	106.1	1.6	1.5	106	100 - 112	24	89.5	2.0	2.2	90	84 - 94		
Horiba ABX Pentra 400 / C400	16	103.1	2.6	2.5	103	97 - 109	16	85.3	2.5	3.0	86	80 - 90		
All Chemistry Instruments	49	104.8	2.5	2.4	105	99 - 111	49	87.8	3.4	3.9	88	83 - 93		
VITROS														
VITROS 250,350,400 500,700,750,950	19	102.7	1.3	1.2	103	97 - 108	19	91.3	1.6	1.7	92	86 - 96		
All Chemistry Instruments	25	102.7	1.3	1.3	103	97 - 108	25	91.4	1.8	1.9	91	86 - 96		

## **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	158	97.0	2.2	2.3	97	92 - 102
Abaxis Piccolo						
Abaxis Piccolo - waived	5	-	-	-	105	98 - 110
All Chemistry Instruments	6	-	-	-	105	98 - 109
ISE Diluted						
Beckman AU systems	29	96.2	1.0	1.1	96	91 - 102
Roche Integra	13	101.5	3.2	3.1	101	96 - 107
Siemens Dimension QuickLyte - Xpand/EXL	17	96.8	1.5	1.6	97	91 - 102
All Chemistry Instruments	80	96.9	1.9	1.9	97	92 - 102
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	25	97.6	1.9	1.9	97	92 - 103
Horiba ABX Pentra 400 / C400	16	94.7	1.8	1.9	95	89 - 100
All Chemistry Instruments	49	96.4	2.5	2.5	96	91 - 102
VITROS						
VITROS 250,350,400 500,700,750,950	19	97.6	1.7	1.7	98	92 - 103
All Chemistry Instruments	25	97.3	1.6	1.6	97	92 - 103

## CO<sub>2</sub> (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	168	26.2	2.2	8.4	26	20 - 32	169	10.8	2.6	24.4	11	8 - 13		
Abaxis Piccolo														
Abaxis Piccolo - waived	14	26.9	1.1	4.0	27	21 - 33	14	11.4	0.7	6.6	11	9 - 14		
All Chemistry Instruments	16	27.0	1.0	3.8	27	21 - 33	16	11.4	0.7	6.3	11	9 - 14		
Enzymatic Reagent														
Alfa Wassermann ACE Alera/Axcel	13	25.8	2.1	8.0	26	20 - 32	13	11.5	2.0	17.3	12	9 - 14		
Beckman AU systems	27	26.6	1.8	6.8	27	21 - 32	27	11.6	1.1	9.3	12	9 - 14		
Horiba ABX Pentra 400 / C400	14	26.9	2.1	7.6	27	21 - 33	14	12.7	2.1	16.4	12	10 - 16		
Roche Integra	12	24.7	1.4	5.6	25	19 - 30	12	10.4	1.1	10.4	11	8 - 13		
Siemens Dimension	18	27.1	2.4	9.0	28	21 - 33	18	13.1	2.0	15.2	14	10 - 16		
All Chemistry Instruments	101	26.2	2.1	8.0	26	20 - 32	101	11.8	1.8	14.8	12	9 - 15		
ISE Diluted														
All Chemistry Instruments	10	24.3	3.7	15.4	24	19 - 30	10	9.4	2.1	22.0	10	7 - 12		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	11	25.1	2.7	10.6	24	20 - 31	11	11.4	2.0	17.7	11	9 - 14		
All Chemistry Instruments	17	25.0	3.0	12.0	26	20 - 30	17	11.2	2.1	18.5	11	8 - 14		
VITROS														
VITROS 250,350,400 500,700,750,950	18	26.4	1.8	6.8	27	21 - 32	18	6.2	1.1	17.9	6	4 - 8		
All Chemistry Instruments	24	26.4	1.6	6.0	27	21 - 32	24	6.0	1.1	18.2	6	4 - 8		
	Specimen CH-3							Specimen CH-4						
All Method	156	15.4	1.7	11.3	16	12 - 19	156	36.5	3.1	8.4	37	29 - 44		
Abaxis Piccolo														
Abaxis Piccolo - waived	5	-	-	-	16	12 - 20	5	-	-	-	32	25 - 39		
All Chemistry Instruments	6	-	-	-	16	12 - 20	6	-	-	-	33	26 - 39		
Enzymatic Reagent														
Alfa Wassermann ACE Alera/Axcel	13	15.5	2.0	13.1	16	12 - 19	13	36.7	3.0	8.3	37	29 - 45		
Beckman AU systems	27	15.9	1.2	7.8	16	12 - 20	25	39.0	1.9	4.9	39	31 - 47		
Horiba ABX Pentra 400	14	16.7	1.6	9.8	17	13 - 21	14	35.9	2.6	7.3	37	28 - 44		
Roche Integra	12	14.4	1.6	10.9	15	11 - 18	12	33.8	1.7	5.2	34	27 - 41		
Siemens Dimension	17	16.8	1.0	5.7	17	13 - 21	17	38.7	1.7	4.5	39	30 - 47		
All Chemistry Instruments	99	15.8	1.5	9.3	16	12 - 19	100	37.0	2.9	7.9	38	29 - 45		
ISE Diluted														
All Chemistry Instruments	10	13.8	2.1	15.6	14	11 - 17	10	35.1	5.7	16.3	35	28 - 43		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	11	14.7	2.1	13.9	14	11 - 18	11	35.5	3.2	9.0	36	28 - 43		
All Chemistry Instruments	17	14.8	2.5	17.1	15	11 - 18	17	35.3	3.3	9.3	36	28 - 43		
VITROS														
VITROS 250,350,400 500,700,750,950	17	14.6	1.7	11.6	15	11 - 18	19	34.9	4.3	12.3	35	27 - 42		
All Chemistry Instruments	23	14.6	1.5	10.3	15	11 - 18	23	36.8	2.2	5.9	37	29 - 45		

**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	156	20.2	2.2	10.8	20	16 - 25
Abaxis Piccolo						
Abaxis Piccolo - waived	5	-	-	-	21	17 - 26
All Chemistry Instruments	6	-	-	-	22	17 - 26
Enzymatic Reagent						
Alfa Wassermann ACE Alera/Axcel	13	21.3	2.3	10.7	21	17 - 26
Beckman AU systems	27	20.6	1.7	8.2	21	16 - 25
Horiba ABX Pentra 400	14	20.7	1.8	8.8	21	16 - 25
Roche Integra	12	18.8	1.3	6.7	19	15 - 23
Siemens Dimension	18	21.6	1.9	8.9	22	17 - 26
All Chemistry Instruments	101	20.6	1.9	9.2	21	16 - 25
ISE Diluted						
All Chemistry Instruments	10	18.3	2.4	12.9	18	14 - 22
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	11	19.6	2.7	13.9	19	15 - 24
All Chemistry Instruments	17	19.7	3.1	15.6	19	15 - 24
VITROS						
VITROS 250,350,400 500,700,750,950	17	18.2	2.5	13.8	19	14 - 22
All Chemistry Instruments	23	18.7	2.4	12.7	19	14 - 23

## Potassium (mmol/L)

<u><b>Method/Instrument</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	176	4.96	0.10	2.1	5.0	4.4 - 5.5	176	2.60	0.15	5.8	2.6	2.1 - 3.2		
Abaxis Piccolo														
Abaxis Piccolo - waived	14	4.96	0.22	4.4	5.0	4.4 - 5.5	14	2.38	0.15	6.2	2.3	1.8 - 2.9		
All Chemistry Instruments	17	5.00	0.22	4.4	5.0	4.5 - 5.5	17	2.36	0.15	6.3	2.3	1.8 - 2.9		
ISE Diluted														
Beckman AU systems	30	4.88	0.08	1.6	4.9	4.3 - 5.4	30	2.55	0.06	2.2	2.5	2.0 - 3.1		
Roche Integra	13	4.97	0.05	1.0	5.0	4.4 - 5.5	13	2.54	0.05	2.0	2.5	2.0 - 3.1		
Siemens Dimension QuickLyte - Xpand/EXL	18	4.98	0.05	1.0	5.0	4.4 - 5.5	18	2.48	0.04	1.7	2.5	1.9 - 3.0		
All Chemistry Instruments	86	4.94	0.08	1.7	5.0	4.4 - 5.5	85	2.54	0.07	2.6	2.5	2.0 - 3.1		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	25	5.07	0.07	1.3	5.1	4.5 - 5.6	25	2.74	0.10	3.8	2.7	2.2 - 3.3		
Horiba ABX Pentra 400 / C400	17	4.86	0.09	1.8	4.9	4.3 - 5.4	17	2.79	0.11	3.8	2.8	2.2 - 3.3		
All Chemistry Instruments	50	4.98	0.13	2.5	5.0	4.4 - 5.5	50	2.72	0.14	5.1	2.7	2.2 - 3.3		
VITROS														
VITROS 250,350,400 500,700,750,950	19	4.99	0.08	1.6	5.0	4.4 - 5.5	19	2.76	0.06	2.2	2.8	2.2 - 3.3		
All Chemistry Instruments	25	4.98	0.07	1.5	5.0	4.4 - 5.5	25	2.76	0.06	2.1	2.8	2.2 - 3.3		
Specimen CH-3							Specimen CH-4							
All Method	165	2.74	0.08	3.1	2.7	2.2 - 3.3	163	7.21	0.19	2.7	7.2	6.7 - 7.8		
Abaxis Piccolo														
Abaxis Piccolo - waived	4	-	-	-	2.6	2.2 - 3.2	4	-	-	-	6.9	6.4 - 7.5		
All Chemistry Instruments	6	-	-	-	2.7	2.2 - 3.2	6	-	-	-	6.9	6.4 - 7.5		
ISE Diluted														
Beckman AU systems	29	2.78	0.05	1.8	2.8	2.2 - 3.3	27	7.04	0.06	0.9	7.0	6.5 - 7.6		
Roche Integra	13	2.75	0.05	1.9	2.8	2.2 - 3.3	13	7.12	0.06	0.8	7.1	6.6 - 7.7		
Siemens Dimension QuickLyte - Xpand/EXL	18	2.72	0.04	1.6	2.7	2.2 - 3.3	18	7.23	0.08	1.1	7.2	6.7 - 7.8		
All Chemistry Instruments	84	2.76	0.06	2.1	2.8	2.2 - 3.3	84	7.14	0.14	1.9	7.1	6.6 - 7.7		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	24	2.66	0.07	2.7	2.7	2.1 - 3.2	25	7.51	0.23	3.1	7.5	7.0 - 8.1		
Horiba ABX Pentra 400 / C400	17	2.77	0.08	3.1	2.8	2.2 - 3.3	17	7.13	0.14	2.0	7.1	6.6 - 7.7		
All Chemistry Instruments	48	2.70	0.08	3.1	2.7	2.1 - 3.2	50	7.32	0.27	3.7	7.3	6.8 - 7.9		
VITROS														
VITROS 250,350,400 500,700,750,950	19	2.77	0.05	1.7	2.8	2.2 - 3.3	19	7.34	0.10	1.4	7.4	6.8 - 7.9		
All Chemistry Instruments	25	2.76	0.05	1.8	2.8	2.2 - 3.3	25	7.32	0.10	1.4	7.3	6.8 - 7.9		

## 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	165	3.86	0.07	1.9	3.9	3.3 - 4.4
Abaxis Piccolo						
Abaxis Piccolo - waived	4	-	-	-	4.0	3.3 - 4.4
All Chemistry Instruments	6	-	-	-	4.0	3.3 - 4.4
ISE Diluted						
Beckman AU systems	30	3.84	0.06	1.5	3.8	3.3 - 4.4
Roche Integra	13	3.86	0.05	1.3	3.9	3.3 - 4.4
Siemens Dimension QuickLyte - Xpand/EXL	18	3.87	0.06	1.5	3.9	3.3 - 4.4
All Chemistry Instruments	86	3.86	0.06	1.5	3.9	3.3 - 4.4
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	24	3.92	0.08	2.0	3.9	3.4 - 4.5
Horiba ABX Pentra 400	17	3.83	0.08	2.0	3.8	3.3 - 4.4
All Chemistry Instruments	49	3.87	0.09	2.5	3.9	3.3 - 4.4
VITROS						
VITROS 250,350,400 500,700,750,950	19	3.91	0.07	1.8	3.9	3.4 - 4.5
All Chemistry Instruments	25	3.90	0.07	1.9	3.9	3.3 - 4.4

## 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	178	144.6	2.5	1.8	144	140 - 149	178	125.4	4.7	3.8	125	121 - 130		
Abaxis Piccolo														
Abaxis Piccolo - waived	14	148.8	2.6	1.8	150	144 - 153	14	128.1	1.4	1.1	128	124 - 133		
All Chemistry Instruments	17	148.7	2.5	1.7	149	144 - 153	17	128.0	1.5	1.2	128	124 - 132		
ISE Diluted														
Beckman AU systems	29	142.9	1.5	1.0	143	138 - 147	29	119.9	1.3	1.0	120	115 - 124		
Roche Integra	13	143.3	0.9	0.6	143	139 - 148	13	121.4	0.8	0.6	121	117 - 126		
Siemens Dimension QuickLyte - Xpand/EXL	17	146.4	1.2	0.8	146	142 - 151	18	122.7	1.4	1.1	123	118 - 127		
All Chemistry Instruments	85	143.9	2.0	1.4	144	139 - 148	85	121.3	1.7	1.4	121	117 - 126		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	25	144.6	1.8	1.2	144	140 - 149	25	128.1	1.6	1.2	128	124 - 133		
Horiba ABX Pentra 400 / C400	16	143.5	1.9	1.3	144	139 - 148	16	131.0	1.8	1.4	131	127 - 135		
All Chemistry Instruments	49	144.0	2.0	1.4	144	140 - 148	50	128.1	3.5	2.8	129	124 - 133		
VITROS														
VITROS 250,350,400 500,700,750,950	19	145.6	1.5	1.0	145	141 - 150	19	131.9	2.1	1.6	132	127 - 136		
All Chemistry Instruments	24	145.3	1.2	0.8	145	141 - 150	25	131.8	2.1	1.6	131	127 - 136		
Specimen CH-3							Specimen CH-4							
All Method	167	122.3	2.7	2.2	122	118 - 127	163	167.1	3.8	2.3	167	163 - 172		
Abaxis Piccolo														
Abaxis Piccolo - waived	4	-	-	-	126	121 - 130	2	-	-	-	170	163 - 172		
All Chemistry Instruments	6	-	-	-	126	121 - 130	4	-	-	-	170	166 - 174		
ISE Diluted														
Beckman AU systems	29	122.6	1.0	0.8	123	118 - 127	28	163.5	1.5	0.9	164	159 - 168		
Roche Integra	13	122.3	0.9	0.7	122	118 - 127	13	163.0	1.1	0.7	163	159 - 167		
Siemens Dimension QuickLyte - Xpand/EXL	18	126.1	1.1	0.9	126	122 - 131	17	165.7	1.9	1.1	165	161 - 170		
All Chemistry Instruments	86	123.5	2.0	1.6	123	119 - 128	82	164.5	2.1	1.3	164	160 - 169		
ISE Undiluted														
Alfa Wassermann ACE Alera/Axcel	26	118.3	1.7	1.4	118	114 - 123	25	169.9	2.3	1.3	170	165 - 174		
Horiba ABX Pentra 400	15	120.8	1.1	0.9	121	116 - 125	16	169.7	2.1	1.2	170	165 - 174		
All Chemistry Instruments	50	119.6	2.1	1.8	119	115 - 124	50	168.9	3.2	1.9	170	164 - 173		
VITROS														
VITROS 250,350,400 500,700,750,950	19	122.7	1.5	1.2	122	118 - 127	19	171.8	1.7	1.0	171	167 - 176		
All Chemistry Instruments	25	122.4	1.5	1.2	122	118 - 127	25	171.6	1.6	1.0	171	167 - 176		

## 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	163	133.4	1.9	1.4	133	129 - 138
Abaxis Piccolo						
Abaxis Piccolo - waived	4	-	-	-	137	132 - 141
All Chemistry Instruments	6	-	-	-	137	132 - 141
ISE Diluted						
Beckman AU systems	29	133.2	1.1	0.8	133	129 - 138
Roche Integra	13	132.5	0.9	0.7	133	128 - 137
Siemens Dimension QuickLyte - Xpand/EXL	17	135.8	1.3	1.0	136	131 - 140
All Chemistry Instruments	84	133.7	1.6	1.2	133	129 - 138
ISE Undiluted						
Alfa Wassermann ACE Alera/Axcel	25	131.7	1.6	1.2	132	127 - 136
Horiba ABX Pentra 400	16	132.7	1.7	1.3	133	128 - 137
All Chemistry Instruments	49	132.1	1.7	1.3	132	128 - 137
VITROS						
VITROS 250,350,400 500,700,750,950	19	134.9	1.8	1.3	135	130 - 139
All Chemistry Instruments	24	134.3	1.4	1.1	134	130 - 139

### TIBC – Calculated (µg/dL)

<u><b>Method/Instrument</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	218.7	51.2	23.4	241	116 - 322	11	627.7	40.4	6.4	604	502 - 754		
Calculated TIBC (TRF x CF 1.40 - 1.49)														
All Chemistry Instruments	5	243.8	12.9	5.3	248	195 - 293	5	621.6	39.6	6.4	600	497 - 746		
<b>Specimen CH-3</b>							<b>Specimen CH-4</b>							
All Method	10	89.9	23.0	25.6	101	43 - 136	11	347.2	83.0	23.9	372	181 - 514		
Calculated TIBC (TRF x CF 1.40 - 1.49)														
All Chemistry Instruments	4	-	-	-	102	79 - 120	5	393.4	22.7	5.8	400	314 - 473		
<b>Specimen CH-5</b>														
All Method	11	154.5	36.6	23.7	164	81 - 228								
Calculated TIBC (TRF x CF 1.40 - 1.49)														
All Chemistry Instruments	5	173.0	10.0	5.8	177	138 - 208								

### TIBC – Direct (µg/dL)

<u><b>Method/Instrument</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	18	208.0	34.1	16.4	208	139 - 277	16	605.6	16.1	2.7	611	484 - 727		
<b>Specimen CH-3</b>							<b>Specimen CH-4</b>							
All Method	18	90.4	38.2	42.2	96	14 - 167	17	302.5	20.7	6.8	306	242 - 364		
<b>Specimen CH-5</b>														
All Method	18	151.2	34.9	23.1	161	81 - 222								

**UIBC – Direct ( $\mu\text{g/dL}$ )**

<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	23	117.6	12.3	10.5	120	92 - 143	23	431.0	24.0	5.6	428	344 - 518		
Beckman AU														
Beckman AU systems	14	124.7	5.7	4.6	126	99 - 150	14	445.8	17.4	3.9	449	356 - 535		
	<b>Specimen CH-3</b>							<b>Specimen CH-4</b>						
All Method	22	65.9	8.3	12.6	66	49 - 83	23	167.9	13.6	8.1	173	134 - 202		
Beckman AU														
Beckman AU systems	14	69.3	6.1	8.8	70	55 - 84	14	176.2	6.1	3.5	178	140 - 212		
	<b>Specimen CH-5</b>													
All Method	23	92.3	9.4	10.2	92	73 - 112								
Beckman AU														
Beckman AU systems	14	98.4	5.4	5.5	99	78 - 119								

