

# **MEDICAL LABORATORY EVALUATION**

## **PARTICIPANT SUMMARY**

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Hematology, Coagulation,  
Blood Bank, Urinalysis, PPM  
2020 MLE-M2

**ACP** | **Medical Laboratory  
Evaluation** 

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

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# EVALUATION CRITERIA

The evaluation criteria used in the MLE Program is in accordance with the Clinical Laboratory Improvement Amendments of 1988 (CLIA '88) federal requirements for proficiency testing. The criteria are included below.

## Qualitative

For qualitative procedures, evaluation is based on participant or referee consensus. If participant consensus is not reached, CMS requirements call for grading by referee consensus. A minimum percentage of participants or referee laboratories must receive a passing score or the challenge is not evaluated due to lack of consensus. These percentages are listed below.

ABO Group	95% Participant or 100% Referee Consensus
Antibody Identification	95% Consensus
Blood Cell Identification	80% Consensus
Compatibility Testing	95% Participant or 100% Referee Consensus
Creatinine (Semi-Quantitative)	80% Consensus
Crystal Identification	80% Consensus
Fecal Occult Blood	80% Consensus
KOH Skin Preparation	80% Consensus
Microalbumin (Semi-Quantitative)	80% Consensus
Provider-Performed Microscopy	80% Consensus
Rh Factor (D Type)	95% Participant or 100% Referee Consensus
Unexpected Antibody Detection	95% Consensus
Urine Dipstick	80% Consensus
Urine hCG	80% Consensus
Urine Sediment Identification	80% Consensus

## Quantitative

For quantitative procedures, a mean and standard deviation (SD) are calculated for each peer group consisting of 10 or more laboratories except for Coagulation (CG Specimens) which consist of peer groups of 5 or more laboratories. Acceptable performance is established on a target value  $\pm$  the intervals below. An explanation on how to calculate the range of acceptability based upon these limits is also provided in your MLE Program Guide on page 37 under the heading "Acceptable Ranges for Quantitative Results."

Activated Partial Thromboplastin Time	$\pm 15\%$
Automated Differential	$\pm 3$ SD
Blood Lead	$\pm 4$ $\mu\text{g/dL}$ or $\pm 10\%^*$
Body Fluid - Red Cell Count	$\pm 2$ SD
Body Fluid - White Cell Count	$\pm 2$ SD
Creatinine, Urine (Quantitative)	$\pm 17\%$
Fibrinogen	$\pm 20\%$
Glucose, Whole Blood – HemoCue	$\pm 12$ $\text{mg/dL}$ or $\pm 20\%^*$
Hematocrit	$\pm 6\%$
Hematocrit, Waived	$\pm 6\%$ or $\pm 2$ SD*
Hemoglobin	$\pm 7\%$
Hemoglobin, Waived	$\pm 7\%$ or $\pm 2$ SD*
International Normalized Ratio (INR)	$\pm 20\%$
Microalbumin (Quantitative)	$\pm 30\%$
Platelet Count	$\pm 25\%$
Prothrombin Time	$\pm 15\%$
Red Blood Cell Count	$\pm 6\%$
Reticulocyte Count	$\pm 30\%$ or $\pm 2$ SD*
Sedimentation Rate	$\pm 2$ SD
Specific Gravity	$\pm 0.010$
White Blood Cell Count	$\pm 15\%$

\*Whichever is greater

**HEMOCUE HEMATOLOGY–HEMOGLOBIN (g/dL)**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen HQ-3</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen HQ-4</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>				<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	31	16.73	3.33	19.9	15.3	15.5 - 18.0	31	5.40	1.15	21.2	5.0	5.0 - 5.8	
All HemoCue 301/801	5	24.13	0.46	1.9	24.4	22.4 - 25.9	5	8.17	0.35	4.3	8.2	7.5 - 8.8	
HemoCue 201/+	26	15.30	0.35	2.3	15.3	14.2 - 16.4	26	4.92	0.19	3.9	5.0	4.5 - 5.3	
HemoCue 801	5	24.13	0.46	1.9	24.4	22.4 - 25.9	5	8.17	0.35	4.3	8.2	7.5 - 8.8	

**HEMOCUE HEMATOLOGY–GLUCOSE (mg/dL)**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen HQ-3</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen HQ-4</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>				<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	26	311.3	11.1	3.6	313	249 - 374	27	48.5	5.4	11.2	49	36 - 61	
All HemoCue Methods	26	311.3	11.1	3.6	313	249 - 374	26	48.6	5.5	11.4	49	36 - 61	
HemoCue Glucose 201	24	310.8	6.3	2.0	313	248 - 373	26	48.6	5.5	11.4	49	36 - 61	

**SEDIMENTATION RATE (MM/HR)**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen ES-3</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen ES-4</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>				<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	77	8.6	2.5	28.5	9	3 - 14	79	43.1	12.4	28.8	40	18 - 68	
All Automated Methods	21	10.4	2.9	28.3	10	4 - 17	21	56.1	11.8	21.1	58	32 - 80	
All Manual Methods	56	8.1	2.2	27.4	8	3 - 13	56	39.3	8.7	22.3	38	21 - 57	
All Vital Diagnostics Methods	13	9.4	1.6	17.1	10	6 - 13	13	57.8	11.2	19.3	58	35 - 81	
Westergren - diluted	51	8.0	2.3	28.6	8	3 - 13	51	39.4	8.8	22.2	38	21 - 57	

**SEDIMAT SEDIMENTATION RATE (MM/HR)**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen MAT-3</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen MAT-4</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>				<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Polymedco Sedimat 15	9	1.9	0.6	31.8	2	0 - 4	9	64.0	8.7	13.6	62	46 - 82	

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x K/uL)**

<u>Instrument</u>	<b>Specimen CL-6</b>						<b>Specimen CL-7</b>					
	<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	2.88	0.40	13.8	3.0	2.4 - 3.4	11	7.22	0.44	6.1	7.4	6.1 - 8.4
All Abbott Cell-Dyn Instruments	11	3.05	0.13	4.2	3.1	2.5 - 3.6	11	7.40	0.22	2.9	7.5	6.2 - 8.6
Abbott Cell-Dyn Ruby	10	3.05	0.13	4.2	3.1	2.5 - 3.6	10	7.40	0.22	2.9	7.5	6.2 - 8.6
<u>Instrument</u>	<b>Specimen CL-8</b>						<b>Specimen CL-9</b>					
	<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	24.28	1.40	5.7	24.6	20.6 - 28.0	11	19.86	0.82	4.1	20.0	16.8 - 22.9
All Abbott Cell-Dyn Instruments	11	24.88	0.49	2.0	24.8	21.1 - 28.7	11	20.20	0.36	1.8	20.1	17.1 - 23.3
Abbott Cell-Dyn Ruby	10	24.88	0.49	2.0	24.8	21.1 - 28.7	10	20.20	0.36	1.8	20.1	17.1 - 23.3
<u>Instrument</u>	<b>Specimen CL-10</b>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	11	3.02	0.41	13.5	3.2	2.5 - 3.5						
All Abbott Cell-Dyn Instruments	11	3.20	0.08	2.6	3.2	2.7 - 3.7						
Abbott Cell-Dyn Ruby	10	3.20	0.08	2.6	3.2	2.7 - 3.7						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x M/uL)**

<u>Instrument</u>	<b>Specimen CL-6</b>						<b>Specimen CL-7</b>					
	<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	2.282	0.058	2.5	2.28	2.14 - 2.42	11	4.756	0.050	1.1	4.78	4.47 - 5.05
All Abbott Cell-Dyn Instruments	11	2.303	0.040	1.8	2.29	2.16 - 2.45	11	4.748	0.054	1.1	4.76	4.46 - 5.04
Abbott Cell-Dyn Ruby	10	2.303	0.040	1.8	2.29	2.16 - 2.45	10	4.748	0.054	1.1	4.76	4.46 - 5.04
<u>Instrument</u>	<b>Specimen CL-8</b>						<b>Specimen CL-9</b>					
	<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	6.256	0.118	1.9	6.30	5.88 - 6.64	11	5.078	0.028	0.5	5.08	4.77 - 5.39
All Abbott Cell-Dyn Instruments	11	6.260	0.136	2.2	6.31	5.88 - 6.64	11	5.070	0.024	0.5	5.07	4.76 - 5.38
Abbott Cell-Dyn Ruby	10	6.260	0.136	2.2	6.31	5.88 - 6.64	10	5.070	0.024	0.5	5.07	4.76 - 5.38
<u>Instrument</u>	<b>Specimen CL-10</b>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	11	2.266	0.024	1.1	2.26	2.13 - 2.41						
All Abbott Cell-Dyn Instruments	11	2.270	0.026	1.1	2.27	2.13 - 2.41						
Abbott Cell-Dyn Ruby	10	2.270	0.026	1.1	2.27	2.13 - 2.41						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–HEMOGLOBIN (g/dL)**

<u>Instrument</u>	<b>Specimen CL-6</b>						<b>Specimen CL-7</b>					
	<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	5.38	0.50	9.2	5.6	5.0 - 5.8	11	13.06	0.65	5.0	13.2	12.1 - 14.0
All Abbott Cell-Dyn Instruments	11	5.60	0.08	1.5	5.6	5.2 - 6.0	11	13.33	0.30	2.2	13.3	12.3 - 14.3
Abbott Cell-Dyn Ruby	10	5.60	0.08	1.5	5.6	5.2 - 6.0	10	13.33	0.30	2.2	13.3	12.3 - 14.3
<b>Specimen CL-8</b>						<b>Specimen CL-9</b>						
All Method	11	19.54	0.54	2.8	19.5	18.1 - 21.0	11	16.06	0.41	2.6	16.2	14.9 - 17.2
All Abbott Cell-Dyn Instruments	11	19.73	0.40	2.0	19.7	18.3 - 21.2	11	16.23	0.21	1.3	16.2	15.0 - 17.4
Abbott Cell-Dyn Ruby	10	19.73	0.40	2.0	19.7	18.3 - 21.2	10	16.23	0.21	1.3	16.2	15.0 - 17.4
<b>Specimen CL-10</b>												
All Method	11	5.34	0.42	7.8	5.5	4.9 - 5.8						
All Abbott Cell-Dyn Instruments	11	5.53	0.05	0.9	5.5	5.1 - 6.0						
Abbott Cell-Dyn Ruby	10	5.53	0.05	0.9	5.5	5.1 - 6.0						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–HEMATOCRIT (percent)**

<u>Instrument</u>	<b>Specimen CL-6</b>						<b>Specimen CL-7</b>					
	<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	16.06	0.50	3.1	16.1	15.0 - 17.1	11	38.54	1.90	4.9	37.8	36.2 - 40.9
All Abbott Cell-Dyn Instruments	11	15.90	0.41	2.6	16.1	14.9 - 16.9	11	37.70	0.29	0.8	37.8	35.4 - 40.0
Abbott Cell-Dyn Ruby	10	15.90	0.41	2.6	16.1	14.9 - 16.9	10	37.70	0.29	0.8	37.8	35.4 - 40.0
<b>Specimen CL-8</b>						<b>Specimen CL-9</b>						
All Method	11	54.00	2.70	5.0	53.1	50.7 - 57.3	11	44.02	2.71	6.2	43.2	41.3 - 46.7
All Abbott Cell-Dyn Instruments	11	52.83	0.72	1.4	52.8	49.6 - 56.0	11	42.85	0.81	1.9	43.0	40.2 - 45.5
Abbott Cell-Dyn Ruby	10	52.83	0.72	1.4	52.8	49.6 - 56.0	10	42.85	0.81	1.9	43.0	40.2 - 45.5
<b>Specimen CL-10</b>												
All Method	11	16.00	0.62	3.9	15.9	15.0 - 17.0						
All Abbott Cell-Dyn Instruments	11	15.75	0.30	1.9	15.9	14.8 - 16.7						
Abbott Cell-Dyn Ruby	10	15.75	0.30	1.9	15.9	14.8 - 16.7						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL-PLATELET COUNT (x K/uL)**

<u>Instrument</u>	<b>Specimen CL-6</b>						<b>Specimen CL-7</b>					
	<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	82.6	3.0	3.6	82	61 - 104	11	257.8	11.2	4.3	263	193 - 323
All Abbott Cell-Dyn Instruments	11	82.3	3.3	4.0	81	61 - 103	11	260.0	11.6	4.5	264	195 - 325
Abbott Cell-Dyn Ruby	10	82.3	3.3	4.0	81	61 - 103	10	260.0	11.6	4.5	264	195 - 325
<u>Instrument</u>	<b>Specimen CL-8</b>						<b>Specimen CL-9</b>					
	<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	549.2	44.9	8.2	562	411 - 687	11	488.8	15.0	3.1	492	366 - 611
All Abbott Cell-Dyn Instruments	11	567.5	21.4	3.8	562	425 - 710	11	494.5	9.1	1.8	496	370 - 619
Abbott Cell-Dyn Ruby	10	567.5	21.4	3.8	562	425 - 710	10	494.5	9.1	1.8	496	370 - 619
<u>Instrument</u>	<b>Specimen CL-10</b>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	11	84.4	7.0	8.3	83	63 - 106						
All Abbott Cell-Dyn Instruments	11	81.5	3.1	3.8	83	61 - 102						
Abbott Cell-Dyn Ruby	10	81.5	3.1	3.8	83	61 - 102						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL-NEUTROPHILS (percent)**

<u>Instrument</u>	<b>Specimen CL-6</b>						<b>Specimen CL-7</b>					
	<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	43.70	2.07	4.7	44.0	37.4 - 50.0	11	62.94	1.91	3.0	63.6	57.2 - 68.7
All Abbott Cell-Dyn Instruments	11	44.50	1.21	2.7	44.0	40.8 - 48.2	11	63.78	0.46	0.7	63.9	62.3 - 65.2
Abbott Cell-Dyn Ruby	10	44.50	1.21	2.7	44.0	40.8 - 48.2	10	63.78	0.46	0.7	63.9	62.3 - 65.2
<u>Instrument</u>	<b>Specimen CL-8</b>						<b>Specimen CL-9</b>					
	<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	75.26	1.23	1.6	75.5	71.5 - 79.0	11	75.10	0.94	1.2	75.6	72.2 - 78.0
All Abbott Cell-Dyn Instruments	11	75.65	1.01	1.3	75.9	72.6 - 78.7	11	75.45	0.60	0.8	75.6	73.6 - 77.3
Abbott Cell-Dyn Ruby	10	75.65	1.01	1.3	75.9	72.6 - 78.7	10	75.45	0.60	0.8	75.6	73.6 - 77.3
<u>Instrument</u>	<b>Specimen CL-10</b>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	11	45.46	1.05	2.3	45.6	42.3 - 48.6						
All Abbott Cell-Dyn Instruments	11	45.65	1.10	2.4	45.7	42.3 - 49.0						
Abbott Cell-Dyn Ruby	10	45.65	1.10	2.4	45.7	42.3 - 49.0						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–LYMPHOCYTES (percent)**

<u>Instrument</u>	<b>Specimen CL-6</b>						<b>Specimen CL-7</b>					
	<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	41.28	4.05	9.8	43.0	29.1 - 53.5	11	23.44	1.99	8.5	24.1	17.4 - 29.5
All Abbott Cell-Dyn Instruments	11	43.08	0.59	1.4	43.2	41.3 - 44.9	11	24.30	0.59	2.4	24.2	22.5 - 26.1
Abbott Cell-Dyn Ruby	10	43.08	0.59	1.4	43.2	41.3 - 44.9	10	24.30	0.59	2.4	24.2	22.5 - 26.1
<u>Instrument</u>	<b>Specimen CL-8</b>						<b>Specimen CL-9</b>					
	<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	14.64	0.95	6.5	14.3	11.7 - 17.5	11	15.26	1.34	8.8	15.5	11.2 - 19.3
All Abbott Cell-Dyn Instruments	11	14.83	0.99	6.7	14.4	11.8 - 17.8	11	15.83	0.53	3.3	15.6	14.2 - 17.5
Abbott Cell-Dyn Ruby	10	14.83	0.99	6.7	14.4	11.8 - 17.8	10	15.83	0.53	3.3	15.6	14.2 - 17.5
<u>Instrument</u>	<b>Specimen CL-10</b>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	11	39.98	5.74	14.3	42.4	22.7 - 57.2						
All Abbott Cell-Dyn Instruments	11	42.50	1.24	2.9	42.8	38.7 - 46.3						
Abbott Cell-Dyn Ruby	10	42.50	1.24	2.9	42.8	38.7 - 46.3						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–MONOCYTES (percent)**

<u>Instrument</u>	<b>Specimen CL-6</b>						<b>Specimen CL-7</b>					
	<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	10.52	5.79	55.1	8.6	0.0 - 28.0	11	7.80	3.70	47.5	6.3	0.0 - 19.0
All Abbott Cell-Dyn Instruments	11	7.98	1.26	15.8	8.0	4.1 - 11.8	11	6.15	0.37	6.0	6.1	5.0 - 7.3
Abbott Cell-Dyn Ruby	10	7.98	1.26	15.8	8.0	4.1 - 11.8	10	6.15	0.37	6.0	6.1	5.0 - 7.3
<u>Instrument</u>	<b>Specimen CL-8</b>						<b>Specimen CL-9</b>					
	<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	6.64	2.00	30.2	5.8	0.6 - 12.7	11	6.34	2.50	39.4	5.3	0.0 - 13.9
All Abbott Cell-Dyn Instruments	11	5.75	0.26	4.6	5.7	4.9 - 6.6	11	5.23	0.22	4.2	5.2	4.5 - 5.9
Abbott Cell-Dyn Ruby	10	5.75	0.26	4.6	5.7	4.9 - 6.6	10	5.23	0.22	4.2	5.2	4.5 - 5.9
<u>Instrument</u>	<b>Specimen CL-10</b>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	11	9.72	5.83	60.0	7.4	0.0 - 27.3						
All Abbott Cell-Dyn Instruments	11	7.13	0.65	9.1	7.3	5.1 - 9.1						
Abbott Cell-Dyn Ruby	10	7.13	0.65	9.1	7.3	5.1 - 9.1						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–EOSINOPHILS (percent)**

<u><i>Instrument</i></u>	<b>Specimen CL-6</b>						<b>Specimen CL-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	11	4.34	0.57	13.1	4.2	2.6 - 6.1	11	5.74	0.29	5.0	5.8	4.8 - 6.7
All Abbott Cell-Dyn Instruments	11	4.40	0.64	14.5	4.3	2.4 - 6.4	11	5.73	0.33	5.8	5.7	4.7 - 6.8
Abbott Cell-Dyn Ruby	10	4.40	0.64	14.5	4.3	2.4 - 6.4	10	5.73	0.33	5.8	5.7	4.7 - 6.8
<b>Specimen CL-8</b>						<b>Specimen CL-9</b>						
All Method	11	3.12	0.69	22.1	3.4	1.0 - 5.2	11	3.06	0.49	16.1	3.2	1.5 - 4.6
All Abbott Cell-Dyn Instruments	11	3.43	0.13	3.7	3.4	3.0 - 3.9	11	3.25	0.29	8.9	3.3	2.3 - 4.2
Abbott Cell-Dyn Ruby	10	3.43	0.13	3.7	3.4	3.0 - 3.9	10	3.25	0.29	8.9	3.3	2.3 - 4.2
<b>Specimen CL-10</b>												
All Method	11	4.72	0.15	3.1	4.7	4.2 - 5.2						
All Abbott Cell-Dyn Instruments	11	4.73	0.17	3.6	4.8	4.2 - 5.3						
Abbott Cell-Dyn Ruby	10	4.73	0.17	3.6	4.8	4.2 - 5.3						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–BASOPHILS (percent)**

<u><i>Instrument</i></u>	<b>Specimen CL-6</b>						<b>Specimen CL-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	11	0.16	0.25	156.9	0.1	0.0 - 1.0	11	0.06	0.09	149.1	0.0	0.0 - 0.4
All Abbott Cell-Dyn Instruments	11	0.05	0.06	115.5	0.1	0.0 - 0.3	11	0.03	0.05	200.0	0.0	0.0 - 0.2
Abbott Cell-Dyn Ruby	10	0.05	0.06	115.5	0.1	0.0 - 0.3	10	0.03	0.05	200.0	0.0	0.0 - 0.2
<b>Specimen CL-8</b>						<b>Specimen CL-9</b>						
All Method	11	0.36	0.09	24.8	0.3	0.0 - 0.7	11	0.26	0.09	34.4	0.2	0.0 - 0.6
All Abbott Cell-Dyn Instruments	11	0.38	0.10	25.5	0.4	0.0 - 0.7	11	0.28	0.10	34.8	0.3	0.0 - 0.6
Abbott Cell-Dyn Ruby	10	0.38	0.10	25.5	0.4	0.0 - 0.7	10	0.28	0.10	34.8	0.3	0.0 - 0.6
<b>Specimen CL-10</b>												
All Method	11	0.12	0.27	223.6	0.0	0.0 - 1.0						
All Abbott Cell-Dyn Instruments	11	0.00	0.01	0.0	0.0	0.0 - 0.1						
Abbott Cell-Dyn Ruby	10	0.00	0.01	0.0	0.0	0.0 - 0.1						

**SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L)**

<u><i>Instrument</i></u>	<b>Specimen SYX-6</b>						<b>Specimen SYX-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	52	2.73	0.09	3.3	2.7	2.3 - 3.2	53	8.32	0.30	3.6	8.3	7.0 - 9.6
All Sysmex Instruments	52	2.73	0.09	3.3	2.7	2.3 - 3.2	53	8.32	0.30	3.6	8.3	7.0 - 9.6
Sysmex KX-21N & K-800, 1000, 4500	14	2.67	0.12	4.5	2.7	2.2 - 3.1	14	8.13	0.30	3.7	8.1	6.9 - 9.4
Sysmex pocH-100i	7	2.73	0.05	1.8	2.7	2.3 - 3.2	7	8.03	0.19	2.4	8.1	6.8 - 9.3
Sysmex XP-300	30	2.76	0.06	2.1	2.8	2.3 - 3.2	32	8.47	0.22	2.6	8.4	7.1 - 9.8
	<b>Specimen SYX-8</b>						<b>Specimen SYX-9</b>					
All Method	53	22.38	0.65	2.9	22.4	19.0 - 25.8	52	20.58	0.60	2.9	20.7	17.4 - 23.7
All Sysmex Instruments	53	22.38	0.65	2.9	22.4	19.0 - 25.8	52	20.58	0.60	2.9	20.7	17.4 - 23.7
Sysmex KX-21N & K-800, 1000, 4500	14	21.91	0.42	1.9	21.9	18.6 - 25.2	14	20.31	0.59	2.9	20.2	17.2 - 23.4
Sysmex pocH-100i	7	21.81	0.44	2.0	21.8	18.5 - 25.1	7	20.56	1.58	7.7	20.2	17.4 - 23.7
Sysmex XP-300	32	22.72	0.55	2.4	22.8	19.3 - 26.2	30	20.82	0.34	1.6	20.8	17.6 - 24.0
	<b>Specimen SYX-10</b>											
All Method	53	2.75	0.10	3.6	2.8	2.3 - 3.2						
All Sysmex Instruments	53	2.75	0.10	3.6	2.8	2.3 - 3.2						
Sysmex KX-21N & K-800, 1000, 4500	14	2.71	0.11	4.0	2.7	2.3 - 3.2						
Sysmex pocH-100i	7	2.69	0.11	4.0	2.7	2.2 - 3.1						
Sysmex XP-300	32	2.79	0.08	2.8	2.8	2.3 - 3.3						

**SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL-RED BLOOD CELL COUNT (x 10<sup>12</sup>/L)**

<u>Instrument</u>	<b>Specimen SYX-6</b>						<b>Specimen SYX-7</b>					
	<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	52	2.480	0.032	1.3	2.48	2.33 - 2.63	50	4.199	0.048	1.2	4.20	3.94 - 4.46
All Sysmex Instruments	52	2.480	0.032	1.3	2.48	2.33 - 2.63	50	4.199	0.048	1.2	4.20	3.94 - 4.46
Sysmex KX-21N & K-800, 1000, 4500	14	2.472	0.032	1.3	2.48	2.32 - 2.63	14	4.188	0.050	1.2	4.19	3.93 - 4.44
Sysmex pocH-100i	7	2.549	0.078	3.1	2.55	2.39 - 2.71	6	4.305	0.082	1.9	4.31	4.04 - 4.57
Sysmex XP-300	32	2.475	0.023	0.9	2.48	2.32 - 2.63	32	4.195	0.038	0.9	4.20	3.94 - 4.45

<u>Instrument</u>	<b>Specimen SYX-8</b>						<b>Specimen SYX-9</b>					
	<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	52	6.175	0.070	1.1	6.17	5.80 - 6.55	51	5.767	0.063	1.1	5.77	5.42 - 6.12
All Sysmex Instruments	52	6.175	0.070	1.1	6.17	5.80 - 6.55	51	5.767	0.063	1.1	5.77	5.42 - 6.12
Sysmex KX-21N & K-800, 1000, 4500	14	6.161	0.050	0.8	6.16	5.79 - 6.54	14	5.781	0.046	0.8	5.78	5.43 - 6.13
Sysmex pocH-100i	7	6.286	0.115	1.8	6.29	5.90 - 6.67	7	6.029	0.503	8.3	5.85	5.66 - 6.40
Sysmex XP-300	32	6.164	0.057	0.9	6.17	5.79 - 6.54	32	5.755	0.063	1.1	5.76	5.40 - 6.10

<u>Instrument</u>	<b>Specimen SYX-10</b>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	52	2.478	0.030	1.2	2.48	2.32 - 2.63
All Sysmex Instruments	52	2.478	0.030	1.2	2.48	2.32 - 2.63
Sysmex KX-21N & K-800, 1000, 4500	14	2.476	0.023	0.9	2.48	2.32 - 2.63
Sysmex pocH-100i	7	2.510	0.047	1.9	2.51	2.35 - 2.67
Sysmex XP-300	32	2.476	0.031	1.3	2.48	2.32 - 2.63

**SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–HEMOGLOBIN (g/dL)**

<u>Instrument</u>	<b>Specimen SYX-6</b>						<b>Specimen SYX-7</b>					
	<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	53	6.13	0.14	2.2	6.1	5.6 - 6.6	52	12.06	0.14	1.2	12.1	11.2 - 13.0
All Sysmex Instruments	53	6.13	0.14	2.2	6.1	5.6 - 6.6	52	12.06	0.14	1.2	12.1	11.2 - 13.0
Sysmex KX-21N & K-800, 1000, 4500	14	6.14	0.12	1.9	6.2	5.7 - 6.6	14	12.05	0.13	1.1	12.1	11.2 - 12.9
Sysmex pocH-100i	7	6.31	0.13	2.1	6.3	5.8 - 6.8	7	12.23	0.23	1.9	12.3	11.3 - 13.1
Sysmex XP-300	32	6.08	0.11	1.8	6.1	5.6 - 6.6	32	12.04	0.13	1.1	12.1	11.1 - 12.9

