

MEDICAL LABORATORY EVALUATION

PARTICIPANT SUMMARY

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Medical Laboratory
Evaluation 

Hematology, Coagulation,
Blood Bank, Urinalysis, PPM
2022 MLE-M1

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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-1</u>				<u>Labs</u>	<u>Mean</u>	<u>Specimen HQ-2</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	35	12.31	1.68	13.6	11.5	11.4 - 13.2	35	5.47	0.80	14.6	5.1	5.0 - 5.9
All HemoCue 301/801	8	15.34	0.21	1.3	15.3	14.2 - 16.5	8	6.90	0.18	2.6	6.9	6.4 - 7.4
HemoCue 201/+	27	11.41	0.13	1.1	11.4	10.6 - 12.3	27	5.05	0.09	1.9	5.1	4.6 - 5.5
HemoCue 801	8	15.34	0.21	1.3	15.3	14.2 - 16.5	8	6.90	0.18	2.6	6.9	6.4 - 7.4

HEMOCUE HEMATOLOGY–GLUCOSE (mg/dL)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen HQ-1</u>				<u>Labs</u>	<u>Mean</u>	<u>Specimen HQ-2</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	24	154.9	5.0	3.2	155	123 - 186	24	78.2	6.3	8.0	76	62 - 94
All HemoCue Methods	24	154.9	5.0	3.2	155	123 - 186	24	78.2	6.3	8.0	76	62 - 94
HemoCue Glucose 201	24	154.9	5.0	3.2	155	123 - 186	24	78.2	6.3	8.0	76	62 - 94

SEDIMENTATION RATE (MM/HR)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen ES-1</u>				<u>Labs</u>	<u>Mean</u>	<u>Specimen ES-2</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	68	56.1	13.5	24.0	55	15 - 97	68	11.5	4.2	36.9	11	0 - 25
All Automated Methods	16	71.8	17.5	24.4	69	19 - 125	16	12.1	4.9	40.4	11	0 - 27
All Manual Methods	52	52.3	10.5	20.1	50	20 - 84	51	11.4	4.1	35.7	10	0 - 24
All Vital Diagnostics Methods	11	67.9	14.7	21.6	63	23 - 113	11	9.7	2.6	27.2	11	1 - 18
Vital Diagnostics Excyte M/10	6	66.0	18.0	27.3	58	11 - 121	6	10.2	2.5	24.4	11	2 - 18
Westergren - diluted	46	52.0	9.9	19.0	50	22 - 82	46	11.0	3.9	35.4	10	0 - 23
Westergren - undiluted	5	51.4	15.7	30.6	48	4 - 99	5	14.8	4.4	30.0	14	1 - 29

SEDIMAT SEDIMENTATION RATE (MM/HR)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen MAT-1</u>				<u>Labs</u>	<u>Mean</u>	<u>Specimen MAT-2</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	68.3	8.1	11.8	69	43 - 93	8	2.8	1.3	46.6	3	0 - 7
Polymedco Sedimat 15	8	68.3	8.1	11.8	69	43 - 93	8	2.8	1.3	46.6	3	0 - 7

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

<u>Instrument</u>	Specimen CL-1						Specimen CL-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	3.03	0.40	13.3	3.1	2.5 - 3.5	10	19.88	1.54	7.7	19.8	16.8 - 22.9
All Abbott Cell-Dyn Instruments	10	3.03	0.40	13.3	3.1	2.5 - 3.5	10	20.33	1.51	7.4	21.0	17.2 - 23.4
Abbott Cell-Dyn Ruby	8	3.03	0.40	13.3	3.1	2.5 - 3.5	8	20.33	1.51	7.4	21.0	17.2 - 23.4
<u>Instrument</u>	Specimen CL-3						Specimen CL-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	10	7.28	0.87	11.9	7.4	6.1 - 8.4	10	20.03	1.53	7.7	20.0	17.0 - 23.1
All Abbott Cell-Dyn Instruments	10	7.60	0.70	9.2	7.9	6.4 - 8.8	10	20.47	1.54	7.5	21.2	17.3 - 23.6
Abbott Cell-Dyn Ruby	8	7.60	0.70	9.2	7.9	6.4 - 8.8	8	20.47	1.54	7.5	21.2	17.3 - 23.6
<u>Instrument</u>	Specimen CL-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	7.28	0.85	11.6	7.4	6.1 - 8.4						
All Abbott Cell-Dyn Instruments	10	7.57	0.75	9.9	8.0	6.4 - 8.8						
Abbott Cell-Dyn Ruby	8	7.57	0.75	9.9	8.0	6.4 - 8.8						

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

<u>Instrument</u>	Specimen CL-1						Specimen CL-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	2.253	0.097	4.3	2.23	2.11 - 2.39	10	5.360	0.214	4.0	5.43	5.03 - 5.69
All Abbott Cell-Dyn Instruments	10	2.295	0.092	4.0	2.30	2.15 - 2.44	10	5.480	0.071	1.3	5.48	5.15 - 5.81
Abbott Cell-Dyn Ruby	8	2.295	0.092	4.0	2.30	2.15 - 2.44	8	5.480	0.071	1.3	5.48	5.15 - 5.81
<u>Instrument</u>	Specimen CL-3						Specimen CL-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	10	4.700	0.200	4.2	4.75	4.41 - 4.99	10	5.403	0.289	5.4	5.46	5.07 - 5.73
All Abbott Cell-Dyn Instruments	10	4.810	0.085	1.8	4.81	4.52 - 5.10	10	5.560	0.141	2.5	5.56	5.22 - 5.90
Abbott Cell-Dyn Ruby	8	4.810	0.085	1.8	4.81	4.52 - 5.10	8	5.560	0.141	2.5	5.56	5.22 - 5.90
<u>Instrument</u>	Specimen CL-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	4.700	0.165	3.5	4.78	4.41 - 4.99						
All Abbott Cell-Dyn Instruments	10	4.795	0.021	0.4	4.80	4.50 - 5.09						
Abbott Cell-Dyn Ruby	8	4.795	0.021	0.4	4.80	4.50 - 5.09						

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

<u>Instrument</u>	Specimen CL-1						Specimen CL-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	5.77	0.21	3.6	5.7	5.3 - 6.2	10	16.80	0.67	4.0	17.0	15.6 - 18.0
All Abbott Cell-Dyn Instruments	10	5.77	0.21	3.6	5.7	5.3 - 6.2	10	17.10	0.36	2.1	17.2	15.9 - 18.3
Abbott Cell-Dyn Ruby	8	5.77	0.21	3.6	5.7	5.3 - 6.2	8	17.10	0.36	2.1	17.2	15.9 - 18.3
<u>Instrument</u>	Specimen CL-3						Specimen CL-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	10	13.30	0.50	3.8	13.3	12.3 - 14.3	10	16.83	0.84	5.0	16.9	15.6 - 18.1
All Abbott Cell-Dyn Instruments	10	13.30	0.50	3.8	13.3	12.3 - 14.3	10	17.17	0.60	3.5	17.1	15.9 - 18.4
Abbott Cell-Dyn Ruby	8	13.30	0.50	3.8	13.3	12.3 - 14.3	8	17.17	0.60	3.5	17.1	15.9 - 18.4
<u>Instrument</u>	Specimen CL- 5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	13.47	0.25	1.9	13.5	12.5 - 14.5						
All Abbott Cell-Dyn Instruments	10	13.47	0.25	1.9	13.5	12.5 - 14.5						
Abbott Cell-Dyn Ruby	8	13.47	0.25	1.9	13.5	12.5 - 14.5						

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

<u>Instrument</u>	Specimen CL-1						Specimen CL-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	16.37	0.21	1.3	16.3	15.3 - 17.4	10	47.00	1.30	2.8	47.7	44.1 - 49.9
All Abbott Cell-Dyn Instruments	10	16.25	0.07	0.4	16.3	15.2 - 17.3	10	46.65	1.63	3.5	46.7	43.8 - 49.5
Abbott Cell-Dyn Ruby	8	16.25	0.07	0.4	16.3	15.2 - 17.3	8	46.65	1.63	3.5	46.7	43.8 - 49.5
<u>Instrument</u>	Specimen CL-3						Specimen CL-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	10	38.87	1.10	2.8	38.8	36.5 - 41.2	10	47.40	1.67	3.5	47.7	44.5 - 50.3
All Abbott Cell-Dyn Instruments	10	38.90	1.56	4.0	38.9	36.5 - 41.3	10	47.25	2.33	4.9	47.3	44.4 - 50.1
Abbott Cell-Dyn Ruby	8	38.90	1.56	4.0	38.9	36.5 - 41.3	8	47.25	2.33	4.9	47.3	44.4 - 50.1
<u>Instrument</u>	Specimen CL-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	38.97	0.78	2.0	39.2	36.6 - 41.4						
All Abbott Cell-Dyn Instruments	10	38.85	1.06	2.7	38.9	36.5 - 41.2						
Abbott Cell-Dyn Ruby	8	38.85	1.06	2.7	38.9	36.5 - 41.2						

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

<u>Instrument</u>	Specimen CL-1						Specimen CL-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	81.8	7.5	9.2	82	61 - 103	10	465.0	12.6	2.7	461	348 - 582
All Abbott Cell-Dyn Instruments	10	79.0	6.2	7.9	77	59 - 99	10	467.3	14.3	3.1	464	350 - 585
Abbott Cell-Dyn Ruby	8	79.0	6.2	7.9	77	59 - 99	8	467.3	14.3	3.1	464	350 - 585
<u>Instrument</u>	Specimen CL-3						Specimen CL-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	10	262.5	6.2	2.4	263	196 - 329	10	460.3	9.6	2.1	463	345 - 576
All Abbott Cell-Dyn Instruments	10	260.3	5.5	2.1	260	195 - 326	10	464.7	4.5	1.0	465	348 - 581
Abbott Cell-Dyn Ruby	8	260.3	5.5	2.1	260	195 - 326	8	464.7	4.5	1.0	465	348 - 581
<u>Instrument</u>	Specimen CL-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	262.8	3.8	1.4	263	197 - 329						
All Abbott Cell-Dyn Instruments	10	264.3	2.5	1.0	264	198 - 331						
Abbott Cell-Dyn Ruby	8	264.3	2.5	1.0	264	198 - 331						

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

<u>Instrument</u>	Specimen CL-1						Specimen CL-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	48.43	1.27	2.6	48.7	44.6 - 52.3	10	75.85	1.54	2.0	76.2	71.2 - 80.5
All Abbott Cell-Dyn Instruments	10	49.00	0.66	1.3	48.9	47.0 - 51.0	10	76.57	0.70	0.9	76.5	74.4 - 78.7
Abbott Cell-Dyn Ruby	8	49.00	0.66	1.3	48.9	47.0 - 51.0	8	76.57	0.70	0.9	76.5	74.4 - 78.7
<u>Instrument</u>	Specimen CL-3						Specimen CL-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	10	63.73	2.42	3.8	64.5	56.4 - 71.0	10	75.63	2.02	2.7	76.1	69.5 - 81.7
All Abbott Cell-Dyn Instruments	10	64.90	0.72	1.1	64.7	62.7 - 67.1	10	76.50	1.23	1.6	77.0	72.8 - 80.2
Abbott Cell-Dyn Ruby	8	64.90	0.72	1.1	64.7	62.7 - 67.1	8	76.50	1.23	1.6	77.0	72.8 - 80.2
<u>Instrument</u>	Specimen CL-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	63.53	2.02	3.2	64.2	57.4 - 69.6						
All Abbott Cell-Dyn Instruments	10	64.50	0.66	1.0	64.6	62.5 - 66.5						
Abbott Cell-Dyn Ruby	8	64.50	0.66	1.0	64.6	62.5 - 66.5						

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

<u>Instrument</u>	Specimen CL-1						Specimen CL-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	33.25	7.07	21.3	36.3	12.0 - 54.5	10	14.45	2.99	20.7	13.9	5.4 - 23.5
All Abbott Cell-Dyn Instruments	10	36.77	0.86	2.3	36.6	34.1 - 39.4	10	15.43	2.76	17.9	14.2	7.1 - 23.8
Abbott Cell-Dyn Ruby	8	36.77	0.86	2.3	36.6	34.1 - 39.4	8	15.43	2.76	17.9	14.2	7.1 - 23.8
<u>Instrument</u>	Specimen CL-3						Specimen CL-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	10	21.30	4.47	21.0	23.5	7.8 - 34.8	10	12.47	1.95	15.6	11.6	6.6 - 18.4
All Abbott Cell-Dyn Instruments	10	23.53	0.15	0.6	23.5	23.0 - 24.0	10	13.15	2.19	16.7	13.2	6.5 - 19.8
Abbott Cell-Dyn Ruby	8	23.53	0.15	0.6	23.5	23.0 - 24.0	8	13.15	2.19	16.7	13.2	6.5 - 19.8
<u>Instrument</u>	Specimen CL-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	21.30	4.23	19.9	23.0	8.6 - 34.0						
All Abbott Cell-Dyn Instruments	10	23.37	1.12	4.8	23.8	20.0 - 26.8						
Abbott Cell-Dyn Ruby	8	23.37	1.12	4.8	23.8	20.0 - 26.8						

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

<u>Instrument</u>	Specimen CL-1						Specimen CL-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	10	11.60	8.16	70.3	7.8	0.0 - 36.1	10	6.07	3.35	55.2	4.6	0.0 - 16.2
All Abbott Cell-Dyn Instruments	10	7.53	0.76	10.1	7.2	5.2 - 9.9	10	4.15	0.64	15.3	4.2	2.2 - 6.1
Abbott Cell-Dyn Ruby	8	7.53	0.76	10.1	7.2	5.2 - 9.9	8	4.15	0.64	15.3	4.2	2.2 - 6.1
<u>Instrument</u>	Specimen CL-3						Specimen CL-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	10	8.90	6.08	68.3	6.1	0.0 - 27.2	10	6.73	3.99	59.2	6.1	0.0 - 18.7
All Abbott Cell-Dyn Instruments	10	5.87	0.42	7.1	6.0	4.6 - 7.2	10	4.60	2.12	46.1	4.6	0.0 - 11.0
Abbott Cell-Dyn Ruby	8	5.87	0.42	7.1	6.0	4.6 - 7.2	8	4.60	2.12	46.1	4.6	0.0 - 11.0
<u>Instrument</u>	Specimen CL-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	8.50	5.41	63.7	6.0	0.0 - 24.8						
All Abbott Cell-Dyn Instruments	10	5.80	0.46	7.9	5.7	4.4 - 7.2						
Abbott Cell-Dyn Ruby	8	5.80	0.46	7.9	5.7	4.4 - 7.2						

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

<u><i>Instrument</i></u>	Specimen CL-1						Specimen CL-2					
	<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	5.73	0.50	8.7	5.9	4.2 - 7.3	10	4.83	0.25	5.2	4.9	4.0 - 5.6
All Abbott Cell-Dyn Instruments	10	5.60	0.53	9.4	5.8	4.0 - 7.2	10	4.93	0.15	3.1	4.9	4.4 - 5.4
Abbott Cell-Dyn Ruby	8	5.60	0.53	9.4	5.8	4.0 - 7.2	8	4.93	0.15	3.1	4.9	4.4 - 5.4
Specimen CL-3						Specimen CL-4						
All Method	10	5.53	0.81	14.7	5.3	3.0 - 8.0	10	4.63	0.15	3.2	4.7	4.1 - 5.1
All Abbott Cell-Dyn Instruments	10	5.13	0.25	4.9	5.1	4.3 - 5.9	10	4.60	0.17	3.8	4.7	4.0 - 5.2
Abbott Cell-Dyn Ruby	8	5.13	0.25	4.9	5.1	4.3 - 5.9	8	4.60	0.17	3.8	4.7	4.0 - 5.2
Specimen CL-5												
All Method	10	5.98	0.76	12.8	5.8	3.6 - 8.3						
All Abbott Cell-Dyn Instruments	10	5.63	0.42	7.4	5.5	4.3 - 6.9						
Abbott Cell-Dyn Ruby	8	5.63	0.42	7.4	5.5	4.3 - 6.9						