## ALT (SGPT) (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	170	152.2	11.2	7.3	150	121 - 183	166	21.5	4.1	18.9	21	17 - 26
All Alfa Wassermann Reagents	23	149.0	3.5	2.3	149	119 - 179	20	16.2	3.2	19.8	17	12 - 20
All Horiba Pentra Reagents	18	168.5	7.1	4.2	167	134 - 203	18	23.4	1.6	7.1	24	18 - 29
All Roche Reagents	24	153.1	3.0	2.0	154	122 - 184	24	18.9	1.6	8.4	19	15 - 23
All Siemens Healthcare	5	172.8	7.0	4.0	172	138 - 208	5	28.8	4.0	13.8	28	23 - 35
Abaxis Piccolo												
Abaxis Piccolo - waived	15	141.8	2.5	1.8	142	113 - 171	15	25.5	2.2	8.8	25	20 - 31
All Chemistry Instruments	17	141.8	2.5	1.8	142	113 - 171	17	25.6	2.1	8.4	25	20 - 31
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	23	149.0	3.5	2.3	149	119 - 179	20	16.2	3.2	19.8	17	12 - 20
Beckman AU												
Beckman AU systems	30	141.9	4.8	3.4	142	113 - 171	30	20.7	1.5	7.4	21	16 - 25
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	168.5	7.1	4.2	167	134 - 203	18	23.4	1.6	7.1	24	18 - 29
Roche cobas c 501												
Roche cobas 6000 / c 501	9	153.9	3.6	2.3	155	123 - 185	9	19.7	1.1	5.7	20	15 - 24
Roche Integra												
Roche Integra	13	152.6	2.8	1.8	153	122 - 184	13	18.1	1.4	8.0	19	14 - 22
Siemens Healthcare ALTi												
Siemens Dimension	20	166.5	4.4	2.6	168	133 - 200	20	27.6	2.2	8.0	28	22 - 34
VITROS ALT												
VITROS 250,350,400 500,700,750,950	15	144.3	4.9	3.4	145	115 - 174	15	19.7	2.3	11.5	20	15 - 24
All Chemistry Instruments	17	145.3	2.8	1.9	145	116 - 175	18	19.5	2.5	13.0	20	15 - 24

## 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	157	20.8	2.6	12.4	21	16 - 25	160	282.3	20.0	7.1	280	225 - 339
All Alfa Wassermann Reagents	25	21.7	3.2	14.7	22	17 - 27	24	271.6	4.9	1.8	271	217 - 326
All Horiba Pentra Reagents	18	21.6	0.9	4.2	22	17 - 26	18	311.2	12.4	4.0	312	248 - 374
All Roche Reagents	24	20.3	0.7	3.3	20	16 - 25	24	283.8	6.8	2.4	283	227 - 341
All Siemens Healthcare	5	25.6	2.2	8.6	25	20 - 31	5	314.6	14.8	4.7	312	251 - 378
Abaxis Piccolo												
Abaxis Piccolo - waived	5	22.8	2.6	11.4	22	18 - 28	5	259.6	4.4	1.7	260	207 - 312
All Chemistry Instruments	6	22.7	2.3	10.3	22	18 - 28	6	259.2	4.1	1.6	259	207 - 312
Alfa Wassermann												
Alfa Wassermann ACE Alera/Axcel	25	21.7	3.2	14.7	22	17 - 27	24	271.6	4.9	1.8	271	217 - 326
Beckman AU												
Beckman AU systems	30	19.1	0.7	3.6	19	15 - 23	30	262.7	8.3	3.2	262	210 - 316
Horiba ABX Pentra												
Horiba ABX Pentra 400 / C400	18	21.6	0.9	4.2	22	17 - 26	18	311.2	12.4	4.0	312	248 - 374
Roche cobas c 501												
Roche cobas 6000 / c 501	9	20.4	0.7	3.6	21	16 - 25	9	288.3	7.2	2.5	289	230 - 346
Roche Integra												
Roche Integra	13	20.0	0.6	2.9	20	16 - 24	13	280.7	5.3	1.9	281	224 - 337
Siemens Healthcare ALTi												
Siemens Dimension	20	24.7	2.4	9.7	25	19 - 30	20	304.1	6.2	2.0	305	243 - 365
VITROS ALT												
VITROS 250,350,400 500,700,750,950	15	17.7	1.0	5.8	18	14 - 22	15	272.9	13.3	4.9	274	218 - 328
All Chemistry Instruments	18	17.7	1.0	5.8	18	14 - 22	18	273.1	13.2	4.8	273	218 - 328

## 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	159	88.2	7.0	7.9	87	70 - 106
All Alfa Wassermann Reagents	24	86.4	3.4	3.9	87	69 - 104
All Horiba Pentra Reagents	18	97.8	4.2	4.3	98	78 - 118
All Roche Reagents	24	87.9	1.7	1.9	88	70 - 106
All Siemens Healthcare	5	101.6	3.0	2.9	103	81 - 122
Abaxis Piccolo						
Abaxis Piccolo - waived	5	81.6	0.9	1.1	81	65 - 98
All Chemistry Instruments	6	81.3	1.0	1.3	81	65 - 98
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	24	86.4	3.4	3.9	87	69 - 104
Beckman AU						
Beckman AU systems	30	81.1	2.4	3.0	81	64 - 98
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	97.8	4.2	4.3	98	78 - 118
Roche cobas c 501						
Roche cobas 6000 / c 501	9	88.8	2.0	2.2	90	71 - 107
Roche Integra						
Roche Integra	13	87.5	1.3	1.5	88	69 - 105
Siemens Healthcare ALTi						
Siemens Dimension	20	97.1	2.7	2.8	97	77 - 117
VITROS ALT						
VITROS 250,350,400 500,700,750,950	15	82.7	3.0	3.6	82	66 - 100
All Chemistry Instruments	18	82.6	2.8	3.4	82	66 - 100

## 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	177	213.0	32.7	15.4	220	149 - 277	175	109.9	11.9	10.8	112	76 - 143		
All Alfa Wassermann Reagents	24	222.1	11.6	5.2	221	155 - 289	25	103.0	6.7	6.5	103	72 - 134		
All Horiba Pentra Reagents	18	245.9	17.2	7.0	245	172 - 320	17	120.8	6.0	4.9	121	84 - 158		
All Roche Reagents	24	233.0	11.7	5.0	234	163 - 303	24	115.9	4.6	3.9	117	81 - 151		
Abaxis Piccolo														
Abaxis Piccolo - waived	15	173.9	7.5	4.3	176	121 - 227	14	96.1	6.0	6.2	97	67 - 125		
All Chemistry Instruments	17	173.9	7.0	4.0	174	121 - 227	16	95.8	5.6	5.9	96	67 - 125		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	24	222.1	11.6	5.2	221	155 - 289	25	103.0	6.7	6.5	103	72 - 134		
Beckman AU														
Beckman AU systems	29	208.6	13.8	6.6	206	146 - 272	29	99.6	5.9	5.9	99	69 - 130		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	245.9	17.2	7.0	245	172 - 320	17	120.8	6.0	4.9	121	84 - 158		
Roche Integra														
Roche Integra	13	234.2	14.3	6.1	236	163 - 305	13	115.8	5.2	4.5	117	81 - 151		
Siemens Healthcare ALPi														
Siemens Dimension	18	243.8	9.2	3.8	243	170 - 317	18	117.9	4.3	3.6	117	82 - 154		
VITROS														
VITROS 250,350,400 500,700,750,950	18	164.1	9.2	5.6	164	114 - 214	18	121.8	6.8	5.6	122	85 - 159		
All Chemistry Instruments	23	162.8	9.2	5.7	163	113 - 212	23	122.2	6.7	5.5	123	85 - 159		

### 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	164	43.8	4.2	9.6	43	30 - 57	166	361.6	82.0	22.7	386	253 - 471		
All Alfa Wassermann Reagents	24	43.0	2.5	5.9	43	30 - 56	23	381.6	14.2	3.7	381	267 - 497		
All Horiba Pentra Reagents	18	49.2	4.1	8.3	49	34 - 64	18	427.2	27.3	6.4	426	299 - 556		
All Roche Reagents	24	44.4	2.1	4.7	44	31 - 58	23	406.4	17.4	4.3	402	284 - 529		
Abaxis Piccolo														
Abaxis Piccolo - waived	5	-	-	-	40	30 - 57	5	-	-	-	272	253 - 471		
All Chemistry Instruments	6	-	-	-	41	30 - 57	6	-	-	-	272	186 - 347		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	24	43.0	2.5	5.9	43	30 - 56	23	381.6	14.2	3.7	381	267 - 497		
Beckman AU														
Beckman AU systems	29	39.4	2.5	6.3	39	27 - 52	29	367.4	23.9	6.5	364	257 - 478		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	49.2	4.1	8.3	49	34 - 64	18	427.2	27.3	6.4	426	299 - 556		
Roche Integra														
Roche Integra	13	44.8	2.3	5.1	45	31 - 59	12	407.8	19.2	4.7	408	285 - 531		
Siemens Healthcare ALPi														
Siemens Dimension	18	46.3	3.2	6.8	47	32 - 61	18	433.6	13.5	3.1	431	303 - 564		
VITROS														
VITROS 250,350,400 500,700,750,950	19	43.8	3.6	8.1	44	30 - 57	19	192.9	18.3	9.5	195	135 - 251		
All Chemistry Instruments	24	43.7	3.2	7.3	44	30 - 57	22	193.9	9.6	4.9	195	135 - 253		

## 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	165	136.5	14.5	10.6	137	95 - 178
All Alfa Wassermann Reagents	24	138.5	7.5	5.4	139	96 - 181
All Horiba Pentra Reagents	18	153.0	10.0	6.6	153	107 - 199
All Roche Reagents	24	142.2	7.5	5.3	140	99 - 185
Abaxis Piccolo						
Abaxis Piccolo - waived	5	-	-	-	121	95 - 178
All Chemistry Instruments	6	-	-	-	119	82 - 154
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	24	138.5	7.5	5.4	139	96 - 181
Beckman AU						
Beckman AU systems	29	128.2	8.4	6.5	129	89 - 167
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	153.0	10.0	6.6	153	107 - 199
Roche Integra						
Roche Integra	13	143.2	8.2	5.8	144	100 - 187
Siemens Healthcare ALPi						
Siemens Dimension	18	149.9	5.7	3.8	149	104 - 195
VITROS						
VITROS 250,350,400 500,700,750,950	18	121.9	5.5	4.5	122	85 - 159
All Chemistry Instruments	23	121.1	5.5	4.5	121	84 - 158

## AST (SGOT) (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	153	212.0	22.2	10.5	213	169 - 255	153	39.4	4.6	11.8	38	31 - 48		
All Alfa Wassermann Reagents	25	196.8	9.0	4.6	197	157 - 237	25	33.5	3.0	9.0	33	26 - 41		
All Horiba Pentra Reagents	18	227.6	10.4	4.6	228	182 - 274	18	43.7	2.0	4.6	44	34 - 53		
All Roche Reagents	24	219.1	7.0	3.2	221	175 - 263	24	37.8	1.8	4.8	38	30 - 46		
Abaxis Piccolo														
Abaxis Piccolo - waived	15	206.4	3.7	1.8	206	165 - 248	15	43.7	1.8	4.2	44	34 - 53		
All Chemistry Instruments	17	206.6	3.7	1.8	206	165 - 248	17	43.8	1.9	4.2	44	35 - 53		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	25	196.8	9.0	4.6	197	157 - 237	25	33.5	3.0	9.0	33	26 - 41		
Beckman AU														
Beckman AU systems	29	183.2	5.4	2.9	183	146 - 220	30	35.8	1.2	3.4	36	28 - 43		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	227.6	10.4	4.6	228	182 - 274	18	43.7	2.0	4.6	44	34 - 53		
Roche Integra														
Roche Integra	13	219.1	7.5	3.4	221	175 - 263	13	36.9	1.5	4.1	37	29 - 45		
Siemens Healthcare														
Siemens Dimension	24	219.5	6.6	3.0	219	175 - 264	24	34.8	2.6	7.5	35	27 - 42		
VITROS														
VITROS 250,350,400 500,700,750,950	19	247.8	7.9	3.2	246	198 - 298	19	44.5	1.2	2.7	44	35 - 54		
All Chemistry Instruments	24	246.9	8.3	3.4	246	197 - 297	24	44.6	1.1	2.6	44	35 - 54		

## AST (SGOT) (IU/L)

<b><u>Instrument/Reagent</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	142	108.9	9.3	8.6	111	87 - 131	142	319.3	49.9	15.6	313	255 - 384		
All Alfa Wassermann Reagents	25	104.0	5.7	5.4	104	83 - 125	25	286.8	12.0	4.2	285	229 - 345		
All Horiba Pentra Reagents	18	120.2	5.6	4.7	122	96 - 145	18	333.1	13.9	4.2	336	266 - 400		
All Roche Reagents	24	115.0	4.1	3.5	116	92 - 139	24	318.4	10.0	3.1	322	254 - 383		
Abaxis Piccolo														
Abaxis Piccolo - waived	5	-	-	-	110	87 - 131	5	-	-	-	302	255 - 384		
All Chemistry Instruments	6	-	-	-	111	87 - 131	6	-	-	-	300	241 - 363		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	25	104.0	5.7	5.4	104	83 - 125	25	286.8	12.0	4.2	285	229 - 345		
Beckman AU														
Beckman AU systems	30	96.5	4.0	4.1	96	77 - 116	29	267.7	8.0	3.0	267	214 - 322		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	18	120.2	5.6	4.7	122	96 - 145	18	333.1	13.9	4.2	336	266 - 400		
Roche Integra														
Roche Integra	13	115.5	4.4	3.8	116	92 - 139	13	317.1	10.0	3.2	318	253 - 381		
Siemens Healthcare														
Siemens Dimension	24	111.4	3.2	2.9	111	89 - 134	24	326.3	9.3	2.9	325	261 - 392		
VITROS														
VITROS 250,350,400 500,700,750,950	19	112.5	3.2	2.8	113	89 - 135	19	418.4	13.0	3.1	416	334 - 503		
All Chemistry Instruments	24	112.6	3.0	2.7	113	90 - 136	24	415.3	15.3	3.7	414	332 - 499		

## AST (SGOT) (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	142	160.4	14.9	9.3	164	128 - 193
All Alfa Wassermann Reagents	25	152.7	7.1	4.6	152	122 - 184
All Horiba Pentra Reagents	18	176.2	8.5	4.8	177	140 - 212
All Roche Reagents	24	165.3	5.4	3.2	166	132 - 199
Abaxis Piccolo						
Abaxis Piccolo - waived	5	-	-	-	154	128 - 193
All Chemistry Instruments	6	-	-	-	154	124 - 187
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	25	152.7	7.1	4.6	152	122 - 184
Beckman AU						
Beckman AU systems	30	139.6	4.5	3.2	139	111 - 168
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	18	176.2	8.5	4.8	177	140 - 212
Roche Integra						
Roche Integra	13	165.6	5.8	3.5	166	132 - 199
Siemens Healthcare						
Siemens Dimension	24	167.1	4.8	2.9	167	133 - 201
VITROS						
VITROS 250,350,400 500,700,750,950	19	176.5	4.4	2.5	176	141 - 212
All Chemistry Instruments	24	176.2	4.3	2.5	176	140 - 212

## Creatine Kinase (IU/L)

<b><u>Instrument/Reagent</u></b>	<b>Specimen CH-1</b>							<b>Specimen CH-2</b>						
	<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	64	197.0	13.0	6.6	199	137 - 257	64	144.8	13.1	9.0	146	101 - 189		
All Alfa Wassermann Reagents	9	195.0	4.9	2.5	194	136 - 254	9	139.9	5.0	3.6	142	97 - 182		
All Roche Reagents	10	205.6	6.2	3.0	206	143 - 268	10	148.0	3.8	2.5	147	103 - 193		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	9	195.0	4.9	2.5	194	136 - 254	9	139.9	5.0	3.6	142	97 - 182		
Beckman AU														
Beckman AU systems	16	183.8	14.3	7.8	185	128 - 239	16	129.4	9.0	7.0	130	90 - 169		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	5	198.2	10.9	5.5	200	138 - 258	5	152.4	4.7	3.1	154	106 - 199		
Roche Integra														
Roche Integra	5	205.0	8.0	3.9	210	143 - 267	5	146.0	1.9	1.3	146	102 - 190		
Siemens Healthcare CKI														
Siemens Dimension	13	207.3	3.5	1.7	207	145 - 270	14	149.4	2.8	1.9	149	104 - 195		
VITROS														
VITROS 250,350,400 500,700,750,950	5	189.8	17.1	9.0	191	132 - 247	5	176.6	11.3	6.4	175	123 - 230		
All Chemistry Instruments	6	184.8	19.5	10.6	186	129 - 241	6	173.0	13.4	7.7	173	121 - 225		

<b><u>Instrument/Reagent</u></b>	<b>Specimen CH-3</b>							<b>Specimen CH-4</b>						
	<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	20.3	3.8	18.5	20	14 - 27	65	356.5	33.5	9.4	361	249 - 464		
All Alfa Wassermann Reagents	9	27.1	1.7	6.2	27	18 - 36	9	345.8	13.2	3.8	343	242 - 450		
All Roche Reagents	10	21.4	1.3	6.3	21	14 - 28	10	376.3	13.5	3.6	375	263 - 490		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	9	27.1	1.7	6.2	27	18 - 36	9	345.8	13.2	3.8	343	242 - 450		
Beckman AU														
Beckman AU systems	16	17.8	2.1	11.7	18	12 - 24	16	344.6	26.9	7.8	347	241 - 449		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	5	21.2	2.7	12.7	20	14 - 28	5	363.6	23.6	6.5	368	254 - 473		
Roche Integra														
Roche Integra	5	21.4	1.1	5.3	21	14 - 28	5	370.4	12.1	3.3	371	259 - 482		
Siemens Healthcare CKI														
Siemens Dimension	14	17.8	1.9	10.6	18	12 - 24	14	382.5	12.8	3.4	386	267 - 498		
VITROS														
VITROS 250,350,400 500,700,750,950	5	21.6	1.5	7.0	22	15 - 29	5	292.6	27.6	9.4	300	204 - 381		
All Chemistry Instruments	6	21.5	1.4	6.4	22	15 - 28	6	287.7	27.5	9.6	288	201 - 374		

### Creatine Kinase (IU/L) cont'd

	Specimen CH-5					
All Method	64	109.8	7.4	6.8	112	76 - 143
All Alfa Wassermann Reagents	9	112.2	5.6	5.0	114	78 - 146
All Roche Reagents	10	114.1	4.3	3.8	116	79 - 149
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	9	112.2	5.6	5.0	114	78 - 146
Beckman AU						
Beckman AU systems	16	100.4	8.5	8.4	101	70 - 131
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	5	110.6	5.5	5.0	113	77 - 144
Roche Integra						
Roche Integra	5	113.6	4.9	4.3	115	79 - 148
Siemens Healthcare CKI						
Siemens Dimension	14	112.4	5.2	4.7	114	78 - 147
VITROS						
VITROS 250,350,400 500,700,750,950	5	111.4	11.9	10.7	112	77 - 145
All Chemistry Instruments	6	110.0	11.2	10.2	108	77 - 143

## GGT (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	39	121.2	26.8	22.1	115	67 - 175	39	37.1	6.8	18.3	35	23 - 51		
All Roche Reagents	11	114.5	5.0	4.3	115	97 - 132	11	34.7	1.7	5.0	35	29 - 40		
Beckman AU														
Beckman AU systems	9	100.2	2.8	2.8	100	85 - 116	9	31.7	1.1	3.5	32	26 - 37		
Roche Integra														
Roche Integra	7	115.1	1.1	0.9	115	97 - 133	7	34.3	1.0	2.8	35	29 - 40		
Siemens Healthcare														
Siemens Dimension	5	152.6	3.8	2.5	151	129 - 176	5	52.4	1.1	2.2	52	44 - 61		
Specimen CH-3							Specimen CH-4							
All Method	38	18.6	5.5	29.8	16	7 - 30	38	218.0	39.9	18.3	211	138 - 298		
All Roche Reagents	11	15.8	1.2	7.4	16	13 - 19	11	209.5	9.6	4.6	211	178 - 241		
Beckman AU														
Beckman AU systems	9	14.2	0.4	3.1	14	12 - 17	9	184.8	6.6	3.6	184	157 - 213		
Roche Integra														
Roche Integra	7	15.6	0.5	3.4	16	13 - 18	7	211.9	2.3	1.1	212	180 - 244		
Siemens Healthcare														
Siemens Dimension	5	28.0	1.2	4.4	28	23 - 33	5	274.8	5.0	1.8	273	233 - 317		
Specimen CH-5														
All Method	38	71.4	16.1	22.6	67	39 - 104								
All Roche Reagents	11	68.2	8.8	13.0	66	50 - 86								
Beckman AU														
Beckman AU systems	9	57.8	2.1	3.6	58	49 - 67								
Roche Integra														
Roche Integra	7	66.3	0.8	1.1	66	56 - 77								
Siemens Healthcare														
Siemens Dimension	5	90.6	1.7	1.8	91	77 - 105								