<u>Instrument</u>	<b>Specimen SYX-8</b>						<b>Specimen SYX-9</b>					
	<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	51	19.67	0.25	1.3	19.6	18.2 - 21.1	51	18.27	0.24	1.3	18.2	16.9 - 19.6
All Sysmex Instruments	51	19.67	0.25	1.3	19.6	18.2 - 21.1	51	18.27	0.24	1.3	18.2	16.9 - 19.6
Sysmex KX-21N & K-800, 1000, 4500	13	19.66	0.19	0.9	19.6	18.2 - 21.1	13	18.28	0.21	1.2	18.2	17.0 - 19.6
Sysmex pocH-100i	7	19.94	0.36	1.8	20.1	18.5 - 21.4	7	19.04	1.70	8.9	18.4	17.7 - 20.4
Sysmex XP-300	31	19.61	0.20	1.0	19.6	18.2 - 21.0	31	18.22	0.17	0.9	18.2	16.9 - 19.5

<u>Instrument</u>	<b>Specimen SYX-10</b>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	52	6.15	0.11	1.8	6.2	5.7 - 6.6
All Sysmex Instruments	52	6.15	0.11	1.8	6.2	5.7 - 6.6
Sysmex KX-21N & K-800, 1000, 4500	14	6.18	0.11	1.8	6.2	5.7 - 6.7
Sysmex pocH-100i	6	6.20	0.09	1.4	6.2	5.7 - 6.7
Sysmex XP-300	32	6.13	0.11	1.8	6.1	5.7 - 6.6



**SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL—PLATELET COUNT (x10<sup>9</sup>/L)**

<u>Instrument</u>	<b>Specimen SYX-6</b>						<b>Specimen SYX-7</b>					
	<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	53	63.5	4.0	6.2	64	47 - 80	50	198.4	6.9	3.5	198	148 - 248
All Sysmex Instruments	53	63.5	4.0	6.2	64	47 - 80	50	198.4	6.9	3.5	198	148 - 248
Sysmex KX-21N & K-800, 1000, 4500	14	63.5	5.2	8.1	63	47 - 80	14	197.5	16.0	8.1	196	148 - 247
Sysmex pocH-100i	7	65.9	3.9	6.0	66	49 - 83	7	198.3	6.6	3.3	195	148 - 248
Sysmex XP-300	31	63.3	2.7	4.3	64	47 - 80	31	198.3	6.3	3.2	199	148 - 248
	<b>Specimen SYX-8</b>						<b>Specimen SYX-9</b>					
All Method	51	418.6	12.7	3.0	417	313 - 524	50	406.5	14.7	3.6	408	304 - 509
All Sysmex Instruments	51	418.6	12.7	3.0	417	313 - 524	50	406.5	14.7	3.6	408	304 - 509
Sysmex KX-21N & K-800, 1000, 4500	13	416.9	14.2	3.4	419	312 - 522	13	409.5	15.7	3.8	409	307 - 512
Sysmex pocH-100i	7	414.6	13.0	3.1	417	310 - 519	7	387.9	29.4	7.6	401	290 - 485
Sysmex XP-300	31	420.2	12.2	2.9	417	315 - 526	31	407.1	13.3	3.3	408	305 - 509
	<b>Specimen SYX-10</b>											
All Method	50	63.2	4.3	6.7	63	47 - 79						
All Sysmex Instruments	50	63.2	4.3	6.7	63	47 - 79						
Sysmex KX-21N & K-800, 1000, 4500	14	62.3	3.7	6.0	62	46 - 78						
Sysmex pocH-100i	5	64.4	4.3	6.6	64	48 - 81						
Sysmex XP-300	31	63.4	4.5	7.1	63	47 - 80						

**SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–LYMPH W/SCR (percent)**

<u><i>Instrument</i></u>	<b>Specimen SYX-6</b>						<b>Specimen SYX-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	48	12.28	1.33	10.9	12.3	8.2 - 16.3	48	29.81	0.96	3.2	29.9	26.9 - 32.7
All Sysmex Instruments	48	12.28	1.33	10.9	12.3	8.2 - 16.3	48	29.81	0.96	3.2	29.9	26.9 - 32.7
Sysmex KX-21N & K-800, 1000, 4500	13	12.46	1.42	11.4	12.3	8.2 - 16.8	13	29.88	1.11	3.7	30.1	26.5 - 33.3
Sysmex pocH-100i	6	10.92	0.66	6.1	10.8	8.9 - 13.0	6	28.70	0.60	2.1	28.7	26.9 - 30.5
Sysmex XP-300	29	12.47	1.26	10.1	12.6	8.6 - 16.3	29	30.01	0.81	2.7	29.9	27.5 - 32.5
<b>Specimen SYX-8</b>												
All Method	48	62.02	0.69	1.1	62.0	59.9 - 64.2	48	62.23	0.68	1.1	62.2	60.1 - 64.3
All Sysmex Instruments	48	62.02	0.69	1.1	62.0	59.9 - 64.2	48	62.23	0.68	1.1	62.2	60.1 - 64.3
Sysmex KX-21N & K-800, 1000, 4500	13	61.95	0.70	1.1	62.0	59.8 - 64.1	13	62.18	0.81	1.3	62.2	59.7 - 64.7
Sysmex pocH-100i	6	62.43	1.07	1.7	62.5	59.2 - 65.7	6	62.48	0.83	1.3	62.4	59.9 - 65.0
Sysmex XP-300	29	61.97	0.59	1.0	62.0	60.1 - 63.8	29	62.19	0.60	1.0	62.2	60.4 - 64.0
<b>Specimen SYX-9</b>												
<b>Specimen SYX-10</b>												
All Method	48	12.35	1.14	9.2	12.4	8.9 - 15.8						
All Sysmex Instruments	48	12.35	1.14	9.2	12.4	8.9 - 15.8						
Sysmex KX-21N & K-800, 1000, 4500	13	12.60	0.90	7.1	12.3	9.9 - 15.3						
Sysmex pocH-100i	6	10.62	1.21	11.4	10.5	6.9 - 14.3						
Sysmex XP-300	29	12.60	0.91	7.2	12.7	9.8 - 15.4						

**SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL—MONO/MIXED W/MCR (percent)**

<u><i>Instrument</i></u>	<b>Specimen SYX-6</b>						<b>Specimen SYX-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	48	17.91	1.65	9.2	17.9	12.9 - 22.9	48	16.13	1.16	7.2	16.3	12.6 - 19.7
All Sysmex Instruments	48	17.91	1.65	9.2	17.9	12.9 - 22.9	48	16.13	1.16	7.2	16.3	12.6 - 19.7
Sysmex KX-21N & K-800, 1000, 4500	13	17.87	1.23	6.9	17.7	14.1 - 21.6	13	16.27	0.79	4.8	16.5	13.9 - 18.7
Sysmex pocH-100i	6	16.38	2.10	12.8	15.6	10.0 - 22.7	6	15.22	0.68	4.4	15.3	13.1 - 17.3
Sysmex XP-300	29	18.25	1.58	8.7	18.5	13.5 - 23.0	29	16.26	1.30	8.0	16.5	12.3 - 20.2
	<b>Specimen SYX-8</b>						<b>Specimen SYX-9</b>					
All Method	48	13.19	0.99	7.5	13.2	10.2 - 16.2	48	12.69	0.93	7.3	12.7	9.8 - 15.5
All Sysmex Instruments	48	13.19	0.99	7.5	13.2	10.2 - 16.2	48	12.69	0.93	7.3	12.7	9.8 - 15.5
Sysmex KX-21N & K-800, 1000, 4500	13	13.23	0.96	7.2	13.1	10.3 - 16.2	13	12.86	0.72	5.6	12.8	10.7 - 15.1
Sysmex pocH-100i	6	12.00	1.28	10.7	11.7	8.1 - 15.9	6	11.00	0.57	5.1	11.0	9.3 - 12.7
Sysmex XP-300	28	13.34	0.64	4.8	13.3	11.4 - 15.3	29	12.96	0.69	5.3	12.8	10.8 - 15.1
	<b>Specimen SYX-10</b>											
All Method	47	17.39	1.40	8.0	17.3	13.2 - 21.6						
All Sysmex Instruments	47	17.39	1.40	8.0	17.3	13.2 - 21.6						
Sysmex KX-21N & K-800, 1000, 4500	13	17.17	1.40	8.1	17.2	12.9 - 21.4						
Sysmex pocH-100i	6	16.33	2.43	14.9	16.8	9.0 - 23.7						
Sysmex XP-300	29	17.52	1.48	8.4	17.4	13.0 - 22.0						

**SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–NEUT W/LCR (percent)**

<i><b>Instrument</b></i>	<b>Specimen SYX-6</b>						<b>Specimen SYX-7</b>					
	<i><b>Labs</b></i>	<i><b>Mean</b></i>	<i><b>SD</b></i>	<i><b>CV</b></i>	<i><b>Median</b></i>	<i><b>Range</b></i>	<i><b>Labs</b></i>	<i><b>Mean</b></i>	<i><b>SD</b></i>	<i><b>CV</b></i>	<i><b>Median</b></i>	<i><b>Range</b></i>
All Method	48	69.82	2.29	3.3	69.7	62.9 - 76.8	48	54.06	1.49	2.8	54.2	49.5 - 58.6
All Sysmex Instruments	48	69.82	2.29	3.3	69.7	62.9 - 76.8	48	54.06	1.49	2.8	54.2	49.5 - 58.6
Sysmex KX-21N & K-800, 1000, 4500	13	69.69	1.42	2.0	70.0	65.4 - 74.0	13	53.85	1.08	2.0	53.7	50.6 - 57.2
Sysmex pocH-100i	6	72.70	2.63	3.6	73.5	64.8 - 80.6	6	56.08	0.39	0.7	56.0	54.9 - 57.3
Sysmex XP-300	29	69.28	2.16	3.1	69.3	62.8 - 75.8	29	53.73	1.48	2.8	53.6	49.2 - 58.2
	<b>Specimen SYX-8</b>						<b>Specimen SYX-9</b>					
All Method	47	24.82	0.83	3.3	24.9	22.3 - 27.4	46	25.02	0.68	2.7	24.9	22.9 - 27.1
All Sysmex Instruments	47	24.82	0.83	3.3	24.9	22.3 - 27.4	46	25.02	0.68	2.7	24.9	22.9 - 27.1
Sysmex KX-21N & K-800, 1000, 4500	12	24.86	0.87	3.5	24.9	22.2 - 27.5	12	25.12	0.82	3.3	25.0	22.6 - 27.6
Sysmex pocH-100i	6	25.72	0.69	2.7	25.6	23.6 - 27.8	6	26.10	1.06	4.1	26.3	22.9 - 29.3
Sysmex XP-300	29	24.61	0.73	2.9	24.9	22.4 - 26.8	29	24.85	0.49	2.0	24.8	23.3 - 26.4
	<b>Specimen SYX-10</b>											
All Method	48	70.39	1.90	2.7	70.3	64.7 - 76.1						
All Sysmex Instruments	48	70.39	1.90	2.7	70.3	64.7 - 76.1						
Sysmex KX-21N & K-800, 1000, 4500	13	70.27	1.86	2.6	70.5	64.7 - 75.9						
Sysmex pocH-100i	6	73.05	1.44	2.0	72.7	68.7 - 77.4						
Sysmex XP-300	29	69.90	1.55	2.2	69.7	65.2 - 74.6						

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL—WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L)**

<u><i>Instrument</i></u>	Specimen HD-6						Specimen HD-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	351	2.04	0.13	6.4	2.0	1.7 - 2.4	349	8.03	0.26	3.3	8.0	6.8 - 9.3
All Abbott Cell-Dyn Instruments	87	2.10	0.14	6.4	2.1	1.7 - 2.5	86	8.09	0.31	3.8	8.1	6.8 - 9.4
All ABX Instruments	53	2.04	0.09	4.6	2.0	1.7 - 2.4	53	8.03	0.25	3.1	8.0	6.8 - 9.3
All Boule (CDS) Instruments	113	1.93	0.07	3.7	1.9	1.6 - 2.3	112	7.92	0.21	2.7	7.9	6.7 - 9.2
All COULTER Instruments	93	2.12	0.11	5.1	2.1	1.8 - 2.5	93	8.09	0.24	3.0	8.1	6.8 - 9.4
Abbott Cell-Dyn 1700	6	2.25	0.05	2.4	2.3	1.9 - 2.6	6	8.88	0.51	5.8	8.8	7.5 - 10.3
Abbott Cell-Dyn 1800	19	1.98	0.11	5.7	2.0	1.6 - 2.3	19	7.93	0.37	4.6	8.0	6.7 - 9.2
Abbott Cell-Dyn Emerald	61	2.12	0.11	5.2	2.1	1.8 - 2.5	62	8.12	0.23	2.9	8.1	6.8 - 9.4
Boule (CDS) Medonic M series	110	1.93	0.07	3.6	1.9	1.6 - 2.3	109	7.91	0.21	2.6	7.9	6.7 - 9.1
COULTER AcT diff/diff 2	90	2.12	0.11	5.0	2.1	1.8 - 2.5	90	8.08	0.24	3.0	8.1	6.8 - 9.3
Horiba ABX Micros/45/60	53	2.04	0.09	4.6	2.0	1.7 - 2.4	53	8.03	0.25	3.1	8.0	6.8 - 9.3
	Specimen HD-8						Specimen HD-9					
v	349	5.43	0.24	4.4	5.4	4.6 - 6.3	347	20.96	0.66	3.1	21.0	17.8 - 24.2
All Abbott Cell-Dyn Instruments	87	5.59	0.26	4.6	5.6	4.7 - 6.5	85	20.44	0.69	3.4	20.4	17.3 - 23.6
All ABX Instruments	53	5.49	0.16	2.9	5.5	4.6 - 6.4	50	20.86	0.47	2.3	20.9	17.7 - 24.0
All Boule (CDS) Instruments	111	5.22	0.15	2.9	5.2	4.4 - 6.0	110	21.12	0.52	2.5	21.2	17.9 - 24.3
All COULTER Instruments	94	5.53	0.18	3.2	5.5	4.6 - 6.4	94	21.29	0.54	2.5	21.3	18.0 - 24.5
Abbott Cell-Dyn 1700	6	6.02	0.12	1.9	6.0	5.1 - 7.0	6	22.48	0.98	4.4	22.3	19.1 - 25.9
Abbott Cell-Dyn 1800	19	5.29	0.30	5.6	5.3	4.5 - 6.1	19	20.47	0.87	4.3	20.5	17.4 - 23.6
Abbott Cell-Dyn Emerald	62	5.61	0.18	3.2	5.6	4.7 - 6.5	62	20.40	0.55	2.7	20.4	17.3 - 23.5
Boule (CDS) Medonic M series	108	5.21	0.15	2.8	5.2	4.4 - 6.0	107	21.10	0.51	2.4	21.1	17.9 - 24.3
COULTER AcT diff/diff 2	91	5.53	0.18	3.3	5.5	4.6 - 6.4	91	21.26	0.52	2.5	21.3	18.0 - 24.5
Horiba ABX Micros/45/60	53	5.49	0.16	2.9	5.5	4.6 - 6.4	50	20.86	0.47	2.3	20.9	17.7 - 24.0

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L) cont'd**

**Specimen HD-10**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	352	2.09	0.15	7.0	2.1	1.7 - 2.4
All Abbott Cell-Dyn Instruments	88	2.14	0.13	6.0	2.1	1.8 - 2.5
All ABX Instruments	52	2.03	0.08	3.8	2.0	1.7 - 2.4
All Boule (CDS) Instruments	114	1.96	0.09	4.8	2.0	1.6 - 2.3
All COULTER Instruments	94	2.21	0.11	5.0	2.2	1.8 - 2.6
Abbott Cell-Dyn 1700	6	2.32	0.12	5.0	2.3	1.9 - 2.7
Abbott Cell-Dyn 1800	18	2.03	0.05	2.4	2.0	1.7 - 2.4
Abbott Cell-Dyn Emerald	63	2.16	0.11	5.3	2.1	1.8 - 2.5
Boule (CDS) Medonic M series	111	1.96	0.09	4.7	2.0	1.6 - 2.3
COULTER AcT diff/diff 2	90	2.21	0.10	4.6	2.2	1.8 - 2.6
Horiba ABX Micros/45/60	52	2.03	0.08	3.8	2.0	1.7 - 2.4

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10<sup>12</sup>/L)**

**Specimen HD-6**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	349	2.364	0.063	2.7	2.36	2.22 - 2.51
All Abbott Cell-Dyn Instruments	88	2.391	0.085	3.5	2.38	2.24 - 2.54
All ABX Instruments	53	2.325	0.055	2.4	2.32	2.18 - 2.47
All Boule (CDS) Instruments	113	2.343	0.036	1.5	2.34	2.20 - 2.49
All COULTER Instruments	93	2.393	0.060	2.5	2.39	2.24 - 2.54
Abbott Cell-Dyn 1700	6	2.487	0.074	3.0	2.49	2.33 - 2.64
Abbott Cell-Dyn 1800	19	2.444	0.069	2.8	2.46	2.29 - 2.60
Abbott Cell-Dyn Emerald	63	2.366	0.077	3.2	2.36	2.22 - 2.51
Boule (CDS) Medonic M series	110	2.342	0.036	1.5	2.34	2.20 - 2.49
COULTER AcT diff/diff 2	89	2.394	0.058	2.4	2.39	2.25 - 2.54
Horiba ABX Micros/45/60	53	2.325	0.055	2.4	2.32	2.18 - 2.47

**Specimen HD-7**

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
347	4.692	0.105	2.2	4.70	4.41 - 4.98
87	4.643	0.115	2.5	4.63	4.36 - 4.93
52	4.669	0.109	2.3	4.67	4.38 - 4.95
112	4.710	0.066	1.4	4.72	4.42 - 5.00
94	4.721	0.129	2.7	4.73	4.43 - 5.01
6	4.787	0.132	2.8	4.81	4.49 - 5.08
19	4.658	0.124	2.7	4.65	4.37 - 4.94
62	4.624	0.101	2.2	4.61	4.34 - 4.91
109	4.709	0.066	1.4	4.71	4.42 - 5.00
90	4.721	0.129	2.7	4.73	4.43 - 5.01
52	4.669	0.109	2.3	4.67	4.38 - 4.95

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10<sup>12</sup>/L) cont'd**

<u>Instrument</u>	Specimen HD-8						Specimen HD-9					
	<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	349	6.236	0.154	2.5	6.25	5.86 - 6.62	352	5.689	0.147	2.6	5.69	5.34 - 6.04
All Abbott Cell-Dyn Instruments	88	6.119	0.171	2.8	6.11	5.75 - 6.49	88	5.581	0.137	2.4	5.58	5.24 - 5.92
All ABX Instruments	51	6.241	0.146	2.3	6.24	5.86 - 6.62	52	5.670	0.123	2.2	5.66	5.32 - 6.01
All Boule (CDS) Instruments	110	6.278	0.085	1.4	6.28	5.90 - 6.66	110	5.765	0.092	1.6	5.77	5.41 - 6.12
All COULTER Instruments	93	6.292	0.140	2.2	6.29	5.91 - 6.67	94	5.721	0.148	2.6	5.70	5.37 - 6.07
Abbott Cell-Dyn 1700	6	6.387	0.118	1.9	6.42	6.00 - 6.77	6	5.757	0.130	2.3	5.72	5.41 - 6.11
Abbott Cell-Dyn 1800	19	5.993	0.145	2.4	6.01	5.63 - 6.36	19	5.516	0.121	2.2	5.53	5.18 - 5.85
Abbott Cell-Dyn Emerald	62	6.124	0.135	2.2	6.12	5.75 - 6.50	63	5.584	0.127	2.3	5.57	5.24 - 5.92
Boule (CDS) Medonic M series	107	6.277	0.084	1.3	6.28	5.90 - 6.66	107	5.766	0.091	1.6	5.77	5.42 - 6.12
COULTER AcT diff/diff 2	89	6.296	0.139	2.2	6.29	5.91 - 6.68	90	5.723	0.146	2.5	5.69	5.37 - 6.07
Horiba ABX Micros/45/60	51	6.241	0.146	2.3	6.24	5.86 - 6.62	52	5.670	0.123	2.2	5.66	5.32 - 6.01
<b>Specimen HD-10</b>												
All Method	353	2.364	0.064	2.7	2.36	2.22 - 2.51						
All Abbott Cell-Dyn Instruments	87	2.386	0.072	3.0	2.38	2.24 - 2.53						
All ABX Instruments	53	2.328	0.051	2.2	2.33	2.18 - 2.47						
All Boule (CDS) Instruments	113	2.334	0.041	1.8	2.34	2.19 - 2.48						
All COULTER Instruments	94	2.400	0.055	2.3	2.40	2.25 - 2.55						
Abbott Cell-Dyn 1700	6	2.463	0.043	1.8	2.46	2.31 - 2.62						
Abbott Cell-Dyn 1800	19	2.448	0.069	2.8	2.44	2.30 - 2.60						
Abbott Cell-Dyn Emerald	62	2.360	0.057	2.4	2.35	2.21 - 2.51						
Boule (CDS) Medonic M series	110	2.333	0.041	1.8	2.34	2.19 - 2.48						
COULTER AcT diff/diff 2	90	2.403	0.053	2.2	2.40	2.25 - 2.55						
Horiba ABX Micros/45/60	53	2.328	0.051	2.2	2.33	2.18 - 2.47						

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–HEMOGLOBIN (g/dL)**

<u><i>Instrument</i></u>	<b>Specimen HD-6</b>						<b>Specimen HD-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	354	5.91	0.18	3.0	5.9	5.4 - 6.4	351	13.52	0.27	2.0	13.5	12.5 - 14.5
All Abbott Cell-Dyn Instruments	87	5.88	0.23	3.9	5.9	5.4 - 6.3	87	13.45	0.26	1.9	13.5	12.5 - 14.4
All ABX Instruments	53	5.93	0.13	2.2	5.9	5.5 - 6.4	53	13.59	0.26	1.9	13.6	12.6 - 14.6
All Boule (CDS) Instruments	112	5.98	0.09	1.5	6.0	5.5 - 6.4	112	13.59	0.19	1.4	13.6	12.6 - 14.6
All COULTER Instruments	92	5.85	0.18	3.0	5.9	5.4 - 6.3	94	13.45	0.34	2.5	13.5	12.5 - 14.4
Abbott Cell-Dyn 1700	6	6.08	0.31	5.0	6.2	5.6 - 6.6	6	13.53	0.48	3.5	13.5	12.5 - 14.5
Abbott Cell-Dyn 1800	18	6.07	0.14	2.4	6.1	5.6 - 6.5	18	13.61	0.22	1.6	13.6	12.6 - 14.6
Abbott Cell-Dyn Emerald	62	5.79	0.18	3.1	5.8	5.3 - 6.2	63	13.40	0.23	1.7	13.4	12.4 - 14.4
Boule (CDS) Medonic M series	110	5.98	0.09	1.5	6.0	5.5 - 6.4	109	13.60	0.19	1.4	13.6	12.6 - 14.6
COULTER AcT diff/diff 2	89	5.84	0.17	3.0	5.9	5.4 - 6.3	90	13.42	0.31	2.3	13.5	12.4 - 14.4
Horiba ABX Micros/45/60	53	5.93	0.13	2.2	5.9	5.5 - 6.4	53	13.59	0.26	1.9	13.6	12.6 - 14.6
	<b>Specimen HD-8</b>						<b>Specimen HD-9</b>					
All Method	349	17.47	0.31	1.8	17.5	16.2 - 18.7	351	18.24	0.38	2.1	18.2	16.9 - 19.6
All Abbott Cell-Dyn Instruments	85	17.42	0.28	1.6	17.4	16.1 - 18.7	85	18.11	0.30	1.6	18.1	16.8 - 19.4
All ABX Instruments	52	17.55	0.32	1.8	17.5	16.3 - 18.8	52	18.21	0.33	1.8	18.1	16.9 - 19.5
All Boule (CDS) Instruments	111	17.52	0.25	1.4	17.6	16.2 - 18.8	111	18.43	0.32	1.7	18.5	17.1 - 19.8
All COULTER Instruments	92	17.43	0.36	2.1	17.4	16.2 - 18.7	93	18.18	0.40	2.2	18.2	16.9 - 19.5
Abbott Cell-Dyn 1700	6	17.42	0.76	4.4	17.5	16.1 - 18.7	6	18.20	0.63	3.5	18.2	16.9 - 19.5
Abbott Cell-Dyn 1800	18	17.42	0.36	2.1	17.5	16.2 - 18.7	17	18.26	0.32	1.8	18.2	16.9 - 19.6
Abbott Cell-Dyn Emerald	63	17.38	0.26	1.5	17.3	16.1 - 18.6	63	18.08	0.27	1.5	18.1	16.8 - 19.4
Boule (CDS) Medonic M series	108	17.53	0.24	1.4	17.6	16.3 - 18.8	108	18.44	0.30	1.6	18.5	17.1 - 19.8
COULTER AcT diff/diff 2	89	17.42	0.36	2.1	17.4	16.2 - 18.7	90	18.16	0.40	2.2	18.2	16.8 - 19.5
Horiba ABX Micros/45/60	52	17.55	0.32	1.8	17.5	16.3 - 18.8	52	18.21	0.33	1.8	18.1	16.9 - 19.5

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–HEMOGLOBIN (g/dL) cont'd**

**Specimen HD-10**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	352	5.94	0.15	2.6	5.9	5.5 - 6.4
All Abbott Cell-Dyn Instruments	85	5.91	0.18	3.1	5.9	5.4 - 6.4
All ABX Instruments	53	5.95	0.13	2.1	5.9	5.5 - 6.4
All Boule (CDS) Instruments	114	5.98	0.11	1.8	6.0	5.5 - 6.4
All COULTER Instruments	92	5.89	0.15	2.5	5.9	5.4 - 6.4
Abbott Cell-Dyn 1700	6	6.12	0.35	5.8	6.2	5.6 - 6.6
Abbott Cell-Dyn 1800	17	6.12	0.15	2.4	6.2	5.6 - 6.6
Abbott Cell-Dyn Emerald	63	5.84	0.12	2.1	5.8	5.4 - 6.3
Boule (CDS) Medonic M series	111	5.98	0.11	1.8	6.0	5.5 - 6.5
COULTER AcT diff/diff 2	88	5.89	0.13	2.3	5.9	5.4 - 6.3
Horiba ABX Micros/45/60	53	5.95	0.13	2.1	5.9	5.5 - 6.4

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–HEMATOCRIT (percent)**

**Specimen HD-6**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	354	16.91	1.04	6.1	16.8	15.8 - 18.0
All Abbott Cell-Dyn Instruments	88	18.18	0.68	3.7	18.2	17.0 - 19.3
All ABX Instruments	52	15.96	0.42	2.6	15.9	14.9 - 17.0
All Boule (CDS) Instruments	114	16.06	0.38	2.4	16.1	15.0 - 17.1
All COULTER Instruments	94	17.30	0.49	2.9	17.3	16.2 - 18.4
Abbott Cell-Dyn 1700	6	17.58	0.64	3.6	17.8	16.5 - 18.7
Abbott Cell-Dyn 1800	19	18.14	0.61	3.4	18.2	17.0 - 19.3
Abbott Cell-Dyn Emerald	63	18.25	0.68	3.7	18.2	17.1 - 19.4
Boule (CDS) Medonic M series	111	16.06	0.38	2.4	16.1	15.0 - 17.1
COULTER AcT diff/diff 2	90	17.31	0.49	2.8	17.3	16.2 - 18.4
Horiba ABX Micros/45/60	52	15.96	0.42	2.6	15.9	14.9 - 17.0