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

<u><i>Instrument</i></u>	Specimen CL-1						Specimen CL-2					
	<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	0.98	0.28	28.2	1.0	0.1 - 1.9	10	0.33	0.22	68.2	0.4	0.0 - 1.0
All Abbott Cell-Dyn Instruments	10	1.07	0.25	23.6	1.1	0.3 - 1.9	10	0.30	0.26	88.2	0.4	0.0 - 1.1
Abbott Cell-Dyn Ruby	8	1.07	0.25	23.6	1.1	0.3 - 1.9	8	0.30	0.26	88.2	0.4	0.0 - 1.1
Specimen CL-3						Specimen CL-4						
All Method	10	0.55	0.19	34.8	0.6	0.0 - 1.2	10	0.28	0.43	155.3	0.1	0.0 - 1.6
All Abbott Cell-Dyn Instruments	10	0.57	0.23	40.8	0.7	0.0 - 1.3	10	0.30	0.52	173.2	0.0	0.0 - 1.9
Abbott Cell-Dyn Ruby	8	0.57	0.23	40.8	0.7	0.0 - 1.3	8	0.30	0.52	173.2	0.0	0.0 - 1.9
Specimen CL-5												
All Method	10	0.70	0.22	30.9	0.8	0.0 - 1.4						
All Abbott Cell-Dyn Instruments	10	0.70	0.26	37.8	0.8	0.0 - 1.5						
Abbott Cell-Dyn Ruby	8	0.70	0.26	37.8	0.8	0.0 - 1.5						

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

<u><i>Instrument</i></u>	Specimen SYX-1						Specimen SYX-2					
	<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	43	2.99	0.10	3.4	3.0	2.5 - 3.5	41	20.63	0.44	2.1	20.6	17.5 - 23.8
All Sysmex Instruments	43	2.99	0.10	3.4	3.0	2.5 - 3.5	41	20.63	0.44	2.1	20.6	17.5 - 23.8
Sysmex pocH-100i	6	2.95	0.05	1.9	3.0	2.5 - 3.4	6	20.73	0.63	3.0	20.9	17.6 - 23.9
Sysmex XP-300	34	3.01	0.10	3.2	3.0	2.5 - 3.5	32	20.66	0.40	1.9	20.7	17.5 - 23.8
<u><i>Instrument</i></u>	Specimen SYX-3						Specimen SYX-4					
	<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	8.32	0.23	2.7	8.3	7.0 - 9.6	43	20.65	0.47	2.3	20.6	17.5 - 23.8
All Sysmex Instruments	42	8.32	0.23	2.7	8.3	7.0 - 9.6	43	20.65	0.47	2.3	20.6	17.5 - 23.8
Sysmex pocH-100i	6	8.13	0.31	3.8	8.2	6.9 - 9.4	6	20.68	0.35	1.7	20.6	17.5 - 23.8
Sysmex XP-300	33	8.38	0.17	2.1	8.4	7.1 - 9.7	34	20.69	0.47	2.3	20.7	17.5 - 23.8
<u><i>Instrument</i></u>	Specimen SYX-5											
	<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	8.35	0.20	2.4	8.3	7.0 - 9.7						
All Sysmex Instruments	42	8.35	0.20	2.4	8.3	7.0 - 9.7						
Sysmex pocH-100i	6	8.13	0.32	3.9	8.3	6.9 - 9.4						
Sysmex XP-300	34	8.39	0.19	2.2	8.4	7.1 - 9.7						

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

<u><i>Instrument</i></u>	Specimen SYX-1						Specimen SYX-2					
	<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	43	2.418	0.033	1.4	2.42	2.27 - 2.57	41	5.755	0.095	1.7	5.75	5.40 - 6.11
All Sysmex Instruments	43	2.418	0.033	1.4	2.42	2.27 - 2.57	41	5.755	0.095	1.7	5.75	5.40 - 6.11
Sysmex pocH-100i	6	2.443	0.044	1.8	2.43	2.29 - 2.59	6	5.885	0.149	2.5	5.94	5.53 - 6.24
Sysmex XP-300	34	2.416	0.028	1.1	2.41	2.27 - 2.57	32	5.737	0.058	1.0	5.75	5.39 - 6.09
<u><i>Instrument</i></u>	Specimen SYX-3						Specimen SYX-4					
	<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	4.159	0.051	1.2	4.16	3.90 - 4.41	43	5.737	0.085	1.5	5.73	5.39 - 6.09
All Sysmex Instruments	41	4.159	0.051	1.2	4.16	3.90 - 4.41	43	5.737	0.085	1.5	5.73	5.39 - 6.09
Sysmex pocH-100i	6	4.245	0.075	1.8	4.26	3.99 - 4.50	6	5.870	0.066	1.1	5.87	5.51 - 6.23
Sysmex XP-300	33	4.153	0.040	1.0	4.16	3.90 - 4.41	34	5.721	0.060	1.1	5.73	5.37 - 6.07
<u><i>Instrument</i></u>	Specimen SYX-5											
	<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	43	4.147	0.061	1.5	4.14	3.89 - 4.40						
All Sysmex Instruments	43	4.147	0.061	1.5	4.14	3.89 - 4.40						
Sysmex pocH-100i	6	4.195	0.114	2.7	4.23	3.94 - 4.45						
Sysmex XP-300	34	4.143	0.044	1.1	4.14	3.89 - 4.40						

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

<i><u>Instrument</u></i>	Specimen SYX-1						Specimen SYX-2					
	<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	43	62.9	4.7	7.4	62	47 - 79	41	381.6	11.1	2.9	381	286 - 477
All Sysmex Instruments	43	62.9	4.7	7.4	62	47 - 79	41	381.6	11.1	2.9	381	286 - 477
Sysmex pocH-100i	6	64.2	7.0	10.9	64	48 - 81	6	375.8	8.3	2.2	376	281 - 470
Sysmex XP-300	34	62.4	4.1	6.6	62	46 - 79	32	382.8	11.6	3.0	382	287 - 479
	Specimen SYX-3						Specimen SYX-4					
All Method	43	192.0	9.3	4.9	191	144 - 241	42	379.2	11.3	3.0	381	284 - 474
All Sysmex Instruments	43	192.0	9.3	4.9	191	144 - 241	42	379.2	11.3	3.0	381	284 - 474
Sysmex pocH-100i	6	193.3	10.9	5.6	193	144 - 242	6	373.0	8.2	2.2	373	279 - 467
Sysmex XP-300	34	191.5	9.4	4.9	191	143 - 240	33	380.3	11.9	3.1	382	285 - 476
	Specimen SYX-5											
All Method	42	192.7	8.6	4.5	193	144 - 241						
All Sysmex Instruments	42	192.7	8.6	4.5	193	144 - 241						
Sysmex pocH-100i	6	195.8	10.1	5.1	194	146 - 245						
Sysmex XP-300	34	191.4	9.9	5.2	193	143 - 240						

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

<i>Instrument</i>	Specimen SYX-1						Specimen SYX-2					
	<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	37	12.35	1.05	8.5	12.3	9.1 - 15.6	37	61.76	0.94	1.5	61.7	58.9 - 64.6
All Sysmex Instruments	37	12.35	1.05	8.5	12.3	9.1 - 15.6	37	61.76	0.94	1.5	61.7	58.9 - 64.6
Sysmex pocH-100i	5	10.98	0.81	7.4	11.0	8.5 - 13.5	5	62.50	0.75	1.2	62.6	60.2 - 64.8
Sysmex XP-300	30	12.57	0.95	7.6	12.5	9.7 - 15.5	30	61.71	0.89	1.4	61.7	59.0 - 64.4
Specimen SYX-3												
All Method	37	29.72	1.17	3.9	29.7	26.2 - 33.3	37	61.95	0.84	1.4	61.9	59.4 - 64.5
All Sysmex Instruments	37	29.72	1.17	3.9	29.7	26.2 - 33.3	37	61.95	0.84	1.4	61.9	59.4 - 64.5
Sysmex pocH-100i	5	29.02	1.01	3.5	29.0	26.0 - 32.1	5	62.10	0.28	0.5	62.0	61.2 - 63.0
Sysmex XP-300	30	29.79	1.20	4.0	29.7	26.2 - 33.4	30	61.87	0.84	1.4	61.8	59.3 - 64.4
Specimen SYX-4												
Specimen SYX-5												
All Method	37	29.56	1.22	4.1	29.7	25.9 - 33.3						
All Sysmex Instruments	37	29.56	1.22	4.1	29.7	25.9 - 33.3						
Sysmex pocH-100i	5	28.32	1.27	4.5	28.7	24.5 - 32.2						
Sysmex XP-300	30	29.75	1.12	3.8	29.8	26.3 - 33.2						

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

<u>Instrument</u>	Specimen SYX-1						Specimen SYX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	37	18.82	1.58	8.4	18.9	14.0 - 23.6	37	11.78	1.09	9.3	11.9	8.4 - 15.1
All Sysmex Instruments	37	18.82	1.58	8.4	18.9	14.0 - 23.6	37	11.78	1.09	9.3	11.9	8.4 - 15.1
Sysmex pocH-100i	5	16.44	1.56	9.5	16.6	11.7 - 21.2	5	10.12	0.47	4.6	10.0	8.7 - 11.6
Sysmex XP-300	30	19.28	1.22	6.3	19.4	15.6 - 23.0	30	12.01	0.95	7.9	12.0	9.1 - 14.9
	Specimen SYX-3						Specimen SYX-4					
All Method	36	16.48	1.08	6.5	16.4	13.2 - 19.8	37	11.41	1.05	9.2	11.6	8.2 - 14.6
All Sysmex Instruments	36	16.48	1.08	6.5	16.4	13.2 - 19.8	37	11.41	1.05	9.2	11.6	8.2 - 14.6
Sysmex pocH-100i	5	15.22	1.01	6.6	15.2	12.2 - 18.3	5	10.88	1.10	10.1	10.5	7.5 - 14.2
Sysmex XP-300	29	16.73	0.96	5.8	16.5	13.8 - 19.7	30	11.52	1.01	8.8	11.6	8.4 - 14.6
	Specimen SYX-5											
All Method	37	16.70	1.31	7.9	16.3	12.7 - 20.7						
All Sysmex Instruments	37	16.70	1.31	7.9	16.3	12.7 - 20.7						
Sysmex pocH-100i	5	16.08	1.46	9.1	16.2	11.6 - 20.5						
Sysmex XP-300	30	16.81	1.28	7.6	16.3	12.9 - 20.7						

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

<u><i>Instrument</i></u>	Specimen SYX-1						Specimen SYX-2					
	<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	37	68.83	2.00	2.9	68.1	62.8 - 74.9	37	26.46	0.83	3.2	26.4	23.9 - 29.0
All Sysmex Instruments	37	68.83	2.00	2.9	68.1	62.8 - 74.9	37	26.46	0.83	3.2	26.4	23.9 - 29.0
Sysmex pocH-100i	5	72.58	1.43	2.0	72.1	68.2 - 76.9	5	27.38	0.57	2.1	27.6	25.6 - 29.1
Sysmex XP-300	30	68.15	1.30	1.9	68.1	64.2 - 72.1	30	26.27	0.77	2.9	26.3	23.9 - 28.6
	Specimen SYX-3						Specimen SYX-4					
All Method	37	53.69	1.32	2.5	53.6	49.7 - 57.7	36	26.64	0.73	2.8	26.6	24.4 - 28.9
All Sysmex Instruments	37	53.69	1.32	2.5	53.6	49.7 - 57.7	36	26.64	0.73	2.8	26.6	24.4 - 28.9
Sysmex pocH-100i	5	55.76	1.69	3.0	56.6	50.6 - 60.9	5	27.02	1.09	4.0	27.5	23.7 - 30.4
Sysmex XP-300	30	53.34	0.95	1.8	53.4	50.5 - 56.2	29	26.61	0.68	2.5	26.6	24.5 - 28.7
	Specimen SYX-5											
All Method	37	53.74	1.50	2.8	53.8	49.2 - 58.3						
All Sysmex Instruments	37	53.74	1.50	2.8	53.8	49.2 - 58.3						
Sysmex pocH-100i	5	55.60	0.62	1.1	55.7	53.7 - 57.5						
Sysmex XP-300	30	53.44	1.30	2.4	53.6	49.5 - 57.4						

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

<u>Instrument</u>	Specimen HD-1						Specimen HD-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	275	1.94	0.15	7.7	1.9	1.6 - 2.3	272	20.16	0.56	2.8	20.2	17.1 - 23.2
All Abbott Cell-Dyn Instruments	82	2.02	0.14	6.9	2.0	1.7 - 2.4	83	19.85	0.70	3.5	19.8	16.8 - 22.9
All ABX Instruments	43	1.98	0.07	3.6	2.0	1.6 - 2.3	43	20.33	0.46	2.2	20.3	17.2 - 23.4
All Boule (CDS) Instruments	96	1.80	0.08	4.4	1.8	1.5 - 2.1	96	20.28	0.48	2.4	20.3	17.2 - 23.4
All COULTER Instruments	47	2.04	0.12	5.8	2.0	1.7 - 2.4	46	20.19	0.50	2.5	20.1	17.1 - 23.3
Abbott Cell-Dyn 1700	5	2.03	0.12	5.7	2.1	1.7 - 2.4	5	20.87	1.07	5.1	21.1	17.7 - 24.0
Abbott Cell-Dyn 1800	17	1.82	0.10	5.7	1.8	1.5 - 2.1	17	19.98	0.94	4.7	20.1	16.9 - 23.0
Abbott Cell-Dyn Emerald	62	2.07	0.10	4.6	2.1	1.7 - 2.4	63	19.77	0.56	2.8	19.7	16.8 - 22.8
Boule (CDS) Medonic M series	96	1.80	0.08	4.4	1.8	1.5 - 2.1	96	20.28	0.48	2.4	20.3	17.2 - 23.4
COULTER AcT diff/diff 2	46	2.03	0.11	5.6	2.0	1.7 - 2.4	45	20.15	0.45	2.2	20.1	17.1 - 23.2
Diatron Abacus 3 CP	5	1.93	0.10	5.0	2.0	1.6 - 2.3	5	20.15	0.77	3.8	20.3	17.1 - 23.2
Horiba ABX Micros/45/60	43	1.98	0.07	3.6	2.0	1.6 - 2.3	43	20.33	0.46	2.2	20.3	17.2 - 23.4
<u>Instrument</u>	Specimen HD-3						Specimen HD-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	270	7.65	0.26	3.3	7.6	6.5 - 8.8	272	20.18	0.60	3.0	20.2	17.1 - 23.3
All Abbott Cell-Dyn Instruments	79	7.78	0.28	3.6	7.8	6.6 - 9.0	83	19.87	0.69	3.5	19.8	16.8 - 22.9
All ABX Instruments	43	7.70	0.17	2.2	7.7	6.5 - 8.9	42	20.39	0.46	2.3	20.5	17.3 - 23.5
All Boule (CDS) Instruments	98	7.48	0.19	2.6	7.5	6.3 - 8.7	97	20.27	0.46	2.3	20.3	17.2 - 23.4
All COULTER Instruments	44	7.74	0.21	2.7	7.8	6.5 - 9.0	45	20.28	0.70	3.5	20.4	17.2 - 23.4
Abbott Cell-Dyn 1700	5	7.97	0.59	7.4	8.2	6.7 - 9.2	5	20.73	1.27	6.1	21.2	17.6 - 23.9
Abbott Cell-Dyn 1800	16	7.50	0.46	6.1	7.5	6.3 - 8.7	17	19.91	0.93	4.7	19.9	16.9 - 22.9
Abbott Cell-Dyn Emerald	62	7.84	0.22	2.8	7.8	6.6 - 9.1	63	19.82	0.56	2.8	19.7	16.8 - 22.8
Boule (CDS) Medonic M series	98	7.48	0.19	2.6	7.5	6.3 - 8.7	97	20.27	0.46	2.3	20.3	17.2 - 23.4
COULTER AcT diff/diff 2	43	7.75	0.21	2.7	7.8	6.5 - 9.0	44	20.32	0.65	3.2	20.4	17.2 - 23.4
Diatron Abacus 3 CP	5	7.48	0.19	2.5	7.6	6.3 - 8.6	5	20.38	0.98	4.8	20.6	17.3 - 23.5
Horiba ABX Micros/45/60	43	7.70	0.17	2.2	7.7	6.5 - 8.9	42	20.39	0.46	2.3	20.5	17.3 - 23.5

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–WHITE BLOOD CELL COUNT (x 10⁹/L) cont'd

Specimen HD-5

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	271	7.64	0.28	3.6	7.6	6.4 - 8.8
All Abbott Cell-Dyn Instruments	80	7.79	0.28	3.7	7.8	6.6 - 9.0
All ABX Instruments	43	7.71	0.18	2.3	7.7	6.5 - 8.9
All Boule (CDS) Instruments	97	7.47	0.21	2.9	7.4	6.3 - 8.6
All COULTER Instruments	44	7.72	0.23	2.9	7.8	6.5 - 8.9
Abbott Cell-Dyn 1700	5	8.27	0.61	7.4	8.4	7.0 - 9.6
Abbott Cell-Dyn 1800	17	7.52	0.49	6.5	7.5	6.3 - 8.7
Abbott Cell-Dyn Emerald	63	7.85	0.22	2.8	7.9	6.6 - 9.1
Boule (CDS) Medonic M series	97	7.47	0.21	2.9	7.4	6.3 - 8.6
COULTER AcT diff/diff 2	43	7.72	0.23	3.0	7.8	6.5 - 8.9
Diatron Abacus 3 CP	5	7.45	0.30	4.0	7.4	6.3 - 8.6
Horiba ABX Micros/45/60	43	7.71	0.18	2.3	7.7	6.5 - 8.9