## Amylase (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	47	95.9	17.0	17.7	99	67 - 125	47	95.5	13.4	14.0	97	66 - 125		
All Roche Reagents	9	99.1	2.1	2.1	99	69 - 129	9	106.3	2.1	1.9	106	74 - 139		
Beckman AU														
Beckman AU systems	10	82.7	3.9	4.8	83	57 - 108	10	74.1	4.0	5.4	75	51 - 97		
Roche Integra														
Roche Integra	5	100.0	2.2	2.2	100	70 - 130	5	106.2	1.8	1.7	106	74 - 139		
Siemens Healthcare														
Siemens Dimension	8	114.8	1.8	1.5	114	80 - 150	8	95.0	1.7	1.8	95	66 - 124		
VITROS														
VITROS 250,350,400 500,700,750,950	6	69.2	4.3	6.2	69	48 - 90	6	106.7	2.0	1.8	107	74 - 139		
All Chemistry Instruments	7	69.4	4.0	5.8	69	48 - 91	7	108.9	6.1	5.6	107	76 - 142		
Specimen CH-3							Specimen CH-4							
All Method	45	16.3	6.1	37.5	15	11 - 22	46	178.2	31.7	17.8	185	124 - 232		
All Roche Reagents	9	16.0	0.5	3.1	16	11 - 21	9	184.3	3.8	2.1	186	129 - 240		
Beckman AU														
Beckman AU systems	10	10.4	1.0	9.3	11	7 - 14	10	153.8	6.7	4.3	154	107 - 200		
Roche Integra														
Roche Integra	5	16.2	0.4	2.8	16	11 - 22	5	185.4	3.0	1.6	186	129 - 242		
Siemens Healthcare														
Siemens Dimension	8	14.8	0.7	4.8	15	10 - 20	8	211.8	2.7	1.3	213	148 - 276		
VITROS														
VITROS 250,350,400 500,700,750,950	5	30.0	0.1	0.0	30	21 - 39	6	128.0	2.5	2.0	128	89 - 167		
All Chemistry Instruments	6	30.0	0.1	0.0	30	21 - 39	7	129.4	4.4	3.4	129	90 - 169		

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

All Method	45	55.2	8.8	15.9	59	38 - 72
All Roche Reagents	9	57.9	1.5	2.5	58	40 - 76
Beckman AU						
Beckman AU systems	10	47.3	2.2	4.7	48	33 - 62
Roche Integra						
Roche Integra	5	58.8	1.1	1.9	59	41 - 77
Siemens Healthcare						
Siemens Dimension	8	65.4	0.5	0.8	65	45 - 85
VITROS						
VITROS 250,350,400 500,700,750,950	6	41.7	3.5	8.4	41	29 - 55
All Chemistry Instruments	7	41.7	3.2	7.7	42	29 - 55

### 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	48	449.3	55.4	12.3	474	359 - 540	48	177.1	23.7	13.4	186	141 - 213		
All Alfa Wassermann Reagents	5	323.3	11.8	3.6	322	258 - 388	5	126.8	3.3	2.6	127	101 - 153		
All Horiba Pentra Reagents	7	485.6	21.3	4.4	482	388 - 583	7	201.4	9.9	4.9	201	161 - 242		
All Roche Reagents	18	487.2	9.1	1.9	487	389 - 585	18	188.3	7.6	4.0	189	150 - 226		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	5	323.3	11.8	3.6	322	258 - 388	5	126.8	3.3	2.6	127	101 - 153		
Beckman AU														
Beckman AU systems	10	393.8	21.8	5.5	399	315 - 473	10	152.8	7.6	4.9	155	122 - 184		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	7	485.6	21.3	4.4	482	388 - 583	7	201.4	9.9	4.9	201	161 - 242		
Roche cobas c 501														
Roche cobas 6000 / c 501	7	490.6	8.3	1.7	490	392 - 589	7	191.0	5.8	3.1	194	152 - 230		
Roche Integra														
Roche Integra	11	485.0	9.2	1.9	484	388 - 582	11	186.6	8.3	4.5	186	149 - 224		
Siemens Healthcare LDI														
Siemens Dimension	5	457.3	8.3	1.8	459	365 - 549	5	186.5	8.6	4.6	189	149 - 224		

### 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	47	115.4	14.8	12.9	123	92 - 139	48	770.1	99.6	12.9	804	616 - 925		
All Alfa Wassermann Reagents	5	89.8	2.2	2.5	90	71 - 108	5	546.3	13.8	2.5	544	437 - 656		
All Horiba Pentra Reagents	7	129.4	8.5	6.6	125	103 - 156	7	852.0	61.7	7.2	859	681 - 1023		
All Roche Reagents	18	124.6	2.4	2.0	125	99 - 150	18	823.3	18.6	2.3	825	658 - 988		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	5	89.8	2.2	2.5	90	71 - 108	5	546.3	13.8	2.5	544	437 - 656		
Beckman AU														
Beckman AU systems	10	98.0	5.8	5.9	100	78 - 118	10	674.2	30.7	4.6	681	539 - 810		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	7	129.4	8.5	6.6	125	103 - 156	7	852.0	61.7	7.2	859	681 - 1023		
Roche cobas c 501														
Roche cobas 6000 / c 501	7	123.7	2.8	2.2	122	98 - 149	7	838.4	11.9	1.4	833	670 - 1007		
Roche Integra														
Roche Integra	11	125.1	2.2	1.7	125	100 - 151	11	813.7	15.6	1.9	812	650 - 977		
Siemens Healthcare LDI														
Siemens Dimension	5	119.8	9.4	7.8	121	95 - 144	5	809.3	24.2	3.0	803	647 - 972		

## Lactate Dehydrogenase (IU/L)

### Specimen CH-5

All Method	48	286.8	36.7	12.8	304	229 - 345
All Alfa Wassermann Reagents	5	208.8	6.4	3.1	210	167 - 251
All Horiba Pentra Reagents	7	310.3	12.2	3.9	307	248 - 373
All Roche Reagents	18	310.9	6.6	2.1	312	248 - 374
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	5	208.8	6.4	3.1	210	167 - 251
Beckman AU						
Beckman AU systems	10	248.3	13.5	5.5	252	198 - 298
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	7	310.3	12.2	3.9	307	248 - 373
Roche cobas c 501						
Roche cobas 6000 / c 501	7	309.7	8.0	2.6	307	247 - 372
Roche Integra						
Roche Integra	11	311.7	5.9	1.9	312	249 - 375
Siemens Healthcare LDI						
Siemens Dimension	5	291.5	5.4	1.9	293	233 - 350

## 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	22	35.1	4.5	12.9	37	24 - 46	21	59.6	2.8	4.7	61	41 - 78		
All Roche Reagents	9	32.8	1.8	5.5	32	22 - 43	9	59.3	3.1	5.3	60	41 - 78		
Beckman AU														
Beckman AU systems	7	38.4	1.8	4.7	38	26 - 50	7	60.9	1.3	2.2	61	42 - 80		
Siemens Healthcare														
Siemens Dimension	6	124.3	15.6	12.5	127	87 - 162	6	251.3	26.3	10.4	247	175 - 327		

### 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	7	172.97	5.49	3.2	174.1	156.5 - 189.5	7	5.27	0.35	6.7	5.3	4.2 - 6.4		
Specimen CH-3														
All Method	7	1.20	0.72	60.1	1.0	0.0 - 3.4	7	335.23	14.26	4.3	329.3	292.4 - 378.1		
Specimen CH-4														
Specimen CH-5														
All Method	7	88.47	6.25	7.1	87.6	69.7 - 107.3								

### 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	15	17.33	1.95	11.3	17.8	12.9 - 21.7	15	11.67	2.11	18.0	11.6	8.7 - 14.6		
Beckman ACCESS / 2 / Dxl	7	18.23	1.48	8.1	17.9	13.6 - 22.8	7	10.59	0.97	9.2	10.7	7.9 - 13.3		
Specimen CH-3														
All Method	15	4.67	0.58	12.5	4.6	3.5 - 5.9	15	28.83	1.98	6.9	28.6	21.6 - 36.1		
Beckman ACCESS / 2 / Dxl	7	5.00	0.61	12.1	4.9	3.7 - 6.3	7	29.47	1.57	5.3	29.0	22.1 - 36.9		
Specimen CH-4														
Specimen CH-5														
All Method	15	11.38	0.91	8.0	11.2	8.5 - 14.3								
Beckman ACCESS / 2 / Dxl	7	11.96	0.84	7.0	11.7	8.9 - 15.0								

### 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	10	45.78	2.75	6.0	45.4	37.5 - 54.1	10	26.19	4.31	16.5	27.5	13.2 - 39.2		
<b>Specimen CH-3</b>														
All Method	10	48.77	4.61	9.5	50.2	34.9 - 62.7	10	43.06	2.98	6.9	42.0	34.1 - 52.0		
<b>Specimen CH-5</b>														
All Method	10	46.70	4.04	8.7	46.7	34.5 - 58.9								

### 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	20	1.34	0.21	15.8	1.4	0.7 - 2.0	21	1.26	0.41	32.6	1.2	0.0 - 2.5		
All TOSOH Instruments	7	4.46	1.54	34.6	4.9	0.0 - 9.1	7	1.54	1.31	84.7	1.1	0.0 - 5.5		
Beckman ACCESS / 2 / Dxl	11	1.40	0.16	11.5	1.4	0.9 - 1.9	11	1.58	0.13	8.4	1.5	1.1 - 2.0		
TOSOH ST AIA PACK	6	4.40	1.68	38.2	5.0	0.0 - 9.5	6	1.62	1.42	87.6	1.1	0.0 - 5.9		
<b>Specimen CH-3</b>														
All Method	20	0.74	0.22	29.7	0.8	0.0 - 1.4	20	1.88	0.41	21.7	2.1	0.6 - 3.2		
All TOSOH Instruments	7	3.01	0.20	6.5	3.1	2.4 - 3.6	7	6.27	0.78	12.5	6.1	3.9 - 8.7		
Beckman ACCESS / 2 / Dxl	11	0.75	0.13	17.1	0.7	0.3 - 1.2	11	2.14	0.24	11.1	2.1	1.4 - 2.9		
TOSOH ST AIA PACK	6	2.97	0.16	5.5	3.0	2.4 - 3.5	6	6.25	0.85	13.7	6.1	3.6 - 8.9		
<b>Specimen CH-5</b>														
All Method	20	1.02	0.23	22.8	1.1	0.3 - 1.8								
All TOSOH Instruments	7	4.01	0.34	8.4	3.9	2.9 - 5.1								
Beckman ACCESS / 2 / Dxl	11	1.07	0.14	13.2	1.1	0.6 - 1.5								
TOSOH ST AIA PACK	6	4.00	0.37	9.2	3.9	2.8 - 5.2								

**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	32	4.06	0.63	15.5	3.9	2.1 - 6.0	32	2.53	0.27	10.5	2.5	1.7 - 3.4
All TOSOH Instruments	5	7.74	0.42	5.4	7.7	6.4 - 9.0	5	2.86	0.39	13.7	2.8	1.6 - 4.1
Beckman ACCESS / 2 / Dxl	20	3.73	0.22	5.8	3.7	3.0 - 4.4	20	2.54	0.21	8.2	2.5	1.9 - 3.2
<b>Specimen CH-3</b>												
All Method	32	2.48	0.39	15.6	2.5	1.3 - 3.7	32	4.94	0.79	15.9	4.6	2.5 - 7.3
All TOSOH Instruments	5	3.48	0.37	10.6	3.4	2.3 - 4.6	5	11.06	0.59	5.3	11.0	9.3 - 12.9
Beckman ACCESS / 2 / Dxl	20	2.37	0.27	11.6	2.4	1.5 - 3.2	20	4.51	0.23	5.1	4.5	3.8 - 5.2
<b>Specimen CH-5</b>												
All Method	31	3.54	0.47	13.3	3.5	2.1 - 5.0						
All TOSOH Instruments	5	6.10	0.30	4.9	6.2	5.2 - 7.0						
Beckman ACCESS / 2 / Dxl	19	3.34	0.19	5.8	3.3	2.7 - 4.0						

## 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	14	8.25	0.87	10.5	8.5	6.6 - 9.9	14	10.65	1.42	13.3	9.6	8.5 - 12.8
All TOSOH Instruments	6	8.47	0.80	9.4	8.2	6.7 - 10.2	6	9.73	0.54	5.5	9.7	7.7 - 11.7
Beckman ACCESS / 2 / Dxl	8	9.16	0.87	9.5	9.4	7.3 - 11.0	8	8.89	0.70	7.8	9.1	7.1 - 10.7
TOSOH ST AIA PACK	5	8.16	0.30	3.7	8.1	6.5 - 9.8	5	9.56	0.36	3.8	9.4	7.6 - 11.5
Specimen CH-3							Specimen CH-4					
All Method	14	1.92	0.25	12.9	1.8	0.9 - 3.0	14	13.46	1.16	8.6	13.1	10.7 - 16.2
All TOSOH Instruments	6	1.83	0.08	4.5	1.9	0.8 - 2.9	6	13.07	0.45	3.4	12.9	10.4 - 15.7
Beckman ACCESS / 2 / Dxl	8	1.85	0.23	12.6	1.8	0.8 - 2.9	8	13.14	1.00	7.6	13.1	10.5 - 15.8
TOSOH ST AIA PACK	5	1.82	0.08	4.6	1.8	0.8 - 2.9	5	13.12	0.48	3.7	13.0	10.4 - 15.8
Specimen CH-5												
All Method	14	5.14	0.38	7.4	5.3	4.1 - 6.2						
All TOSOH Instruments	6	5.18	0.29	5.6	5.1	4.1 - 6.3						
Beckman ACCESS / 2 / Dxl	8	5.81	0.46	7.9	5.8	4.6 - 7.0						
TOSOH ST AIA PACK	5	5.24	0.29	5.5	5.2	4.1 - 6.3						

## 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	110	2.54	0.49	19.1	2.4	1.0 - 4.0	114	1.19	0.24	20.5	1.2	0.4 - 2.0
All TOSOH Instruments	18	3.12	0.20	6.4	3.2	2.5 - 3.8	18	1.37	0.08	6.1	1.4	1.1 - 1.7
Abbott Architect	10	2.43	0.13	5.5	2.5	2.0 - 2.9	10	1.40	0.07	4.8	1.4	1.2 - 1.6
Beckman ACCESS / 2 / Dxl	45	2.11	0.11	5.3	2.1	1.7 - 2.5	44	0.95	0.09	9.2	1.0	0.6 - 1.3
Siemens Dimension	16	3.01	0.12	3.9	3.0	2.6 - 3.4	17	1.19	0.11	9.6	1.2	0.8 - 1.6
TOSOH ST AIA PACK	14	3.10	0.22	7.2	3.2	2.4 - 3.8	14	1.35	0.09	6.3	1.4	1.0 - 1.7
Specimen CH-3												
All Method	110	0.85	0.12	14.3	0.8	0.4 - 1.3	112	3.60	0.77	21.4	3.6	1.2 - 6.0
All TOSOH Instruments	18	0.95	0.08	8.3	1.0	0.7 - 1.2	18	4.42	0.24	5.5	4.5	3.6 - 5.2
Beckman ACCESS / 2 / Dxl	10	0.76	0.05	6.8	0.8	0.6 - 1.0	10	3.65	0.30	8.1	3.6	2.7 - 4.6
Siemens Dimension	46	0.78	0.07	8.5	0.8	0.5 - 1.0	46	2.85	0.17	5.9	2.8	2.3 - 3.4
TOSOH AIA PACK	17	0.86	0.08	9.1	0.9	0.6 - 1.2	16	4.35	0.23	5.2	4.4	3.6 - 5.1
TOSOH ST AIA PACK	14	0.94	0.08	9.0	1.0	0.6 - 1.2	14	4.39	0.26	5.9	4.4	3.6 - 5.2
Specimen CH-5												
All Method	110	1.84	0.33	18.1	1.7	0.8 - 2.9						
All TOSOH Instruments	18	2.26	0.13	5.9	2.3	1.8 - 2.7						
Beckman ACCESS / 2 / Dxl	10	1.56	0.07	4.5	1.6	1.3 - 1.8						
Siemens Dimension	46	1.58	0.08	5.4	1.6	1.3 - 1.9						
TOSOH AIA PACK	17	2.02	0.15	7.3	2.0	1.5 - 2.5						
TOSOH ST AIA PACK	14	2.24	0.13	6.0	2.3	1.8 - 2.7						

## TSH ( $\mu$ U/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	137	4.98	0.67	13.4	4.9	2.9 - 7.0	138	3.28	0.31	9.5	3.3	2.3 - 4.3		
All Abbott Instruments	11	4.79	0.18	3.8	4.8	4.2 - 5.4	11	3.07	0.11	3.6	3.1	2.7 - 3.5		
All Roche Instruments	10	5.04	0.20	3.9	5.0	4.4 - 5.7	10	3.26	0.16	4.8	3.2	2.7 - 3.8		
All TOSOH Instruments	26	5.85	0.56	9.5	5.9	4.1 - 7.6	26	3.69	0.31	8.3	3.7	2.7 - 4.7		
Abbott Architect	11	4.79	0.18	3.8	4.8	4.2 - 5.4	11	3.07	0.11	3.6	3.1	2.7 - 3.5		
Beckman ACCESS / 2 / Dxl	51	4.75	0.25	5.3	4.7	4.0 - 5.6	52	3.25	0.25	7.8	3.3	2.4 - 4.1		
Siemens Dimension	21	4.21	0.53	12.7	4.0	2.6 - 5.9	21	3.05	0.27	8.9	3.0	2.2 - 3.9		
TOSOH ST AIA PACK	18	5.81	0.61	10.5	5.9	3.9 - 7.7	18	3.64	0.33	9.2	3.7	2.6 - 4.7		
Specimen CH-3							Specimen CH-4							
All Method	134	0.31	0.05	16.8	0.3	0.1 - 0.5	138	8.99	1.25	13.9	9.0	5.2 - 12.8		
All Abbott Instruments	10	0.30	0.01	0.0	0.3	0.2 - 0.4	11	8.76	0.26	3.0	8.7	7.9 - 9.6		
All Roche Instruments	10	0.40	0.01	0.0	0.4	0.3 - 0.5	10	8.50	0.39	4.6	8.5	7.3 - 9.7		
All TOSOH Instruments	26	0.37	0.06	15.4	0.4	0.1 - 0.6	26	10.25	0.77	7.5	10.2	7.9 - 12.6		
Abbott Architect	10	0.30	0.01	0.0	0.3	0.2 - 0.4	11	8.76	0.26	3.0	8.7	7.9 - 9.6		
Beckman ACCESS / 2 / Dxl	46	0.30	0.01	0.0	0.3	0.2 - 0.4	52	8.77	0.81	9.2	9.0	6.3 - 11.2		
Siemens Dimension	19	0.29	0.03	10.9	0.3	0.1 - 0.4	21	7.47	1.34	18.0	7.1	3.4 - 11.6		
TOSOH ST AIA PACK	18	0.36	0.06	16.8	0.4	0.1 - 0.6	18	10.07	0.81	8.1	10.1	7.6 - 12.6		
Specimen CH-5														
All Method	137	2.74	0.38	13.9	2.7	1.5 - 3.9								
All Abbott Instruments	11	2.59	0.09	3.6	2.6	2.3 - 2.9								
All Roche Instruments	10	2.92	0.09	3.1	2.9	2.6 - 3.2								
All TOSOH Instruments	26	3.25	0.32	10.0	3.2	2.2 - 4.3								
Abbott Architect	11	2.59	0.09	3.6	2.6	2.3 - 2.9								
Beckman ACCESS / 2 / Dxl	51	2.60	0.12	4.7	2.6	2.2 - 3.0								
Siemens Dimension	21	2.30	0.25	11.0	2.2	1.5 - 3.1								
TOSOH ST AIA PACK	18	3.23	0.37	11.6	3.2	2.1 - 4.4								

