

MEDICAL LABORATORY EVALUATION

PARTICIPANT SUMMARY

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Medical Laboratory
Evaluation 

Hematology, Coagulation,
Blood Bank, Urinalysis, PPM
2022 MLE-M2

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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	± 3 SD
Body Fluid - Red Cell Count	± 2 SD
Body Fluid - White Cell Count	± 2 SD
Creatinine, Urine (Quantitative)	$\pm 17\%$
Fibrinogen	$\pm 20\%$
Glucose, Whole Blood – HemoCue	± 6 mg/dL or $\pm 20\%^*$
Hematocrit	$\pm 6\%$
Hematocrit, Waived	$\pm 6\%$ or ± 2 SD*
Hemoglobin	$\pm 7\%$
Hemoglobin, Waived	$\pm 7\%$ or ± 2 SD*
International Normalized Ratio (INR)	$\pm 15\%$
Microalbumin (Quantitative)	$\pm 30\%$
Platelet Count	$\pm 25\%$
Prothrombin Time	$\pm 15\%$
Red Blood Cell Count	$\pm 6\%$
Reticulocyte Count	$\pm 30\%$ or ± 2 SD*
Sedimentation Rate	± 3 SD
Specific Gravity	± 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	33	6.08	0.95	15.7	5.6	5.6 - 6.6	33	12.47	2.01	16.1	11.3	11.5 - 13.4	
All HemoCue 301/801	8	7.61	0.22	2.9	7.7	7.0 - 8.2	8	15.69	0.26	1.7	15.8	14.5 - 16.8	
HemoCue 201/+	24	5.51	0.09	1.6	5.5	5.1 - 5.9	24	11.26	0.16	1.4	11.2	10.4 - 12.1	
HemoCue 801	8	7.61	0.22	2.9	7.7	7.0 - 8.2	8	15.69	0.26	1.7	15.8	14.5 - 16.8	

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	23	96.8	6.2	6.4	97	77 - 117	23	113.9	10.9	9.5	114	91 - 137	
All HemoCue Methods	23	96.8	6.2	6.4	97	77 - 117	23	113.9	10.9	9.5	114	91 - 137	
HemoCue Glucose 201	23	96.8	6.2	6.4	97	77 - 117	23	113.9	10.9	9.5	114	91 - 137	

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	64	14.6	4.8	32.7	14	0 - 29	63	67.2	13.1	19.5	67	27 - 107	
All Automated Methods	15	16.6	3.6	21.7	16	5 - 28	15	78.9	15.5	19.6	76	32 - 126	
All Manual Methods	48	14.1	4.9	34.9	13	0 - 29	48	64.8	12.5	19.3	65	27 - 103	
All Vital Diagnostics Methods	11	15.0	2.2	14.9	15	8 - 22	11	75.8	11.2	14.8	75	42 - 110	
Vital Diagnostics Excyte M/10	6	15.0	2.8	18.9	15	6 - 24	6	71.7	11.1	15.5	69	38 - 106	
Westergren - diluted	42	13.1	4.2	31.6	13	0 - 26	42	65.1	12.4	19.1	65	27 - 103	
Westergren - undiluted	5	20.0	5.4	27.2	20	3 - 37	5	62.8	15.4	24.5	70	16 - 109	

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>
All Method	8	2.5	1.2	47.8	3	0 - 7	7	78.1	4.3	5.5	78	65 - 92	
Polymedco Sedimat 15	8	2.5	1.2	47.8	3	0 - 7	7	78.1	4.3	5.5	78	65 - 92	

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-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	3.13	0.21	6.6	3.2	2.6 - 3.7	10	7.73	0.21	2.7	7.8	6.5 - 8.9
All Abbott Cell-Dyn Instruments	10	3.13	0.21	6.6	3.2	2.6 - 3.7	10	7.73	0.21	2.7	7.8	6.5 - 8.9
Abbott Cell-Dyn Ruby	8	3.13	0.21	6.6	3.2	2.6 - 3.7	8	7.73	0.21	2.7	7.8	6.5 - 8.9
<u>Instrument</u>	Specimen CL-8						Specimen CL-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	10	9.90	0.20	2.0	9.9	8.4 - 11.4	10	20.27	0.42	2.1	20.4	17.2 - 23.4
All Abbott Cell-Dyn Instruments	10	9.90	0.20	2.0	9.9	8.4 - 11.4	10	20.27	0.42	2.1	20.4	17.2 - 23.4
Abbott Cell-Dyn Ruby	8	9.90	0.20	2.0	9.9	8.4 - 11.4	8	20.27	0.42	2.1	20.4	17.2 - 23.4
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	3.07	0.21	6.8	3.0	2.6 - 3.6						
All Abbott Cell-Dyn Instruments	10	3.07	0.21	6.8	3.0	2.6 - 3.6						
Abbott Cell-Dyn Ruby	8	3.07	0.21	6.8	3.0	2.6 - 3.6						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-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	2.223	0.045	2.0	2.22	2.08 - 2.36	10	4.790	0.026	0.6	4.80	4.50 - 5.08
All Abbott Cell-Dyn Instruments	10	2.223	0.045	2.0	2.22	2.08 - 2.36	10	4.790	0.026	0.6	4.80	4.50 - 5.08
Abbott Cell-Dyn Ruby	8	2.223	0.045	2.0	2.22	2.08 - 2.36	8	4.790	0.026	0.6	4.80	4.50 - 5.08
<u>Instrument</u>	Specimen CL-8						Specimen CL-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	10	6.603	0.074	1.1	6.63	6.20 - 7.00	10	5.287	0.045	0.9	5.29	4.96 - 5.61
All Abbott Cell-Dyn Instruments	10	6.603	0.074	1.1	6.63	6.20 - 7.00	10	5.287	0.045	0.9	5.29	4.96 - 5.61
Abbott Cell-Dyn Ruby	8	6.603	0.074	1.1	6.63	6.20 - 7.00	8	5.287	0.045	0.9	5.29	4.96 - 5.61
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	2.220	0.075	3.4	2.21	2.08 - 2.36						
All Abbott Cell-Dyn Instruments	10	2.220	0.075	3.4	2.21	2.08 - 2.36						
Abbott Cell-Dyn Ruby	8	2.220	0.075	3.4	2.21	2.08 - 2.36						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-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	5.70	0.20	3.5	5.7	5.3 - 6.1	10	13.70	0.20	1.5	13.7	12.7 - 14.7
All Abbott Cell-Dyn Instruments	10	5.70	0.20	3.5	5.7	5.3 - 6.1	10	13.70	0.20	1.5	13.7	12.7 - 14.7
Abbott Cell-Dyn Ruby	8	5.70	0.20	3.5	5.7	5.3 - 6.1	8	13.70	0.20	1.5	13.7	12.7 - 14.7
<u>Instrument</u>	Specimen CL-8						Specimen CL-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	10	19.17	0.21	1.1	19.1	17.8 - 20.6	10	16.70	0.10	0.6	16.7	15.5 - 17.9
All Abbott Cell-Dyn Instruments	10	19.17	0.21	1.1	19.1	17.8 - 20.6	10	16.70	0.10	0.6	16.7	15.5 - 17.9
Abbott Cell-Dyn Ruby	8	19.17	0.21	1.1	19.1	17.8 - 20.6	8	16.70	0.10	0.6	16.7	15.5 - 17.9
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	5.73	0.06	1.0	5.7	5.3 - 6.2						
All Abbott Cell-Dyn Instruments	10	5.73	0.06	1.0	5.7	5.3 - 6.2						
Abbott Cell-Dyn Ruby	8	5.73	0.06	1.0	5.7	5.3 - 6.2						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-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	15.67	0.31	2.0	15.6	14.7 - 16.7	10	38.57	1.31	3.4	39.0	36.2 - 40.9
All Abbott Cell-Dyn Instruments	10	15.67	0.31	2.0	15.6	14.7 - 16.7	10	38.57	1.31	3.4	39.0	36.2 - 40.9
Abbott Cell-Dyn Ruby	8	15.67	0.31	2.0	15.6	14.7 - 16.7	8	38.57	1.31	3.4	39.0	36.2 - 40.9
<u>Instrument</u>	Specimen CL-8						Specimen CL-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	10	54.27	1.50	2.8	53.5	51.0 - 57.6	10	44.90	1.39	3.1	44.2	42.2 - 47.6
All Abbott Cell-Dyn Instruments	10	54.27	1.50	2.8	53.5	51.0 - 57.6	10	44.90	1.39	3.1	44.2	42.2 - 47.6
Abbott Cell-Dyn Ruby	8	54.27	1.50	2.8	53.5	51.0 - 57.6	8	44.90	1.39	3.1	44.2	42.2 - 47.6
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	15.70	0.36	2.3	15.6	14.7 - 16.7						
All Abbott Cell-Dyn Instruments	10	15.70	0.36	2.3	15.6	14.7 - 16.7						
Abbott Cell-Dyn Ruby	8	15.70	0.36	2.3	15.6	14.7 - 16.7						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-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	79.0	7.0	8.9	76	59 - 99	10	275.3	2.5	0.9	275	206 - 345
All Abbott Cell-Dyn Instruments	10	79.0	7.0	8.9	76	59 - 99	10	275.3	2.5	0.9	275	206 - 345
Abbott Cell-Dyn Ruby	8	79.0	7.0	8.9	76	59 - 99	8	275.3	2.5	0.9	275	206 - 345
<u>Instrument</u>	Specimen CL-8						Specimen CL-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	10	125.5	14.8	11.8	126	94 - 157	10	483.3	5.5	1.1	483	362 - 605
All Abbott Cell-Dyn Instruments	10	125.5	14.8	11.8	126	94 - 157	10	483.3	5.5	1.1	483	362 - 605
Abbott Cell-Dyn Ruby	8	125.5	14.8	11.8	126	94 - 157	8	483.3	5.5	1.1	483	362 - 605
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	77.7	1.5	2.0	78	58 - 98						
All Abbott Cell-Dyn Instruments	10	77.7	1.5	2.0	78	58 - 98						
Abbott Cell-Dyn Ruby	8	77.7	1.5	2.0	78	58 - 98						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-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	49.13	1.00	2.0	49.5	46.1 - 52.2	10	66.97	0.67	1.0	67.3	64.9 - 69.0
All Abbott Cell-Dyn Instruments	10	49.13	1.00	2.0	49.5	46.1 - 52.2	10	66.97	0.67	1.0	67.3	64.9 - 69.0
Abbott Cell-Dyn Ruby	8	49.13	1.00	2.0	49.5	46.1 - 52.2	8	66.97	0.67	1.0	67.3	64.9 - 69.0
<u>Instrument</u>	Specimen CL-8						Specimen CL-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	10	72.53	1.35	1.9	72.5	68.4 - 76.6	10	77.47	0.32	0.4	77.6	76.5 - 78.5
All Abbott Cell-Dyn Instruments	10	72.53	1.35	1.9	72.5	68.4 - 76.6	10	77.47	0.32	0.4	77.6	76.5 - 78.5
Abbott Cell-Dyn Ruby	8	72.53	1.35	1.9	72.5	68.4 - 76.6	8	77.47	0.32	0.4	77.6	76.5 - 78.5
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	49.93	0.90	1.8	50.0	47.2 - 52.7						
All Abbott Cell-Dyn Instruments	10	49.93	0.90	1.8	50.0	47.2 - 52.7						
Abbott Cell-Dyn Ruby	8	49.93	0.90	1.8	50.0	47.2 - 52.7						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-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	39.47	1.31	3.3	39.9	35.5 - 43.4	10	24.10	1.25	5.2	24.2	20.3 - 27.9
All Abbott Cell-Dyn Instruments	10	39.47	1.31	3.3	39.9	35.5 - 43.4	10	24.10	1.25	5.2	24.2	20.3 - 27.9
Abbott Cell-Dyn Ruby	8	39.47	1.31	3.3	39.9	35.5 - 43.4	8	24.10	1.25	5.2	24.2	20.3 - 27.9
	Specimen CL-8						Specimen CL-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	10	17.53	0.47	2.7	17.7	16.1 - 19.0	10	13.40	1.51	11.3	13.2	8.8 - 18.0
All Abbott Cell-Dyn Instruments	10	17.53	0.47	2.7	17.7	16.1 - 19.0	10	13.40	1.51	11.3	13.2	8.8 - 18.0
Abbott Cell-Dyn Ruby	8	17.53	0.47	2.7	17.7	16.1 - 19.0	8	13.40	1.51	11.3	13.2	8.8 - 18.0
	Specimen CL-10											
	<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	42.60	3.72	8.7	41.3	31.4 - 53.8						
All Abbott Cell-Dyn Instruments	10	42.60	3.72	8.7	41.3	31.4 - 53.8						
Abbott Cell-Dyn Ruby	8	42.60	3.72	8.7	41.3	31.4 - 53.8						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-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	8.47	0.91	10.7	8.6	5.7 - 11.2	10	5.20	0.50	9.6	5.2	3.7 - 6.7
All Abbott Cell-Dyn Instruments	10	8.47	0.91	10.7	8.6	5.7 - 11.2	10	5.20	0.50	9.6	5.2	3.7 - 6.7
Abbott Cell-Dyn Ruby	8	8.47	0.91	10.7	8.6	5.7 - 11.2	8	5.20	0.50	9.6	5.2	3.7 - 6.7
	Specimen CL-8						Specimen CL-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	10	4.63	0.45	9.7	4.6	3.2 - 6.0	10	4.60	0.17	3.8	4.7	4.0 - 5.2
All Abbott Cell-Dyn Instruments	10	4.63	0.45	9.7	4.6	3.2 - 6.0	10	4.60	0.17	3.8	4.7	4.0 - 5.2
Abbott Cell-Dyn Ruby	8	4.63	0.45	9.7	4.6	3.2 - 6.0	8	4.60	0.17	3.8	4.7	4.0 - 5.2
	Specimen CL-10											
	<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	7.70	0.40	5.2	7.7	6.5 - 8.9						
All Abbott Cell-Dyn Instruments	10	7.70	0.40	5.2	7.7	6.5 - 8.9						
Abbott Cell-Dyn Ruby	8	7.70	0.40	5.2	7.7	6.5 - 8.9						

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

<u><i>Instrument</i></u>	Specimen CL-6						Specimen CL-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	10	2.43	0.23	9.5	2.3	1.7 - 3.2	10	3.53	0.31	8.6	3.6	2.6 - 4.5
All Abbott Cell-Dyn Instruments	10	2.43	0.23	9.5	2.3	1.7 - 3.2	10	3.53	0.31	8.6	3.6	2.6 - 4.5
Abbott Cell-Dyn Ruby	8	2.43	0.23	9.5	2.3	1.7 - 3.2	8	3.53	0.31	8.6	3.6	2.6 - 4.5
Specimen CL-8						Specimen CL-9						
All Method	10	4.40	0.01	0.0	4.4	4.3 - 4.5	10	5.00	0.26	5.3	4.9	4.2 - 5.8
All Abbott Cell-Dyn Instruments	10	4.40	0.01	0.0	4.4	4.3 - 4.5	10	5.00	0.26	5.3	4.9	4.2 - 5.8
Abbott Cell-Dyn Ruby	8	4.40	0.01	0.0	4.4	4.3 - 4.5	8	5.00	0.26	5.3	4.9	4.2 - 5.8
Specimen CL-10												
All Method	10	2.07	0.25	12.2	2.1	1.3 - 2.9						
All Abbott Cell-Dyn Instruments	10	2.07	0.25	12.2	2.1	1.3 - 2.9						
Abbott Cell-Dyn Ruby	8	2.07	0.25	12.2	2.1	1.3 - 2.9						

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

<u><i>Instrument</i></u>	Specimen CL-6						Specimen CL-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	10	0.47	0.06	12.4	0.5	0.2 - 0.7	10	0.23	0.21	89.2	0.3	0.0 - 0.9
All Abbott Cell-Dyn Instruments	10	0.47	0.06	12.4	0.5	0.2 - 0.7	10	0.23	0.21	89.2	0.3	0.0 - 0.9
Abbott Cell-Dyn Ruby	8	0.47	0.06	12.4	0.5	0.2 - 0.7	8	0.23	0.21	89.2	0.3	0.0 - 0.9
Specimen CL-8						Specimen CL-9						
All Method	10	0.27	0.25	94.4	0.3	0.0 - 1.1	10	0.23	0.25	107.9	0.2	0.0 - 1.0
All Abbott Cell-Dyn Instruments	10	0.27	0.25	94.4	0.3	0.0 - 1.1	10	0.23	0.25	107.9	0.2	0.0 - 1.0
Abbott Cell-Dyn Ruby	8	0.27	0.25	94.4	0.3	0.0 - 1.1	8	0.23	0.25	107.9	0.2	0.0 - 1.0
Specimen CL-10												
All Method	10	0.17	0.21	124.9	0.1	0.0 - 0.8						
All Abbott Cell-Dyn Instruments	10	0.17	0.21	124.9	0.1	0.0 - 0.8						
Abbott Cell-Dyn Ruby	8	0.17	0.21	124.9	0.1	0.0 - 0.8						

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10⁹/L)

<u><i>Instrument</i></u>	Specimen SYX-6						Specimen SYX-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	41	2.94	0.10	3.3	2.9	2.4 - 3.4	41	8.49	0.19	2.3	8.5	7.2 - 9.8
All Sysmex Instruments	41	2.94	0.10	3.3	2.9	2.4 - 3.4	41	8.49	0.19	2.3	8.5	7.2 - 9.8
Sysmex pocH-100i	7	2.90	0.06	2.0	2.9	2.4 - 3.4	7	8.33	0.21	2.6	8.3	7.0 - 9.6
Sysmex XP-300	32	2.96	0.12	4.0	3.0	2.5 - 3.5	31	8.54	0.17	2.0	8.5	7.2 - 9.9
	Specimen SYX-8						Specimen SYX-9					
All Method	42	25.74	0.75	2.9	25.8	21.8 - 29.6	42	21.33	0.51	2.4	21.4	18.1 - 24.6
All Sysmex Instruments	42	25.74	0.75	2.9	25.8	21.8 - 29.6	42	21.33	0.51	2.4	21.4	18.1 - 24.6
Sysmex pocH-100i	7	25.03	0.38	1.5	25.1	21.2 - 28.8	7	20.59	0.49	2.4	20.4	17.4 - 23.7
Sysmex XP-300	32	25.96	0.66	2.5	26.0	22.0 - 29.9	32	21.52	0.35	1.6	21.6	18.2 - 24.8
	Specimen SYX-10											
All Method	42	3.00	0.12	4.0	3.0	2.5 - 3.5						
All Sysmex Instruments	42	3.00	0.12	4.0	3.0	2.5 - 3.5						
Sysmex pocH-100i	7	2.99	0.11	3.6	3.0	2.5 - 3.5						
Sysmex XP-300	32	3.01	0.12	3.9	3.0	2.5 - 3.5						

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL-RED BLOOD CELL COUNT (x 10¹²/L)

<u>Instrument</u>	Specimen SYX-6						Specimen SYX-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	42	2.359	0.033	1.4	2.36	2.21 - 2.51	41	4.315	0.058	1.4	4.31	4.05 - 4.58
All Sysmex Instruments	42	2.359	0.033	1.4	2.36	2.21 - 2.51	41	4.315	0.058	1.4	4.31	4.05 - 4.58
Sysmex pocH-100i	7	2.387	0.045	1.9	2.40	2.24 - 2.54	7	4.416	0.095	2.2	4.41	4.15 - 4.69
Sysmex XP-300	32	2.357	0.025	1.0	2.36	2.21 - 2.50	32	4.304	0.049	1.1	4.31	4.04 - 4.57
Specimen SYX-8												
All Method	42	6.274	0.070	1.1	6.28	5.89 - 6.66	42	5.586	0.085	1.5	5.58	5.25 - 5.93
All Sysmex Instruments	42	6.274	0.070	1.1	6.28	5.89 - 6.66	42	5.586	0.085	1.5	5.58	5.25 - 5.93
Sysmex pocH-100i	7	6.317	0.096	1.5	6.27	5.93 - 6.70	7	5.714	0.065	1.1	5.75	5.37 - 6.06
Sysmex XP-300	32	6.270	0.055	0.9	6.29	5.89 - 6.65	32	5.567	0.060	1.1	5.56	5.23 - 5.91
Specimen SYX-9												
All Method	42	2.363	0.036	1.5	2.36	2.22 - 2.51						
All Sysmex Instruments	42	2.363	0.036	1.5	2.36	2.22 - 2.51						
Sysmex pocH-100i	7	2.384	0.051	2.2	2.38	2.24 - 2.53						
Sysmex XP-300	32	2.362	0.029	1.2	2.36	2.22 - 2.51						
Specimen SYX-10												
All Method	42	2.363	0.036	1.5	2.36	2.22 - 2.51						
All Sysmex Instruments	42	2.363	0.036	1.5	2.36	2.22 - 2.51						
Sysmex pocH-100i	7	2.384	0.051	2.2	2.38	2.24 - 2.53						
Sysmex XP-300	32	2.362	0.029	1.2	2.36	2.22 - 2.51						

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

<u><i>Instrument</i></u>	Specimen SYX-6						Specimen SYX-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	42	6.18	0.17	2.8	6.2	5.7 - 6.7	42	12.26	0.18	1.5	12.2	11.4 - 13.2
All Sysmex Instruments	42	6.18	0.17	2.8	6.2	5.7 - 6.7	42	12.26	0.18	1.5	12.2	11.4 - 13.2
Sysmex pocH-100i	7	6.37	0.10	1.5	6.4	5.9 - 6.9	7	12.40	0.24	1.9	12.3	11.5 - 13.3
Sysmex XP-300	32	6.15	0.16	2.6	6.2	5.7 - 6.6	32	12.24	0.16	1.3	12.2	11.3 - 13.1
Specimen SYX-8												
All Method	42	18.54	0.23	1.3	18.5	17.2 - 19.9	41	17.90	0.21	1.2	17.9	16.6 - 19.2
All Sysmex Instruments	42	18.54	0.23	1.3	18.5	17.2 - 19.9	41	17.90	0.21	1.2	17.9	16.6 - 19.2
Sysmex pocH-100i	7	18.69	0.30	1.6	18.7	17.3 - 20.0	7	18.23	0.50	2.7	18.1	16.9 - 19.6
Sysmex XP-300	32	18.52	0.21	1.1	18.5	17.2 - 19.9	32	17.88	0.18	1.0	17.9	16.6 - 19.2
Specimen SYX-10												
All Method	40	6.20	0.15	2.3	6.2	5.7 - 6.7						
All Sysmex Instruments	40	6.20	0.15	2.3	6.2	5.7 - 6.7						
Sysmex pocH-100i	7	6.33	0.11	1.8	6.3	5.8 - 6.8						
Sysmex XP-300	30	6.18	0.12	2.0	6.2	5.7 - 6.7						

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL—HEMATOCRIT (percent)

<i>Instrument</i>	Specimen SYX-6						Specimen SYX-7					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	42	18.53	0.38	2.0	18.5	17.4 - 19.7	41	34.35	0.74	2.2	34.1	32.2 - 36.5
All Sysmex Instruments	42	18.53	0.38	2.0	18.5	17.4 - 19.7	41	34.35	0.74	2.2	34.1	32.2 - 36.5
Sysmex pocH-100i	7	19.00	0.44	2.3	19.2	17.8 - 20.2	7	35.83	1.01	2.8	35.8	33.6 - 38.0
Sysmex XP-300	32	18.45	0.28	1.5	18.5	17.3 - 19.6	32	34.13	0.51	1.5	34.1	32.0 - 36.2
<i>Instrument</i>	Specimen SYX-8						Specimen SYX-9					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	40	52.69	0.78	1.5	52.7	49.5 - 55.9	42	50.11	1.13	2.2	49.8	47.1 - 53.2
All Sysmex Instruments	40	52.69	0.78	1.5	52.7	49.5 - 55.9	42	50.11	1.13	2.2	49.8	47.1 - 53.2
Sysmex pocH-100i	7	54.11	1.34	2.5	53.9	50.8 - 57.4	7	52.09	0.79	1.5	52.0	48.9 - 55.3
Sysmex XP-300	32	52.58	0.66	1.2	52.7	49.4 - 55.8	32	49.73	0.67	1.4	49.7	46.7 - 52.8
<i>Instrument</i>	Specimen SYX-10											
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>						
All Method	42	18.58	0.39	2.1	18.6	17.4 - 19.7						
All Sysmex Instruments	42	18.58	0.39	2.1	18.6	17.4 - 19.7						
Sysmex pocH-100i	7	19.03	0.46	2.4	19.0	17.8 - 20.2						
Sysmex XP-300	32	18.51	0.29	1.6	18.5	17.4 - 19.7						

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL-PLATELET COUNT (x10⁹/L)

<u>Instrument</u>	Specimen SYX-6						Specimen SYX-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	42	65.2	3.9	6.0	66	48 - 82	42	201.1	7.8	3.9	202	150 - 252
All Sysmex Instruments	42	65.2	3.9	6.0	66	48 - 82	42	201.1	7.8	3.9	202	150 - 252
Sysmex pocH-100i	7	66.0	4.2	6.3	67	49 - 83	7	202.9	6.3	3.1	206	152 - 254
Sysmex XP-300	32	65.4	3.5	5.3	66	49 - 82	32	201.0	8.5	4.2	201	150 - 252
Specimen SYX-8												
All Method	41	490.0	12.6	2.6	491	367 - 613	41	388.0	11.4	2.9	388	291 - 486
All Sysmex Instruments	41	490.0	12.6	2.6	491	367 - 613	41	388.0	11.4	2.9	388	291 - 486
Sysmex pocH-100i	7	475.9	8.3	1.8	473	356 - 595	7	387.7	6.8	1.8	389	290 - 485
Sysmex XP-300	31	493.0	11.9	2.4	494	369 - 617	31	388.6	12.5	3.2	388	291 - 486
Specimen SYX-10												
All Method	42	65.1	4.6	7.1	65	48 - 82						
All Sysmex Instruments	42	65.1	4.6	7.1	65	48 - 82						
Sysmex pocH-100i	7	65.3	5.6	8.6	65	48 - 82						
Sysmex XP-300	32	65.5	4.4	6.7	66	49 - 82						

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

<i><u>Instrument</u></i>	Specimen SYX-6						Specimen SYX-7					
	<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	36	11.61	1.57	13.5	11.8	6.8 - 16.4	36	30.46	0.97	3.2	30.5	27.5 - 33.4
All Sysmex Instruments	36	11.61	1.57	13.5	11.8	6.8 - 16.4	36	30.46	0.97	3.2	30.5	27.5 - 33.4
Sysmex pocH-100i	6	10.32	1.76	17.0	10.8	5.0 - 15.6	6	29.52	0.72	2.4	29.5	27.3 - 31.7
Sysmex XP-300	28	11.89	1.47	12.4	12.1	7.4 - 16.4	28	30.52	0.80	2.6	30.6	28.1 - 33.0
Specimen SYX-8												
All Method	36	14.96	1.17	7.8	14.8	11.4 - 18.5	36	62.33	0.86	1.4	62.4	59.7 - 65.0
All Sysmex Instruments	36	14.96	1.17	7.8	14.8	11.4 - 18.5	36	62.33	0.86	1.4	62.4	59.7 - 65.0
Sysmex pocH-100i	6	14.15	0.70	5.0	14.2	12.0 - 16.3	6	62.22	0.55	0.9	62.3	60.5 - 63.9
Sysmex XP-300	28	15.11	1.21	8.0	14.9	11.4 - 18.8	28	62.31	0.93	1.5	62.4	59.5 - 65.2
Specimen SYX-10												
All Method	36	12.01	1.26	10.5	12.1	8.2 - 15.8						
All Sysmex Instruments	36	12.01	1.26	10.5	12.1	8.2 - 15.8						
Sysmex pocH-100i	6	11.05	1.34	12.1	11.5	7.0 - 15.1						
Sysmex XP-300	28	12.22	1.21	9.9	12.2	8.6 - 15.9						