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–RED BLOOD CELL COUNT (x 10¹²/L)

Specimen HD-1

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	273	2.262	0.064	2.8	2.26	2.12 - 2.40
All Abbott Cell-Dyn Instruments	82	2.301	0.070	3.1	2.30	2.16 - 2.44
All ABX Instruments	44	2.241	0.046	2.0	2.24	2.10 - 2.38
All Boule (CDS) Instruments	96	2.233	0.044	2.0	2.23	2.09 - 2.37
All COULTER Instruments	47	2.275	0.073	3.2	2.28	2.13 - 2.42
Abbott Cell-Dyn 1700	5	2.247	0.025	1.1	2.25	2.11 - 2.39
Abbott Cell-Dyn 1800	17	2.364	0.066	2.8	2.37	2.22 - 2.51
Abbott Cell-Dyn Emerald	62	2.287	0.063	2.8	2.28	2.14 - 2.43
Boule (CDS) Medonic M series	96	2.233	0.044	2.0	2.23	2.09 - 2.37
COULTER AcT diff/diff 2	46	2.275	0.074	3.2	2.28	2.13 - 2.42
Diatron Abacus 3 CP	5	2.257	0.072	3.2	2.22	2.12 - 2.40
Horiba ABX Micros/45/60	44	2.241	0.046	2.0	2.24	2.10 - 2.38

Specimen HD-2

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
276	5.700	0.139	2.4	5.71	5.35 - 6.05
83	5.596	0.131	2.3	5.60	5.26 - 5.94
43	5.727	0.101	1.8	5.74	5.38 - 6.08
97	5.767	0.113	2.0	5.77	5.42 - 6.12
47	5.709	0.128	2.2	5.72	5.36 - 6.06
5	5.557	0.112	2.0	5.53	5.22 - 5.90
17	5.526	0.091	1.6	5.50	5.19 - 5.86
63	5.617	0.135	2.4	5.63	5.27 - 5.96
97	5.767	0.113	2.0	5.77	5.42 - 6.12
46	5.711	0.128	2.2	5.72	5.36 - 6.06
5	5.865	0.182	3.1	5.84	5.51 - 6.22
43	5.727	0.101	1.8	5.74	5.38 - 6.08

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL—RED BLOOD CELL COUNT (x 10¹²/L) cont'd

<u>Instrument</u>	Specimen HD-3						Specimen HD-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	273	4.627	0.089	1.9	4.63	4.34 - 4.91	274	5.706	0.135	2.4	5.71	5.36 - 6.05
All Abbott Cell-Dyn Instruments	81	4.612	0.091	2.0	4.62	4.33 - 4.89	83	5.614	0.118	2.1	5.61	5.27 - 5.96
All ABX Instruments	44	4.619	0.091	2.0	4.60	4.34 - 4.90	43	5.722	0.124	2.2	5.71	5.37 - 6.07
All Boule (CDS) Instruments	99	4.645	0.076	1.6	4.65	4.36 - 4.93	97	5.783	0.090	1.5	5.79	5.43 - 6.14
All COULTER Instruments	46	4.655	0.140	3.0	4.63	4.37 - 4.94	45	5.687	0.144	2.5	5.66	5.34 - 6.03
Abbott Cell-Dyn 1700	5	4.477	0.055	1.2	4.48	4.20 - 4.75	5	5.567	0.121	2.2	5.61	5.23 - 5.91
Abbott Cell-Dyn 1800	17	4.628	0.065	1.4	4.64	4.34 - 4.91	17	5.561	0.105	1.9	5.58	5.22 - 5.90
Abbott Cell-Dyn Emerald	61	4.614	0.094	2.0	4.62	4.33 - 4.90	63	5.630	0.118	2.1	5.62	5.29 - 5.97
Boule (CDS) Medonic M series	99	4.645	0.076	1.6	4.65	4.36 - 4.93	97	5.783	0.090	1.5	5.79	5.43 - 6.14
COULTER AcT diff/diff 2	45	4.658	0.140	3.0	4.63	4.37 - 4.94	44	5.686	0.146	2.6	5.66	5.34 - 6.03
Diatron Abacus 3 CP	5	4.585	0.147	3.2	4.59	4.30 - 4.87	5	5.838	0.197	3.4	5.82	5.48 - 6.19
Horiba ABX Micros/45/60	44	4.619	0.091	2.0	4.60	4.34 - 4.90	43	5.722	0.124	2.2	5.71	5.37 - 6.07
Specimen HD-5												
All Method	274	4.624	0.094	2.0	4.62	4.34 - 4.91						
All Abbott Cell-Dyn Instruments	83	4.605	0.100	2.2	4.61	4.32 - 4.89						
All ABX Instruments	44	4.627	0.100	2.2	4.62	4.34 - 4.91						
All Boule (CDS) Instruments	97	4.639	0.069	1.5	4.64	4.36 - 4.92						
All COULTER Instruments	47	4.633	0.139	3.0	4.61	4.35 - 4.92						
Abbott Cell-Dyn 1700	5	4.550	0.095	2.1	4.60	4.27 - 4.83						
Abbott Cell-Dyn 1800	17	4.628	0.061	1.3	4.61	4.34 - 4.91						
Abbott Cell-Dyn Emerald	63	4.601	0.108	2.4	4.61	4.32 - 4.88						
Boule (CDS) Medonic M series	97	4.639	0.069	1.5	4.64	4.36 - 4.92						
COULTER AcT diff/diff 2	46	4.636	0.140	3.0	4.62	4.35 - 4.92						
Diatron Abacus 3 CP	5	4.648	0.223	4.8	4.68	4.36 - 4.93						
Horiba ABX Micros/45/60	44	4.627	0.100	2.2	4.62	4.34 - 4.91						

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

<i>Instrument</i>	Specimen HD-1						Specimen HD-2					
	<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	279	5.91	0.20	3.5	5.9	5.4 - 6.4	277	18.39	0.38	2.0	18.4	17.1 - 19.7
All Abbott Cell-Dyn Instruments	81	5.92	0.17	2.9	5.9	5.5 - 6.4	82	18.35	0.37	2.0	18.3	17.0 - 19.7
All ABX Instruments	43	5.96	0.10	1.7	5.9	5.5 - 6.4	44	18.41	0.30	1.6	18.4	17.1 - 19.8
All Boule (CDS) Instruments	96	5.94	0.09	1.6	5.9	5.5 - 6.4	96	18.53	0.30	1.6	18.6	17.2 - 19.9
All COULTER Instruments	46	5.79	0.16	2.8	5.8	5.3 - 6.2	46	18.12	0.35	1.9	18.1	16.8 - 19.4
Abbott Cell-Dyn 1700	5	6.03	0.06	1.0	6.0	5.6 - 6.5	5	18.43	0.06	0.3	18.4	17.1 - 19.8
Abbott Cell-Dyn 1800	17	6.04	0.19	3.1	6.0	5.6 - 6.5	17	18.36	0.37	2.0	18.3	17.0 - 19.7
Abbott Cell-Dyn Emerald	61	5.88	0.16	2.7	5.9	5.4 - 6.3	62	18.34	0.38	2.1	18.3	17.0 - 19.7
Boule (CDS) Medonic M series	96	5.94	0.09	1.6	5.9	5.5 - 6.4	96	18.53	0.30	1.6	18.6	17.2 - 19.9
COULTER AcT diff/diff 2	45	5.79	0.16	2.8	5.8	5.3 - 6.2	45	18.12	0.36	2.0	18.1	16.8 - 19.4
Diatron Abacus 3 CP	5	6.03	0.10	1.6	6.1	5.6 - 6.5	5	19.23	0.17	0.9	19.3	17.8 - 20.6
Horiba ABX Micros/45/60	43	5.96	0.10	1.7	5.9	5.5 - 6.4	44	18.41	0.30	1.6	18.4	17.1 - 19.8

<i>Instrument</i>	Specimen HD-3						Specimen HD-4					
	<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	274	13.66	0.23	1.7	13.7	12.7 - 14.7	274	18.43	0.35	1.9	18.4	17.1 - 19.8
All Abbott Cell-Dyn Instruments	81	13.68	0.26	1.9	13.7	12.7 - 14.7	80	18.42	0.28	1.5	18.4	17.1 - 19.8
All ABX Instruments	43	13.71	0.15	1.1	13.7	12.7 - 14.7	42	18.41	0.23	1.3	18.4	17.1 - 19.7
All Boule (CDS) Instruments	98	13.68	0.18	1.3	13.7	12.7 - 14.7	96	18.55	0.28	1.5	18.6	17.2 - 19.9
All COULTER Instruments	45	13.50	0.32	2.4	13.4	12.5 - 14.5	45	18.12	0.47	2.6	18.1	16.8 - 19.4
Abbott Cell-Dyn 1700	5	13.47	0.32	2.4	13.6	12.5 - 14.5	5	18.33	0.23	1.3	18.2	17.0 - 19.7
Abbott Cell-Dyn 1800	17	13.75	0.25	1.8	13.7	12.7 - 14.8	17	18.54	0.27	1.5	18.5	17.2 - 19.9
Abbott Cell-Dyn Emerald	61	13.67	0.26	1.9	13.7	12.7 - 14.7	61	18.38	0.30	1.6	18.4	17.0 - 19.7
Boule (CDS) Medonic M series	98	13.68	0.18	1.3	13.7	12.7 - 14.7	96	18.55	0.28	1.5	18.6	17.2 - 19.9
COULTER AcT diff/diff 2	44	13.50	0.32	2.4	13.4	12.5 - 14.5	44	18.15	0.40	2.2	18.1	16.8 - 19.5
Diatron Abacus 3 CP	5	13.90	0.08	0.6	13.9	12.9 - 14.9	5	19.18	0.24	1.2	19.1	17.8 - 20.6
Horiba ABX Micros/45/60	43	13.71	0.15	1.1	13.7	12.7 - 14.7	42	18.41	0.23	1.3	18.4	17.1 - 19.7

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

Specimen HD-5

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	277	13.66	0.27	1.9	13.7	12.7 - 14.7
All Abbott Cell-Dyn Instruments	80	13.72	0.26	1.9	13.7	12.7 - 14.7
All ABX Instruments	43	13.74	0.18	1.3	13.7	12.7 - 14.8
All Boule (CDS) Instruments	97	13.69	0.20	1.4	13.7	12.7 - 14.7
All COULTER Instruments	47	13.44	0.32	2.4	13.4	12.5 - 14.4
Abbott Cell-Dyn 1700	5	13.73	0.12	0.8	13.8	12.7 - 14.7
Abbott Cell-Dyn 1800	17	13.80	0.32	2.3	13.8	12.8 - 14.8
Abbott Cell-Dyn Emerald	60	13.69	0.24	1.8	13.7	12.7 - 14.7
Boule (CDS) Medonic M series	97	13.69	0.20	1.4	13.7	12.7 - 14.7
COULTER AcT diff/diff 2	46	13.45	0.32	2.4	13.4	12.5 - 14.4
Diatron Abacus 3 CP	5	13.88	0.19	1.4	14.0	12.9 - 14.9
Horiba ABX Micros/45/60	43	13.74	0.18	1.3	13.7	12.7 - 14.8

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

Specimen HD-1

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	278	16.51	1.19	7.2	16.1	15.5 - 17.6
All Abbott Cell-Dyn Instruments	81	17.96	0.64	3.5	18.0	16.8 - 19.1
All ABX Instruments	44	15.76	0.34	2.2	15.8	14.8 - 16.8
All Boule (CDS) Instruments	96	15.47	0.42	2.7	15.5	14.5 - 16.4
All COULTER Instruments	48	16.75	0.56	3.3	16.8	15.7 - 17.8
Abbott Cell-Dyn 1700	5	16.37	0.59	3.6	16.6	15.3 - 17.4
Abbott Cell-Dyn 1800	17	17.80	0.80	4.5	17.8	16.7 - 18.9
Abbott Cell-Dyn Emerald	62	18.04	0.55	3.0	18.0	16.9 - 19.2
Boule (CDS) Medonic M series	96	15.47	0.42	2.7	15.5	14.5 - 16.4
COULTER AcT diff/diff 2	47	16.75	0.56	3.4	16.8	15.7 - 17.8
Diatron Abacus 3 CP	5	17.45	0.45	2.6	17.3	16.4 - 18.5
Horiba ABX Micros/45/60	44	15.76	0.34	2.2	15.8	14.8 - 16.8

Specimen HD-2

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
276	52.50	1.96	3.7	52.2	49.3 - 55.7
82	54.29	1.73	3.2	54.6	51.0 - 57.6
43	51.32	1.04	2.0	51.5	48.2 - 54.4
97	51.77	1.43	2.8	51.6	48.6 - 54.9
47	51.93	1.40	2.7	51.9	48.8 - 55.1
5	51.00	2.19	4.3	51.5	47.9 - 54.1
17	52.80	1.84	3.5	52.8	49.6 - 56.0
63	54.76	1.44	2.6	54.9	51.4 - 58.1
97	51.77	1.43	2.8	51.6	48.6 - 54.9
47	51.93	1.40	2.7	51.9	48.8 - 55.1
5	57.20	1.66	2.9	56.9	53.7 - 60.7
43	51.32	1.04	2.0	51.5	48.2 - 54.4

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

<i><u>Instrument</u></i>	Specimen HD-3						Specimen HD-4					
	<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	279	38.59	1.90	4.9	38.2	36.2 - 41.0	275	52.55	1.91	3.6	52.2	49.3 - 55.8
All Abbott Cell-Dyn Instruments	81	40.78	1.18	2.9	41.0	38.3 - 43.3	81	54.46	1.51	2.8	54.7	51.1 - 57.8
All ABX Instruments	44	37.67	0.75	2.0	37.6	35.4 - 40.0	43	51.23	1.06	2.1	51.3	48.1 - 54.4
All Boule (CDS) Instruments	99	37.02	0.90	2.4	37.0	34.7 - 39.3	97	51.89	1.22	2.3	52.0	48.7 - 55.1
All COULTER Instruments	46	38.75	1.09	2.8	38.5	36.4 - 41.1	46	51.68	1.48	2.9	51.4	48.5 - 54.8
Abbott Cell-Dyn 1700	5	37.43	1.27	3.4	37.9	35.1 - 39.7	5	51.10	2.09	4.1	52.1	48.0 - 54.2
Abbott Cell-Dyn 1800	17	40.09	1.03	2.6	39.9	37.6 - 42.5	17	53.06	1.62	3.1	53.0	49.8 - 56.3
Abbott Cell-Dyn Emerald	62	41.06	1.05	2.6	41.1	38.5 - 43.6	63	54.83	1.35	2.5	55.0	51.5 - 58.2
Boule (CDS) Medonic M series	99	37.02	0.90	2.4	37.0	34.7 - 39.3	97	51.89	1.22	2.3	52.0	48.7 - 55.1
COULTER AcT diff/diff 2	45	38.75	1.10	2.8	38.5	36.4 - 41.1	45	51.64	1.47	2.9	51.4	48.5 - 54.8
Diatron Abacus 3 CP	5	40.98	1.18	2.9	41.0	38.5 - 43.5	5	56.95	1.95	3.4	56.9	53.5 - 60.4
Horiba ABX Micros/45/60	44	37.67	0.75	2.0	37.6	35.4 - 40.0	43	51.23	1.06	2.1	51.3	48.1 - 54.4
Specimen HD-5												
All Method	279	38.55	1.95	5.1	38.2	36.2 - 40.9						
All Abbott Cell-Dyn Instruments	82	40.77	1.21	3.0	40.9	38.3 - 43.3						
All ABX Instruments	44	37.72	0.85	2.3	37.7	35.4 - 40.0						
All Boule (CDS) Instruments	98	36.91	0.87	2.3	36.8	34.6 - 39.2						
All COULTER Instruments	47	38.57	1.19	3.1	38.4	36.2 - 40.9						
Abbott Cell-Dyn 1700	5	38.13	1.76	4.6	39.1	35.8 - 40.5						
Abbott Cell-Dyn 1800	17	40.00	0.98	2.5	39.9	37.6 - 42.4						
Abbott Cell-Dyn Emerald	63	41.03	1.16	2.8	41.1	38.5 - 43.5						
Boule (CDS) Medonic M series	98	36.91	0.87	2.3	36.8	34.6 - 39.2						
COULTER AcT diff/diff 2	46	38.57	1.21	3.1	38.5	36.2 - 40.9						
Diatron Abacus 3 CP	5	41.50	1.86	4.5	41.8	39.0 - 44.0						
Horiba ABX Micros/45/60	44	37.72	0.85	2.3	37.7	35.4 - 40.0						