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	-	134	134	-
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	-	4	4	-
BTNX Rapid Response hCG	-	1	1	-
Cardinal Health SP Brand combo	-	13	13	-
CONSULT diagnostics hCG Combo	-	9	9	-
Henry Schein One Step + Combo	-	5	5	-
McKesson hCG Combo Cassette	-	5	5	-
Medline hCG Combo Test Cassette	-	2	2	-
PSS Select hCG Combo	-	1	1	-
Quidel QuickVue + One-Step	-	6	6	-
Quidel QuickVue One-Step Combo	-	12	12	-
Quidel QuickVue Semi-Q hCG	-	1	1	-
Sekisui OSOM hCG Combo Test	-	2	2	-
Stanbio QUPID Plus	-	2	2	-

**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	134	-	134	-
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	4	-	4	-
BTNX Rapid Response hCG	1	-	1	-
Cardinal Health SP Brand combo	13	-	13	-
CONSULT diagnostics hCG Combo	9	-	9	-
Henry Schein One Step + Combo	5	-	5	-
McKesson hCG Combo Cassette	5	-	5	-
Medline hCG Combo Test Cassette	2	-	2	-
PSS Select hCG Combo	1	-	1	-
Quidel QuickVue + One-Step	6	-	6	-
Quidel QuickVue One-Step Combo	12	-	12	-
Quidel QuickVue Semi-Q hCG	1	-	1	-
Sekisui OSOM hCG Combo Test	2	-	2	-
Stanbio QUPID Plus	2	-	2	-

## Serum hCG – Qualitative

### Specimen HCG-5

<u>Method</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	-	134
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	-	4
BTNX Rapid Response hCG	-	1
Cardinal Health SP Brand combo	-	13
CONSULT diagnostics hCG Combo	-	9
Henry Schein One Step + Combo	-	5
McKesson hCG Combo Cassette	-	5
Medline hCG Combo Test Cassette	-	2
PSS Select hCG Combo	-	1
Quidel QuickVue + One-Step	-	6
Quidel QuickVue One-Step Combo	-	12
Quidel QuickVue Semi-Q hCG	-	1
Sekisui OSOM hCG Combo Test	-	2
Stanbio QUPID Plus	-	2

## 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	17	0.9	0.6	61.2	1	0 - 3	18	356.8	160.4	45.0	312	36 - 678		
Specimen HCG-3														
All Method	18	2392.9	1629.4	68.1	1981	0 - 5652	18	3094.3	1741.6	56.3	2869	0 - 6578		
Specimen HCG-5														
All Method	17	0.9	0.6	62.0	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	169	152.0	5.5	3.6	152	136 - 168	169	302.5	22.3	7.4	295	272 - 333		
All Alfa Wassermann Reagents	20	155.4	4.1	2.6	157	139 - 171	20	292.7	10.1	3.5	294	263 - 322		
All Horiba Pentra Reagents	12	150.1	2.2	1.5	150	135 - 166	12	283.3	5.4	1.9	282	254 - 312		
All Roche Reagents	15	148.6	3.6	2.4	150	133 - 164	15	287.3	5.7	2.0	288	258 - 317		
Abaxis Piccolo														
All Chemistry Instruments	5	147.2	2.9	2.0	147	132 - 162	5	284.4	4.3	1.5	285	255 - 313		
Alere Cholestech LDX														
Alere Cholestech LDX - waived	38	156.1	7.1	4.5	155	140 - 172	38	326.2	18.0	5.5	326	293 - 359		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	20	155.4	4.1	2.6	157	139 - 171	20	292.7	10.1	3.5	294	263 - 322		
Beckman AU														
Beckman AU systems	24	149.9	4.0	2.7	150	134 - 165	23	292.7	5.1	1.8	293	263 - 322		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	12	150.1	2.2	1.5	150	135 - 166	12	283.3	5.4	1.9	282	254 - 312		
Roche cobas c 501														
Roche cobas 6000 / c 501	8	149.5	3.2	2.1	151	134 - 165	8	288.8	4.2	1.5	289	259 - 318		
Roche Integra														
Roche Integra	6	147.0	4.0	2.7	149	132 - 162	6	284.3	6.7	2.3	284	255 - 313		
Siemens Healthcare														
Siemens Dimension	22	149.5	4.4	3.0	149	134 - 165	22	291.2	8.6	3.0	290	262 - 321		
All Chemistry Instruments														
All Chemistry Instruments	23	149.7	4.5	3.0	149	134 - 165	23	291.7	8.8	3.0	290	262 - 321		
VITROS														
VITROS 250,350,400 500,700,750,950	17	150.6	5.2	3.5	150	135 - 166	16	330.4	14.3	4.3	329	297 - 364		
All Chemistry Instruments														
All Chemistry Instruments	19	151.2	5.2	3.5	151	136 - 167	18	333.0	15.5	4.7	332	299 - 367		

## 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	127	63.8	3.5	5.5	64	57 - 71	134	237.7	8.6	3.6	237	213 - 262		
All Alfa Wassermann Reagents	20	67.9	1.8	2.7	68	61 - 75	20	237.9	5.7	2.4	239	214 - 262		
All Horiba Pentra Reagents	12	64.1	1.2	1.9	64	57 - 71	12	234.3	4.9	2.1	236	210 - 258		
All Roche Reagents	15	63.5	1.4	2.1	64	57 - 70	15	233.5	5.7	2.4	235	210 - 257		
Abaxis Piccolo														
All Chemistry Instruments	3	-	-	-	62	55 - 68	3	-	-	-	-	222	198 - 244	
Alere Cholestech LDX														
Alere Cholestech LDX - waived	5	100.0	0.1	0.0	100	90 - 110	5	249.0	11.7	4.7	249	224 - 274		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	20	67.9	1.8	2.7	68	61 - 75	20	237.9	5.7	2.4	239	214 - 262		
Beckman AU														
Beckman AU systems	24	63.7	2.3	3.6	64	57 - 71	24	235.4	5.9	2.5	236	211 - 259		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	12	64.1	1.2	1.9	64	57 - 71	12	234.3	4.9	2.1	236	210 - 258		
Roche cobas c 501														
Roche cobas 6000 / c 501	8	64.0	1.3	2.0	64	57 - 71	8	234.9	5.5	2.3	235	211 - 259		
Roche Integra														
Roche Integra	6	62.7	1.2	1.9	63	56 - 69	6	230.7	5.5	2.4	230	207 - 254		
Siemens Healthcare														
Siemens Dimension	21	64.7	3.0	4.6	64	58 - 72	22	235.3	6.0	2.5	236	211 - 259		
All Chemistry Instruments	22	64.7	2.9	4.5	64	58 - 72	23	235.3	5.8	2.5	236	211 - 259		
VITROS														
VITROS 250,350,400 500,700,750,950	17	58.8	1.5	2.5	58	52 - 65	17	245.0	9.1	3.7	248	220 - 270		
All Chemistry Instruments	19	58.8	1.5	2.6	58	52 - 65	19	246.4	9.6	3.9	249	221 - 272		

## 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	132	108.7	3.2	2.9	109	97 - 120
All Alfa Wassermann Reagents	20	111.9	3.4	3.0	112	100 - 124
All Horiba Pentra Reagents	12	108.5	2.5	2.3	108	97 - 120
All Roche Reagents	15	107.4	2.8	2.6	108	96 - 119
Abaxis Piccolo						
All Chemistry Instruments	3	-	-	-	107	96 - 118
Alere Cholestech LDX						
Alere Cholestech LDX - waived	5	107.4	2.3	2.1	107	96 - 119
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	20	111.9	3.4	3.0	112	100 - 124
Beckman AU						
Beckman AU systems	23	108.7	2.1	2.0	109	97 - 120
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	12	108.5	2.5	2.3	108	97 - 120
Roche cobas c 501						
Roche cobas 6000 / c 501	8	108.4	3.0	2.7	109	97 - 120
Roche Integra						
Roche Integra	6	106.0	2.3	2.2	106	95 - 117
Siemens Healthcare						
Siemens Dimension	22	108.1	3.3	3.1	108	97 - 119
All Chemistry Instruments	23	108.2	3.3	3.0	108	97 - 120
VITROS						
VITROS 250,350,400 500,700,750,950	17	107.5	3.7	3.4	108	96 - 119
All Chemistry Instruments	19	107.4	3.5	3.2	107	96 - 119

### 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	121	51.9	9.2	17.7	53	33 - 71	120	202.6	31.0	15.3	203	140 - 265		
Calculated-Trig/5														
Alere Cholestech LDX - waived	37	55.2	7.0	12.8	55	38 - 72	36	239.0	18.7	7.8	237	167 - 311		
Alfa Wassermann ACE Alera/Axcel	15	56.7	4.6	8.1	56	39 - 74	15	173.2	9.5	5.5	174	121 - 226		
Beckman AU systems	16	54.9	3.7	6.7	56	38 - 72	16	170.8	5.3	3.1	171	119 - 223		
Horiba ABX Pentra 400 / C400	9	63.2	12.7	20.1	60	37 - 89	9	167.3	5.9	3.5	168	117 - 218		
Siemens Dimension	9	39.3	3.7	9.3	39	27 - 52	9	209.3	5.5	2.6	210	146 - 273		
VITROS 250,350,400 500,700,750,950	12	40.8	7.9	19.4	39	24 - 57	11	210.5	16.2	7.7	211	147 - 274		
All Chemistry Instruments	117	52.1	9.1	17.5	53	33 - 71	116	202.5	31.4	15.5	202	139 - 266		
	Specimen CH-3							Specimen CH-4						
All Method	83	18.6	5.4	29.0	18	7 - 30	79	81.5	14.6	18.0	83	52 - 111		
Calculated-Trig/5														
Alere Cholestech LDX - waived	1	-	-	-	61	8 - 30	1	-	-	-	84	52 - 111		
Alfa Wassermann ACE Alera/Axcel	15	19.4	3.1	15.8	19	13 - 26	15	91.1	9.3	10.2	93	63 - 119		
Beckman AU systems	16	21.5	1.8	8.5	21	15 - 28	16	83.8	5.9	7.0	84	58 - 109		
Horiba ABX Pentra 400 / C400	9	23.2	2.3	10.0	23	16 - 31	9	93.8	5.3	5.7	95	65 - 122		
Siemens Dimension	9	12.4	3.0	23.8	12	6 - 19	9	69.3	5.0	7.3	71	48 - 91		
VITROS 250,350,400 500,700,750,950	12	12.7	1.8	14.4	12	8 - 17	11	59.6	16.0	26.9	61	27 - 92		
All Chemistry Instruments	79	18.6	5.3	28.3	19	8 - 30	76	81.5	14.4	17.7	84	52 - 111		
	Specimen CH-5													
All Method	87	35.5	7.1	19.9	36	21 - 50								
Calculated-Trig/5														
Alere Cholestech LDX - waived	4	-	-	-	40	21 - 50								
Alfa Wassermann ACE Alera/Axcel	15	36.7	4.0	10.8	37	25 - 48								
Beckman AU systems	16	39.5	2.7	6.9	40	27 - 52								
Horiba ABX Pentra 400 / C400	9	42.8	3.5	8.2	44	29 - 56								
Siemens Dimension	9	26.7	3.2	11.9	28	18 - 35								
VITROS 250,350,400 500,700,750,950	12	28.8	4.0	14.0	29	20 - 38								
All Chemistry Instruments	83	35.5	7.1	19.9	36	21 - 50								

### LDL Cholesterol - Direct (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	41	56.3	12.8	22.7	54	30 - 82		41	149.3	20.9	14.0	153	104 - 195	
Beckman AU Direct HDL / LDL														
Beckman AU systems	12	42.5	1.3	3.1	43	29 - 56		12	123.8	8.1	6.5	125	86 - 161	
Roche LDL Direct														
Roche cobas 6000 / c 501	6	76.8	1.5	1.9	77	53 - 100		6	176.0	3.3	1.9	176	123 - 229	
All Chemistry Instruments	9	77.0	1.9	2.4	77	53 - 101		9	177.2	3.3	1.9	178	124 - 231	
Siemens Automated LDL														
Siemens Dimension	11	56.6	2.9	5.1	57	39 - 74		11	154.8	8.7	5.6	155	108 - 202	
<b><u>Method</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	40	21.6	5.7	26.4	22	10 - 34		40	88.7	19.1	21.5	86	50 - 127	
Beckman AU Direct HDL / LDL														
Beckman AU systems	12	15.5	0.7	4.3	16	10 - 21		12	69.5	2.3	3.3	70	48 - 91	
Roche LDL Direct														
Roche cobas 6000 / c 501	6	30.8	0.8	2.4	31	21 - 41		6	122.7	2.9	2.4	123	85 - 160	
All Chemistry Instruments	9	34.8	11.0	31.6	31	12 - 57		9	134.4	37.8	28.1	122	58 - 211	
Siemens Automated LDL														
Siemens Dimension	11	22.6	1.3	5.7	23	15 - 30		11	89.8	4.1	4.6	90	62 - 117	
<b><u>Method</u></b>	Specimen CH-5													
	<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	40	39.3	9.2	23.5	38	20 - 58								
Beckman AU Direct HDL / LDL														
Beckman AU systems	12	29.6	1.1	3.7	30	20 - 39								
Roche LDL Direct														
Roche cobas 6000 / c 501	6	54.8	0.8	1.4	55	38 - 72								
All Chemistry Instruments	9	60.8	17.3	28.5	55	26 - 96								
Siemens Automated LDL														
Siemens Dimension	11	40.3	2.0	5.0	41	28 - 53								

## 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	168	68.0	7.3	10.7	66	47 - 89	167	81.0	18.7	23.1	87	56 - 106		
All Dex-Sulfate 50,000 MW Methods	38	67.8	6.6	9.7	66	47 - 89	37	62.1	9.3	15.0	60	43 - 81		
All Direct Methods	111	67.0	7.6	11.3	65	46 - 88	111	84.8	18.0	21.2	95	59 - 111		
Abaxis Piccolo														
All Chemistry Instruments	5	61.6	3.8	6.1	62	43 - 81	5	53.6	4.1	7.6	51	37 - 70		
Alere Cholestech LDX														
Alere Cholestech LDX - waived	38	67.8	6.6	9.7	66	47 - 89	37	62.1	9.3	15.0	60	43 - 81		
Alfa Wass. ACE HDL-C / LDL-C														
Alfa Wassermann ACE Alera/Axcel	20	64.3	3.3	5.2	65	45 - 84	20	96.7	4.7	4.8	97	67 - 126		
All Chemistry Instruments	21	64.2	3.3	5.1	64	44 - 84	21	96.8	4.6	4.8	97	67 - 126		
Beckman AU Direct HDL / LDL														
Beckman AU systems	22	62.7	3.0	4.8	62	43 - 82	22	99.7	4.5	4.5	100	69 - 130		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	12	58.1	3.1	5.4	58	40 - 76	12	95.2	5.0	5.3	96	66 - 124		
Roche HDL Direct														
Roche cobas 6000 / c 501	8	76.4	2.5	3.3	77	53 - 100	8	71.8	2.5	3.6	73	50 - 94		
Roche Integra	5	75.2	3.3	4.3	77	52 - 98	5	68.0	3.1	4.5	69	47 - 89		
All Chemistry Instruments	14	76.1	2.7	3.6	77	53 - 99	14	70.5	3.2	4.5	72	49 - 92		
Siemens Automated HDL														
Siemens Dimension	20	77.4	1.3	1.7	78	54 - 101	21	59.7	2.3	3.9	60	41 - 78		
All Chemistry Instruments	21	77.4	1.3	1.7	78	54 - 101	22	59.7	2.3	3.8	60	41 - 78		
VITROS														
VITROS 250,350,400 500,700,750,950	5	72.4	4.4	6.1	74	50 - 95	5	92.2	4.4	4.8	91	64 - 120		
VITROS dHDL Slide														
VITROS 250,350,400 500,700,750,950	12	74.7	2.5	3.4	75	52 - 98	12	96.1	6.6	6.9	97	67 - 125		
All Chemistry Instruments	14	74.8	2.4	3.2	75	52 - 98	14	96.8	6.3	6.5	97	67 - 126		

### 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	133	28.5	4.7	16.5	29	19 - 38	129	108.3	13.1	12.1	105	75 - 141		
All Dex-Sulfate 50,000 MW Methods	5	18.8	4.8	25.3	16	13 - 25	5	100.0	0.1	0.0	100	70 - 130		
All Direct Methods	109	28.9	4.6	15.9	28	20 - 38	106	105.5	10.7	10.2	104	73 - 138		
Abaxis Piccolo														
All Chemistry Instruments	3	-	-	-	21	13 - 26	0	-	-	-	0	[No Laboratory]		
Alere Cholestech LDX														
Alere Cholestech LDX - waived	5	18.8	4.8	25.3	16	13 - 25	5	100.0	0.1	0.0	100	70 - 130		
Alfa Wass. ACE HDL-C / LDL-C														
Alfa Wassermann ACE Alera/Axcel	20	30.2	1.7	5.6	31	21 - 40	20	97.3	5.8	5.9	98	68 - 127		
All Chemistry Instruments	21	30.0	1.7	5.7	30	21 - 40	21	97.6	5.8	5.9	98	68 - 127		
Beckman AU Direct HDL / LDL														
Beckman AU systems	22	26.0	1.7	6.7	26	18 - 34	22	102.8	5.7	5.6	104	71 - 134		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	12	24.3	1.2	5.1	24	17 - 32	12	93.3	5.0	5.4	93	65 - 122		
Roche HDL Direct														
Roche cobas 6000 / c 501	8	29.6	0.9	3.1	30	20 - 39	8	121.8	3.9	3.2	122	85 - 159		
Roche Integra	5	29.6	1.1	3.9	30	20 - 39	5	117.2	6.3	5.3	119	82 - 153		
All Chemistry Instruments	14	29.6	0.9	3.2	30	20 - 39	14	120.3	5.1	4.3	122	84 - 157		
Siemens Automated HDL														
Siemens Dimension	21	36.2	0.9	2.4	36	25 - 48	21	116.6	2.9	2.5	116	81 - 152		
All Chemistry Instruments	22	36.2	0.9	2.4	36	25 - 48	22	116.4	2.9	2.5	116	81 - 152		
VITROS														
VITROS 250,350,400 500,700,750,950	5	28.2	1.9	6.8	29	19 - 37	5	122.2	9.5	7.8	124	85 - 159		
VITROS dHDL Slide														
VITROS 250,350,400 500,700,750,950	12	28.8	1.0	3.4	29	20 - 38	11	127.3	12.3	9.7	130	89 - 166		
All Chemistry Instruments	14	28.8	0.9	3.1	29	20 - 38	13	129.0	12.5	9.7	130	90 - 168		