**Specimen HD-7**

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
351	38.63	1.66	4.3	38.4	36.3 - 41.0
86	40.41	1.17	2.9	40.4	37.9 - 42.9
53	37.33	1.05	2.8	37.3	35.0 - 39.6
111	37.38	0.79	2.1	37.4	35.1 - 39.7
93	39.12	1.02	2.6	39.1	36.7 - 41.5
6	39.15	1.39	3.5	39.1	36.8 - 41.5
19	40.40	1.26	3.1	40.6	37.9 - 42.9
61	40.54	1.06	2.6	40.6	38.1 - 43.0
108	37.40	0.79	2.1	37.4	35.1 - 39.7
89	39.13	1.02	2.6	39.1	36.7 - 41.5
53	37.33	1.05	2.8	37.3	35.0 - 39.6

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–HEMATOCRIT (percent) cont'd**

<u><i>Instrument</i></u>	<b>Specimen HD-8</b>						<b>Specimen HD-9</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	350	51.08	1.70	3.3	51.0	48.0 - 54.2	351	51.96	1.82	3.5	51.8	48.8 - 55.1
All Abbott Cell-Dyn Instruments	86	52.50	1.44	2.7	52.6	49.3 - 55.7	87	53.65	1.56	2.9	53.7	50.4 - 56.9
All ABX Instruments	53	50.18	1.35	2.7	50.3	47.1 - 53.2	53	50.17	1.17	2.3	50.2	47.1 - 53.2
All Boule (CDS) Instruments	112	49.95	1.21	2.4	50.0	46.9 - 53.0	112	51.42	1.35	2.6	51.6	48.3 - 54.6
All COULTER Instruments	93	51.48	1.19	2.3	51.5	48.3 - 54.6	95	52.01	1.45	2.8	51.7	48.8 - 55.2
Abbott Cell-Dyn 1700	6	52.30	1.71	3.3	52.4	49.1 - 55.5	6	52.40	1.72	3.3	51.9	49.2 - 55.6
Abbott Cell-Dyn 1800	19	51.73	1.52	2.9	51.7	48.6 - 54.9	19	53.07	1.79	3.4	52.9	49.8 - 56.3
Abbott Cell-Dyn Emerald	61	52.76	1.32	2.5	52.8	49.5 - 56.0	62	53.95	1.37	2.5	54.0	50.7 - 57.2
Boule (CDS) Medonic M series	109	50.00	1.18	2.4	50.0	47.0 - 53.1	108	51.52	1.24	2.4	51.6	48.4 - 54.7
COULTER AcT diff/diff 2	89	51.51	1.20	2.3	51.5	48.4 - 54.7	91	52.03	1.45	2.8	51.7	48.9 - 55.2
Horiba ABX Micros/45/60	53	50.18	1.35	2.7	50.3	47.1 - 53.2	53	50.17	1.17	2.3	50.2	47.1 - 53.2
<b>Specimen HD-10</b>												
All Method	353	16.88	1.03	6.1	16.8	15.8 - 17.9						
All Abbott Cell-Dyn Instruments	85	18.10	0.51	2.8	18.0	17.0 - 19.2						
All ABX Instruments	51	15.92	0.34	2.2	15.9	14.9 - 16.9						
All Boule (CDS) Instruments	113	15.97	0.38	2.4	15.9	15.0 - 17.0						
All COULTER Instruments	95	17.32	0.46	2.7	17.3	16.2 - 18.4						
Abbott Cell-Dyn 1700	5	17.40	0.53	3.1	17.4	16.3 - 18.5						
Abbott Cell-Dyn 1800	19	18.13	0.52	2.9	18.1	17.0 - 19.3						
Abbott Cell-Dyn Emerald	61	18.15	0.47	2.6	18.0	17.0 - 19.3						
Boule (CDS) Medonic M series	110	15.98	0.38	2.4	16.0	15.0 - 17.0						
COULTER AcT diff/diff 2	91	17.34	0.46	2.6	17.3	16.2 - 18.4						
Horiba ABX Micros/45/60	51	15.92	0.34	2.2	15.9	14.9 - 16.9						

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL-PLATELET COUNT (x 10<sup>9</sup>/L)**

<u><i>Instrument</i></u>	<b>Specimen HD-6</b>						<b>Specimen HD-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	352	68.8	8.4	12.2	68	51 - 87	352	267.8	16.9	6.3	268	200 - 335
All Abbott Cell-Dyn Instruments	86	71.0	11.5	16.2	68	53 - 89	87	272.9	17.8	6.5	271	204 - 342
All ABX Instruments	53	75.1	6.9	9.1	76	56 - 94	53	268.5	13.1	4.9	270	201 - 336
All Boule (CDS) Instruments	113	62.9	4.8	7.6	63	47 - 79	113	257.9	14.1	5.5	257	193 - 323
All COULTER Instruments	95	70.8	6.4	9.0	71	53 - 89	94	274.1	16.0	5.8	274	205 - 343
Abbott Cell-Dyn 1700	6	62.7	7.2	11.5	63	47 - 79	6	266.5	26.4	9.9	265	199 - 334
Abbott Cell-Dyn 1800	18	65.6	4.2	6.3	66	49 - 82	19	264.5	22.9	8.7	267	198 - 331
Abbott Cell-Dyn Emerald	61	73.0	12.2	16.7	71	54 - 92	63	274.9	16.9	6.2	272	206 - 344
Boule (CDS) Medonic M series	111	62.9	4.8	7.6	63	47 - 79	110	257.1	13.3	5.2	257	192 - 322
COULTER AcT diff/diff 2	91	71.0	6.1	8.5	72	53 - 89	89	274.6	14.6	5.3	273	205 - 344
Horiba ABX Micros/45/60	53	75.1	6.9	9.1	76	56 - 94	53	268.5	13.1	4.9	270	201 - 336
	<b>Specimen HD-8</b>						<b>Specimen HD-9</b>					
All Method	353	170.9	15.5	9.0	171	128 - 214	354	525.6	33.5	6.4	524	394 - 658
All Abbott Cell-Dyn Instruments	88	178.6	14.8	8.3	178	133 - 224	88	532.1	35.1	6.6	528	399 - 666
All ABX Instruments	53	168.0	9.7	5.8	169	126 - 211	52	511.9	24.1	4.7	515	383 - 640
All Boule (CDS) Instruments	112	159.2	11.5	7.2	160	119 - 200	114	504.8	24.5	4.9	506	378 - 631
All COULTER Instruments	95	179.4	13.6	7.6	179	134 - 225	94	553.0	22.7	4.1	552	414 - 692
Abbott Cell-Dyn 1700	6	189.3	13.8	7.3	186	141 - 237	6	559.3	47.1	8.4	576	419 - 700
Abbott Cell-Dyn 1800	19	182.6	16.0	8.8	183	136 - 229	19	549.9	30.7	5.6	548	412 - 688
Abbott Cell-Dyn Emerald	63	176.3	14.1	8.0	176	132 - 221	63	524.1	32.2	6.1	520	393 - 656
Boule (CDS) Medonic M series	110	158.8	11.1	7.0	160	119 - 199	111	503.3	23.1	4.6	504	377 - 630
COULTER AcT diff/diff 2	91	179.7	13.7	7.6	179	134 - 225	91	552.8	22.8	4.1	552	414 - 691
Horiba ABX Micros/45/60	53	168.0	9.7	5.8	169	126 - 211	52	511.9	24.1	4.7	515	383 - 640

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–PLATELET COUNT (x 10<sup>9</sup>/L) cont'd**

**Specimen HD-10**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	349	69.0	8.3	12.0	68	51 - 87
All Abbott Cell-Dyn Instruments	85	71.2	11.0	15.4	69	53 - 89
All ABX Instruments	53	74.9	6.3	8.3	74	56 - 94
All Boule (CDS) Instruments	114	63.1	5.4	8.6	62	47 - 79
All COULTER Instruments	93	71.4	6.0	8.4	72	53 - 90
Abbott Cell-Dyn 1700	6	66.5	7.0	10.5	65	49 - 84
Abbott Cell-Dyn 1800	19	66.8	4.2	6.3	66	50 - 84
Abbott Cell-Dyn Emerald	62	74.3	13.8	18.6	73	55 - 93
Boule (CDS) Medonic M series	111	62.9	5.4	8.5	62	47 - 79
COULTER AcT diff/diff 2	89	71.6	5.8	8.1	72	53 - 90
Horiba ABX Micros/45/60	53	74.9	6.3	8.3	74	56 - 94

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–LYMPHOCYTES (percent)**

**Specimen HD-6**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	345	53.52	10.22	19.1	57.7	22.8 - 84.2
All Abbott Cell-Dyn Instruments	87	46.25	3.46	7.5	46.1	35.8 - 56.7
All ABX Instruments	48	35.34	5.90	16.7	34.6	17.6 - 53.1
All Boule (CDS) Instruments	104	62.72	1.70	2.7	62.7	57.6 - 67.9
All COULTER Instruments	91	58.76	2.63	4.5	59.0	50.8 - 66.7
Abbott Cell-Dyn 1700	6	50.40	2.84	5.6	50.8	41.8 - 59.0
Abbott Cell-Dyn 1800	19	43.14	2.83	6.6	42.7	34.6 - 51.7
Abbott Cell-Dyn Emerald	60	46.81	2.56	5.5	47.1	39.1 - 54.5
Boule (CDS) Medonic M series	104	62.72	1.70	2.7	62.7	57.6 - 67.9
COULTER AcT diff/diff 2	90	58.74	2.63	4.5	59.0	50.8 - 66.7
Horiba ABX Micros/45/60	48	35.34	5.90	16.7	34.6	17.6 - 53.1

**Specimen HD-7**

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
343	29.65	4.58	15.5	31.8	15.9 - 43.4
85	26.59	1.82	6.8	26.9	21.1 - 32.1
48	21.54	2.97	13.8	20.5	12.6 - 30.5
106	33.25	0.78	2.3	33.2	30.9 - 35.6
88	32.25	1.22	3.8	32.2	28.5 - 36.0
6	28.42	3.33	11.7	27.8	18.4 - 38.4
19	24.05	2.02	8.4	24.0	18.0 - 30.2
62	27.22	1.21	4.4	27.3	23.5 - 30.9
106	33.25	0.78	2.3	33.2	30.9 - 35.6
87	32.26	1.22	3.8	32.2	28.6 - 36.0
48	21.54	2.97	13.8	20.5	12.6 - 30.5



**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–MONO/MID/MIXED/MCR (percent)**

<u>Instrument</u>	<b>Specimen HD-6</b>						<b>Specimen HD-7</b>					
	<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	344	14.21	7.21	50.7	11.2	0.0 - 35.9	345	8.35	2.92	34.9	7.7	0.0 - 17.2
All Abbott Cell-Dyn Instruments	87	18.01	3.76	20.9	16.8	6.7 - 29.3	87	9.39	2.41	25.7	8.7	2.1 - 16.7
All ABX Instruments	47	28.19	3.80	13.5	29.0	16.7 - 39.6	49	13.29	1.97	14.9	13.6	7.3 - 19.3
All Boule (CDS) Instruments	107	9.70	1.83	18.9	9.6	4.2 - 15.2	108	7.55	1.07	14.2	7.7	4.3 - 10.8
All COULTER Instruments	90	9.07	2.05	22.6	9.1	2.9 - 15.3	88	5.75	0.78	13.6	5.6	3.3 - 8.1
Abbott Cell-Dyn 1700	6	15.82	1.78	11.3	16.4	10.4 - 21.2	6	9.38	1.27	13.5	9.3	5.5 - 13.2
Abbott Cell-Dyn 1800	19	23.03	1.85	8.0	23.5	17.4 - 28.6	19	13.29	1.13	8.5	13.3	9.9 - 16.7
Abbott Cell-Dyn Emerald	62	16.68	2.92	17.5	16.3	7.9 - 25.5	62	8.19	1.22	14.9	7.9	4.5 - 11.9
Boule (CDS) Medonic M series	107	9.70	1.83	18.9	9.6	4.2 - 15.2	108	7.55	1.07	14.2	7.7	4.3 - 10.8
COULTER AcT diff/diff 2	89	9.07	2.06	22.8	9.1	2.8 - 15.3	87	5.76	0.78	13.6	5.6	3.4 - 8.2
Horiba ABX Micros/45/60	47	28.19	3.80	13.5	29.0	16.7 - 39.6	49	13.29	1.97	14.9	13.6	7.3 - 19.3
	<b>Specimen HD-8</b>						<b>Specimen HD-9</b>					
All Method	345	14.56	5.13	35.3	13.2	0.0 - 30.0	344	4.60	1.13	24.6	4.5	1.1 - 8.0
All Abbott Cell-Dyn Instruments	86	16.48	4.88	29.6	14.7	1.8 - 31.2	87	4.39	1.46	33.2	3.8	0.0 - 8.8
All ABX Instruments	49	22.97	2.96	12.9	23.7	14.0 - 31.9	48	5.28	0.67	12.7	5.4	3.2 - 7.3
All Boule (CDS) Instruments	107	10.28	1.14	11.1	10.2	6.8 - 13.8	107	5.14	0.56	10.9	5.2	3.4 - 6.9
All COULTER Instruments	89	13.79	1.56	11.3	14.0	9.1 - 18.5	91	3.71	0.52	13.9	3.7	2.1 - 5.3
Abbott Cell-Dyn 1700	6	19.23	1.80	9.4	19.4	13.8 - 24.7	6	5.40	0.24	4.5	5.5	4.6 - 6.2
Abbott Cell-Dyn 1800	18	24.69	1.24	5.0	24.7	20.9 - 28.5	18	6.94	0.36	5.2	7.0	5.8 - 8.1
Abbott Cell-Dyn Emerald	60	13.89	1.95	14.1	13.2	8.0 - 19.8	61	3.53	0.44	12.6	3.4	2.1 - 4.9
Boule (CDS) Medonic M series	107	10.28	1.14	11.1	10.2	6.8 - 13.8	107	5.14	0.56	10.9	5.2	3.4 - 6.9
COULTER AcT diff/diff 2	88	13.81	1.56	11.3	14.0	9.1 - 18.5	90	3.72	0.52	14.0	3.7	2.1 - 5.3
Horiba ABX Micros/45/60	49	22.97	2.96	12.9	23.7	14.0 - 31.9	48	5.28	0.67	12.7	5.4	3.2 - 7.3

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–MONO/MID/MIXED/MCR (percent) cont'd**

**Specimen HD-10**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	344	14.66	7.23	49.3	11.7	0.0 - 36.4
All Abbott Cell-Dyn Instruments	87	18.14	3.59	19.8	17.3	7.3 - 29.0
All ABX Instruments	49	28.63	3.78	13.2	29.6	17.2 - 40.0
All Boule (CDS) Instruments	107	10.03	1.71	17.1	10.1	4.8 - 15.2
All COULTER Instruments	90	9.77	2.12	21.7	9.3	3.4 - 16.2
Abbott Cell-Dyn 1700	6	15.83	2.23	14.1	15.6	9.1 - 22.6
Abbott Cell-Dyn 1800	19	22.55	1.70	7.6	22.7	17.4 - 27.7
Abbott Cell-Dyn Emerald	62	17.01	3.01	17.7	16.5	7.9 - 26.1
Boule (CDS) Medonic M series	107	10.03	1.71	17.1	10.1	4.8 - 15.2
COULTER AcT diff/diff 2	89	9.79	2.12	21.7	9.3	3.4 - 16.2
Horiba ABX Micros/45/60	49	28.63	3.78	13.2	29.6	17.2 - 40.0

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–GRANULOCYTES/NEUT (percent)**

**Specimen HD-6**

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	346	32.20	4.14	12.9	32.5	19.7 - 44.7
All Abbott Cell-Dyn Instruments	86	35.67	1.87	5.2	36.0	30.0 - 41.3
All ABX Instruments	47	36.63	2.39	6.5	36.4	29.4 - 43.8
All Boule (CDS) Instruments	107	27.70	2.29	8.3	27.5	20.8 - 34.6
All COULTER Instruments	91	31.96	1.70	5.3	32.1	26.8 - 37.1
Abbott Cell-Dyn 1700	6	33.75	1.67	4.9	34.0	28.7 - 38.8
Abbott Cell-Dyn 1800	19	33.83	1.78	5.3	33.5	28.4 - 39.2
Abbott Cell-Dyn Emerald	61	36.43	1.31	3.6	36.5	32.4 - 40.4
Boule (CDS) Medonic M series	107	27.70	2.29	8.3	27.5	20.8 - 34.6
COULTER AcT diff/diff 2	90	31.98	1.71	5.3	32.1	26.8 - 37.1
Horiba ABX Micros/45/60	47	36.63	2.39	6.5	36.4	29.4 - 43.8

**Specimen HD-7**

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
345	61.96	2.70	4.4	62.0	53.8 - 70.1
85	64.15	1.43	2.2	64.5	59.8 - 68.5
48	65.05	1.65	2.5	65.3	60.0 - 70.0
109	59.18	1.29	2.2	59.0	55.3 - 63.1
90	62.08	0.97	1.6	62.0	59.1 - 65.0
6	62.18	2.80	4.5	62.4	53.7 - 70.6
19	62.65	1.71	2.7	63.0	57.5 - 67.8
60	64.72	0.98	1.5	64.9	61.7 - 67.7
109	59.18	1.29	2.2	59.0	55.3 - 63.1
89	62.06	0.94	1.5	62.0	59.2 - 64.9
48	65.05	1.65	2.5	65.3	60.0 - 70.0

**BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–GRANULOCYTES/NEUT (percent) cont'd**

<u><i>Instrument</i></u>	<b>Specimen HD-8</b>						<b>Specimen HD-9</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	345	32.15	5.98	18.6	30.9	14.1 - 50.2	341	81.40	2.04	2.5	81.7	75.2 - 87.6
All Abbott Cell-Dyn Instruments	86	37.47	2.69	7.2	38.5	29.3 - 45.6	84	82.85	1.18	1.4	83.1	79.3 - 86.4
All ABX Instruments	48	40.68	2.37	5.8	41.2	33.5 - 47.9	47	83.74	1.06	1.3	83.9	80.5 - 87.0
All Boule (CDS) Instruments	108	25.72	1.53	6.0	25.6	21.1 - 30.4	108	79.20	0.86	1.1	79.2	76.6 - 81.8
All COULTER Instruments	92	30.60	1.34	4.4	30.5	26.5 - 34.7	89	81.83	0.64	0.8	81.9	79.8 - 83.8
Abbott Cell-Dyn 1700	6	33.07	1.81	5.5	33.0	27.6 - 38.5	6	82.35	0.75	0.9	82.2	80.0 - 84.7
Abbott Cell-Dyn 1800	19	34.09	1.83	5.4	33.9	28.6 - 39.6	19	82.41	0.66	0.8	82.5	80.4 - 84.4
Abbott Cell-Dyn Emerald	61	38.96	1.09	2.8	39.0	35.6 - 42.3	61	82.90	1.50	1.8	83.3	78.4 - 87.4
Boule (CDS) Medonic M series	108	25.72	1.53	6.0	25.6	21.1 - 30.4	108	79.20	0.86	1.1	79.2	76.6 - 81.8
COULTER AcT diff/diff 2	91	30.61	1.34	4.4	30.5	26.5 - 34.7	88	81.82	0.64	0.8	81.9	79.8 - 83.8
Horiba ABX Micros/45/60	48	40.68	2.37	5.8	41.2	33.5 - 47.9	47	83.74	1.06	1.3	83.9	80.5 - 87.0
<b>Specimen HD-10</b>												
All Method	346	32.77	4.11	12.5	32.9	20.4 - 45.2						
All Abbott Cell-Dyn Instruments	86	36.55	1.70	4.6	36.8	31.4 - 41.7						
All ABX Instruments	49	36.90	2.39	6.5	37.3	29.7 - 44.1						
All Boule (CDS) Instruments	110	28.54	2.68	9.4	28.2	20.4 - 36.6						
All COULTER Instruments	90	32.13	1.69	5.3	32.2	27.0 - 37.3						
Abbott Cell-Dyn 1700	6	35.18	2.46	7.0	34.8	27.7 - 42.6						
Abbott Cell-Dyn 1800	19	35.48	2.17	6.1	35.8	28.9 - 42.0						
Abbott Cell-Dyn Emerald	62	36.92	1.41	3.8	37.0	32.7 - 41.2						
Boule (CDS) Medonic M series	110	28.54	2.68	9.4	28.2	20.4 - 36.6						
COULTER AcT diff/diff 2	89	32.15	1.69	5.3	32.2	27.0 - 37.3						
Horiba ABX Micros/45/60	49	36.90	2.39	6.5	37.3	29.7 - 44.1						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L)**

<i><u>Instrument</u></i>	<b>Specimen DIF-6</b>						<b>Specimen DIF-7</b>					
	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	12	4.07	0.28	6.8	4.1	3.4 - 4.7	12	9.26	0.50	5.4	9.4	7.8 - 10.7
All COULTER Instruments	11	4.07	0.28	6.8	4.1	3.4 - 4.7	11	9.26	0.50	5.4	9.4	7.8 - 10.7
COULTER UniCel DxH 600	10	4.10	0.12	3.0	4.1	3.4 - 4.8	10	9.60	0.16	1.6	9.6	8.1 - 11.1
<b>Specimen DIF-8</b>						<b>Specimen DIF-9</b>						
All Method	12	23.78	0.30	1.3	23.7	20.2 - 27.4	12	21.44	0.32	1.5	21.4	18.2 - 24.7
All COULTER Instruments	11	23.78	0.30	1.3	23.7	20.2 - 27.4	11	21.44	0.32	1.5	21.4	18.2 - 24.7
COULTER UniCel DxH 600	10	23.86	0.34	1.4	23.7	20.2 - 27.5	10	21.62	0.31	1.4	21.5	18.3 - 24.9
<b>Specimen DIF-10</b>												
All Method	12	4.12	0.19	4.5	4.1	3.5 - 4.8						
All COULTER Instruments	11	4.12	0.19	4.5	4.1	3.5 - 4.8						
COULTER UniCel DxH 600	10	4.12	0.15	3.6	4.1	3.5 - 4.8						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10<sup>12</sup>/L)**

<i><u>Instrument</u></i>	<b>Specimen DIF-6</b>						<b>Specimen DIF-7</b>					
	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	12	2.613	0.069	2.6	2.61	2.45 - 2.77	12	2.561	0.047	1.8	2.54	2.40 - 2.72
All COULTER Instruments	11	2.613	0.069	2.6	2.61	2.45 - 2.77	12	2.561	0.047	1.8	2.54	2.40 - 2.72
COULTER UniCel DxH 600	10	2.588	0.032	1.2	2.58	2.43 - 2.75	10	2.528	0.016	0.6	2.54	2.37 - 2.68
<b>Specimen DIF-8</b>						<b>Specimen DIF-9</b>						
All Method	12	6.262	0.120	1.9	6.24	5.88 - 6.64	12	5.407	0.097	1.8	5.43	5.08 - 5.74
All COULTER Instruments	11	6.262	0.120	1.9	6.24	5.88 - 6.64	11	5.407	0.097	1.8	5.43	5.08 - 5.74
COULTER UniCel DxH 600	10	6.188	0.074	1.2	6.17	5.81 - 6.56	10	5.362	0.091	1.7	5.38	5.04 - 5.69
<b>Specimen DIF-10</b>												
All Method	12	2.609	0.040	1.5	2.61	2.45 - 2.77						
All COULTER Instruments	11	2.609	0.040	1.5	2.61	2.45 - 2.77						
COULTER UniCel DxH 600	10	2.582	0.031	1.2	2.58	2.42 - 2.74						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–HEMOGLOBIN (g/dL)**

<u>Instrument</u>	<b>Specimen DIF-6</b>						<b>Specimen DIF-7</b>					
	<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	6.17	0.23	3.7	6.3	5.7 - 6.7	12	11.84	0.31	2.6	12.0	11.0 - 12.7
All COULTER Instruments	11	6.17	0.23	3.7	6.3	5.7 - 6.7	11	11.84	0.31	2.6	12.0	11.0 - 12.7
COULTER UniCel DxH 600	10	6.24	0.05	0.9	6.2	5.8 - 6.7	10	11.94	0.13	1.1	12.0	11.1 - 12.8
<u>Instrument</u>	<b>Specimen DIF-8</b>						<b>Specimen DIF-9</b>					
	<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	20.09	0.27	1.3	20.0	18.6 - 21.5	12	17.48	0.13	0.8	17.5	16.2 - 18.8
All COULTER Instruments	11	20.09	0.27	1.3	20.0	18.6 - 21.5	11	17.48	0.13	0.8	17.5	16.2 - 18.8
COULTER UniCel DxH 600	10	20.08	0.29	1.5	19.9	18.6 - 21.5	10	17.44	0.11	0.7	17.4	16.2 - 18.7
<u>Instrument</u>	<b>Specimen DIF-10</b>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	12	6.23	0.22	3.5	6.3	5.7 - 6.7						
All COULTER Instruments	11	6.23	0.22	3.5	6.3	5.7 - 6.7						
COULTER UniCel DxH 600	10	6.28	0.08	1.3	6.3	5.8 - 6.8						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–HEMATOCRIT (percent)**

<u>Instrument</u>	<b>Specimen DIF-6</b>						<b>Specimen DIF-7</b>					
	<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	20.35	0.62	3.0	20.7	19.1 - 21.6	12	38.07	1.27	3.3	38.2	35.7 - 40.4
All COULTER Instruments	11	20.35	0.62	3.0	20.7	19.1 - 21.6	11	38.07	1.27	3.3	38.2	35.7 - 40.4
COULTER UniCel DxH 600	10	20.60	0.29	1.4	20.7	19.3 - 21.9	10	38.88	0.82	2.1	38.6	36.5 - 41.3
<u>Instrument</u>	<b>Specimen DIF-8</b>						<b>Specimen DIF-9</b>					
	<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	65.59	1.02	1.6	65.7	61.6 - 69.6	12	57.02	0.94	1.7	57.1	53.5 - 60.5
All COULTER Instruments	11	65.59	1.02	1.6	65.7	61.6 - 69.6	11	57.02	0.94	1.7	57.1	53.5 - 60.5
COULTER UniCel DxH 600	10	65.66	0.83	1.3	65.3	61.7 - 69.6	10	57.54	0.86	1.5	57.9	54.0 - 61.0
<u>Instrument</u>	<b>Specimen DIF-10</b>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	12	20.38	0.33	1.6	20.4	19.1 - 21.7						
All COULTER Instruments	11	20.38	0.33	1.6	20.4	19.1 - 21.7						
COULTER UniCel DxH 600	10	20.58	0.22	1.1	20.7	19.3 - 21.9						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL-PLATELET COUNT (x 10<sup>9</sup>/L)**

<u><i>Instrument</i></u>	<b>Specimen DIF-6</b>						<b>Specimen DIF-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	12	90.5	4.1	4.6	90	67 - 114	12	288.0	13.2	4.6	287	216 - 360
All COULTER Instruments	11	90.5	4.1	4.6	90	67 - 114	11	288.0	13.2	4.6	287	216 - 360
COULTER UniCel DxH 600	10	88.0	2.0	2.3	87	66 - 110	10	287.2	9.8	3.4	291	215 - 359
<u><i>Instrument</i></u>	<b>Specimen DIF-8</b>						<b>Specimen DIF-9</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	12	501.8	25.9	5.2	497	376 - 628	12	482.8	25.9	5.4	475	362 - 604
All COULTER Instruments	11	501.8	25.9	5.2	497	376 - 628	11	482.8	25.9	5.4	475	362 - 604
COULTER UniCel DxH 600	10	493.6	14.2	2.9	493	370 - 617	10	473.0	3.7	0.8	474	354 - 592
<u><i>Instrument</i></u>	<b>Specimen DIF-10</b>											
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>						
All Method	12	89.0	4.2	4.8	90	66 - 112						
All COULTER Instruments	11	89.0	4.2	4.8	90	66 - 112						
COULTER UniCel DxH 600	10	88.2	4.0	4.5	89	66 - 111						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL-NEUTROPHILS (percent)**