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

<i><u>Instrument</u></i>	Specimen HD-1						Specimen HD-2					
	<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	271	65.8	6.7	10.2	65	49 - 83	277	548.5	32.2	5.9	546	411 - 686
All Abbott Cell-Dyn Instruments	80	65.5	9.4	14.3	65	49 - 82	83	547.7	33.1	6.0	552	410 - 685
All ABX Instruments	44	71.3	5.7	7.9	72	53 - 90	44	546.0	24.5	4.5	547	409 - 683
All Boule (CDS) Instruments	97	62.9	5.1	8.1	63	47 - 79	97	535.0	22.6	4.2	533	401 - 669
All COULTER Instruments	47	67.7	4.9	7.2	68	50 - 85	47	585.0	29.1	5.0	586	438 - 732
Abbott Cell-Dyn 1700	5	65.3	7.5	11.5	65	48 - 82	5	598.0	27.6	4.6	601	448 - 748
Abbott Cell-Dyn 1800	17	62.7	6.1	9.7	63	47 - 79	17	576.9	28.3	4.9	567	432 - 722
Abbott Cell-Dyn Emerald	61	66.8	11.0	16.4	66	50 - 84	63	537.4	27.4	5.1	541	403 - 672
Boule (CDS) Medonic M series	97	62.9	5.1	8.1	63	47 - 79	97	535.0	22.6	4.2	533	401 - 669
COULTER AcT diff/diff 2	46	68.0	4.6	6.7	68	51 - 85	46	586.3	27.9	4.8	587	439 - 733
Diatron Abacus 3 CP	5	64.5	6.8	10.5	65	48 - 81	5	530.8	44.1	8.3	524	398 - 664
Horiba ABX Micros/45/60	44	71.3	5.7	7.9	72	53 - 90	44	546.0	24.5	4.5	547	409 - 683

<i><u>Instrument</u></i>	Specimen HD-3						Specimen HD-4					
	<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	276	265.5	14.9	5.6	266	199 - 332	278	549.4	32.3	5.9	548	412 - 687
All Abbott Cell-Dyn Instruments	81	268.4	15.8	5.9	272	201 - 336	83	550.5	34.7	6.3	547	412 - 689
All ABX Instruments	44	269.2	13.2	4.9	268	201 - 337	45	545.8	27.0	5.0	545	409 - 683
All Boule (CDS) Instruments	98	258.1	11.7	4.5	256	193 - 323	97	536.1	22.0	4.1	537	402 - 671
All COULTER Instruments	47	272.6	13.3	4.9	273	204 - 341	47	581.4	26.3	4.5	579	436 - 727
Abbott Cell-Dyn 1700	5	267.0	27.7	10.4	282	200 - 334	5	563.0	45.9	8.2	588	422 - 704
Abbott Cell-Dyn 1800	17	269.2	13.5	5.0	274	201 - 337	17	584.0	30.1	5.1	582	438 - 730
Abbott Cell-Dyn Emerald	61	268.2	16.0	6.0	271	201 - 336	62	539.3	27.0	5.0	535	404 - 675
Boule (CDS) Medonic M series	98	258.1	11.7	4.5	256	193 - 323	97	536.1	22.0	4.1	537	402 - 671
COULTER AcT diff/diff 2	46	273.4	12.1	4.4	273	205 - 342	46	583.1	23.8	4.1	580	437 - 729
Diatron Abacus 3 CP	5	257.3	25.9	10.1	251	192 - 322	5	506.5	44.0	8.7	503	379 - 634
Horiba ABX Micros/45/60	44	269.2	13.2	4.9	268	201 - 337	45	545.8	27.0	5.0	545	409 - 683

BASIC HEMATOLOGY W/ 3-PART DIFFERENTIAL–PLATELET COUNT (x 10⁹/L) cont'd

Specimen HD-5

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	278	265.7	15.9	6.0	266	199 - 333
All Abbott Cell-Dyn Instruments	82	269.6	15.0	5.6	270	202 - 338
All ABX Instruments	45	268.5	14.9	5.5	269	201 - 336
All Boule (CDS) Instruments	96	256.4	12.1	4.7	255	192 - 321
All COULTER Instruments	47	276.4	12.3	4.4	274	207 - 346
Abbott Cell-Dyn 1700	5	275.3	18.6	6.7	277	206 - 345
Abbott Cell-Dyn 1800	17	267.1	16.3	6.1	262	200 - 334
Abbott Cell-Dyn Emerald	62	270.0	14.6	5.4	270	202 - 338
Boule (CDS) Medonic M series	96	256.4	12.1	4.7	255	192 - 321
COULTER AcT diff/diff 2	47	276.4	12.3	4.4	274	207 - 346
Diatron Abacus 3 CP	5	254.0	29.9	11.8	251	190 - 318
Horiba ABX Micros/45/60	45	268.5	14.9	5.5	269	201 - 336

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

Specimen HD-1

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	268	54.71	6.94	12.7	55.7	33.8 - 75.6
All Abbott Cell-Dyn Instruments	78	51.19	2.79	5.4	51.7	42.8 - 59.6
All ABX Instruments	44	44.15	5.23	11.9	43.8	28.4 - 59.9
All Boule (CDS) Instruments	92	61.27	1.69	2.8	61.2	56.2 - 66.4
All COULTER Instruments	45	58.12	1.99	3.4	58.1	52.1 - 64.1
Abbott Cell-Dyn 1700	5	52.57	3.92	7.5	53.7	40.7 - 64.4
Abbott Cell-Dyn 1800	16	46.86	1.77	3.8	46.8	41.5 - 52.2
Abbott Cell-Dyn Emerald	59	52.30	1.56	3.0	52.3	47.6 - 57.0
Boule (CDS) Medonic M series	92	61.27	1.69	2.8	61.2	56.2 - 66.4
COULTER AcT diff/diff 2	45	58.12	1.99	3.4	58.1	52.1 - 64.1
Diatron Abacus 3 CP	5	55.05	1.23	2.2	54.7	51.3 - 58.8
Horiba ABX Micros/45/60	44	44.15	5.23	11.9	43.8	28.4 - 59.9

Specimen HD-2

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
267	13.49	1.42	10.6	13.5	9.2 - 17.8
79	12.84	1.43	11.1	13.0	8.5 - 17.2
42	12.11	1.15	9.5	12.0	8.6 - 15.6
95	14.74	0.62	4.2	14.7	12.8 - 16.7
44	13.15	0.48	3.6	13.1	11.7 - 14.6
5	12.07	0.25	2.1	12.1	11.3 - 12.9
17	10.72	0.74	6.9	10.7	8.5 - 13.0
59	13.49	0.90	6.7	13.3	10.7 - 16.2
95	14.74	0.62	4.2	14.7	12.8 - 16.7
44	13.15	0.48	3.6	13.1	11.7 - 14.6
5	14.90	0.36	2.4	15.0	13.8 - 16.0
42	12.11	1.15	9.5	12.0	8.6 - 15.6

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

<u><i>Instrument</i></u>	Specimen HD-3						Specimen HD-4					
	<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	271	29.65	2.88	9.7	30.5	20.9 - 38.4	269	13.58	1.52	11.2	13.5	9.0 - 18.2
All Abbott Cell-Dyn Instruments	80	27.96	2.12	7.6	28.5	21.5 - 34.4	80	12.94	1.57	12.1	13.0	8.2 - 17.7
All ABX Instruments	42	25.68	2.21	8.6	25.7	19.0 - 32.4	42	12.02	0.99	8.3	11.9	9.0 - 15.1
All Boule (CDS) Instruments	96	31.96	0.87	2.7	32.1	29.3 - 34.6	96	14.86	0.63	4.2	14.8	12.9 - 16.8
All COULTER Instruments	44	31.00	0.92	3.0	31.1	28.2 - 33.8	43	13.15	0.45	3.4	13.2	11.8 - 14.5
Abbott Cell-Dyn 1700	5	27.27	0.81	3.0	27.4	24.8 - 29.7	5	12.03	0.21	1.7	12.1	11.4 - 12.7
Abbott Cell-Dyn 1800	16	24.56	1.48	6.0	24.9	20.1 - 29.1	17	10.80	0.59	5.5	10.7	9.0 - 12.6
Abbott Cell-Dyn Emerald	59	28.72	0.72	2.5	28.8	26.5 - 30.9	58	13.47	1.00	7.4	13.2	10.4 - 16.5
Boule (CDS) Medonic M series	96	31.96	0.87	2.7	32.1	29.3 - 34.6	96	14.86	0.63	4.2	14.8	12.9 - 16.8
COULTER AcT diff/diff 2	44	31.00	0.92	3.0	31.1	28.2 - 33.8	43	13.15	0.45	3.4	13.2	11.8 - 14.5
Diatron Abacus 3 CP	5	30.68	0.92	3.0	30.9	27.9 - 33.5	5	15.55	0.37	2.4	15.6	14.4 - 16.7
Horiba ABX Micros/45/60	42	25.68	2.21	8.6	25.7	19.0 - 32.4	42	12.02	0.99	8.3	11.9	9.0 - 15.1
Specimen HD-5												
All Method	268	29.58	2.99	10.1	30.3	20.6 - 38.6						
All Abbott Cell-Dyn Instruments	78	27.92	1.95	7.0	28.6	22.0 - 33.8						
All ABX Instruments	41	25.31	1.90	7.5	25.1	19.6 - 31.1						
All Boule (CDS) Instruments	96	32.10	1.03	3.2	32.0	29.0 - 35.2						
All COULTER Instruments	43	30.82	0.97	3.2	31.0	27.9 - 33.8						
Abbott Cell-Dyn 1700	5	28.10	1.08	3.8	27.8	24.8 - 31.4						
Abbott Cell-Dyn 1800	17	24.48	1.58	6.5	24.3	19.7 - 29.3						
Abbott Cell-Dyn Emerald	59	28.78	0.99	3.5	28.9	25.7 - 31.8						
Boule (CDS) Medonic M series	96	32.10	1.03	3.2	32.0	29.0 - 35.2						
COULTER AcT diff/diff 2	43	30.82	0.97	3.2	31.0	27.9 - 33.8						
Diatron Abacus 3 CP	5	30.73	1.13	3.7	30.3	27.3 - 34.2						
Horiba ABX Micros/45/60	41	25.31	1.90	7.5	25.1	19.6 - 31.1						

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

<u>Instrument</u>	Specimen HD-1						Specimen HD-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	271	11.16	3.91	35.0	10.2	0.0 - 22.9	269	4.36	1.47	33.8	4.8	0.0 - 8.8
All Abbott Cell-Dyn Instruments	79	11.66	3.65	31.3	10.0	0.7 - 22.7	79	3.18	1.63	51.4	2.4	0.0 - 8.1
All ABX Instruments	43	16.92	2.14	12.7	17.0	10.4 - 23.4	41	3.45	0.27	7.9	3.5	2.6 - 4.3
All Boule (CDS) Instruments	95	8.32	1.71	20.5	8.2	3.2 - 13.5	93	5.32	0.62	11.7	5.4	3.4 - 7.2
All COULTER Instruments	44	11.18	1.05	9.4	11.1	8.0 - 14.4	45	5.10	0.46	9.1	5.0	3.7 - 6.5
Abbott Cell-Dyn 1700	5	13.93	0.99	7.1	14.4	10.9 - 16.9	5	5.33	0.23	4.3	5.2	4.6 - 6.1
Abbott Cell-Dyn 1800	16	18.38	0.81	4.4	18.1	15.9 - 20.9	16	6.13	0.39	6.4	6.2	4.9 - 7.3
Abbott Cell-Dyn Emerald	59	9.84	0.90	9.1	9.8	7.1 - 12.6	59	2.26	0.21	9.5	2.2	1.6 - 3.0
Boule (CDS) Medonic M series	95	8.32	1.71	20.5	8.2	3.2 - 13.5	93	5.32	0.62	11.7	5.4	3.4 - 7.2
COULTER AcT diff/diff 2	44	11.18	1.05	9.4	11.1	8.0 - 14.4	45	5.10	0.46	9.1	5.0	3.7 - 6.5
Diatron Abacus 3 CP	5	13.50	0.74	5.5	13.4	11.2 - 15.8	5	7.45	0.24	3.2	7.4	6.7 - 8.2
Horiba ABX Micros/45/60	43	16.92	2.14	12.7	17.0	10.4 - 23.4	41	3.45	0.27	7.9	3.5	2.6 - 4.3
Specimen HD-3												
All Method	266	7.14	1.83	25.7	7.0	1.6 - 12.7	271	4.39	1.49	34.0	4.8	0.0 - 8.9
All Abbott Cell-Dyn Instruments	79	6.91	2.84	41.1	5.5	0.0 - 15.5	79	3.24	1.70	52.6	2.4	0.0 - 8.4
All ABX Instruments	43	8.83	0.84	9.5	8.8	6.3 - 11.4	41	3.41	0.19	5.7	3.4	2.8 - 4.0
All Boule (CDS) Instruments	94	6.63	1.10	16.6	6.8	3.3 - 10.0	94	5.37	0.58	10.8	5.3	3.6 - 7.2
All COULTER Instruments	45	7.44	0.62	8.4	7.5	5.5 - 9.4	44	5.16	0.53	10.3	5.2	3.5 - 6.8
Abbott Cell-Dyn 1700	5	9.20	0.20	2.2	9.2	8.6 - 9.8	5	5.50	0.20	3.6	5.5	4.9 - 6.1
Abbott Cell-Dyn 1800	16	12.17	0.89	7.3	12.0	9.4 - 14.9	16	6.34	0.29	4.6	6.3	5.4 - 7.3
Abbott Cell-Dyn Emerald	57	5.30	0.42	7.9	5.2	4.0 - 6.6	60	2.30	0.24	10.3	2.3	1.5 - 3.1
Boule (CDS) Medonic M series	94	6.63	1.10	16.6	6.8	3.3 - 10.0	94	5.37	0.58	10.8	5.3	3.6 - 7.2
COULTER AcT diff/diff 2	45	7.44	0.62	8.4	7.5	5.5 - 9.4	44	5.16	0.53	10.3	5.2	3.5 - 6.8
Diatron Abacus 3 CP	5	10.15	0.41	4.1	10.2	8.9 - 11.4	5	7.35	0.50	6.8	7.4	5.8 - 8.9
Horiba ABX Micros/45/60	43	8.83	0.84	9.5	8.8	6.3 - 11.4	41	3.41	0.19	5.7	3.4	2.8 - 4.0
Specimen HD-4												

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

Specimen HD-5

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	267	7.21	1.85	25.7	7.0	1.6 - 12.8
All Abbott Cell-Dyn Instruments	80	6.96	2.92	41.9	5.4	0.0 - 15.8
All ABX Instruments	43	8.81	0.72	8.2	8.7	6.6 - 11.0
All Boule (CDS) Instruments	95	6.66	1.11	16.6	6.7	3.3 - 10.0
All COULTER Instruments	45	7.51	0.64	8.6	7.5	5.5 - 9.5
Abbott Cell-Dyn 1700	5	9.30	0.80	8.6	9.3	6.9 - 11.7
Abbott Cell-Dyn 1800	17	12.24	0.79	6.4	12.2	9.8 - 14.6
Abbott Cell-Dyn Emerald	59	5.32	0.44	8.3	5.2	3.9 - 6.7
Boule (CDS) Medonic M series	95	6.66	1.11	16.6	6.7	3.3 - 10.0
COULTER AcT diff/diff 2	45	7.51	0.64	8.6	7.5	5.5 - 9.5
Diatron Abacus 3 CP	5	10.60	0.39	3.7	10.6	9.4 - 11.8
Horiba ABX Micros/45/60	43	8.81	0.72	8.2	8.7	6.6 - 11.0

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

Specimen HD-1

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	262	33.60	4.01	11.9	32.6	21.5 - 45.7
All Abbott Cell-Dyn Instruments	79	37.07	2.08	5.6	37.5	30.8 - 43.4
All ABX Instruments	44	39.26	4.87	12.4	38.7	24.6 - 53.9
All Boule (CDS) Instruments	92	30.30	2.00	6.6	30.3	24.3 - 36.3
All COULTER Instruments	43	30.62	1.06	3.4	30.7	27.4 - 33.8
Abbott Cell-Dyn 1700	5	33.50	3.38	10.1	31.7	23.3 - 43.7
Abbott Cell-Dyn 1800	17	34.96	1.92	5.5	34.4	29.1 - 40.8
Abbott Cell-Dyn Emerald	59	37.86	1.34	3.5	37.9	33.8 - 41.9
Boule (CDS) Medonic M series	92	30.30	2.00	6.6	30.3	24.3 - 36.3
COULTER AcT diff/diff 2	43	30.62	1.06	3.4	30.7	27.4 - 33.8
Diatron Abacus 3 CP	5	31.45	1.32	4.2	31.3	27.4 - 35.5
Horiba ABX Micros/45/60	44	39.26	4.87	12.4	38.7	24.6 - 53.9