## 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	132	48.6	6.1	12.5	49	34 - 64
All Dex-Sulfate 50,000 MW Methods	5	37.4	13.3	35.6	41	26 - 49
All Direct Methods	109	48.3	6.4	13.3	47	33 - 63
Abaxis Piccolo						
All Chemistry Instruments	3	-	-	-	40	26 - 50
Alere Cholestech LDX						
Alere Cholestech LDX - waived	5	37.4	13.3	35.6	41	26 - 49
Alfa Wass. ACE HDL-C / LDL-C						
Alfa Wassermann ACE Alera/Axcel	20	48.5	3.6	7.4	48	33 - 63
All Chemistry Instruments	20	47.8	2.6	5.5	48	33 - 63
Beckman AU Direct HDL / LDL						
Beckman AU systems	22	44.1	2.8	6.3	45	30 - 58
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	12	41.0	2.1	5.2	41	28 - 54
Roche HDL Direct						
Roche cobas 6000 / c 501	8	53.5	1.4	2.6	54	37 - 70
Roche Integra	5	52.6	2.6	5.0	53	36 - 69
All Chemistry Instruments	14	53.2	1.8	3.5	54	37 - 70
Siemens Automated HDL						
Siemens Dimension	21	57.5	1.0	1.7	57	40 - 75
All Chemistry Instruments	22	57.4	1.0	1.8	57	40 - 75
VITROS						
VITROS 250,350,400 500,700,750,950	5	50.8	2.3	4.5	51	35 - 67
VITROS dHDL Slide						
VITROS 250,350,400 500,700,750,950	12	51.8	1.1	2.2	52	36 - 68
All Chemistry Instruments	14	51.7	1.1	2.1	52	36 - 68

## 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	164	167.3	9.6	5.7	167	125 - 210	167	118.8	10.1	8.5	117	89 - 149		
All Alfa Wassermann Reagents	19	171.6	4.7	2.7	173	128 - 215	20	120.6	5.3	4.4	122	90 - 151		
All Horiba Pentra Reagents	12	163.5	4.3	2.6	165	122 - 205	12	107.9	4.7	4.4	108	80 - 135		
All Roche Reagents	15	160.9	4.2	2.6	161	120 - 202	15	114.1	2.6	2.3	115	85 - 143		
Abaxis Piccolo														
All Chemistry Instruments	5	175.6	1.1	0.6	176	131 - 220	5	121.0	2.2	1.8	121	90 - 152		
Alere Cholestech LDX														
Alere Cholestech LDX - waived	36	167.1	7.0	4.2	167	125 - 209	37	126.9	6.2	4.9	126	95 - 159		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	19	171.6	4.7	2.7	173	128 - 215	20	120.6	5.3	4.4	122	90 - 151		
Beckman AU														
Beckman AU systems	24	168.3	2.6	1.5	168	126 - 211	24	113.0	2.1	1.9	114	84 - 142		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	12	163.5	4.3	2.6	165	122 - 205	12	107.9	4.7	4.4	108	80 - 135		
Roche cobas c 501														
Roche cobas 6000 / c 501	8	158.8	3.3	2.1	160	119 - 199	8	114.1	2.5	2.2	114	85 - 143		
Roche Integra														
Roche Integra	6	163.8	4.2	2.5	164	122 - 205	6	113.7	2.9	2.6	115	85 - 143		
Siemens Healthcare														
Siemens Dimension	22	157.7	2.1	1.3	159	118 - 198	22	107.8	3.1	2.9	107	80 - 135		
All Chemistry Instruments	22	157.7	2.1	1.3	159	118 - 198	23	108.3	3.9	3.6	107	81 - 136		
VITROS														
VITROS 250,350,400 500,700,750,950	17	187.2	7.2	3.8	185	140 - 235	17	135.6	5.9	4.3	137	101 - 170		
All Chemistry Instruments	19	186.4	7.3	3.9	185	139 - 233	19	134.8	6.1	4.5	133	101 - 169		

## 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	133	83.5	5.7	6.9	84	62 - 105	134	249.2	20.3	8.1	246	186 - 312		
All Alfa Wassermann Reagents	20	89.8	2.5	2.8	90	67 - 113	20	246.3	6.7	2.7	246	184 - 308		
All Horiba Pentra Reagents	12	82.6	2.6	3.2	83	61 - 104	12	237.3	8.7	3.7	240	177 - 297		
All Roche Reagents	15	83.4	2.4	2.9	83	62 - 105	15	230.4	5.1	2.2	231	172 - 288		
Abaxis Piccolo														
All Chemistry Instruments	3	-	-	-	87	64 - 108	3	-	-	-	-	265	199 - 333	
Alere Cholestech LDX														
Alere Cholestech LDX - waived	5	82.4	4.5	5.5	85	61 - 103	5	253.2	7.6	3.0	254	189 - 317		
Alfa Wassermann														
Alfa Wassermann ACE Alera/Axcel	20	89.8	2.5	2.8	90	67 - 113	20	246.3	6.7	2.7	246	184 - 308		
Beckman AU														
Beckman AU systems	24	84.0	1.9	2.3	84	62 - 105	24	251.4	4.3	1.7	250	188 - 315		
Horiba ABX Pentra														
Horiba ABX Pentra 400 / C400	12	82.6	2.6	3.2	83	61 - 104	12	237.3	8.7	3.7	240	177 - 297		
Roche cobas c 501														
Roche cobas 6000 / c 501	8	81.8	1.7	2.0	82	61 - 103	8	227.9	4.3	1.9	228	170 - 285		
Roche Integra														
Roche Integra	6	85.3	1.9	2.2	86	63 - 107	6	233.3	4.9	2.1	234	174 - 292		
Siemens Healthcare														
Siemens Dimension	22	74.8	2.2	3.0	74	56 - 94	22	239.4	4.5	1.9	240	179 - 300		
All Chemistry Instruments														
VITROS	22	74.8	2.2	3.0	74	56 - 94	23	239.8	4.8	2.0	240	179 - 300		
VITROS 250,350,400 500,700,750,950														
All Chemistry Instruments	17	89.4	3.8	4.2	89	67 - 112	17	291.0	10.1	3.5	289	218 - 364		
	19	88.9	3.8	4.2	88	66 - 112	19	289.9	10.1	3.5	289	217 - 363		

## 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	134	127.2	8.5	6.7	127	95 - 159
All Alfa Wassermann Reagents	18	131.9	1.8	1.4	132	98 - 165
All Horiba Pentra Reagents	12	125.6	4.8	3.8	126	94 - 157
All Roche Reagents	15	124.5	3.0	2.4	125	93 - 156
Abaxis Piccolo						
All Chemistry Instruments	3	-	-	-	131	98 - 164
Alere Cholestech LDX						
Alere Cholestech LDX - waived	5	125.4	5.0	4.0	125	94 - 157
Alfa Wassermann						
Alfa Wassermann ACE Alera/Axcel	18	131.9	1.8	1.4	132	98 - 165
Beckman AU						
Beckman AU systems	24	127.3	3.1	2.4	128	95 - 160
Horiba ABX Pentra						
Horiba ABX Pentra 400 / C400	12	125.6	4.8	3.8	126	94 - 157
Roche cobas c 501						
Roche cobas 6000 / c 501	8	122.8	2.3	1.8	124	92 - 154
Roche Integra						
Roche Integra	6	126.5	2.7	2.2	126	94 - 159
Siemens Healthcare						
Siemens Dimension	22	117.3	3.2	2.8	117	87 - 147
All Chemistry Instruments	23	117.8	3.9	3.3	117	88 - 148
VITROS						
VITROS 250,350,400 500,700,750,950	17	139.9	5.9	4.2	139	104 - 175
All Chemistry Instruments	19	139.1	6.1	4.4	137	104 - 174

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

<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	74.17	1.23	1.7	74.5	63.0 - 85.3	5	0.67	1.15	173.2	0.0	0.0 - 3.2
Siemens Dimension	5	74.17	1.23	1.7	74.5	63.0 - 85.3	5	0.67	1.15	173.2	0.0	0.0 - 3.2
<b>Specimen CH-3</b>												
All Method	5	17.23	0.93	5.4	16.8	14.6 - 19.9	5	136.80	2.52	1.8	136.4	116.2 - 157.4
Siemens Dimension	5	17.23	0.93	5.4	16.8	14.6 - 19.9	5	136.80	2.52	1.8	136.4	116.2 - 157.4
<b>Specimen CH-4</b>												
<b>Specimen CH-5</b>												
All Method	5	45.93	1.10	2.4	45.4	39.0 - 52.9						
Siemens Dimension	5	45.93	1.10	2.4	45.4	39.0 - 52.9						

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

<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	7	8.70	0.17	2.0	8.6	6.5 - 10.9	7	3.30	0.17	5.2	3.4	2.4 - 4.2
Siemens Dimension	5	8.70	0.17	2.0	8.6	6.5 - 10.9	5	3.30	0.17	5.2	3.4	2.4 - 4.2
<b>Specimen CH-3</b>												
All Method	7	3.07	0.23	7.5	3.2	2.3 - 3.9	7	13.83	0.25	1.8	13.8	10.3 - 17.3
Siemens Dimension	5	3.07	0.23	7.5	3.2	2.3 - 3.9	5	13.83	0.25	1.8	13.8	10.3 - 17.3
<b>Specimen CH-4</b>												
<b>Specimen CH-5</b>												
All Method	7	5.77	0.32	5.6	5.9	4.3 - 7.3						
Siemens Dimension	5	5.77	0.32	5.6	5.9	4.3 - 7.3						

**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	7	1.23	0.22	18.1	1.3	0.9 - 1.5	7	0.23	0.13	55.9	0.2	0.0 - 0.5
Siemens Dimension	5	1.33	0.06	4.3	1.3	1.0 - 1.6	5	0.17	0.06	34.6	0.2	0.0 - 0.4
<b>Specimen CH-3</b>												
All Method	7	0.45	0.06	12.8	0.5	0.2 - 0.7	7	2.10	0.24	11.7	2.1	1.6 - 2.6
Siemens Dimension	5	0.47	0.06	12.4	0.5	0.2 - 0.7	5	2.20	0.17	7.9	2.1	1.7 - 2.7
<b>Specimen CH-4</b>												
All Method	7	0.83	0.10	11.6	0.9	0.6 - 1.1						
Siemens Dimension	5	0.87	0.06	6.7	0.9	0.6 - 1.1						
<b>Specimen CH-5</b>												
All Method	7	0.83	0.10	11.6	0.9	0.6 - 1.1						
Siemens Dimension	5	0.87	0.06	6.7	0.9	0.6 - 1.1						

### 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	5.70	0.14	2.5	5.7	4.2 - 7.2	5	0.60	0.01	0.0	0.6	0.4 - 0.8
Siemens Dimension	5	5.70	0.14	2.5	5.7	4.2 - 7.2	5	0.60	0.01	0.0	0.6	0.4 - 0.8
Specimen CH-3												
All Method	5	0.50	0.28	56.6	0.5	0.3 - 0.7	5	10.95	0.78	7.1	11.0	8.2 - 13.7
Siemens Dimension	5	0.50	0.28	56.6	0.5	0.3 - 0.7	5	10.95	0.78	7.1	11.0	8.2 - 13.7
Specimen CH-4												
Specimen CH-5												
All Method	5	3.45	0.07	2.0	3.5	2.5 - 4.4						
Siemens Dimension	5	3.45	0.07	2.0	3.5	2.5 - 4.4						

### 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	1.33	0.06	4.3	1.3	1.0 - 1.7	5	0.30	0.01	0.0	0.3	0.0 - 0.6
Siemens Dimension	5	1.33	0.06	4.3	1.3	1.0 - 1.7	5	0.30	0.01	0.0	0.3	0.0 - 0.6
Specimen CH-3												
All Method	5	0.27	0.06	21.6	0.3	0.0 - 0.6	5	2.40	0.01	0.0	2.4	1.9 - 2.9
Siemens Dimension	5	0.27	0.06	21.6	0.3	0.0 - 0.6	5	2.40	0.01	0.0	2.4	1.9 - 2.9
Specimen CH-4												
Specimen CH-5												
All Method	5	0.80	0.01	0.0	0.8	0.5 - 1.1						
Siemens Dimension	5	0.80	0.01	0.0	0.8	0.5 - 1.1						

### 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	2	-	-	-	25.5	Not graded	2	-	-	-	-	18.0	Not graded		
Specimen CH-3															
All Method	2	-	-	-	5.6	Not graded	2	-	-	-	-	48.1	Not graded		
Specimen CH-5															
All Method	2	-	-	-	15.7	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	6	19.68	0.48	2.4	19.8	14.7 - 24.6	6	7.78	0.59	7.6	7.7	5.8 - 9.8		
Siemens Dimension	5	19.65	0.54	2.8	19.7	14.7 - 24.6	5	7.98	0.46	5.7	8.0	5.9 - 10.0		
Specimen CH-3														
All Method	6	6.42	0.77	11.9	6.4	4.8 - 8.1	6	34.08	0.75	2.2	34.1	25.5 - 42.6		
Siemens Dimension	5	6.15	0.54	8.9	6.1	4.6 - 7.7	5	34.35	0.52	1.5	34.3	25.7 - 43.0		
Specimen CH-5														
All Method	6	13.52	1.05	7.8	12.9	10.1 - 16.9								
Siemens Dimension	5	13.73	1.09	7.9	13.4	10.2 - 17.2								

### 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	5	18.05	0.21	1.2	18.1	13.5 - 22.6	5	8.85	0.35	4.0	8.9	6.6 - 11.1
Siemens Dimension	5	18.05	0.21	1.2	18.1	13.5 - 22.6	5	8.85	0.35	4.0	8.9	6.6 - 11.1
Specimen CH-3												
All Method	5	7.50	0.57	7.5	7.5	5.6 - 9.4	5	28.70	0.01	0.0	28.7	21.5 - 35.9
Siemens Dimension	5	7.50	0.57	7.5	7.5	5.6 - 9.4	5	28.70	0.01	0.0	28.7	21.5 - 35.9
Specimen CH-4												
All Method	5	13.05	0.07	0.5	13.1	9.7 - 16.4						
Siemens Dimension	5	13.05	0.07	0.5	13.1	9.7 - 16.4						
Specimen CH-5												
All Method	5	13.05	0.07	0.5	13.1	9.7 - 16.4						
Siemens Dimension	5	13.05	0.07	0.5	13.1	9.7 - 16.4						

### 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	3	-	-	-	24.5	Not graded	3	-	-	-	10.2	Not graded
Specimen CH-3												
All Method	3	-	-	-	9.5	Not graded	3	-	-	-	38.9	Not graded
Specimen CH-4												
All Method	3	-	-	-	17.1	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	7	80.76	1.36	1.7	80.5	60.5 - 101.0	7	35.06	1.57	4.5	35.0	26.2 - 43.9
Siemens Dimension	5	80.20	0.62	0.8	80.4	60.1 - 100.3	5	35.33	1.68	4.8	35.7	26.4 - 44.2
Specimen CH-3												
All Method	7	32.28	3.37	10.4	33.7	24.2 - 40.4	7	128.52	7.86	6.1	132.7	96.3 - 160.7
Siemens Dimension	5	31.60	3.47	11.0	31.6	23.7 - 39.5	5	129.90	8.35	6.4	133.3	97.4 - 162.4
Specimen CH-4												
Specimen CH-5												
All Method	7	57.68	2.21	3.8	57.0	43.2 - 72.1						
Siemens Dimension	5	58.10	2.31	4.0	58.1	43.5 - 72.7						

### 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	6	30.40	2.05	6.8	30.1	22.8 - 38.0	6	1.45	0.68	46.6	1.4	0.4 - 2.5
Siemens Dimension	5	31.07	1.91	6.2	30.8	23.3 - 38.9	5	1.17	0.45	38.7	1.2	0.1 - 2.2
Specimen CH-3												
All Method	6	2.65	0.42	15.9	2.6	1.6 - 3.7	6	54.05	3.35	6.2	54.1	40.5 - 67.6
Siemens Dimension	5	2.47	0.25	10.2	2.5	1.4 - 3.5	5	54.27	4.07	7.5	54.7	40.7 - 67.9
Specimen CH-4												
Specimen CH-5												
All Method	6	16.60	1.38	8.3	17.0	12.4 - 20.8						
Siemens Dimension	5	17.23	0.67	3.9	17.4	12.9 - 21.6						

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

<u>Instrument</u>	Specimen LED-1							Specimen LED-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	4.06	0.70	17.3	4.0	0.0 - 8.1	17	34.48	2.69	7.8	34.4	30.4 - 38.5		
All Magellan Diagnostics Methods	24	4.06	0.70	17.3	4.0	0.0 - 8.1	17	34.48	2.69	7.8	34.4	30.4 - 38.5		
Magellan Diagnostics LeadCare II	24	4.06	0.70	17.3	4.0	0.0 - 8.1	17	34.48	2.69	7.8	34.4	30.4 - 38.5		

### 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	6.96	0.35	5.1	6.9	5.5 - 8.4	27	19.26	0.81	4.2	19.5	15.4 - 23.2		
No Reagent Required														
Bilirubinometer / Unistat	18	6.93	0.36	5.1	6.9	5.5 - 8.4	18	19.39	0.65	3.4	19.4	15.5 - 23.3		
All Chemistry Instruments	22	6.94	0.37	5.3	6.9	5.5 - 8.4	21	19.27	0.77	4.0	19.2	15.4 - 23.2		
Specimen NB-3														
All Method	26	0.05	0.08	164.8	0.0	0.0 - 0.5	28	12.65	0.79	6.2	12.7	10.1 - 15.2		
No Reagent Required														
Bilirubinometer / Unistat	18	0.00	0.01	0.0	0.0	0.0 - 0.4	18	12.87	0.79	6.1	12.9	10.2 - 15.5		
All Chemistry Instruments	22	0.07	0.18	248.1	0.0	0.0 - 0.5	22	12.78	0.81	6.4	12.9	10.2 - 15.4		
Specimen NB-5														
All Method	28	17.85	1.07	6.0	17.8	14.2 - 21.5								
No Reagent Required														
Bilirubinometer / Unistat	18	18.18	1.03	5.7	18.1	14.5 - 21.9								
All Chemistry Instruments	22	18.00	1.13	6.3	17.9	14.4 - 21.6								

### Bilirubin, Direct (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	10	1.74	0.34	19.6	1.7	1.0 - 2.5	10	4.15	0.56	13.4	4.1	3.0 - 5.3		
<b>Specimen NB-3</b>														
All Method	10	0.14	0.15	107.5	0.1	0.0 - 0.5	10	5.34	0.61	11.4	5.3	4.1 - 6.6		
<b>Specimen NB-5</b>														
All Method	10	6.09	0.58	9.6	6.0	4.9 - 7.3								

### Blood Gases – pH

<u>Method</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	7.153	0.019	0.3	7.15	7.11 - 7.20	11	7.185	0.006	0.1	7.19	7.14 - 7.23		
i-STAT	11	7.153	0.019	0.3	7.15	7.11 - 7.20	11	7.185	0.006	0.1	7.19	7.14 - 7.23		
<b>Specimen BG-3</b>														
All Method	11	7.495	0.013	0.2	7.50	7.45 - 7.54	11	7.493	0.017	0.2	7.50	7.45 - 7.54		
i-STAT	11	7.495	0.013	0.2	7.50	7.45 - 7.54	11	7.493	0.017	0.2	7.50	7.45 - 7.54		
<b>Specimen BG-5</b>														
All Method	11	7.480	0.008	0.1	7.48	7.44 - 7.52								
i-STAT	11	7.480	0.008	0.1	7.48	7.44 - 7.52								

### 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	68.60	0.98	1.4	68.9	63.1 - 74.1	11	56.03	1.29	2.3	56.3	51.0 - 61.1
i-STAT	11	68.60	0.98	1.4	68.9	63.1 - 74.1	11	56.03	1.29	2.3	56.3	51.0 - 61.1
<b>Specimen BG-3</b>												
All Method	11	23.73	0.59	2.5	23.7	18.7 - 28.8	11	27.88	1.23	4.4	28.2	22.8 - 32.9
i-STAT	11	23.73	0.59	2.5	23.7	18.7 - 28.8	11	27.88	1.23	4.4	28.2	22.8 - 32.9
<b>Specimen BG-4</b>												
All Method	11	19.38	0.82	4.2	19.4	14.3 - 24.4						
i-STAT	11	19.38	0.82	4.2	19.4	14.3 - 24.4						

### 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	96.50	4.12	4.3	97.0	84.1 - 108.9	11	83.25	7.27	8.7	83.5	61.4 - 105.1
i-STAT	11	96.50	4.12	4.3	97.0	84.1 - 108.9	11	83.25	7.27	8.7	83.5	61.4 - 105.1
<b>Specimen BG-3</b>												
All Method	11	143.50	2.38	1.7	143.5	136.3 - 150.7	11	115.50	4.20	3.6	115.5	102.8 - 128.2
i-STAT	11	143.50	2.38	1.7	143.5	136.3 - 150.7	11	115.50	4.20	3.6	115.5	102.8 - 128.2
<b>Specimen BG-4</b>												
All Method	11	156.00	15.87	10.2	161.0	108.3 - 203.7						
i-STAT	11	156.00	15.87	10.2	161.0	108.3 - 203.7						
<b>Specimen BG-5</b>												

### 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: 2.19 mmol/L, 2.1 mmol/L, 1.18 mmol/L, 0.86 mmol/L, and 0.77 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: 86 mmol/L, 75 mmol/L, 85 mmol/L, 116 mmol/L, and 103 mmol/L, respectively.