<u><i>Instrument</i></u>	<b>Specimen DIF-6</b>						<b>Specimen DIF-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	11	50.95	1.67	3.3	51.4	45.9 - 56.0	11	60.63	0.92	1.5	60.7	57.8 - 63.4
All COULTER Instruments	11	50.95	1.67	3.3	51.4	45.9 - 56.0	11	60.63	0.92	1.5	60.7	57.8 - 63.4
COULTER UniCel DxH 600	10	51.52	0.72	1.4	51.5	49.3 - 53.7	10	60.68	0.89	1.5	61.0	58.0 - 63.4
<u><i>Instrument</i></u>	<b>Specimen DIF-8</b>						<b>Specimen DIF-9</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	11	70.00	1.28	1.8	70.5	66.1 - 73.9	11	68.36	1.39	2.0	68.9	64.2 - 72.6
All COULTER Instruments	11	70.00	1.28	1.8	70.5	66.1 - 73.9	11	68.36	1.39	2.0	68.9	64.2 - 72.6
COULTER UniCel DxH 600	10	70.64	0.26	0.4	70.6	69.8 - 71.5	10	69.10	0.41	0.6	69.1	67.8 - 70.4
<u><i>Instrument</i></u>	<b>Specimen DIF-10</b>											
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>						
All Method	11	51.53	1.51	2.9	51.8	47.0 - 56.1						
All COULTER Instruments	11	51.53	1.51	2.9	51.8	47.0 - 56.1						
COULTER UniCel DxH 600	10	51.94	1.08	2.1	52.4	48.7 - 55.2						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL– LYMPHOCYTES (percent)**

<u>Instrument</u>	<u>Specimen DIF-6</u>						<u>Specimen DIF-7</u>					
	<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	35.79	4.04	11.3	34.4	23.6 - 48.0	11	29.66	1.64	5.5	29.6	24.7 - 34.6
All COULTER Instruments	11	35.79	4.04	11.3	34.4	23.6 - 48.0	11	29.66	1.64	5.5	29.6	24.7 - 34.6
COULTER UniCel DxH 600	10	34.42	2.19	6.4	34.1	27.8 - 41.0	10	29.50	1.41	4.8	29.4	25.2 - 33.8
<u>Instrument</u>	<u>Specimen DIF-8</u>						<u>Specimen DIF-9</u>					
	<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	18.31	1.65	9.0	17.7	13.3 - 23.3	11	19.75	1.58	8.0	19.2	15.0 - 24.5
All COULTER Instruments	11	18.31	1.65	9.0	17.7	13.3 - 23.3	11	19.75	1.58	8.0	19.2	15.0 - 24.5
COULTER UniCel DxH 600	10	17.62	0.54	3.1	17.5	15.9 - 19.3	10	19.08	0.75	3.9	19.2	16.8 - 21.4
<u>Instrument</u>	<u>Specimen DIF-10</u>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	11	34.69	3.93	11.3	33.6	22.8 - 46.5						
All COULTER Instruments	11	34.69	3.93	11.3	33.6	22.8 - 46.5						
COULTER UniCel DxH 600	10	33.26	2.83	8.5	32.7	24.7 - 41.8						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL– MONOCYTES (percent)**

<u>Instrument</u>	<u>Specimen DIF-6</u>						<u>Specimen DIF-7</u>					
	<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	5.71	2.21	38.8	6.7	0.0 - 12.4	11	4.30	0.83	19.3	4.3	1.8 - 6.8
All COULTER Instruments	11	5.71	2.21	38.8	6.7	0.0 - 12.4	11	4.30	0.83	19.3	4.3	1.8 - 6.8
COULTER UniCel DxH 600	10	6.28	1.58	25.2	6.8	1.5 - 11.1	10	4.36	0.68	15.5	4.7	2.3 - 6.4
<u>Instrument</u>	<u>Specimen DIF-8</u>						<u>Specimen DIF-9</u>					
	<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	6.73	0.45	6.7	6.7	5.3 - 8.1	11	6.88	0.45	6.5	6.9	5.5 - 8.3
All COULTER Instruments	11	6.73	0.45	6.7	6.7	5.3 - 8.1	11	6.88	0.45	6.5	6.9	5.5 - 8.3
COULTER UniCel DxH 600	10	6.82	0.41	6.1	6.8	5.5 - 8.1	10	6.86	0.50	7.3	6.9	5.3 - 8.4
<u>Instrument</u>	<u>Specimen DIF-10</u>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	11	6.00	2.27	37.9	7.1	0.0 - 12.9						
All COULTER Instruments	11	6.00	2.27	37.9	7.1	0.0 - 12.9						
COULTER UniCel DxH 600	10	6.88	1.75	25.4	7.5	1.6 - 12.2						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL– EOSINOPHILS (percent)**

<u><i>Instrument</i></u>	<b>Specimen DIF-6</b>						<b>Specimen DIF-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	11	7.50	0.58	7.7	7.6	5.7 - 9.3	11	5.34	0.40	7.4	5.4	4.1 - 6.6
All COULTER Instruments	11	7.50	0.58	7.7	7.6	5.7 - 9.3	11	5.34	0.40	7.4	5.4	4.1 - 6.6
COULTER UniCel DxH 600	10	7.76	0.32	4.1	7.8	6.7 - 8.8	10	5.44	0.17	3.1	5.4	4.9 - 6.0
<b>Specimen DIF-8</b>						<b>Specimen DIF-9</b>						
All Method	11	4.83	0.54	11.2	4.8	3.1 - 6.5	11	4.81	0.32	6.7	4.8	3.8 - 5.8
All COULTER Instruments	11	4.83	0.54	11.2	4.8	3.1 - 6.5	11	4.81	0.32	6.7	4.8	3.8 - 5.8
COULTER UniCel DxH 600	10	4.86	0.61	12.7	4.6	3.0 - 6.8	10	4.84	0.23	4.8	4.8	4.1 - 5.6
<b>Specimen DIF-10</b>												
All Method	11	7.75	0.58	7.5	7.9	6.0 - 9.5						
All COULTER Instruments	11	7.75	0.58	7.5	7.9	6.0 - 9.5						
COULTER UniCel DxH 600	10	7.92	0.41	5.2	8.0	6.6 - 9.2						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL– BASOPHILS (percent)**

<u><i>Instrument</i></u>	<b>Specimen DIF-6</b>						<b>Specimen DIF-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	11	0.05	0.08	151.2	0.0	0.0 - 0.3	11	0.08	0.09	118.2	0.1	0.0 - 0.4
All COULTER Instruments	11	0.05	0.08	151.2	0.0	0.0 - 0.3	11	0.08	0.09	118.2	0.1	0.0 - 0.4
COULTER UniCel DxH 600	10	0.02	0.04	223.6	0.0	0.0 - 0.2	10	0.02	0.04	223.6	0.0	0.0 - 0.2
<b>Specimen DIF-8</b>						<b>Specimen DIF-9</b>						
All Method	11	0.14	0.14	102.4	0.1	0.0 - 0.6	11	0.20	0.16	80.2	0.1	0.0 - 0.7
All COULTER Instruments	11	0.14	0.14	102.4	0.1	0.0 - 0.6	11	0.20	0.16	80.2	0.1	0.0 - 0.7
COULTER UniCel DxH 600	10	0.06	0.05	91.3	0.1	0.0 - 0.3	10	0.12	0.04	37.3	0.1	0.0 - 0.3
<b>Specimen DIF-10</b>												
All Method	11	0.04	0.07	198.4	0.0	0.0 - 0.3						
All COULTER Instruments	11	0.04	0.07	198.4	0.0	0.0 - 0.3						
COULTER UniCel DxH 600	10	0.00	0.01	0.0	0.0	0.0 - 0.1						

**BLOOD LEAD (µg/dL)**

<u>Instrument</u>	Specimen LED-3						Specimen LED-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	19	4.37	0.55	12.7	4.4	0.3 - 8.4	19	22.03	1.93	8.7	21.9	18.0 - 26.1
All Magellan Diagnostics Methods	19	4.37	0.55	12.7	4.4	0.3 - 8.4	19	22.03	1.93	8.7	21.9	18.0 - 26.1
Magellan Diagnostics LeadCare II	19	4.37	0.55	12.7	4.4	0.3 - 8.4	19	22.03	1.93	8.7	21.9	18.0 - 26.1

**RETICULOCYTE COUNT (percent)**

<u>Instrument</u>	Specimen RT-3						Specimen RT-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	23	6.96	1.45	20.8	6.7	4.0 - 9.9	23	1.06	0.21	20.3	1.1	0.6 - 1.5
All Automated Methods	13	6.22	0.72	11.6	6.2	4.3 - 8.1	13	1.08	0.14	13.0	1.2	0.7 - 1.5
All Manual Methods	10	7.93	1.61	20.3	7.5	4.7 - 11.2	10	1.02	0.29	28.4	1.0	0.4 - 1.6
Sysmex XN-1000	11	6.20	0.79	12.7	6.2	4.3 - 8.1	11	1.12	0.12	10.4	1.2	0.7 - 1.5

**HEMATOLOGY W/ 5-PART DIFFERENTIAL—WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L)**

<i><b><u>Instrument</u></b></i>	<b>Specimen BCX-6</b>						<b>Specimen BCX-7</b>					
	<i><b><u>Labs</u></b></i>	<i><b><u>Mean</u></b></i>	<i><b><u>SD</u></b></i>	<i><b><u>CV</u></b></i>	<i><b><u>Median</u></b></i>	<i><b><u>Range</u></b></i>	<i><b><u>Labs</u></b></i>	<i><b><u>Mean</u></b></i>	<i><b><u>SD</u></b></i>	<i><b><u>CV</u></b></i>	<i><b><u>Median</u></b></i>	<i><b><u>Range</u></b></i>
All Method	91	2.55	0.09	3.5	2.5	2.1 - 3.0	90	24.53	0.62	2.5	24.5	20.8 - 28.3
All ABX Instruments	85	2.55	0.09	3.5	2.5	2.1 - 3.0	83	24.46	0.56	2.3	24.5	20.7 - 28.2
All COULTER Instruments	6	2.55	0.10	4.1	2.6	2.1 - 3.0	6	25.08	0.84	3.4	25.0	21.3 - 28.9
ABX Pentra 60C+	73	2.54	0.07	2.9	2.5	2.1 - 3.0	72	24.48	0.53	2.2	24.5	20.8 - 28.2
ABX Pentra 80 / XL 80	10	2.51	0.24	9.7	2.6	2.1 - 2.9	10	24.34	0.80	3.3	24.5	20.6 - 28.0
COULTER AcT 5diff	6	2.55	0.10	4.1	2.6	2.1 - 3.0	6	25.08	0.84	3.4	25.0	21.3 - 28.9
	<b>Specimen BCX-8</b>						<b>Specimen BCX-9</b>					
All Method	90	4.97	0.13	2.5	5.0	4.2 - 5.8	89	17.17	0.36	2.1	17.1	14.5 - 19.8
All ABX Instruments	84	4.97	0.12	2.4	5.0	4.2 - 5.8	82	17.15	0.32	1.9	17.1	14.5 - 19.8
All COULTER Instruments	6	4.98	0.20	4.1	5.0	4.2 - 5.8	6	17.35	0.62	3.6	17.3	14.7 - 20.0
ABX Pentra 60C+	74	4.97	0.12	2.3	5.0	4.2 - 5.8	72	17.14	0.31	1.8	17.1	14.5 - 19.8
ABX Pentra 80 / XL 80	10	5.04	0.20	3.9	5.1	4.2 - 5.8	10	16.81	1.09	6.5	17.1	14.2 - 19.4
COULTER AcT 5diff	6	4.98	0.20	4.1	5.0	4.2 - 5.8	6	17.35	0.62	3.6	17.3	14.7 - 20.0
	<b>Specimen BCX-10</b>											
All Method	90	6.84	0.19	2.8	6.8	5.8 - 7.9						
All ABX Instruments	83	6.82	0.17	2.4	6.8	5.8 - 7.9						
All COULTER Instruments	5	6.92	0.23	3.3	6.9	5.8 - 8.0						
ABX Pentra 60C+	72	6.80	0.14	2.1	6.8	5.7 - 7.9						
ABX Pentra 80 / XL 80	9	6.92	0.25	3.6	7.0	5.8 - 8.0						
COULTER AcT 5diff	5	6.92	0.23	3.3	6.9	5.8 - 8.0						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10<sup>12</sup>/L)**

<u><i>Instrument</i></u>	<b>Specimen BCX-6</b>						<b>Specimen BCX-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	91	2.057	0.034	1.7	2.06	1.93 - 2.19	92	5.900	0.079	1.3	5.90	5.54 - 6.26
All ABX Instruments	85	2.058	0.034	1.7	2.06	1.93 - 2.19	86	5.900	0.078	1.3	5.90	5.54 - 6.26
All COULTER Instruments	6	2.047	0.033	1.6	2.07	1.92 - 2.17	6	5.900	0.098	1.7	5.90	5.54 - 6.26
ABX Pentra 60C+	74	2.063	0.032	1.5	2.06	1.93 - 2.19	75	5.897	0.080	1.4	5.89	5.54 - 6.26
ABX Pentra 80 / XL 80	10	2.021	0.029	1.4	2.02	1.89 - 2.15	10	5.933	0.059	1.0	5.92	5.57 - 6.29
COULTER AcT 5diff	6	2.047	0.033	1.6	2.07	1.92 - 2.17	6	5.900	0.098	1.7	5.90	5.54 - 6.26
<b>Specimen BCX-8</b>												
All Method	92	4.316	0.062	1.4	4.32	4.05 - 4.58	91	5.506	0.076	1.4	5.51	5.17 - 5.84
All ABX Instruments	86	4.315	0.063	1.5	4.31	4.05 - 4.58	86	5.508	0.076	1.4	5.51	5.17 - 5.84
All COULTER Instruments	6	4.330	0.042	1.0	4.33	4.07 - 4.59	6	5.518	0.145	2.6	5.48	5.18 - 5.85
ABX Pentra 60C+	75	4.318	0.064	1.5	4.32	4.05 - 4.58	75	5.506	0.074	1.3	5.51	5.17 - 5.84
ABX Pentra 80 / XL 80	10	4.301	0.053	1.2	4.30	4.04 - 4.56	10	5.539	0.071	1.3	5.52	5.20 - 5.88
COULTER AcT 5diff	6	4.330	0.042	1.0	4.33	4.07 - 4.59	6	5.518	0.145	2.6	5.48	5.18 - 5.85
<b>Specimen BCX-10</b>												
All Method	91	4.650	0.059	1.3	4.65	4.37 - 4.93						
All ABX Instruments	86	4.651	0.059	1.3	4.65	4.37 - 4.93						
All COULTER Instruments	5	4.642	0.067	1.4	4.63	4.36 - 4.93						
ABX Pentra 60C+	75	4.652	0.059	1.3	4.65	4.37 - 4.94						
ABX Pentra 80 / XL 80	10	4.652	0.058	1.2	4.66	4.37 - 4.94						
COULTER AcT 5diff	5	4.642	0.067	1.4	4.63	4.36 - 4.93						



**HEMATOLOGY W/ 5-PART DIFFERENTIAL–HEMATOCRIT (percent)**

<u><i>Instrument</i></u>	<b>Specimen BCX-6</b>						<b>Specimen BCX-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	91	18.42	0.32	1.8	18.4	17.3 - 19.6	92	51.53	0.80	1.5	51.5	48.4 - 54.7
All ABX Instruments	85	18.42	0.33	1.8	18.4	17.3 - 19.6	86	51.56	0.80	1.6	51.5	48.4 - 54.7
All COULTER Instruments	6	18.30	0.20	1.1	18.4	17.2 - 19.4	6	51.05	0.53	1.0	51.0	47.9 - 54.2
ABX Pentra 60C+	74	18.40	0.31	1.7	18.4	17.2 - 19.6	75	51.65	0.78	1.5	51.6	48.5 - 54.8
ABX Pentra 80 / XL 80	10	18.68	0.29	1.5	18.7	17.5 - 19.9	10	50.96	0.69	1.4	51.1	47.9 - 54.1
COULTER AcT 5diff	6	18.30	0.20	1.1	18.4	17.2 - 19.4	6	51.05	0.53	1.0	51.0	47.9 - 54.2
	<b>Specimen BCX-8</b>						<b>Specimen BCX-9</b>					
All Method	92	37.29	0.61	1.6	37.2	35.0 - 39.6	92	48.19	0.77	1.6	48.2	45.3 - 51.1
All ABX Instruments	86	37.30	0.63	1.7	37.3	35.0 - 39.6	86	48.21	0.76	1.6	48.3	45.3 - 51.2
All COULTER Instruments	6	37.18	0.27	0.7	37.2	34.9 - 39.5	6	47.90	0.98	2.0	47.6	45.0 - 50.8
ABX Pentra 60C+	75	37.31	0.62	1.7	37.3	35.0 - 39.6	75	48.29	0.72	1.5	48.3	45.3 - 51.2
ABX Pentra 80 / XL 80	10	37.27	0.61	1.6	37.3	35.0 - 39.6	10	47.77	0.78	1.6	47.8	44.9 - 50.7
COULTER AcT 5diff	6	37.18	0.27	0.7	37.2	34.9 - 39.5	6	47.90	0.98	2.0	47.6	45.0 - 50.8
	<b>Specimen BCX-10</b>											
All Method	91	40.38	0.61	1.5	40.4	37.9 - 42.9						
All ABX Instruments	86	40.40	0.61	1.5	40.4	37.9 - 42.9						
All COULTER Instruments	5	40.08	0.56	1.4	40.2	37.6 - 42.5						
ABX Pentra 60C+	75	40.42	0.59	1.5	40.5	37.9 - 42.9						
ABX Pentra 80 / XL 80	10	40.34	0.60	1.5	40.1	37.9 - 42.8						
COULTER AcT 5diff	5	40.08	0.56	1.4	40.2	37.6 - 42.5						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL-PLATELET COUNT (x 10<sup>9</sup>/L)**

<b><i>Instrument</i></b>	<b>Specimen BCX-6</b>						<b>Specimen BCX-7</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	91	70.7	4.0	5.7	70	53 - 89	92	509.8	14.2	2.8	509	382 - 638
All ABX Instruments	85	70.3	3.8	5.5	70	52 - 88	86	509.6	14.4	2.8	509	382 - 637
All COULTER Instruments	6	75.8	2.5	3.3	76	56 - 95	6	513.3	10.3	2.0	510	384 - 642
ABX Pentra 60C+	74	70.3	3.8	5.4	70	52 - 88	75	508.0	13.9	2.7	507	381 - 636
ABX Pentra 80 / XL 80	10	71.0	4.4	6.2	71	53 - 89	10	519.9	14.4	2.8	528	389 - 650
COULTER AcT 5diff	6	75.8	2.5	3.3	76	56 - 95	6	513.3	10.3	2.0	510	384 - 642
	<b>Specimen BCX-8</b>						<b>Specimen BCX-9</b>					
All Method	92	248.8	8.9	3.6	248	186 - 311	92	307.9	10.8	3.5	307	230 - 385
All ABX Instruments	86	248.7	9.0	3.6	248	186 - 311	86	307.4	10.7	3.5	307	230 - 385
All COULTER Instruments	6	250.2	8.5	3.4	249	187 - 313	6	316.2	10.1	3.2	317	237 - 396
ABX Pentra 60C+	75	247.9	9.0	3.6	247	185 - 310	75	306.7	10.8	3.5	305	230 - 384
ABX Pentra 80 / XL 80	10	253.4	6.6	2.6	254	190 - 317	10	311.9	9.7	3.1	308	233 - 390
COULTER AcT 5diff	6	250.2	8.5	3.4	249	187 - 313	6	316.2	10.1	3.2	317	237 - 396
	<b>Specimen BCX-10</b>											
All Method	92	248.1	8.7	3.5	248	186 - 311						
All ABX Instruments	86	247.7	8.6	3.5	248	185 - 310						
All COULTER Instruments	6	253.3	10.0	4.0	252	189 - 317						
ABX Pentra 60C+	75	247.0	8.4	3.4	246	185 - 309						
ABX Pentra 80 / XL 80	10	251.9	8.1	3.2	250	188 - 315						
COULTER AcT 5diff	6	253.3	10.0	4.0	252	189 - 317						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–NEUTROPHILS (percent)**

<u>Instrument</u>	<b>Specimen BCX-6</b>						<b>Specimen BCX-7</b>						
	<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	89	67.08	3.49	5.2	67.4	56.6 - 77.6	90	48.36	4.41	9.1	48.5	35.1 - 61.6	
All ABX Instruments	85	67.34	3.31	4.9	67.6	57.4 - 77.3	85	48.59	4.21	8.7	48.7	35.9 - 61.3	
All COULTER Instruments	5	59.34	5.46	9.2	60.1	42.9 - 75.8	5	44.44	6.30	14.2	46.6	25.5 - 63.4	
ABX Pentra 60C+	74	67.80	3.07	4.5	68.1	58.5 - 77.1	75	49.06	3.84	7.8	48.8	37.5 - 60.6	
ABX Pentra 80 / XL 80	10	64.20	3.46	5.4	63.1	53.8 - 74.6	9	44.42	5.28	11.9	43.7	28.5 - 60.3	
COULTER AcT 5diff	5	59.34	5.46	9.2	60.1	42.9 - 75.8	5	44.44	6.30	14.2	46.6	25.5 - 63.4	
			<b>Specimen BCX-8</b>					<b>Specimen BCX-9</b>					
All Method	91	57.00	4.06	7.1	57.3	44.8 - 69.2	91	48.82	3.58	7.3	49.6	38.0 - 59.6	
All ABX Instruments	85	57.03	4.12	7.2	57.3	44.6 - 69.4	86	49.06	3.52	7.2	49.7	38.4 - 59.7	
All COULTER Instruments	6	56.48	3.51	6.2	57.4	45.9 - 67.1	6	43.32	4.02	9.3	44.4	31.2 - 55.4	
ABX Pentra 60C+	75	57.51	3.92	6.8	57.8	45.7 - 69.3	75	49.79	2.74	5.5	50.2	41.5 - 58.1	
ABX Pentra 80 / XL 80	10	52.07	5.08	9.8	52.7	36.8 - 67.4	10	43.53	4.13	9.5	42.5	31.1 - 56.0	
COULTER AcT 5diff	6	56.48	3.51	6.2	57.4	45.9 - 67.1	6	43.32	4.02	9.3	44.4	31.2 - 55.4	
			<b>Specimen BCX-10</b>										
All Method	91	59.49	4.21	7.1	59.7	46.8 - 72.2							
All ABX Instruments	85	59.62	4.18	7.0	59.9	47.0 - 72.2							
All COULTER Instruments	6	57.55	4.49	7.8	58.6	44.0 - 71.1							
ABX Pentra 60C+	75	60.08	3.84	6.4	60.4	48.5 - 71.6							
ABX Pentra 80 / XL 80	10	54.95	6.13	11.2	55.0	36.5 - 73.4							
COULTER AcT 5diff	6	57.55	4.49	7.8	58.6	44.0 - 71.1							

**HEMATOLOGY W/ 5-PART DIFFERENTIAL–LYMPHOCYTES (percent)**

<u>Instrument</u>	<b>Specimen BCX-6</b>						<b>Specimen BCX-7</b>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	91	24.23	3.40	14.0	23.8	14.0 - 34.5	90	44.80	4.65	10.4	44.8	30.8 - 58.8
All ABX Instruments	85	24.25	3.15	13.0	24.0	14.8 - 33.7	85	44.88	4.51	10.0	44.8	31.3 - 58.4
All COULTER Instruments	5	21.90	4.35	19.9	20.3	8.8 - 35.0	5	43.46	7.19	16.6	41.8	21.8 - 65.1
ABX Pentra 60C+	74	23.97	2.85	11.9	23.9	15.4 - 32.6	75	44.41	4.14	9.3	44.8	32.0 - 56.9
ABX Pentra 80 / XL 80	10	26.32	4.62	17.5	27.0	12.4 - 40.2	9	48.96	5.80	11.8	50.0	31.5 - 66.4
COULTER AcT 5diff	5	21.90	4.35	19.9	20.3	8.8 - 35.0	5	43.46	7.19	16.6	41.8	21.8 - 65.1

<u>Instrument</u>	<b>Specimen BCX-8</b>						<b>Specimen BCX-9</b>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	91	31.70	4.49	14.2	31.7	18.2 - 45.2	91	41.62	3.58	8.6	40.9	30.8 - 52.4
All ABX Instruments	85	31.98	4.38	13.7	32.0	18.8 - 45.2	85	41.88	3.39	8.1	41.2	31.7 - 52.1
All COULTER Instruments	6	27.63	4.32	15.6	27.6	14.6 - 40.6	6	37.97	4.57	12.0	37.2	24.2 - 51.7
ABX Pentra 60C+	75	31.53	4.28	13.6	31.2	18.7 - 44.4	75	41.28	2.88	7.0	40.7	32.6 - 50.0
ABX Pentra 80 / XL 80	10	37.00	5.23	14.1	36.5	21.3 - 52.7	10	47.63	3.94	8.3	47.6	35.8 - 59.5
COULTER AcT 5diff	6	27.63	4.32	15.6	27.6	14.6 - 40.6	6	37.97	4.57	12.0	37.2	24.2 - 51.7

<u>Instrument</u>	<b>Specimen BCX-10</b>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	92	30.62	4.54	14.8	30.5	17.0 - 44.3
All ABX Instruments	86	30.84	4.47	14.5	30.8	17.4 - 44.3
All COULTER Instruments	6	27.40	4.64	16.9	26.1	13.4 - 41.4
ABX Pentra 60C+	75	30.36	4.08	13.4	30.4	18.1 - 42.7
ABX Pentra 80 / XL 80	10	34.23	6.03	17.6	34.1	16.1 - 52.4
COULTER AcT 5diff	6	27.40	4.64	16.9	26.1	13.4 - 41.4