Specimen HD-2

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
265	82.12	2.21	2.7	82.1	75.4 - 88.8
79	83.94	1.13	1.4	84.4	80.5 - 87.4
41	84.48	1.21	1.4	84.5	80.8 - 88.2
92	79.97	0.81	1.0	80.0	77.5 - 82.4
45	81.70	0.74	0.9	81.7	79.4 - 84.0
5	82.60	0.10	0.1	82.6	82.3 - 82.9
17	83.12	0.98	1.2	83.3	80.1 - 86.1
58	84.31	0.96	1.1	84.5	81.4 - 87.2
92	79.97	0.81	1.0	80.0	77.5 - 82.4
45	81.70	0.74	0.9	81.7	79.4 - 84.0
5	77.65	0.51	0.7	77.8	76.1 - 79.2
41	84.48	1.21	1.4	84.5	80.8 - 88.2

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

<u>Instrument</u>	Specimen HD-3						Specimen HD-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	267	63.17	2.47	3.9	62.8	55.7 - 70.6	266	82.00	2.29	2.8	81.8	75.1 - 88.9
All Abbott Cell-Dyn Instruments	78	65.25	1.57	2.4	65.6	60.5 - 70.0	79	83.77	1.36	1.6	84.2	79.7 - 87.9
All ABX Instruments	41	65.63	1.46	2.2	65.6	61.2 - 70.1	42	84.51	1.25	1.5	84.7	80.7 - 88.3
All Boule (CDS) Instruments	94	61.40	1.29	2.1	61.5	57.5 - 65.3	93	79.83	0.83	1.0	79.9	77.3 - 82.4
All COULTER Instruments	44	61.55	1.02	1.7	61.5	58.4 - 64.7	43	81.68	0.61	0.7	81.6	79.8 - 83.6
Abbott Cell-Dyn 1700	5	63.53	0.70	1.1	63.6	61.4 - 65.7	5	82.47	0.15	0.2	82.5	82.0 - 83.0
Abbott Cell-Dyn 1800	16	63.44	1.11	1.7	63.5	60.1 - 66.8	17	82.85	0.75	0.9	83.0	80.5 - 85.2
Abbott Cell-Dyn Emerald	58	65.94	0.88	1.3	66.1	63.3 - 68.6	59	84.10	1.37	1.6	84.5	80.0 - 88.3
Boule (CDS) Medonic M series	94	61.40	1.29	2.1	61.5	57.5 - 65.3	93	79.83	0.83	1.0	79.9	77.3 - 82.4
COULTER AcT diff/diff 2	44	61.55	1.02	1.7	61.5	58.4 - 64.7	43	81.68	0.61	0.7	81.6	79.8 - 83.6
Diatron Abacus 3 CP	5	59.18	1.25	2.1	58.8	55.4 - 63.0	5	77.10	0.87	1.1	77.1	74.4 - 79.8
Horiba ABX Micros/45/60	41	65.63	1.46	2.2	65.6	61.2 - 70.1	42	84.51	1.25	1.5	84.7	80.7 - 88.3
Specimen HD-5												
All Method	269	63.13	2.61	4.1	62.8	55.3 - 71.0						
All Abbott Cell-Dyn Instruments	80	65.22	1.54	2.4	65.5	60.6 - 69.9						
All ABX Instruments	42	65.68	1.83	2.8	65.8	60.1 - 71.2						
All Boule (CDS) Instruments	95	61.22	1.53	2.5	61.1	56.6 - 65.9						
All COULTER Instruments	44	61.63	0.99	1.6	61.7	58.6 - 64.7						
Abbott Cell-Dyn 1700	5	62.60	0.78	1.2	62.2	60.2 - 65.0						
Abbott Cell-Dyn 1800	17	63.39	1.05	1.7	63.5	60.2 - 66.6						
Abbott Cell-Dyn Emerald	58	65.98	0.89	1.3	65.9	63.3 - 68.7						
Boule (CDS) Medonic M series	95	61.22	1.53	2.5	61.1	56.6 - 65.9						
COULTER AcT diff/diff 2	44	61.63	0.99	1.6	61.7	58.6 - 64.7						
Diatron Abacus 3 CP	5	58.68	0.92	1.6	59.0	55.9 - 61.5						
Horiba ABX Micros/45/60	42	65.68	1.83	2.8	65.8	60.1 - 71.2						

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

<i><u>Instrument</u></i>	Specimen DIF-1						Specimen DIF-2					
	<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	19	4.10	0.16	3.9	4.1	3.4 - 4.8	19	22.05	0.55	2.5	22.2	18.7 - 25.4
All COULTER Instruments	19	4.10	0.16	3.9	4.1	3.4 - 4.8	19	22.05	0.55	2.5	22.2	18.7 - 25.4
Coulter DxH 500	5	3.98	0.08	2.1	4.0	3.3 - 4.6	5	21.86	0.33	1.5	21.8	18.5 - 25.2
Coulter DxH 520	9	4.19	0.15	3.7	4.2	3.5 - 4.9	9	22.29	0.56	2.5	22.3	18.9 - 25.7
<i><u>Instrument</u></i>	Specimen DIF-3						Specimen DIF-4					
	<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	19	9.71	0.29	3.0	9.7	8.2 - 11.2	19	22.06	0.63	2.8	22.2	18.7 - 25.4
All COULTER Instruments	19	9.71	0.29	3.0	9.7	8.2 - 11.2	19	22.06	0.63	2.8	22.2	18.7 - 25.4
Coulter DxH 500	5	9.52	0.30	3.2	9.4	8.0 - 11.0	5	21.92	0.55	2.5	21.9	18.6 - 25.3
Coulter DxH 520	9	9.81	0.28	2.8	9.8	8.3 - 11.3	9	22.39	0.34	1.5	22.5	19.0 - 25.8
<i><u>Instrument</u></i>	Specimen DIF-5											
	<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	19	9.75	0.19	1.9	9.7	8.2 - 11.3						
All COULTER Instruments	19	9.75	0.19	1.9	9.7	8.2 - 11.3						
Coulter DxH 500	5	9.56	0.11	1.2	9.6	8.1 - 11.0						
Coulter DxH 520	9	9.83	0.15	1.5	9.8	8.3 - 11.4						

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

<i><u>Instrument</u></i>	Specimen DIF-1						Specimen DIF-2					
	<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	19	2.539	0.063	2.5	2.55	2.38 - 2.70	19	5.509	0.123	2.2	5.49	5.17 - 5.84
All COULTER Instruments	19	2.539	0.063	2.5	2.55	2.38 - 2.70	19	5.509	0.123	2.2	5.49	5.17 - 5.84
Coulter DxH 500	5	2.468	0.047	1.9	2.46	2.31 - 2.62	5	5.534	0.202	3.6	5.47	5.20 - 5.87
Coulter DxH 520	9	2.568	0.039	1.5	2.55	2.41 - 2.73	9	5.509	0.081	1.5	5.50	5.17 - 5.84
<i><u>Instrument</u></i>	Specimen DIF-3						Specimen DIF-4					
	<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	19	4.059	0.085	2.1	4.05	3.81 - 4.31	19	5.521	0.126	2.3	5.52	5.18 - 5.86
All COULTER Instruments	19	4.059	0.085	2.1	4.05	3.81 - 4.31	19	5.521	0.126	2.3	5.52	5.18 - 5.86
Coulter DxH 500	5	4.070	0.123	3.0	4.13	3.82 - 4.32	5	5.594	0.198	3.5	5.63	5.25 - 5.93
Coulter DxH 520	9	4.057	0.076	1.9	4.05	3.81 - 4.31	9	5.511	0.040	0.7	5.52	5.18 - 5.85
<i><u>Instrument</u></i>	Specimen DIF-5											
	<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	19	4.051	0.057	1.4	4.07	3.80 - 4.30						
All COULTER Instruments	19	4.051	0.057	1.4	4.07	3.80 - 4.30						
Coulter DxH 500	5	4.066	0.074	1.8	4.08	3.82 - 4.31						
Coulter DxH 520	9	4.039	0.054	1.3	4.04	3.79 - 4.29						

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

<u>Instrument</u>	Specimen DIF-1						Specimen DIF-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	19	6.02	0.22	3.7	6.0	5.6 - 6.5	19	17.28	0.29	1.7	17.3	16.0 - 18.5
All COULTER Instruments	19	6.02	0.22	3.7	6.0	5.6 - 6.5	19	17.28	0.29	1.7	17.3	16.0 - 18.5
Coulter DxH 500	5	5.88	0.16	2.8	5.8	5.4 - 6.3	5	17.22	0.32	1.9	17.3	16.0 - 18.5
Coulter DxH 520	9	6.02	0.17	2.8	6.0	5.5 - 6.5	9	17.31	0.32	1.8	17.2	16.0 - 18.6

<u>Instrument</u>	Specimen DIF-3						Specimen DIF-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	19	11.39	0.35	3.1	11.3	10.5 - 12.2	19	17.27	0.32	1.8	17.3	16.0 - 18.5
All COULTER Instruments	19	11.39	0.35	3.1	11.3	10.5 - 12.2	19	17.27	0.32	1.8	17.3	16.0 - 18.5
Coulter DxH 500	5	11.30	0.36	3.1	11.3	10.5 - 12.1	5	17.28	0.45	2.6	17.3	16.0 - 18.5
Coulter DxH 520	9	11.31	0.28	2.5	11.3	10.5 - 12.2	9	17.30	0.30	1.8	17.2	16.0 - 18.6

<u>Instrument</u>	Specimen DIF-5					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	19	11.38	0.33	2.9	11.4	10.5 - 12.2
All COULTER Instruments	19	11.38	0.33	2.9	11.4	10.5 - 12.2
Coulter DxH 500	5	11.28	0.25	2.2	11.3	10.4 - 12.1
Coulter DxH 520	9	11.31	0.30	2.6	11.4	10.5 - 12.2

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

<u><i>Instrument</i></u>	Specimen DIF-1						Specimen DIF-2					
	<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	19	19.56	0.48	2.4	19.6	18.3 - 20.8	19	55.53	1.29	2.3	55.3	52.1 - 58.9
All COULTER Instruments	19	19.56	0.48	2.4	19.6	18.3 - 20.8	19	55.53	1.29	2.3	55.3	52.1 - 58.9
Coulter DxH 500	5	19.12	0.24	1.2	19.0	17.9 - 20.3	5	55.92	1.78	3.2	55.5	52.5 - 59.3
Coulter DxH 520	9	19.61	0.25	1.3	19.7	18.4 - 20.8	9	55.06	0.94	1.7	55.1	51.7 - 58.4
Specimen DIF-3												
All Method	19	37.13	0.86	2.3	37.0	34.8 - 39.4	19	55.68	1.19	2.1	55.7	52.3 - 59.1
All COULTER Instruments	19	37.13	0.86	2.3	37.0	34.8 - 39.4	19	55.68	1.19	2.1	55.7	52.3 - 59.1
Coulter DxH 500	5	37.18	0.87	2.3	37.5	34.9 - 39.5	5	56.50	1.54	2.7	56.2	53.1 - 59.9
Coulter DxH 520	9	36.82	0.72	1.9	36.5	34.6 - 39.1	9	55.18	0.79	1.4	55.1	51.8 - 58.5
Specimen DIF-5												
All Method	19	37.11	0.82	2.2	37.0	34.8 - 39.4						
All COULTER Instruments	19	37.11	0.82	2.2	37.0	34.8 - 39.4						
Coulter DxH 500	5	37.32	0.58	1.5	37.3	35.0 - 39.6						
Coulter DxH 520	9	36.64	0.48	1.3	36.7	34.4 - 38.9						

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

<u>Instrument</u>	Specimen DIF-1						Specimen DIF-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	19	108.9	12.2	11.2	109	81 - 137	19	538.3	43.0	8.0	535	403 - 673
All COULTER Instruments	19	108.9	12.2	11.2	109	81 - 137	19	538.3	43.0	8.0	535	403 - 673
Coulter DxH 500	5	103.4	15.3	14.8	100	77 - 130	5	519.8	62.1	11.9	501	389 - 650
Coulter DxH 520	9	114.9	7.6	6.6	115	86 - 144	9	552.3	31.5	5.7	549	414 - 691
Specimen DIF-3						Specimen DIF-4						
All Method	19	297.3	26.3	8.8	296	222 - 372	19	535.7	42.9	8.0	531	401 - 670
All COULTER Instruments	19	297.3	26.3	8.8	296	222 - 372	19	535.7	42.9	8.0	531	401 - 670
Coulter DxH 500	5	287.2	28.6	10.0	292	215 - 359	5	523.0	63.3	12.1	495	392 - 654
Coulter DxH 520	9	309.2	21.3	6.9	308	231 - 387	9	550.3	26.6	4.8	545	412 - 688
Specimen DIF-5												
All Method	19	303.2	29.6	9.8	306	227 - 379						
All COULTER Instruments	19	303.2	29.6	9.8	306	227 - 379						
Coulter DxH 500	5	296.8	44.3	14.9	290	222 - 371						
Coulter DxH 520	9	314.1	14.8	4.7	321	235 - 393						

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

<u>Instrument</u>	Specimen DIF-1						Specimen DIF-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	19	42.61	4.46	10.5	41.8	29.2 - 56.0	19	33.07	13.28	40.2	28.3	0.0 - 73.0
All COULTER DxH 500/520	13	41.32	3.14	7.6	41.6	31.9 - 50.8	13	28.06	1.32	4.7	27.8	24.1 - 32.1
All COULTER Instruments	5	50.95	0.21	0.4	51.0	50.3 - 51.6	5	65.65	0.49	0.8	65.7	64.1 - 67.2
Coulter DxH 500	5	39.50	1.75	4.4	39.5	34.2 - 44.8	5	27.53	0.71	2.6	27.4	25.3 - 29.7
Coulter DxH 520	9	42.13	3.35	8.0	42.1	32.0 - 52.2	9	28.30	1.48	5.2	28.3	23.8 - 32.8
	Specimen DIF-3						Specimen DIF-4					
All Method	19	37.82	8.53	22.6	34.7	12.2 - 63.5	19	32.91	12.98	39.5	28.3	0.0 - 71.9
All COULTER DxH 500/520	13	34.79	2.18	6.3	34.5	28.2 - 41.4	13	28.17	1.14	4.1	27.9	24.7 - 31.6
All COULTER Instruments	5	59.05	0.07	0.1	59.1	58.8 - 59.3	5	66.05	0.92	1.4	66.1	63.2 - 68.9
Coulter DxH 500	5	33.54	0.93	2.8	33.2	30.7 - 36.4	5	27.54	1.23	4.5	27.3	23.8 - 31.3
Coulter DxH 520	9	35.48	2.40	6.8	34.7	28.2 - 42.7	9	28.52	0.99	3.5	28.6	25.5 - 31.5
	Specimen DIF-5											
All Method	19	37.66	8.52	22.6	35.4	12.1 - 63.3						
All COULTER DxH 500/520	13	34.64	2.26	6.5	34.6	27.8 - 41.5						
All COULTER Instruments	5	58.80	0.57	1.0	58.8	57.1 - 60.5						
Coulter DxH 500	5	33.44	2.02	6.0	33.1	27.3 - 39.5						
Coulter DxH 520	9	35.30	2.20	6.2	35.6	28.6 - 42.0						