### Blood Gases - Potassium (mmol/L)

One participant reported results for Blood Gases-Potassium. The vendor mean assay values for specimens BG-1 through BG-5 are: 3.8 mmol/L, 2.7 mmol/L, 4.2 mmol/L, 6.4 mmol/L, and 6.1 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: 138 mmol/L, 125 mmol/L, 148 mmol/L, 168 mmol/L, and 145 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	3	-	-	-	3.8	Not graded	3	-	-	-	-	4.7	Not graded	
Specimen BG-3														
All Method	3	-	-	-	1.5	Not graded	3	-	-	-	-	1.0	Not graded	
Specimen BG-5														
All Method	3	-	-	-	1.2	Not graded								

### 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	75	8.21	0.15	1.8	8.2	7.7 - 8.7	76	6.06	0.12	2.0	6.1	5.7 - 6.4		
All Alere Afinion Analyzers	75	8.21	0.15	1.8	8.2	7.7 - 8.7	76	6.06	0.12	2.0	6.1	5.7 - 6.4		
Alere Afinion 2	14	8.16	0.16	2.0	8.1	7.7 - 8.6	14	6.06	0.10	1.7	6.1	5.7 - 6.4		
Alere Afinion AS100	61	8.22	0.14	1.7	8.2	7.8 - 8.7	62	6.06	0.12	2.0	6.1	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	108	7.07	0.23	3.3	7.1	6.7 - 7.5	107	10.95	0.45	4.1	11.0	10.4 - 11.6		
All Bio-Rad Methods	5	7.22	0.27	3.7	7.1	6.8 - 7.6	5	10.72	0.33	3.1	10.7	10.1 - 11.3		
All Enzymatic A1c Methods	5	6.67	0.15	2.3	6.7	6.3 - 7.1	5	10.43	0.15	1.5	10.4	9.9 - 11.0		
All Hemoglobin A1c Methods	105	7.08	0.23	3.2	7.1	6.7 - 7.5	104	10.97	0.45	4.1	11.0	10.4 - 11.6		
All Roche Methods	8	6.91	0.25	3.6	6.9	6.5 - 7.3	8	11.18	0.35	3.1	11.1	10.6 - 11.8		
All TOSOH Methods	13	7.23	0.27	3.8	7.3	6.8 - 7.6	13	10.04	0.35	3.5	10.0	9.5 - 10.6		
Beckman AU A1c	9	6.83	0.22	3.2	6.8	6.4 - 7.2	9	10.94	0.35	3.2	10.9	10.3 - 11.5		
Bio-Rad D-10 HbA1C	5	7.22	0.27	3.7	7.1	6.8 - 7.6	5	10.72	0.33	3.1	10.7	10.1 - 11.3		
Roche cobas c501 HbA1c	5	7.10	0.22	3.0	7.1	6.7 - 7.5	5	11.35	0.40	3.6	11.3	10.7 - 12.0		
Roche Integra A1C	5	6.73	0.05	0.7	6.7	6.3 - 7.1	5	11.00	0.18	1.7	11.0	10.4 - 11.6		
Siemens DCA Vantage	49	7.09	0.18	2.6	7.1	6.7 - 7.5	48	11.03	0.22	2.0	11.0	10.4 - 11.6		
Siemens Dimension HA1C	7	7.03	0.16	2.3	7.0	6.6 - 7.4	6	10.97	0.30	2.7	11.0	10.4 - 11.6		
Siemens Dimension HB1C	8	7.08	0.10	1.5	7.1	6.7 - 7.5	8	11.28	0.18	1.6	11.3	10.7 - 11.9		
TOSOH G8	13	7.23	0.27	3.8	7.3	6.8 - 7.6	13	10.04	0.35	3.5	10.0	9.5 - 10.6		

## 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	262	71.0	15.5	21.9	67	56 - 86	259	322.1	35.5	11.0	333	257 - 387		
All Abbott Methods	35	59.6	6.7	11.2	58	47 - 72	34	302.8	27.5	9.1	297	242 - 364		
All Arkray Methods	15	88.2	3.8	4.3	89	70 - 106	14	343.9	13.7	4.0	345	275 - 413		
All Bayer Methods	22	55.4	6.9	12.5	52	44 - 67	22	264.4	29.7	11.2	251	211 - 318		
All Hemocue Methods	54	93.7	11.0	11.8	95	74 - 113	51	342.5	7.9	2.3	343	274 - 412		
All Lifescan Methods	15	63.3	4.7	7.5	65	50 - 76	15	343.1	37.8	11.0	365	274 - 412		
All Roche Methods	24	75.0	1.5	2.1	74	59 - 90	25	337.2	8.7	2.6	336	269 - 405		
Abbott FreeStyle Lite/Freedom Lite	7	67.7	1.1	1.6	68	54 - 82	7	332.1	11.5	3.5	333	265 - 399		
Abbott FreeStyle Precision Pro	22	58.0	6.0	10.4	57	46 - 70	21	298.0	24.7	8.3	294	238 - 358		
Abbott Precision XceedPro	6	56.0	5.5	9.9	56	44 - 68	6	285.2	26.8	9.4	288	228 - 343		
Arkray Platinum	15	88.2	3.8	4.3	89	70 - 106	13	345.0	13.6	3.9	346	276 - 414		
Bayer Contour	21	54.7	6.1	11.2	52	43 - 66	21	261.1	26.0	10.0	248	208 - 314		
HemoCue Glucose 201	52	93.9	9.8	10.5	95	75 - 113	49	343.2	7.1	2.1	343	274 - 412		
Home Diagnostics True Balance / TrueTrack	12	184.3	11.8	6.4	185	147 - 222	9	582.7	24.2	4.2	593	466 - 700		
Lifescan One Touch Ultra/2/Mini	13	63.0	5.1	8.0	64	50 - 76	13	348.9	37.3	10.7	366	279 - 419		
Medline EvenCare G2 / G3	19	70.4	7.2	10.2	72	56 - 85	19	322.5	40.4	12.5	325	257 - 387		
NOVA Biomedical StatStrip	19	58.7	4.8	8.1	59	46 - 71	18	280.6	19.9	7.1	284	224 - 337		
Quintet / AC	35	63.1	4.6	7.2	63	50 - 76	36	355.4	14.5	4.1	359	284 - 427		
Roche Accu-Chek Inform II	9	76.2	2.8	3.6	76	60 - 92	9	343.6	6.1	1.8	343	274 - 413		
Roche Accu-Chek Performa	12	74.8	1.5	2.0	75	59 - 90	12	333.9	8.4	2.5	330	267 - 401		
True Metrix Pro	17	60.1	3.7	6.2	60	48 - 73	18	299.4	19.2	6.4	301	239 - 360		

### 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	12	102.4	13.4	13.0	103	81 - 123	13	289.4	33.8	11.7	279	231 - 348		
All Lifescan Methods	8	102.1	14.1	13.8	102	81 - 123	8	294.6	40.8	13.9	287	235 - 354		
All Roche Methods	2	-	-	-	115	92 - 138	2	-	-	-	299	239 - 359		
Lifescan One Touch Ultra/2/Mini	8	102.1	14.1	13.8	102	81 - 123	8	294.6	40.8	13.9	287	235 - 354		
Roche Accu-Chek Inform II	1	-	-	-	116	81 - 123	1	-	-	-	309	231 - 348		
Roche Accu-Chek Performa	1	-	-	-	114	81 - 123	1	-	-	-	289	231 - 348		
True Metrix Pro	2	-	-	-	491	81 - 123	2	-	-	-	264	231 - 348		
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	13	88.4	12.3	13.9	85	70 - 107								
All Lifescan Methods	8	88.1	13.2	15.0	86	70 - 106								
All Roche Methods	2	-	-	-	102	81 - 122								
Lifescan One Touch Ultra/2/Mini	8	88.1	13.2	15.0	86	70 - 106								
Roche Accu-Chek Inform II	1	-	-	-	103	70 - 107								
Roche Accu-Chek Performa	1	-	-	-	100	70 - 107								
True Metrix Pro	2	-	-	-	78	70 - 107								

**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	11	9.463	1.182	12.5	8.91	7.09 - 11.83	11	0.597	0.059	9.9	0.60	0.47 - 0.72		

**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	67.84	14.33	21.1	68.1	39.1 - 96.6	12	18.00	12.79	71.1	14.6	0.0 - 43.6		
All TOSOH Instruments	5	174.05	1.20	0.7	174.1	171.6 - 176.5	5	46.60	2.97	6.4	46.6	40.6 - 52.6		
Beckman ACCESS / 2 / Dxl	5	68.56	6.35	9.3	66.7	55.8 - 81.3	5	13.68	2.30	16.8	13.1	9.0 - 18.3		

**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	30	105.6	13.6	12.9	104	73 - 138	30	20.0	2.5	12.4	19	14 - 27		
All TOSOH Instruments	5	106.4	5.3	5.0	104	74 - 139	5	19.8	1.1	5.5	19	13 - 26		
Beckman ACCESS / 2 / Dxl	14	101.8	10.6	10.5	101	71 - 133	14	19.5	2.1	10.6	19	13 - 26		

**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	96	57.36	7.87	13.7	56.8	41.6 - 73.1	97	15.53	3.61	23.2	14.8	8.3 - 22.8		
All Roche Instruments	9	58.47	12.74	21.8	61.3	32.9 - 84.0	9	14.84	3.45	23.3	14.3	7.9 - 21.8		
All TOSOH Instruments	14	54.19	5.32	9.8	55.4	43.5 - 64.9	14	18.51	3.64	19.7	19.9	11.2 - 25.8		
All VITROS Instruments	5	70.35	5.11	7.3	69.6	60.1 - 80.6	5	17.43	3.68	21.1	18.0	10.0 - 24.8		
Abbott Architect	5	55.28	3.55	6.4	55.4	48.1 - 62.4	5	14.18	0.64	4.5	14.0	12.9 - 15.5		
Beckman ACCESS / 2 / Dxl	42	58.87	6.31	10.7	58.8	46.2 - 71.5	42	13.58	2.22	16.3	13.3	9.1 - 18.1		
Qualigen FastPack	5	47.18	0.88	1.9	47.5	45.4 - 49.0	5	24.25	3.37	13.9	25.1	17.5 - 31.0		
Roche cobas e 411	5	57.14	13.09	22.9	61.3	30.9 - 83.4	5	13.22	0.92	7.0	12.9	11.3 - 15.1		
Roche cobas e 601/ e 602	5	60.13	14.06	23.4	63.2	32.0 - 88.3	5	16.88	4.56	27.0	14.8	7.7 - 26.0		
Siemens Dimension	5	49.22	3.97	8.1	49.1	41.2 - 57.2	5	16.20	2.00	12.3	15.7	12.2 - 20.2		
TOSOH AIA PACK	5	52.60	4.89	9.3	53.9	42.8 - 62.4	5	16.25	3.39	20.8	17.0	9.4 - 23.1		
TOSOH ST AIA PACK	10	54.83	5.59	10.2	55.6	43.6 - 66.1	10	19.42	3.48	17.9	20.3	12.4 - 26.4		

### Bioavailable Testosterone (ng/dL)

<u>Method</u>	Specimen SHB-1							Specimen SHB-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	-	-	-	108.6	Not graded	2	-	-	-	-	342.3	Not graded	

### Free Testosterone (pg/mL)

<u>Method</u>	Specimen SHB-1							Specimen SHB-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	18.53	18.24	98.5	14.3	0.0 - 55.1	5	45.48	49.71	109.3	31.8	0.0 - 144.9		

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

<u>Method</u>	Specimen SHB-1							Specimen SHB-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	39.958	4.581	11.5	39.30	26.21 - 53.71	15	80.699	11.020	13.7	77.70	47.63 - 113.76		
Beckman ACCESS / 2 / Dxl	12	40.792	4.736	11.6	40.80	26.58 - 55.00	12	82.742	11.318	13.7	78.70	48.78 - 116.70		

### Testosterone (ng/dL)

<u>Method</u>	Specimen SHB-1							Specimen SHB-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	226.3	18.3	8.1	228	158 - 295	15	829.7	107.0	12.9	821	580 - 1079		
Beckman ACCESS / 2 / Dxl	12	220.6	12.9	5.8	225	154 - 287	12	791.3	52.1	6.6	781	553 - 1029		

**BNP (pg/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	23	125.38	41.93	33.4	53.0	41.5 - 209.3	23	2974.59	1050.72	35.3	1280.0	873.1 - 5076.1
i-STAT - moderate	6	150.75	18.63	12.4	153.0	113.0 - 188.5	6	3753.25	337.21	9.0	3753.5	2814.9 - 4691.6
Quidel Triage	12	49.77	5.74	11.5	51.6	37.3 - 62.3	12	1191.67	136.84	11.5	1190.0	893.7 - 1489.6
Specimen CK-3												
All Method	18	132.12	47.16	35.7	71.7	37.8 - 226.5	18	1730.58	596.88	34.5	861.0	536.8 - 2924.4
i-STAT - moderate	6	161.75	13.89	8.6	161.0	121.3 - 202.2	6	2085.75	268.86	12.9	2129.5	1548.0 - 2623.5
Quidel Triage	10	50.30	11.15	22.2	45.6	28.0 - 72.6	10	638.20	95.83	15.0	638.0	446.5 - 829.9
Specimen CK-5												
All Method	18	4613.08	721.25	15.6	3205.0	3170.5 - 6055.6						
i-STAT - moderate	6	5000.00	0.01	0.0	5000.0	3750.0 - 6250.0						
Quidel Triage	10	2046.00	406.55	19.9	2050.0	1232.9 - 2859.1						

**CK-MB (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	14	6.33	1.01	15.9	4.9	3.3 - 9.4	14	49.93	9.24	18.5	33.9	22.2 - 77.7
Quidel Triage	10	3.03	0.46	15.1	3.1	1.6 - 4.5	10	25.14	4.14	16.5	24.6	12.7 - 37.6
Specimen CK-3												
All Method	14	6.45	1.07	16.6	4.6	3.2 - 9.7	14	27.42	4.78	17.4	19.0	13.0 - 41.8
Quidel Triage	10	3.39	0.72	21.1	3.5	1.2 - 5.6	10	13.98	1.93	13.8	13.8	8.1 - 19.8
Specimen CK-5												
All Method	14	95.75	19.03	19.9	63.7	38.6 - 152.9						
Quidel Triage	10	44.93	9.17	20.4	46.5	17.4 - 72.5						

**D-Dimer (ng/mL)**

<b><u>Method</u></b>	<b>Specimen CK-1</b>							<b>Specimen CK-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	19	270.0	2.8	1.0	147	189 - 351	19	471.5	10.6	2.2	900	330 - 613
Instrumentation Laborartory (IL) ACL Series	5	270.0	2.8	1.0	270	189 - 351	5	471.5	10.6	2.2	472	330 - 613
Quidel Triage	14	146.7	20.8	14.2	143	102 - 191	14	902.2	84.6	9.4	901	631 - 1173
<b>Specimen CK-3</b>							<b>Specimen CK-4</b>					
All Method	17	262.5	21.9	8.4	177	183 - 342	17	335.5	20.5	6.1	633	234 - 437
Instrumentation Laborartory (IL) ACL Series	5	262.5	21.9	8.4	263	183 - 342	5	335.5	20.5	6.1	336	234 - 437
Quidel Triage	11	171.5	18.1	10.6	173	120 - 224	11	595.5	160.7	27.0	636	274 - 917
<b>Specimen CK-5</b>												
All Method	17	673.0	4.2	0.6	1510	471 - 875						
Instrumentation Laborartory (IL) ACL Series	5	673.0	4.2	0.6	673	471 - 875						
Quidel Triage	11	1574.5	159.8	10.1	1520	1102 - 2047						

### Myoglobin (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	13	30.03	3.53	11.7	36.1	21.0 - 39.1	13	163.93	21.84	13.3	192.0	114.7 - 213.2		
Alere Triage	8	43.70	11.66	26.7	42.7	20.3 - 67.1	8	236.00	56.17	23.8	238.5	123.6 - 348.4		
Specimen CK-3														
All Method	13	30.77	3.74	12.2	38.9	21.5 - 40.0	13	99.17	11.77	11.9	125.0	69.4 - 129.0		
Alere Triage	8	46.18	13.79	29.9	42.7	18.5 - 73.8	8	148.75	24.81	16.7	147.5	99.1 - 198.4		
Specimen CK-4														
Specimen CK-5														
All Method	13	306.63	46.75	15.2	360.0	213.1 - 400.2								
Alere Triage	8	392.38	76.63	19.5	408.0	239.1 - 545.7								

### NT-proBNP (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	13	32.0	25.6	80.1	31	0 - 84	13	1395.0	841.4	60.3	1308	0 - 3078		
Roche cobas e 601/e 602	5	54.0	5.7	10.5	54	40 - 68	5	2112.5	253.9	12.0	2113	1584 - 2641		
Siemens Dimension NT-proBNP	6	10.0	1.4	14.1	10	7 - 13	6	677.5	7.8	1.1	678	508 - 847		
Specimen CK-3														
All Method	12	25.3	25.7	101.4	11	0 - 77	12	511.3	390.5	76.4	300	0 - 1293		
Roche cobas e 601/e 602	4	-	-	-	55	0 - 77	4	-	-	-	962	0 - 1293		
Siemens Dimension NT-proBNP	6	10.5	0.7	6.7	11	7 - 14	6	286.0	19.8	6.9	286	214 - 358		
Specimen CK-4														
Specimen CK-5														
All Method	12	2422.3	1280.1	52.8	1715	0 - 4983								
Roche cobas e 601/e 602	4	-	-	-	3900	0 - 4983								
Siemens Dimension NT-proBNP	6	1683.5	44.5	2.6	1684	1262 - 2105								

## 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	32	0.085	0.083	97.5	0.05	0.00 - 0.26	32	10.934	9.284	84.9	6.55	0.00 - 29.51
All HS Troponin I Methods	11	0.241	0.218	90.5	0.18	0.00 - 0.68	11	29.482	16.704	56.7	19.38	0.00 - 62.90
All Non-HS Troponin I Methods	17	0.038	0.016	40.5	0.05	0.00 - 0.07	17	5.400	2.027	37.5	6.11	1.34 - 9.46
Quidel Triage	10	0.050	0.001	0.0	0.05	0.03 - 0.07	10	7.065	1.043	14.8	6.55	4.94 - 9.19
Siemens Dimension	10	0.018	0.004	22.4	0.02	0.01 - 0.03	10	3.458	0.123	3.5	3.50	2.42 - 4.50
<b>Specimen CK-3</b>							<b>Specimen CK-4</b>					
All Method	32	0.115	0.113	98.4	0.05	0.00 - 0.35	32	4.234	4.180	98.7	2.36	0.00 - 12.60
All HS Troponin I Methods	11	0.365	0.330	90.6	0.27	0.00 - 1.03	11	13.078	10.882	83.2	8.83	0.00 - 34.85
All Non-HS Troponin I Methods	17	0.049	0.005	10.8	0.05	0.03 - 0.07	17	2.142	0.535	25.0	2.16	1.07 - 3.22
Alere Triage	10	0.050	0.001	0.0	0.05	0.03 - 0.07	10	2.511	0.387	15.4	2.40	1.73 - 3.29
Siemens Dimension	10	0.045	0.005	12.2	0.05	0.03 - 0.06	10	1.752	0.059	3.4	1.76	1.22 - 2.28
<b>Specimen CK-5</b>												
All Method	32	20.531	17.673	86.1	13.80	0.00 - 55.88						
All HS Troponin I Methods	11	54.018	32.993	61.1	42.34	0.00 - 120.01						
All Non-HS Troponin I Methods	17	10.798	3.744	34.7	11.10	3.31 - 18.29						
Alere Triage	10	13.610	2.264	16.6	13.80	9.08 - 18.14						
Siemens Dimension	10	7.223	0.300	4.2	7.16	5.05 - 9.40						