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

<u>Instrument</u>	Specimen SYX-6						Specimen SYX-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	34	17.97	1.72	9.5	18.0	12.8 - 23.2	36	17.20	1.09	6.4	17.1	13.9 - 20.5
All Sysmex Instruments	34	17.97	1.72	9.5	18.0	12.8 - 23.2	36	17.20	1.09	6.4	17.1	13.9 - 20.5
Sysmex pocH-100i	6	15.63	1.33	8.5	15.6	11.6 - 19.7	6	15.90	0.68	4.3	16.2	13.8 - 18.0
Sysmex XP-300	26	18.54	1.29	6.9	18.5	14.6 - 22.4	28	17.55	0.90	5.1	17.5	14.8 - 20.3
	Specimen SYX-8						Specimen SYX-9					
All Method	36	11.18	0.73	6.5	11.2	8.9 - 13.4	35	13.61	1.02	7.5	13.5	10.5 - 16.7
All Sysmex Instruments	36	11.18	0.73	6.5	11.2	8.9 - 13.4	35	13.61	1.02	7.5	13.5	10.5 - 16.7
Sysmex pocH-100i	6	10.42	0.60	5.8	10.5	8.6 - 12.3	5	12.28	0.76	6.2	12.6	10.0 - 14.6
Sysmex XP-300	28	11.34	0.69	6.0	11.4	9.2 - 13.4	28	13.84	0.88	6.4	13.8	11.1 - 16.5
	Specimen SYX-10											
All Method	35	18.42	1.58	8.6	18.7	13.6 - 23.2						
All Sysmex Instruments	35	18.42	1.58	8.6	18.7	13.6 - 23.2						
Sysmex pocH-100i	5	16.70	1.65	9.9	16.1	11.7 - 21.7						
Sysmex XP-300	28	18.68	1.43	7.7	18.8	14.3 - 23.0						

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

<u><i>Instrument</i></u>	Specimen SYX-6						Specimen SYX-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	36	70.39	1.98	2.8	69.9	64.4 - 76.4	34	52.42	1.42	2.7	52.2	48.1 - 56.7
All Sysmex Instruments	36	70.39	1.98	2.8	69.9	64.4 - 76.4	34	52.42	1.42	2.7	52.2	48.1 - 56.7
Sysmex pocH-100i	6	74.05	1.03	1.4	74.6	70.9 - 77.2	6	54.58	1.02	1.9	54.6	51.5 - 57.7
Sysmex XP-300	28	69.57	1.04	1.5	69.8	66.4 - 72.8	26	51.99	1.04	2.0	52.1	48.8 - 55.1
<u><i>Instrument</i></u>	Specimen SYX-8						Specimen SYX-9					
	<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	35	73.87	1.48	2.0	74.0	69.4 - 78.4	35	24.07	0.96	4.0	24.0	21.1 - 27.0
All Sysmex Instruments	35	73.87	1.48	2.0	74.0	69.4 - 78.4	35	24.07	0.96	4.0	24.0	21.1 - 27.0
Sysmex pocH-100i	6	75.43	0.86	1.1	75.4	72.8 - 78.1	6	25.15	1.06	4.2	25.3	21.9 - 28.4
Sysmex XP-300	27	73.56	1.42	1.9	73.4	69.3 - 77.9	27	23.89	0.75	3.2	24.0	21.6 - 26.2
<u><i>Instrument</i></u>	Specimen SYX-10											
	<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	35	69.75	1.92	2.8	69.5	63.9 - 75.6						
All Sysmex Instruments	35	69.75	1.92	2.8	69.5	63.9 - 75.6						
Sysmex pocH-100i	6	72.77	1.40	1.9	72.4	68.5 - 77.0						
Sysmex XP-300	27	69.14	1.34	1.9	69.2	65.1 - 73.2						

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL—WHITE BLOOD CELL COUNT (x 10⁹/L)

<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	265	1.88	0.14	7.5	1.9	1.6 - 2.2	264	7.70	0.28	3.6	7.7	6.5 - 8.9
All Abbott Cell-Dyn Instruments	80	1.98	0.12	6.0	2.0	1.6 - 2.3	80	7.81	0.24	3.0	7.8	6.6 - 9.0
All ABX Instruments	39	1.91	0.06	3.4	1.9	1.6 - 2.2	40	7.77	0.30	3.8	7.8	6.6 - 9.0
All Boule (CDS) Instruments	101	1.76	0.08	4.3	1.8	1.4 - 2.1	101	7.53	0.24	3.2	7.5	6.4 - 8.7
All COULTER Instruments	36	1.99	0.09	4.7	2.0	1.6 - 2.3	36	7.82	0.18	2.3	7.8	6.6 - 9.0
Abbott Cell-Dyn 1800	15	1.82	0.09	5.2	1.8	1.5 - 2.1	15	7.65	0.24	3.1	7.7	6.4 - 8.8
Abbott Cell-Dyn Emerald	63	2.02	0.09	4.3	2.0	1.7 - 2.4	63	7.84	0.22	2.9	7.8	6.6 - 9.1
Boule (CDS) Medonic M series	101	1.76	0.08	4.3	1.8	1.4 - 2.1	101	7.53	0.24	3.2	7.5	6.4 - 8.7
COULTER AcT diff/diff 2	36	1.99	0.09	4.7	2.0	1.6 - 2.3	36	7.82	0.18	2.3	7.8	6.6 - 9.0
Diatron Abacus 3 CP	5	1.90	0.08	4.3	1.9	1.6 - 2.2	5	7.63	0.30	3.9	7.6	6.4 - 8.8
Horiba ABX Micros/45/60	39	1.91	0.06	3.4	1.9	1.6 - 2.2	40	7.77	0.30	3.8	7.8	6.6 - 9.0

<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	263	5.18	0.24	4.6	5.2	4.4 - 6.0	261	20.06	0.61	3.0	20.0	17.0 - 23.1
All Abbott Cell-Dyn Instruments	80	5.33	0.21	3.9	5.3	4.5 - 6.2	79	19.78	0.58	2.9	19.7	16.8 - 22.8
All ABX Instruments	39	5.26	0.13	2.5	5.2	4.4 - 6.1	37	20.14	0.56	2.8	20.0	17.1 - 23.2
All Boule (CDS) Instruments	102	4.97	0.16	3.1	4.9	4.2 - 5.8	100	20.19	0.52	2.6	20.1	17.1 - 23.3
All COULTER Instruments	35	5.31	0.16	3.0	5.3	4.5 - 6.2	36	20.36	0.58	2.8	20.4	17.3 - 23.5
Abbott Cell-Dyn 1800	15	5.08	0.19	3.8	5.0	4.3 - 5.9	15	19.59	0.91	4.7	19.8	16.6 - 22.6
Abbott Cell-Dyn Emerald	63	5.39	0.17	3.1	5.4	4.5 - 6.2	63	19.79	0.53	2.7	19.7	16.8 - 22.8
Boule (CDS) Medonic M series	102	4.97	0.16	3.1	4.9	4.2 - 5.8	100	20.19	0.52	2.6	20.1	17.1 - 23.3
COULTER AcT diff/diff 2	35	5.31	0.16	3.0	5.3	4.5 - 6.2	36	20.36	0.58	2.8	20.4	17.3 - 23.5
Diatron Abacus 3 CP	5	5.13	0.30	5.8	5.1	4.3 - 5.9	5	19.68	0.78	3.9	19.7	16.7 - 22.7
Horiba ABX Micros/45/60	39	5.26	0.13	2.5	5.2	4.4 - 6.1	37	20.14	0.56	2.8	20.0	17.1 - 23.2

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10⁹/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	263	1.90	0.15	8.1	1.9	1.6 - 2.2
All Abbott Cell-Dyn Instruments	78	2.01	0.11	5.6	2.0	1.7 - 2.4
All ABX Instruments	39	1.89	0.08	4.4	1.9	1.6 - 2.2
All Boule (CDS) Instruments	102	1.77	0.09	5.0	1.8	1.5 - 2.1
All COULTER Instruments	36	2.05	0.10	5.0	2.0	1.7 - 2.4
Abbott Cell-Dyn 1800	15	1.85	0.12	6.7	1.8	1.5 - 2.2
Abbott Cell-Dyn Emerald	62	2.04	0.09	4.2	2.0	1.7 - 2.4
Boule (CDS) Medonic M series	102	1.77	0.09	5.0	1.8	1.5 - 2.1
COULTER AcT diff/diff 2	36	2.05	0.10	5.0	2.0	1.7 - 2.4
Diatron Abacus 3 CP	5	1.83	0.05	2.7	1.8	1.5 - 2.1
Horiba ABX Micros/45/60	39	1.89	0.08	4.4	1.9	1.6 - 2.2

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10¹²/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	264	2.230	0.061	2.7	2.22	2.09 - 2.37
All Abbott Cell-Dyn Instruments	80	2.269	0.068	3.0	2.27	2.13 - 2.41
All ABX Instruments	41	2.204	0.049	2.2	2.21	2.07 - 2.34
All Boule (CDS) Instruments	101	2.202	0.040	1.8	2.20	2.06 - 2.34
All COULTER Instruments	36	2.257	0.062	2.8	2.26	2.12 - 2.40
Abbott Cell-Dyn 1800	15	2.345	0.060	2.6	2.35	2.20 - 2.49
Abbott Cell-Dyn Emerald	63	2.251	0.057	2.5	2.25	2.11 - 2.39
Boule (CDS) Medonic M series	101	2.202	0.040	1.8	2.20	2.06 - 2.34
COULTER AcT diff/diff 2	35	2.258	0.063	2.8	2.26	2.12 - 2.40
Diatron Abacus 3 CP	5	2.310	0.055	2.4	2.31	2.17 - 2.45
Horiba ABX Micros/45/60	41	2.204	0.049	2.2	2.21	2.07 - 2.34

Specimen HD-7

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
260	4.671	0.090	1.9	4.67	4.39 - 4.96
79	4.661	0.102	2.2	4.67	4.38 - 4.95
39	4.634	0.102	2.2	4.65	4.35 - 4.92
102	4.672	0.072	1.6	4.67	4.39 - 4.96
35	4.707	0.095	2.0	4.69	4.42 - 4.99
15	4.693	0.072	1.5	4.68	4.41 - 4.98
62	4.652	0.106	2.3	4.66	4.37 - 4.94
102	4.672	0.072	1.6	4.67	4.39 - 4.96
34	4.708	0.096	2.0	4.70	4.42 - 5.00
5	4.847	0.144	3.0	4.93	4.55 - 5.14
39	4.634	0.102	2.2	4.65	4.35 - 4.92

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10¹²/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	265	6.184	0.135	2.2	6.18	5.81 - 6.56	258	5.742	0.119	2.1	5.74	5.39 - 6.09
All Abbott Cell-Dyn Instruments	80	6.100	0.127	2.1	6.09	5.73 - 6.47	77	5.681	0.103	1.8	5.68	5.34 - 6.03
All ABX Instruments	39	6.181	0.095	1.5	6.17	5.81 - 6.56	36	5.708	0.078	1.4	5.69	5.36 - 6.06
All Boule (CDS) Instruments	102	6.238	0.110	1.8	6.24	5.86 - 6.62	101	5.794	0.107	1.8	5.78	5.44 - 6.15
All COULTER Instruments	37	6.252	0.160	2.6	6.25	5.87 - 6.63	36	5.766	0.126	2.2	5.76	5.41 - 6.12
Abbott Cell-Dyn 1800	15	6.091	0.116	1.9	6.09	5.72 - 6.46	15	5.636	0.126	2.2	5.64	5.29 - 5.98
Abbott Cell-Dyn Emerald	63	6.102	0.130	2.1	6.09	5.73 - 6.47	60	5.693	0.094	1.7	5.69	5.35 - 6.04
Boule (CDS) Medonic M series	102	6.238	0.110	1.8	6.24	5.86 - 6.62	101	5.794	0.107	1.8	5.78	5.44 - 6.15
COULTER AcT diff/diff 2	36	6.251	0.162	2.6	6.25	5.87 - 6.63	35	5.770	0.125	2.2	5.76	5.42 - 6.12
Diatron Abacus 3 CP	5	6.303	0.313	5.0	6.27	5.92 - 6.69	5	5.958	0.235	3.9	5.96	5.60 - 6.32
Horiba ABX Micros/45/60	39	6.181	0.095	1.5	6.17	5.81 - 6.56	36	5.708	0.078	1.4	5.69	5.36 - 6.06
Specimen HD-10												
All Method	263	2.229	0.067	3.0	2.22	2.09 - 2.37						
All Abbott Cell-Dyn Instruments	78	2.270	0.070	3.1	2.27	2.13 - 2.41						
All ABX Instruments	39	2.197	0.048	2.2	2.20	2.06 - 2.33						
All Boule (CDS) Instruments	100	2.201	0.042	1.9	2.20	2.06 - 2.34						
All COULTER Instruments	36	2.265	0.059	2.6	2.26	2.12 - 2.41						
Abbott Cell-Dyn 1800	15	2.355	0.078	3.3	2.36	2.21 - 2.50						
Abbott Cell-Dyn Emerald	62	2.253	0.059	2.6	2.24	2.11 - 2.39						
Boule (CDS) Medonic M series	100	2.201	0.042	1.9	2.20	2.06 - 2.34						
COULTER AcT diff/diff 2	35	2.269	0.056	2.5	2.26	2.13 - 2.41						
Diatron Abacus 3 CP	5	2.258	0.077	3.4	2.27	2.12 - 2.40						
Horiba ABX Micros/45/60	39	2.197	0.048	2.2	2.20	2.06 - 2.33						

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–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	264	5.89	0.14	2.3	5.9	5.4 - 6.3	261	13.73	0.25	1.8	13.7	12.7 - 14.7
All Abbott Cell-Dyn Instruments	78	5.90	0.15	2.5	5.9	5.4 - 6.4	78	13.84	0.24	1.8	13.9	12.8 - 14.9
All ABX Instruments	41	5.88	0.10	1.7	5.9	5.4 - 6.3	39	13.71	0.26	1.9	13.7	12.7 - 14.7
All Boule (CDS) Instruments	101	5.92	0.11	1.8	5.9	5.5 - 6.4	100	13.73	0.22	1.6	13.8	12.7 - 14.7
All COULTER Instruments	37	5.75	0.17	3.0	5.8	5.3 - 6.2	36	13.54	0.19	1.4	13.5	12.5 - 14.5
Abbott Cell-Dyn 1800	15	6.02	0.10	1.7	6.0	5.5 - 6.5	15	13.85	0.24	1.7	13.9	12.8 - 14.9
Abbott Cell-Dyn Emerald	62	5.86	0.16	2.6	5.9	5.4 - 6.3	61	13.85	0.24	1.7	13.9	12.8 - 14.9
Boule (CDS) Medonic M series	101	5.92	0.11	1.8	5.9	5.5 - 6.4	100	13.73	0.22	1.6	13.8	12.7 - 14.7
COULTER AcT diff/diff 2	36	5.75	0.17	3.0	5.8	5.3 - 6.2	35	13.54	0.19	1.4	13.5	12.5 - 14.5
Diatron Abacus 3 CP	5	6.05	0.13	2.1	6.1	5.6 - 6.5	5	13.93	0.29	2.1	13.9	12.9 - 14.9
Horiba ABX Micros/45/60	41	5.88	0.10	1.7	5.9	5.4 - 6.3	39	13.71	0.26	1.9	13.7	12.7 - 14.7
	Specimen HD-8						Specimen HD-9					
All Method	264	18.28	0.34	1.9	18.3	17.0 - 19.6	260	18.57	0.39	2.1	18.6	17.2 - 19.9
All Abbott Cell-Dyn Instruments	80	18.47	0.35	1.9	18.5	17.1 - 19.8	79	18.68	0.33	1.8	18.7	17.3 - 20.0
All ABX Instruments	40	18.20	0.26	1.4	18.2	16.9 - 19.5	37	18.34	0.35	1.9	18.4	17.0 - 19.7
All Boule (CDS) Instruments	102	18.25	0.30	1.6	18.3	16.9 - 19.6	101	18.65	0.35	1.9	18.6	17.3 - 20.0
All COULTER Instruments	36	18.07	0.40	2.2	18.1	16.8 - 19.4	37	18.24	0.43	2.4	18.2	16.9 - 19.6
Abbott Cell-Dyn 1800	15	18.39	0.35	1.9	18.4	17.0 - 19.7	15	18.67	0.38	2.0	18.6	17.3 - 20.0
Abbott Cell-Dyn Emerald	63	18.51	0.33	1.8	18.5	17.2 - 19.9	62	18.70	0.31	1.6	18.7	17.3 - 20.1
Boule (CDS) Medonic M series	102	18.25	0.30	1.6	18.3	16.9 - 19.6	101	18.65	0.35	1.9	18.6	17.3 - 20.0
COULTER AcT diff/diff 2	35	18.06	0.41	2.3	18.1	16.7 - 19.4	36	18.24	0.44	2.4	18.2	16.9 - 19.6
Diatron Abacus 3 CP	5	18.28	0.62	3.4	18.3	16.9 - 19.6	5	19.18	0.54	2.8	19.2	17.8 - 20.6
Horiba ABX Micros/45/60	40	18.20	0.26	1.4	18.2	16.9 - 19.5	37	18.34	0.35	1.9	18.4	17.0 - 19.7

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	264	5.90	0.14	2.4	5.9	5.4 - 6.4
All Abbott Cell-Dyn Instruments	79	5.94	0.16	2.6	5.9	5.5 - 6.4
All ABX Instruments	39	5.87	0.09	1.5	5.9	5.4 - 6.3
All Boule (CDS) Instruments	101	5.92	0.11	1.9	5.9	5.5 - 6.4
All COULTER Instruments	36	5.79	0.15	2.6	5.8	5.3 - 6.2
Abbott Cell-Dyn 1800	15	6.15	0.08	1.4	6.2	5.7 - 6.6
Abbott Cell-Dyn Emerald	61	5.90	0.12	2.1	5.9	5.4 - 6.4
Boule (CDS) Medonic M series	101	5.92	0.11	1.9	5.9	5.5 - 6.4
COULTER AcT diff/diff 2	35	5.79	0.15	2.5	5.8	5.3 - 6.2
Diatron Abacus 3 CP	5	6.00	0.20	3.3	5.9	5.5 - 6.5
Horiba ABX Micros/45/60	39	5.87	0.09	1.5	5.9	5.4 - 6.3

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	268	16.50	1.16	7.0	16.1	15.5 - 17.5
All Abbott Cell-Dyn Instruments	80	17.93	0.60	3.3	18.0	16.8 - 19.1
All ABX Instruments	39	15.57	0.30	1.9	15.6	14.6 - 16.6
All Boule (CDS) Instruments	101	15.60	0.40	2.6	15.6	14.6 - 16.6
All COULTER Instruments	37	16.75	0.54	3.2	16.7	15.7 - 17.8
Abbott Cell-Dyn 1800	15	17.87	0.51	2.8	18.1	16.8 - 19.0
Abbott Cell-Dyn Emerald	63	17.98	0.59	3.3	18.0	16.8 - 19.1
Boule (CDS) Medonic M series	101	15.60	0.40	2.6	15.6	14.6 - 16.6
COULTER AcT diff/diff 2	36	16.76	0.54	3.2	16.8	15.7 - 17.8
Diatron Abacus 3 CP	5	18.03	0.38	2.1	18.0	16.9 - 19.2
Horiba ABX Micros/45/60	39	15.57	0.30	1.9	15.6	14.6 - 16.6

Specimen HD-7

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
267	38.68	2.12	5.5	38.1	36.3 - 41.1
80	41.11	1.29	3.1	41.0	38.6 - 43.6
39	37.67	0.86	2.3	37.8	35.4 - 40.0
100	36.89	0.85	2.3	36.9	34.6 - 39.2
37	39.01	1.05	2.7	38.9	36.6 - 41.4
15	40.53	1.13	2.8	40.5	38.1 - 43.0
63	41.31	1.25	3.0	41.3	38.8 - 43.8
100	36.89	0.85	2.3	36.9	34.6 - 39.2
36	39.04	1.05	2.7	38.9	36.6 - 41.4
5	42.18	1.28	3.0	42.3	39.6 - 44.8
39	37.67	0.86	2.3	37.8	35.4 - 40.0

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

<i><u>Instrument</u></i>	Specimen HD-8						Specimen HD-9					
	<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	266	53.55	2.03	3.8	53.1	50.3 - 56.8	263	53.04	2.22	4.2	52.7	49.8 - 56.3
All Abbott Cell-Dyn Instruments	80	55.60	1.71	3.1	55.5	52.2 - 59.0	78	55.26	1.60	2.9	55.2	51.9 - 58.6
All ABX Instruments	40	52.50	0.96	1.8	52.4	49.3 - 55.7	37	50.93	1.23	2.4	50.9	47.8 - 54.0
All Boule (CDS) Instruments	102	52.32	1.24	2.4	52.4	49.1 - 55.5	101	52.15	1.34	2.6	52.1	49.0 - 55.3
All COULTER Instruments	37	53.48	1.70	3.2	53.3	50.2 - 56.7	37	52.42	1.41	2.7	52.0	49.2 - 55.6
Abbott Cell-Dyn 1800	15	54.69	1.76	3.2	55.0	51.4 - 58.0	15	53.99	1.84	3.4	54.4	50.7 - 57.3
Abbott Cell-Dyn Emerald	63	55.90	1.58	2.8	55.9	52.5 - 59.3	61	55.65	1.37	2.5	55.7	52.3 - 59.0
Boule (CDS) Medonic M series	102	52.32	1.24	2.4	52.4	49.1 - 55.5	101	52.15	1.34	2.6	52.1	49.0 - 55.3
COULTER AcT diff/diff 2	36	53.46	1.72	3.2	53.3	50.2 - 56.7	36	52.44	1.42	2.7	52.1	49.2 - 55.6
Diatron Abacus 3 CP	5	57.30	2.31	4.0	56.9	53.8 - 60.8	5	57.68	1.80	3.1	57.8	54.2 - 61.2
Horiba ABX Micros/45/60	40	52.50	0.96	1.8	52.4	49.3 - 55.7	37	50.93	1.23	2.4	50.9	47.8 - 54.0
Specimen HD-10												
All Method	265	16.51	1.16	7.0	16.1	15.5 - 17.6						
All Abbott Cell-Dyn Instruments	79	17.94	0.63	3.5	18.0	16.8 - 19.1						
All ABX Instruments	39	15.57	0.31	2.0	15.5	14.6 - 16.6						
All Boule (CDS) Instruments	101	15.62	0.38	2.5	15.6	14.6 - 16.6						
All COULTER Instruments	37	16.82	0.52	3.1	16.7	15.8 - 17.9						
Abbott Cell-Dyn 1800	15	17.83	0.81	4.5	18.2	16.7 - 19.0						
Abbott Cell-Dyn Emerald	62	18.00	0.56	3.1	18.0	16.9 - 19.1						
Boule (CDS) Medonic M series	101	15.62	0.38	2.5	15.6	14.6 - 16.6						
COULTER AcT diff/diff 2	36	16.84	0.51	3.0	16.7	15.8 - 17.9						
Diatron Abacus 3 CP	5	17.68	0.53	3.0	17.7	16.6 - 18.8						
Horiba ABX Micros/45/60	39	15.57	0.31	2.0	15.5	14.6 - 16.6						

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL-PLATELET COUNT (x 10⁹/L)

<i><u>Instrument</u></i>	Specimen HD-6						Specimen HD-7					
	<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	261	72.2	6.9	9.6	72	54 - 91	265	256.1	14.3	5.6	256	192 - 321
All Abbott Cell-Dyn Instruments	75	70.3	8.4	12.0	70	52 - 88	79	257.6	14.9	5.8	257	193 - 323
All ABX Instruments	40	77.1	6.3	8.1	77	57 - 97	40	259.0	15.8	6.1	260	194 - 324
All Boule (CDS) Instruments	102	70.9	4.9	7.0	70	53 - 89	101	252.5	10.9	4.3	253	189 - 316
All COULTER Instruments	37	72.5	6.8	9.3	73	54 - 91	37	260.8	17.2	6.6	263	195 - 327
Abbott Cell-Dyn 1800	14	68.6	4.7	6.9	69	51 - 86	14	258.4	17.7	6.8	264	193 - 323
Abbott Cell-Dyn Emerald	61	72.0	11.0	15.3	70	53 - 90	62	257.9	13.4	5.2	257	193 - 323
Boule (CDS) Medonic M series	102	70.9	4.9	7.0	70	53 - 89	101	252.5	10.9	4.3	253	189 - 316
COULTER AcT diff/diff 2	36	72.8	6.6	9.0	73	54 - 92	36	261.8	16.4	6.3	263	196 - 328
Diatron Abacus 3 CP	5	80.8	5.1	6.3	81	60 - 101	5	257.3	25.3	9.8	250	192 - 322
Horiba ABX Micros/45/60	40	77.1	6.3	8.1	77	57 - 97	40	259.0	15.8	6.1	260	194 - 324
	Specimen HD-8						Specimen HD-9					
All Method	263	160.6	11.2	7.0	160	120 - 201	263	536.7	30.5	5.7	536	402 - 671
All Abbott Cell-Dyn Instruments	77	164.7	13.2	8.0	164	123 - 206	78	535.9	32.6	6.1	529	401 - 670
All ABX Instruments	40	157.8	10.2	6.5	158	118 - 198	40	529.4	28.5	5.4	530	397 - 662
All Boule (CDS) Instruments	102	158.2	9.1	5.8	159	118 - 198	100	530.2	20.4	3.9	531	397 - 663
All COULTER Instruments	37	163.5	11.2	6.9	162	122 - 205	36	570.5	24.3	4.3	573	427 - 714
Abbott Cell-Dyn 1800	14	170.1	15.5	9.1	170	127 - 213	14	575.4	45.4	7.9	569	431 - 720
Abbott Cell-Dyn Emerald	61	162.9	12.0	7.3	161	122 - 204	63	526.3	20.9	4.0	525	394 - 658
Boule (CDS) Medonic M series	102	158.2	9.1	5.8	159	118 - 198	100	530.2	20.4	3.9	531	397 - 663
COULTER AcT diff/diff 2	36	163.6	11.4	6.9	162	122 - 205	35	572.0	23.0	4.0	574	428 - 715
Diatron Abacus 3 CP	5	146.8	11.2	7.6	146	110 - 184	5	485.8	21.7	4.5	493	364 - 608
Horiba ABX Micros/45/60	40	157.8	10.2	6.5	158	118 - 198	40	529.4	28.5	5.4	530	397 - 662

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–PLATELET COUNT (x 10⁹/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	259	73.1	7.3	10.0	72	54 - 92
All Abbott Cell-Dyn Instruments	78	74.6	11.4	15.2	72	55 - 94
All ABX Instruments	39	78.0	7.5	9.6	78	58 - 98
All Boule (CDS) Instruments	101	71.3	4.9	6.9	71	53 - 90
All COULTER Instruments	37	72.4	5.1	7.0	73	54 - 91
Abbott Cell-Dyn 1800	14	71.1	6.9	9.7	71	53 - 89
Abbott Cell-Dyn Emerald	62	75.4	12.2	16.2	72	56 - 95
Boule (CDS) Medonic M series	101	71.3	4.9	6.9	71	53 - 90
COULTER AcT diff/diff 2	36	72.6	5.0	6.8	73	54 - 91
Diatron Abacus 3 CP	5	71.3	1.5	2.1	71	53 - 90
Horiba ABX Micros/45/60	39	78.0	7.5	9.6	78	58 - 98