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

<i>Instrument</i>	Specimen DIF-1						Specimen DIF-2					
	<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	19	4.88	12.72	260.9	0.3	0.0 - 43.1	19	3.10	6.95	224.2	0.6	0.0 - 24.0
All COULTER DxH 500/520	13	0.22	0.12	53.7	0.2	0.0 - 0.6	13	0.56	0.19	34.3	0.6	0.0 - 1.2
All COULTER Instruments	5	37.45	0.35	0.9	37.5	36.3 - 38.6	5	20.90	0.01	0.0	20.9	20.8 - 21.0
Coulter DxH 500	5	0.26	0.15	58.3	0.2	0.0 - 0.8	5	0.48	0.27	55.9	0.6	0.0 - 1.3
Coulter DxH 520	9	0.20	0.10	50.0	0.2	0.0 - 0.5	9	0.60	0.13	22.0	0.6	0.2 - 1.0
	Specimen DIF-3						Specimen DIF-4					
All Method	19	4.13	10.55	255.4	0.3	0.0 - 35.8	19	2.78	5.88	211.6	0.7	0.0 - 20.5
All COULTER DxH 500/520	13	0.27	0.09	33.7	0.3	0.0 - 0.6	13	0.63	0.15	24.5	0.6	0.1 - 1.1
All COULTER Instruments	5	31.15	1.06	3.4	31.2	27.9 - 34.4	5	17.85	0.35	2.0	17.9	16.7 - 19.0
Coulter DxH 500	5	0.28	0.08	29.9	0.3	0.0 - 0.6	5	0.56	0.15	27.1	0.6	0.1 - 1.1
Coulter DxH 520	9	0.27	0.10	37.5	0.3	0.0 - 0.6	9	0.67	0.15	22.5	0.7	0.2 - 1.2
	Specimen DIF-5											
All Method	19	4.01	10.17	253.9	0.3	0.0 - 34.6						
All COULTER DxH 500/520	13	0.29	0.12	43.1	0.3	0.0 - 0.7						
All COULTER Instruments	5	30.05	1.34	4.5	30.1	26.0 - 34.1						
Coulter DxH 500	5	0.22	0.15	67.4	0.2	0.0 - 0.7						
Coulter DxH 520	9	0.32	0.10	30.2	0.3	0.0 - 0.7						

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

<u><i>Instrument</i></u>	Specimen DIF-1						Specimen DIF-2					
	<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	19	0.59	1.26	214.8	0.2	0.0 - 4.4	19	1.24	3.01	243.5	0.2	0.0 - 10.3
All COULTER DxH 500/520	13	0.13	0.09	71.1	0.1	0.0 - 0.5	13	0.14	0.10	74.3	0.1	0.0 - 0.5
All COULTER Instruments	5	3.80	0.42	11.2	3.8	2.5 - 5.1	5	8.95	0.35	4.0	9.0	7.8 - 10.1
Coulter DxH 500	5	0.18	0.08	46.5	0.2	0.0 - 0.5	5	0.12	0.08	69.7	0.1	0.0 - 0.4
Coulter DxH 520	9	0.10	0.09	86.6	0.1	0.0 - 0.4	9	0.14	0.11	78.3	0.1	0.0 - 0.5
	Specimen DIF-3						Specimen DIF-4					
All Method	19	0.64	1.46	229.2	0.1	0.0 - 5.1	19	1.57	3.90	249.1	0.1	0.0 - 13.3
All COULTER DxH 500/520	13	0.11	0.06	55.8	0.1	0.0 - 0.3	13	0.14	0.07	52.9	0.1	0.0 - 0.4
All COULTER Instruments	5	4.35	0.49	11.4	4.4	2.8 - 5.9	5	11.55	0.64	5.5	11.6	9.6 - 13.5
Coulter DxH 500	5	0.08	0.04	55.9	0.1	0.0 - 0.3	5	0.14	0.05	39.1	0.1	0.0 - 0.4
Coulter DxH 520	9	0.12	0.06	52.9	0.1	0.0 - 0.4	9	0.14	0.09	61.4	0.1	0.0 - 0.4
	Specimen DIF-5											
All Method	19	0.72	1.70	235.3	0.1	0.0 - 5.9						
All COULTER DxH 500/520	13	0.10	0.06	55.1	0.1	0.0 - 0.3						
All COULTER Instruments	5	5.05	0.64	12.6	5.1	3.1 - 7.0						
Coulter DxH 500	5	0.10	0.01	0.0	0.1	0.0 - 0.2						
Coulter DxH 520	9	0.11	0.07	68.8	0.1	0.0 - 0.4						

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

<u>Instrument</u>	Specimen DIF-1						Specimen DIF-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	19	51.57	18.00	34.9	58.1	0.0 - 105.6	19	62.23	23.47	37.7	70.8	0.0 - 132.7
All COULTER DxH 500/520	13	58.30	3.10	5.3	58.1	49.0 - 67.6	13	71.11	1.42	2.0	71.2	66.8 - 75.4
All COULTER Instruments	5	7.80	0.14	1.8	7.8	7.3 - 8.3	5	4.50	0.14	3.1	4.5	4.0 - 5.0
Coulter DxH 500	5	60.05	1.56	2.6	60.1	55.3 - 64.8	5	71.73	0.78	1.1	71.8	69.3 - 74.1
Coulter DxH 520	9	57.52	3.36	5.8	57.6	47.4 - 67.6	9	70.83	1.59	2.2	70.8	66.0 - 75.6
	Specimen DIF-3						Specimen DIF-4					
All Method	19	57.39	20.38	35.5	64.9	0.0 - 118.6	19	62.64	22.73	36.3	70.9	0.0 - 130.9
All COULTER DxH 500/520	13	64.81	2.19	3.4	65.1	58.2 - 71.4	13	70.95	1.25	1.8	71.3	67.2 - 74.7
All COULTER Instruments	5	5.45	0.49	9.1	5.5	3.9 - 7.0	5	4.50	0.14	3.1	4.5	4.0 - 5.0
Coulter DxH 500	5	66.08	0.95	1.4	66.4	63.2 - 69.0	5	71.64	1.34	1.9	72.0	67.6 - 75.7
Coulter DxH 520	9	64.10	2.39	3.7	64.9	56.9 - 71.3	9	70.57	1.09	1.5	70.5	67.3 - 73.9
	Specimen DIF-5											
All Method	19	57.55	20.22	35.1	64.2	0.0 - 118.2						
All COULTER DxH 500/520	13	64.91	2.29	3.5	65.0	58.0 - 71.8						
All COULTER Instruments	5	6.05	0.07	1.2	6.1	5.8 - 6.3						
Coulter DxH 500	5	66.16	2.04	3.1	66.4	60.0 - 72.3						
Coulter DxH 520	9	64.21	2.21	3.4	64.0	57.5 - 70.9						

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

<i>Instrument</i>	Specimen DIF-1						Specimen DIF-2					
	<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	19	0.00	0.01	0.0	0.0	0.0 - 0.1	19	0.06	0.06	111.8	0.1	0.0 - 0.3
All COULTER DxH 500/520	13	0.00	0.01	0.0	0.0	0.0 - 0.1	13	0.06	0.06	98.5	0.1	0.0 - 0.3
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	5	0.02	0.04	223.6	0.0	0.0 - 0.2	5	0.04	0.05	136.9	0.0	0.0 - 0.3
Coulter DxH 520	9	0.00	0.01	0.0	0.0	0.0 - 0.1	9	0.08	0.07	85.7	0.1	0.0 - 0.3
	Specimen DIF-3						Specimen DIF-4					
All Method	19	0.00	0.01	0.0	0.0	0.0 - 0.1	19	0.06	0.05	80.0	0.1	0.0 - 0.3
All COULTER DxH 500/520	13	0.00	0.01	0.0	0.0	0.0 - 0.1	13	0.06	0.05	77.4	0.1	0.0 - 0.3
All COULTER Instruments	5	0.00	0.01	0.0	0.0	0.0 - 0.1	5	0.05	0.07	141.4	0.1	0.0 - 0.3
Coulter DxH 500	5	0.00	0.01	0.0	0.0	0.0 - 0.1	5	0.06	0.05	91.3	0.1	0.0 - 0.3
Coulter DxH 520	9	0.00	0.01	0.0	0.0	0.0 - 0.1	9	0.07	0.05	75.0	0.1	0.0 - 0.3
	Specimen DIF-5											
All Method	19	0.01	0.03	273.2	0.0	0.0 - 0.2						
All COULTER DxH 500/520	13	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						
Coulter DxH 500	5	0.00	0.01	0.0	0.0	0.0 - 0.1						
Coulter DxH 520	9	0.01	0.03	299.9	0.0	0.0 - 0.2						

RETICULOCYTE COUNT (percent)

<u>Instrument</u>	Specimen RT-1						Specimen RT-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	25	2.57	0.56	21.8	2.5	1.4 - 3.7	25	0.89	0.18	20.1	0.9	0.5 - 1.3
All Automated Methods	21	2.41	0.28	11.5	2.5	1.6 - 3.2	21	0.85	0.12	14.7	0.9	0.5 - 1.2
All Manual Methods	5	3.98	0.90	22.6	4.1	2.1 - 5.8	5	1.10	0.28	25.7	1.2	0.5 - 1.7
Sysmex XN-1000	17	2.46	0.26	10.5	2.5	1.7 - 3.3	17	0.89	0.09	10.4	0.9	0.6 - 1.2
Sysmex XN-550	5	2.18	0.25	11.5	2.2	1.5 - 2.9	5	0.68	0.10	14.2	0.7	0.4 - 0.9

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

<u>Instrument</u>	Specimen BCX-1						Specimen BCX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	90	26.85	0.52	1.9	26.9	22.8 - 30.9	90	24.22	0.72	3.0	24.3	20.5 - 27.9
All ABX Instruments	83	26.87	0.51	1.9	26.9	22.8 - 31.0	83	24.26	0.67	2.8	24.3	20.6 - 28.0
All COULTER Instruments	5	26.27	0.64	2.4	26.0	22.3 - 30.3	5	23.00	1.06	4.6	22.6	19.5 - 26.5
ABX Pentra 60C+	77	26.90	0.50	1.9	26.9	22.8 - 31.0	77	24.29	0.69	2.8	24.3	20.6 - 28.0
ABX Pentra 80 / XL 80	6	26.55	0.52	2.0	26.7	22.5 - 30.6	6	23.95	0.27	1.1	24.0	20.3 - 27.6
COULTER AcT 5diff	5	26.27	0.64	2.4	26.0	22.3 - 30.3	5	23.00	1.06	4.6	22.6	19.5 - 26.5

<u>Instrument</u>	Specimen BCX-3						Specimen BCX-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	90	4.54	0.10	2.2	4.5	3.8 - 5.3	90	7.29	0.18	2.4	7.3	6.2 - 8.4
All ABX Instruments	83	4.55	0.10	2.3	4.6	3.8 - 5.3	83	7.30	0.18	2.4	7.3	6.2 - 8.4
All COULTER Instruments	5	4.53	0.06	1.3	4.5	3.8 - 5.3	5	7.20	0.17	2.4	7.1	6.1 - 8.3
ABX Pentra 60C+	77	4.54	0.10	2.3	4.5	3.8 - 5.3	77	7.29	0.18	2.4	7.3	6.1 - 8.4
ABX Pentra 80 / XL 80	6	4.60	0.09	1.9	4.6	3.9 - 5.3	6	7.38	0.15	2.0	7.4	6.2 - 8.5
COULTER AcT 5diff	5	4.53	0.06	1.3	4.5	3.8 - 5.3	5	7.20	0.17	2.4	7.1	6.1 - 8.3

<u>Instrument</u>	Specimen BCX-5					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	90	6.66	0.17	2.5	6.6	5.6 - 7.7
All ABX Instruments	83	6.66	0.17	2.5	6.7	5.6 - 7.7
All COULTER Instruments	5	6.37	0.23	3.6	6.5	5.4 - 7.4
ABX Pentra 60C+	77	6.66	0.17	2.5	6.6	5.6 - 7.7
ABX Pentra 80 / XL 80	6	6.43	0.73	11.3	6.7	5.4 - 7.4
COULTER AcT 5diff	5	6.37	0.23	3.6	6.5	5.4 - 7.4

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

Specimen BCX-1							Specimen BCX-2					
<i>Instrument</i>	<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	90	2.968	0.056	1.9	2.97	2.79 - 3.15	90	5.932	0.095	1.6	5.94	5.57 - 6.29
All ABX Instruments	83	2.969	0.056	1.9	2.97	2.79 - 3.15	83	5.935	0.088	1.5	5.94	5.57 - 6.30
All COULTER Instruments	5	2.960	0.080	2.7	2.96	2.78 - 3.14	5	5.950	0.165	2.8	6.03	5.59 - 6.31
ABX Pentra 60C+	77	2.972	0.055	1.9	2.97	2.79 - 3.16	77	5.931	0.095	1.6	5.94	5.57 - 6.29
ABX Pentra 80 / XL 80	6	2.922	0.043	1.5	2.92	2.74 - 3.10	6	5.940	0.067	1.1	5.93	5.58 - 6.30
COULTER AcT 5diff	5	2.960	0.080	2.7	2.96	2.78 - 3.14	5	5.950	0.165	2.8	6.03	5.59 - 6.31
Specimen BCX-3							Specimen BCX-4					
All Method	90	4.846	0.074	1.5	4.85	4.55 - 5.14	90	4.518	0.074	1.6	4.52	4.24 - 4.79
All ABX Instruments	83	4.846	0.073	1.5	4.84	4.55 - 5.14	83	4.519	0.074	1.6	4.52	4.24 - 4.80
All COULTER Instruments	5	4.863	0.108	2.2	4.91	4.57 - 5.16	5	4.493	0.081	1.8	4.53	4.22 - 4.77
ABX Pentra 60C+	77	4.852	0.069	1.4	4.85	4.56 - 5.15	77	4.522	0.073	1.6	4.52	4.25 - 4.80
ABX Pentra 80 / XL 80	6	4.800	0.061	1.3	4.79	4.51 - 5.09	6	4.473	0.083	1.9	4.46	4.20 - 4.75
COULTER AcT 5diff	5	4.863	0.108	2.2	4.91	4.57 - 5.16	5	4.493	0.081	1.8	4.53	4.22 - 4.77
Specimen BCX-5												
All Method	90	3.898	0.062	1.6	3.90	3.66 - 4.14						
All ABX Instruments	83	3.898	0.061	1.6	3.90	3.66 - 4.14						
All COULTER Instruments	5	3.897	0.101	2.6	3.91	3.66 - 4.14						
ABX Pentra 60C+	77	3.904	0.058	1.5	3.90	3.66 - 4.14						
ABX Pentra 80 / XL 80	6	3.830	0.050	1.3	3.82	3.60 - 4.06						
COULTER AcT 5diff	5	3.897	0.101	2.6	3.91	3.66 - 4.14						

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

<i><u>Instrument</u></i>	Specimen BCX-1						Specimen BCX-2					
	<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	90	7.77	0.12	1.5	7.8	7.2 - 8.4	90	18.08	0.23	1.3	18.1	16.8 - 19.4
All ABX Instruments	83	7.76	0.12	1.5	7.7	7.2 - 8.4	83	18.08	0.23	1.3	18.1	16.8 - 19.4
All COULTER Instruments	5	7.87	0.06	0.7	7.9	7.3 - 8.5	5	17.90	0.20	1.1	17.9	16.6 - 19.2
ABX Pentra 60C+	77	7.77	0.12	1.5	7.8	7.2 - 8.4	77	18.08	0.24	1.3	18.1	16.8 - 19.4
ABX Pentra 80 / XL 80	6	7.70	0.06	0.8	7.7	7.1 - 8.3	6	18.05	0.16	0.9	18.1	16.7 - 19.4
COULTER Act 5diff	5	7.87	0.06	0.7	7.9	7.3 - 8.5	5	17.90	0.20	1.1	17.9	16.6 - 19.2
	Specimen BCX-3						Specimen BCX-4					
All Method	90	14.65	0.17	1.2	14.6	13.6 - 15.7	90	13.62	0.18	1.3	13.6	12.6 - 14.6
All ABX Instruments	83	14.65	0.18	1.2	14.6	13.6 - 15.7	83	13.62	0.18	1.3	13.6	12.6 - 14.6
All COULTER Instruments	5	14.70	0.10	0.7	14.7	13.6 - 15.8	5	13.60	0.10	0.7	13.6	12.6 - 14.6
ABX Pentra 60C+	77	14.65	0.18	1.2	14.6	13.6 - 15.7	77	13.63	0.18	1.3	13.6	12.6 - 14.6
ABX Pentra 80 / XL 80	6	14.60	0.17	1.1	14.6	13.5 - 15.7	6	13.52	0.15	1.1	13.5	12.5 - 14.5
COULTER Act 5diff	5	14.70	0.10	0.7	14.7	13.6 - 15.8	5	13.60	0.10	0.7	13.6	12.6 - 14.6
	Specimen BCX-5											
All Method	90	13.38	0.19	1.4	13.4	12.4 - 14.4						
All ABX Instruments	83	13.38	0.19	1.4	13.4	12.4 - 14.4						
All COULTER Instruments	5	13.40	0.17	1.3	13.3	12.4 - 14.4						
ABX Pentra 60C+	77	13.39	0.19	1.4	13.4	12.4 - 14.4						
ABX Pentra 80 / XL 80	6	13.27	0.10	0.8	13.3	12.3 - 14.2						
COULTER Act 5diff	5	13.40	0.17	1.3	13.3	12.4 - 14.4						