**HEMATOLOGY W/ 5-PART DIFFERENTIAL—MONOCYTES (percent)**

<i><b>Instrument</b></i>	<b>Specimen BCX-6</b>						<b>Specimen BCX-7</b>					
	<i><b>Labs</b></i>	<i><b>Mean</b></i>	<i><b>SD</b></i>	<i><b>CV</b></i>	<i><b>Median</b></i>	<i><b>Range</b></i>	<i><b>Labs</b></i>	<i><b>Mean</b></i>	<i><b>SD</b></i>	<i><b>CV</b></i>	<i><b>Median</b></i>	<i><b>Range</b></i>
All Method	91	0.76	0.45	59.5	0.7	0.0 - 2.2	89	1.09	0.35	32.3	1.1	0.0 - 2.2
All ABX Instruments	86	0.75	0.44	58.6	0.7	0.0 - 2.1	83	1.09	0.35	32.2	1.0	0.0 - 2.2
All COULTER Instruments	6	1.58	1.82	115.1	1.0	0.0 - 7.1	6	1.08	0.40	36.7	1.2	0.0 - 2.3
ABX Pentra 60C+	75	0.76	0.44	58.0	0.7	0.0 - 2.1	72	1.10	0.35	32.0	1.1	0.0 - 2.2
ABX Pentra 80 / XL 80	10	0.67	0.47	70.4	0.7	0.0 - 2.1	10	1.06	0.37	34.8	1.0	0.0 - 2.2
COULTER AcT 5diff	6	1.58	1.82	115.1	1.0	0.0 - 7.1	6	1.08	0.40	36.7	1.2	0.0 - 2.3
	<b>Specimen BCX-8</b>						<b>Specimen BCX-9</b>					
All Method	92	0.73	0.41	55.6	0.6	0.0 - 2.0	92	3.48	0.70	20.0	3.5	1.3 - 5.6
All ABX Instruments	86	0.74	0.41	56.0	0.6	0.0 - 2.0	86	3.51	0.69	19.7	3.5	1.4 - 5.6
All COULTER Instruments	6	0.70	0.37	52.7	0.7	0.0 - 1.9	6	3.12	0.73	23.4	3.0	0.9 - 5.4
ABX Pentra 60C+	75	0.76	0.42	55.0	0.7	0.0 - 2.1	75	3.62	0.62	17.2	3.6	1.7 - 5.5
ABX Pentra 80 / XL 80	10	0.60	0.37	60.9	0.6	0.0 - 1.7	10	2.72	0.71	26.0	2.5	0.5 - 4.9
COULTER AcT 5diff	6	0.70	0.37	52.7	0.7	0.0 - 1.9	6	3.12	0.73	23.4	3.0	0.9 - 5.4
	<b>Specimen BCX-10</b>											
All Method	92	0.79	0.38	47.8	0.8	0.0 - 2.0						
All ABX Instruments	86	0.80	0.38	47.2	0.8	0.0 - 2.0						
All COULTER Instruments	6	0.57	0.28	49.5	0.6	0.0 - 1.5						
ABX Pentra 60C+	75	0.81	0.39	48.2	0.8	0.0 - 2.0						
ABX Pentra 80 / XL 80	10	0.78	0.28	36.2	0.8	0.0 - 1.7						
COULTER AcT 5diff	6	0.57	0.28	49.5	0.6	0.0 - 1.5						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL– EOSINOPHILS (percent)**

<u><i>Instrument</i></u>	Specimen BCX-6						Specimen BCX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	88	6.69	1.60	23.9	6.8	1.8 - 11.5	92	5.04	0.85	16.9	5.1	2.4 - 7.6
All ABX Instruments	83	6.75	1.50	22.2	6.8	2.2 - 11.3	86	5.00	0.80	16.0	5.1	2.6 - 7.5
All COULTER Instruments	5	5.66	2.90	51.3	4.7	0.0 - 14.4	6	5.52	1.41	25.5	5.3	1.2 - 9.8
ABX Pentra 60C+	73	6.71	1.53	22.9	6.8	2.1 - 11.4	75	5.04	0.77	15.3	5.1	2.7 - 7.4
ABX Pentra 80 / XL 80	9	6.66	0.51	7.7	6.5	5.1 - 8.2	10	4.70	1.00	21.3	4.6	1.7 - 7.7
COULTER AcT 5diff	5	5.66	2.90	51.3	4.7	0.0 - 14.4	6	5.52	1.41	25.5	5.3	1.2 - 9.8
<b>Specimen BCX-8</b>												
All Method	92	9.80	1.81	18.5	9.5	4.3 - 15.3	92	4.69	0.65	14.0	4.8	2.7 - 6.7
All ABX Instruments	86	9.81	1.81	18.5	9.5	4.3 - 15.3	86	4.66	0.64	13.7	4.7	2.7 - 6.6
All COULTER Instruments	6	9.70	2.02	20.8	10.2	3.6 - 15.8	6	5.08	0.80	15.8	4.9	2.6 - 7.5
ABX Pentra 60C+	75	9.83	1.87	19.0	9.5	4.2 - 15.5	75	4.67	0.64	13.6	4.7	2.7 - 6.6
ABX Pentra 80 / XL 80	10	9.52	1.38	14.5	9.4	5.3 - 13.7	10	4.61	0.73	15.8	4.8	2.4 - 6.8
COULTER AcT 5diff	6	9.70	2.02	20.8	10.2	3.6 - 15.8	6	5.08	0.80	15.8	4.9	2.6 - 7.5
<b>Specimen BCX-10</b>												
All Method	91	8.46	1.32	15.6	8.5	4.4 - 12.5						
All ABX Instruments	86	8.43	1.32	15.7	8.5	4.4 - 12.4						
All COULTER Instruments	5	8.94	1.41	15.8	9.0	4.6 - 13.2						
ABX Pentra 60C+	75	8.35	1.26	15.1	8.4	4.5 - 12.2						
ABX Pentra 80 / XL 80	10	9.08	1.70	18.7	8.7	3.9 - 14.2						
COULTER AcT 5diff	5	8.94	1.41	15.8	9.0	4.6 - 13.2						

**HEMATOLOGY W/ 5-PART DIFFERENTIAL– BASOPHILS (percent)**

<u><i>Instrument</i></u>	<b>Specimen BCX-6</b>						<b>Specimen BCX-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	83	0.52	0.04	7.6	0.5	0.4 - 0.7	77	0.30	0.01	0.0	0.3	0.2 - 0.4
All ABX Instruments	83	0.52	0.04	7.6	0.5	0.4 - 0.7	77	0.30	0.01	0.0	0.3	0.2 - 0.4
All COULTER Instruments	6	10.42	0.33	3.2	10.4	9.4 - 11.5	6	5.17	0.14	2.6	5.2	4.7 - 5.6
ABX Pentra 60C+	74	0.52	0.04	7.8	0.5	0.3 - 0.7	68	0.30	0.01	0.0	0.3	0.2 - 0.4
ABX Pentra 80 / XL 80	9	0.56	0.13	24.0	0.5	0.1 - 1.0	9	0.29	0.03	11.5	0.3	0.1 - 0.4
COULTER AcT 5diff	6	10.42	0.33	3.2	10.4	9.4 - 11.5	6	5.17	0.14	2.6	5.2	4.7 - 5.6
	<b>Specimen BCX-8</b>						<b>Specimen BCX-9</b>					
All Method	83	0.30	0.01	0.0	0.3	0.2 - 0.4	82	0.51	0.03	5.2	0.5	0.4 - 0.6
All ABX Instruments	83	0.30	0.01	0.0	0.3	0.2 - 0.4	82	0.51	0.03	5.2	0.5	0.4 - 0.6
All COULTER Instruments	6	5.48	0.23	4.2	5.4	4.7 - 6.2	6	10.52	0.23	2.2	10.6	9.8 - 11.3
ABX Pentra 60C+	73	0.30	0.01	0.0	0.3	0.2 - 0.4	73	0.51	0.03	5.4	0.5	0.4 - 0.6
ABX Pentra 80 / XL 80	9	0.30	0.01	0.0	0.3	0.2 - 0.4	9	0.53	0.10	18.7	0.5	0.2 - 0.9
COULTER AcT 5diff	6	5.48	0.23	4.2	5.4	4.7 - 6.2	6	10.52	0.23	2.2	10.6	9.8 - 11.3
	<b>Specimen BCX-10</b>											
All Method	84	0.30	0.01	0.0	0.3	0.2 - 0.4						
All ABX Instruments	84	0.30	0.01	0.0	0.3	0.2 - 0.4						
All COULTER Instruments	6	6.27	0.91	14.5	6.0	3.5 - 9.0						
ABX Pentra 60C+	74	0.30	0.01	0.0	0.3	0.2 - 0.4						
ABX Pentra 80 / XL 80	9	0.30	0.01	0.0	0.3	0.2 - 0.4						
COULTER AcT 5diff	6	6.27	0.91	14.5	6.0	3.5 - 9.0						

**HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL—WHITE BLOOD CELL COUNT (x 10<sup>9</sup>/L)**

Specimen MX-6							Specimen MX-7					
<u>Instrument</u>	<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	111	3.45	0.37	10.8	3.3	2.9 - 4.0	111	6.81	0.37	5.4	6.7	5.7 - 7.9
All Sysmex XN/XS Instruments	110	3.45	0.37	10.8	3.3	2.9 - 4.0	110	6.80	0.36	5.3	6.7	5.7 - 7.9
Sysmex XN-1000	17	3.79	0.09	2.3	3.8	3.2 - 4.4	17	7.41	0.14	1.9	7.4	6.2 - 8.6
Sysmex XN-330	5	3.40	0.35	10.2	3.2	2.8 - 4.0	5	6.80	0.52	7.6	6.5	5.7 - 7.9
Sysmex XN-430	31	3.12	0.10	3.3	3.1	2.6 - 3.6	32	6.66	0.16	2.4	6.6	5.6 - 7.7
Sysmex XN-450	9	3.12	0.08	2.7	3.1	2.6 - 3.6	9	6.68	0.10	1.5	6.7	5.6 - 7.7
Sysmex XN-550	16	3.11	0.10	3.2	3.1	2.6 - 3.6	16	6.52	0.13	2.0	6.5	5.5 - 7.5
Sysmex XS-1000i	28	3.88	0.10	2.7	3.9	3.2 - 4.5	28	6.70	0.27	4.0	6.6	5.6 - 7.8
Specimen MX-8							Specimen MX-9					
All Method	110	22.44	0.43	1.9	22.4	19.0 - 25.9	111	20.13	0.43	2.1	20.1	17.1 - 23.2
All Sysmex XN/XS Instruments	109	22.43	0.43	1.9	22.4	19.0 - 25.8	110	20.13	0.42	2.1	20.1	17.1 - 23.2
Sysmex XN-1000	17	22.77	0.39	1.7	22.8	19.3 - 26.2	17	20.45	0.24	1.2	20.4	17.3 - 23.6
Sysmex XN-330	5	21.93	0.35	1.6	21.9	18.6 - 25.3	5	20.17	0.91	4.5	19.8	17.1 - 23.2
Sysmex XN-430	34	22.33	0.47	2.1	22.4	18.9 - 25.7	34	20.03	0.42	2.1	20.1	17.0 - 23.1
Sysmex XN-450	9	22.42	0.39	1.8	22.3	19.0 - 25.8	9	20.09	0.26	1.3	20.2	17.0 - 23.2
Sysmex XN-550	17	22.33	0.34	1.5	22.4	18.9 - 25.7	17	19.86	0.27	1.4	19.9	16.8 - 22.9
Sysmex XS-1000i	28	22.55	0.39	1.8	22.5	19.1 - 26.0	28	20.21	0.44	2.2	20.2	17.1 - 23.3
Specimen MX-10												
All Method	110	3.46	0.37	10.7	3.3	2.9 - 4.0						
All Sysmex XN/XS Instruments	109	3.46	0.37	10.7	3.3	2.9 - 4.0						
Sysmex XN-1000	17	3.79	0.06	1.6	3.8	3.2 - 4.4						
Sysmex XN-330	5	3.37	0.35	10.4	3.4	2.8 - 3.9						
Sysmex XN-430	32	3.18	0.12	3.8	3.2	2.6 - 3.7						
Sysmex XN-450	9	3.11	0.12	3.7	3.1	2.6 - 3.6						
Sysmex XN-550	16	3.11	0.09	2.8	3.1	2.6 - 3.6						
Sysmex XS-1000i	27	3.91	0.11	2.9	3.9	3.3 - 4.5						

**HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10<sup>12</sup>/L)**

Specimen MX-6							Specimen MX-7					
<u>Instrument</u>	<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	111	2.397	0.037	1.5	2.40	2.25 - 2.55	111	4.702	0.047	1.0	4.70	4.41 - 4.99
All Sysmex XN/XS Instruments	110	2.397	0.037	1.5	2.40	2.25 - 2.55	110	4.701	0.047	1.0	4.70	4.41 - 4.99
Sysmex XN-1000	17	2.415	0.028	1.2	2.41	2.26 - 2.56	17	4.725	0.048	1.0	4.72	4.44 - 5.01
Sysmex XN-330	5	2.370	0.062	2.6	2.35	2.22 - 2.52	5	4.630	0.072	1.6	4.61	4.35 - 4.91
Sysmex XN-430	34	2.390	0.033	1.4	2.39	2.24 - 2.54	34	4.698	0.038	0.8	4.70	4.41 - 4.98
Sysmex XN-450	9	2.378	0.034	1.4	2.38	2.23 - 2.53	9	4.687	0.039	0.8	4.68	4.40 - 4.97
Sysmex XN-550	17	2.377	0.026	1.1	2.37	2.23 - 2.52	17	4.701	0.040	0.9	4.69	4.41 - 4.99
Sysmex XS-1000i	28	2.417	0.036	1.5	2.42	2.27 - 2.57	28	4.704	0.054	1.2	4.70	4.42 - 4.99

Specimen MX-8							Specimen MX-9					
All Method	110	6.393	0.066	1.0	6.39	6.00 - 6.78	111	5.697	0.053	0.9	5.70	5.35 - 6.04
All Sysmex XN/XS Instruments	109	6.391	0.065	1.0	6.39	6.00 - 6.78	110	5.697	0.053	0.9	5.70	5.35 - 6.04
Sysmex XN-1000	17	6.390	0.085	1.3	6.38	6.00 - 6.78	17	5.708	0.060	1.1	5.69	5.36 - 6.06
Sysmex XN-330	5	6.353	0.006	0.1	6.35	5.97 - 6.74	5	5.653	0.081	1.4	5.64	5.31 - 6.00
Sysmex XN-430	33	6.403	0.058	0.9	6.42	6.01 - 6.79	33	5.714	0.033	0.6	5.72	5.37 - 6.06
Sysmex XN-450	9	6.389	0.062	1.0	6.40	6.00 - 6.78	9	5.702	0.051	0.9	5.70	5.36 - 6.05
Sysmex XN-550	17	6.415	0.049	0.8	6.43	6.02 - 6.80	17	5.706	0.060	1.1	5.72	5.36 - 6.05
Sysmex XS-1000i	28	6.366	0.067	1.1	6.36	5.98 - 6.75	28	5.673	0.051	0.9	5.66	5.33 - 6.02

Specimen MX-10						
All Method	111	2.396	0.034	1.4	2.40	2.25 - 2.55
All Sysmex XN/XS Instruments	110	2.396	0.032	1.4	2.40	2.25 - 2.54
Sysmex XN-1000	17	2.397	0.027	1.1	2.40	2.25 - 2.55
Sysmex XN-330	5	2.370	0.030	1.3	2.37	2.22 - 2.52
Sysmex XN-430	34	2.391	0.025	1.0	2.39	2.24 - 2.54
Sysmex XN-450	9	2.381	0.040	1.7	2.39	2.23 - 2.53
Sysmex XN-550	17	2.379	0.031	1.3	2.37	2.23 - 2.53
Sysmex XS-1000i	28	2.417	0.034	1.4	2.42	2.27 - 2.57

**HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL–HEMOGLOBIN (g/dL)**

<u><i>Instrument</i></u>	<b>Specimen MX-6</b>						<b>Specimen MX-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	111	5.80	0.08	1.4	5.8	5.3 - 6.3	109	13.17	0.11	0.9	13.2	12.2 - 14.1
All Sysmex XN/XS Instruments	110	5.80	0.08	1.4	5.8	5.3 - 6.3	108	13.17	0.12	0.9	13.2	12.2 - 14.1
Sysmex XN-1000	17	5.84	0.07	1.2	5.9	5.4 - 6.3	17	13.19	0.14	1.1	13.2	12.2 - 14.2
Sysmex XN-330	5	5.77	0.06	1.0	5.8	5.3 - 6.2	5	13.03	0.21	1.6	13.1	12.1 - 14.0
Sysmex XN-430	34	5.81	0.07	1.2	5.8	5.3 - 6.3	33	13.16	0.10	0.7	13.2	12.2 - 14.1
Sysmex XN-450	9	5.80	0.09	1.5	5.8	5.3 - 6.3	9	13.11	0.11	0.8	13.1	12.1 - 14.1
Sysmex XN-550	17	5.84	0.06	1.1	5.8	5.4 - 6.3	17	13.22	0.06	0.5	13.2	12.2 - 14.2
Sysmex XS-1000i	28	5.74	0.09	1.6	5.7	5.3 - 6.2	28	13.16	0.14	1.1	13.2	12.2 - 14.1
<u><i>Instrument</i></u>	<b>Specimen MX-8</b>						<b>Specimen MX-9</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	109	19.60	0.16	0.8	19.6	18.2 - 21.0	110	17.50	0.14	0.8	17.5	16.2 - 18.8
All Sysmex XN/XS Instruments	108	19.60	0.16	0.8	19.6	18.2 - 21.0	109	17.50	0.14	0.8	17.5	16.2 - 18.8
Sysmex XN-1000	17	19.61	0.19	0.9	19.6	18.2 - 21.0	17	17.49	0.17	1.0	17.5	16.2 - 18.8
Sysmex XN-330	5	19.47	0.15	0.8	19.5	18.1 - 20.9	5	17.40	0.10	0.6	17.4	16.1 - 18.7
Sysmex XN-430	33	19.59	0.14	0.7	19.6	18.2 - 21.0	34	17.49	0.11	0.6	17.5	16.2 - 18.8
Sysmex XN-450	9	19.49	0.17	0.9	19.5	18.1 - 20.9	9	17.38	0.15	0.9	17.4	16.1 - 18.6
Sysmex XN-550	17	19.64	0.13	0.6	19.6	18.2 - 21.1	16	17.53	0.09	0.5	17.5	16.2 - 18.8
Sysmex XS-1000i	28	19.66	0.21	1.0	19.7	18.2 - 21.1	28	17.54	0.17	0.9	17.5	16.3 - 18.8
<u><i>Instrument</i></u>	<b>Specimen MX-10</b>											
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>						
All Method	110	5.81	0.08	1.4	5.8	5.3 - 6.3						
All Sysmex XN/XS Instruments	109	5.81	0.08	1.4	5.8	5.3 - 6.3						
Sysmex XN-1000	17	5.84	0.08	1.4	5.8	5.4 - 6.3						
Sysmex XN-330	5	5.80	0.01	0.0	5.8	5.3 - 6.3						
Sysmex XN-430	33	5.82	0.07	1.2	5.8	5.4 - 6.3						
Sysmex XN-450	9	5.80	0.07	1.2	5.8	5.3 - 6.3						
Sysmex XN-550	17	5.85	0.06	1.1	5.8	5.4 - 6.3						
Sysmex XS-1000i	28	5.75	0.07	1.3	5.8	5.3 - 6.2						



**HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL-PLATELET COUNT (x 10<sup>9</sup>/L)**

Specimen MX-6							Specimen MX-7					
<u>Instrument</u>	<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	110	52.4	3.7	7.1	52	39 - 66	110	222.0	6.1	2.8	222	166 - 278
All Sysmex XN/XS Instruments	109	52.3	3.6	6.9	52	39 - 66	109	221.9	6.1	2.8	222	166 - 278
Sysmex XN-1000	17	50.9	2.9	5.8	51	38 - 64	17	222.1	4.3	1.9	222	166 - 278
Sysmex XN-330	5	53.0	3.0	5.7	53	39 - 67	5	224.7	6.4	2.8	221	168 - 281
Sysmex XN-430	34	51.3	3.2	6.2	51	38 - 65	34	222.3	6.4	2.9	221	166 - 278
Sysmex XN-450	9	50.9	4.6	9.0	51	38 - 64	9	219.7	13.5	6.1	223	164 - 275
Sysmex XN-550	17	52.1	3.6	6.9	52	39 - 66	16	222.2	3.4	1.5	223	166 - 278
Sysmex XS-1000i	27	55.2	2.7	4.9	55	41 - 69	28	221.1	7.4	3.3	220	165 - 277
Specimen MX-8							Specimen MX-9					
All Method	111	446.9	18.8	4.2	449	335 - 559	109	433.2	14.1	3.3	434	324 - 542
All Sysmex XN/XS Instruments	110	446.6	18.7	4.2	449	334 - 559	108	433.2	14.1	3.3	434	324 - 542
Sysmex XN-1000	17	461.1	14.3	3.1	463	345 - 577	16	441.6	10.5	2.4	441	331 - 553
Sysmex XN-330	5	448.7	15.0	3.3	448	336 - 561	5	437.3	13.4	3.1	443	327 - 547
Sysmex XN-430	34	451.8	13.0	2.9	454	338 - 565	34	436.6	10.7	2.4	434	327 - 546
Sysmex XN-450	9	451.8	23.2	5.1	458	338 - 565	9	435.2	26.5	6.1	430	326 - 545
Sysmex XN-550	17	449.4	10.2	2.3	448	337 - 562	17	435.9	11.3	2.6	437	326 - 545
Sysmex XS-1000i	28	426.8	15.4	3.6	424	320 - 534	28	418.9	11.2	2.7	419	314 - 524
Specimen MX-10												
All Method	110	52.4	3.7	7.0	52	39 - 66						
All Sysmex XN/XS Instruments	109	52.3	3.6	6.9	52	39 - 66						
Sysmex XN-1000	16	50.9	3.4	6.7	51	38 - 64						
Sysmex XN-330	5	53.0	2.0	3.8	53	39 - 67						
Sysmex XN-430	34	51.3	3.1	5.9	51	38 - 65						
Sysmex XN-450	9	50.2	3.9	7.7	52	37 - 63						
Sysmex XN-550	17	51.6	3.1	6.0	52	38 - 65						
Sysmex XS-1000i	28	55.4	3.1	5.6	55	41 - 70						

**HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL – NEUTROPHILS (percent)**

Specimen MX-6							Specimen MX-7					
<u>Instrument</u>	<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	60.17	2.05	3.4	59.9	54.0 - 66.4	102	47.78	1.73	3.6	47.6	42.5 - 53.0
All Sysmex XN/XS Instruments	104	60.17	2.05	3.4	59.9	54.0 - 66.4	102	47.78	1.73	3.6	47.6	42.5 - 53.0
Sysmex XN-1000	15	63.42	0.74	1.2	63.4	61.2 - 65.7	15	50.97	0.70	1.4	51.0	48.8 - 53.1
Sysmex XN-330	5	58.95	1.48	2.5	59.0	54.4 - 63.5	5	48.20	0.01	0.0	48.2	48.1 - 48.3
Sysmex XN-430	32	59.33	1.37	2.3	59.3	55.2 - 63.5	32	47.54	0.64	1.4	47.6	45.6 - 49.5
Sysmex XN-450	9	58.90	1.80	3.1	58.9	53.4 - 64.4	9	47.44	0.79	1.7	47.3	45.0 - 49.9
Sysmex XN-550	16	58.96	0.93	1.6	58.9	56.1 - 61.8	16	47.73	0.91	1.9	48.1	44.9 - 50.5
Sysmex XS-1000i	28	60.45	1.78	2.9	60.3	55.1 - 65.8	26	46.18	1.01	2.2	46.3	43.1 - 49.3
Specimen MX-8							Specimen MX-9					
All Method	103	59.93	1.70	2.8	59.9	54.8 - 65.1	102	60.26	1.61	2.7	60.1	55.4 - 65.2
All Sysmex XN/XS Instruments	102	59.92	1.71	2.8	59.9	54.8 - 65.1	101	60.24	1.60	2.7	60.1	55.4 - 65.1
Sysmex XN-1000	15	62.15	0.98	1.6	62.3	59.2 - 65.1	15	62.17	1.33	2.1	62.4	58.1 - 66.2
Sysmex XN-330	5	60.35	2.05	3.4	60.4	54.1 - 66.6	5	59.55	0.21	0.4	59.6	58.9 - 60.2
Sysmex XN-430	32	59.90	1.14	1.9	59.8	56.4 - 63.4	32	59.78	1.23	2.1	59.7	56.0 - 63.5
Sysmex XN-450	9	59.36	1.18	2.0	59.5	55.8 - 62.9	9	58.89	0.34	0.6	59.0	57.8 - 60.0
Sysmex XN-550	16	59.68	1.12	1.9	59.4	56.3 - 63.1	16	60.04	0.71	1.2	59.9	57.9 - 62.2
Sysmex XS-1000i	26	58.89	1.96	3.3	59.8	53.0 - 64.8	26	60.04	2.19	3.7	60.6	53.4 - 66.7
Specimen MX-10												
All Method	104	60.26	1.85	3.1	59.9	54.7 - 65.9						
All Sysmex XN/XS Instruments	104	60.26	1.85	3.1	59.9	54.7 - 65.9						
Sysmex XN-1000	15	63.26	0.68	1.1	63.3	61.2 - 65.4						
Sysmex XN-330	5	59.00	0.01	0.0	59.0	58.9 - 59.1						
Sysmex XN-430	32	59.18	1.11	1.9	59.3	55.8 - 62.6						
Sysmex XN-450	9	59.80	0.69	1.1	59.9	57.7 - 61.9						
Sysmex XN-550	16	59.11	1.35	2.3	59.3	55.0 - 63.2						
Sysmex XS-1000i	28	60.70	1.47	2.4	60.2	56.2 - 65.2						

**HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL – LYMPHOCYTES (percent)**

<u>Instrument</u>	<b>Specimen MX-6</b>						<b>Specimen MX-7</b>					
	<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	105	14.82	1.38	9.3	15.1	10.6 - 19.0	103	30.84	1.76	5.7	31.3	25.5 - 36.2
All Sysmex XN/XS Instruments	104	14.82	1.39	9.4	15.1	10.6 - 19.0	102	30.89	1.71	5.5	31.3	25.7 - 36.1
Sysmex XN-1000	15	14.05	0.92	6.5	14.0	11.3 - 16.9	15	27.57	0.88	3.2	27.8	24.9 - 30.3
Sysmex XN-330	5	15.25	1.63	10.7	15.3	10.3 - 20.2	5	30.90	0.71	2.3	30.9	28.7 - 33.1
Sysmex XN-430	32	15.58	1.07	6.9	15.5	12.3 - 18.8	32	31.18	0.76	2.4	31.1	28.8 - 33.5
Sysmex XN-450	9	15.48	0.93	6.0	15.7	12.6 - 18.3	9	30.80	0.76	2.5	30.9	28.5 - 33.1
Sysmex XN-550	16	15.89	0.54	3.4	15.9	14.2 - 17.6	16	31.27	0.77	2.5	31.2	28.9 - 33.6
Sysmex XS-1000i	28	13.51	1.12	8.3	13.8	10.1 - 16.9	26	32.37	0.61	1.9	32.4	30.5 - 34.2
<u>Instrument</u>	<b>Specimen MX-8</b>						<b>Specimen MX-9</b>					
	<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	15.21	1.54	10.1	14.9	10.6 - 19.9	104	15.20	1.53	10.1	15.0	10.6 - 19.8
All Sysmex XN/XS Instruments	104	15.21	1.54	10.1	14.9	10.6 - 19.9	104	15.20	1.53	10.1	15.0	10.6 - 19.8
Sysmex XN-1000	15	16.90	1.15	6.8	17.2	13.4 - 20.4	15	16.57	1.72	10.4	17.3	11.4 - 21.8
Sysmex XN-330	5	14.30	0.85	5.9	14.3	11.7 - 16.9	5	14.75	0.35	2.4	14.8	13.6 - 15.9
Sysmex XN-430	32	14.85	0.58	3.9	14.8	13.1 - 16.6	32	15.00	0.71	4.8	15.2	12.8 - 17.2
Sysmex XN-450	9	14.86	0.62	4.2	14.8	12.9 - 16.8	9	15.09	0.78	5.2	15.3	12.7 - 17.5
Sysmex XN-550	16	14.65	0.51	3.5	14.8	13.1 - 16.2	16	14.77	0.53	3.6	14.8	13.1 - 16.4
Sysmex XS-1000i	28	15.16	2.35	15.5	14.4	8.1 - 22.3	28	14.95	2.26	15.1	14.2	8.1 - 21.8
<u>Instrument</u>	<b>Specimen MX-10</b>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	105	14.76	1.50	10.1	15.0	10.2 - 19.3						
All Sysmex XN/XS Instruments	104	14.75	1.50	10.2	15.0	10.2 - 19.3						
Sysmex XN-1000	15	14.03	0.65	4.6	14.1	12.0 - 16.0						
Sysmex XN-330	5	15.95	0.64	4.0	16.0	14.0 - 17.9						
Sysmex XN-430	32	15.75	0.70	4.4	15.7	13.6 - 17.9						
Sysmex XN-450	9	15.41	1.11	7.2	15.8	12.0 - 18.8						
Sysmex XN-550	16	15.69	0.85	5.4	15.6	13.1 - 18.3						
Sysmex XS-1000i	28	13.21	1.50	11.3	13.8	8.7 - 17.7						

**HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL – MONOCYTES (percent)**

Specimen MX-6							Specimen MX-7					
<u>Instrument</u>	<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	0.83	0.43	51.5	0.7	0.0 - 2.2	103	1.85	0.78	42.0	1.5	0.0 - 4.2
All Sysmex XN/XS Instruments	102	0.82	0.43	51.8	0.7	0.0 - 2.2	102	1.83	0.76	41.4	1.5	0.0 - 4.2
Sysmex XN-1000	15	1.65	0.25	15.1	1.7	0.9 - 2.5	15	3.34	0.22	6.7	3.3	2.6 - 4.1
Sysmex XN-330	5	0.45	0.21	47.1	0.5	0.0 - 1.1	5	1.30	0.28	21.8	1.3	0.4 - 2.2
Sysmex XN-350	5	0.65	0.49	76.1	0.7	0.0 - 2.2	5	1.20	0.01	0.0	1.2	1.1 - 1.3
Sysmex XN-430	31	0.55	0.18	32.7	0.6	0.0 - 1.1	31	1.31	0.27	20.4	1.3	0.5 - 2.2
Sysmex XN-450	9	0.79	0.18	23.2	0.9	0.2 - 1.4	9	1.72	0.41	23.5	1.8	0.5 - 3.0
Sysmex XN-550	16	0.55	0.20	36.4	0.6	0.0 - 1.2	16	1.36	0.25	18.5	1.4	0.6 - 2.2
Sysmex XS-1000i	26	0.88	0.20	22.6	0.8	0.2 - 1.5	26	1.94	0.32	16.7	2.0	0.9 - 3.0

Specimen MX-8							Specimen MX-9					
All Method	101	0.58	0.34	58.9	0.5	0.0 - 1.7	100	0.59	0.32	54.8	0.5	0.0 - 1.6
All Sysmex XN/XS Instruments	100	0.57	0.34	58.6	0.5	0.0 - 1.6	99	0.58	0.32	54.8	0.5	0.0 - 1.6
Sysmex XN-1000	15	1.11	0.30	27.1	1.0	0.2 - 2.1	15	1.19	0.48	40.8	0.9	0.0 - 2.7
Sysmex XN-330	5	0.40	0.01	0.0	0.4	0.3 - 0.5	5	0.45	0.07	15.7	0.5	0.2 - 0.7
Sysmex XN-350	5	0.35	0.07	20.2	0.4	0.1 - 0.6	5	0.45	0.07	15.7	0.5	0.2 - 0.7
Sysmex XN-430	30	0.42	0.10	22.9	0.4	0.1 - 0.8	30	0.46	0.09	19.7	0.5	0.1 - 0.8
Sysmex XN-450	9	0.56	0.11	20.3	0.6	0.2 - 0.9	9	0.59	0.18	30.0	0.5	0.0 - 1.2
Sysmex XN-550	15	0.44	0.06	14.4	0.4	0.2 - 0.7	16	0.49	0.06	12.7	0.5	0.3 - 0.7
Sysmex XS-1000i	26	0.62	0.66	107.2	0.5	0.0 - 2.7	26	0.58	0.45	78.6	0.5	0.0 - 2.0

Specimen MX-10						
All Method	102	0.84	0.45	53.5	0.7	0.0 - 2.2
All Sysmex XN/XS Instruments	101	0.83	0.44	52.9	0.7	0.0 - 2.2
Sysmex XN-1000	15	1.79	0.31	17.2	1.8	0.8 - 2.8
Sysmex XN-330	5	0.65	0.07	10.9	0.7	0.4 - 0.9
Sysmex XN-350	5	0.65	0.07	10.9	0.7	0.4 - 0.9
Sysmex XN-430	31	0.52	0.18	34.9	0.6	0.0 - 1.1
Sysmex XN-450	9	0.73	0.23	32.0	0.7	0.0 - 1.5
Sysmex XN-550	16	0.64	0.24	37.6	0.6	0.0 - 1.4
Sysmex XS-1000i	26	0.86	0.17	19.8	0.8	0.3 - 1.4



**HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL – BASOPHILS (percent)**

<u><i>Instrument</i></u>	<b>Specimen MX-6</b>						<b>Specimen MX-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	60	9.09	0.72	7.9	8.9	6.9 - 11.3	60	7.28	0.60	8.3	7.1	5.4 - 9.1
All Sysmex XN/XS Instruments	102	8.51	1.78	21.0	8.9	3.1 - 13.9	102	6.94	1.11	16.0	7.1	3.6 - 10.3
Sysmex XN-1000	15	4.77	0.16	3.3	4.8	4.2 - 5.3	15	4.79	0.12	2.4	4.8	4.4 - 5.2
Sysmex XN-330	5	8.85	0.64	7.2	8.9	6.9 - 10.8	5	6.90	0.28	4.1	6.9	6.0 - 7.8
Sysmex XN-430	32	9.07	0.75	8.3	9.0	6.8 - 11.4	32	7.35	0.63	8.6	7.4	5.4 - 9.3
Sysmex XN-450	9	9.34	0.75	8.0	9.4	7.0 - 11.6	9	7.28	0.56	7.7	7.3	5.5 - 9.0
Sysmex XN-550	16	9.07	0.67	7.4	9.0	7.0 - 11.1	16	7.24	0.62	8.6	7.2	5.3 - 9.2
Sysmex XS-1000i	26	9.46	0.94	10.0	9.5	6.6 - 12.3	26	7.46	0.75	10.1	7.5	5.2 - 9.8

<u><i>Instrument</i></u>	<b>Specimen MX-8</b>						<b>Specimen MX-9</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	60	9.27	0.75	8.1	9.2	7.0 - 11.6	60	9.26	0.74	8.0	9.1	7.0 - 11.5
All Sysmex XN/XS Instruments	102	8.73	1.88	21.6	9.3	3.0 - 14.4	102	8.69	1.84	21.2	9.1	3.1 - 14.3
Sysmex XN-1000	15	4.77	0.14	3.0	4.8	4.3 - 5.3	15	4.83	0.14	2.9	4.9	4.4 - 5.3
Sysmex XN-330	5	9.00	1.27	14.1	9.0	5.1 - 12.9	5	10.05	0.07	0.7	10.1	9.8 - 10.3
Sysmex XN-430	32	9.17	0.80	8.7	9.1	6.7 - 11.6	32	9.18	0.79	8.6	9.1	6.8 - 11.6
Sysmex XN-450	9	9.69	0.60	6.2	9.7	7.8 - 11.5	9	9.42	0.67	7.1	9.8	7.4 - 11.5
Sysmex XN-550	16	9.34	0.64	6.9	9.2	7.4 - 11.3	16	9.31	0.62	6.7	9.4	7.4 - 11.2
Sysmex XS-1000i	26	9.91	0.89	8.9	9.9	7.2 - 12.6	26	9.73	0.97	10.0	9.4	6.8 - 12.7

<u><i>Instrument</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
<b>Specimen MX-10</b>						
All Method	59	8.91	0.77	8.7	8.7	6.5 - 11.3
All Sysmex XN/XS Instruments	101	8.35	1.72	20.7	8.7	3.1 - 13.6
Sysmex XN-1000	15	4.74	0.20	4.3	4.7	4.1 - 5.4
Sysmex XN-330	5	9.35	0.78	8.3	9.4	7.0 - 11.7
Sysmex XN-430	31	8.93	0.69	7.7	8.8	6.8 - 11.0
Sysmex XN-450	9	8.54	0.67	7.8	8.4	6.5 - 10.6
Sysmex XN-550	16	9.00	0.97	10.8	8.6	6.0 - 12.0
Sysmex XS-1000i	26	9.27	0.76	8.2	9.4	6.9 - 11.6

**HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL – Immature Granulocytes (percent)**

<u><i>Instrument</i></u>	<b>Specimen MX-6</b>						<b>Specimen MX-7</b>					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	72	15.98	0.84	5.3	15.9	13.4 - 18.6	73	12.82	0.55	4.3	12.9	11.1 - 14.5
All Sysmex XN/XS Instruments	72	15.98	0.84	5.3	15.9	13.4 - 18.6	73	12.82	0.55	4.3	12.9	11.1 - 14.5
Sysmex XN-1000	14	15.44	0.50	3.2	15.5	13.9 - 17.0	14	12.76	0.39	3.0	12.8	11.5 - 14.0
Sysmex XN-330	5	16.95	0.07	0.4	17.0	16.7 - 17.2	5	13.20	0.14	1.1	13.2	12.7 - 13.7
Sysmex XN-430	32	16.19	0.91	5.6	16.3	13.4 - 19.0	32	12.83	0.63	4.9	12.8	10.9 - 14.8
Sysmex XN-450	9	15.99	0.86	5.4	15.8	13.4 - 18.6	9	12.71	0.56	4.4	12.9	11.0 - 14.4
Sysmex XN-550	13	15.94	0.77	4.8	16.2	13.6 - 18.3	14	12.85	0.56	4.3	12.9	11.1 - 14.6
	<b>Specimen MX-8</b>						<b>Specimen MX-9</b>					
All Method	73	15.98	0.88	5.5	15.9	13.3 - 18.7	73	15.80	0.83	5.2	15.7	13.3 - 18.3
All Sysmex XN/XS Instruments	73	15.98	0.88	5.5	15.9	13.3 - 18.7	73	15.80	0.83	5.2	15.7	13.3 - 18.3
Sysmex XN-1000	14	15.26	0.71	4.6	15.2	13.1 - 17.4	14	15.29	0.94	6.1	15.1	12.4 - 18.2
Sysmex XN-330	5	16.50	0.85	5.1	16.5	13.9 - 19.1	5	16.25	0.49	3.0	16.3	14.7 - 17.8
Sysmex XN-430	32	16.18	0.87	5.4	16.1	13.5 - 18.8	32	15.88	0.74	4.6	15.8	13.6 - 18.1
Sysmex XN-450	9	16.07	0.81	5.1	15.8	13.6 - 18.6	9	15.61	0.50	3.2	15.4	14.1 - 17.2
Sysmex XN-550	14	16.08	0.87	5.4	16.2	13.4 - 18.8	14	16.29	0.84	5.1	16.2	13.7 - 18.9
	<b>Specimen MX-10</b>											
All Method	73	16.07	0.82	5.1	16.0	13.5 - 18.6						
All Sysmex XN/XS Instruments	73	16.07	0.82	5.1	16.0	13.5 - 18.6						
Sysmex XN-1000	14	15.74	0.64	4.0	15.7	13.8 - 17.7						
Sysmex XN-330	5	16.95	0.35	2.1	17.0	15.8 - 18.1						
Sysmex XN-430	32	16.02	0.76	4.8	16.0	13.7 - 18.4						
Sysmex XN-450	9	16.47	0.90	5.4	16.5	13.7 - 19.2						
Sysmex XN-550	14	16.17	1.05	6.5	16.1	13.0 - 19.4						

**2020 M2**  
**BLOOD CELL IDENTIFICATION**  
**Specimens BC-7 through BC-12**

**CASE HISTORY:**

A 72-year-old male was seen by his primary care physician for left upper quadrant pain and decreased exercise tolerance. He had always been in good health, and walked several miles a day until recently due to feeling very fatigued. Physical exam revealed enlarged, nontender lymph nodes in his neck, as well as splenomegaly. A panel of laboratory tests, including a CBC, were performed. Significant results appear below.

Test	Results	Reference Range
WBC	>100 x 10 <sup>9</sup> /L	5 - 10 x 10 <sup>9</sup> /L
RBC	4.7 x 10 <sup>12</sup> /L	4.6 - 6.0 x 10 <sup>12</sup> /L
HGB	13.6 g/dL	14.0 - 18.0 g/dL
HCT	39 %	40 - 54 %
PLT	88 x 10 <sup>9</sup> /L	150 - 400 x 10 <sup>9</sup> /L
MCV	83 fL	80 - 94 fL
MCH	29 pg	26 - 32 pg
MCHC	35 g/dL	32 - 36 g/dL

**This patient was diagnosed with Chronic Lymphocytic Leukemia (CLL).**

CLL is a clonal expansion of lymphocytes. The predominant cell usually resembles a small, normal, mature lymphocyte, but may appear abnormal with shredded cytoplasm or a bulging nucleus. CLL is the most common leukemia in adults in Western countries, affecting mostly males over the age of 60. Patients with CLL are often asymptomatic at the time of diagnosis, or have nonspecific symptoms like fatigue, weakness, and weight loss. The disease is often discovered when lymphocytosis is detected upon routine laboratory testing, or during the investigation of other medical problems. As the disease progresses, lymphadenopathy, splenomegaly, anemia, and thrombocytopenia become more common. The prognosis for patients with CLL is highly variable. Some will remain stable for decades without treatment and live a normal life span, while others may progress rapidly and die within months of diagnosis.

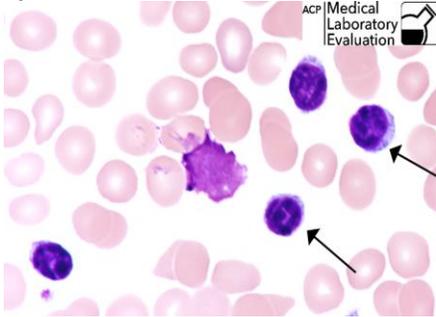
Genetic testing helps to diagnose CLL subsets, determine which type of therapy is most appropriate, what type of response is possible, and the likelihood of complications.

Before the widespread use of flow cytometry for the discrimination of T and B cells, CLL was diagnosed via the peripheral blood smear and a bone marrow examination. The use of flow cytometry has eliminated the requirement for a bone marrow evaluation.

Other tests now used to determine CLL prognosis and treatment include Immunoglobulin heavy chain variable (IgVH), Zeta-chain associated protein (ZAP-70), and CD38 expression.

## BLOOD CELL IDENTIFICATION

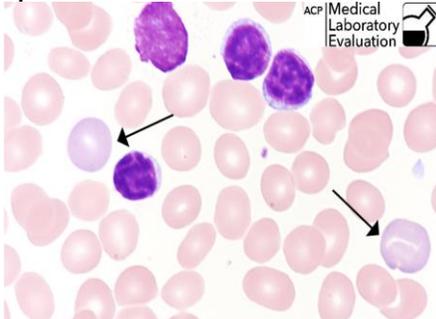
### Specimen BC-7



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Lymphocyte	140	93.33%	Acceptable
Lymphocyte, reactive	8	5.33%	

The arrows in this photograph point to **lymphocytes**. The nucleus is eccentric (off-center) and round to oval in shape. The nuclear chromatin is condensed. The typical cells in CLL are small lymphocytes with clumped chromatin and scant (small amount) of cytoplasm. To view another photo of a mature, resting lymphocyte, see 2019 BC-14.

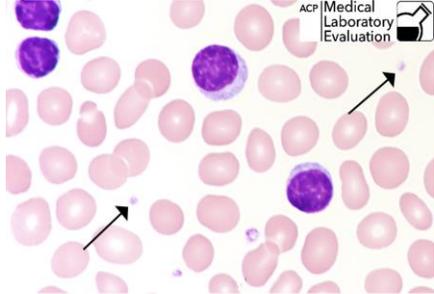
### Specimen BC-8



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Polychromatophilic red cell	141	94.00%	Acceptable
Stomatocyte	6	4.00%	

The arrows in this photograph point to **polychromatophilic red blood cells**. These immature red cells have a distinctive gray-blue color from the diffused residual RNA that will be absorbed later as they fully mature. They are slightly larger than the mature RBCs around them. Presence of polychromatophilic red cells in the peripheral smear (polychromasia) is an indicator of increased bone marrow activity. When the bone marrow cannot keep up with the need for new red cells, either due to hemolysis or bleeding, it compensates by releasing cells into circulation before they are fully mature. These immature cells could be identified as reticulocytes when examined with a supravital stain such as New Methylene Blue. Although the arrowed cell on the right has a slit that resembles a stomatocyte, the one on the left does not, and neither are normochromic as stomatocytes should be. To view a photo of stomatocytes, see 2016 M1 Specimen BC-2. To view another photo of polychromatophilic RBCs, see 2019 M1 Specimen BC-3.

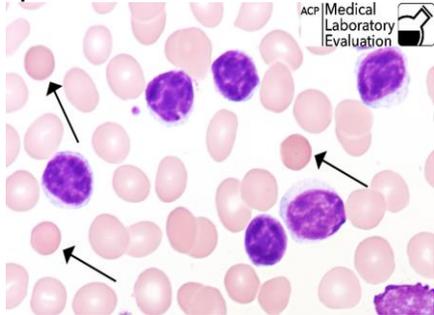
**Specimen BC-9**



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Platelet, normal	150	100%	Acceptable

The arrows in this photograph point to **normal platelets**. Platelets are much smaller than red blood cells. They are rounded with irregular edges, and contain fine, red-violet granules surrounded by bluish cytoplasm. To view another photo of normal platelets, see 2019 M2 BC-7.

**Specimen BC-10**

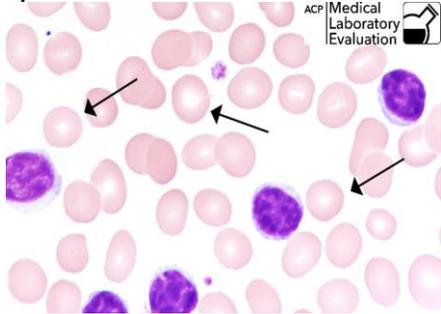


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Spherocyte	135	90.00%	Acceptable
Microcyte	14	9.33%	

The arrows in this photograph point to **spherocytes**. Notice the difference in size and color between these cells and the surrounding red cells. The nucleus of a small lymph is a good reference for estimating the size of red blood cells. A normal RBC should be approximately the same size or slightly smaller than the lymph's nucleus. While spherocytes are commonly confused with microcytes because of their smaller size, the deep red color and absence of central pallor helps to distinguish spherocytes from microcytes. Microcytes look exactly like average RBCs, only smaller. To view a photo of microcytes, see 2019 M3 Specimen BC-15. To view another photo of spherocytes, see 2015 M2 Specimen BC-9.

## BLOOD CELL IDENTIFICATION

### Specimen BC-11

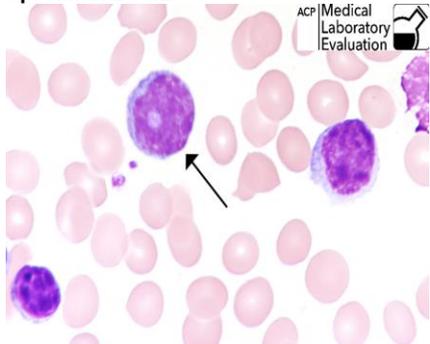


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Erythrocyte, normal	123	82.55%	Acceptable
Microcyte	13	8.72%	
Hypochromic red cell	12	8.05%	

The arrows in this photograph point to **normal erythrocytes** (red blood cells.) The arrowed cells are approximately the same size or slightly smaller than the nucleus of the mature lymphocyte nearby. The area of central pallor occupies about one-third of the diameter of the red cell. To view another photo of normal red cells, see 2019 M2 BC-10.

## BLOOD CELL IDENTIFICATION

### Specimen BC-12



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Prolymphocyte	40	27.78%	Not graded – Educational Challenge
Blast cell	28	19.44%	
Immature/abnormal cell – refer	72	50.00%	
Lymphocyte, reactive	3	2.08%	
Lymphocyte	1	0.69%	

The arrow in this ungraded, educational challenge points to a **prolymphocyte**. A small proportion of patients with CLL gradually develop a prolymphocytoid transformation. A prolymphocyte is at the stage of development between a blast and a mature lymphocyte. It is slightly smaller than a blast and has more cytoplasm, but is larger than a mature lymph, and may have a large, prominent nucleolus. The chromatin structure of the nucleus is more clumped than in a blast, but finer than in a lymph. The nucleus has a combination of red-purple chromatin (immature) and blue-purple chromatin (mature). To view another prolymphocyte, see 2015 M1 Specimen BC-6.

### References:

Cheson, B. D. "Chronic Lymphoid Leukemias and Plasma Cell Disorders." *ACP Medicine*. Ed. D. C. Dale. New York: WebMD, Inc., 2004. 2517-2519.

Reich, P. R.: *Manual of Hematology*. Upjohn, Kalamazoo MI, 1976.

Rodak, B. F.: *Hematology: Clinical Principles and Applications*. 3<sup>rd</sup> ed. W. B. Saunders, Philadelphia, 2007.

## BLOOD BANK

### ABO GROUP

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-6	Group O	5	100%	Acceptable
BB-7	Group O	5	100%	Acceptable
BB-8	Group A	5	100%	Acceptable
BB-9	Group A	5	100%	Acceptable
BB-10	Group B	5	100%	Acceptable

### RH FACTOR (D TYPE)

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-6	Rh Negative	16	100%	Acceptable
BB-7	Rh Positive	15	93.75%	Acceptable
	Rh Negative	1	6.25%	
BB-8	Rh Negative	16	100%	Acceptable
BB-9	Rh Positive	16	100%	Acceptable
BB-10	Rh Positive	16	100%	Acceptable

Specimen BB-7 was graded by 100% referee consensus.

### UNEXPECTED ANTIBODY DETECTION

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-6	No unexpected antibody detected	3	60.00%	Not graded
	Unexpected antibody detected		40.00%	
AB-7	Unexpected antibody detected	5	100%	Acceptable
AB-8	No unexpected antibody detected	5	100%	Acceptable
AB-9	Unexpected antibody detected	5	100%	Acceptable
AB-10	No unexpected antibody detected	5	100%	Acceptable

Specimen AB-6 is an ungraded challenge due to lack of participant consensus.

## BLOOD BANK

### ANTIBODY IDENTIFICATION

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-6	No antibody detected	1	100%	Acceptable
AB-7	Anti-Fy <sup>a</sup>	1	100%	Acceptable
AB-8	No antibody detected	1	100%	Acceptable
AB-9	Anti-K	1	100%	Acceptable
AB-10	No antibody detected	1	100%	Acceptable

### COMPATIBILITY TESTING

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-6	Compatible	3	60.00%	Not graded
	Not Compatible	2	40.00%	
AB-7	Compatible	5	100%	Acceptable
AB-8	Compatible	5	100%	Acceptable
AB-9	Not Compatible	5	100%	Acceptable
AB-10	Compatible	5	100%	Acceptable

Specimen AB-6 is an ungraded challenge due to lack of participant consensus.