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	246	56.21	6.62	11.8	58.7	36.3 - 76.1
All Abbott Cell-Dyn Instruments	73	52.64	3.04	5.8	53.7	43.5 - 61.8
All ABX Instruments	38	44.90	4.66	10.4	44.6	30.9 - 58.9
All Boule (CDS) Instruments	95	61.45	2.11	3.4	61.3	55.1 - 67.8
All COULTER Instruments	34	60.96	1.30	2.1	60.8	57.0 - 64.9
Abbott Cell-Dyn 1800	14	47.51	2.42	5.1	46.5	40.2 - 54.8
Abbott Cell-Dyn Emerald	56	54.01	1.19	2.2	54.0	50.4 - 57.6
Boule (CDS) Medonic M series	95	61.45	2.11	3.4	61.3	55.1 - 67.8
COULTER AcT diff/diff 2	34	60.96	1.30	2.1	60.8	57.0 - 64.9
Diatron Abacus 3 CP	5	58.28	0.98	1.7	58.4	55.3 - 61.3
Horiba ABX Micros/45/60	38	44.90	4.66	10.4	44.6	30.9 - 58.9

Specimen HD-7

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
247	30.41	2.68	8.8	31.1	22.3 - 38.5
74	29.01	1.76	6.1	29.7	23.7 - 34.3
39	26.27	2.68	10.2	26.1	18.2 - 34.4
95	32.16	1.14	3.5	32.2	28.7 - 35.6
35	32.40	0.76	2.4	32.3	30.1 - 34.7
14	26.19	1.42	5.4	26.3	21.9 - 30.5
56	29.81	0.75	2.5	29.8	27.5 - 32.1
95	32.16	1.14	3.5	32.2	28.7 - 35.6
35	32.40	0.76	2.4	32.3	30.1 - 34.7
5	33.48	0.65	1.9	33.6	31.5 - 35.5
39	26.27	2.68	10.2	26.1	18.2 - 34.4

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL—LYMPHOCYTES (percent) cont'd

<u><i>Instrument</i></u>	Specimen HD-8						Specimen HD-9					
	<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	250	52.30	8.36	16.0	52.0	27.2 - 77.4	241	13.65	1.09	8.0	13.9	10.3 - 17.0
All Abbott Cell-Dyn Instruments	74	46.58	2.46	5.3	47.1	39.1 - 54.0	73	13.51	1.46	10.8	13.6	9.1 - 18.0
All ABX Instruments	39	40.29	3.12	7.7	40.6	30.9 - 49.7	34	12.39	1.23	9.9	12.1	8.7 - 16.1
All Boule (CDS) Instruments	95	61.66	1.27	2.1	61.8	57.8 - 65.5	96	14.01	0.52	3.7	14.0	12.4 - 15.6
All COULTER Instruments	35	52.58	1.02	1.9	52.7	49.5 - 55.7	34	14.00	0.43	3.0	14.0	12.7 - 15.3
Abbott Cell-Dyn 1800	14	42.44	2.00	4.7	42.6	36.4 - 48.5	14	11.45	0.78	6.8	11.4	9.1 - 13.8
Abbott Cell-Dyn Emerald	57	47.61	1.09	2.3	47.5	44.3 - 50.9	56	13.99	0.97	7.0	13.9	11.0 - 17.0
Boule (CDS) Medonic M series	95	61.66	1.27	2.1	61.8	57.8 - 65.5	96	14.01	0.52	3.7	14.0	12.4 - 15.6
COULTER AcT diff/diff 2	35	52.58	1.02	1.9	52.7	49.5 - 55.7	34	14.00	0.43	3.0	14.0	12.7 - 15.3
Diatron Abacus 3 CP	5	51.83	1.55	3.0	52.3	47.1 - 56.5	5	15.65	0.21	1.3	15.7	15.0 - 16.3
Horiba ABX Micros/45/60	39	40.29	3.12	7.7	40.6	30.9 - 49.7	34	12.39	1.23	9.9	12.1	8.7 - 16.1
Specimen HD-10												
All Method	248	56.29	6.11	10.8	58.6	37.9 - 74.7						
All Abbott Cell-Dyn Instruments	74	52.73	3.11	5.9	53.3	43.3 - 62.1						
All ABX Instruments	38	46.33	4.98	10.8	46.4	31.3 - 61.3						
All Boule (CDS) Instruments	96	60.93	1.84	3.0	60.9	55.4 - 66.5						
All COULTER Instruments	35	60.87	1.51	2.5	60.6	56.3 - 65.4						
Abbott Cell-Dyn 1800	14	48.26	2.62	5.4	48.9	40.4 - 56.2						
Abbott Cell-Dyn Emerald	57	53.97	1.71	3.2	54.0	48.8 - 59.1						
Boule (CDS) Medonic M series	96	60.93	1.84	3.0	60.9	55.4 - 66.5						
COULTER AcT diff/diff 2	35	60.87	1.51	2.5	60.6	56.3 - 65.4						
Diatron Abacus 3 CP	5	60.05	2.23	3.7	59.4	53.3 - 66.8						
Horiba ABX Micros/45/60	38	46.33	4.98	10.8	46.4	31.3 - 61.3						

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL—MONO/MID/MIXED/MCR (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	249	12.00	4.26	35.5	10.6	0.0 - 24.8	249	8.21	1.89	23.0	8.5	2.5 - 13.9
All Abbott Cell-Dyn Instruments (excl Emerald)	16	18.76	2.06	11.0	19.2	12.5 - 25.0	16	11.11	1.03	9.3	11.3	8.0 - 14.2
All ABX Instruments	39	19.07	2.90	15.2	19.5	10.3 - 27.8	39	9.31	1.21	13.0	9.3	5.6 - 13.0
All Boule (CDS) Instruments	95	10.16	2.10	20.7	10.2	3.8 - 16.5	95	9.12	1.12	12.3	9.1	5.7 - 12.5
All COULTER Instruments	34	8.42	1.13	13.5	8.6	5.0 - 11.9	34	6.83	0.65	9.5	6.8	4.8 - 8.8
Abbott Cell-Dyn 1800	14	19.27	1.61	8.4	19.2	14.4 - 24.1	14	11.41	0.66	5.8	11.3	9.4 - 13.4
Abbott Cell-Dyn Emerald	57	10.54	1.01	9.6	10.6	7.5 - 13.6	56	5.87	0.59	10.1	5.7	4.1 - 7.7
Boule (CDS) Medonic M series	95	10.16	2.10	20.7	10.2	3.8 - 16.5	95	9.12	1.12	12.3	9.1	5.7 - 12.5
COULTER AcT diff/diff 2	34	8.42	1.13	13.5	8.6	5.0 - 11.9	34	6.83	0.65	9.5	6.8	4.8 - 8.8
Diatron Abacus 3 CP	5	11.23	2.46	21.9	12.2	3.8 - 18.7	5	9.70	0.59	6.1	9.6	7.9 - 11.5
Horiba ABX Micros/45/60	39	19.07	2.90	15.2	19.5	10.3 - 27.8	39	9.31	1.21	13.0	9.3	5.6 - 13.0
	Specimen HD-8						Specimen HD-9					
All Method	249	13.24	3.94	29.8	11.3	1.4 - 25.1	244	4.80	1.72	35.8	4.6	0.0 - 10.0
All Abbott Cell-Dyn Instruments (excl Emerald)	16	21.69	1.63	7.5	22.2	16.8 - 26.6	16	5.90	0.42	7.1	5.9	4.6 - 7.2
All ABX Instruments	39	16.51	1.17	7.1	16.3	12.9 - 20.1	33	3.55	0.29	8.1	3.5	2.6 - 4.5
All Boule (CDS) Instruments	94	10.04	1.31	13.0	10.2	6.1 - 14.0	94	6.52	0.56	8.7	6.5	4.8 - 8.3
All COULTER Instruments	35	17.30	1.20	6.9	17.3	13.7 - 20.9	33	4.25	0.36	8.5	4.3	3.1 - 5.4
Abbott Cell-Dyn 1800	14	22.21	0.82	3.7	22.3	19.7 - 24.7	14	6.01	0.32	5.3	6.0	5.0 - 7.0
Abbott Cell-Dyn Emerald	56	10.97	0.60	5.5	10.9	9.1 - 12.8	58	2.60	0.24	9.3	2.5	1.8 - 3.4
Boule (CDS) Medonic M series	94	10.04	1.31	13.0	10.2	6.1 - 14.0	94	6.52	0.56	8.7	6.5	4.8 - 8.3
COULTER AcT diff/diff 2	35	17.30	1.20	6.9	17.3	13.7 - 20.9	33	4.25	0.36	8.5	4.3	3.1 - 5.4
Diatron Abacus 3 CP	5	19.00	1.08	5.7	18.8	15.7 - 22.3	5	7.10	0.26	3.6	7.1	6.3 - 7.9
Horiba ABX Micros/45/60	39	16.51	1.17	7.1	16.3	12.9 - 20.1	33	3.55	0.29	8.1	3.5	2.6 - 4.5

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	245	11.65	3.84	33.0	10.6	0.1 - 23.2
All Abbott Cell-Dyn Instruments (excl Emerald)	16	17.66	2.17	12.3	17.3	11.1 - 24.2
All ABX Instruments	36	18.54	2.48	13.4	18.7	11.1 - 26.0
All Boule (CDS) Instruments	95	10.03	1.97	19.6	10.3	4.1 - 16.0
All COULTER Instruments	35	8.54	1.08	12.7	8.6	5.2 - 11.8
Abbott Cell-Dyn 1800	14	18.11	1.93	10.6	17.7	12.3 - 23.9
Abbott Cell-Dyn Emerald	56	10.44	0.99	9.5	10.6	7.4 - 13.5
Boule (CDS) Medonic M series	95	10.03	1.97	19.6	10.3	4.1 - 16.0
COULTER AcT diff/diff 2	35	8.54	1.08	12.7	8.6	5.2 - 11.8
Diatron Abacus 3 CP	5	10.68	1.45	13.6	10.3	6.3 - 15.1
Horiba ABX Micros/45/60	36	18.54	2.48	13.4	18.7	11.1 - 26.0

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	249	31.91	3.86	12.1	31.9	20.3 - 43.6
All Abbott Cell-Dyn Instruments	74	34.86	1.70	4.9	35.0	29.7 - 40.0
All ABX Instruments	39	35.96	2.19	6.1	36.3	29.3 - 42.6
All Boule (CDS) Instruments	95	28.51	2.88	10.1	27.9	19.8 - 37.2
All COULTER Instruments	35	30.53	1.15	3.8	30.9	27.0 - 34.0
Abbott Cell-Dyn 1800	14	32.98	1.65	5.0	33.1	28.0 - 38.0
Abbott Cell-Dyn Emerald	57	35.49	1.10	3.1	35.4	32.1 - 38.8
Boule (CDS) Medonic M series	95	28.51	2.88	10.1	27.9	19.8 - 37.2
COULTER AcT diff/diff 2	35	30.53	1.15	3.8	30.9	27.0 - 34.0
Diatron Abacus 3 CP	5	30.50	3.16	10.4	29.2	21.0 - 40.0
Horiba ABX Micros/45/60	39	35.96	2.19	6.1	36.3	29.3 - 42.6

Specimen HD-7

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
248	61.46	2.93	4.8	61.3	52.6 - 70.3
73	63.98	1.23	1.9	64.1	60.3 - 67.7
37	64.71	1.31	2.0	64.6	60.7 - 68.7
93	58.65	1.36	2.3	58.8	54.5 - 62.8
35	60.69	1.07	1.8	60.8	57.4 - 63.9
14	62.39	1.38	2.2	62.4	58.2 - 66.6
58	64.36	0.95	1.5	64.5	61.5 - 67.3
93	58.65	1.36	2.3	58.8	54.5 - 62.8
35	60.69	1.07	1.8	60.8	57.4 - 63.9
5	56.83	0.84	1.5	57.0	54.3 - 59.4
37	64.71	1.31	2.0	64.6	60.7 - 68.7

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

<u><i>Instrument</i></u>	Specimen HD-8						Specimen HD-9					
	<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	247	34.51	6.61	19.2	31.2	14.6 - 54.4	248	81.58	2.22	2.7	81.8	74.9 - 88.3
All Abbott Cell-Dyn Instruments	72	40.26	2.52	6.3	41.1	32.6 - 47.9	70	83.38	0.90	1.1	83.5	80.6 - 86.1
All ABX Instruments	39	43.20	2.23	5.2	43.0	36.4 - 49.9	38	84.14	1.06	1.3	84.3	80.9 - 87.4
All Boule (CDS) Instruments	92	28.18	1.58	5.6	28.1	23.4 - 33.0	93	79.43	0.75	0.9	79.4	77.1 - 81.7
All COULTER Instruments	34	30.25	0.87	2.9	30.2	27.6 - 32.9	33	81.79	0.46	0.6	81.8	80.4 - 83.2
Abbott Cell-Dyn 1800	13	35.46	1.51	4.3	35.7	30.9 - 40.0	14	82.82	0.91	1.1	83.1	80.0 - 85.6
Abbott Cell-Dyn Emerald	58	41.41	0.82	2.0	41.5	38.9 - 43.9	56	83.43	1.05	1.3	83.6	80.2 - 86.6
Boule (CDS) Medonic M series	92	28.18	1.58	5.6	28.1	23.4 - 33.0	93	79.43	0.75	0.9	79.4	77.1 - 81.7
COULTER AcT diff/diff 2	34	30.25	0.87	2.9	30.2	27.6 - 32.9	33	81.79	0.46	0.6	81.8	80.4 - 83.2
Diatron Abacus 3 CP	5	29.18	1.14	3.9	29.6	25.7 - 32.7	5	77.25	0.37	0.5	77.4	76.1 - 78.4
Horiba ABX Micros/45/60	39	43.20	2.23	5.2	43.0	36.4 - 49.9	38	84.14	1.06	1.3	84.3	80.9 - 87.4
Specimen HD-10												
All Method	246	32.14	3.68	11.5	32.2	21.0 - 43.2						
All Abbott Cell-Dyn Instruments	72	35.16	1.52	4.3	35.3	30.5 - 39.8						
All ABX Instruments	38	35.52	2.40	6.8	35.7	28.3 - 42.8						
All Boule (CDS) Instruments	95	29.04	2.68	9.2	28.6	20.9 - 37.1						
All COULTER Instruments	33	30.56	1.31	4.3	30.8	26.6 - 34.5						
Abbott Cell-Dyn 1800	14	33.78	1.58	4.7	33.5	29.0 - 38.6						
Abbott Cell-Dyn Emerald	57	35.51	1.32	3.7	35.6	31.5 - 39.5						
Boule (CDS) Medonic M series	95	29.04	2.68	9.2	28.6	20.9 - 37.1						
COULTER AcT diff/diff 2	33	30.56	1.31	4.3	30.8	26.6 - 34.5						
Diatron Abacus 3 CP	5	29.28	1.47	5.0	29.6	24.8 - 33.7						
Horiba ABX Micros/45/60	38	35.52	2.40	6.8	35.7	28.3 - 42.8						

HEMATOLOGY W/ 5-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10⁹/L)

<i>Instrument</i>	Specimen DIF-6						Specimen DIF-7					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	28	3.89	0.20	5.1	3.9	3.3 - 4.5	28	9.77	0.27	2.8	9.7	8.3 - 11.3
All COULTER Instruments	28	3.89	0.20	5.1	3.9	3.3 - 4.5	28	9.77	0.27	2.8	9.7	8.3 - 11.3
Coulter DxH 500	7	3.84	0.24	6.3	3.9	3.2 - 4.5	7	9.53	0.45	4.8	9.6	8.0 - 11.0
Coulter DxH 520	12	3.93	0.20	5.0	4.0	3.3 - 4.6	12	9.79	0.32	3.2	9.8	8.3 - 11.3
Coulter DxH 560	5	3.80	0.01	0.0	3.8	3.2 - 4.4	5	9.70	0.01	0.0	9.7	8.2 - 11.2
	Specimen DIF-8						Specimen DIF-9					
All Method	28	23.33	0.51	2.2	23.3	19.8 - 26.9	28	21.75	0.38	1.7	21.8	18.4 - 25.1
All COULTER Instruments	28	23.33	0.51	2.2	23.3	19.8 - 26.9	28	21.75	0.38	1.7	21.8	18.4 - 25.1
Coulter DxH 500	7	23.04	0.32	1.4	23.1	19.5 - 26.5	7	21.56	0.21	1.0	21.6	18.3 - 24.8
Coulter DxH 520	12	23.63	0.40	1.7	23.7	20.0 - 27.2	12	21.93	0.41	1.9	22.0	18.6 - 25.3
Coulter DxH 560	5	23.30	0.42	1.8	23.3	19.8 - 26.8	5	21.70	0.14	0.7	21.7	18.4 - 25.0
	Specimen DIF-10											
All Method	28	3.87	0.19	4.8	3.9	3.2 - 4.5						
All COULTER Instruments	28	3.87	0.19	4.8	3.9	3.2 - 4.5						
Coulter DxH 500	7	3.83	0.27	7.0	3.8	3.2 - 4.5						
Coulter DxH 520	12	3.91	0.16	4.1	3.9	3.3 - 4.5						
Coulter DxH 560	5	3.80	0.01	0.0	3.8	3.2 - 4.4						

HEMATOLOGY W/ 5-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10¹²/L)

<i>Instrument</i>	Specimen DIF-6						Specimen DIF-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	28	2.543	0.080	3.2	2.56	2.39 - 2.70	28	4.041	0.087	2.1	4.05	3.79 - 4.29
All COULTER Instruments	28	2.543	0.080	3.2	2.56	2.39 - 2.70	28	4.041	0.087	2.1	4.05	3.79 - 4.29
Coulter DxH 500	7	2.487	0.110	4.4	2.48	2.33 - 2.64	7	3.996	0.116	2.9	3.94	3.75 - 4.24
Coulter DxH 520	12	2.581	0.047	1.8	2.59	2.42 - 2.74	12	4.058	0.076	1.9	4.04	3.81 - 4.31
Coulter DxH 560	5	2.515	0.021	0.8	2.52	2.36 - 2.67	5	4.080	0.014	0.3	4.08	3.83 - 4.33
	Specimen DIF-8						Specimen DIF-9					
All Method	28	6.226	0.114	1.8	6.21	5.85 - 6.60	28	5.607	0.101	1.8	5.61	5.27 - 5.95
All COULTER Instruments	28	6.226	0.114	1.8	6.21	5.85 - 6.60	28	5.607	0.101	1.8	5.61	5.27 - 5.95
Coulter DxH 500	7	6.244	0.065	1.0	6.26	5.86 - 6.62	7	5.590	0.096	1.7	5.61	5.25 - 5.93
Coulter DxH 520	12	6.243	0.141	2.3	6.21	5.86 - 6.62	12	5.644	0.102	1.8	5.63	5.30 - 5.99
Coulter DxH 560	5	6.180	0.014	0.2	6.18	5.80 - 6.56	5	5.575	0.049	0.9	5.58	5.24 - 5.91
	Specimen DIF-10											
All Method	28	2.543	0.055	2.2	2.53	2.39 - 2.70						
All COULTER Instruments	28	2.543	0.055	2.2	2.53	2.39 - 2.70						
Coulter DxH 500	7	2.519	0.056	2.2	2.49	2.36 - 2.67						
Coulter DxH 520	12	2.558	0.060	2.3	2.56	2.40 - 2.72						
Coulter DxH 560	5	2.530	0.001	0.0	2.53	2.37 - 2.69						

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

<u><i>Instrument</i></u>	Specimen DIF-6						Specimen DIF-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	28	6.47	0.16	2.5	6.5	6.0 - 7.0	28	11.69	0.18	1.5	11.7	10.8 - 12.6
All COULTER Instruments	28	6.47	0.16	2.5	6.5	6.0 - 7.0	28	11.69	0.18	1.5	11.7	10.8 - 12.6
Coulter DxH 500	7	6.39	0.15	2.3	6.4	5.9 - 6.9	7	11.59	0.20	1.7	11.6	10.7 - 12.4
Coulter DxH 520	12	6.52	0.17	2.7	6.6	6.0 - 7.0	12	11.73	0.23	2.0	11.7	10.9 - 12.6
Coulter DxH 560	5	6.40	0.01	0.0	6.4	5.9 - 6.9	5	11.80	0.14	1.2	11.8	10.9 - 12.7
	Specimen DIF-8						Specimen DIF-9					
All Method	28	19.28	0.33	1.7	19.3	17.9 - 20.7	28	17.38	0.22	1.3	17.4	16.1 - 18.6
All COULTER Instruments	28	19.28	0.33	1.7	19.3	17.9 - 20.7	28	17.38	0.22	1.3	17.4	16.1 - 18.6
Coulter DxH 500	7	19.33	0.34	1.7	19.3	17.9 - 20.7	7	17.47	0.15	0.9	17.5	16.2 - 18.7
Coulter DxH 520	12	19.32	0.30	1.6	19.3	17.9 - 20.7	12	17.38	0.22	1.3	17.3	16.1 - 18.7
Coulter DxH 560	5	19.45	0.07	0.4	19.5	18.0 - 20.9	5	17.45	0.07	0.4	17.5	16.2 - 18.7
	Specimen DIF-10											
All Method	28	6.36	0.12	1.9	6.4	5.9 - 6.9						
All COULTER Instruments	28	6.36	0.12	1.9	6.4	5.9 - 6.9						
Coulter DxH 500	7	6.31	0.13	2.1	6.3	5.8 - 6.8						
Coulter DxH 520	12	6.34	0.09	1.4	6.4	5.8 - 6.8						
Coulter DxH 560	5	6.40	0.01	0.0	6.4	5.9 - 6.9						

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

<u><i>Instrument</i></u>	Specimen DIF-6						Specimen DIF-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	28	20.46	0.68	3.3	20.6	19.2 - 21.7	27	36.26	0.99	2.7	36.0	34.0 - 38.5
All COULTER Instruments	28	20.46	0.68	3.3	20.6	19.2 - 21.7	27	36.26	0.99	2.7	36.0	34.0 - 38.5
Coulter DxH 500	7	20.07	0.90	4.5	20.2	18.8 - 21.3	7	36.00	1.29	3.6	35.4	33.8 - 38.2
Coulter DxH 520	12	20.66	0.50	2.4	20.7	19.4 - 21.9	12	36.22	0.83	2.3	35.9	34.0 - 38.4
Coulter DxH 560	5	20.05	0.21	1.1	20.1	18.8 - 21.3	4	-	-	-	36.5	34.0 - 38.5
Specimen DIF-8												
All Method	28	60.38	1.08	1.8	60.3	56.7 - 64.1	28	54.64	1.05	1.9	54.4	51.3 - 58.0
All COULTER Instruments	28	60.38	1.08	1.8	60.3	56.7 - 64.1	28	54.64	1.05	1.9	54.4	51.3 - 58.0
Coulter DxH 500	7	60.89	1.14	1.9	60.6	57.2 - 64.6	7	54.81	0.95	1.7	54.9	51.5 - 58.2
Coulter DxH 520	12	60.28	1.12	1.9	60.2	56.6 - 63.9	12	54.74	1.22	2.2	54.7	51.4 - 58.1
Coulter DxH 560	5	59.45	0.78	1.3	59.5	55.8 - 63.1	5	53.70	0.14	0.3	53.7	50.4 - 57.0
Specimen DIF-10												
All Method	28	20.43	0.51	2.5	20.4	19.2 - 21.7						
All COULTER Instruments	28	20.43	0.51	2.5	20.4	19.2 - 21.7						
Coulter DxH 500	7	20.31	0.54	2.6	20.2	19.0 - 21.6						
Coulter DxH 520	12	20.44	0.52	2.6	20.5	19.2 - 21.7						
Coulter DxH 560	5	20.15	0.07	0.4	20.2	18.9 - 21.4						

HEMATOLOGY W/ 5-PART DIFFERENTIAL-PLATELET COUNT (x 10⁹/L)

<i>Instrument</i>	Specimen DIF-6						Specimen DIF-7					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	28	93.4	7.1	7.6	93	70 - 117	28	291.6	15.0	5.1	289	218 - 365
All COULTER Instruments	28	93.4	7.1	7.6	93	70 - 117	28	291.6	15.0	5.1	289	218 - 365
Coulter DxH 500	7	93.7	8.4	9.0	93	70 - 118	7	287.7	12.9	4.5	287	215 - 360
Coulter DxH 520	12	95.0	6.8	7.2	94	71 - 119	12	296.4	17.1	5.8	298	222 - 371
Coulter DxH 560	5	90.5	2.1	2.3	91	67 - 114	5	285.5	7.8	2.7	286	214 - 357
	Specimen DIF-8						Specimen DIF-9					
All Method	28	498.0	23.2	4.7	503	373 - 623	28	486.6	21.3	4.4	483	364 - 609
All COULTER Instruments	28	498.0	23.2	4.7	503	373 - 623	28	486.6	21.3	4.4	483	364 - 609
Coulter DxH 500	7	496.1	28.7	5.8	503	372 - 621	7	479.6	18.4	3.8	474	359 - 600
Coulter DxH 520	12	501.2	21.7	4.3	508	375 - 627	12	495.8	20.8	4.2	497	371 - 620
Coulter DxH 560	5	490.0	32.5	6.6	490	367 - 613	5	467.5	24.7	5.3	468	350 - 585
	Specimen DIF-10											
All Method	28	94.3	7.0	7.5	95	70 - 118						
All COULTER Instruments	28	94.3	7.0	7.5	95	70 - 118						
Coulter DxH 500	7	98.3	7.4	7.5	97	73 - 123						
Coulter DxH 520	12	93.3	6.6	7.0	95	69 - 117						
Coulter DxH 560	5	94.5	3.5	3.7	95	70 - 119						

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

<i>Instrument</i>	Specimen DIF-6						Specimen DIF-7					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	28	37.65	7.23	19.2	37.0	15.9 - 59.4	28	36.76	8.65	23.5	34.5	10.7 - 62.8
All COULTER DxH 500 Series	23	35.94	4.77	13.3	36.4	21.6 - 50.3	23	34.22	2.84	8.3	33.8	25.6 - 42.8
All COULTER Instruments	5	54.80	4.24	7.7	54.8	42.0 - 67.6	5	62.15	0.78	1.3	62.2	59.8 - 64.5
Coulter DxH 500	6	38.38	5.90	15.4	37.8	20.6 - 56.1	6	34.07	3.88	11.4	33.5	22.4 - 45.7
Coulter DxH 520	12	35.22	4.23	12.0	37.0	22.5 - 48.0	12	34.45	2.63	7.6	34.5	26.5 - 42.4
Coulter DxH 560	5	32.95	0.64	1.9	33.0	31.0 - 34.9	5	33.30	0.14	0.4	33.3	32.8 - 33.8
	Specimen DIF-8						Specimen DIF-9					
All Method	28	24.79	1.70	6.9	24.8	19.6 - 29.9	28	27.81	1.75	6.3	27.6	22.5 - 33.1
All COULTER DxH 500 Series	23	24.79	1.70	6.9	24.8	19.6 - 29.9	23	27.81	1.75	6.3	27.6	22.5 - 33.1
All COULTER Instruments	5	70.80	1.41	2.0	70.8	66.5 - 75.1	5	69.35	0.21	0.3	69.4	68.7 - 70.0
Coulter DxH 500	6	24.00	1.91	8.0	24.1	18.2 - 29.8	6	27.17	2.08	7.7	27.2	20.9 - 33.5
Coulter DxH 520	12	25.23	1.55	6.1	25.0	20.5 - 29.9	12	28.06	1.64	5.8	28.0	23.1 - 33.0
Coulter DxH 560	5	25.10	1.56	6.2	25.1	20.4 - 29.8	5	28.65	0.78	2.7	28.7	26.3 - 31.0
	Specimen DIF-10											
All Method	28	36.95	8.11	22.0	34.1	12.6 - 61.3						
All COULTER DxH 500 Series	23	34.83	4.55	13.1	33.8	21.1 - 48.5						
All COULTER Instruments	5	58.15	1.06	1.8	58.2	54.9 - 61.4						
Coulter DxH 500	6	37.52	4.98	13.3	36.0	22.5 - 52.5						
Coulter DxH 520	12	34.28	3.99	11.6	33.5	22.3 - 46.3						
Coulter DxH 560	5	30.00	0.14	0.5	30.0	29.5 - 30.5						