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

<u>Instrument</u>	Specimen BCX-1						Specimen BCX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	90	22.78	0.46	2.0	22.8	21.4 - 24.2	90	50.89	0.92	1.8	51.0	47.8 - 54.0
All ABX Instruments	83	22.79	0.45	2.0	22.8	21.4 - 24.2	83	50.92	0.87	1.7	51.0	47.8 - 54.0
All COULTER Instruments	5	22.50	0.75	3.4	22.4	21.1 - 23.9	5	50.07	1.94	3.9	49.1	47.0 - 53.1
ABX Pentra 60C+	77	22.78	0.45	2.0	22.8	21.4 - 24.2	77	50.96	0.88	1.7	51.1	47.9 - 54.1
ABX Pentra 80 / XL 80	6	23.02	0.34	1.5	23.1	21.6 - 24.4	6	50.35	0.55	1.1	50.2	47.3 - 53.4
COULTER AcT 5diff	5	22.50	0.75	3.4	22.4	21.1 - 23.9	5	50.07	1.94	3.9	49.1	47.0 - 53.1
Specimen BCX-3						Specimen BCX-4						
All Method	90	41.28	0.71	1.7	41.3	38.8 - 43.8	90	38.45	0.66	1.7	38.4	36.1 - 40.8
All ABX Instruments	83	41.30	0.70	1.7	41.3	38.8 - 43.8	83	38.48	0.64	1.7	38.4	36.1 - 40.8
All COULTER Instruments	5	40.70	1.04	2.6	40.2	38.2 - 43.2	5	37.70	0.87	2.3	37.3	35.4 - 40.0
ABX Pentra 60C+	77	41.33	0.70	1.7	41.3	38.8 - 43.9	77	38.50	0.62	1.6	38.5	36.1 - 40.9
ABX Pentra 80 / XL 80	6	40.98	0.68	1.7	40.9	38.5 - 43.5	6	38.28	0.87	2.3	38.1	35.9 - 40.6
COULTER AcT 5diff	5	40.70	1.04	2.6	40.2	38.2 - 43.2	5	37.70	0.87	2.3	37.3	35.4 - 40.0
Specimen BCX-5												
All Method	90	37.70	0.64	1.7	37.7	35.4 - 40.0						
All ABX Instruments	83	37.71	0.62	1.7	37.7	35.4 - 40.0						
All COULTER Instruments	5	37.20	1.14	3.1	36.7	34.9 - 39.5						
ABX Pentra 60C+	77	37.74	0.62	1.7	37.7	35.4 - 40.1						
ABX Pentra 80 / XL 80	6	37.42	0.58	1.6	37.3	35.1 - 39.7						
COULTER AcT 5diff	5	37.20	1.14	3.1	36.7	34.9 - 39.5						

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

<u>Instrument</u>	Specimen BCX-1						Specimen BCX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	90	391.7	12.2	3.1	390	293 - 490	90	493.5	17.8	3.6	496	370 - 617
All ABX Instruments	83	391.3	11.9	3.0	390	293 - 490	83	493.2	17.1	3.5	495	369 - 617
All COULTER Instruments	5	403.3	17.7	4.4	412	302 - 505	5	501.3	36.5	7.3	501	375 - 627
ABX Pentra 60C+	77	391.2	12.1	3.1	390	293 - 490	77	492.2	16.9	3.4	494	369 - 616
ABX Pentra 80 / XL 80	6	392.0	11.1	2.8	392	294 - 490	6	505.5	16.2	3.2	508	379 - 632
COULTER Act 5diff	5	403.3	17.7	4.4	412	302 - 505	5	501.3	36.5	7.3	501	375 - 627
	Specimen BCX-3						Specimen BCX-4					
All Method	90	147.4	5.8	4.0	149	110 - 185	90	238.1	9.6	4.0	239	178 - 298
All ABX Instruments	83	147.3	5.7	3.9	149	110 - 185	83	237.8	9.2	3.9	238	178 - 298
All COULTER Instruments	5	160.3	13.6	8.5	162	120 - 201	5	246.0	18.2	7.4	255	184 - 308
ABX Pentra 60C+	77	146.9	5.7	3.9	148	110 - 184	77	237.5	9.2	3.9	238	178 - 297
ABX Pentra 80 / XL 80	6	151.8	3.3	2.1	153	113 - 190	6	241.2	9.6	4.0	242	180 - 302
COULTER Act 5diff	5	160.3	13.6	8.5	162	120 - 201	5	246.0	18.2	7.4	255	184 - 308
	Specimen BCX-5											
All Method	90	294.4	11.1	3.8	294	220 - 369						
All ABX Instruments	83	294.4	10.8	3.7	294	220 - 368						
All COULTER Instruments	5	295.0	19.5	6.6	288	221 - 369						
ABX Pentra 60C+	77	294.5	10.9	3.7	294	220 - 369						
ABX Pentra 80 / XL 80	6	292.8	10.5	3.6	295	219 - 367						
COULTER Act 5diff	5	295.0	19.5	6.6	288	221 - 369						

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

<u>Instrument</u>	Specimen BCX-1						Specimen BCX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	90	65.96	2.39	3.6	66.2	58.8 - 73.2	90	46.02	2.37	5.2	46.2	38.8 - 53.2
All ABX Instruments	83	66.03	2.31	3.5	66.2	59.0 - 73.0	83	46.17	2.17	4.7	46.3	39.6 - 52.7
All COULTER Instruments	5	53.77	5.69	10.6	51.7	36.7 - 70.9	5	35.40	5.38	15.2	36.1	19.2 - 51.6
ABX Pentra 60C+	77	66.32	2.05	3.1	66.5	60.1 - 72.5	77	46.22	2.17	4.7	46.4	39.7 - 52.8
ABX Pentra 80 / XL 80	6	58.95	5.75	9.8	61.2	41.7 - 76.2	6	42.82	4.29	10.0	43.8	29.9 - 55.7
COULTER Act 5diff	5	53.77	5.69	10.6	51.7	36.7 - 70.9	5	35.40	5.38	15.2	36.1	19.2 - 51.6
Specimen BCX-3						Specimen BCX-4						
All Method	90	48.44	3.14	6.5	48.9	39.0 - 57.9	90	63.12	3.23	5.1	63.0	53.4 - 72.9
All ABX Instruments	83	48.67	2.86	5.9	49.0	40.0 - 57.3	83	63.23	3.08	4.9	63.0	53.9 - 72.5
All COULTER Instruments	5	41.43	4.96	12.0	39.8	26.5 - 56.4	5	48.67	4.69	9.6	47.6	34.5 - 62.8
ABX Pentra 60C+	77	48.69	2.83	5.8	49.0	40.1 - 57.2	77	63.50	2.82	4.4	63.1	55.0 - 72.0
ABX Pentra 80 / XL 80	6	46.93	4.91	10.5	47.6	32.2 - 61.7	6	59.78	4.46	7.5	61.1	46.3 - 73.2
COULTER Act 5diff	5	41.43	4.96	12.0	39.8	26.5 - 56.4	5	48.67	4.69	9.6	47.6	34.5 - 62.8
Specimen BCX-5												
All Method	90	49.21	2.85	5.8	49.2	40.6 - 57.8						
All ABX Instruments	83	49.20	2.87	5.8	49.1	40.6 - 57.9						
All COULTER Instruments	5	42.97	6.13	14.3	40.1	24.5 - 61.4						
ABX Pentra 60C+	77	49.43	2.69	5.4	49.4	41.3 - 57.6						
ABX Pentra 80 / XL 80	6	46.23	3.65	7.9	45.7	35.2 - 57.2						
COULTER Act 5diff	5	42.97	6.13	14.3	40.1	24.5 - 61.4						

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

<u><i>Instrument</i></u>	Specimen BCX-1						Specimen BCX-2					
	<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	90	26.44	2.43	9.2	26.4	19.1 - 33.8	90	49.28	2.33	4.7	49.1	42.2 - 56.3
All ABX Instruments	83	26.44	2.45	9.3	26.4	19.0 - 33.8	83	49.36	2.21	4.5	49.1	42.7 - 56.0
All COULTER Instruments	5	29.83	6.36	21.3	27.1	10.7 - 49.0	5	47.20	4.75	10.1	47.1	32.9 - 61.5
ABX Pentra 60C+	77	26.22	2.26	8.6	26.3	19.4 - 33.1	77	49.29	2.17	4.4	49.0	42.7 - 55.9
ABX Pentra 80 / XL 80	6	33.80	5.26	15.6	32.4	18.0 - 49.6	6	53.20	4.57	8.6	52.8	39.5 - 66.9
COULTER AcT 5diff	5	29.83	6.36	21.3	27.1	10.7 - 49.0	5	47.20	4.75	10.1	47.1	32.9 - 61.5
Specimen BCX-3							Specimen BCX-4					
All Method	90	44.34	3.33	7.5	44.2	34.3 - 54.4	90	29.20	2.97	10.2	29.1	20.2 - 38.2
All ABX Instruments	83	44.55	3.01	6.7	44.2	35.5 - 53.6	83	29.24	2.90	9.9	29.1	20.5 - 38.0
All COULTER Instruments	5	42.03	6.72	16.0	43.5	21.8 - 62.2	5	28.27	5.35	18.9	28.1	12.2 - 44.4
ABX Pentra 60C+	77	44.47	2.76	6.2	44.2	36.1 - 52.8	77	29.04	2.67	9.2	29.1	21.0 - 37.1
ABX Pentra 80 / XL 80	6	45.62	5.53	12.1	45.5	29.0 - 62.3	6	31.73	4.66	14.7	31.7	17.7 - 45.8
COULTER AcT 5diff	5	42.03	6.72	16.0	43.5	21.8 - 62.2	5	28.27	5.35	18.9	28.1	12.2 - 44.4
Specimen BCX-5												
All Method	90	43.21	3.40	7.9	43.2	33.0 - 53.5						
All ABX Instruments	83	43.29	3.23	7.5	43.2	33.6 - 53.0						
All COULTER Instruments	5	40.83	7.40	18.1	40.7	18.6 - 63.1						
ABX Pentra 60C+	77	43.06	3.01	7.0	43.2	34.0 - 52.1						
ABX Pentra 80 / XL 80	6	46.28	4.72	10.2	46.9	32.1 - 60.5						
COULTER AcT 5diff	5	40.83	7.40	18.1	40.7	18.6 - 63.1						

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

<i><u>Instrument</u></i>	Specimen BCX-1						Specimen BCX-2					
	<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	90	1.27	0.42	32.8	1.3	0.0 - 2.6	90	1.93	0.83	43.0	1.8	0.0 - 4.5
All ABX Instruments	83	1.27	0.42	33.2	1.3	0.0 - 2.6	83	1.93	0.83	43.2	1.8	0.0 - 4.5
All COULTER Instruments	5	2.37	1.59	67.1	1.5	0.0 - 7.2	5	3.55	2.62	73.7	3.6	0.0 - 11.4
ABX Pentra 60C+	77	1.26	0.37	29.6	1.3	0.1 - 2.4	77	1.99	0.83	41.7	1.8	0.0 - 4.5
ABX Pentra 80 / XL 80	6	1.10	0.68	61.7	0.9	0.0 - 3.2	6	1.17	0.45	38.2	1.2	0.0 - 2.6
COULTER AcT 5diff	5	2.37	1.59	67.1	1.5	0.0 - 7.2	5	3.55	2.62	73.7	3.6	0.0 - 11.4
	Specimen BCX-3						Specimen BCX-4					
All Method	90	1.47	0.78	52.9	1.3	0.0 - 3.9	90	1.52	0.62	40.4	1.5	0.0 - 3.4
All ABX Instruments	83	1.45	0.75	51.6	1.3	0.0 - 3.7	83	1.49	0.58	38.9	1.4	0.0 - 3.3
All COULTER Instruments	5	2.20	1.47	67.0	2.5	0.0 - 6.7	5	2.60	1.54	59.2	2.2	0.0 - 7.3
ABX Pentra 60C+	77	1.45	0.73	50.0	1.3	0.0 - 3.7	77	1.52	0.57	37.4	1.4	0.0 - 3.3
ABX Pentra 80 / XL 80	6	1.35	1.04	76.8	1.2	0.0 - 4.5	6	1.20	0.72	59.6	1.2	0.0 - 3.4
COULTER AcT 5diff	5	2.20	1.47	67.0	2.5	0.0 - 6.7	5	2.60	1.54	59.2	2.2	0.0 - 7.3
	Specimen BCX-5											
All Method	90	1.91	0.76	39.7	1.9	0.0 - 4.2						
All ABX Instruments	83	1.91	0.76	39.9	1.9	0.0 - 4.3						
All COULTER Instruments	5	2.87	1.84	64.4	2.4	0.0 - 8.5						
ABX Pentra 60C+	77	1.94	0.77	39.8	2.0	0.0 - 4.3						
ABX Pentra 80 / XL 80	6	1.57	0.59	37.8	1.4	0.0 - 3.4						
COULTER AcT 5diff	5	2.87	1.84	64.4	2.4	0.0 - 8.5						

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

<i><u>Instrument</u></i>	Specimen BCX-1						Specimen BCX-2					
	<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	90	5.70	0.87	15.2	5.8	3.0 - 8.4	90	2.17	0.50	22.8	2.1	0.6 - 3.7
All ABX Instruments	83	5.73	0.87	15.1	5.8	3.1 - 8.4	83	2.14	0.46	21.4	2.1	0.7 - 3.6
All COULTER Instruments	5	4.80	0.14	2.9	4.8	4.3 - 5.3	5	3.77	0.58	15.3	4.1	2.0 - 5.5
ABX Pentra 60C+	77	5.72	0.88	15.4	5.9	3.0 - 8.4	77	2.14	0.46	21.6	2.1	0.7 - 3.6
ABX Pentra 80 / XL 80	6	5.75	0.75	13.1	5.7	3.4 - 8.1	6	2.22	1.11	50.2	2.1	0.0 - 5.6
COULTER AcT 5diff	5	4.80	0.14	2.9	4.8	4.3 - 5.3	5	3.77	0.58	15.3	4.1	2.0 - 5.5
Specimen BCX-3						Specimen BCX-4						
All Method	90	5.06	1.21	23.8	5.1	1.4 - 8.7	90	5.32	1.24	23.3	5.4	1.5 - 9.1
All ABX Instruments	83	5.00	1.16	23.2	5.1	1.5 - 8.5	83	5.25	1.15	22.0	5.3	1.7 - 8.8
All COULTER Instruments	5	6.63	1.60	24.1	6.7	1.8 - 11.5	5	8.83	1.25	14.2	9.4	5.0 - 12.6
ABX Pentra 60C+	77	4.99	1.17	23.5	5.0	1.4 - 8.6	77	5.13	1.09	21.2	5.3	1.8 - 8.4
ABX Pentra 80 / XL 80	6	5.24	1.07	20.4	5.1	2.0 - 8.5	6	6.77	0.88	13.0	6.9	4.1 - 9.5
COULTER AcT 5diff	5	6.63	1.60	24.1	6.7	1.8 - 11.5	5	8.83	1.25	14.2	9.4	5.0 - 12.6
Specimen BCX-5												
All Method	90	5.16	1.18	22.8	5.0	1.6 - 8.7						
All ABX Instruments	83	5.15	1.19	23.1	5.0	1.5 - 8.8						
All COULTER Instruments	5	5.57	0.95	17.0	5.9	2.7 - 8.5						
ABX Pentra 60C+	77	5.11	1.16	22.7	5.0	1.6 - 8.6						
ABX Pentra 80 / XL 80	6	5.76	1.61	27.9	6.1	0.9 - 10.6						
COULTER AcT 5diff	5	5.57	0.95	17.0	5.9	2.7 - 8.5						

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

<u>Instrument</u>	Specimen BCX-1						Specimen BCX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	90	0.40	0.01	0.0	0.4	0.3 - 0.5	90	0.40	0.01	0.0	0.4	0.3 - 0.5
All ABX Instruments	83	0.40	0.01	0.0	0.4	0.3 - 0.5	83	0.40	0.01	0.0	0.4	0.3 - 0.5
All COULTER Instruments	5	8.13	0.75	9.2	8.1	5.8 - 10.4	5	7.53	0.40	5.4	7.6	6.3 - 8.8
ABX Pentra 60C+	77	0.40	0.01	0.0	0.4	0.3 - 0.5	77	0.40	0.01	0.0	0.4	0.3 - 0.5
ABX Pentra 80 / XL 80	6	0.40	0.01	0.0	0.4	0.3 - 0.5	6	0.37	0.05	14.1	0.4	0.2 - 0.6
COULTER AcT 5diff	5	8.13	0.75	9.2	8.1	5.8 - 10.4	5	7.53	0.40	5.4	7.6	6.3 - 8.8