**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	7	0.0100	0.0001	0.0	0.010	0.007 - 0.013	7	0.7380	0.0566	7.7	0.738	0.516 - 0.960
Roche cobas e 601/ e 602	5	0.0100	0.0001	0.0	0.010	0.007 - 0.013	5	0.7380	0.0566	7.7	0.738	0.516 - 0.960
<b>Specimen CK-3</b>												
All Method	7	0.1300	0.0099	7.6	0.130	0.091 - 0.169	7	0.4355	0.0445	10.2	0.436	0.304 - 0.567
Roche cobas e 601/ e 602	5	0.1300	0.0099	7.6	0.130	0.091 - 0.169	5	0.4355	0.0445	10.2	0.436	0.304 - 0.567
<b>Specimen CK-4</b>												
All Method	7	1.3700	0.0566	4.1	1.370	0.959 - 1.781						
Roche cobas e 601/ e 602	5	1.3700	0.0566	4.1	1.370	0.959 - 1.781						
<b>Specimen CK-5</b>												
All Method	7	1.3700	0.0566	4.1	1.370	0.959 - 1.781						
Roche cobas e 601/ e 602	5	1.3700	0.0566	4.1	1.370	0.959 - 1.781						

## 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	81	28.720	5.723	19.9	29.73	20.10 - 37.34	80	0.431	0.076	17.7	0.44	0.00 - 1.34
All Beckman Instruments	28	31.152	2.046	6.6	30.72	21.80 - 40.50	28	0.483	0.038	7.9	0.48	0.00 - 1.39
All Roche Instruments	7	32.590	2.282	7.0	31.71	22.81 - 42.37	7	0.451	0.195	43.2	0.51	0.00 - 1.36
All TOSOH Instruments	15	21.427	1.060	4.9	21.65	14.99 - 27.86	15	0.433	0.027	6.2	0.44	0.00 - 1.34
Abbott Architect	7	26.476	2.225	8.4	25.60	18.53 - 34.42	7	0.344	0.043	12.4	0.34	0.00 - 1.25
Beckman ACCESS / 2 / Dxl	16	31.184	2.183	7.0	30.54	21.82 - 40.54	16	0.483	0.039	8.1	0.49	0.00 - 1.39
Beckman ACCESS Hybritech PSA	12	31.109	1.944	6.2	31.10	21.77 - 40.45	12	0.483	0.038	7.9	0.48	0.00 - 1.39
Qualigen FastPack	5	40.800	4.622	11.3	43.40	28.56 - 53.04	5	0.278	0.080	28.9	0.29	0.00 - 1.18
Siemens Dimension TPSA	11	30.511	2.141	7.0	30.06	21.35 - 39.67	11	0.403	0.056	14.0	0.40	0.00 - 1.31
TOSOH AIA PACK	6	21.497	0.760	3.5	21.68	15.04 - 27.95	6	0.442	0.022	5.0	0.45	0.00 - 1.35
TOSOH ST AIA PACK	9	21.380	1.264	5.9	21.20	14.96 - 27.80	9	0.428	0.029	6.9	0.42	0.00 - 1.33

## 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	0.364	0.080	22.0	0.35	0.12 - 0.61	5	3.516	0.157	4.5	3.52	3.04 - 3.99

## 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	16	11.1	2.3	20.8	12	6 - 16	16	138.4	32.2	23.2	221	74 - 203
All TOSOH Instruments	14	13.1	1.6	12.3	13	9 - 17	14	259.0	16.0	6.2	265	207 - 311
TOSOH ST AIA PACK	10	13.1	1.6	12.3	13	9 - 17	10	259.0	16.0	6.2	265	207 - 311

### 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	8	17.6	7.2	40.6	15	3 - 32	8	163.5	60.5	37.0	160	42 - 285		

### CA 19-9 (ng/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	10.1	0.8	8.2	10	7 - 14	8	189.6	65.8	34.7	195	58 - 322		

### CA 27/29 (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	14	54.6	5.0	9.2	56	38 - 72	14	231.1	16.0	6.9	232	161 - 301		
All TOSOH Instruments	12	54.6	5.0	9.2	56	38 - 72	12	231.1	16.0	6.9	232	161 - 301		
TOSOH ST AIA PACK	10	53.6	4.4	8.1	55	37 - 70	10	228.0	14.4	6.3	224	159 - 297		

### CEA (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	14	1.16	0.13	11.2	1.4	0.0 - 2.4	14	63.53	7.45	11.7	63.5	50.8 - 76.3		
All TOSOH Instruments	12	1.49	0.09	6.2	1.5	0.2 - 2.7	12	63.83	3.80	5.9	63.5	51.0 - 76.6		
TOSOH ST AIA PACK	10	1.49	0.09	6.2	1.5	0.2 - 2.7	10	63.83	3.80	5.9	63.5	51.0 - 76.6		

### Free PSA (ng/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	0.009	0.019	217.4	0.00	0.00 - 0.91	7	7.094	0.650	9.2	6.94	4.96 - 9.23

### PSA (ng/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	25	0.054	0.022	41.3	0.05	0.00 - 0.96	26	6.508	1.293	19.9	6.29	4.55 - 8.47
All Beckman Instruments	11	0.075	0.109	144.1	0.05	0.00 - 0.98	11	7.566	0.902	11.9	7.74	5.29 - 9.84

### Thyroglobulin (ng/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	1.00	0.41	40.8	1.2	0.1 - 1.9	8	64.78	7.77	12.0	64.5	49.2 - 80.4
Beckman ACCESS / 2 / Dxl	5	1.20	0.10	8.3	1.2	1.0 - 1.4	5	67.67	6.35	9.4	67.5	54.9 - 80.4

### 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	7	39.16	5.96	15.2	41.3	31.3 - 47.0	7	1.28	0.15	11.6	1.5	0.0 - 2.5		
All TOSOH Instruments	6	44.63	3.44	7.7	46.1	35.7 - 53.6	6	1.78	0.19	10.7	1.9	0.5 - 3.0		

### 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	14	541.16	87.24	16.1	495.9	366.6 - 715.7	13	56.78	7.01	12.3	57.0	39.7 - 73.9		
Beckman ACCESS / 2 / Dxl	10	522.98	50.38	9.6	495.9	366.0 - 679.9	10	56.61	6.75	11.9	57.4	39.6 - 73.6		

### 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	27	637.5	191.1	30.0	547	255 - 1020	27	37.9	9.9	26.0	37	18 - 58		
All TOSOH Instruments	7	1025.3	96.0	9.4	1044	717 - 1333	7	50.8	10.8	21.4	52	29 - 73		
Beckman ACCESS / 2 / Dxl	14	538.2	13.9	2.6	539	376 - 700	14	37.7	2.0	5.3	37	26 - 50		
TOSOH ST AIA PACK	5	1025.3	96.0	9.4	1044	717 - 1333	5	50.8	10.8	21.4	52	29 - 73		

### 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	30	276.4	40.6	14.7	218	221 - 332	31	25.7	4.4	17.3	18	20 - 31		
All Abbott Instruments	5	352.6	55.2	15.7	335	282 - 424	5	27.2	2.6	9.5	27	21 - 33		
All Roche Instruments	8	304.3	15.9	5.2	304	243 - 366	8	28.3	1.3	4.5	29	22 - 34		
All Siemens Dimension Instruments	8	268.9	23.3	8.7	277	215 - 323	8	26.6	3.2	12.0	28	21 - 32		
All TOSOH Instruments	19	205.1	12.5	6.1	209	164 - 247	18	16.7	1.0	6.1	17	13 - 21		
Beckman ACCESS / 2 / Dxl	28	218.7	13.8	6.3	216	174 - 263	28	17.3	1.4	8.2	17	13 - 21		
Siemens Dimension	7	275.6	14.6	5.3	278	220 - 331	7	27.7	1.0	3.4	28	22 - 34		
TOSOH ST AIA PACK	15	204.1	13.3	6.5	209	163 - 245	15	16.9	1.7	10.1	17	13 - 21		

### 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	22	9.59	3.67	38.3	10.4	6.7 - 12.5	22	1.04	0.73	70.3	0.5	0.0 - 2.1
All Roche Instruments	7	8.26	1.12	13.6	7.9	5.7 - 10.8	7	1.73	0.76	44.1	2.0	0.7 - 2.8
All Siemens Dimension Instruments	6	6.17	1.02	16.5	6.4	4.3 - 8.1	6	0.77	0.14	17.8	0.8	0.0 - 1.8
All Siemens Dimension Instruments	6	6.17	1.02	16.5	6.4	4.3 - 8.1	6	0.77	0.14	17.8	0.8	0.0 - 1.8
All Siemens Dimension Instruments	6	6.17	1.02	16.5	6.4	4.3 - 8.1	6	0.77	0.14	17.8	0.8	0.0 - 1.8
All Siemens Dimension Instruments	6	6.17	1.02	16.5	6.4	4.3 - 8.1	6	0.77	0.14	17.8	0.8	0.0 - 1.8
All TOSOH Instruments	8	5.79	0.87	15.0	5.5	4.0 - 7.6	8	1.03	0.85	83.1	0.8	0.0 - 2.1
Abbott Architect	5	15.02	2.58	17.2	16.4	10.5 - 19.6	5	0.82	0.72	87.3	0.4	0.0 - 1.9
Beckman ACCESS / 2 / Dxl	23	11.74	1.16	9.9	11.7	8.2 - 15.3	23	0.23	0.34	143.4	0.1	0.0 - 1.3
Siemens Dimension	5	6.20	1.13	18.3	6.8	4.3 - 8.1	5	0.80	0.12	15.3	0.8	0.0 - 1.8

### 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	25	65.98	8.82	13.4	65.9	49.4 - 82.5	26	9.46	1.52	16.1	9.5	7.0 - 11.9
Beckman ACCESS / 2 / Dxl	14	70.39	8.22	11.7	68.4	57.7 - 83.1	14	9.63	0.88	9.1	9.5	7.6 - 11.7

### 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	8	53.7	6.4	12.0	51	37 - 70	8	6.3	0.6	9.1	6	4 - 9
Beckman ACCESS / 2 / Dxl	5	50.0	1.4	2.8	50	35 - 65	5	6.0	0.1	0.0	6	4 - 8

### 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	65.45	6.58	10.1	64.7	52.2 - 78.7	24	4.18	0.73	17.6	4.1	2.7 - 5.7
Beckman ACCESS / 2 / Dxl	15	63.17	6.13	9.7	62.1	50.5 - 75.9	15	4.30	0.46	10.6	4.1	3.3 - 5.3

### 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>
-	-	-	-	-	-	-	-	-	-	-	-	-

### **Progesterone (ng/mL)**

<b><u>Method</u></b>	Specimen SC-1							Specimen SC-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	16	40.03	3.63	9.1	40.0	28.0 - 52.1	18	2.46	0.41	16.7	2.4	1.7 - 3.2		
Beckman ACCESS / 2 / Dxl	11	39.35	1.32	3.3	39.9	29.5 - 49.2	11	2.25	0.30	13.6	2.2	1.6 - 2.9		

### **Prolactin (ng/mL)**

<b><u>Method</u></b>	Specimen SC-1							Specimen SC-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	23	74.28	8.05	10.8	73.5	59.4 - 89.2	23	2.60	0.31	12.0	2.6	2.0 - 3.2		
Beckman ACCESS / 2 / Dxl	14	73.35	8.38	11.4	71.7	58.6 - 88.1	14	2.64	0.32	11.9	2.6	2.1 - 3.2		

### **Testosterone (ng/dL)**

<b><u>Method</u></b>	Specimen SC-1							Specimen SC-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	48	1310.3	198.0	15.1	1246	917 - 1704	45	85.2	9.2	10.8	84	59 - 111		
All TOSOH Instruments	11	1587.4	83.8	5.3	1599	1111 - 2064	11	89.8	8.3	9.2	92	62 - 117		
Abbott Architect	5	1233.4	206.9	16.8	1336	863 - 1604	5	72.6	5.8	7.9	71	50 - 95		
Beckman ACCESS / 2 / Dxl	24	1190.6	91.5	7.7	1198	833 - 1548	24	83.6	6.3	7.6	85	58 - 109		
TOSOH ST AIA PACK	9	1599.6	81.8	5.1	1599	1119 - 2080	9	90.1	8.6	9.6	92	63 - 118		

### **Transferrin (mg/dL)**

<b><u>Method</u></b>	Specimen SC-1							Specimen SC-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	187.3	8.3	4.5	191	168 - 207	8	93.8	3.4	3.6	94	84 - 104		

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

<u><b>Method</b></u>	Specimen SC-1							Specimen SC-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	76	1375.6	243.4	17.7	1357	1031 - 1720	75	135.1	30.7	22.8	124	101 - 169		
All Abbott Instruments	7	1704.3	202.9	11.9	1757	1278 - 2131	6	152.0	22.8	15.0	148	114 - 190		
All Roche Instruments	7	1673.4	80.9	4.8	1647	1255 - 2092	7	173.1	18.1	10.4	175	129 - 217		
All Siemens Dimension Instruments	8	1496.4	174.6	11.7	1549	1122 - 1871	8	163.4	30.5	18.7	172	122 - 205		
All TOSOH Instruments	12	1550.4	61.3	4.0	1538	1162 - 1939	12	157.4	14.2	9.0	155	118 - 197		
Abbott Architect	6	1655.0	170.3	10.3	1723	1241 - 2069	5	145.6	18.6	12.8	146	109 - 182		
Beckman ACCESS / 2 / Dxl	37	1198.1	101.0	8.4	1190	898 - 1498	37	109.9	9.9	9.0	109	82 - 138		
Siemens Dimension	7	1483.4	184.4	12.4	1546	1112 - 1855	7	161.0	32.1	20.0	164	120 - 202		
TOSOH AIA PACK	7	1544.9	69.8	4.5	1545	1158 - 1932	7	151.6	9.1	6.0	151	113 - 190		
TOSOH ST AIA PACK	5	1558.2	53.8	3.5	1530	1168 - 1948	5	165.6	16.9	10.2	163	124 - 207		

### Serum Alcohol (mg/dL)

<u><b>Method</b></u>	Specimen ETH-1							Specimen ETH-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	22.8	2.2	9.7	23	17 - 29	8	118.0	17.4	14.7	126	88 - 148		
Siemens Dimension	5	23.0	2.6	11.5	24	17 - 29	5	126.7	1.5	1.2	127	95 - 159		
Specimen ETH-3														
All Method	8	347.0	18.7	5.4	353	260 - 434	8	200.0	30.1	15.0	214	150 - 250		
Siemens Dimension	5	356.0	6.1	1.7	353	267 - 445	5	215.0	3.0	1.4	215	161 - 269		
Specimen ETH-5														
All Method	8	7.8	2.1	26.6	8	5 - 10								
Siemens Dimension	5	7.0	1.7	24.7	6	5 - 9								

## 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	12	12	-	-	-	12	-	-	2	10
Biorex Labs K-CHECK	10	10	-	-	-	10	-	-	-	10
Germaine Laboratories AimTab	2	2	-	-	-	2	-	-	2	-
Specimen ETH-3						Specimen ETH-4				
ALL METHODS	12	12	-	-	-	12	-	-	1	11
Biorex Labs K-CHECK	10	10	-	-	-	10	-	-	-	10
Germaine Laboratories AimTab	2	2	-	-	-	2	-	-	1	1
Specimen ETH-5										
ALL METHODS	12	12	-	-	-					
Biorex Labs K-CHECK	10	10	-	-	-					
Germaine Laboratories AimTab	2	2	-	-	-					

## 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	16	946.738	338.716	35.8	1039.20	0.00 - 1962.89	17	4.748	8.406	177.0	0.50	0.00 - 29.97
Beckman ACCESS / 2 / Dxl	10	1173.720	167.186	14.2	1151.35	672.16 - 1675.28	10	0.440	0.299	67.9	0.35	0.00 - 1.34

## 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	20	179.895	133.158	74.0	136.90	0.00 - 579.37	20	3.715	8.643	232.6	0.10	0.00 - 29.65
Beckman ACCESS / 2 / Dxl	12	133.533	9.045	6.8	131.80	106.39 - 160.67	12	0.150	0.077	51.2	0.10	0.00 - 0.39

### 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	7	133.0	7.0	5.3	136	123 - 143	7	38.0	6.2	16.4	40	28 - 48		
Siemens Dimension	5	133.0	7.0	5.3	136	123 - 143	5	38.0	6.2	16.4	40	28 - 48		

### 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	1.0290	0.0057	0.5	1.029	1.019 - 1.039	4	-	-	-	-	1.067	Not graded	

### 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>
ALL METHODS	2	2	-	2	-	2
Carolina Chemistries BiOlis	2	2	-	2	-	2

### 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	3	-	-	-	2.06	Not graded	3	-	-	-	-	6.99	Not graded	

### 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	2	-	2	2	2	2	2	2	-
Carolina Chemistries BiOlis	2	-	2	2	2	2	2	2	-

### 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	60.05	1.20	2.0	60.1	49.8 - 70.3	5	0.47	0.45	96.6	0.5	0.0 - 3.5		
Beckman AU	4	-	-	-	59.2	49.8 - 70.3	5	0.25	0.35	141.4	0.3	0.0 - 3.3		

### 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	3	3	-	3	-	3	1	-	1
Beckman AU	1	1	-	1	-	1	1	-	1
Carolina Chemistries BiOlis	1	1	-	1	-	1	1	-	1
ImmTox	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	2	2	-	2	2	-

#### 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	2	2	-	2	2	-

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

<u>Method</u>	<u>Labs</u>	Specimen ETG-1		Specimen ETG-2		
		<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	3	3	-	3	-	3
Cut-off 500						
Beckman AU	1	1	-	1	-	1
ImmTox	1	1	-	1	-	1
Indiko Plus	1	1	-	1	-	1
All Cut-off 500	3	3	-	3	-	3

**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>Labs</u>	<u>Positive</u>	<u>Negative</u>
All Methods	1	-	1	1	-	1

**Amphetamines (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	92	-	92	92	-	92
Cut-off 300						
Beckman AU	1	-	1	1	-	1
All Cut-off 300	1	-	1	1	-	1
Cut-off 500						
12 Panel Now	1	-	1	1	-	1
Beckman AU	1	-	1	1	-	1
CLIWaived, Inc. Drug Test	4	-	4	4	-	4
First Sign Drugs of Abuse	1	-	1	1	-	1
ImmTox	1	-	1	1	-	1
Indiko Plus	2	-	2	2	-	2
MEDTOX Diagnostics	5	-	5	5	-	5
Microgenics DRI	1	-	1	1	-	1
Mindray BS-200/BS-480	1	-	1	1	-	1
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
Synermed IR 500	1	-	1	1	-	1
All Cut-off 500	21	-	21	21	-	21
Cut-off 1000						
Alere iCassette	3	-	3	3	-	3
Alere iCup	1	-	1	1	-	1
Alere iScreen	23	-	23	23	-	23
Beckman AU	1	-	1	1	-	1
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	2	-	2	2	-	2
Clarity Diagnostics Urine Panels/Cassettes	1	-	1	1	-	1
CLIWaived, Inc. Drug Test	2	-	2	2	-	2
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	3	-	3	3	-	3
Germaine Laboratories AimScreen	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	7	-	7	7	-	7
Microgenics DRI	5	-	5	5	-	5
Noble Medical Inc.	2	-	2	2	-	2
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	9	-	9	9	-	9
All Cut-off 1000	69	-	69	69	-	69