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

<i>Instrument</i>	Specimen DIF-6						Specimen DIF-7					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	28	0.20	0.16	77.8	0.2	0.0 - 0.7	28	0.26	0.12	46.7	0.3	0.0 - 0.7
All COULTER DxH 500 Series	23	0.20	0.16	77.8	0.2	0.0 - 0.7	23	0.26	0.12	46.7	0.3	0.0 - 0.7
All COULTER Instruments	5	30.50	2.55	8.3	30.5	22.8 - 38.2	5	24.70	0.85	3.4	24.7	22.1 - 27.3
Coulter DxH 500	6	0.18	0.17	93.9	0.2	0.0 - 0.8	6	0.30	0.11	36.5	0.3	0.0 - 0.7
Coulter DxH 520	12	0.21	0.17	80.5	0.2	0.0 - 0.8	12	0.23	0.13	55.8	0.2	0.0 - 0.7
Coulter DxH 560	5	0.20	0.01	0.0	0.2	0.1 - 0.3	5	0.25	0.07	28.3	0.3	0.0 - 0.5
Specimen DIF-8						Specimen DIF-9						
All Method	28	0.88	0.32	36.2	0.8	0.0 - 1.9	28	0.93	0.42	44.7	0.8	0.0 - 2.2
All COULTER DxH 500 Series	23	0.88	0.32	36.2	0.8	0.0 - 1.9	23	0.93	0.42	44.7	0.8	0.0 - 2.2
All COULTER Instruments	5	17.00	0.99	5.8	17.0	14.0 - 20.0	5	19.55	0.64	3.3	19.6	17.6 - 21.5
Coulter DxH 500	6	0.79	0.24	30.7	0.7	0.0 - 1.6	6	0.79	0.31	39.2	0.7	0.0 - 1.8
Coulter DxH 520	12	0.97	0.37	37.9	0.8	0.0 - 2.1	12	1.04	0.49	47.5	0.8	0.0 - 2.6
Coulter DxH 560	5	0.70	0.01	0.0	0.7	0.6 - 0.8	5	0.85	0.07	8.3	0.9	0.6 - 1.1
Specimen DIF-10												
All Method	28	0.26	0.15	58.4	0.3	0.0 - 0.8						
All COULTER DxH 500 Series	23	0.26	0.15	58.4	0.3	0.0 - 0.8						
All COULTER Instruments	5	24.75	0.07	0.3	24.8	24.5 - 25.0						
Coulter DxH 500	6	0.26	0.20	77.3	0.2	0.0 - 0.9						
Coulter DxH 520	12	0.24	0.13	54.3	0.3	0.0 - 0.7						
Coulter DxH 560	5	0.35	0.07	20.2	0.4	0.1 - 0.6						

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

<i>Instrument</i>	Specimen DIF-6						Specimen DIF-7					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	28	0.20	0.14	71.5	0.2	0.0 - 0.7	28	0.11	0.08	69.4	0.1	0.0 - 0.4
All COULTER DxH 500 Series	23	0.20	0.14	71.5	0.2	0.0 - 0.7	23	0.11	0.08	69.4	0.1	0.0 - 0.4
All COULTER Instruments	5	8.40	1.56	18.5	8.4	3.7 - 13.1	5	8.50	0.14	1.7	8.5	8.0 - 9.0
Coulter DxH 500	6	0.15	0.12	81.6	0.1	0.0 - 0.6	6	0.09	0.07	80.5	0.1	0.0 - 0.3
Coulter DxH 520	12	0.23	0.15	68.7	0.2	0.0 - 0.7	12	0.12	0.08	71.6	0.1	0.0 - 0.4
Coulter DxH 560	5	0.15	0.07	47.1	0.2	0.0 - 0.4	5	0.20	0.01	0.0	0.2	0.1 - 0.3
Specimen DIF-8							Specimen DIF-9					
All Method	28	0.34	0.21	60.9	0.3	0.0 - 1.0	28	0.32	0.18	56.1	0.3	0.0 - 0.9
All COULTER DxH 500 Series	23	0.34	0.21	60.9	0.3	0.0 - 1.0	23	0.32	0.18	56.1	0.3	0.0 - 0.9
All COULTER Instruments	5	8.50	0.28	3.3	8.5	7.6 - 9.4	5	7.10	0.57	8.0	7.1	5.4 - 8.8
Coulter DxH 500	6	0.33	0.22	67.4	0.3	0.0 - 1.0	6	0.29	0.21	74.0	0.2	0.0 - 1.0
Coulter DxH 520	12	0.38	0.21	57.0	0.3	0.0 - 1.1	12	0.36	0.17	46.5	0.3	0.0 - 0.9
Coulter DxH 560	5	0.20	0.14	70.7	0.2	0.0 - 0.7	5	0.20	0.01	0.0	0.2	0.1 - 0.3
Specimen DIF-10												
All Method	28	0.18	0.13	75.9	0.2	0.0 - 0.6						
All COULTER DxH 500 Series	23	0.18	0.13	75.9	0.2	0.0 - 0.6						
All COULTER Instruments	5	9.05	0.92	10.2	9.1	6.2 - 11.9						
Coulter DxH 500	6	0.11	0.11	93.5	0.1	0.0 - 0.5						
Coulter DxH 520	12	0.19	0.14	71.9	0.2	0.0 - 0.7						
Coulter DxH 560	5	0.30	0.14	47.1	0.3	0.0 - 0.8						

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

<u>Instrument</u>	Specimen DIF-6						Specimen DIF-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	28	58.58	16.77	28.6	62.7	8.2 - 109.0	28	65.35	2.89	4.4	65.9	56.6 - 74.1
All COULTER DxH 500 Series	23	63.56	4.85	7.6	63.4	49.0 - 78.2	23	65.35	2.89	4.4	65.9	56.6 - 74.1
All COULTER Instruments	5	8.75	0.35	4.0	8.8	7.6 - 9.9	5	4.65	0.21	4.6	4.7	4.0 - 5.3
Coulter DxH 500	6	61.12	6.11	10.0	62.0	42.8 - 79.5	6	65.55	3.90	5.9	66.2	53.8 - 77.3
Coulter DxH 520	12	64.27	4.25	6.6	62.7	51.5 - 77.1	12	65.10	2.69	4.1	65.1	57.0 - 73.2
Coulter DxH 560	5	66.65	0.78	1.2	66.7	64.3 - 69.0	5	66.25	0.07	0.1	66.3	66.0 - 66.5
Specimen DIF-8												
All Method	28	73.90	1.94	2.6	74.0	68.0 - 79.8	28	70.95	1.91	2.7	71.1	65.2 - 76.7
All COULTER DxH 500 Series	23	73.90	1.94	2.6	74.0	68.0 - 79.8	23	70.95	1.91	2.7	71.1	65.2 - 76.7
All COULTER Instruments	5	3.70	0.14	3.8	3.7	3.2 - 4.2	5	4.00	0.28	7.1	4.0	3.1 - 4.9
Coulter DxH 500	6	75.37	1.72	2.3	74.6	70.2 - 80.6	6	72.42	1.32	1.8	72.1	68.4 - 76.4
Coulter DxH 520	12	73.19	1.76	2.4	72.9	67.9 - 78.5	12	70.33	1.93	2.7	70.3	64.5 - 76.2
Coulter DxH 560	5	73.70	1.98	2.7	73.7	67.7 - 79.7	5	70.25	0.92	1.3	70.3	67.4 - 73.1
Specimen DIF-9												
Specimen DIF-10												
All Method	28	59.37	17.60	29.6	65.6	6.5 - 112.2						
All COULTER DxH 500 Series	23	64.77	4.57	7.1	65.7	51.0 - 78.5						
All COULTER Instruments	5	8.05	0.07	0.9	8.1	7.8 - 8.3						
Coulter DxH 500	6	62.04	5.55	8.9	65.0	45.3 - 78.7						
Coulter DxH 520	12	65.18	3.98	6.1	66.0	53.2 - 77.2						
Coulter DxH 560	5	69.15	0.64	0.9	69.2	67.2 - 71.1						

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

<i>Instrument</i>	Specimen DIF-6						Specimen DIF-7					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	28	0.02	0.04	217.1	0.0	0.0 - 0.2	28	0.00	0.01	0.0	0.0	0.0 - 0.1
All COULTER DxH 500 Series	23	0.02	0.04	244.2	0.0	0.0 - 0.2	23	0.00	0.01	0.0	0.0	0.0 - 0.1
All COULTER Instruments	5	0.05	0.07	141.4	0.1	0.0 - 0.3	5	0.00	0.01	0.0	0.0	0.0 - 0.1
Coulter DxH 500	6	0.06	0.08	137.7	0.0	0.0 - 0.3	6	0.00	0.01	0.0	0.0	0.0 - 0.1
Coulter DxH 520	12	0.00	0.01	0.0	0.0	0.0 - 0.1	12	0.02	0.04	233.6	0.0	0.0 - 0.2
Coulter DxH 560	5	0.00	0.01	0.0	0.0	0.0 - 0.1	5	0.00	0.01	0.0	0.0	0.0 - 0.1
Specimen DIF-8						Specimen DIF-9						
All Method	28	0.13	0.08	65.7	0.1	0.0 - 0.4	28	0.15	0.13	84.1	0.1	0.0 - 0.6
All COULTER DxH 500 Series	23	0.14	0.08	54.1	0.1	0.0 - 0.4	23	0.17	0.13	74.2	0.1	0.0 - 0.6
All COULTER Instruments	5	0.00	0.01	0.0	0.0	0.0 - 0.1	5	0.00	0.01	0.0	0.0	0.0 - 0.1
Coulter DxH 500	6	0.13	0.08	61.2	0.1	0.0 - 0.4	6	0.14	0.05	37.4	0.1	0.0 - 0.4
Coulter DxH 520	12	0.15	0.08	53.1	0.2	0.0 - 0.5	12	0.21	0.15	72.4	0.2	0.0 - 0.7
Coulter DxH 560	5	0.10	0.01	0.0	0.1	0.0 - 0.2	5	0.05	0.07	141.4	0.1	0.0 - 0.3
Specimen DIF-10												
All Method	28	0.00	0.01	0.0	0.0	0.0 - 0.1						
All COULTER DxH 500 Series	23	0.00	0.01	0.0	0.0	0.0 - 0.1						
All COULTER Instruments	5	0.00	0.01	0.0	0.0	0.0 - 0.1						
Coulter DxH 500	6	0.01	0.04	264.6	0.0	0.0 - 0.2						
Coulter DxH 520	12	0.00	0.01	0.0	0.0	0.0 - 0.1						
Coulter DxH 560	5	0.00	0.01	0.0	0.0	0.0 - 0.1						

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	22	0.88	0.14	16.1	0.9	0.5 - 1.2	22	3.60	0.85	23.5	3.5	1.9 - 5.3
All Automated Methods	18	0.84	0.12	14.2	0.9	0.5 - 1.1	18	3.41	0.48	14.2	3.4	2.3 - 4.5
All Manual Methods	5	1.28	0.43	33.5	1.1	0.4 - 2.2	5	7.55	2.50	33.2	7.8	2.5 - 12.6
Sysmex XN-1000	15	0.88	0.09	10.7	0.9	0.6 - 1.2	15	3.44	0.49	14.2	3.5	2.4 - 4.5

HEMATOLOGY W/ 5-PART DIFFERENTIAL—WHITE BLOOD CELL COUNT (x 10⁹/L)

<u>Instrument</u>	Specimen BCX-6						Specimen BCX-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	88	15.14	0.36	2.4	15.1	12.8 - 17.5	88	9.20	0.26	2.9	9.2	7.8 - 10.6
All ABX Instruments	82	15.15	0.36	2.4	15.1	12.8 - 17.5	82	9.22	0.24	2.6	9.3	7.8 - 10.6
All COULTER Instruments	5	15.07	0.15	1.0	15.1	12.8 - 17.4	5	8.77	0.55	6.3	8.5	7.4 - 10.1
ABX Pentra 60C+	76	15.17	0.36	2.4	15.2	12.8 - 17.5	76	9.22	0.24	2.6	9.3	7.8 - 10.7
ABX Pentra 80 / XL 80	6	14.83	0.26	1.7	14.9	12.6 - 17.1	6	9.15	0.26	2.8	9.2	7.7 - 10.6
COULTER AcT 5diff	5	15.07	0.15	1.0	15.1	12.8 - 17.4	5	8.77	0.55	6.3	8.5	7.4 - 10.1

<u>Instrument</u>	Specimen BCX-8						Specimen BCX-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	88	2.55	0.09	3.4	2.6	2.1 - 3.0	88	4.62	0.13	2.9	4.6	3.9 - 5.4
All ABX Instruments	82	2.55	0.09	3.4	2.6	2.1 - 3.0	82	4.63	0.13	2.9	4.6	3.9 - 5.4
All COULTER Instruments	5	2.60	0.10	3.8	2.6	2.2 - 3.0	5	4.50	0.17	3.8	4.4	3.8 - 5.2
ABX Pentra 60C+	76	2.54	0.08	3.1	2.5	2.1 - 3.0	76	4.63	0.14	2.9	4.6	3.9 - 5.4
ABX Pentra 80 / XL 80	6	2.60	0.11	4.2	2.6	2.2 - 3.0	6	4.60	0.06	1.4	4.6	3.9 - 5.3
COULTER AcT 5diff	5	2.60	0.10	3.8	2.6	2.2 - 3.0	5	4.50	0.17	3.8	4.4	3.8 - 5.2

<u>Instrument</u>	Specimen BCX-10					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	88	17.61	0.54	3.1	17.6	14.9 - 20.3
All ABX Instruments	82	17.62	0.53	3.0	17.6	14.9 - 20.3
All COULTER Instruments	5	15.60	0.87	5.6	15.2	13.2 - 18.0
ABX Pentra 60C+	76	17.65	0.47	2.7	17.7	15.0 - 20.3
ABX Pentra 80 / XL 80	6	16.97	0.54	3.2	17.1	14.4 - 19.6
COULTER AcT 5diff	5	15.60	0.87	5.6	15.2	13.2 - 18.0

HEMATOLOGY W/ 5-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10¹²/L)

Specimen BCX-6							Specimen BCX-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	88	4.281	0.064	1.5	4.28	4.02 - 4.54	88	6.240	0.088	1.4	6.24	5.86 - 6.62
All ABX Instruments	82	4.282	0.063	1.5	4.28	4.02 - 4.54	82	6.242	0.084	1.3	6.24	5.86 - 6.62
All COULTER Instruments	5	4.260	0.105	2.5	4.25	4.00 - 4.52	5	6.177	0.176	2.8	6.16	5.80 - 6.55
ABX Pentra 60C+	76	4.286	0.058	1.4	4.28	4.02 - 4.55	76	6.245	0.083	1.3	6.24	5.87 - 6.62
ABX Pentra 80 / XL 80	6	4.228	0.099	2.3	4.20	3.97 - 4.49	6	6.208	0.096	1.6	6.17	5.83 - 6.59
COULTER AcT 5diff	5	4.260	0.105	2.5	4.25	4.00 - 4.52	5	6.177	0.176	2.8	6.16	5.80 - 6.55
Specimen BCX-8							Specimen BCX-9					
All Method	88	2.410	0.045	1.9	2.41	2.26 - 2.56	88	4.256	0.062	1.5	4.25	4.00 - 4.52
All ABX Instruments	82	2.411	0.045	1.9	2.41	2.26 - 2.56	82	4.255	0.063	1.5	4.26	4.00 - 4.52
All COULTER Instruments	5	2.367	0.025	1.1	2.37	2.22 - 2.51	5	4.257	0.060	1.4	4.25	4.00 - 4.52
ABX Pentra 60C+	76	2.418	0.038	1.6	2.42	2.27 - 2.57	76	4.261	0.060	1.4	4.26	4.00 - 4.52
ABX Pentra 80 / XL 80	6	2.343	0.047	2.0	2.35	2.20 - 2.49	6	4.182	0.045	1.1	4.17	3.93 - 4.44
COULTER AcT 5diff	5	2.367	0.025	1.1	2.37	2.22 - 2.51	5	4.257	0.060	1.4	4.25	4.00 - 4.52
Specimen BCX-10												
All Method	88	5.147	0.074	1.4	5.16	4.83 - 5.46						
All ABX Instruments	82	5.150	0.073	1.4	5.16	4.84 - 5.46						
All COULTER Instruments	5	5.073	0.093	1.8	5.10	4.76 - 5.38						
ABX Pentra 60C+	76	5.153	0.073	1.4	5.16	4.84 - 5.47						
ABX Pentra 80 / XL 80	6	5.110	0.064	1.2	5.12	4.80 - 5.42						
COULTER AcT 5diff	5	5.073	0.093	1.8	5.10	4.76 - 5.38						

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

<i><u>Instrument</u></i>	Specimen BCX-6						Specimen BCX-7					
	<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	88	11.32	0.13	1.2	11.3	10.5 - 12.2	88	19.17	0.22	1.2	19.1	17.8 - 20.6
All ABX Instruments	82	11.32	0.13	1.1	11.3	10.5 - 12.2	82	19.18	0.20	1.1	19.2	17.8 - 20.6
All COULTER Instruments	5	11.27	0.25	2.2	11.3	10.4 - 12.1	5	18.70	0.40	2.1	18.7	17.3 - 20.1
ABX Pentra 60C+	76	11.33	0.13	1.1	11.3	10.5 - 12.2	76	19.17	0.21	1.1	19.1	17.8 - 20.6
ABX Pentra 80 / XL 80	6	11.30	0.09	0.8	11.3	10.5 - 12.1	6	19.27	0.19	1.0	19.3	17.9 - 20.7
COULTER Act 5diff	5	11.27	0.25	2.2	11.3	10.4 - 12.1	5	18.70	0.40	2.1	18.7	17.3 - 20.1
Specimen BCX-8						Specimen BCX-9						
All Method	88	6.31	0.08	1.3	6.3	5.8 - 6.8	88	12.78	0.14	1.1	12.8	11.8 - 13.7
All ABX Instruments	82	6.30	0.08	1.3	6.3	5.8 - 6.8	82	12.78	0.14	1.1	12.8	11.8 - 13.7
All COULTER Instruments	5	6.37	0.15	2.4	6.4	5.9 - 6.9	5	12.87	0.06	0.4	12.9	11.9 - 13.8
ABX Pentra 60C+	76	6.31	0.08	1.3	6.3	5.8 - 6.8	76	12.78	0.14	1.1	12.8	11.8 - 13.7
ABX Pentra 80 / XL 80	6	6.27	0.05	0.8	6.3	5.8 - 6.8	6	12.77	0.05	0.4	12.8	11.8 - 13.7
COULTER Act 5diff	5	6.37	0.15	2.4	6.4	5.9 - 6.9	5	12.87	0.06	0.4	12.9	11.9 - 13.8
Specimen BCX-10												
All Method	88	16.89	0.19	1.1	16.9	15.7 - 18.1						
All ABX Instruments	82	16.90	0.18	1.1	16.9	15.7 - 18.1						
All COULTER Instruments	5	16.60	0.20	1.2	16.6	15.4 - 17.8						
ABX Pentra 60C+	76	16.90	0.19	1.1	16.9	15.7 - 18.1						
ABX Pentra 80 / XL 80	6	16.92	0.17	1.0	16.9	15.7 - 18.2						
COULTER Act 5diff	5	16.60	0.20	1.2	16.6	15.4 - 17.8						

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

<i><u>Instrument</u></i>	Specimen BCX-6						Specimen BCX-7					
	<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	88	32.76	0.52	1.6	32.7	30.7 - 34.8	88	53.93	0.98	1.8	53.9	50.6 - 57.2
All ABX Instruments	82	32.78	0.51	1.6	32.7	30.8 - 34.8	82	54.03	0.88	1.6	54.0	50.7 - 57.3
All COULTER Instruments	5	32.30	0.44	1.3	32.5	30.3 - 34.3	5	52.40	0.95	1.8	51.9	49.2 - 55.6
ABX Pentra 60C+	76	32.80	0.52	1.6	32.7	30.8 - 34.8	76	54.11	0.84	1.5	54.0	50.8 - 57.4
ABX Pentra 80 / XL 80	6	32.53	0.39	1.2	32.5	30.5 - 34.5	6	52.57	1.03	2.0	52.7	49.4 - 55.8
COULTER AcT 5diff	5	32.30	0.44	1.3	32.5	30.3 - 34.3	5	52.40	0.95	1.8	51.9	49.2 - 55.6
	Specimen BCX-8						Specimen BCX-9					
All Method	88	18.23	0.31	1.7	18.2	17.1 - 19.4	88	36.08	0.59	1.6	36.0	33.9 - 38.3
All ABX Instruments	82	18.25	0.30	1.7	18.3	17.1 - 19.4	82	36.09	0.58	1.6	36.0	33.9 - 38.3
All COULTER Instruments	5	17.77	0.21	1.2	17.7	16.7 - 18.9	5	35.60	0.92	2.6	35.4	33.4 - 37.8
ABX Pentra 60C+	76	18.25	0.31	1.7	18.3	17.1 - 19.4	76	36.13	0.57	1.6	36.1	33.9 - 38.4
ABX Pentra 80 / XL 80	6	18.27	0.18	1.0	18.3	17.1 - 19.4	6	35.60	0.49	1.4	35.7	33.4 - 37.8
COULTER AcT 5diff	5	17.77	0.21	1.2	17.7	16.7 - 18.9	5	35.60	0.92	2.6	35.4	33.4 - 37.8
	Specimen BCX-10											
All Method	88	47.09	0.84	1.8	47.2	44.2 - 50.0						
All ABX Instruments	82	47.14	0.78	1.7	47.2	44.3 - 50.0						
All COULTER Instruments	5	45.60	1.08	2.4	45.3	42.8 - 48.4						
ABX Pentra 60C+	76	47.20	0.76	1.6	47.2	44.3 - 50.1						
ABX Pentra 80 / XL 80	6	46.47	0.73	1.6	46.3	43.6 - 49.3						
COULTER AcT 5diff	5	45.60	1.08	2.4	45.3	42.8 - 48.4						

HEMATOLOGY W/ 5-PART DIFFERENTIAL—PLATELET COUNT (x 10⁹/L)

<i><u>Instrument</u></i>	Specimen BCX-6						Specimen BCX-7						
	<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	88	226.3	9.6	4.2	227	169 - 283	88	81.4	5.4	6.6	80	61 - 102	
All ABX Instruments	82	226.0	9.3	4.1	227	169 - 283	82	81.1	5.1	6.3	80	60 - 102	
All COULTER Instruments	5	236.3	14.8	6.3	240	177 - 296	5	90.7	5.0	5.6	90	68 - 114	
ABX Pentra 60C+	76	225.5	9.1	4.1	227	169 - 282	76	80.9	5.2	6.4	80	60 - 102	
ABX Pentra 80 / XL 80	6	232.0	9.2	4.0	233	174 - 290	6	82.8	4.8	5.8	84	62 - 104	
COULTER Act 5diff	5	236.3	14.8	6.3	240	177 - 296	5	90.7	5.0	5.6	90	68 - 114	
	Specimen BCX-8						Specimen BCX-9						
All Method	88	73.2	4.6	6.2	73	54 - 92	88	248.4	9.6	3.9	249	186 - 311	
All ABX Instruments	82	73.1	4.6	6.2	73	54 - 92	82	248.3	9.7	3.9	249	186 - 311	
All COULTER Instruments	5	76.0	4.4	5.7	74	57 - 95	5	251.0	6.2	2.5	253	188 - 314	
ABX Pentra 60C+	76	73.3	4.6	6.3	74	54 - 92	76	248.5	8.8	3.5	249	186 - 311	
ABX Pentra 80 / XL 80	6	71.7	3.3	4.6	71	53 - 90	6	240.5	11.6	4.8	235	180 - 301	
COULTER Act 5diff	5	76.0	4.4	5.7	74	57 - 95	5	251.0	6.2	2.5	253	188 - 314	
	Specimen BCX-10												
All Method	88	504.1	18.7	3.7	505	378 - 631							
All ABX Instruments	82	503.6	18.0	3.6	505	377 - 630							
All COULTER Instruments	5	494.0	65.0	13.2	496	370 - 618							
ABX Pentra 60C+	76	503.2	18.0	3.6	504	377 - 629							
ABX Pentra 80 / XL 80	6	509.0	18.7	3.7	510	381 - 637							
COULTER Act 5diff	5	494.0	65.0	13.2	496	370 - 618							

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

<u>Instrument</u>	Specimen BCX-6						Specimen BCX-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	88	65.77	3.32	5.1	66.2	55.8 - 75.8	88	67.90	3.24	4.8	68.4	58.1 - 77.7
All ABX Instruments	82	66.01	2.99	4.5	66.2	57.0 - 75.0	82	67.90	3.24	4.8	68.4	58.1 - 77.7
All COULTER Instruments	5	51.67	3.76	7.3	50.4	40.3 - 63.0	5	53.60	3.64	6.8	53.0	42.6 - 64.6
ABX Pentra 60C+	76	66.37	2.53	3.8	66.2	58.7 - 74.0	76	68.16	2.98	4.4	68.6	59.2 - 77.2
ABX Pentra 80 / XL 80	6	61.48	4.65	7.6	60.4	47.5 - 75.5	6	64.58	4.66	7.2	64.5	50.5 - 78.6
COULTER Act 5diff	5	51.67	3.76	7.3	50.4	40.3 - 63.0	5	53.60	3.64	6.8	53.0	42.6 - 64.6

<u>Instrument</u>	Specimen BCX-8						Specimen BCX-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	88	70.35	4.04	5.7	70.5	58.2 - 82.5	88	65.63	3.57	5.4	65.9	54.9 - 76.4
All ABX Instruments	82	70.67	3.70	5.2	70.7	59.5 - 81.8	82	65.79	3.45	5.2	66.0	55.4 - 76.2
All COULTER Instruments	5	61.73	4.05	6.6	59.6	49.5 - 73.9	5	55.83	5.52	9.9	58.4	39.2 - 72.4
ABX Pentra 60C+	76	70.71	3.76	5.3	70.7	59.4 - 82.0	76	65.90	3.31	5.0	66.0	55.9 - 75.9
ABX Pentra 80 / XL 80	6	70.15	3.08	4.4	70.3	60.8 - 79.5	6	64.42	5.06	7.9	65.3	49.2 - 79.7
COULTER Act 5diff	5	61.73	4.05	6.6	59.6	49.5 - 73.9	5	55.83	5.52	9.9	58.4	39.2 - 72.4

<u>Instrument</u>	Specimen BCX-10					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	88	70.90	3.44	4.9	71.2	60.5 - 81.3
All ABX Instruments	82	71.01	3.32	4.7	71.2	61.0 - 81.0
All COULTER Instruments	5	55.70	5.62	10.1	53.4	38.8 - 72.6
ABX Pentra 60C+	76	71.40	2.89	4.0	71.7	62.7 - 80.1
ABX Pentra 80 / XL 80	6	65.82	5.01	7.6	66.5	50.7 - 80.9
COULTER Act 5diff	5	55.70	5.62	10.1	53.4	38.8 - 72.6