**PROTHROMBIN TIME (seconds)**

<u>Reagent/Instrument</u>	<b>Specimen CG-6</b>						<b>Specimen CG-7</b>					
	<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	18.23	1.57	8.6	17.9	15.4 - 21.0	21	13.06	1.11	8.5	12.9	11.0 - 15.1
Dade Innovin												
Dade Behring BFT II	5	18.15	1.79	9.9	17.8	15.4 - 20.9	5	12.43	0.50	4.0	12.4	10.5 - 14.3
Sysmex CA-500/600 series	11	18.05	0.77	4.3	17.9	15.3 - 20.8	12	12.73	0.75	5.9	12.8	10.8 - 14.7
All Coagulation Instruments	16	18.01	1.06	5.9	17.9	15.3 - 20.8	17	12.62	0.68	5.4	12.6	10.7 - 14.6
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	21.65	0.35	1.6	21.7	18.4 - 24.9	5	14.70	0.14	1.0	14.7	12.4 - 17.0
<b>Specimen CG-8</b>						<b>Specimen CG-9</b>						
All Method	21	29.21	3.46	11.8	29.0	24.8 - 33.6	21	10.56	0.93	8.8	10.4	8.9 - 12.2
Dade Innovin												
Dade Behring BFT II	5	29.90	1.76	5.9	30.0	25.4 - 34.4	5	9.55	0.26	2.8	9.6	8.1 - 11.0
Sysmex CA-500/600 series	12	29.21	1.35	4.6	28.8	24.8 - 33.6	11	10.44	0.30	2.9	10.4	8.8 - 12.1
All Coagulation Instruments	17	29.33	1.41	4.8	29.0	24.9 - 33.8	16	10.18	0.49	4.8	10.2	8.6 - 11.8
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	35.90	0.42	1.2	35.9	30.5 - 41.3	5	10.95	0.21	1.9	11.0	9.3 - 12.6
<b>Specimen CG-10</b>												
All Method	20	10.22	0.77	7.5	10.1	8.6 - 11.8						
Dade Innovin												
Dade Behring BFT II	5	9.35	0.29	3.1	9.4	7.9 - 10.8						
Sysmex CA-500/600 series	11	10.14	0.26	2.6	10.1	8.6 - 11.7						
All Coagulation Instruments	16	9.91	0.43	4.4	9.9	8.4 - 11.4						
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	11.05	0.35	3.2	11.1	9.3 - 12.8						

**PROTHROMBIN TIME-INTERNATIONAL NORMALIZED RATIO (INR)**

<u>Reagent/Instrument</u>	<u>Specimen CG-6</u>						<u>Specimen CG-7</u>					
	<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	1.82	0.13	7.2	1.8	1.4 - 2.2	21	1.29	0.09	7.3	1.3	1.0 - 1.6
Dade Innovin												
Dade Behring BFT II	5	1.83	0.17	9.4	1.9	1.4 - 2.2	5	1.33	0.05	3.8	1.3	1.0 - 1.6
Sysmex CA-500/600 series	11	1.82	0.06	3.3	1.8	1.4 - 2.2	12	1.27	0.09	7.0	1.3	1.0 - 1.6
All Coagulation Instruments	16	1.81	0.10	5.3	1.8	1.4 - 2.2	17	1.28	0.08	6.5	1.3	1.0 - 1.6
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	2.00	0.14	7.1	2.0	1.6 - 2.4	5	1.30	0.14	10.9	1.3	1.0 - 1.6
	<u>Specimen CG-8</u>						<u>Specimen CG-9</u>					
All Method	21	2.97	0.24	8.0	3.0	2.3 - 3.6	21	1.02	0.09	9.2	1.0	0.8 - 1.3
Dade Innovin												
Dade Behring BFT II	5	2.83	0.24	8.4	2.9	2.2 - 3.4	5	1.03	0.05	4.9	1.0	0.8 - 1.3
Sysmex CA-500/600 series	12	2.99	0.14	4.8	3.0	2.3 - 3.6	12	1.06	0.09	8.5	1.0	0.8 - 1.3
All Coagulation Instruments	17	2.95	0.17	5.9	3.0	2.3 - 3.6	16	1.03	0.05	4.6	1.0	0.8 - 1.3
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	3.35	0.35	10.6	3.4	2.6 - 4.1	5	0.95	0.07	7.4	1.0	0.7 - 1.2
	<u>Specimen CG-10</u>											
All Method	19	0.99	0.04	4.1	1.0	0.7 - 1.2						
Dade Innovin												
Dade Behring BFT II	5	1.00	0.01	0.0	1.0	0.8 - 1.2						
Sysmex CA-500/600 series	10	1.00	0.01	0.0	1.0	0.8 - 1.2						
All Coagulation Instruments	15	1.00	0.01	0.0	1.0	0.8 - 1.2						
HemosIL RecombiPlasTin 2G												
IL ACL, all models	5	1.00	0.14	14.1	1.0	0.8 - 1.2						



**COAGUCHEK XS PLUS PROTHROMBIN TIME (seconds)**

<i><u>Instrument</u></i>	<b>Specimen XS-6</b>						<b>Specimen XS-7</b>					
	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	14	13.86	0.27	1.9	13.8	11.7 - 16.0	14	33.40	0.81	2.4	33.4	28.3 - 38.5
All Roche CoaguChek XS Plus Instruments	14	13.86	0.27	1.9	13.8	11.7 - 16.0	14	33.40	0.81	2.4	33.4	28.3 - 38.5
Roche CoaguChek XS Plus - Waived	9	13.83	0.30	2.2	13.8	11.7 - 16.0	9	32.69	2.15	6.6	33.3	27.7 - 37.6
Roche CoaguChek XS Plus	6	15.85	4.78	30.2	14.0	13.4 - 18.3	6	33.47	0.78	2.3	33.5	28.4 - 38.5
	<b>Specimen XS-8</b>						<b>Specimen XS-9</b>					
All Method	8	23.93	0.21	0.9	23.9	20.3 - 27.6	8	33.25	0.49	1.5	33.3	28.2 - 38.3
All Roche CoaguChek XS Plus Instruments	8	23.93	0.21	0.9	23.9	20.3 - 27.6	8	33.25	0.49	1.5	33.3	28.2 - 38.3
Roche CoaguChek XS Plus - Waived	4	-	-	-	23.8	20.3 - 27.6	4	-	-	-	33.1	28.2 - 38.3
Roche CoaguChek XS Plus	4	-	-	-	24.1	20.3 - 27.6	4	-	-	-	33.4	28.2 - 38.3
	<b>Specimen XS-10</b>											
All Method	8	13.73	0.10	0.7	13.8	11.6 - 15.8						
All Roche CoaguChek XS Plus Instruments	8	13.73	0.10	0.7	13.8	11.6 - 15.8						
Roche CoaguChek XS Plus - Waived	4	-	-	-	13.8	11.6 - 15.8						
Roche CoaguChek XS Plus	4	-	-	-	13.7	11.6 - 15.8						

**COAGUCHEK XS PLUS PROTHROMBIN TIME-INTERNATIONAL NORMALIZED RATIO (INR)**

<u>Instrument</u>	<b>Specimen XS-6</b>						<b>Specimen XS-7</b>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	26	1.15	0.05	4.4	1.2	0.9 - 1.4	26	2.77	0.08	3.0	2.8	2.2 - 3.4
All Roche CoaguChek XS Plus Instruments	26	1.15	0.05	4.4	1.2	0.9 - 1.4	26	2.77	0.08	3.0	2.8	2.2 - 3.4
Roche CoaguChek XS Plus - Waived	20	1.16	0.05	4.4	1.2	0.9 - 1.4	19	2.76	0.08	3.0	2.8	2.2 - 3.4
Roche CoaguChek XS Plus	7	1.30	0.40	30.8	1.2	1.0 - 1.6	7	2.79	0.09	3.2	2.8	2.2 - 3.4
<u>Instrument</u>	<b>Specimen XS-8</b>						<b>Specimen XS-9</b>					
	<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	2.01	0.04	1.9	2.0	1.6 - 2.5	10	2.77	0.05	1.8	2.8	2.2 - 3.4
All Roche CoaguChek XS Plus Instruments	10	2.01	0.04	1.9	2.0	1.6 - 2.5	10	2.77	0.05	1.8	2.8	2.2 - 3.4
Roche CoaguChek XS Plus - Waived	5	2.02	0.04	2.2	2.0	1.6 - 2.5	5	2.76	0.05	2.0	2.8	2.2 - 3.4
Roche CoaguChek XS Plus	4	-	-	-	2.0	1.6 - 2.5	4	-	-	-	2.8	2.2 - 3.4
<u>Instrument</u>	<b>Specimen XS-10</b>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	1.10	0.01	0.0	1.1	0.8 - 1.4						
All Roche CoaguChek XS Plus Instruments	10	1.10	0.01	0.0	1.1	0.8 - 1.4						
Roche CoaguChek XS Plus - Waived	5	1.10	0.01	0.0	1.1	0.8 - 1.4						
Roche CoaguChek XS Plus	4	-	-	-	1.1	0.8 - 1.4						

**COAGUCHEK XS - INTERNATIONAL NORMALIZED RATIO (INR)**

<u>Instrument</u>	<b>Specimen INX-3</b>						<b>Specimen INX-4</b>					
	<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>
Roche CoaguChek XS	87	2.78	0.08	2.8	2.8	2.2 - 3.4	87	2.01	0.07	3.4	2.0	1.6 - 2.5

**i-Stat PROTHROMBIN TIME (seconds)**

<u>Instrument</u>	Specimen PTI-6						Specimen PTI-7					
	<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>
i-Stat Prothrombin Time	5	23.90	0.66	2.7	23.8	20.3 - 27.5	5	15.00	1.47	9.8	14.7	12.7 - 17.3
<u>Instrument</u>	Specimen PTI-8						Specimen PTI-9					
	<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>
i-Stat Prothrombin Time	5	24.50	0.95	3.9	24.0	20.8 - 28.2	5	23.83	1.45	6.1	23.8	20.2 - 27.5
<u>Instrument</u>	Specimen PTI-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
i-Stat Prothrombin Time	5	14.63	1.15	7.9	15.3	12.4 - 16.9						

**i-Stat PROTHROMBIN TIME - INTERNATIONAL NORMALIZED RATIO (INR)**

<u>Instrument</u>	Specimen PTI-6						Specimen PTI-7					
	<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>
i-Stat Prothrombin Time	5	2.07	0.06	2.8	2.1	1.6 - 2.5	5	1.23	0.15	12.4	1.2	0.9 - 1.5
<u>Instrument</u>	Specimen PTI-8						Specimen PTI-9					
	<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>
i-Stat Prothrombin Time	5	2.13	0.06	2.7	2.1	1.7 - 2.6	5	2.03	0.15	7.5	2.0	1.6 - 2.5
<u>Instrument</u>	Specimen PTI-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
i-Stat Prothrombin Time	5	1.23	0.12	9.4	1.3	0.9 - 1.5						

**FLUID CELL COUNT – WHITE BLOOD CELL COUNT (µL)**

<u>Instrument</u>	Specimen BF-3						Specimen BF-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	1	-	-	-	Not graded	1 - 3	1	-	-	-	318	Not graded

**FLUID CELL COUNT – RED BLOOD CELL COUNT (µL)**

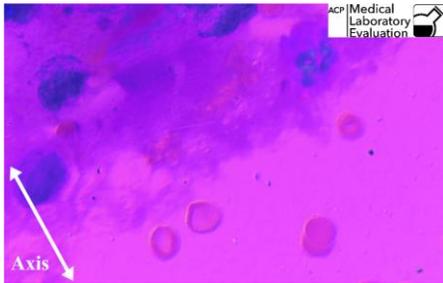
<u>Instrument</u>	Specimen BF-3						Specimen BF-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	1	-	-	-	Not graded	1 - 3	1	-	-	-	674	Not graded

**2020 M2**  
**FLUID CRYSTAL IDENTIFICATION**  
**Specimens FC-3 and FC-4**

Crystals can generally be classified as either optically isotropic or anisotropic. Isotropic solids refract light rays equally in all directions throughout the crystalline structure, regardless of the crystal's orientation to the light source. In contrast, anisotropic crystals interact with light in a manner that is dependent upon the alignment of the crystal. Anisotropic crystals have an internal structure that will cause a ray of light to split into two rays, each traveling in a different direction. A light beam hitting the crystal from one direction or angle will react differently than a beam hitting the crystal at a different angle. This property of splitting light is called **birefringence** or double refraction.

Microscopic examination of synovial fluid for crystals is an important diagnostic test in the evaluation of arthritis. Some crystals can be identified by their shape or morphology alone. Others have similar shapes and need specialized techniques for identification. Using compensated polarized light helps us to identify crystals based on the optical differences described above. Adding a red compensator filter separates the microscope's light rays into slow-moving and fast-moving vibrations or waves. The compensator is marked with an arrow indicating the direction of the slow vibration. The "axis" in the photos below indicates the direction of the slow wave. Color produced by a crystal aligned with the slow-vibration ray of light can be used to identify the crystal. This difference in color is due to the molecular structure inside the crystal, which either allows the light to pass through unchanged, or impedes the light. A **negatively** birefringent crystal such as MSU will appear yellow when aligned with the axis and blue when perpendicular to the axis. Conversely, a **positively** birefringent crystal such as CPPD will appear blue when aligned with the axis and yellow when perpendicular.

**Specimen FC-3**

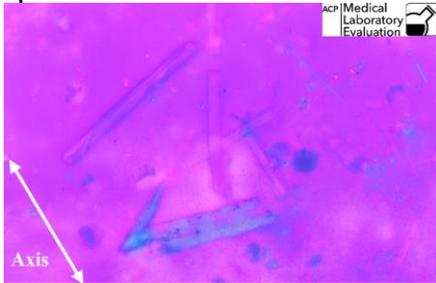


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
No crystals observed	3	100%	Acceptable

There are **no crystals present** in this photograph of a synovial fluid preparation. The round objects in this photo are red blood cells and white blood cells.

**2020 M2  
FLUID CRYSTAL IDENTIFICATION**

**Specimen FC-4**



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Cholesterol crystals	1	33.33%	Not graded
CPPD crystals	1	33.33%	
Other, not listed	1	33.33%	

The large rectangular objects in this photograph are **steroid crystals**. Steroids are drugs that are used to treat musculoskeletal and joint pain by reducing inflammation. They are often injected directly into the joints to treat conditions such as rheumatoid arthritis and gout. There are several different corticosteroids, and they can exhibit positive or negative birefringence depending on the chemical composition. Examples of steroid drugs include cortisone, triamcinolone, and prednisone. Steroid crystals may be seen as an artefact in synovial fluids following intra-articular injection. Having the patient's clinical history is helpful in these cases. They can be confused with other rod-shaped or needle-shaped crystals, but steroids are significantly larger than MSU and CPPD, and generally appear in greater numbers. To view another photo of steroid crystals, see 2019 M3 Specimen FC-5.

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Carr, J.H., Rodak, B.F.: *Clinical Hematology Atlas, 3<sup>rd</sup> ed.* Saunders, St. Louis, 2009.

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## MICROALBUMIN, DIPSTICK

### Specimen UM-2

#### Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/L</u>	<u>20 mg/L</u>	<u>30 mg/L</u>	<u>50 mg/L</u>	<u>80 mg/L</u>	<u>100 mg/L</u>	<u>150 mg/L</u>	<u>+ (4 - 8 mg/dL)</u>	<u>++ (&gt;8 mg/dL)</u>
ALL METHODS	25	-	2	-	9	-	14	-	-	-	-
Consult Diagnostics Urine Analyzer	3	-	-	-	3	-	-	-	-	-	-
Siemens Clinitek Microalbumin	21	-	2	-	6	-	13	-	-	-	-
Uriscan Optima	1	-	-	-	-	-	1	-	-	-	-

## CREATININE, DIPSTICK

### Specimen UM-2

#### Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/dL</u>	<u>30 mg/dL</u>	<u>50 mg/dL</u>	<u>100 mg/dL</u>	<u>200 mg/dL</u>	<u>300 mg/dL</u>
ALL METHODS	26	-	-	1	1	-	10	14
Consult Diagnostics Urine Analyzer	3	-	-	-	-	-	3	-
Siemens Clinitek Microalbumin	21	-	-	1	1	-	7	12
Siemens Multistix Pro	2	-	-	-	-	-	-	2

## MICROALBUMIN, QUANTITATIVE (mg/L)

### Specimen UM-2

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	41	73.13	6.82	9.3	71.8	51.1 - 95.1
Beckman AU	13	69.60	2.26	3.3	69.9	48.7 - 90.5

## CREATININE, URINE (mg/dL)

### Specimen UM-2

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	34	200.53	14.67	7.3	199.7	166.4 - 234.7
Beckman AU	11	184.42	6.01	3.3	185.6	153.0 - 215.8

**WAIVED HEMATOLOGY–HEMOGLOBIN (g/dL)**

<u>Instrument</u>	Specimen HD-6						Specimen HD-7					
	<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	79	6.07	0.14	2.4	6.1	5.6 - 6.5	77	13.27	0.45	3.4	13.3	12.3 - 14.3
All Stanbio Methods	19	6.16	0.13	2.0	6.1	5.7 - 6.6	18	13.51	0.49	3.6	13.6	12.5 - 14.5
Alere (Stanbio) HemoPoint H2	19	6.16	0.13	2.0	6.1	5.7 - 6.6	18	13.51	0.49	3.6	13.6	12.5 - 14.5
HemoCue 201/+	60	6.04	0.14	2.2	6.0	5.6 - 6.5	57	13.25	0.34	2.6	13.3	12.3 - 14.2

**WAIVED HEMATOLOGY–HEMATOCRIT (percent)**

<u>Instrument</u>	Specimen HD-6						Specimen HD-7					
	<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	16.55	3.24	19.6	18.0	10.0 - 23.1	10	36.88	4.44	12.0	38.9	28.0 - 45.8

**KOH SKIN PREPARATION**

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
K-3	Yeast/fungal elements present	77	97.47%	Acceptable
	Yeast/fungal elements absent	2	2.53%	

Organism present in specimen K-3: *Tritirachium oryzae*.

K-4	Yeast/fungal elements absent	74	94.87%	Acceptable
	Yeast/fungal elements present	4	5.13%	

Organism present in specimen K-4: *Corynebacterium striatum*.

## URINALYSIS DIPSTICK–SPECIFIC GRAVITY

### Specimen UA-2

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	583	1.0157	0.0050	0.5	1.015	1.005 - 1.026
All Refractive Index Methods	7	1.0257	0.0040	0.4	1.028	1.015 - 1.036
All Roche Methods	10	1.0115	0.0041	0.4	1.010	1.001 - 1.022
All Siemens Methods	457	1.0168	0.0045	0.4	1.020	1.006 - 1.027
Consult Diagnostics Urine Analyzer	9	1.0122	0.0027	0.3	1.010	1.002 - 1.023
Diagnostic Test Group Clarity Urocheck 120	8	1.0119	0.0027	0.3	1.010	1.001 - 1.022
Henry Schein Urispec / Urispec Plus	16	1.0144	0.0016	0.2	1.015	1.004 - 1.025
McKesson 10SG Reagent Strips	5	1.0090	0.0022	0.2	1.010	0.999 - 1.019
McKesson 120 Urine Analyzer	22	1.0114	0.0023	0.2	1.010	1.001 - 1.022
Other Dipstick Method	6	1.0108	0.0021	0.2	1.010	1.000 - 1.021
Roche Chemstrips	24	1.0071	0.0036	0.4	1.005	0.997 - 1.018
Roche Urisys	7	1.0107	0.0020	0.2	1.010	1.000 - 1.021
Siemens Clinitek 50	5	1.0160	0.0022	0.2	1.015	1.006 - 1.026
Siemens Clinitek Advantus	15	1.0157	0.0025	0.2	1.015	1.005 - 1.026
Siemens Clinitek Status / Status+	339	1.0187	0.0024	0.2	1.020	1.008 - 1.029
Siemens Multistix Pro	7	1.0129	0.0070	0.7	1.010	1.002 - 1.023
Siemens Reagent Strips	87	1.0095	0.0039	0.4	1.010	0.999 - 1.020

**URINALYSIS DIPSTICK-pH**

**Specimen UA-2**

**Participant Results**

<u>Method</u>	<u>Labs</u>	<u>≤3.5</u>	<u>4.0</u>	<u>4.5</u>	<u>5.0</u>	<u>5.5</u>	<u>6.0</u>	<u>6.5</u>	<u>7.0</u>	<u>7.5</u>	<u>8.0</u>	<u>8.5</u>	<u>≥9.0</u>
ALL METHODS	605	1	3	-	1	-	3	-	5	16	216	359	1
BTNX Rapid Response U120/U500	1	-	-	-	-	-	-	-	-	-	1	-	-
Consult Diagnostics Reagent Strips	3	-	-	-	-	-	-	-	-	-	2	-	1
Consult Diagnostics Urine Analyzer	10	-	-	-	-	-	-	-	-	1	8	1	-
CTMI CT-120 Urine Analyzer	2	-	-	-	-	-	-	-	-	-	2	-	-
Diagnostic Test Group Clarity Urocheck	4	-	-	-	-	-	-	-	-	-	4	-	-
Diagnostic Test Group Clarity Urocheck 120	8	-	-	-	-	-	-	-	-	1	7	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	-	-	-	-	1	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	1	-	-
Henry Schein Urispec / Urispec Plus	15	-	-	-	-	-	-	-	1	-	14	-	-
Immunostics Detector Urine Strips	1	-	-	-	-	-	-	-	-	-	1	-	-
Iris Ichem VELOCITY Urine Chemistry System	1	-	-	-	-	-	-	-	-	-	1	-	-
McKesson 10SG Reagent Strips	6	-	-	-	-	-	1	-	-	-	4	1	-
McKesson 120 Urine Analyzer	23	-	-	-	-	-	-	-	-	-	21	2	-
Medline 120 Urine Analyzer	3	-	-	-	-	-	-	-	1	-	2	-	-
Medline Urinalysis Reagent Strips	4	-	-	-	-	-	-	-	-	2	2	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	-	-	1	-	-
Other Dipstick Method	6	-	-	-	-	-	-	-	1	1	4	-	-
Roche Chemstrip 101	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche Chemstrips	29	-	-	-	-	-	-	-	2	-	26	1	-
Roche cobas u 411	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche Urisys	7	-	-	-	-	-	-	-	-	-	7	-	-
Siemens Clinitek 50	6	-	-	-	-	-	-	-	-	3	2	1	-
Siemens Clinitek 500	2	-	-	-	-	-	-	-	-	-	2	-	-
Siemens Clinitek Advantus	16	-	-	-	-	-	-	-	-	-	13	3	-
Siemens Clinitek Status / Status+	347	-	2	-	1	-	-	-	-	6	13	325	-
Siemens Multistix Pro	3	-	-	-	-	-	1	-	-	-	1	1	-
Siemens Reagent Strips	99	1	1	-	-	-	1	-	-	-	73	23	-
Uriscan Optima	2	-	-	-	-	-	-	-	-	2	-	-	-
UriScan Reagent Strips	1	-	-	-	-	-	-	-	-	-	-	1	-

**URINALYSIS DIPSTICK–PROTEIN QUALITATIVE**

**Specimen UA-2**

<u>Method</u>	<i>Participant Results</i>												
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>10 - 20</u> <u>mg/dL</u>	<u>30 - 70</u> <u>mg/dL</u>	<u>75</u> <u>mg/dL</u>	<u>100 - 200</u> <u>mg/dL</u>	<u>≥300 - 600</u> <u>mg/dL</u>	<u>&gt;600 or ≥1000</u> <u>mg/dL</u>
ALL METHODS	609	5	1	-	126	115	6	-	4	-	116	235	1
BTNX Rapid Response U120/U500	1	-	-	-	1	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	-	-	-	1	1	1	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	10	-	-	-	7	1	-	-	-	-	1	1	-
CTMI CT-120 Urine Analyzer	2	-	-	-	1	-	-	-	-	-	1	-	-
Diagnostic Test Group Clarity Urocheck	4	-	-	-	3	1	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	8	-	-	-	6	2	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	1	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	2	-	-	-	-	1	-	-	-	-	1	-	-
Henry Schein Urispec / Urispec Plus	16	-	-	-	-	-	-	-	1	-	15	-	-
Immunostics Detector Urine Strips	1	-	-	-	-	1	-	-	-	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	1	-	-	-	1	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	6	-	-	-	4	2	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	23	1	-	-	15	5	-	-	-	-	2	-	-
Medline 120 Urine Analyzer	3	-	-	-	2	1	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	4	-	-	-	3	-	-	-	-	-	1	-	-
NDC Pro Advantage	1	-	-	-	1	-	-	-	-	-	-	-	-
Other Dipstick Method	6	-	-	-	1	3	-	-	-	-	1	1	-
Roche Chemstrip 101	1	-	-	-	1	-	-	-	-	-	-	-	-
Roche Chemstrips	32	1	-	-	21	3	-	-	2	-	4	1	-

**URINALYSIS DIPSTICK-PROTEIN QUALITATIVE (cont'd)**

**Specimen UA-2**

<u>Method</u>	<u>Participant Results</u>												
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>10 - 20</u> <u>mg/dL</u>	<u>30 - 70</u> <u>mg/dL</u>	<u>75</u> <u>mg/dL</u>	<u>100 - 200</u> <u>mg/dL</u>	<u>≥300 - 600</u> <u>mg/dL</u>	<u>&gt;600 or ≥1000</u> <u>mg/dL</u>
Roche cobas u 411	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche Urisys	7	-	-	-	2	-	-	-	1	-	4	-	-
Siemens Clinitek 50	6	-	-	-	-	1	-	-	-	-	-	5	-
Siemens Clinitek 500	2	-	-	-	1	-	-	-	-	-	1	-	-
Siemens Clinitek Advantus	16	-	-	-	8	-	-	-	-	-	6	2	-
Siemens Clinitek Status / Status+	345	3	-	-	13	69	-	-	-	-	54	206	-
Siemens Multistix Pro	3	-	-	-	-	-	-	-	-	-	1	2	-
Siemens Reagent Strips	98	-	-	-	30	24	5	-	-	-	21	17	1
Siemens Uristix	2	-	1	-	1	-	-	-	-	-	-	-	-
Uriscan Optima	2	-	-	-	1	-	-	-	-	-	1	-	-
UriScan Reagent Strips	1	-	-	-	1	-	-	-	-	-	-	-	-

## URINALYSIS DIPSTICK–GLUCOSE

### Specimen UA-2

<u>Method</u>	<u>Labs</u>	<u>Negative or Normal</u>	<u>Trace</u>	<u>(1+)</u>	<u>Participant Results</u>				<u>30 - 100 mg/dL</u>	<u>150 - 300 mg/dL</u>	<u>500 mg/dL</u>	<u>&gt;500 or ≥1000 or ≥2000 mg/dL</u>
					<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>					
ALL METHODS	612	607	-	1	-	-	-	1	1	1	1	
BioScan Reagent Strips	1	1	-	-	-	-	-	-	-	-	-	
BTNX Rapid Response U120/U500	1	1	-	-	-	-	-	-	-	-	-	
Consult Diagnostics Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	
Consult Diagnostics Urine Analyzer	10	10	-	-	-	-	-	-	-	-	-	
CTMI CT-120 Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-	
Diagnostic Test Group Clarity Urocheck	5	5	-	-	-	-	-	-	-	-	-	
Diagnostic Test Group Clarity Urocheck 120	7	7	-	-	-	-	-	-	-	-	-	
Germaine Labs AimStrip Urine Analyzer	1	1	-	-	-	-	-	-	-	-	-	
Henry Schein One Step Plus	1	1	-	-	-	-	-	-	-	-	-	
Henry Schein Urispec / Urispec Plus	16	16	-	-	-	-	-	-	-	-	-	
Immunostics Detector Urine Strips	1	1	-	-	-	-	-	-	-	-	-	
Iris Ichem VELOCITY Urine Chemistry System	1	1	-	-	-	-	-	-	-	-	-	
McKesson 10SG Reagent Strips	6	6	-	-	-	-	-	-	-	-	-	
McKesson 120 Urine Analyzer	23	23	-	-	-	-	-	-	-	-	-	
Medline 120 Urine Analyzer	3	3	-	-	-	-	-	-	-	-	-	
Medline Urinalysis Reagent Strips	4	4	-	-	-	-	-	-	-	-	-	
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-	
Other Dipstick Method	6	6	-	-	-	-	-	-	-	-	-	
Roche Chemstrip 101	1	1	-	-	-	-	-	-	-	-	-	
Roche Chemstrips	31	30	-	-	-	-	-	1	-	-	-	
Roche cobas u 411	1	1	-	-	-	-	-	-	-	-	-	
Roche Criterion Analyzer	1	1	-	-	-	-	-	-	-	-	-	
Roche Urisys	7	7	-	-	-	-	-	-	-	-	-	
Siemens Clinitek 50	6	6	-	-	-	-	-	-	-	-	-	
Siemens Clinitek 500	2	2	-	-	-	-	-	-	-	-	-	
Siemens Clinitek Advantus	16	16	-	-	-	-	-	-	-	-	-	
Siemens Clinitek Status / Status+	347	345	-	1	-	-	-	-	1	-	-	
Siemens Multistix Pro	3	3	-	-	-	-	-	-	-	-	-	
Siemens Reagent Strips	100	99	-	-	-	-	1	-	-	-	-	
Siemens Uristix	2	1	-	-	-	-	-	-	-	-	1	
Uriscan Optima	2	2	-	-	-	-	-	-	-	-	-	
UriScan Reagent Strips	1	1	-	-	-	-	-	-	-	-	-	

**URINALYSIS DIPSTICK--KETONES**

**Specimen UA-2**

<u>Method</u>	<u>Labs</u>	<u>Participant Results</u>													
		<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>5 - 10 mg/dL</u>	<u>15 - 25 mg/dL</u>	<u>40 - 60 mg/dL</u>	<u>80 - 100 mg/dL</u>	<u>≥150 mg/dL</u>
ALL METHODS	605	4	-	-	-	65	2	3	98	86	-	-	2	35	310
BTNX Rapid Response U120/U500	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	-	-	-	-	1	-	-	-	2	-	-	-	-	-
Consult Diagnostics Urine Analyzer	10	-	-	-	-	-	-	-	8	-	-	-	-	1	1
CTMI CT-120 Urine Analyzer	2	-	-	-	-	-	-	-	1	-	-	-	-	1	-
Diagnostic Test Group Clarity Urocheck	5	-	-	-	-	-	-	-	4	1	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	7	-	-	-	-	-	-	-	7	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Henry Schein Urispec / Urispec Plus	16	-	-	-	-	-	-	-	1	-	-	-	-	-	15
Immunostics Detector Urine Strips	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	6	-	-	-	-	1	-	-	3	2	-	-	-	-	-
McKesson 120 Urine Analyzer	23	-	-	-	-	-	-	-	21	-	-	-	-	2	-
Medline 120 Urine Analyzer	3	-	-	-	-	-	-	-	3	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	4	-	-	-	-	-	-	1	1	1	-	-	-	-	1
NDC Pro Advantage	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Other Dipstick Method	6	-	-	-	-	2	1	-	-	1	-	-	-	-	2
Roche Chemstrip 101	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Roche Chemstrips	29	-	-	-	-	10	-	1	16	1	-	-	-	-	1
Roche cobas u 411	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Roche Urisys	7	1	-	-	-	-	-	-	1	-	-	-	1	-	4
Siemens Clinitek 50	6	-	-	-	-	-	-	-	1	-	-	-	-	4	1
Siemens Clinitek 500	2	-	-	-	-	-	-	-	1	-	-	-	-	1	-
Siemens Clinitek Advantus	16	-	-	-	-	-	-	-	9	-	-	-	-	6	1
Siemens Clinitek Status / Status+	347	1	-	-	-	-	1	-	14	70	-	-	1	15	245
Siemens Multistix Pro	4	1	-	-	-	1	-	-	-	-	-	-	-	-	2
Siemens Reagent Strips	98	1	-	-	-	50	-	-	1	8	-	-	-	4	34
Uriscan Optima	2	-	-	-	-	-	-	-	1	-	-	-	-	1	-