**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	10	-	10	10	-	10
Cut-off 300						
Roche Integra	1	-	1	1	-	1
All Cut-off 300	1	-	1	1	-	1
Cut-off 500						
Beckman AU	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
USDiagnostics UScreen Cup	1	-	1	1	-	1
All Cut-off 500	5	-	5	5	-	5
Cut-off 1000						
Abbott Architect	1	-	1	1	-	1
Beckman AU	1	-	1	1	-	1
Microgenics DRI	2	-	2	2	-	2
All Cut-off 1000	4	-	4	4	-	4

### Barbiturates (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	79	-	79	79	78	1
Cut-off 100						
Beckman AU	1	-	1	1	1	-
All Cut-off 100	1	-	1	1	1	-
Cut-off 200						
Abbott Architect	1	-	1	1	1	-
Beckman AU	4	-	4	4	4	-
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	1	-
Carolina Chemistries BioLis 24i	1	-	1	1	1	-
Indiko Plus	1	-	1	1	1	-
MEDTOX Diagnostics	5	-	5	5	5	-
Microgenics DRI	3	-	3	3	3	-
Roche Integra	2	-	2	2	2	-
Siemens Dimension	2	-	2	2	2	-
Siemens EMIT II Plus	2	-	2	2	2	-
Synermed IR 500	1	-	1	1	1	-
All Cut-off 200	23	-	23	23	23	-
Cut-off 300						
Alere iCassette	3	-	3	3	3	-
Alere iCup	1	-	1	1	1	-
Alere iScreen	23	-	23	23	23	-
CLIAwaived, Inc. Drug Test	5	-	5	5	5	-
Confirm Biosciences DoA Test	1	-	1	1	1	-
McKesson Consult Drug Panel	1	-	1	1	1	-
McKesson Drug Panel	7	-	7	7	7	-
Microgenics DRI	1	-	1	1	1	-
Noble Medical Inc.	1	-	1	1	1	-
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	1	-
USDiagnostics One Step Multi-Drug	2	-	2	2	1	1
USDiagnostics UScreen Cup	8	-	8	8	8	-
All Cut-off 300	55	-	55	55	54	1

### Benzodiazepines (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	-	99	99	-	99
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	5	-	5	5	-	5
All Cut-off 150	6	-	6	6	-	6
Cut-off 200						
Abbott Architect	1	-	1	1	-	1
Beckman AU	4	-	4	4	-	4
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
ImmTox	1	-	1	1	-	1
Indiko Plus	3	-	3	3	-	3
Microgenics DRI	6	-	6	6	-	6
Mindray BS-200/BS-480	1	-	1	1	-	1
Siemens Dimension	2	-	2	2	-	2
Siemens EMIT II Plus	2	-	2	2	-	2
Synermed IR 500	1	-	1	1	-	1
All Cut-off 200	22	-	22	22	-	22
Cut-off 300						
12 Panel Now	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	1	-	1	1	-	1
Alere iScreen	23	-	23	23	-	23
Alfa Scientific Instant-View	2	-	2	2	-	2
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	6	-	6	6	-	6
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	5	-	5	5	-	5
Identify Diagnostics Drug Test	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	7	-	7	7	-	7
Microgenics CEDIA	1	-	1	1	-	1
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Roche cobas 6000 / c 501	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics Proscreen	1	-	1	1	-	1
USDiagnostics UScreen Cup	8	-	8	8	-	8
All Cut-off 300	68	-	68	68	-	68

## 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	37	37	-	37	-	37
Cut-off 5						
Beckman AU	3	3	-	3	-	3
Immunalysis	1	1	-	1	-	1
Indiko Plus	1	1	-	1	-	1
Microgenics CEDIA	4	4	-	4	-	4
Microgenics DRI	1	1	-	1	-	1
Siemens EMIT II Plus	1	1	-	1	-	1
Synermed IR 500	1	1	-	1	-	1
All Cut-off 5	12	12	-	12	-	12
Cut-off 10						
12 Panel Now	1	1	-	1	-	1
BluRapids Multi-Drug Urine Test Cup	1	1	-	1	-	1
Chemtron Biotech	1	1	-	1	-	1
CLIAwaived, Inc. Drug Test	6	6	-	6	-	6
Confirm Biosciences DoA Test	1	1	-	1	-	1
First Sign Drugs of Abuse	1	1	-	1	-	1
McKesson Drug Panel	4	4	-	4	-	4
MEDTOX Diagnostics	2	2	-	2	-	2
Noble Medical Inc.	1	1	-	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	1	-	1	-	1
USDiagnostics One Step Multi-Drug	1	1	-	1	-	1
USDiagnostics UScreen Cup	3	3	-	3	-	3
All Cut-off 10	23	23	-	23	-	23
Cut-off 20						
Indiko Plus	1	1	-	1	-	1
Microgenics CEDIA	1	1	-	1	-	1
All Cut-off 20	2	2	-	2	-	2

## 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	100	1	99	100	100	-
Cut-off 20						
Roche Integra	1	-	1	1	1	-
All Cut-off 20	1	-	1	1	1	-
Cut-off 50						
12 Panel Now	1	-	1	1	1	-
Abbott Architect	1	-	1	1	1	-
Alere iCassette	3	-	3	3	3	-
Alere iCup	1	-	1	1	1	-
Alere iScreen	23	-	23	23	23	-
Alfa Scientific Instant-View	8	-	8	8	8	-
Beckman AU	4	-	4	4	4	-
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	1	-
Carolina Chemistries BioLis 24i	2	-	2	2	2	-
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	-
Germaine Laboratories AimScreen	4	-	4	4	4	-
Identify Diagnostics Drug Test	1	1	-	1	1	-
ImmTox	2	-	2	2	2	-
Indiko Plus	3	-	3	3	3	-
McKesson Consult Drug Panel	1	-	1	1	1	-
McKesson Drug Panel	7	-	7	7	7	-
MEDTOX Diagnostics	5	-	5	5	5	-
Microgenics DRI	5	-	5	5	5	-
Mindray BS-200/BS-480	1	-	1	1	1	-
Noble Medical Inc.	3	-	3	3	3	-
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	1	-
Roche cobas 6000 / c 501	1	-	1	1	1	-
Siemens Dimension	2	-	2	2	2	-
Siemens EMIT II Plus	2	-	2	2	2	-
USDiagnostics One Step Multi-Drug	2	-	2	2	2	-
USDiagnostics UScreen Cup	8	-	8	8	8	-
All Cut-off 50	98	1	97	98	98	-
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

### Cocaine Metabolites (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	114	-	114	114	-	114
Cut-off 50						
First Sign Drugs of Abuse	1	-	1	1	-	1
All Cut-off 50	1	-	1	1	-	1
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 150						
12 Panel Now	1	-	1	1	-	1
Beckman AU	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	4	-	4	4	-	4
First Sign Drugs of Abuse	1	-	1	1	-	1
Identify Diagnostics Drug Test	1	-	1	1	-	1
ImmTox	2	-	2	2	-	2
Immunalysis	1	-	1	1	-	1
Indiko Plus	3	-	3	3	-	3
MEDTOX Diagnostics	5	-	5	5	-	5
Microgenics DRI	1	-	1	1	-	1
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Roche Integra	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
Synermed IR 500	1	-	1	1	-	1
All Cut-off 150	26	-	26	26	-	26

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

	Specimen UDS-1			Specimen UDS-2		
Cut-off 300						
Abbott Architect	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	1	-	1	1	-	1
Alere iScreen	23	-	23	23	-	23
Alfa Scientific Instant-View	8	-	8	8	-	8
Beckman AU	2	-	2	2	-	2
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	2	-	2	2	-	2
CLIWaived, Inc. Drug Test	2	-	2	2	-	2
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	2	-	2	2	-	2
Germaine Laboratories AimScreen	4	-	4	4	-	4
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	7	-	7	7	-	7
Microgenics DRI	7	-	7	7	-	7
Noble Medical Inc.	2	-	2	2	-	2
Roche cobas 6000 / c 501	1	-	1	1	-	1
Roche Integra	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
Siemens EMIT II Plus	2	-	2	2	-	2
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	9	-	9	9	-	9
All Cut-off 300	84	-	84	84	-	84

**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	5	-	5	5	5	-
Cut-off 100						
Beckman AU	1	-	1	1	1	-
ImmTox	1	-	1	1	1	-
All Cut-off 100	2	-	2	2	2	-
Cut-off 150						
Microgenics DRI	1	-	1	1	1	-
All Cut-off 150	1	-	1	1	1	-
Cut-off 300						
Beckman AU	1	-	1	1	1	-
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)**

<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	8	-	8	8	-	8
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						
Beckman AU	1	-	1	1	-	1
All Cut-off 20	1	-	1	1	-	1
Cut-off 40						
Siemens EMIT II Plus	1	-	1	1	-	1
All Cut-off 40	1	-	1	1	-	1
Cut-off 100						
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
Microgenics DRI	3	-	3	3	-	3
All Cut-off 100	4	-	4	4	-	4

**Fentanyl (ng/mL)**

<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						
Indiko Plus	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 2						
Beckman AU	1	-	1	1	-	1
Immunalysis	1	-	1	1	-	1
Microgenics DRI	1	-	1	1	-	1
All Cut-off 2	3	-	3	3	-	3

**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	1	-	1	1	-	1
Cut-off 300						
Indiko Plus	1	-	1	1	-	1
All Cut-off 300	1	-	1	1	-	1

**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><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	57	-	57	57	-	57
Cut-off 100						
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 500						
12 Panel Now	1	-	1	1	-	1
Alere iCup	1	-	1	1	-	1
Alere iScreen	23	-	23	23	-	23
Beckman AU	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	6	-	6	6	-	6
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	7	-	7	7	-	7
Microgenics DRI	1	-	1	1	-	1
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	8	-	8	8	-	8
All Cut-off 500	56	-	56	56	-	56

**Meperidine (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	1	-	1	1	1	-

**Methadone (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	84	-	84	84	1	83
Cut-off 100						
Beckman AU	1	-	1	1	-	1
All Cut-off 100	1	-	1	1	-	1
Cut-off 150						
Beckman AU	1	-	1	1	-	1
All Cut-off 150	1	-	1	1	-	1
Cut-off 200						
MEDTOX Diagnostics	5	-	5	5	-	5
All Cut-off 200	5	-	5	5	-	5
Cut-off 300						
12 Panel Now	1	-	1	1	-	1
Abbott Architect	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	1	-	1	1	-	1
Alere iScreen	23	-	23	23	-	23
Beckman AU	2	-	2	2	-	2
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	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
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	7	-	7	7	-	7
Microgenics DRI	7	-	7	7	1	6
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Roche cobas 6000 / c 501	1	-	1	1	-	1
Roche Integra	1	-	1	1	-	1
Siemens EMIT II Plus	2	-	2	2	-	2
Synermed IR 500	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	8	-	8	8	-	8
All Cut-off 300	76	-	76	76	1	75
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	-	71	71	-	71
Cut-off 500						
12 Panel Now	1	-	1	1	-	1
Alere iScreen	23	-	23	23	-	23
Beckman AU	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	4	-	4	4	-	4
First Sign Drugs of Abuse	1	-	1	1	-	1
ImmTox	2	-	2	2	-	2
Lin-Zhi International	1	-	1	1	-	1
MEDTOX Diagnostics	5	-	5	5	-	5
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
All Cut-off 500	40	-	40	40	-	40
Cut-off 1000						
Alere iCassette	3	-	3	3	-	3
Alere iCup	1	-	1	1	-	1
Alfa Scientific Instant-View	2	-	2	2	-	2
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	2	-	2	2	-	2
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	2	-	2	2	-	2
McKesson Consult Drug Panel	2	-	2	2	-	2
McKesson Drug Panel	6	-	6	6	-	6
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	8	-	8	8	-	8
All Cut-off 1000	31	-	31	31	-	31

**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	8	8	-	8	-	8
Cut-off 10						
Beckman AU	1	1	-	1	-	1
ImmTox	1	1	-	1	-	1
Indiko Plus	2	2	-	2	-	2
Microgenics CEDIA	3	3	-	3	-	3
Siemens Viva-E	1	1	-	1	-	1
All Cut-off 10	8	8	-	8	-	8

Opiates (Morphine Trihydrate) (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	110	1	109	110	-	110
Cut-off 100						
Beckman AU	1	-	1	1	-	1
Lin-Zhi International	1	-	1	1	-	1
MEDTOX Diagnostics	3	-	3	3	-	3
All Cut-off 100	5	-	5	5	-	5
Cut-off 300						
12 Panel Now	1	-	1	1	-	1
Abbott Architect	1	-	1	1	-	1
Alere iScreen	23	-	23	23	-	23
Alfa Scientific Instant-View	2	-	2	2	-	2
Beckman AU	4	-	4	4	-	4
Carolina Chemistries BioLis 24i	2	-	2	2	-	2
CLIAwaived, Inc. Drug Test	5	-	5	5	-	5
Confirm Biosciences DoA Test	1	-	1	1	-	1
Identify Diagnostics Drug Test	1	-	1	1	-	1
ImmTox	2	-	2	2	-	2
Indiko Plus	2	-	2	2	-	2
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	4	-	4	4	-	4
Microgenics DRI	7	-	7	7	-	7
Mindray BS-200/BS-480	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Roche cobas 6000 / c 501	1	-	1	1	-	1
Roche Integra	2	-	2	2	-	2

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

<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>
Siemens Dimension	2	-	2	2	-	2
Siemens EMIT II Plus	2	-	2	2	-	2
Synermed IR 500	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	1	-	1	1	-	1
USDiagnostics UScreen Cup	7	-	7	7	-	7
All Cut-off 300	74	-	74	74	-	74
Cut-off 2000						
Alere iCassette	3	-	3	3	-	3
Alere iCup	1	-	1	1	-	1
Alfa Scientific Instant-View	6	-	6	6	-	6
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	1	-	1	1	-	1
First Sign Drugs of Abuse	3	-	3	3	-	3
Germaine Laboratories AimScreen	4	-	4	4	-	4
McKesson Drug Panel	2	-	2	2	-	2
MEDTOX Diagnostics	2	-	2	2	-	2
Microgenics DRI	1	-	1	1	-	1
Noble Medical Inc.	3	-	3	3	-	3
USDiagnostics One Step Multi-Drug	1	-	1	1	-	1
USDiagnostics UScreen Cup	2	1	1	2	-	2
All Cut-off 2000	31	1	30	31	-	31

## 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	-	83	83	-	83
Cut-off 100						
12 Panel Now	1	-	1	1	-	1
Alere iCassette	2	-	2	2	-	2
Alere iCup	1	-	1	1	-	1
Alere iScreen	23	-	23	23	-	23
Beckman AU	4	-	4	4	-	4
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
CLIAwaived, Inc. Drug Test	6	-	6	6	-	6
Confirm Biosciences DoA Test	1	-	1	1	-	1
First Sign Drugs of Abuse	1	-	1	1	-	1
Identify Diagnostics Drug Test	1	-	1	1	-	1
ImmTox	1	-	1	1	-	1
Immunalysis	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	7	-	7	7	-	7
MEDTOX Diagnostics	5	-	5	5	-	5
Microgenics DRI	5	-	5	5	-	5
Noble Medical Inc.	1	-	1	1	-	1
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Roche cobas 6000 / c 501	1	-	1	1	-	1
Roche Integra	2	-	2	2	-	2
Siemens EMIT II Plus	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	1	-	1	1	-	1
USDiagnostics UScreen Cup	8	-	8	8	-	8
All Cut-off 100	79	-	79	79	-	79
Cut-off 300						
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
Indiko Plus	1	-	1	1	-	1
Microgenics DRI	2	-	2	2	-	2
All Cut-off 300	4	-	4	4	-	4

### Phencyclidine (PCP) (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	72	-	72	72	1	71
Cut-off 25						
Abbott Architect	1	-	1	1	-	1
Alere iCassette	3	-	3	3	-	3
Alere iCup	1	-	1	1	-	1
Alere iScreen	22	-	22	22	1	21
Beckman AU	3	-	3	3	-	3
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	-	1
BMC QuickTox Drug Screen	1	-	1	1	-	1
Carolina Chemistries BioLis 24i	1	-	1	1	-	1
Clarity Diagnostics Urine Panels/Cassettes	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
Germaine Laboratories AimScreen	1	-	1	1	-	1
McKesson Consult Drug Panel	1	-	1	1	-	1
McKesson Drug Panel	5	-	5	5	-	5
MEDTOX Diagnostics	5	-	5	5	-	5
Microgenics DRI	2	-	2	2	-	2
Noble Medical Inc.	3	-	3	3	-	3
Premier Biotech Bio-Cup/Bio-Dip	1	-	1	1	-	1
Siemens Dimension	1	-	1	1	-	1
Siemens EMIT II Plus	1	-	1	1	-	1
USDiagnostics One Step Multi-Drug	2	-	2	2	-	2
USDiagnostics UScreen Cup	8	-	8	8	-	8
All Cut-off 25	71	-	71	71	1	70
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	18	-	18	18	18	-
Cut-off 300						
Abbott Architect	1	-	1	1	1	-
Alere iCassette	1	-	1	1	1	-
Beckman AU	2	-	2	2	2	-
BluRapids Multi-Drug Urine Test Cup	1	-	1	1	1	-
Carolina Chemistries BioLis 24i	1	-	1	1	1	-
Indiko Plus	1	-	1	1	1	-
McKesson Drug Panel	5	-	5	5	5	-
MEDTOX Diagnostics	5	-	5	5	5	-
Microgenics DRI	1	-	1	1	1	-
All Cut-off 300	18	-	18	18	18	-

**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	1	-	1	1	-	1

### 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	23	23	-	23	-	23
Cut-off 300						
MEDTOX Diagnostics	5	5	-	5	-	5
All Cut-off 300	5	5	-	5	-	5
Cut-off 1000						
Alere iCup	1	1	-	1	-	1
BluRapids Multi-Drug Urine Test Cup	1	1	-	1	-	1
CLIAwaived, Inc. Drug Test	4	4	-	4	-	4
McKesson Consult Drug Panel	1	1	-	1	-	1
McKesson Drug Panel	6	6	-	6	-	6
USDiagnostics UScreen Cup	5	5	-	5	-	5
All Cut-off 1000	18	18	-	18	-	18

### 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	3	-	-	-	117	Not graded	3	-	-	-	-	275	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	2	-	-	-	8.6	Not graded	2	-	-	-	-	4.4	Not graded	

### 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	2	-	-	-	73	Not graded	2	-	-	-	-	245	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	6	66.83	3.55	5.3	66.1	55.4 - 78.2	6	187.90	10.48	5.6	185.5	155.9 - 219.9		

### 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	3	-	-	-	24	Not graded	3	-	-	-	-	267	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	2	-	-	-	2.7	Not graded	2	-	-	-	-	8.5	Not graded	

**Urine Osmolality (mOsm/kg)**

<b><u>Method</u></b>	Specimen UCH-1						Specimen UCH-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	-	-	-	232	Not graded	1	-	-	-	825	Not graded

**Urine Phosphorus (mg/dL)**

<b><u>Method</u></b>	Specimen UCH-1						Specimen UCH-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	2	-	-	-	18.5	Not graded	2	-	-	-	62.6	Not graded

**Urine Potassium (mmol/L)**

<b><u>Method</u></b>	Specimen UCH-1						Specimen UCH-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	3	-	-	-	21	Not graded	3	-	-	-	101	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	3	-	-	-	84	Not graded	3	-	-	-	-	191	Not graded	

**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	5	13.05	5.80	44.4	11.7	7.3 - 18.8	5	82.05	17.24	21.0	89.3	45.9 - 118.2		

**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	2	-	-	-	368	Not graded	2	-	-	-	-	668	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	-	-	-	4.5	Not graded	1	-	-	-	-	8.7	Not graded	

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