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

		Specimen BCX-6					Specimen BCX-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	88	26.84	3.35	12.5	26.4	16.7 - 36.9	88	25.33	3.14	12.4	25.0	15.9 - 34.8
All ABX Instruments	82	26.78	3.28	12.2	26.5	16.9 - 36.7	82	25.27	3.14	12.4	24.8	15.8 - 34.7
All COULTER Instruments	5	28.33	5.61	19.8	25.5	11.4 - 45.2	5	30.70	5.43	17.7	29.6	14.3 - 47.1
ABX Pentra 60C+	76	26.40	2.76	10.5	26.4	18.1 - 34.7	76	25.08	2.91	11.6	24.6	16.3 - 33.9
ABX Pentra 80 / XL 80	6	31.60	5.46	17.3	33.3	15.2 - 48.0	6	29.48	5.67	19.2	29.7	12.4 - 46.5
COULTER AcT 5diff	5	28.33	5.61	19.8	25.5	11.4 - 45.2	5	30.70	5.43	17.7	29.6	14.3 - 47.1
		Specimen BCX-8					Specimen BCX-9					
All Method	88	20.81	2.96	14.2	21.1	11.9 - 29.7	88	28.28	3.48	12.3	28.2	17.8 - 38.8
All ABX Instruments	82	20.85	2.94	14.1	21.1	12.0 - 29.7	82	28.27	3.50	12.4	28.2	17.7 - 38.8
All COULTER Instruments	5	19.77	3.87	19.6	21.8	8.1 - 31.4	5	28.73	3.58	12.5	30.7	17.9 - 39.5
ABX Pentra 60C+	76	20.73	2.94	14.2	20.7	11.8 - 29.6	76	28.16	3.29	11.7	28.2	18.2 - 38.1
ABX Pentra 80 / XL 80	6	22.35	2.72	12.2	22.5	14.1 - 30.6	6	29.62	5.79	19.6	28.6	12.2 - 47.0
COULTER AcT 5diff	5	19.77	3.87	19.6	21.8	8.1 - 31.4	5	28.73	3.58	12.5	30.7	17.9 - 39.5
		Specimen BCX-10										
All Method	88	24.18	3.15	13.0	24.0	14.7 - 33.7						
All ABX Instruments	82	24.16	3.03	12.5	24.0	15.0 - 33.3						
All COULTER Instruments	5	24.83	6.69	26.9	24.0	4.7 - 45.0						
ABX Pentra 60C+	76	24.02	2.92	12.2	23.9	15.2 - 32.8						
ABX Pentra 80 / XL 80	6	29.58	5.44	18.4	29.6	13.2 - 46.0						
COULTER AcT 5diff	5	24.83	6.69	26.9	24.0	4.7 - 45.0						

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

<i><u>Instrument</u></i>	Specimen BCX-6						Specimen BCX-7					
	<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	88	0.61	0.30	49.2	0.6	0.0 - 1.6	88	0.75	0.46	61.5	0.6	0.0 - 2.2
All ABX Instruments	82	0.57	0.24	42.7	0.6	0.0 - 1.3	82	0.73	0.43	59.3	0.6	0.0 - 2.1
All COULTER Instruments	5	2.13	1.27	59.7	1.5	0.0 - 6.0	5	4.13	2.64	63.8	4.9	0.0 - 12.1
ABX Pentra 60C+	76	0.56	0.24	42.5	0.6	0.0 - 1.3	76	0.73	0.44	60.4	0.6	0.0 - 2.1
ABX Pentra 80 / XL 80	6	0.63	0.29	46.5	0.7	0.0 - 1.6	6	0.65	0.25	38.6	0.7	0.0 - 1.5
COULTER AcT 5diff	5	2.13	1.27	59.7	1.5	0.0 - 6.0	5	4.13	2.64	63.8	4.9	0.0 - 12.1
	Specimen BCX-8						Specimen BCX-9					
All Method	88	0.37	0.29	78.6	0.3	0.0 - 1.3	88	0.56	0.38	68.1	0.5	0.0 - 1.7
All ABX Instruments	82	0.33	0.23	69.3	0.3	0.0 - 1.1	82	0.55	0.38	69.1	0.5	0.0 - 1.7
All COULTER Instruments	5	0.87	0.49	56.9	1.1	0.0 - 2.4	5	1.33	0.58	43.3	1.0	0.0 - 3.1
ABX Pentra 60C+	76	0.33	0.23	70.8	0.3	0.0 - 1.1	76	0.55	0.37	68.5	0.5	0.0 - 1.7
ABX Pentra 80 / XL 80	6	0.32	0.16	50.6	0.3	0.0 - 0.8	6	0.53	0.45	83.6	0.5	0.0 - 1.9
COULTER AcT 5diff	5	0.87	0.49	56.9	1.1	0.0 - 2.4	5	1.33	0.58	43.3	1.0	0.0 - 3.1
	Specimen BCX-10											
All Method	88	0.65	0.33	51.1	0.6	0.0 - 1.7						
All ABX Instruments	82	0.63	0.31	48.5	0.6	0.0 - 1.6						
All COULTER Instruments	5	4.40	3.80	86.5	4.6	0.0 - 15.9						
ABX Pentra 60C+	76	0.64	0.31	48.2	0.6	0.0 - 1.6						
ABX Pentra 80 / XL 80	6	0.60	0.34	56.8	0.5	0.0 - 1.7						
COULTER AcT 5diff	5	4.40	3.80	86.5	4.6	0.0 - 15.9						

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

<i><u>Instrument</u></i>	Specimen BCX-6						Specimen BCX-7					
	<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	88	6.23	1.11	17.8	6.2	2.9 - 9.6	88	5.36	1.09	20.4	5.4	2.0 - 8.7
All ABX Instruments	82	6.18	1.05	16.9	6.1	3.0 - 9.4	82	5.37	1.07	20.0	5.4	2.1 - 8.6
All COULTER Instruments	5	9.63	2.35	24.4	9.6	2.5 - 16.7	5	5.13	1.86	36.1	5.3	0.0 - 10.8
ABX Pentra 60C+	76	6.20	1.05	17.0	6.1	3.0 - 9.4	76	5.40	1.06	19.6	5.4	2.2 - 8.6
ABX Pentra 80 / XL 80	6	5.88	0.99	16.9	5.9	2.8 - 8.9	6	4.98	1.31	26.2	5.2	1.0 - 9.0
COULTER AcT 5diff	5	9.63	2.35	24.4	9.6	2.5 - 16.7	5	5.13	1.86	36.1	5.3	0.0 - 10.8
	Specimen BCX-8						Specimen BCX-9					
All Method	88	6.97	1.77	25.4	6.9	1.6 - 12.3	88	4.91	1.34	27.3	4.7	0.8 - 9.0
All ABX Instruments	82	7.04	1.76	25.1	7.0	1.7 - 12.4	82	4.92	1.30	26.4	4.7	1.0 - 8.9
All COULTER Instruments	5	5.37	1.32	24.6	5.1	1.4 - 9.4	5	6.17	3.72	60.3	7.0	0.0 - 17.4
ABX Pentra 60C+	76	7.09	1.75	24.7	7.1	1.8 - 12.4	76	4.89	1.31	26.8	4.7	0.9 - 8.9
ABX Pentra 80 / XL 80	6	6.37	1.97	30.9	5.8	0.4 - 12.3	6	5.30	1.18	22.3	5.4	1.7 - 8.9
COULTER AcT 5diff	5	5.37	1.32	24.6	5.1	1.4 - 9.4	5	6.17	3.72	60.3	7.0	0.0 - 17.4
	Specimen BCX-10											
All Method	88	3.43	0.68	19.8	3.3	1.3 - 5.5						
All ABX Instruments	82	3.36	0.60	18.0	3.3	1.5 - 5.2						
All COULTER Instruments	5	4.70	0.50	10.6	4.7	3.2 - 6.2						
ABX Pentra 60C+	76	3.37	0.61	18.0	3.3	1.5 - 5.2						
ABX Pentra 80 / XL 80	6	3.50	1.04	29.6	3.4	0.3 - 6.7						
COULTER AcT 5diff	5	4.70	0.50	10.6	4.7	3.2 - 6.2						

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

<i><u>Instrument</u></i>	Specimen BCX-6						Specimen BCX-7					
	<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	88	0.40	0.01	0.0	0.4	0.3 - 0.5	88	0.30	0.01	0.0	0.3	0.2 - 0.4
All ABX Instruments	82	0.40	0.01	0.0	0.4	0.3 - 0.5	82	0.30	0.01	0.0	0.3	0.2 - 0.4
All COULTER Instruments	5	8.23	0.31	3.7	8.3	7.3 - 9.2	5	6.43	0.45	7.0	6.4	5.0 - 7.8
ABX Pentra 60C+	76	0.40	0.01	0.0	0.4	0.3 - 0.5	76	0.30	0.01	0.0	0.3	0.2 - 0.4
ABX Pentra 80 / XL 80	6	0.40	0.01	0.0	0.4	0.3 - 0.5	6	0.30	0.01	0.0	0.3	0.2 - 0.4
COULTER AcT 5diff	5	8.23	0.31	3.7	8.3	7.3 - 9.2	5	6.43	0.45	7.0	6.4	5.0 - 7.8
	Specimen BCX-8						Specimen BCX-9					
All Method	88	0.59	0.04	7.6	0.6	0.4 - 0.8	88	0.37	0.04	12.0	0.4	0.2 - 0.6
All ABX Instruments	82	0.59	0.04	7.6	0.6	0.4 - 0.8	82	0.37	0.04	12.0	0.4	0.2 - 0.6
All COULTER Instruments	5	12.27	0.71	5.8	12.4	10.1 - 14.4	5	7.93	1.22	15.4	8.2	4.2 - 11.6
ABX Pentra 60C+	76	0.59	0.04	7.6	0.6	0.4 - 0.8	76	0.37	0.04	11.7	0.4	0.2 - 0.6
ABX Pentra 80 / XL 80	6	0.62	0.04	6.6	0.6	0.4 - 0.8	6	0.35	0.05	15.6	0.4	0.1 - 0.6
COULTER AcT 5diff	5	12.27	0.71	5.8	12.4	10.1 - 14.4	5	7.93	1.22	15.4	8.2	4.2 - 11.6
	Specimen BCX-10											
All Method	88	0.51	0.03	5.2	0.5	0.4 - 0.6						
All ABX Instruments	82	0.51	0.03	5.2	0.5	0.4 - 0.6						
All COULTER Instruments	5	10.37	0.81	7.8	10.5	7.9 - 12.8						
ABX Pentra 60C+	76	0.51	0.03	5.4	0.5	0.4 - 0.6						
ABX Pentra 80 / XL 80	6	0.50	0.01	0.0	0.5	0.4 - 0.6						
COULTER AcT 5diff	5	10.37	0.81	7.8	10.5	7.9 - 12.8						

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL—WHITE BLOOD CELL COUNT (x 10⁹/L)

<u>Instrument</u>	Specimen MX-6						Specimen MX-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	126	3.87	0.22	5.8	3.8	3.2 - 4.5	126	7.24	0.28	3.8	7.2	6.1 - 8.4
All Sysmex XN/XS Instruments	126	3.87	0.22	5.8	3.8	3.2 - 4.5	126	7.24	0.28	3.8	7.2	6.1 - 8.4
Sysmex XN-1000	20	4.22	0.08	1.9	4.2	3.5 - 4.9	20	7.67	0.16	2.0	7.7	6.5 - 8.9
Sysmex XN-330	12	3.79	0.18	4.8	3.8	3.2 - 4.4	12	7.09	0.31	4.4	7.0	6.0 - 8.2
Sysmex XN-430	39	3.81	0.17	4.4	3.8	3.2 - 4.4	39	7.16	0.17	2.3	7.1	6.0 - 8.3
Sysmex XN-450	12	3.78	0.13	3.5	3.8	3.2 - 4.4	12	7.17	0.13	1.8	7.1	6.0 - 8.3
Sysmex XN-530	5	3.75	0.10	2.7	3.8	3.1 - 4.4	5	7.08	0.25	3.5	7.1	6.0 - 8.2
Sysmex XN-550	21	3.76	0.08	2.2	3.8	3.1 - 4.4	21	7.17	0.15	2.1	7.2	6.0 - 8.3
Sysmex XS-1000i	16	3.93	0.28	7.2	3.8	3.3 - 4.6	16	7.09	0.13	1.9	7.1	6.0 - 8.2

<u>Instrument</u>	Specimen MX-8						Specimen MX-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	126	22.69	0.38	1.7	22.7	19.2 - 26.1	126	21.05	0.43	2.0	21.0	17.8 - 24.3
All Sysmex XN/XS Instruments	126	22.69	0.38	1.7	22.7	19.2 - 26.1	126	21.05	0.43	2.0	21.0	17.8 - 24.3
Sysmex XN-1000	20	22.80	0.29	1.3	22.9	19.3 - 26.3	20	21.13	0.44	2.1	21.2	17.9 - 24.3
Sysmex XN-330	12	22.42	0.40	1.8	22.3	19.0 - 25.8	12	20.93	0.50	2.4	20.9	17.7 - 24.1
Sysmex XN-430	39	22.83	0.48	2.1	22.7	19.4 - 26.3	39	21.16	0.49	2.3	21.1	17.9 - 24.4
Sysmex XN-450	12	22.73	0.25	1.1	22.7	19.3 - 26.2	12	21.06	0.29	1.4	21.0	17.8 - 24.3
Sysmex XN-530	5	22.70	0.39	1.7	22.7	19.2 - 26.2	5	21.03	0.38	1.8	21.0	17.8 - 24.2
Sysmex XN-550	21	22.69	0.36	1.6	22.6	19.2 - 26.1	21	21.02	0.35	1.7	21.1	17.8 - 24.2
Sysmex XS-1000i	16	22.51	0.24	1.1	22.5	19.1 - 25.9	16	20.84	0.29	1.4	20.8	17.7 - 24.0

<u>Instrument</u>	Specimen MX-10					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	126	3.87	0.22	5.7	3.8	3.2 - 4.5
All Sysmex XN/XS Instruments	126	3.87	0.22	5.7	3.8	3.2 - 4.5
Sysmex XN-1000	20	4.20	0.08	1.9	4.2	3.5 - 4.9
Sysmex XN-330	12	3.80	0.25	6.6	3.7	3.2 - 4.4
Sysmex XN-430	39	3.77	0.14	3.7	3.8	3.2 - 4.4
Sysmex XN-450	12	3.78	0.09	2.3	3.8	3.2 - 4.4
Sysmex XN-530	5	3.75	0.06	1.5	3.8	3.1 - 4.4
Sysmex XN-550	21	3.77	0.09	2.3	3.8	3.2 - 4.4
Sysmex XS-1000i	16	3.91	0.23	5.9	3.8	3.3 - 4.5

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10¹²/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	126	2.285	0.034	1.5	2.29	2.14 - 2.43	126	4.652	0.055	1.2	4.66	4.37 - 4.94
All Sysmex XN/XS Instruments	126	2.285	0.034	1.5	2.29	2.14 - 2.43	126	4.652	0.055	1.2	4.66	4.37 - 4.94
Sysmex XN-1000	20	2.300	0.027	1.2	2.30	2.16 - 2.44	20	4.659	0.050	1.1	4.66	4.37 - 4.94
Sysmex XN-330	12	2.253	0.039	1.7	2.25	2.11 - 2.39	12	4.627	0.079	1.7	4.63	4.34 - 4.91
Sysmex XN-430	39	2.286	0.032	1.4	2.29	2.14 - 2.43	39	4.654	0.057	1.2	4.66	4.37 - 4.94
Sysmex XN-450	12	2.263	0.031	1.4	2.26	2.12 - 2.40	12	4.640	0.063	1.3	4.62	4.36 - 4.92
Sysmex XN-530	5	2.263	0.039	1.7	2.25	2.12 - 2.40	5	4.633	0.035	0.8	4.64	4.35 - 4.92
Sysmex XN-550	21	2.283	0.027	1.2	2.28	2.14 - 2.43	21	4.659	0.045	1.0	4.66	4.37 - 4.94
Sysmex XS-1000i	16	2.313	0.019	0.8	2.32	2.17 - 2.46	16	4.668	0.041	0.9	4.66	4.38 - 4.95

Specimen MX-8							Specimen MX-9					
All Method	126	6.158	0.066	1.1	6.16	5.78 - 6.53	126	5.647	0.059	1.0	5.64	5.30 - 5.99
All Sysmex XN/XS Instruments	126	6.158	0.066	1.1	6.16	5.78 - 6.53	126	5.647	0.059	1.0	5.64	5.30 - 5.99
Sysmex XN-1000	20	6.141	0.069	1.1	6.14	5.77 - 6.51	20	5.626	0.059	1.0	5.62	5.28 - 5.97
Sysmex XN-330	12	6.173	0.098	1.6	6.21	5.80 - 6.55	12	5.640	0.075	1.3	5.64	5.30 - 5.98
Sysmex XN-430	39	6.158	0.060	1.0	6.16	5.78 - 6.53	39	5.655	0.051	0.9	5.64	5.31 - 6.00
Sysmex XN-450	12	6.155	0.072	1.2	6.17	5.78 - 6.53	12	5.654	0.073	1.3	5.65	5.31 - 6.00
Sysmex XN-530	5	6.198	0.051	0.8	6.21	5.82 - 6.57	5	5.620	0.029	0.5	5.63	5.28 - 5.96
Sysmex XN-550	21	6.158	0.068	1.1	6.14	5.78 - 6.53	21	5.655	0.059	1.0	5.65	5.31 - 6.00
Sysmex XS-1000i	16	6.161	0.049	0.8	6.16	5.79 - 6.54	16	5.654	0.060	1.1	5.66	5.31 - 6.00

Specimen MX-10						
All Method	126	2.284	0.033	1.5	2.29	2.14 - 2.43
All Sysmex XN/XS Instruments	126	2.284	0.033	1.5	2.29	2.14 - 2.43
Sysmex XN-1000	20	2.294	0.029	1.3	2.30	2.15 - 2.44
Sysmex XN-330	12	2.264	0.034	1.5	2.25	2.12 - 2.41
Sysmex XN-430	39	2.276	0.029	1.3	2.27	2.13 - 2.42
Sysmex XN-450	12	2.283	0.030	1.3	2.29	2.14 - 2.43
Sysmex XN-530	5	2.265	0.021	0.9	2.27	2.12 - 2.41
Sysmex XN-550	21	2.280	0.033	1.4	2.29	2.14 - 2.42
Sysmex XS-1000i	16	2.321	0.022	0.9	2.33	2.18 - 2.47

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

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	126	5.96	0.07	1.2	6.0	5.5 - 6.4	126	13.29	0.11	0.8	13.3	12.3 - 14.3
All Sysmex XN/XS Instruments	126	5.96	0.07	1.2	6.0	5.5 - 6.4	126	13.29	0.11	0.8	13.3	12.3 - 14.3
Sysmex XN-1000	20	6.04	0.08	1.4	6.0	5.6 - 6.5	20	13.39	0.10	0.8	13.4	12.4 - 14.4
Sysmex XN-330	12	5.92	0.07	1.2	5.9	5.5 - 6.4	12	13.23	0.12	0.9	13.2	12.3 - 14.2
Sysmex XN-430	39	5.96	0.06	1.0	6.0	5.5 - 6.4	39	13.26	0.10	0.7	13.3	12.3 - 14.2
Sysmex XN-450	12	5.93	0.05	0.8	5.9	5.5 - 6.4	12	13.28	0.11	0.8	13.3	12.3 - 14.3
Sysmex XN-530	5	5.98	0.05	0.8	6.0	5.5 - 6.4	5	13.28	0.05	0.4	13.3	12.3 - 14.3
Sysmex XN-550	21	5.97	0.07	1.2	6.0	5.5 - 6.4	21	13.28	0.08	0.6	13.3	12.3 - 14.3
Sysmex XS-1000i	16	5.92	0.05	0.9	5.9	5.5 - 6.4	16	13.31	0.12	0.9	13.3	12.3 - 14.3

Specimen MX-8							Specimen MX-9					
All Method	126	19.12	0.17	0.9	19.1	17.7 - 20.5	126	17.58	0.15	0.9	17.6	16.3 - 18.9
All Sysmex XN/XS Instruments	126	19.12	0.17	0.9	19.1	17.7 - 20.5	126	17.58	0.15	0.9	17.6	16.3 - 18.9
Sysmex XN-1000	20	19.21	0.17	0.9	19.2	17.8 - 20.6	20	17.64	0.14	0.8	17.7	16.4 - 18.9
Sysmex XN-330	12	19.12	0.16	0.9	19.2	17.7 - 20.5	12	17.52	0.09	0.5	17.5	16.2 - 18.8
Sysmex XN-430	39	19.06	0.15	0.8	19.1	17.7 - 20.4	39	17.54	0.14	0.8	17.6	16.3 - 18.8
Sysmex XN-450	12	19.08	0.18	1.0	19.1	17.7 - 20.5	12	17.57	0.18	1.0	17.6	16.3 - 18.8
Sysmex XN-530	5	19.10	0.08	0.4	19.1	17.7 - 20.5	5	17.55	0.06	0.3	17.6	16.3 - 18.8
Sysmex XN-550	21	19.06	0.09	0.5	19.1	17.7 - 20.4	21	17.54	0.11	0.6	17.5	16.3 - 18.8
Sysmex XS-1000i	16	19.31	0.13	0.7	19.3	17.9 - 20.7	16	17.71	0.19	1.1	17.8	16.4 - 19.0

Specimen MX-10						
All Method	126	5.99	0.07	1.2	6.0	5.5 - 6.5
All Sysmex XN/XS Instruments	126	5.99	0.07	1.2	6.0	5.5 - 6.5
Sysmex XN-1000	20	6.05	0.08	1.3	6.0	5.6 - 6.5
Sysmex XN-330	12	5.94	0.05	0.8	5.9	5.5 - 6.4
Sysmex XN-430	39	6.00	0.08	1.3	6.0	5.5 - 6.5
Sysmex XN-450	12	5.98	0.04	0.7	6.0	5.5 - 6.5
Sysmex XN-530	5	6.00	0.01	0.0	6.0	5.5 - 6.5
Sysmex XN-550	21	5.98	0.05	0.9	6.0	5.5 - 6.4
Sysmex XS-1000i	16	5.93	0.06	1.0	5.9	5.5 - 6.4

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL – HEMATOCRIT (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	126	17.77	0.36	2.0	17.7	16.7 - 18.9	126	39.59	0.67	1.7	39.6	37.2 - 42.0
All Sysmex XN/XS Instruments	126	17.77	0.36	2.0	17.7	16.7 - 18.9	126	39.59	0.67	1.7	39.6	37.2 - 42.0
Sysmex XN-1000	20	17.71	0.29	1.6	17.7	16.6 - 18.8	20	39.45	0.69	1.8	39.6	37.0 - 41.9
Sysmex XN-330	12	17.47	0.34	1.9	17.4	16.4 - 18.6	12	39.25	0.73	1.9	39.3	36.8 - 41.7
Sysmex XN-430	39	17.76	0.30	1.7	17.7	16.6 - 18.9	39	39.54	0.63	1.6	39.5	37.1 - 42.0
Sysmex XN-450	12	17.69	0.27	1.5	17.7	16.6 - 18.8	12	39.54	0.64	1.6	39.6	37.1 - 42.0
Sysmex XN-530	5	17.45	0.26	1.5	17.4	16.4 - 18.5	5	39.13	0.34	0.9	39.2	36.7 - 41.5
Sysmex XN-550	21	17.73	0.31	1.7	17.7	16.6 - 18.8	21	39.60	0.61	1.5	39.6	37.2 - 42.0
Sysmex XS-1000i	16	18.31	0.21	1.2	18.4	17.2 - 19.5	16	40.30	0.44	1.1	40.4	37.8 - 42.8

Specimen MX-8							Specimen MX-9					
All Method	126	56.85	0.96	1.7	56.8	53.4 - 60.3	126	52.01	0.91	1.7	52.0	48.8 - 55.2
All Sysmex XN/XS Instruments	126	56.85	0.96	1.7	56.8	53.4 - 60.3	126	52.01	0.91	1.7	52.0	48.8 - 55.2
Sysmex XN-1000	20	56.47	1.00	1.8	56.3	53.0 - 59.9	20	51.56	0.83	1.6	51.6	48.4 - 54.7
Sysmex XN-330	12	56.80	0.83	1.5	56.8	53.3 - 60.3	12	51.75	0.84	1.6	52.0	48.6 - 54.9
Sysmex XN-430	39	56.70	0.82	1.4	56.7	53.2 - 60.2	39	51.96	0.73	1.4	52.0	48.8 - 55.1
Sysmex XN-450	12	56.76	0.95	1.7	56.6	53.3 - 60.2	12	52.00	0.80	1.5	52.0	48.8 - 55.2
Sysmex XN-530	5	56.65	0.33	0.6	56.8	53.2 - 60.1	5	51.20	0.32	0.6	51.2	48.1 - 54.3
Sysmex XN-550	21	56.81	1.04	1.8	56.5	53.4 - 60.3	21	51.97	0.90	1.7	51.8	48.8 - 55.1
Sysmex XS-1000i	16	57.92	0.70	1.2	57.9	54.4 - 61.4	16	53.18	0.67	1.3	53.2	49.9 - 56.4

Specimen MX-10						
All Method	126	17.77	0.37	2.1	17.7	16.7 - 18.9
All Sysmex XN/XS Instruments	126	17.77	0.37	2.1	17.7	16.7 - 18.9
Sysmex XN-1000	20	17.63	0.30	1.7	17.7	16.5 - 18.7
Sysmex XN-330	12	17.60	0.35	2.0	17.6	16.5 - 18.7
Sysmex XN-430	39	17.72	0.26	1.5	17.7	16.6 - 18.8
Sysmex XN-450	12	17.79	0.24	1.3	17.8	16.7 - 18.9
Sysmex XN-530	5	17.53	0.10	0.5	17.6	16.4 - 18.6
Sysmex XN-550	21	17.75	0.35	2.0	17.7	16.6 - 18.9
Sysmex XS-1000i	16	18.34	0.20	1.1	18.3	17.2 - 19.5

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL-PLATELET COUNT (x 10⁹/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	126	50.2	3.3	6.7	50	37 - 63	126	201.0	6.7	3.3	201	150 - 252
All Sysmex XN/XS Instruments	126	50.2	3.3	6.7	50	37 - 63	126	201.0	6.7	3.3	201	150 - 252
Sysmex XN-1000	20	48.5	2.2	4.6	48	36 - 61	20	200.5	7.1	3.6	200	150 - 251
Sysmex XN-330	12	48.5	2.7	5.7	48	36 - 61	12	199.8	5.8	2.9	199	149 - 250
Sysmex XN-430	39	50.6	3.7	7.4	51	37 - 64	39	200.6	6.4	3.2	201	150 - 251
Sysmex XN-450	12	49.9	3.8	7.7	51	37 - 63	12	201.1	5.2	2.6	200	150 - 252
Sysmex XN-530	5	49.3	5.1	10.4	49	36 - 62	5	201.3	10.0	5.0	199	150 - 252
Sysmex XN-550	21	50.6	2.9	5.8	50	37 - 64	21	201.6	7.6	3.8	203	151 - 252
Sysmex XS-1000i	16	53.2	2.7	5.1	53	39 - 67	16	202.5	7.3	3.6	204	151 - 254

Specimen MX-8							Specimen MX-9					
All Method	126	389.4	13.7	3.5	389	292 - 487	126	400.9	12.8	3.2	402	300 - 502
All Sysmex XN/XS Instruments	126	389.4	13.7	3.5	389	292 - 487	126	400.9	12.8	3.2	402	300 - 502
Sysmex XN-1000	20	395.4	14.7	3.7	396	296 - 495	20	402.1	18.2	4.5	402	301 - 503
Sysmex XN-330	12	391.8	14.1	3.6	393	293 - 490	12	403.6	13.2	3.3	404	302 - 505
Sysmex XN-430	39	387.1	11.6	3.0	387	290 - 484	39	398.4	13.0	3.3	400	298 - 498
Sysmex XN-450	12	396.1	13.7	3.5	395	297 - 496	12	402.4	9.3	2.3	404	301 - 504
Sysmex XN-530	5	399.5	13.3	3.3	405	299 - 500	5	405.5	11.6	2.9	410	304 - 507
Sysmex XN-550	21	390.2	11.7	3.0	392	292 - 488	21	403.3	10.2	2.5	403	302 - 505
Sysmex XS-1000i	16	374.5	6.7	1.8	374	280 - 469	16	393.8	11.6	3.0	395	295 - 493