**URINALYSIS DIPSTICK–BILIRUBIN**

**Specimen UA-2**

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Positive (Ictotest ONLY)</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Participant Results</u>								<u>0.5 - 1.0 mg/dL</u>	<u>2.0 - 4.0 mg/dL</u>	<u>6.0 - 10.0 mg/dL</u>	<u>&gt;10.0 mg/dL</u>
							<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>							
ALL METHODS	583	17	1	4	81	219	37	76	103	16	5	8	16	-	-			
BTNX Rapid Response U120/U500	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-			
Consult Diagnostics Reagent Strips	3	-	-	-	-	-	1	-	1	1	-	-	-	-	-			
Consult Diagnostics Urine Analyzer	10	-	-	-	1	-	-	8	-	-	-	1	-	-	-			
CTMI CT-120 Urine Analyzer	2	-	-	-	-	-	-	1	-	-	-	1	-	-	-			
Diagnostic Test Group Clarity Urocheck	5	1	-	1	-	-	-	3	-	-	-	-	-	-	-			
Diagnostic Test Group Clarity Urocheck 120	7	-	-	2	-	-	-	4	1	-	-	-	-	-	-			
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-			
Henry Schein One Step Plus	2	-	-	-	-	-	-	1	-	-	-	-	1	-	-			
Henry Schein Urispec / Urispec Plus	16	-	-	-	-	-	-	-	-	1	3	-	12	-	-			
Immunostics Detector Urine Strips	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-			
Iris Ichem VELOCITY Urine Chemistry System	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
McKesson 10SG Reagent Strips	6	1	-	-	-	1	-	4	-	-	-	-	-	-	-			
McKesson 120 Urine Analyzer	22	1	-	-	-	-	-	18	2	-	-	1	-	-	-			
Medline 120 Urine Analyzer	4	-	-	-	-	-	-	1	2	-	-	1	-	-	-			
Medline Urinalysis Reagent Strips	3	-	-	-	-	-	-	2	-	-	-	-	1	-	-			
NDC Pro Advantage	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-			
Other Dipstick Method	3	-	-	-	-	-	1	1	-	-	1	-	-	-	-			
Roche Chemstrip 101	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-			
Roche Chemstrips	27	3	-	-	1	1	1	-	18	3	-	-	-	-	-			
Roche cobas u 411	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-			
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-			
Roche Urisys	7	2	-	1	-	-	-	1	-	1	-	2	-	-	-			
Siemens Clinitek 50	6	-	-	-	1	3	-	-	2	-	-	-	-	-	-			
Siemens Clinitek 500	2	-	-	-	1	-	-	-	1	-	-	-	-	-	-			
Siemens Clinitek Advantus	13	-	-	-	2	4	-	1	6	-	-	-	-	-	-			
Siemens Clinitek Status / Status+	341	3	-	-	62	194	-	24	57	-	-	-	1	-	-			
Siemens Ictotest	2	-	1	-	-	-	-	-	1	-	-	-	-	-	-			
Siemens Multistix Pro	3	-	-	-	1	1	1	-	-	-	-	-	-	-	-			
Siemens Reagent Strips	88	4	-	-	12	15	33	3	10	10	1	-	-	-	-			
Sulfosalicylic Acid	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-			
Uriscan Optima	2	-	-	-	-	-	-	-	1	-	-	1	-	-	-			

**URINALYSIS DIPSTICK–UROBILINOGEN**

**Specimen UA-2**

<u>Method</u>	<u>Labs</u>	<i>Participant Results</i>				
		<u>Normal or 0.0 - 0.2 mg/dL or &lt;3.2 µmol/L</u>	<u>1.0 or &lt;2.0 mg/dL or 16 or 17 µmol/L</u>	<u>2.0/3.0 mg/dL or 34 or 35 µmol/L</u>	<u>4.0 or 4.0/6.0 mg/dL or 70 µmol/L</u>	<u>≥8.0 or ≥12.0 mg/dL or ≥140 or 200 µmol/L</u>
ALL METHODS	580	76	36	75	365	28
BTNX Rapid Response U120/U500	1	1	-	-	-	-
Consult Diagnostics Reagent Strips	3	-	-	2	-	1
Consult Diagnostics Urine Analyzer	10	8	-	-	2	-
CTMI CT-120 Urine Analyzer	2	2	-	-	-	-
Diagnostic Test Group Clarity Urocheck	4	1	1	2	-	-
Diagnostic Test Group Clarity Urocheck 120	8	2	6	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	1	-	-	-	-
Henry Schein One Step Plus	2	1	-	-	1	-
Henry Schein Urispec / Urispec Plus	16	16	-	-	-	-
Immunostics Detector Urine Strips	1	-	-	1	-	-
McKesson 10SG Reagent Strips	6	2	1	2	-	1
McKesson 120 Urine Analyzer	23	19	3	-	1	-
Medline 120 Urine Analyzer	3	1	2	-	-	-
Medline Urinalysis Reagent Strips	3	1	-	2	-	-
NDC Pro Advantage	1	1	-	-	-	-
Other Dipstick Method	3	-	1	2	-	-
Roche Chemstrip 101	1	1	-	-	-	-
Roche Chemstrips	27	9	6	1	11	-
Roche cobas u 411	1	-	1	-	-	-
Roche Criterion Analyzer	1	1	-	-	-	-
Roche Urisys	7	1	6	-	-	-
Siemens Clinitek 50	6	1	-	4	1	-
Siemens Clinitek 500	2	-	1	1	-	-
Siemens Clinitek Advantus	14	-	1	5	8	-
Siemens Clinitek Status / Status+	339	3	-	18	305	13
Siemens Multistix Pro	2	-	-	1	1	-
Siemens Reagent Strips	91	4	7	34	33	13
Uriscan Optima	2	-	-	-	2	-

**URINALYSIS DIPSTICK–BLOOD/HEMOGLOBIN**

Specimen UA-2

<u>Method</u>	<u>Labs</u>	<u>Participant Results</u>										<u>5 - 25</u> <u>Erv/μL</u>	<u>50 -</u> <u>100</u> <u>Erv/μL</u>	<u>200 -</u> <u>300</u> <u>Erv/μL</u>	<u>±0.03</u> <u>mg/dL</u>	<u>0.06</u> <u>-</u> <u>0.10</u> <u>mg/</u> <u>dL</u>	<u>0.2 -</u> <u>0.5</u> <u>mg/</u> <u>dL</u>	<u>≥ 1.0</u> <u>mg/</u> <u>dL</u>
		<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>(5+)</u>							
ALL METHODS	608	3	1	-	24	332	-	8	183	1	1	-	-	54	-	-	-	1
BTNX Rapid Response U120/U500	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	-	-	-	1	-	-	1	1	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	10	-	-	-	-	1	-	-	8	-	-	-	-	1	-	-	-	-
CTMI CT-120 Urine Analyzer	2	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-
Diagnostic Test Group Clarity Urocheck	5	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	7	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Henry Schein Urispec / Urispec Plus	16	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	-
Immunostics Detector Urine Strips	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	6	-	-	-	-	1	-	-	5	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	23	-	-	-	-	-	-	-	21	-	-	-	-	2	-	-	-	-
Medline 120 Urine Analyzer	3	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	4	-	-	-	-	1	-	-	2	-	-	-	-	1	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Other Dipstick Method	6	-	-	-	-	2	-	-	3	-	1	-	-	-	-	-	-	-
Roche Chemstrip 101	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Roche Chemstrips	32	1	-	-	-	4	-	1	4	-	-	-	-	22	-	-	-	-
Roche cobas u 411	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Roche Urisys	7	-	-	-	-	-	-	1	-	-	-	-	-	6	-	-	-	-
Siemens Clinitek 50	6	-	1	-	-	3	-	-	2	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	2	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	16	-	-	-	-	7	-	-	9	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	346	2	-	-	22	240	-	3	79	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	3	-	-	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	99	-	-	-	1	69	-	-	27	1	-	-	-	-	-	-	-	1
Uriscan Optima	2	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-
UriScan Reagent Strips	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-

**URINALYSIS DIPSTICK–LEUKOCYTE ESTERASE**

Specimen UA-2

<u>Method</u>	<i>Participant Results</i>												
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>15 or 25 µL</u>	<u>75 or 100 µL</u>	<u>250 or 500 µL</u>
ALL METHODS	608	605	1	1	-	-	1	-	-	-	-	-	-
BTNX Rapid Response U120/U500	1	1	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	2	-	1	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	10	10	-	-	-	-	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	4	4	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	8	8	-	-	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	1	1	-	-	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	2	2	-	-	-	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	16	16	-	-	-	-	-	-	-	-	-	-	-
Immunostics Detector Urine Strips	1	1	-	-	-	-	-	-	-	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	1	1	-	-	-	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	6	6	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	22	22	-	-	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	4	-	-	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	4	4	-	-	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-	-	-
Other Dipstick Method	6	6	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrip 101	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrips	32	31	1	-	-	-	-	-	-	-	-	-	-
Roche cobas u 411	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche Urisys	7	7	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	6	6	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	2	2	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	16	16	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	345	344	-	-	-	-	1	-	-	-	-	-	-
Siemens Multistix Pro	3	3	-	-	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	98	98	-	-	-	-	-	-	-	-	-	-	-
Siemens Uristix	1	1	-	-	-	-	-	-	-	-	-	-	-
Uriscan Optima	2	2	-	-	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	1	1	-	-	-	-	-	-	-	-	-	-	-

## URINALYSIS DIPSTICK–NITRITE

### Specimen UA-2

#### Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Positive</u>
ALL METHODS	608	606	2
BTNX Rapid Response U120/U500	1	1	-
Consult Diagnostics Reagent Strips	3	3	-
Consult Diagnostics Urine Analyzer	10	10	-
CTMI CT-120 Urine Analyzer	2	2	-
Diagnostic Test Group Clarity Urocheck	4	4	-
Diagnostic Test Group Clarity Urocheck 120	7	7	-
Germaine Labs AimStrip Urine Analyzer	1	1	-
Henry Schein One Step Plus	2	2	-
Henry Schein Urispec / Urispec Plus	16	16	-
Immunostics Detector Urine Strips	1	1	-
Iris Ichem VELOCITY Urine Chemistry System	1	1	-
McKesson 10SG Reagent Strips	6	6	-
McKesson 120 Urine Analyzer	22	22	-
Medline 120 Urine Analyzer	4	4	-
Medline Urinalysis Reagent Strips	4	4	-
NDC Pro Advantage	1	1	-
Other Dipstick Method	6	6	-
Roche Chemstrip 101	1	1	-
Roche Chemstrips	32	32	-
Roche cobas u 411	1	1	-
Roche Criterion Analyzer	1	1	-
Roche Urisys	7	6	1
Siemens Clinitek 50	6	6	-
Siemens Clinitek 500	2	2	-
Siemens Clinitek Advantus	16	16	-
Siemens Clinitek Status / Status+	345	345	-
Siemens Multistix Pro	3	3	-
Siemens Reagent Strips	99	98	1
Siemens Uristix	1	1	-
Uriscan Optima	2	2	-
UriScan Reagent Strips	1	1	-

**URINALYSIS –MICROALBUMIN (dipstick only)**

Specimen UA-2

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<i>Participant Results</i>								
			<u>10 mg/L</u>	<u>20 mg/L</u>	<u>30 mg/L</u>	<u>50 mg/L</u>	<u>80 mg/L</u>	<u>100 mg/L</u>	<u>150 mg/L</u>	<u>+ (4 - 8 mg/dL)</u>	<u>++ (&gt;8 mg/dL)</u>
ALL METHODS	50	2	-	1	-	-	1	1	44	1	-
Henry Schein Urispec / Urispec Plus	1	1	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	1	-	-	-	-	-	-	-	1	-	-
Roche Micral - 1 minute	3	1	-	1	-	-	-	1	-	-	-
Siemens Clinitek Microalbumin	43	-	-	-	-	-	1	-	42	-	-

**URINALYSIS –URINE hCG****Specimen UA-2**

<b><u>Method</u></b>	<b><i>Participant Results</i></b>		
	<b><u>Labs</u></b>	<b><u>Positive</u></b>	<b><u>Negative</u></b>
ALL METHODS	346	342	4
Alere Aceava hCG-Urine	1	1	-
Alere Clearview hCG Cassette	5	5	-
Alere hCG Combo Cassette	4	4	-
Alfa Scientific Instant View	4	4	-
Beckman Coulter ICON 20 hCG	3	3	-
Beckman Coulter ICON 25 hCG	18	18	-
Beckman Coulter ICON II	2	2	-
BioSign hCG	1	1	-
BTNX Rapid Response hCG	1	1	-
Cardinal Health SP Brand combo	19	19	-
Cardinal Hlth SPBrand-cassette	5	4	1
Clarity Diagnostics hCG strip/cassette	8	8	-
CONSULT diagnostics hCG Cassette	43	42	1
CONSULT diagnostics hCG Combo	9	9	-
CONSULT diagnostics hCG Dipstick	20	20	-
Henry Schein One Step	38	38	-
Henry Schein One Step Plus	12	12	-
Immunostics hCG Detector-urine	2	1	1
Jant Pharmacal Accutest	2	2	-
McKesson hCG Combo Cassette	5	5	-
McKesson hCG Urine Cassette	11	11	-
Medline hCG Combo Test Cassette	4	4	-
Medline hCG Test Cassette	5	5	-
NDC Pro Advantage	1	1	-
PEP (Lab Supply) HCG	1	1	-
Quidel QuickVue One-Step Combo	12	12	-
Quidel QuickVue One-Step Urine	27	27	-
Quidel QuickVue+ One-Step Combo	33	32	1
Quidel RapidVue	1	1	-
Quidel Sofia hCG	2	2	-
Sekisui OSOM - Urine Test	2	2	-
Sekisui OSOM Card Pregnancy	5	5	-
Sekisui OSOM hCG Combo Test	2	2	-
Siemens Clinitek Status / Status+	14	14	-
Stanbio QuPID	8	8	-
Stanbio QuPID Plus	2	2	-
Stanbio TRUE hCG	8	8	-
Sure-Vue hCG - 25mIU	1	1	-
Sure-Vue hCG-STAT	3	3	-

**FECAL OCCULT BLOOD**

<b><u>Method</u></b>	<b>Specimen OC-3</b>			<b>Specimen OC-4</b>		
	<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	254	9	245	248	6	248
Alere Clearview iFOBT Complete	1	-	1	1	-	1
Beckman Coulter Hemocult ICT	46	5	41	44	2	44
Guaiaac (slide) Test	136	4	132	132	4	132
Hemosure iFOB	30	-	30	30	-	30
Other Immunochemical FOB kit	30	-	30	30	-	30
Polymedco OC Auto Micro 80	4	-	4	4	-	4
Polymedco OC-Light iFOB	6	-	6	6	-	6
Quidel QuickVue iFOB	1	-	1	1	-	1

**2020 M2**  
**Urine Sediment Identification**  
**SPECIMENS US-3 AND US-4**

CASE HISTORY:

A 27-year-old female presented to her OB/GYN with dysuria and extreme genital itching. She just finished a course of antibiotics for a bacterial urinary tract infection, but her symptom relief was short-lived. A random urine was collected, and the urinalysis results appear below.

Color= Yellow  
Appearance= Clear

**DIPSTICK RESULTS:**

Specific gravity = 1.025  
pH = 6.5  
Protein = Negative  
Glucose = Negative  
Ketones = Negative  
Bilirubin = Negative  
Urobilinogen = Negative  
Blood = Trace  
Leukocyte Esterase = Small (1+)  
Nitrite = Negative

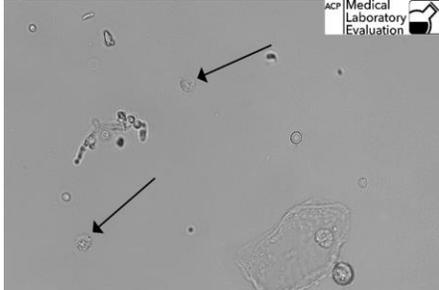
**This patient was diagnosed with vulvovaginal candidiasis.** Yeast in the urine can be a pathogen or a specimen contaminant from the skin or vaginal secretions. Patients often develop yeast infections of the genital or urinary tract after taking antibiotics for other unrelated infections. The yeast *Candida albicans* is a normal part of the intestinal and vaginal flora, in small amounts. When antibiotics inadvertently kill off the protective normal bacteria, yeasts can over proliferate quickly, leading to yeast infection. Other risk factors contributing to vulvovaginal candidiasis include pregnancy, uncontrolled diabetes mellitus, AIDS, corticosteroid use, and other immunosuppression.

Vaginitis is characterized by vaginal symptoms including discharge, itching, irritation, or burning. Most women will have at least one episode of vaginitis during their lives, making it the most common gynecologic diagnosis in primary care. The most common causes of vaginitis are bacterial vaginosis, vulvovaginal candidiasis, and trichomoniasis. Noninfectious causes, including atrophic, irritant, allergic, and inflammatory vaginitis, are less common.

The diagnosis of vulvovaginal candidiasis is usually made using a combination of clinical signs and symptoms (white, thick, odorless discharge; genital inflammation, edema) plus microscopy. Culture can be helpful for complicated cases by identifying non-*albicans* strains of *Candida* such as *C. krusei* and *C. glabrata*. DNA probe testing is also available. Treatment of vulvovaginal candidiasis involves oral fluconazole or topical azoles.

## Urine Sediment Identification

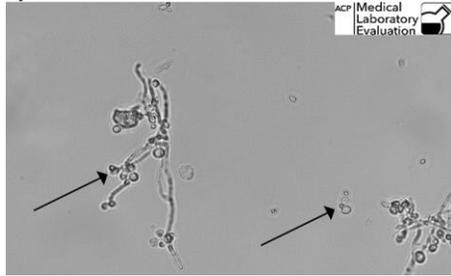
### Specimen US-3



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
White blood cell (WBC)	354	97.79%	Acceptable
Renal tubular epithelial	3	0.83%	
Cellular (WBC) cast	3	0.83%	

The arrows in this photograph point to **white blood cells**. White blood cells (leukocytes) appear granular due to the nuclear material inside. Low numbers of WBC are seen in normal urine specimens, while increased WBCs are indicative of infection in the bladder or kidneys. The white blood cells that respond to infection and inflammation produce enzymes called esterases. When many WBCs are present in the urine, the dipstick turns positive for leukocyte esterase, indicating pyuria, which means urine containing white blood cells or pus. To view another photo of WBCs, see 2019 M2 Specimen US-4.

### Specimen US-4



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Yeast/fungi	356	98.34%	Acceptable
Red blood cell (RBC)	5	1.38%	

The arrows in this photograph point to **yeast**. There are two general kinds of fungi- yeasts and molds. Yeasts are single celled fungal organisms that are round to oval in shape. Yeasts reproduce by budding, a process in which a small portion of the cell is pinched off and grows into a new cell. The arrow on the right points to a good example of budding yeast. Sometimes yeasts form long branching chains resembling the hyphae produced by molds, as indicated by the arrow on the left. Technically, these forms are pseudohyphae, but in the clinical lab they are simply referred to as hyphae. Yeasts do not always present with buds or hyphae, so if you are unsure whether the cells you see are red blood cells or yeast, try adding a drop of acetic acid to the slide preparation. RBCs will be lysed (dissolved), but yeast cells will remain intact. To view another photo of budding yeast in urine sediment, see 2018 M1 Specimen US-2. To view a photo of yeast with hyphae, see 2013M2 Specimen US-4.

## REFERENCES:

Dixon, D.M., Fromtling, R.A. "Morphology, Taxonomy, and Classification of Fungi." *Manual of Clinical Microbiology*. 6th ed. Ed. P.R. Murray. Washington, D.C.: ASM Press, 1995.

Mundt, L.A, Shanahan, K.: *Graff's Textbook of Routine Urinalysis and Body Fluids*, 2<sup>nd</sup> ed. Philadelphia: Lippincott Williams & Wilkins, 2011.

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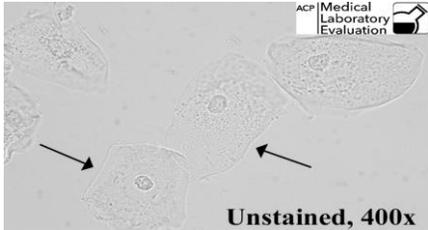
Ringsrud, K. M., Linné, J. J.: *Urinalysis and Body Fluids/ A ColorText and Atlas*. St. Louis, Mosby, 1995.

Warren, N.G., Hazen, K.C. "Candida, Cryptococcus, and Other Yeasts of Medical Importance." *Manual of Clinical Microbiology*. 6th ed. Ed. P.R. Murray. Washington, D.C.: ASM Press, 1995.

## PROVIDER-PERFORMED MICROSCOPY (PPM)

### Wet Mount Preparation

Specimen PPM-7

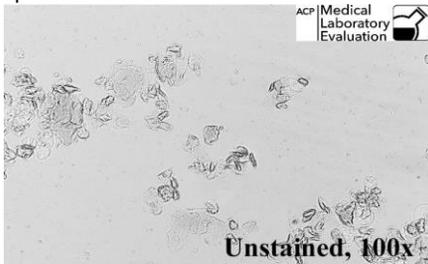


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Squamous epithelial cell	340	85.00%	Acceptable
Clue cell	55	13.75%	

The arrows in this photograph of a vaginal wet mount point to **squamous epithelial cells**. Squamous cells are large, flat, and irregularly shaped, with a single small nucleus and plentiful cytoplasm. They often appear folded or rolled. In contrast, clue cells are so completely covered with bacteria that the cell appears speckled or glittery, and the edges of the cell are obscured by the bacteria. Although there are a few bacteria present, these epithelial cells should not be mistaken for clue cells. It is important for the microscopist to learn the difference between these two cell types because squamous epithelial cells are a normal finding, while clue cells are indicative of bacterial vaginosis. To view a clue cell, see 2019 M2 Specimen PPM-7. To view another squamous cell, see 2018 M3 Specimen PPM-13.

### SCABIES DETECTION

Specimen PPM-8



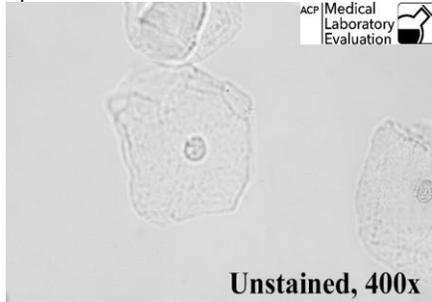
<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Scabies absent	141	97.92%	Acceptable
Scabies present	3	2.08%	

**Scabies are absent** in this photograph of a skin scrapings preparation. The scabies mite, or human itch mite (*Sarcoptes scabiei*), is spread by prolonged direct personal contact with an infested person or indirectly by prolonged contact with infested clothing or bedding. The mites burrow into the skin and produce a papular rash that itches. The diagnosis of scabies is often made only by examination of the skin and the patient history. Scabies can be difficult to find by laboratory testing, because mites are often few in number. There may be only 10-15 mites on the entire body of an infested person who is otherwise healthy, so a negative test does not rule out the diagnosis. To view a photo of a scabies mite, see 2020 M1 Specimen PPM-3.

## PROVIDER-PERFORMED MICROSCOPY (PPM)

### SPERM DETECTION

Specimen PPM-9

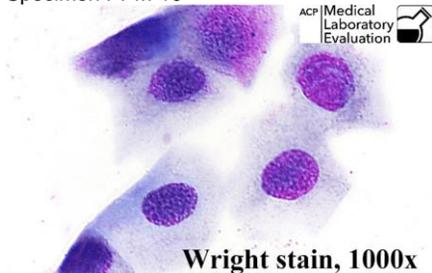


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Sperm absent	204	99.03%	Acceptable
Sperm present	2	0.97%	

**Spermatozoa are absent** in this photograph of a vaginal wet mount preparation. To view a photo of spermatozoa, see 2019 M3 Specimen PPM-15.

### NASAL SMEAR

Specimen PPM-10



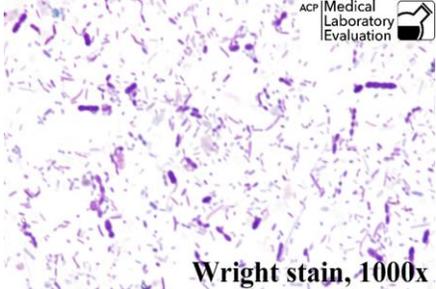
<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Eosinophils absent	50	75.76%	Acceptable
Eosinophils present	16	24.24%	

**Eosinophils are absent** in this photograph of Wright-stained nasal mucus. The cells shown in this photo are not orange, therefore they are not eosinophils. The cytoplasm of an eosinophil is filled with large, round, red-orange granules that surround a segmented, purple nucleus. The orange color of the eosinophil comes from the dye eosin, which is a component of Wright stain. The purpose of examining respiratory secretions for leukocytes (white blood cells) is to differentiate allergic conditions from infections. Eosinophils are a specific type of leukocyte associated with allergic conditions. The unique red-orange color of "Eos" makes them easy to spot and identify. To view a photo of eosinophils in a nasal smear, see 2019 M3 Specimen PPM-16. Specimen PPM-10 was graded by 93% referee consensus

## PROVIDER-PERFORMED MICROSCOPY (PPM)

### STOOL PREPARATION

Specimen PPM-11

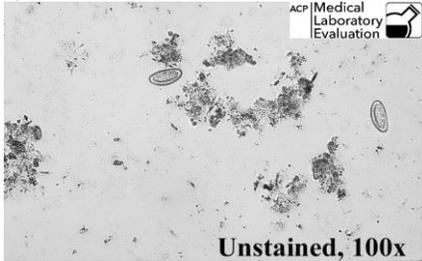


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Leukocytes absent	136	97.14%	Acceptable
Leukocytes present	4	2.86%	

**Leukocytes are absent** in this photograph of a Wright-stained stool preparation. Leukocytes are white blood cells (WBC). The presence of fecal leukocytes indicates inflammation due enteritis or ulcerative colitis. To view a photo of a positive fecal leukocyte prep, see 2019 M2 Specimen PPM-11.

### PINWORM PREPARATION

Specimen PPM-12



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Pinworms/eggs present	164	99.39%	Acceptable
Pinworms/eggs absent	1	0.61%	

**Pinworm eggs are present** in this photograph of a perianal pinworm preparation. To view another photo of pinworm eggs, see

### REFERENCES:

Fischer, P. M.: *The Office Laboratory*. Norwalk, Conn.: Appleton-Century-Crofts, 1983.

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