Specimen MX-10						
All Method	126	50.0	3.1	6.1	50	37 - 63
All Sysmex XN/XS Instruments	126	50.0	3.1	6.1	50	37 - 63
Sysmex XN-1000	20	48.7	3.0	6.2	48	36 - 61
Sysmex XN-330	12	49.1	2.5	5.0	48	36 - 62
Sysmex XN-430	39	49.3	2.6	5.2	49	36 - 62
Sysmex XN-450	12	50.5	2.8	5.6	51	37 - 64
Sysmex XN-530	5	50.3	2.5	5.0	49	37 - 63
Sysmex XN-550	21	50.2	3.0	5.9	51	37 - 63
Sysmex XS-1000i	16	53.4	2.8	5.2	53	40 - 67

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	121	62.85	1.62	2.6	62.9	57.9 - 67.8	121	51.56	1.77	3.4	51.6	46.2 - 56.9
All Sysmex XN/XS Instruments	121	62.85	1.62	2.6	62.9	57.9 - 67.8	121	51.56	1.77	3.4	51.6	46.2 - 56.9
Sysmex XN-1000	20	64.57	1.15	1.8	64.5	61.1 - 68.1	20	53.75	0.80	1.5	53.9	51.3 - 56.2
Sysmex XN-330	10	63.60	1.29	2.0	63.7	59.7 - 67.5	10	50.45	0.83	1.7	50.4	47.9 - 53.0
Sysmex XN-430	36	62.33	1.34	2.2	62.3	58.2 - 66.4	36	50.85	1.29	2.5	50.7	46.9 - 54.8
Sysmex XN-450	12	63.03	0.92	1.5	63.0	60.2 - 65.8	12	51.17	1.19	2.3	51.6	47.6 - 54.8
Sysmex XN-530	5	62.63	0.51	0.8	62.5	61.0 - 64.2	5	50.60	1.66	3.3	49.9	45.6 - 55.6
Sysmex XN-550	21	62.63	1.35	2.2	62.7	58.5 - 66.7	21	50.74	1.30	2.6	50.4	46.8 - 54.7
Sysmex XS-1000i	16	61.58	1.98	3.2	61.1	55.6 - 67.6	16	52.86	1.92	3.6	52.5	47.1 - 58.7

Specimen MX-8							Specimen MX-9					
All Method	121	56.06	1.88	3.4	55.5	50.4 - 61.8	121	56.09	1.80	3.2	55.5	50.6 - 61.5
All Sysmex XN/XS Instruments	121	56.06	1.88	3.4	55.5	50.4 - 61.8	121	56.09	1.80	3.2	55.5	50.6 - 61.5
Sysmex XN-1000	20	58.90	0.78	1.3	59.1	56.5 - 61.3	20	58.73	0.87	1.5	59.0	56.1 - 61.4
Sysmex XN-330	10	55.20	1.23	2.2	55.1	51.5 - 58.9	10	55.38	0.99	1.8	55.5	52.3 - 58.4
Sysmex XN-430	36	55.07	0.93	1.7	55.0	52.2 - 57.9	36	55.04	1.03	1.9	55.1	51.9 - 58.2
Sysmex XN-450	12	55.17	1.08	2.0	55.0	51.9 - 58.5	12	55.35	0.93	1.7	55.3	52.5 - 58.2
Sysmex XN-530	5	55.70	1.00	1.8	55.7	52.7 - 58.7	5	55.53	1.18	2.1	54.9	51.9 - 59.1
Sysmex XN-550	21	55.00	0.98	1.8	55.0	52.0 - 58.0	21	55.37	0.95	1.7	55.2	52.5 - 58.3
Sysmex XS-1000i	16	57.36	1.91	3.3	58.0	51.6 - 63.1	16	57.43	2.07	3.6	57.4	51.2 - 63.7

Specimen MX-10						
All Method	121	62.82	1.45	2.3	62.8	58.4 - 67.2
All Sysmex XN/XS Instruments	121	62.82	1.45	2.3	62.8	58.4 - 67.2
Sysmex XN-1000	20	64.00	1.01	1.6	64.1	60.9 - 67.1
Sysmex XN-330	10	62.87	1.28	2.0	63.3	59.0 - 66.8
Sysmex XN-430	36	62.67	1.20	1.9	62.5	59.0 - 66.3
Sysmex XN-450	12	63.19	1.56	2.5	63.2	58.5 - 67.9
Sysmex XN-530	5	62.37	2.32	3.7	62.7	55.4 - 69.4
Sysmex XN-550	21	62.75	1.18	1.9	62.8	59.2 - 66.3
Sysmex XS-1000i	16	61.44	1.86	3.0	61.5	55.8 - 67.1

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

<u><i>Instrument</i></u>	Specimen MX-6						Specimen MX-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	121	11.50	1.58	13.7	11.0	6.7 - 16.3	121	25.71	1.56	6.1	25.9	21.0 - 30.4
All Sysmex XN/XS Instruments	121	11.50	1.58	13.7	11.0	6.7 - 16.3	121	25.71	1.56	6.1	25.9	21.0 - 30.4
Sysmex XN-1000	20	14.29	0.69	4.9	14.2	12.2 - 16.4	20	24.55	0.48	2.0	24.6	23.1 - 26.0
Sysmex XN-330	10	10.34	0.52	5.0	10.3	8.7 - 11.9	10	26.80	0.76	2.9	26.8	24.5 - 29.1
Sysmex XN-430	36	10.84	0.77	7.1	11.0	8.5 - 13.2	36	26.26	1.17	4.4	26.4	22.7 - 29.8
Sysmex XN-450	12	10.73	0.70	6.6	10.7	8.6 - 12.9	12	25.96	0.96	3.7	26.1	23.0 - 28.9
Sysmex XN-530	5	10.83	0.75	6.9	10.8	8.5 - 13.1	5	26.87	1.37	5.1	27.1	22.7 - 31.0
Sysmex XN-550	21	10.78	0.63	5.9	10.7	8.8 - 12.7	21	26.42	1.37	5.2	26.8	22.3 - 30.6
Sysmex XS-1000i	16	12.16	1.70	14.0	12.8	7.0 - 17.3	16	23.29	1.90	8.2	23.5	17.5 - 29.0

<u><i>Instrument</i></u>	Specimen MX-8						Specimen MX-9					
	<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	121	20.22	1.21	6.0	20.6	16.5 - 23.9	121	20.52	1.17	5.7	20.8	17.0 - 24.1
All Sysmex XN/XS Instruments	121	20.22	1.21	6.0	20.6	16.5 - 23.9	121	20.52	1.17	5.7	20.8	17.0 - 24.1
Sysmex XN-1000	20	18.92	0.49	2.6	18.9	17.4 - 20.4	20	19.38	0.98	5.0	19.5	16.4 - 22.4
Sysmex XN-330	10	20.74	0.47	2.3	20.8	19.3 - 22.2	10	20.80	0.60	2.9	20.9	19.0 - 22.6
Sysmex XN-430	36	20.77	0.39	1.9	20.8	19.5 - 22.0	36	21.11	0.57	2.7	21.2	19.3 - 22.9
Sysmex XN-450	12	20.67	0.48	2.3	20.5	19.2 - 22.1	12	21.18	0.60	2.8	21.4	19.3 - 23.0
Sysmex XN-530	5	19.97	0.84	4.2	20.4	17.4 - 22.5	5	20.83	1.18	5.7	20.2	17.2 - 24.4
Sysmex XN-550	21	20.78	0.51	2.4	20.8	19.2 - 22.3	21	20.99	0.43	2.1	20.9	19.6 - 22.3
Sysmex XS-1000i	16	17.76	2.51	14.1	16.8	10.2 - 25.3	16	17.78	2.30	13.0	17.6	10.8 - 24.7

<u><i>Instrument</i></u>	Specimen MX-10					
	<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	121	11.51	1.72	15.0	11.2	6.3 - 16.7
All Sysmex XN/XS Instruments	121	11.51	1.72	15.0	11.2	6.3 - 16.7
Sysmex XN-1000	20	14.15	0.78	5.5	14.2	11.8 - 16.5
Sysmex XN-330	10	10.90	0.67	6.1	11.1	8.9 - 12.9
Sysmex XN-430	36	10.77	0.91	8.5	10.7	8.0 - 13.6
Sysmex XN-450	12	10.60	0.81	7.6	10.4	8.1 - 13.1
Sysmex XN-530	5	10.97	0.80	7.3	10.9	8.5 - 13.4
Sysmex XN-550	21	10.61	0.99	9.3	11.1	7.6 - 13.6
Sysmex XS-1000i	16	12.79	1.92	15.0	13.4	7.0 - 18.6

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	121	0.64	0.32	49.7	0.5	0.0 - 1.6	121	1.97	0.77	39.2	1.7	0.0 - 4.3
All Sysmex XN/XS Instruments	121	0.64	0.32	49.7	0.5	0.0 - 1.6	121	1.97	0.77	39.2	1.7	0.0 - 4.3
Sysmex XN-1000	20	1.17	0.31	26.5	1.2	0.2 - 2.1	20	3.56	0.31	8.7	3.5	2.6 - 4.5
Sysmex XN-330	10	0.57	0.22	38.8	0.6	0.0 - 1.3	10	1.56	0.22	13.9	1.6	0.9 - 2.3
Sysmex XN-430	36	0.55	0.13	24.3	0.5	0.1 - 1.0	36	1.57	0.26	16.5	1.6	0.7 - 2.4
Sysmex XN-450	12	0.65	0.26	39.6	0.6	0.0 - 1.5	12	1.63	0.39	24.2	1.6	0.4 - 2.9
Sysmex XN-530	5	0.63	0.15	24.1	0.6	0.1 - 1.1	5	1.57	0.12	7.4	1.5	1.2 - 2.0
Sysmex XN-550	21	0.67	0.22	32.3	0.5	0.0 - 1.4	21	1.64	0.33	20.0	1.7	0.6 - 2.7
Sysmex XS-1000i	16	0.30	0.33	110.2	0.2	0.0 - 1.3	16	2.06	0.31	15.0	2.0	1.1 - 3.0

Specimen MX-8							Specimen MX-9					
All Method	121	1.16	0.65	55.8	0.9	0.0 - 3.2	121	1.10	0.64	58.4	0.8	0.0 - 3.1
All Sysmex XN/XS Instruments	121	1.16	0.65	55.8	0.9	0.0 - 3.2	121	1.10	0.64	58.4	0.8	0.0 - 3.1
Sysmex XN-1000	20	2.50	0.24	9.6	2.6	1.7 - 3.3	20	2.42	0.29	12.0	2.4	1.5 - 3.3
Sysmex XN-330	10	0.78	0.15	18.9	0.8	0.3 - 1.3	10	0.75	0.20	26.9	0.8	0.1 - 1.4
Sysmex XN-430	36	0.79	0.14	18.0	0.7	0.3 - 1.3	36	0.74	0.13	17.7	0.8	0.3 - 1.2
Sysmex XN-450	12	0.91	0.20	21.7	0.9	0.3 - 1.6	12	0.88	0.22	25.0	0.9	0.2 - 1.6
Sysmex XN-530	5	0.87	0.21	24.0	0.8	0.2 - 1.5	5	0.77	0.21	27.2	0.7	0.1 - 1.4
Sysmex XN-550	21	0.81	0.16	19.5	0.8	0.3 - 1.3	21	0.75	0.18	24.2	0.7	0.2 - 1.3
Sysmex XS-1000i	16	1.39	0.29	21.2	1.3	0.5 - 2.3	16	1.30	0.36	27.7	1.2	0.2 - 2.4

Specimen MX-10						
All Method	121	0.62	0.31	49.7	0.5	0.0 - 1.6
All Sysmex XN/XS Instruments	121	0.62	0.31	49.7	0.5	0.0 - 1.6
Sysmex XN-1000	20	1.08	0.28	25.8	1.2	0.2 - 2.0
Sysmex XN-330	10	0.53	0.13	23.6	0.5	0.1 - 1.0
Sysmex XN-430	36	0.55	0.14	24.8	0.5	0.1 - 1.0
Sysmex XN-450	12	0.63	0.22	35.2	0.5	0.0 - 1.4
Sysmex XN-530	5	0.50	0.01	0.0	0.5	0.4 - 0.6
Sysmex XN-550	21	0.64	0.19	29.9	0.5	0.0 - 1.3
Sysmex XS-1000i	16	0.25	0.24	96.9	0.3	0.0 - 1.0

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

<u>Instrument</u>	Specimen MX-6						Specimen MX-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	121	16.08	0.84	5.2	16.0	13.5 - 18.7	121	13.32	0.62	4.7	13.3	11.4 - 15.2
All Sysmex XN/XS Instruments	121	16.08	0.84	5.2	16.0	13.5 - 18.7	121	13.32	0.62	4.7	13.3	11.4 - 15.2
Sysmex XN-1000	20	15.48	0.53	3.4	15.5	13.8 - 17.1	20	13.32	0.62	4.7	13.2	11.4 - 15.2
Sysmex XN-330	10	15.83	0.86	5.4	15.9	13.2 - 18.5	10	13.33	0.72	5.4	13.4	11.1 - 15.5
Sysmex XN-430	36	16.37	0.85	5.2	16.4	13.8 - 19.0	36	13.35	0.59	4.4	13.3	11.5 - 15.2
Sysmex XN-450	12	16.28	0.63	3.9	16.5	14.3 - 18.2	12	13.17	0.66	5.0	13.2	11.1 - 15.2
Sysmex XN-530	5	15.63	0.32	2.1	15.5	14.6 - 16.6	5	13.13	0.49	3.8	12.9	11.6 - 14.7
Sysmex XN-550	21	16.48	0.91	5.5	16.7	13.7 - 19.3	21	13.30	0.68	5.1	13.3	11.2 - 15.4
Sysmex XS-1000i	16	15.72	0.70	4.5	15.8	13.6 - 17.9	16	13.53	0.77	5.7	13.4	11.2 - 15.9

<u>Instrument</u>	Specimen MX-8						Specimen MX-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	121	14.72	0.59	4.0	14.7	12.9 - 16.5	121	14.66	0.59	4.0	14.6	12.8 - 16.5
All Sysmex XN/XS Instruments	121	14.72	0.59	4.0	14.7	12.9 - 16.5	121	14.66	0.59	4.0	14.6	12.8 - 16.5
Sysmex XN-1000	20	14.76	0.50	3.4	14.8	13.2 - 16.3	20	14.55	0.48	3.3	14.5	13.1 - 16.0
Sysmex XN-330	10	14.82	0.68	4.6	14.8	12.7 - 16.9	10	14.84	0.55	3.7	14.9	13.1 - 16.6
Sysmex XN-430	36	14.74	0.50	3.4	14.8	13.2 - 16.3	36	14.79	0.58	3.9	14.9	13.0 - 16.6
Sysmex XN-450	12	14.60	0.43	2.9	14.5	13.3 - 15.9	12	14.47	0.49	3.4	14.5	12.9 - 16.0
Sysmex XN-530	5	14.70	0.52	3.5	14.4	13.1 - 16.3	5	14.73	0.75	5.1	14.7	12.4 - 17.0
Sysmex XN-550	21	14.81	0.62	4.2	14.7	12.9 - 16.7	21	14.74	0.68	4.6	14.7	12.6 - 16.8
Sysmex XS-1000i	16	14.53	0.88	6.0	14.5	11.9 - 17.2	16	14.40	0.60	4.2	14.3	12.5 - 16.3

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Specimen MX-10						
All Method	121	16.12	0.87	5.4	16.2	13.5 - 18.8
All Sysmex XN/XS Instruments	121	16.12	0.87	5.4	16.2	13.5 - 18.8
Sysmex XN-1000	20	15.99	0.74	4.6	16.1	13.7 - 18.3
Sysmex XN-330	10	16.33	0.96	5.9	16.0	13.4 - 19.3
Sysmex XN-430	36	16.27	0.85	5.2	16.3	13.7 - 18.9
Sysmex XN-450	12	16.23	0.83	5.1	16.5	13.7 - 18.8
Sysmex XN-530	5	16.23	1.05	6.5	16.2	13.0 - 19.4
Sysmex XN-550	21	16.37	0.80	4.9	16.4	13.9 - 18.8
Sysmex XS-1000i	16	15.36	0.79	5.1	15.2	12.9 - 17.8

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

<u>Instrument</u>	Specimen MX-6						Specimen MX-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	121	9.67	0.83	8.6	9.4	7.1 - 12.2	121	7.96	0.71	8.9	7.8	5.8 - 10.1
All Sysmex XN/XS Instruments	121	8.94	2.05	22.9	9.4	2.8 - 15.1	121	7.49	1.34	17.9	7.8	3.4 - 11.6
Sysmex XN-1000	20	4.67	0.25	5.2	4.7	3.9 - 5.5	20	4.84	0.16	3.3	4.9	4.3 - 5.4
Sysmex XN-330	10	9.67	0.80	8.3	9.6	7.2 - 12.1	10	7.86	0.46	5.8	7.8	6.4 - 9.3
Sysmex XN-430	36	9.91	0.88	8.9	10.0	7.2 - 12.6	36	7.97	0.81	10.1	7.9	5.5 - 10.4
Sysmex XN-450	12	9.33	0.61	6.5	9.3	7.5 - 11.2	12	8.08	0.68	8.4	8.2	6.0 - 10.2
Sysmex XN-530	5	10.27	0.31	3.0	10.2	9.3 - 11.2	5	7.83	1.14	14.5	7.5	4.4 - 11.3
Sysmex XN-550	21	9.44	0.78	8.2	9.4	7.1 - 11.8	21	7.89	0.62	7.9	7.9	6.0 - 9.8
Sysmex XS-1000i	16	10.24	0.97	9.5	10.3	7.3 - 13.2	16	8.26	0.74	9.0	8.2	6.0 - 10.5

<u>Instrument</u>	Specimen MX-8						Specimen MX-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	121	8.65	0.71	8.3	8.5	6.5 - 10.8	121	8.31	0.71	8.6	8.1	6.1 - 10.5
All Sysmex XN/XS Instruments	121	8.08	1.59	19.7	8.6	3.3 - 12.9	121	7.84	1.52	19.3	8.1	3.2 - 12.4
Sysmex XN-1000	20	4.80	0.14	2.9	4.8	4.3 - 5.3	20	4.78	0.11	2.4	4.8	4.4 - 5.2
Sysmex XN-330	10	8.46	0.85	10.0	8.8	5.9 - 11.1	10	8.23	0.54	6.6	8.1	6.6 - 9.9
Sysmex XN-430	36	8.61	0.71	8.2	8.7	6.4 - 10.8	36	8.44	0.73	8.6	8.4	6.2 - 10.7
Sysmex XN-450	12	8.66	0.76	8.8	8.9	6.3 - 11.0	12	8.13	0.87	10.7	7.8	5.5 - 10.8
Sysmex XN-530	5	8.77	0.40	4.6	8.7	7.5 - 10.0	5	8.13	0.40	5.0	8.2	6.9 - 9.4
Sysmex XN-550	21	8.73	0.69	7.9	8.8	6.6 - 10.8	21	8.29	0.71	8.6	8.0	6.1 - 10.5
Sysmex XS-1000i	16	9.03	0.79	8.7	8.8	6.6 - 11.4	16	9.08	0.64	7.1	9.2	7.1 - 11.1

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Specimen MX-10						
All Method	121	9.62	0.77	8.0	9.3	7.3 - 12.0
All Sysmex XN/XS Instruments	121	8.91	2.00	22.5	9.3	2.9 - 15.0
Sysmex XN-1000	20	4.73	0.22	4.7	4.6	4.0 - 5.5
Sysmex XN-330	10	9.37	0.68	7.3	9.3	7.3 - 11.5
Sysmex XN-430	36	9.73	0.77	7.9	9.8	7.4 - 12.1
Sysmex XN-450	12	9.34	0.66	7.1	9.4	7.3 - 11.4
Sysmex XN-530	5	9.93	1.16	11.7	10.5	6.4 - 13.5
Sysmex XN-550	21	9.64	0.83	8.6	9.7	7.1 - 12.2
Sysmex XS-1000i	16	10.19	1.14	11.2	10.6	6.7 - 13.7

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

<u><i>Instrument</i></u>	Specimen MX-6						Specimen MX-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	100	17.12	1.20	7.0	17.1	13.5 - 20.8	100	13.76	0.68	4.9	13.7	11.7 - 15.8
All Sysmex XN/XS Instruments	100	17.12	1.20	7.0	17.1	13.5 - 20.8	100	13.76	0.68	4.9	13.7	11.7 - 15.8
Sysmex XN-1000	19	16.16	0.94	5.8	16.3	13.3 - 19.0	19	13.53	0.41	3.0	13.5	12.2 - 14.8
Sysmex XN-330	10	18.12	1.24	6.8	17.6	14.4 - 21.9	10	13.87	0.65	4.7	13.7	11.9 - 15.9
Sysmex XN-430	35	17.15	1.20	7.0	16.8	13.5 - 20.8	35	13.84	0.75	5.4	13.8	11.5 - 16.1
Sysmex XN-450	12	17.14	0.87	5.1	17.0	14.5 - 19.8	12	13.91	0.79	5.7	13.8	11.5 - 16.3
Sysmex XN-530	5	17.87	0.64	3.6	17.6	15.9 - 19.8	5	13.40	0.72	5.4	13.6	11.2 - 15.6
Sysmex XN-550	18	17.36	1.14	6.5	17.4	13.9 - 20.8	18	13.77	0.71	5.2	13.8	11.6 - 16.0
<u><i>Instrument</i></u>	Specimen MX-8						Specimen MX-9					
	<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	100	14.84	0.77	5.2	14.9	12.5 - 17.2	100	14.98	0.72	4.8	15.0	12.8 - 17.2
All Sysmex XN/XS Instruments	100	14.84	0.77	5.2	14.9	12.5 - 17.2	100	14.98	0.72	4.8	15.0	12.8 - 17.2
Sysmex XN-1000	19	14.66	0.66	4.5	14.6	12.6 - 16.7	19	14.74	0.43	2.9	14.7	13.4 - 16.1
Sysmex XN-330	10	14.52	0.71	4.9	14.8	12.3 - 16.7	10	15.24	0.87	5.7	15.0	12.6 - 17.9
Sysmex XN-430	35	14.95	0.77	5.1	15.1	12.6 - 17.3	35	14.99	0.75	5.0	15.0	12.7 - 17.3
Sysmex XN-450	12	14.80	0.85	5.8	14.7	12.2 - 17.4	12	14.74	0.80	5.4	14.6	12.3 - 17.2
Sysmex XN-530	5	15.20	0.82	5.4	15.0	12.7 - 17.7	5	14.67	1.10	7.5	14.3	11.3 - 18.0
Sysmex XN-550	18	14.89	0.84	5.6	15.1	12.3 - 17.5	18	15.26	0.62	4.0	15.4	13.4 - 17.2
<u><i>Instrument</i></u>	Specimen MX-10											
	<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	100	17.23	1.14	6.6	17.1	13.8 - 20.7						
All Sysmex XN/XS Instruments	100	17.23	1.14	6.6	17.1	13.8 - 20.7						
Sysmex XN-1000	19	16.12	1.03	6.4	16.1	13.0 - 19.2						
Sysmex XN-330	10	17.81	1.14	6.4	17.5	14.3 - 21.3						
Sysmex XN-430	35	17.57	0.96	5.5	17.6	14.6 - 20.5						
Sysmex XN-450	12	17.24	1.13	6.6	17.1	13.8 - 20.7						
Sysmex XN-530	5	17.30	1.47	8.5	17.0	12.8 - 21.8						
Sysmex XN-550	18	17.36	0.89	5.1	17.1	14.6 - 20.1						

2022 M2
BLOOD CELL IDENTIFICATION
Specimens BC-7 through BC-12

CASE HISTORY:

A 59-year-old male presented to his family physician with recent onset of headaches, body aches, fever, chills, and sweating during the night. He returned 2 weeks ago from a month-long trip overseas to Angola. The patient stated that during his time in Africa he generally felt well and did not take any medication. He stayed in the homes of his relatives and consumed the local food and water. The patient's electronic medical record showed that at his last visit in 2020 he had a positive anti-HCV screening test and declined antiviral treatment for chronic hepatitis C.

A CBC was performed, and results appear below.

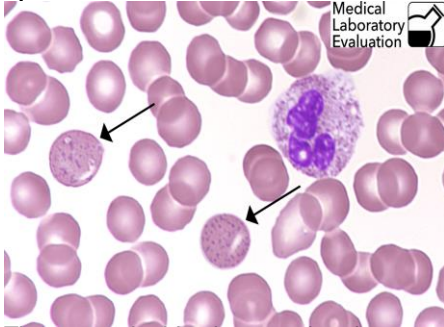
Test	Results	Reference Range
WBC	2.6 x 10 ⁹ /L	4.5 - 11.5 x 10 ⁹ /L
RBC	3.5 x 10 ¹² /L	4.6 - 6.0 x 10 ¹² /L
HGB	10.1 g/dL	14.0 - 18.0 g/dL
HCT	33 %	40 - 54 %
PLT	87 x 10 ⁹ /L	150 - 450 x 10 ⁹ /L
MCV	94 fL	80 - 94 fL
MCH	29 pg	27 - 32 pg
MCHC	31 g/dL	32 - 36 g/dL
RDW	16.5 %	11.5 - 14.5 %

This patient was diagnosed with malaria. Malaria is a potentially fatal acute febrile illness caused by a bloodborne protozoan parasite. Malaria is common in tropical and subtropical regions, such as sub-Saharan Africa and South Asia, which are endemic for the mosquito that transmits it. When an infected female *Anopheles* mosquito bites a human, it injects the parasites. The parasites travel to the liver and reproduce in hepatic cells until those cells erupt, releasing parasites into the blood stream. They invade circulating red blood cells, where they feed, grow, and multiply. The infected red cells rupture, then emerging parasites spread to other red cells, repeating the cycle, resulting in hemolysis and anemia. In non-immune individuals, symptoms appear weeks to months after the infective mosquito bite. Early symptoms of malaria can be mild and difficult to diagnose. Nearly all patients with malaria present with headache. Immune individuals may present with mild anemia or they may be completely asymptomatic. Splenomegaly may be present. Common symptoms include cyclical fever and chills, malaise, muscle aches, nausea, weakness, vomiting and diarrhea. Since these symptoms are non-specific, malaria should be suspected in all febrile travelers, regardless of clinical presentation. Imported malaria cases will continue to be a worldwide problem in the future as the climate changes and the mobility of travelers and migrants increases.

Common laboratory findings in malaria patients include normochromic-normocytic anemia, thrombocytopenia, and elevated LDH, bilirubin, and creatinine. Testing for malaria includes examination of thick and thin peripheral blood smears. Thick smears are 20 times more sensitive than thin smears in detecting the presence of malaria parasites, but one negative smear does not rule out malaria as the diagnosis. Several more smears should be examined over a 36-hour period. The thick smear is a screening test in which the parasites can be detected more easily. The thin smear is used for species identification and quantification of parasitemia (%) calculated based on the number of infected RBCs observed. In the U.S., only about 1500 cases of malaria are diagnosed and reported each year, therefore most laboratorians in the U.S. do not perform this testing regularly. However, healthcare providers need the results within hours in order to appropriately treat a patient with malaria, so the microscopic exam should always be considered a "STAT" procedure, collected and performed immediately. The test should not be saved for the most qualified staff to perform or sent out to a reference laboratory that takes days to report the results.

BLOOD CELL IDENTIFICATION

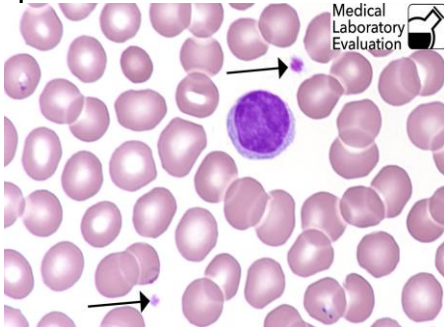
Specimen BC-7



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Basophilic stippling	123	94.62%	Acceptable
Immature/abnormal cell – refer	3	2.31%	Acceptable

The arrows in this photograph point to erythrocytes with **basophilic stippling**. These young red blood cells still contain some residual RNA aggregated into small granular clumps that stain dark blue-purple. The clumps of RNA are evenly distributed throughout the cell, and may appear fine (small) or coarse (large). Basophilic stippling is associated with anemia, increased RBC production, defective heme synthesis, thalassemia, and lead poisoning. Reticulocytes are similar, but must be identified using a supravital stain such as New Methylene Blue. To view another photo of basophilic stippling, see 2020 M3 Specimen BC-15. To view a photo of reticulocytes, see 2015 M2 Specimen BC-12.

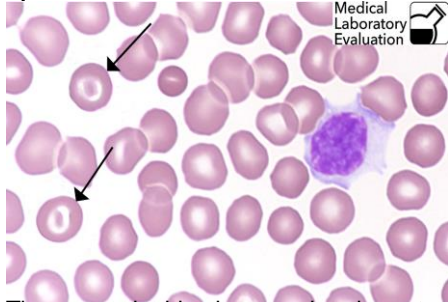
Specimen BC-8



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Platelet, normal	128	98.46%	Acceptable

The arrows in this photograph point to **normal platelets**. Platelets generally have a central area packed with red to violet colored granules, and a clear blue area that surrounds the granules. Platelets are round to elliptical in shape and less than half the size of a normal red blood cell. Normal platelets measure 2-4 microns, while mature erythrocytes measure 6-8 microns. To view another photo of normal platelets, see 2020 M2 Specimen BC-9.

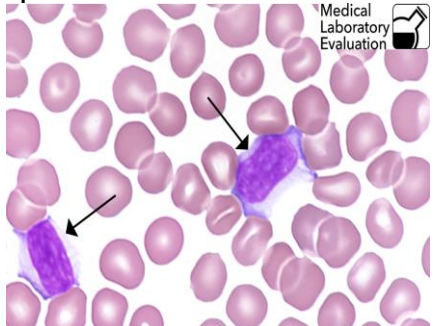
Specimen BC-9



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Target cell	128	98.46%	Acceptable

The arrows in this photograph point to **target cells**. The dark spot in the center gives the cell a bulls-eye appearance. In three dimensions, these red blood cells are bell-shaped rather than the normal biconcave disk shape. This is either due to decreased hemoglobin, excess membrane, or an abnormal hemoglobin. Target cells are frequently seen in liver disease, hemoglobinopathies, iron deficiency, and hyposplenism. To view another photo of target cells, see 2018 M2 Specimen BC-7.

Specimen BC-10

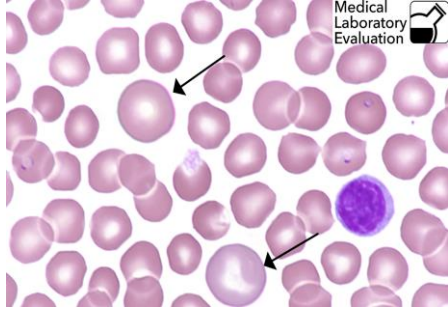


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Lymphocyte, reactive	84	64.62%	Acceptable
Immature/abnormal cell – refer	45	34.62%	Acceptable

The arrows in this photograph point to **reactive lymphocytes**. Reactive lymphocytes appear in a wide variety of forms, sizes, and shapes. The cytoplasm is light blue, with a deeper blue color at the extreme border. This peripheral basophilia is a characteristic feature of the reactive lymph. The cytoplasmic edge of the reactive lymph tends to flow around adjacent red blood cells. The nucleus is large and elongated or stretched, with coarse chromatin. These lymphocytes are responding to immune stimuli in the body. Other reactive changes in lymphocyte morphology include lower nucleus-to-cytoplasm ratio and the possible presence of nucleoli. Some participants incorrectly identified this cell as a monocyte. Monocytes tend to have folded nuclei and grayer cytoplasm, with pseudopods that appear to push away adjacent red cells. To view another photo of a reactive lymphocyte, see 2019 M2 Specimen BC-8. To view a monocyte, see 2020 M3 BC-14.

BLOOD CELL IDENTIFICATION

Specimen BC-11



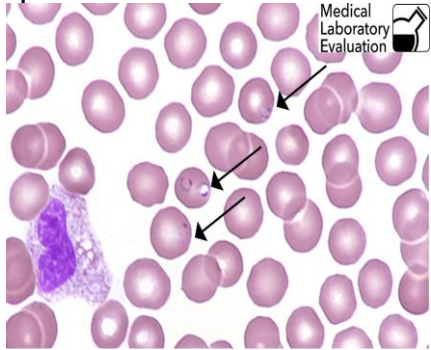
<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Macrocyte	88	67.69%	Acceptable
Polychromatophilic red cell	40	30.77%	

The arrows in this photograph point to round **macrocytes**. Macrocytes are abnormally large red blood cells. Normal red blood cells are about the same size as the nucleus of a small normal lymphocyte. The arrowed cells above are slightly larger than the lymphocyte in the same field. As a “rule of thumb”, the nucleus of a mature resting (non-reactive) lymphocyte can be used to provide a relative measurement of the size of the surrounding red blood cells. Macrocytes occur in either oval or round forms. The round form of macrocyte is seen in a variety of chronic illnesses, and target cell-like round macrocytes are a characteristic finding in liver disease. The oval form is associated with vitamin B12 and folate deficiencies, alcoholism, chronic infection, and toxicity. Some participants incorrectly reported these as polychromatophilic red cells. The upper arrowed cell is normochromic, and although the lower arrowed cell is slightly polychromatophilic, its size is greater than a typical polychromatophilic red cell. Therefore, the more specific and correct response is macrocyte. *Technical tip:* When evaluating a smear for red cell morphology, a single finding such as a polychromatophilic cell would not be sufficient for comment on a patient report. The single event would be an indicator to continue scanning the smear for the presence of a population of abnormal cells, which would require a comment on the report.

To view a photo of polychromatophilic red cells see 2020 M2 BC-8. To view another photo of a round macrocyte, see 2016 M2 BC-8. To view a photo of oval macrocytes, see 2018 M1 BC-2. This challenge was graded by referee consensus.

BLOOD CELL IDENTIFICATION

Specimen BC-12



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Malaria	70	53.85%	Educational challenge
Immature/abnormal cell – refer	56	43.08%	
Protozoan, non-malarial	4	3.08%	

The arrows in this ungraded educational challenge point to **malaria** parasites. There are five species of the genus Plasmodium that cause malaria in humans (*P. vivax*, *P. falciparum*, *P. malariae*, *P. ovale* and *P. knowlesi*). Each species has a specific incubation period. The tiny ring forms inside the cells are the trophozoite stage, and are the most common form of the malaria life cycle seen in peripheral blood. To view another photo of malaria, see 2017 M3 Specimen BC-18.

References:

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

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Herchline, T.E. *Malaria Workup*. Copyright WebMD LLC, 1994-2022. Page updated: June 3, 2020. Accessed May 11, 2022. Available at: <http://emedicine.medscape.com/article/221134-workup#aw2aab6b5b2>

"Malaria." DPDx - Laboratory Identification of Parasitic Diseases of Public Health Concern. Centers for Disease Control and Prevention. Page updated: October 6, 2020. Accessed May 11, 2022. Available at:

<http://www.cdc.gov/dpdx/malaria/index.html>

BLOOD BANK

ABO GROUP

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-6	Group A	5	100%	Acceptable
BB-7	Group B	5	100%	Acceptable
BB-8	Group O	5	100%	Acceptable
BB-9	Group B	5	100%	Acceptable
BB-10	Group O	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	13	100%	Acceptable
BB-7	Rh Positive	12	92.31%	Acceptable
	Rh Negative	1	7.69%	
BB-8	Rh Positive	13	100%	Acceptable
BB-9	Rh Positive	13	100%	Acceptable
BB-10	Rh Negative	13	100%	Acceptable

Sample BB-7 was graded by 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	5	100%	Acceptable
AB-7	No 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	Unexpected antibody detected	5	100%	Acceptable

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	No antibody detected	1	100%	Acceptable
AB-8	No antibody detected	1	100%	Acceptable
AB-9	Anti-E	1	100%	Acceptable
AB-10	Anti-D	1	100%	Acceptable

COMPATIBILITY TESTING

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

PROTHROMBIN TIME (seconds)

<u>Reagent/Instrument</u>	Specimen CG-6						Specimen CG-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	17	10.99	0.34	3.1	11.0	9.3 - 12.7	17	20.13	1.67	8.3	19.9	17.1 - 23.2
Dade Innovin												
Dade Behring BFT II	5	11.20	0.57	5.1	11.2	9.5 - 12.9	5	20.80	0.01	0.0	20.8	17.6 - 24.0
Sysmex CA-500/600 series	11	10.91	0.27	2.5	11.0	9.2 - 12.6	11	19.55	0.83	4.3	19.5	16.6 - 22.5
All Coagulation Instruments	16	10.95	0.32	2.9	11.0	9.3 - 12.6	16	19.75	0.89	4.5	19.7	16.7 - 22.8
	Specimen CG-8						Specimen CG-9					
All Method	17	26.94	1.47	5.5	26.7	22.8 - 31.0	17	12.00	0.42	3.5	12.0	10.2 - 13.8
Dade Innovin												
Dade Behring BFT II	5	29.10	1.84	6.3	29.1	24.7 - 33.5	5	11.65	0.21	1.8	11.7	9.9 - 13.4
Sysmex CA-500/600 series	11	26.55	1.07	4.0	26.5	22.5 - 30.6	11	11.99	0.37	3.1	12.1	10.1 - 13.8
All Coagulation Instruments	16	26.94	1.47	5.5	26.7	22.8 - 31.0	16	11.94	0.37	3.1	11.9	10.1 - 13.8
	Specimen CG-10											
All Method	17	10.80	0.42	3.8	10.8	9.1 - 12.5						
Dade Innovin												
Dade Behring BFT II	5	10.25	0.07	0.7	10.3	8.7 - 11.8						
Sysmex CA-500/600 series	11	10.85	0.35	3.3	10.8	9.2 - 12.5						
All Coagulation Instruments	16	10.75	0.39	3.7	10.8	9.1 - 12.4						

PROTHROMBIN TIME-INTERNATIONAL NORMALIZED RATIO (INR)

<u>Reagent/Instrument</u>	Specimen CG-6						Specimen CG-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	17	1.09	0.05	4.9	1.1	0.9 - 1.3	17	1.99	0.16	8.0	2.0	1.6 - 2.3
Dade Innovin												
Dade Behring BFT II	5	1.15	0.07	6.1	1.2	0.9 - 1.4	5	2.05	0.07	3.4	2.1	1.7 - 2.4
Sysmex CA-500/600 series	11	1.07	0.05	4.4	1.1	0.9 - 1.3	11	1.95	0.11	5.8	2.0	1.6 - 2.3
All Coagulation Instruments	16	1.08	0.06	5.1	1.1	0.9 - 1.3	16	1.96	0.11	5.7	2.0	1.6 - 2.3
	Specimen CG-8						Specimen CG-9					
All Method	17	2.74	0.24	8.8	2.7	2.3 - 3.2	17	1.17	0.06	5.2	1.2	0.9 - 1.4
Dade Innovin												
Dade Behring BFT II	5	2.75	0.21	7.7	2.8	2.3 - 3.2	5	1.20	0.01	0.0	1.2	1.0 - 1.4
Sysmex CA-500/600 series	11	2.68	0.15	5.7	2.7	2.2 - 3.1	11	1.16	0.07	5.8	1.2	0.9 - 1.4
All Coagulation Instruments	16	2.69	0.16	5.8	2.7	2.2 - 3.1	16	1.17	0.06	5.4	1.2	0.9 - 1.4
	Specimen CG-10											
All Method	17	1.09	0.05	4.9	1.1	0.9 - 1.3						
Dade Innovin												
Dade Behring BFT II	5	1.15	0.07	6.1	1.2	0.9 - 1.4						
Sysmex CA-500/600 series	11	1.07	0.05	4.4	1.1	0.9 - 1.3						
All Coagulation Instruments	16	1.08	0.06	5.1	1.1	0.9 - 1.3						

ACTIVATED PARTIAL THROMBOPLASTIN (seconds)

<u>Reagent/Instrument</u>	<u>Labs</u>	<u>Mean</u>	Specimen CG-6				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	Specimen CG-7			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>SD</u>				<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	12	24.2	0.4	1.8	24	20 - 28	12	34.6	2.1	6.0	35	29 - 40	
Dade Actin FSL Sysmex CA-500/600 series	5	24.2	0.4	1.8	24	20 - 28	5	34.6	2.1	6.0	35	29 - 40	
			Specimen CG-8					Specimen CG-9					
All Method	12	41.0	2.3	5.7	42	34 - 48	12	24.6	0.5	2.2	25	20 - 29	
Dade Actin FSL Sysmex CA-500/600 series	5	41.0	2.3	5.7	42	34 - 48	5	24.6	0.5	2.2	25	20 - 29	
			Specimen CG-10										
All Method	12	23.8	0.8	3.5	24	20 - 28							
Dade Actin FSL Sysmex CA-500/600 series	5	23.8	0.8	3.5	24	20 - 28							

Fibrinogen (mg/dL)

One participant reported Fibrinogen. The vendor assay values on a Sysmex CA-540 for specimens CG-6 through CG-10 are: 381 mg/dL, 175 mg/dL, 192 mg/dL, 113 mg/dL, and 162 mg/dL, respectively.

COAGUCHEK XS PLUS PROTHROMBIN TIME (seconds)

<u>Instrument</u>	Specimen XS-6						Specimen XS-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	20	22.81	0.87	3.8	22.5	19.3 - 26.3	20	15.28	0.50	3.3	15.3	12.9 - 17.6
All Roche CoaguChek XS Plus Instruments	20	22.81	0.87	3.8	22.5	19.3 - 26.3	20	15.28	0.50	3.3	15.3	12.9 - 17.6
Roche CoaguChek XS Plus - Waived	10	22.78	0.68	3.0	22.5	19.3 - 26.2	10	15.11	0.42	2.8	15.1	12.8 - 17.4
Roche CoaguChek XS Plus	8	22.86	1.22	5.3	22.5	19.4 - 26.3	8	15.58	0.53	3.4	15.6	13.2 - 18.0
<u>Instrument</u>	Specimen XS-8						Specimen XS-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	10	15.08	0.58	3.8	15.2	12.8 - 17.4	10	22.83	2.55	11.2	23.3	19.4 - 26.3
All Roche CoaguChek XS Plus Instruments	10	15.08	0.58	3.8	15.2	12.8 - 17.4	10	22.83	2.55	11.2	23.3	19.4 - 26.3
Roche CoaguChek XS Plus - Waived	5	14.75	0.64	4.3	14.8	12.5 - 17.0	5	20.85	1.91	9.2	20.9	17.7 - 24.0
Roche CoaguChek XS Plus	5	15.40	0.42	2.8	15.4	13.0 - 17.8	5	24.80	0.57	2.3	24.8	21.0 - 28.6
<u>Instrument</u>	Specimen XS-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	31.70	1.34	4.2	31.3	26.9 - 36.5						
All Roche CoaguChek XS Plus Instruments	10	31.70	1.34	4.2	31.3	26.9 - 36.5						
Roche CoaguChek XS Plus - Waived	5	30.75	0.07	0.2	30.8	26.1 - 35.4						
Roche CoaguChek XS Plus	5	32.65	1.34	4.1	32.7	27.7 - 37.6						

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

<u>Instrument</u>	Specimen XS-6						Specimen XS-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	30	1.90	0.07	3.8	1.9	1.6 - 2.2	30	1.26	0.06	4.5	1.3	1.0 - 1.5
All Roche CoaguChek XS Plus Instruments	30	1.90	0.07	3.8	1.9	1.6 - 2.2	30	1.26	0.06	4.5	1.3	1.0 - 1.5
Roche CoaguChek XS Plus - Waived	24	1.90	0.06	3.0	1.9	1.6 - 2.2	24	1.25	0.05	4.1	1.3	1.0 - 1.5
Roche CoaguChek XS Plus	6	1.93	0.12	6.3	2.0	1.6 - 2.3	6	1.30	0.06	4.9	1.3	1.1 - 1.5
<u>Instrument</u>	Specimen XS-8						Specimen XS-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	10	1.27	0.05	4.1	1.3	1.0 - 1.5	10	1.88	0.17	9.1	1.9	1.6 - 2.2
All Roche CoaguChek XS Plus Instruments	10	1.27	0.05	4.1	1.3	1.0 - 1.5	10	1.88	0.17	9.1	1.9	1.6 - 2.2
Roche CoaguChek XS Plus - Waived	6	1.25	0.06	4.6	1.3	1.0 - 1.5	6	1.80	0.14	7.9	1.9	1.5 - 2.1
Roche CoaguChek XS Plus	4	-	-	-	1.3	1.0 - 1.5	4	-	-	-	2.1	1.6 - 2.2
<u>Instrument</u>	Specimen XS-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	2.63	0.08	3.1	2.6	2.2 - 3.1						
All Roche CoaguChek XS Plus Instruments	10	2.63	0.08	3.1	2.6	2.2 - 3.1						
Roche CoaguChek XS Plus - Waived	6	2.60	0.01	0.0	2.6	2.2 - 3.0						
Roche CoaguChek XS Plus	4	-	-	-	2.7	2.2 - 3.1						

COAGUCHECK XS - INTERNATIONAL NORMALIZED RATIO (INR)

<u>Instrument</u>	Specimen INX-3						Specimen INX-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	87	2.90	0.09	3.2	2.9	2.4 - 3.4	88	1.91	0.08	4.1	1.9	1.6 - 2.2
Roche CoaguChek XS	87	2.90	0.09	3.2	2.9	2.4 - 3.4	88	1.91	0.08	4.1	1.9	1.6 - 2.2

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>
All Method	8	15.57	0.55	3.5	15.6	13.2 - 18.0	8	27.67	2.21	8.0	27.4	23.5 - 31.9
i-Stat Prothrombin Time	8	15.57	0.55	3.5	15.6	13.2 - 18.0	8	27.67	2.21	8.0	27.4	23.5 - 31.9

<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>
All Method	8	27.63	2.07	7.5	28.0	23.4 - 31.8	8	15.73	0.55	3.5	16.0	13.3 - 18.1
i-Stat Prothrombin Time	8	27.63	2.07	7.5	28.0	23.4 - 31.8	8	15.73	0.55	3.5	16.0	13.3 - 18.1

<u>Instrument</u>	Specimen PTI-10					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	8	27.33	0.85	3.1	27.3	23.2 - 31.5
i-Stat Prothrombin Time	8	27.33	0.85	3.1	27.3	23.2 - 31.5

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>
All Method	8	1.33	0.06	4.3	1.3	1.1 - 1.6	8	2.40	0.20	8.3	2.4	2.0 - 2.8
i-Stat Prothrombin Time	8	1.33	0.06	4.3	1.3	1.1 - 1.6	8	2.40	0.20	8.3	2.4	2.0 - 2.8

<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>
All Method	8	2.40	0.20	8.3	2.4	2.0 - 2.8	8	1.37	0.06	4.2	1.4	1.1 - 1.6
i-Stat Prothrombin Time	8	2.40	0.20	8.3	2.4	2.0 - 2.8	8	1.37	0.06	4.2	1.4	1.1 - 1.6

<u>Instrument</u>	Specimen PTI-10					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	8	2.40	0.10	4.2	2.4	2.0 - 2.8
i-Stat Prothrombin Time	8	2.40	0.10	4.2	2.4	2.0 - 2.8

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	3	-	-	-	8	Not graded	3	-	-	-	340	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	3	-	-	-	0	Not graded	3	-	-	-	1020	Not graded

2022 M2

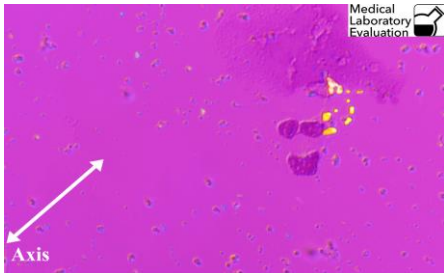
FLUID CRYSTAL IDENTIFICATION

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 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 in a wet mount 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. The 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

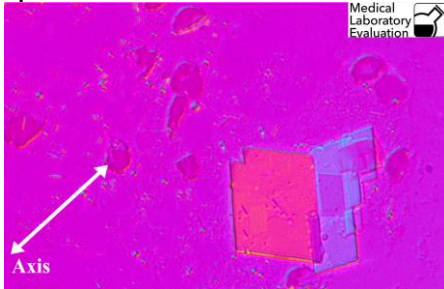


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
No crystals observed	5	100%	Acceptable

There are **no crystals present** in this photograph of a synovial fluid preparation. The brightly colored objects are artefacts/debris. There is one degenerated polymorphonuclear white blood cell present.

2022 M2
FLUID CRYSTAL IDENTIFICATION

Specimen FC-4



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Cholesterol crystals	5	100%	Acceptable

The objects in this photograph are **cholesterol crystals**. The characteristic form of large, flat rectangular plates with notched corners makes them easy to identify in any preparation. Cholesterol crystals may be seen in chronic effusions from patients with osteoarthritis or rheumatoid arthritis. They are associated with chronic inflammatory conditions, but are considered to be a nonspecific finding. To view a photo of cholesterol crystals under normal brightfield illumination, see 2019 M1 Specimen FC-1. To view another photo of cholesterol under polarized, red compensated light, see 2020 M1 Specimen FC-2

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MICROALBUMIN, DIPSTICK

Specimen UM-2

<u>Method</u>	<u>Labs</u>	<i>Participant Results</i>									
		<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>++ (>8 mg/dL)</u>
ALL METHODS	21	-	-	-	12	-	9	-	-	-	-
Consult Diagnostics Reagent Strips	2	-	-	-	1	-	1	-	-	-	-
McKesson Reagent Strips	1	-	-	-	1	-	-	-	-	-	-
Roche Micral - 1 minute	1	-	-	-	-	-	1	-	-	-	-
Siemens Clinitek Microalbumin	16	-	-	-	9	-	7	-	-	-	-
UriScan Reagent Strips	1	-	-	-	1	-	-	-	-	-	-

CREATININE, DIPSTICK

Specimen UM-2

<u>Method</u>	<u>Labs</u>	<i>Participant Results</i>						
		<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	22	-	-	-	-	-	3	19
Consult Diagnostics Reagent Strips	2	-	-	-	-	-	-	2
McKesson Reagent Strips	1	-	-	-	-	-	1	-
Siemens Clinitek Microalbumin	16	-	-	-	-	-	2	14
Siemens Multistix Pro	2	-	-	-	-	-	-	2
UriScan Reagent Strips	1	-	-	-	-	-	-	1

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	34	72.43	4.80	6.6	73.4	50.7 - 94.2
All Alere Afinion Analyzers	7	68.30	7.52	11.0	67.3	47.8 - 88.8
Alere Afinion AS100	6	67.33	7.75	11.5	67.0	47.1 - 87.6
Beckman AU	9	72.16	1.58	2.2	71.8	50.5 - 93.9
Siemens Dimension	7	79.14	9.28	11.7	76.1	55.3 - 102.9

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	29	209.03	11.56	5.5	211.2	173.4 - 244.6
All Alere Afinion Analyzers	6	214.53	9.97	4.6	213.9	178.0 - 251.1
Alere Afinion AS100	5	216.88	9.11	4.2	214.3	180.0 - 253.8
Beckman AU	6	191.45	4.99	2.6	191.4	158.9 - 224.0
Siemens Dimension	6	212.87	5.49	2.6	211.9	176.6 - 249.1

KOH SKIN PREPARATION

Technical note: 10-20% KOH is a suitable concentration for KOH preparations. The recommended wait time for read is up to 30 minutes to allow cellular tissue and debris to dissolve. Alternatively, the slide may be heated using a heating block. Follow your laboratory specific protocol for KOH concentrations and wait times.

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
K-3	Yeast/fungal elements present	67	94.37%	Acceptable
	Yeast/fungal elements absent	4	5.63%	

Organism present in specimen K-3: *Trichophyton tonsurans*.

K-4	Yeast/fungal elements present	69	97.18%	Acceptable
	Yeast/fungal elements absent	2	2.82%	

Organism present in specimen K-4: *Microsporum canis*.

WAIVED HEMATOLOGY–HEMOGLOBIN (g/dL)

<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	80	6.33	1.11	17.6	6.0	4.0 - 8.6	81	14.17	2.30	16.2	13.5	9.5 - 18.8
All HemoCue 301/801	10	9.13	0.52	5.7	9.3	8.0 - 10.2	10	20.06	0.15	0.8	20.1	18.6 - 21.5
All Stanbio Methods	11	6.01	0.23	3.8	6.0	5.5 - 6.5	11	13.75	0.36	2.6	13.9	12.7 - 14.8
Alere (Stanbio) HemoPoint H2	11	6.01	0.23	3.8	6.0	5.5 - 6.5	11	13.75	0.36	2.6	13.9	12.7 - 14.8
HemoCue 201/+	57	5.95	0.15	2.6	5.9	5.5 - 6.4	56	13.37	0.41	3.1	13.4	12.4 - 14.4
HemoCue 801	9	9.12	0.55	6.0	9.3	8.0 - 10.3	9	20.08	0.15	0.7	20.1	18.6 - 21.5

WAIVED HEMATOLOGY–HEMATOCRIT (percent)

<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	10	17.66	1.54	8.7	18.0	14.5 - 20.8	10	39.88	1.39	3.5	40.5	37.1 - 42.7

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	557	1.0234	0.0036	0.4	1.025	1.013 - 1.034
All Roche Methods	10	1.0165	0.0024	0.2	1.015	1.006 - 1.027
All Siemens Methods	442	1.0236	0.0031	0.3	1.025	1.013 - 1.034
Consult Diagnostics Reagent Strips	5	1.0280	0.0027	0.3	1.030	1.018 - 1.038
Consult Diagnostics Urine Analyzer	5	1.0250	0.0035	0.3	1.025	1.015 - 1.035
Diagnostic Test Group Clarity Urocheck 120	7	1.0264	0.0024	0.2	1.025	1.016 - 1.037
Henry Schein Urispec / Urispec Plus	17	1.0182	0.0024	0.2	1.020	1.008 - 1.029
McKesson 120 Urine Analyzer	24	1.0263	0.0034	0.3	1.025	1.016 - 1.037
McKesson Reagent Strips	11	1.0232	0.0040	0.4	1.020	1.013 - 1.034
Roche Chemstrips	18	1.0164	0.0038	0.4	1.015	1.006 - 1.027
Roche Urisys	8	1.0169	0.0027	0.3	1.015	1.006 - 1.027
Siemens Clinitek Advantus	11	1.0241	0.0021	0.2	1.025	1.014 - 1.035
Siemens Clinitek Status / Status+	336	1.0235	0.0029	0.3	1.025	1.013 - 1.034
Siemens Multistix Pro	13	1.0258	0.0028	0.3	1.025	1.015 - 1.036
Siemens Reagent Strips	75	1.0239	0.0040	0.4	1.025	1.013 - 1.034

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	577	1	-	-	301	202	70	2	-	1	-	-	-
Consult Diagnostics Reagent Strips	5	-	-	-	-	-	4	1	-	-	-	-	-
Consult Diagnostics Urine Analyzer	5	-	-	-	1	1	3	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	3	-	-	-	-	2	1	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	1	-	-	-	-	-	1	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	8	-	-	-	-	5	3	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	-	-	-	1	-	1	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	1	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	20	-	-	-	19	1	-	-	-	-	-	-	-
Immunostics Detector Urine Strips	1	-	-	-	1	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	24	1	-	-	3	10	10	-	-	-	-	-	-
McKesson Reagent Strips	11	-	-	-	8	1	1	-	-	1	-	-	-
Medline 120 Urine Analyzer	2	-	-	-	1	-	1	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	-	-	-	2	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	1	-	-	-	-	-	-	-
Other Dipstick Method	4	-	-	-	1	-	3	-	-	-	-	-	-
Roche Chemstrips	21	-	-	-	21	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	1	-	-	-	1	-	-	-	-	-	-	-	-
Roche SuperUA/ChemstripUA	1	-	-	-	1	-	-	-	-	-	-	-	-
Roche Urisys	8	-	-	-	7	-	-	1	-	-	-	-	-
Siemens Clinitek 10 / 100	1	-	-	-	1	-	-	-	-	-	-	-	-
Siemens Clinitek 50	4	-	-	-	2	2	-	-	-	-	-	-	-
Siemens Clinitek 500	1	-	-	-	-	1	-	-	-	-	-	-	-
Siemens Clinitek Advantus	12	-	-	-	2	10	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	342	-	-	-	182	159	1	-	-	-	-	-	-
Siemens Multistix Pro	14	-	-	-	6	2	6	-	-	-	-	-	-
Siemens Reagent Strips	78	-	-	-	37	7	34	-	-	-	-	-	-
Teco Diagnostics URS	1	-	-	-	-	-	1	-	-	-	-	-	-
Uriscan Optima	1	-	-	-	1	-	-	-	-	-	-	-	-
UriScan Reagent Strips	2	-	-	-	2	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–PROTEIN QUALITATIVE

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>>600 or ≥1000</u> <u>mg/dL</u>
ALL METHODS	581	573	4	1	-	-	-	2	-	-	1	-	-
Consult Diagnostics Reagent Strips	4	4	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	6	6	-	-	-	-	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	3	3	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	1	1	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	8	7	-	-	-	-	-	1	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	1	-	-	-	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	19	19	-	-	-	-	-	-	-	-	-	-	-
Immunostics Detector Urine Strips	1	1	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	23	23	-	-	-	-	-	-	-	-	-	-	-
McKesson Reagent Strips	11	8	1	-	-	-	-	1	-	-	1	-	-
Medline 120 Urine Analyzer	3	2	1	-	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	-	1	1	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-	-	-
Other Dipstick Method	3	3	-	-	-	-	-	-	-	-	-	-	-
PSS Select Reagent Strips	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrips	24	24	-	-	-	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche SuperUA/ChemstripUA	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche Urisys	8	8	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	1	1	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	4	4	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	1	1	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	12	12	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Atlas	2	2	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	339	339	-	-	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	12	12	-	-	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	82	81	1	-	-	-	-	-	-	-	-	-	-
Siemens Uristix	1	1	-	-	-	-	-	-	-	-	-	-	-
Teco Diagnostics URS	1	1	-	-	-	-	-	-	-	-	-	-	-
Uriscan Optima	1	1	-	-	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-

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>>500 or ≥1000 or ≥2000 mg/dL</u>
					<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>				
ALL METHODS	583	20	52	101	4	3	1	115	237	6	44
Consult Diagnostics Reagent Strips	4	-	-	2	-	-	-	1	1	-	-
Consult Diagnostics Urine Analyzer	6	-	2	3	1	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	3	-	-	1	1	-	-	-	1	-	-
Diagnostic Test Group Clarity Urocheck	2	-	-	2	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	7	-	-	7	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	3	-	-	1	-	-	-	1	1	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	1
Henry Schein Urispec / Urispec Plus	20	-	-	-	-	-	-	1	3	4	12
Immunostics Detector Urine Strips	1	-	-	-	-	-	-	-	1	-	-
McKesson 120 Urine Analyzer	22	-	1	19	1	-	-	-	1	-	-
McKesson Reagent Strips	11	2	1	4	-	-	-	2	2	-	-
Medline 120 Urine Analyzer	4	-	-	3	1	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	-	-	1	-	-	-	-	-	1	-
NDC Pro Advantage	1	-	-	1	-	-	-	-	-	-	-
Other Dipstick Method	3	-	-	1	-	-	-	-	2	-	-
Roche Chemstrips	24	1	-	-	-	1	1	-	-	-	21
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	1
Roche SuperUA/ChemstripUA	1	-	-	-	-	-	-	-	-	-	1
Roche Urisys	8	-	-	-	-	-	-	-	-	-	8
Siemens Clinitek 10 / 100	1	-	-	-	-	-	-	-	1	-	-
Siemens Clinitek 50	4	-	-	-	-	-	-	1	3	-	-
Siemens Clinitek 500	1	-	-	1	-	-	-	-	-	-	-
Siemens Clinitek Advantus	12	1	7	-	-	-	-	4	-	-	-
Siemens Clinitek Status / Status+	342	6	24	48	-	-	-	88	176	-	-
Siemens Multistix Pro	13	1	2	1	-	-	-	3	5	1	-
Siemens Reagent Strips	81	8	13	5	-	1	-	14	40	-	-
Siemens Uristix	1	-	-	-	-	1	-	-	-	-	-
Teco Diagnostics URS	1	1	-	-	-	-	-	-	-	-	-
Uriscan Optima	1	-	-	1	-	-	-	-	-	-	-
UriScan Reagent Strips	2	-	2	-	-	-	-	-	-	-	-

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	575	2	1	1	17	39	12	126	23	3	-	37	291	22	1
Consult Diagnostics Reagent Strips	4	-	-	-	-	-	-	3	-	-	-	1	-	-	-
Consult Diagnostics Urine Analyzer	6	-	-	-	-	-	-	4	2	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	3	-	-	-	-	-	-	1	1	-	-	-	1	-	-
Diagnostic Test Group Clarity Urocheck	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	7	-	-	-	-	-	-	6	1	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	3	-	-	-	-	-	-	1	-	-	-	1	1	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Henry Schein Urispec / Urispec Plus	20	-	-	-	-	-	-	-	-	-	-	19	1	-	-
Immunostics Detector Urine Strips	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-
McKesson 120 Urine Analyzer	22	-	-	-	-	-	-	13	8	-	-	-	1	-	-
McKesson Reagent Strips	11	-	-	-	-	1	-	5	1	2	-	-	1	-	1
Medline 120 Urine Analyzer	4	-	-	-	-	-	-	3	1	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	-	-	-	-	-	-	1	1	-	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Other Dipstick Method	3	-	-	-	1	-	-	1	-	-	-	-	-	1	-
Roche Chemstrips	21	-	-	1	-	5	1	11	2	-	-	-	-	1	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Roche SuperUA/ChemstripUA	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Roche Urisys	8	-	-	-	-	-	-	-	-	-	-	2	6	-	-
Siemens Clinitek 10 / 100	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Siemens Clinitek 50	4	-	-	-	-	-	-	-	-	-	-	-	4	-	-
Siemens Clinitek 500	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	12	-	-	-	-	-	3	5	-	-	-	2	2	-	-
Siemens Clinitek Status / Status+	342	-	-	-	2	-	5	64	2	-	-	11	253	5	-
Siemens Multistix Pro	12	-	-	-	-	2	1	1	-	-	-	-	5	3	-
Siemens Reagent Strips	80	1	1	-	14	30	1	4	3	-	-	-	14	12	-
Uriscan Optima	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
UriScan Reagent Strips	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>>10.0 mg/dL</u>
							<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>						
ALL METHODS	561	560	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Consult Diagnostics Reagent Strips	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Consult Diagnostics Urine Analyzer	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CTMI CT-120 Urine Analyzer	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diagnostic Test Group Clarity Urocheck	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diagnostic Test Group Clarity Urocheck 120	7	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Germaine Labs AimStrip Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Henry Schein One Step Plus	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Henry Schein Urispec / Urispec Plus	20	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Immunostics Detector Urine Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
McKesson 120 Urine Analyzer	23	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
McKesson Reagent Strips	11	10	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Medline 120 Urine Analyzer	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Medline Urinalysis Reagent Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other Dipstick Method	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Roche Chemstrips	21	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Roche Criterion Analyzer	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Roche SuperUA/ChemstripUA	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Roche Urisys	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Siemens Clinitek 10 / 100	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Siemens Clinitek 50	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Siemens Clinitek 500	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Siemens Clinitek Advantus	11	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Siemens Clinitek Status / Status+	335	335	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Siemens Ictotest	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Siemens Multistix Pro	13	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Siemens Reagent Strips	75	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Uriscan Optima	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UriScan Reagent Strips	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 <3.2 µmol/L</u>	<u>1.0 or <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	559	556	1	1	1	-
Consult Diagnostics Reagent Strips	4	4	-	-	-	-
Consult Diagnostics Urine Analyzer	6	6	-	-	-	-
CTMI CT-120 Urine Analyzer	3	3	-	-	-	-
Diagnostic Test Group Clarity Urocheck	1	1	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	8	8	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	2	-	-	-	-
Henry Schein One Step Plus	1	1	-	-	-	-
Henry Schein Urispec / Urispec Plus	20	20	-	-	-	-
Immunostics Detector Urine Strips	1	1	-	-	-	-
McKesson 120 Urine Analyzer	22	22	-	-	-	-
McKesson Reagent Strips	11	10	-	1	-	-
Medline 120 Urine Analyzer	3	3	-	-	-	-
Medline Urinalysis Reagent Strips	1	1	-	-	-	-
NDC Pro Advantage	1	1	-	-	-	-
Other Dipstick Method	2	2	-	-	-	-
Roche Chemstrips	21	21	-	-	-	-
Roche Criterion Analyzer	1	1	-	-	-	-
Roche SuperUA/ChemstripUA	1	1	-	-	-	-
Roche Urisys	8	8	-	-	-	-
Siemens Clinitek 10 / 100	1	1	-	-	-	-
Siemens Clinitek 50	4	4	-	-	-	-
Siemens Clinitek 500	1	1	-	-	-	-
Siemens Clinitek Advantus	11	11	-	-	-	-
Siemens Clinitek Status / Status+	336	334	1	-	1	-
Siemens Multistix Pro	13	13	-	-	-	-
Siemens Reagent Strips	74	74	-	-	-	-
Uriscan Optima	1	1	-	-	-	-
UriScan Reagent Strips	1	1	-	-	-	-

URINALYSIS DIPSTICK–BLOOD/HEMOGLOBIN

Specimen UA-2

Participant Results

<u>Method</u>	<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>(5+)</u>	<u>5 - 25</u> <u>Ery/μL</u>	<u>50 -</u> <u>100</u> <u>Ery/μL</u>	<u>200 -</u> <u>300</u> <u>Ery/μL</u>	<u>\pm0.03</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>\geq 1.0</u> <u>mg/</u> <u>dL</u>
ALL METHODS	576	560	13	-	1	-	-	-	1	-	-	1	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	7	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	20	19	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Immunostics Detector Urine Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	22	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
McKesson Reagent Strips	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Dipstick Method	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrips	24	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roche SuperUA/ChemstripUA	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roche Urisys	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	12	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Atlas	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	339	330	8	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	13	12	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	80	75	4	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Uriscan Optima	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–LEUKOCYTE ESTERASE

Specimen UA-2

Participant Results

<u>Method</u>	<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	577	10	36	280	47	5	112	51	3	-	3	1	29
Consult Diagnostics Reagent Strips	4	-	-	-	-	-	3	1	-	-	-	-	-
Consult Diagnostics Urine Analyzer	6	-	-	-	-	-	3	2	1	-	-	-	-
CTMI CT-120 Urine Analyzer	3	-	-	-	-	-	-	2	-	-	1	-	-
Diagnostic Test Group Clarity Urocheck	1	-	-	-	-	-	-	1	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	8	-	1	-	-	-	4	3	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	-	-	-	-	-	2	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	-	-	1
Henry Schein Uriscan / Uriscan Plus	20	-	-	1	-	-	-	-	-	-	-	-	19
Immunostics Detector Urine Strips	1	1	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	22	-	3	-	-	-	10	6	1	-	2	-	-
McKesson Reagent Strips	11	1	-	1	1	-	5	2	-	-	-	1	-
Medline 120 Urine Analyzer	3	1	1	-	-	-	1	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	-	-	-	-	-	1	1	-	-	-	-	-
NDC Pro Advantage	1	-	1	-	-	-	-	-	-	-	-	-	-
Other Dipstick Method	3	-	-	-	1	-	2	-	-	-	-	-	-
Roche Chemstrips	24	1	-	-	1	1	1	20	-	-	-	-	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	-	-	1
Roche SuperUA/ChemstripUA	1	-	-	-	-	1	-	-	-	-	-	-	-
Roche Uriscan	8	-	-	-	-	-	-	-	-	-	-	-	8
Siemens Clinitek 10 / 100	1	-	-	1	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	4	-	2	2	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	1	-	1	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	12	-	-	4	-	-	8	-	-	-	-	-	-
Siemens Clinitek Status / Status+	340	2	13	244	11	2	63	5	-	-	-	-	-
Siemens Multistix Pro	13	1	4	3	3	-	1	1	-	-	-	-	-
Siemens Reagent Strips	80	3	10	23	29	1	8	6	-	-	-	-	-
Siemens Uriscan	1	-	-	1	-	-	-	-	-	-	-	-	-
Uriscan Optima	1	-	-	-	-	-	-	-	1	-	-	-	-
UriScan Reagent Strips	2	-	-	-	1	-	-	1	-	-	-	-	-

URINALYSIS DIPSTICK–NITRITE**Specimen UA-2*****Participant Results***

<u>Method</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	579	576	3
Consult Diagnostics Reagent Strips	4	4	-
Consult Diagnostics Urine Analyzer	6	6	-
CTMI CT-120 Urine Analyzer	3	3	-
Diagnostic Test Group Clarity Urocheck	2	2	-
Diagnostic Test Group Clarity Urocheck 120	7	6	1
Germaine Labs AimStrip Urine Analyzer	2	2	-
Henry Schein One Step Plus	1	1	-
Henry Schein Urispec / Urispec Plus	20	20	-
Immunostics Detector Urine Strips	1	1	-
McKesson 120 Urine Analyzer	23	23	-
McKesson Reagent Strips	11	10	1
Medline 120 Urine Analyzer	4	4	-
Medline Urinalysis Reagent Strips	2	2	-
NDC Pro Advantage	1	1	-
Other Dipstick Method	3	3	-
Roche Chemstrips	24	24	-
Roche Criterion Analyzer	1	1	-
Roche SuperUA/ChemstripUA	1	1	-
Roche Urisys	8	8	-
Siemens Clinitek 10 / 100	1	1	-
Siemens Clinitek 50	4	4	-
Siemens Clinitek 500	1	1	-
Siemens Clinitek Advantus	12	12	-
Siemens Clinitek Status / Status+	340	340	-
Siemens Multistix Pro	13	13	-
Siemens Reagent Strips	80	80	-
Siemens Uristix	1	1	-
Uriscan Optima	1	-	1
UriScan Reagent Strips	2	2	-

URINALYSIS –MICROALBUMIN (dipstick only)

Specimen UA-2

<u>Method</u>	<u>Labs</u>	<i>Participant Results</i>									
		<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>++ (>8 mg/dL)</u>
ALL METHODS	39	3	33	2	-	-	1	-	-	-	-
Other Dipstick Method	1	1	-	-	-	-	-	-	-	-	-
Roche Micral - 1 minute	2	-	-	2	-	-	-	-	-	-	-
Siemens Clinitek Microalbumin	35	1	33	-	-	-	1	-	-	-	-

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

<u>Method</u>	<i>Participant Results</i>		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	331	117	214
Alere Aceava hCG-Urine	1	-	1
Alere Clearview hCG Cassette	4	-	4
Alere hCG Combo Cassette	4	1	3
Alfa Scientific Instant View	4	-	4
Beckman Coulter ICON 20 hCG	4	4	-
Beckman Coulter ICON 25 hCG	18	11	7
Beckman Coulter ICON II	1	1	-
BioSign hCG	1	1	-
BTNX Rapid Response hCG	4	-	4
Cardinal Health SP Brand combo	20	15	5
Cardinal Hlth SPBrand-cassette	12	1	11
Clarity Diagnostics hCG strip/cassette	8	-	8
CONSULT diagnostics hCG Cassette	43	23	20
CONSULT diagnostics hCG Combo	8	8	-
CONSULT diagnostics hCG Dipstick	20	4	16
Henry Schein One Step	30	5	25
Henry Schein One Step Plus	25	3	22
Jant Pharmacal Accutest	1	-	1
LifeSign Status hCG	1	-	1
McKesson hCG Combo Cassette	5	5	-
McKesson hCG Urine Cassette	11	8	3
McKesson urine hCG-all 20 mIU kits	1	-	1
Medline hCG Combo Test Cassette	4	3	1
Medline hCG Test Cassette	6	1	5
NDC Pro Advantage	1	1	-
Quidel QuickVue One-Step Combo	7	-	7
Quidel QuickVue One-Step Urine	15	1	14
Quidel QuickVue+ One-Step Combo	15	3	12
Quidel Sofia hCG	1	-	1
Sekisui OSOM Card Pregnancy	7	-	7
Sekisui OSOM hCG Combo Test	2	-	2
Siemens Clinitek Status / Status+	11	1	10
Siemens Multistix Pro	1	1	-
Stanbio QuPID	7	2	5
Stanbio QuPID One-Step Preg.	2	-	2
Stanbio TRUE hCG	8	8	-
Sure-Vue hCG - 25mIU	2	-	2
Sure-Vue hCG-STAT	14	4	10

This challenge is ungraded due to lack of referee consensus. The sample was negative on the Beckman Access but questionable on most rapid tests. Another analyte in the sample caused a degradation of the hCG.

FECAL OCCULT BLOOD

<u>Method</u>	Specimen OC-3			Specimen OC-4		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	245	241	4	245	12	233
Alere Clearview iFOBT Complete	1	1	-	1	-	1
Beckman Coulter Hemocult ICT	46	46	-	46	7	39
Guaiaac (slide) Test	128	126	2	128	3	125
Hemosure iFOB	30	29	1	30	1	29
Other Immunochemical FOB kit	33	32	1	33	1	32
Polymedco OC Auto Micro 80	4	4	-	4	-	4
Polymedco OC-Light iFOB	1	1	-	1	-	1
Quidel QuickVue iFOB	2	2	-	2	-	2

2022 M2**Urine Sediment Identification****SPECIMENS US-3 AND US-4****CASE HISTORY:**

A 57-year-old female was referred to a urology clinic for evaluation due to recurring urinary tract infections. She was treated three times in the last 6 months by her family physician, but after the antibiotics were stopped her symptoms returned. At her last visit a urine culture was performed and grew > 100,000 cfu/mL *Klebsiella pneumoniae*. She is currently asymptomatic, not taking any medication, and her physical examination is unremarkable. Kidney ultrasound was performed which revealed a 1.1-cm irregularly shaped stone in the right renal pelvis. A clean catch urine was collected, and the urinalysis results appear below.

Color= Yellow

Appearance= Cloudy

DIPSTICK RESULTS:

Specific gravity = 1.025

pH = 8.5

Protein = Negative

Glucose = Negative/Normal

Ketones = Negative

Bilirubin = Negative

Urobilinogen = Normal/0.2 mg/dL

Blood = Small (1+)

Leukocyte Esterase = Small (1+)

Nitrite = Negative

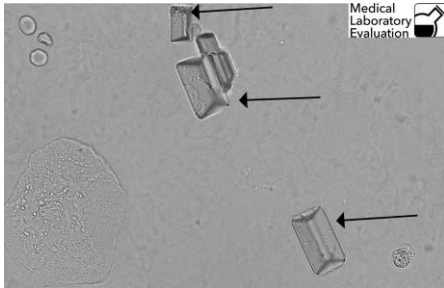
This patient was diagnosed with nephrolithiasis (kidney stones.)

Crystalline stones, also called calculi, may form in the urinary tract from materials that are normally excreted in the urine. Although stones can form anywhere along the urinary tract, the most common site is in the kidney. The terms *nephrolithiasis* and *renal calculi* refer specifically to the presence of stones inside the kidneys. Small calculi may be passed from the kidney into the urine, causing severe pain radiating from the lower back to the legs. Larger calculi cannot be passed and may remain undetected until the patient develops symptoms of urinary obstruction. Recommended management for a patient having an acute stone event is NSAIDs for pain control, and relaxation. Increasing fluid intake causes more discomfort and does not help the stone to pass.

Some people are more likely to develop certain types of kidney stones based on their diet and family history. The major types of stones include: calcium oxalate, calcium phosphate, struvite (aka, triple phosphate), uric acid, and cystine stones. The primary laboratory finding is hematuria (either gross or microscopic) resulting from irritation to the tissues by the moving stone. However, the absence of hematuria does not rule out urinary stone disease. Urinary pH can give the provider a clue to the stone composition, with a very low pH suggesting uric acid stones, or at the other end, a very high pH could indicate struvite stones. Crystals that contribute to the stone formation may or may not be present in the urine sediment.

Urine Sediment Identification

Specimen US-3

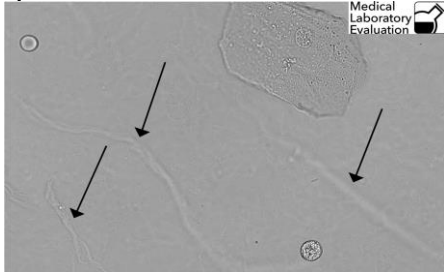


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Triple phosphate crystal	301	97.41%	Acceptable

The arrows in this photograph point to **triple phosphate crystals**. The typical 3-6 sided rectangular shape is described as a “coffin lid”. They can vary greatly in size, and are commonly seen in neutral or alkaline urine (pH \geq 7.0). These crystals are rarely clinically significant, however triple phosphate (also called struvite) can be a major component of urinary stones in the kidneys. Struvite calculi are closely related to urinary tract infections (UTI); hence they are also known as infection stones. Infection or colonization by urease-producing organisms like *Proteus*, *Klebsiella*, *Staphylococcus*, *Pseudomonas*, *Providencia*, *Serratia*, and *Morganella* can cause struvite stones. These stones tend to grow quickly and become large, sometimes occupying the entire renal pelvis. Left untreated, the stones can cause frequent and severe urinary tract infections and loss of kidney function. To view another photo of triple phosphate crystals, see 2017 M1 Specimen US-2.

Urine Sediment Identification

Specimen US-4



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Mucus strands	287	92.88%	Acceptable
Fiber/fecal contamination	11	3.56%	
Yeast/fungi	6	1.94%	

The arrows in this photograph point to **mucus strands**. Mucus is a normal secretion of glands in the urethra and vagina. It is a common non-pathologic finding, especially in females. Mucus appears as long delicate strands or threads with undefined edges and pointed or frayed ends. Mucus can be mistaken for hyaline casts because of their similar low refractive index. However, hyaline casts have definite edges and smooth ends. To view a hyaline cast, see 2014 M1 Specimen US-2. To view another photo of mucus, see 2019 M3 Specimen US-6.

Technical tip: Objects with low refractive index, like mucus and hyaline casts, are hard to see if the microscope's illumination is not set correctly. Use subdued lighting to examine urine sediment, with the sub-stage condenser raised all the way up, and the condenser iris diaphragm approximately 70% closed / 30% open. Do not lower the condenser to decrease brightness. This reduces the resolution and sharpness of the image, which could cause you to miss important elements like casts.

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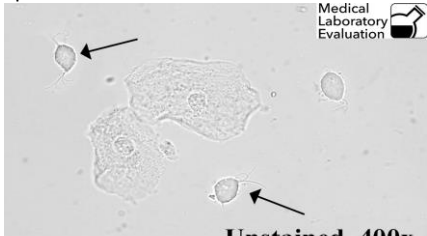
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**2022 M2
PROVIDER-PERFORMED MICROSCOPY (PPM)
Specimens PPM-7 through PPM-12**

WET MOUNT PREPARATION

Specimen PPM-7



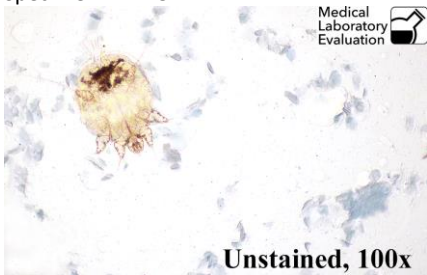
Unstained, 400x

The arrows in this photograph of a vaginal wet mount point to *Trichomonas vaginalis*. *T. vaginalis* is a single-celled protozoan parasite that is about the same size as a white blood cell. It can be pear-shaped, rounded, or triangular. It has four flagella, an anterior undulating membrane, and a sharp protruding posterior axostyle that looks like a tail. Trichomonas is easily identified in a fresh wet prep by its distinctive irregular, jerky, rotating motility. Trichomoniasis is a common sexually-transmitted infection (STI) that affects women more often than men, and is easily cured with medication. Symptoms include urinary frequency, burning and discharge. The genital inflammation caused by Trichomonas can make the patient more susceptible to other STIs such as HIV. To view another photo of Trichomonas, see 2019 M1 Specimen PPM-1.

<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Trichomonas vaginalis	353	98.33%	Acceptable

SCABIES DETECTION

Specimen PPM-8



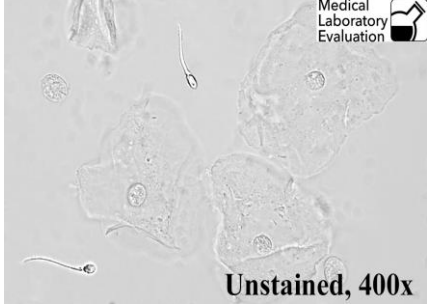
Unstained, 100x

A scabies mite is present in this photograph of a skin scrapings preparation. The scabies mite, or human itch mite (*Sarcoptes scabiei*), is usually spread by prolonged direct personal contact with an infested person. It can also be spread indirectly by prolonged contact with infested clothing or bedding. The mites burrow into the skin and produce an itchy papular (pimple-like) rash. The diagnosis of scabies is often made only by the patient history and examination of the skin. Identification of the mite, its burrows, eggs, or feces (called scybala) confirms the clinical suspicion of scabies. Scabies can be difficult to find by laboratory testing, though, 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 another photo of a scabies mite, see 2017 M1 Specimen PPM-3.

<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Scabies present	144	100%	Acceptable

SPERM DETECTION

Specimen PPM-9



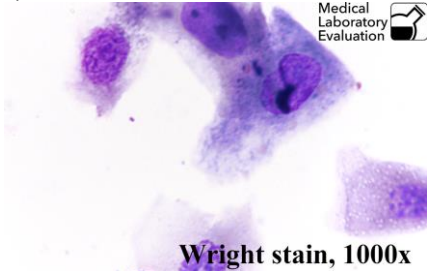
<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Sperm present	190	100%	Acceptable

Two spermatozoa are present in this photograph of a vaginal wet mount preparation.

PROVIDER-PERFORMED MICROSCOPY (PPM)

NASAL SMEAR

Specimen PPM-10

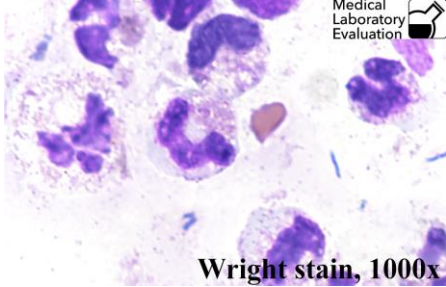


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Eosinophils absent	35	74.47%	Acceptable
Eosinophils present	12	25.53%	

Eosinophils are absent in this photograph of Wright-stained nasal mucus. The cytoplasm of an eosinophil is filled with large, round, red-orange granules that surround a segmented, purple nucleus. The cells shown in this photo are not orange, therefore they are not eosinophilic. 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. This challenge was graded by referee consensus.

STOOL PREPARATION

Specimen PPM-11

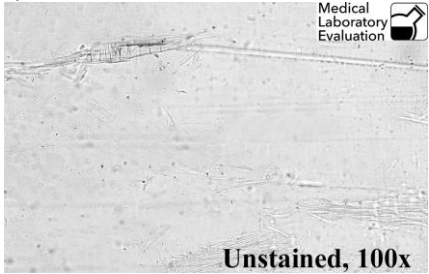


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Leukocytes present	121	100%	Acceptable

Leukocytes are present in this photograph of a Wright stained stool preparation. To view another photo of fecal leukocytes, 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 absent	138	97.18%	Acceptable
Pinworms/eggs present	4	2.82%	

Pinworms/eggs are absent in this photograph of a perianal pinworm preparation. To view a photo of pinworm eggs, see 2021 M2 Specimen PPM-12.

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