<u>Instrument</u>	Specimen BCX-3						Specimen BCX-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	90	0.38	0.04	10.4	0.4	0.2 - 0.6	90	0.56	0.05	8.9	0.6	0.4 - 0.8
All ABX Instruments	83	0.38	0.04	10.4	0.4	0.2 - 0.6	83	0.56	0.05	8.9	0.6	0.4 - 0.8
All COULTER Instruments	5	7.70	1.05	13.7	7.6	4.5 - 10.9	5	11.63	1.65	14.2	11.6	6.6 - 16.6
ABX Pentra 60C+	77	0.38	0.04	10.5	0.4	0.2 - 0.6	77	0.56	0.05	8.8	0.6	0.4 - 0.8
ABX Pentra 80 / XL 80	6	0.38	0.04	10.7	0.4	0.2 - 0.6	6	0.55	0.05	10.0	0.6	0.3 - 0.8
COULTER AcT 5diff	5	7.70	1.05	13.7	7.6	4.5 - 10.9	5	11.63	1.65	14.2	11.6	6.6 - 16.6

<u>Instrument</u>	Specimen BCX-5					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	90	0.36	0.05	13.4	0.4	0.2 - 0.6
All ABX Instruments	83	0.36	0.05	13.4	0.4	0.2 - 0.6
All COULTER Instruments	5	7.77	0.59	7.5	8.0	6.0 - 9.6
ABX Pentra 60C+	77	0.36	0.05	13.5	0.4	0.2 - 0.6
ABX Pentra 80 / XL 80	6	0.42	0.10	23.6	0.4	0.1 - 0.8
COULTER AcT 5diff	5	7.77	0.59	7.5	8.0	6.0 - 9.6

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

<u>Instrument</u>	Specimen MX-1						Specimen MX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	120	3.51	0.26	7.4	3.4	2.9 - 4.1	121	20.80	0.40	1.9	20.7	17.6 - 24.0
All Sysmex XN/XS Instruments	120	3.51	0.26	7.4	3.4	2.9 - 4.1	121	20.80	0.40	1.9	20.7	17.6 - 24.0
Sysmex XN-1000	20	4.02	0.09	2.2	4.0	3.4 - 4.7	20	21.09	0.36	1.7	21.1	17.9 - 24.3
Sysmex XN-330	10	3.40	0.19	5.7	3.4	2.8 - 4.0	10	20.57	0.48	2.3	20.6	17.4 - 23.7
Sysmex XN-430	36	3.43	0.09	2.5	3.4	2.9 - 4.0	37	20.78	0.33	1.6	20.7	17.6 - 23.9
Sysmex XN-450	11	3.38	0.10	2.9	3.4	2.8 - 3.9	12	20.84	0.33	1.6	20.8	17.7 - 24.0
Sysmex XN-530	5	3.43	0.10	2.8	3.5	2.9 - 4.0	5	20.63	0.34	1.7	20.6	17.5 - 23.8
Sysmex XN-550	20	3.41	0.09	2.6	3.4	2.8 - 4.0	21	20.65	0.29	1.4	20.6	17.5 - 23.8
Sysmex XS-1000i	15	3.43	0.12	3.4	3.4	2.9 - 4.0	15	20.81	0.45	2.2	20.8	17.6 - 24.0
Specimen MX-3												
All Method	121	6.80	0.33	4.9	6.7	5.7 - 7.9	119	20.83	0.38	1.8	20.8	17.7 - 24.0
All Sysmex XN/XS Instruments	121	6.80	0.33	4.9	6.7	5.7 - 7.9	119	20.83	0.38	1.8	20.8	17.7 - 24.0
Sysmex XN-1000	20	7.37	0.15	2.0	7.4	6.2 - 8.5	19	21.12	0.23	1.1	21.2	17.9 - 24.3
Sysmex XN-330	10	6.66	0.27	4.0	6.6	5.6 - 7.7	9	20.57	0.46	2.2	20.5	17.4 - 23.7
Sysmex XN-430	37	6.68	0.16	2.4	6.7	5.6 - 7.7	37	20.83	0.31	1.5	20.8	17.7 - 24.0
Sysmex XN-450	12	6.75	0.32	4.7	6.7	5.7 - 7.8	12	20.93	0.38	1.8	20.9	17.7 - 24.1
Sysmex XN-530	5	6.68	0.05	0.7	6.7	5.6 - 7.7	5	20.60	0.12	0.6	20.6	17.5 - 23.7
Sysmex XN-550	21	6.63	0.16	2.3	6.6	5.6 - 7.7	21	20.67	0.29	1.4	20.7	17.5 - 23.8
Sysmex XS-1000i	15	6.76	0.21	3.2	6.8	5.7 - 7.8	14	20.83	0.41	2.0	20.8	17.7 - 24.0
Specimen MX-4												
All Method	118	6.79	0.34	5.0	6.7	5.7 - 7.9						
All Sysmex XN/XS Instruments	118	6.79	0.34	5.0	6.7	5.7 - 7.9						
Sysmex XN-1000	20	7.39	0.13	1.7	7.4	6.2 - 8.5						
Sysmex XN-330	9	6.61	0.37	5.6	6.5	5.6 - 7.7						
Sysmex XN-430	37	6.70	0.16	2.3	6.7	5.6 - 7.8						
Sysmex XN-450	12	6.67	0.29	4.4	6.6	5.6 - 7.7						
Sysmex XN-530	5	6.60	0.08	1.2	6.6	5.6 - 7.6						
Sysmex XN-550	20	6.62	0.16	2.5	6.6	5.6 - 7.7						
Sysmex XS-1000i	14	6.73	0.16	2.4	6.7	5.7 - 7.8						
Specimen MX-5												
All Method	118	6.79	0.34	5.0	6.7	5.7 - 7.9						
All Sysmex XN/XS Instruments	118	6.79	0.34	5.0	6.7	5.7 - 7.9						
Sysmex XN-1000	20	7.39	0.13	1.7	7.4	6.2 - 8.5						
Sysmex XN-330	9	6.61	0.37	5.6	6.5	5.6 - 7.7						
Sysmex XN-430	37	6.70	0.16	2.3	6.7	5.6 - 7.8						
Sysmex XN-450	12	6.67	0.29	4.4	6.6	5.6 - 7.7						
Sysmex XN-530	5	6.60	0.08	1.2	6.6	5.6 - 7.6						
Sysmex XN-550	20	6.62	0.16	2.5	6.6	5.6 - 7.7						
Sysmex XS-1000i	14	6.73	0.16	2.4	6.7	5.7 - 7.8						

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL-RED BLOOD CELL COUNT (x 10¹²/L)

<u>Instrument</u>	Specimen MX-1						Specimen MX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	119	2.342	0.032	1.4	2.34	2.20 - 2.49	120	5.748	0.061	1.1	5.75	5.40 - 6.10
All Sysmex XN/XS Instruments	119	2.342	0.032	1.4	2.34	2.20 - 2.49	120	5.748	0.061	1.1	5.75	5.40 - 6.10
Sysmex XN-1000	20	2.353	0.033	1.4	2.35	2.21 - 2.50	20	5.736	0.054	0.9	5.74	5.39 - 6.09
Sysmex XN-330	10	2.315	0.041	1.8	2.33	2.17 - 2.46	10	5.746	0.095	1.6	5.80	5.40 - 6.10
Sysmex XN-430	37	2.339	0.029	1.2	2.34	2.19 - 2.48	37	5.750	0.056	1.0	5.74	5.40 - 6.10
Sysmex XN-450	12	2.330	0.028	1.2	2.33	2.19 - 2.47	11	5.733	0.044	0.8	5.72	5.38 - 6.08
Sysmex XN-530	5	2.323	0.021	0.9	2.33	2.18 - 2.47	5	5.795	0.021	0.4	5.80	5.44 - 6.15
Sysmex XN-550	21	2.336	0.034	1.4	2.34	2.19 - 2.48	22	5.751	0.071	1.2	5.75	5.40 - 6.10
Sysmex XS-1000i	15	2.372	0.022	0.9	2.37	2.22 - 2.52	15	5.761	0.052	0.9	5.76	5.41 - 6.11

<u>Instrument</u>	Specimen MX-3						Specimen MX-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	121	4.798	0.058	1.2	4.80	4.51 - 5.09	119	5.754	0.066	1.2	5.76	5.40 - 6.10
All Sysmex XN/XS Instruments	121	4.798	0.058	1.2	4.80	4.51 - 5.09	119	5.754	0.066	1.2	5.76	5.40 - 6.10
Sysmex XN-1000	20	4.810	0.059	1.2	4.81	4.52 - 5.10	20	5.743	0.066	1.1	5.76	5.39 - 6.09
Sysmex XN-330	10	4.761	0.066	1.4	4.78	4.47 - 5.05	9	5.757	0.078	1.4	5.79	5.41 - 6.11
Sysmex XN-430	37	4.794	0.049	1.0	4.79	4.50 - 5.09	37	5.752	0.070	1.2	5.76	5.40 - 6.10
Sysmex XN-450	12	4.797	0.057	1.2	4.80	4.50 - 5.09	12	5.765	0.057	1.0	5.76	5.41 - 6.12
Sysmex XN-530	5	4.828	0.038	0.8	4.82	4.53 - 5.12	5	5.770	0.036	0.6	5.78	5.42 - 6.12
Sysmex XN-550	22	4.803	0.066	1.4	4.80	4.51 - 5.10	22	5.762	0.071	1.2	5.77	5.41 - 6.11
Sysmex XS-1000i	15	4.807	0.058	1.2	4.82	4.51 - 5.10	14	5.747	0.066	1.1	5.76	5.40 - 6.10

<u>Instrument</u>	Specimen MX-5					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	119	4.805	0.054	1.1	4.80	4.51 - 5.10
All Sysmex XN/XS Instruments	119	4.805	0.054	1.1	4.80	4.51 - 5.10
Sysmex XN-1000	20	4.814	0.054	1.1	4.80	4.52 - 5.11
Sysmex XN-330	9	4.791	0.050	1.0	4.80	4.50 - 5.08
Sysmex XN-430	37	4.799	0.054	1.1	4.80	4.51 - 5.09
Sysmex XN-450	12	4.788	0.058	1.2	4.77	4.50 - 5.08
Sysmex XN-530	5	4.823	0.026	0.5	4.82	4.53 - 5.12
Sysmex XN-550	22	4.811	0.055	1.1	4.81	4.52 - 5.11
Sysmex XS-1000i	14	4.826	0.050	1.0	4.83	4.53 - 5.12

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

<i>Instrument</i>	Specimen MX-1						Specimen MX-2					
	<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	121	6.01	0.08	1.4	6.0	5.5 - 6.5	121	17.70	0.15	0.9	17.7	16.4 - 19.0
All Sysmex XN/XS Instruments	121	6.01	0.08	1.4	6.0	5.5 - 6.5	121	17.70	0.15	0.9	17.7	16.4 - 19.0
Sysmex XN-1000	20	6.10	0.06	1.0	6.1	5.6 - 6.6	20	17.81	0.17	1.0	17.8	16.5 - 19.1
Sysmex XN-330	10	5.96	0.07	1.2	6.0	5.5 - 6.4	10	17.67	0.18	1.0	17.7	16.4 - 19.0
Sysmex XN-430	37	6.00	0.07	1.2	6.0	5.5 - 6.5	37	17.66	0.14	0.8	17.7	16.4 - 18.9
Sysmex XN-450	12	5.98	0.06	1.0	6.0	5.5 - 6.4	12	17.66	0.12	0.7	17.7	16.4 - 18.9
Sysmex XN-530	5	6.03	0.05	0.8	6.0	5.6 - 6.5	5	17.73	0.10	0.5	17.8	16.4 - 19.0
Sysmex XN-550	22	6.01	0.08	1.2	6.0	5.5 - 6.5	22	17.66	0.12	0.7	17.7	16.4 - 18.9
Sysmex XS-1000i	15	5.95	0.07	1.2	6.0	5.5 - 6.4	15	17.79	0.13	0.7	17.8	16.5 - 19.1

<i>Instrument</i>	Specimen MX-3						Specimen MX-4					
	<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	121	13.49	0.13	1.0	13.5	12.5 - 14.5	118	17.73	0.15	0.8	17.7	16.4 - 19.0
All Sysmex XN/XS Instruments	121	13.49	0.13	1.0	13.5	12.5 - 14.5	118	17.73	0.15	0.8	17.7	16.4 - 19.0
Sysmex XN-1000	20	13.62	0.09	0.7	13.6	12.6 - 14.6	20	17.86	0.17	1.0	17.9	16.6 - 19.2
Sysmex XN-330	10	13.40	0.12	0.9	13.4	12.4 - 14.4	9	17.67	0.14	0.8	17.7	16.4 - 19.0
Sysmex XN-430	37	13.46	0.13	1.0	13.5	12.5 - 14.4	37	17.70	0.13	0.8	17.7	16.4 - 19.0
Sysmex XN-450	12	13.45	0.12	0.9	13.5	12.5 - 14.4	12	17.71	0.12	0.7	17.7	16.4 - 19.0
Sysmex XN-530	5	13.45	0.06	0.4	13.5	12.5 - 14.4	5	17.75	0.06	0.3	17.8	16.5 - 19.0
Sysmex XN-550	22	13.50	0.10	0.7	13.5	12.5 - 14.5	22	17.71	0.14	0.8	17.8	16.4 - 19.0
Sysmex XS-1000i	15	13.47	0.13	1.0	13.5	12.5 - 14.5	14	17.79	0.15	0.9	17.8	16.5 - 19.1

<i>Instrument</i>	Specimen MX-5					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	119	13.50	0.13	1.0	13.5	12.5 - 14.5
All Sysmex XN/XS Instruments	119	13.50	0.13	1.0	13.5	12.5 - 14.5
Sysmex XN-1000	20	13.63	0.11	0.8	13.6	12.6 - 14.6
Sysmex XN-330	9	13.42	0.14	1.0	13.5	12.4 - 14.4
Sysmex XN-430	36	13.47	0.12	0.9	13.5	12.5 - 14.5
Sysmex XN-450	12	13.48	0.11	0.8	13.5	12.5 - 14.5
Sysmex XN-530	5	13.50	0.08	0.6	13.5	12.5 - 14.5
Sysmex XN-550	22	13.50	0.11	0.8	13.5	12.5 - 14.5
Sysmex XS-1000i	14	13.47	0.12	0.9	13.5	12.5 - 14.5

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

<u><i>Instrument</i></u>	Specimen MX-1						Specimen MX-2					
	<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	18.65	0.35	1.9	18.6	17.5 - 19.8	121	53.88	0.91	1.7	53.9	50.6 - 57.2
All Sysmex XN/XS Instruments	121	18.65	0.35	1.9	18.6	17.5 - 19.8	121	53.88	0.91	1.7	53.9	50.6 - 57.2
Sysmex XN-1000	20	18.50	0.21	1.1	18.5	17.3 - 19.7	20	53.36	0.75	1.4	53.5	50.1 - 56.6
Sysmex XN-330	10	18.45	0.30	1.6	18.5	17.3 - 19.6	10	53.78	0.85	1.6	53.9	50.5 - 57.1
Sysmex XN-430	37	18.64	0.33	1.8	18.6	17.5 - 19.8	37	53.79	0.86	1.6	53.6	50.5 - 57.1
Sysmex XN-450	12	18.58	0.27	1.5	18.7	17.4 - 19.7	12	53.62	0.54	1.0	53.5	50.3 - 56.9
Sysmex XN-530	5	18.38	0.13	0.7	18.4	17.2 - 19.5	5	53.83	0.39	0.7	53.9	50.5 - 57.1
Sysmex XN-550	22	18.65	0.33	1.8	18.7	17.5 - 19.8	22	53.94	0.84	1.6	54.1	50.7 - 57.2
Sysmex XS-1000i	15	19.17	0.24	1.2	19.1	18.0 - 20.4	15	55.09	0.66	1.2	55.2	51.7 - 58.4
Specimen MX-3												
All Method	121	41.27	0.65	1.6	41.2	38.7 - 43.8	119	53.91	0.87	1.6	54.0	50.6 - 57.2
All Sysmex XN/XS Instruments	121	41.27	0.65	1.6	41.2	38.7 - 43.8	119	53.91	0.87	1.6	54.0	50.6 - 57.2
Sysmex XN-1000	20	41.08	0.57	1.4	41.1	38.6 - 43.6	20	53.48	0.69	1.3	53.5	50.2 - 56.7
Sysmex XN-330	10	40.92	0.53	1.3	40.8	38.4 - 43.4	9	53.48	0.76	1.4	53.3	50.2 - 56.7
Sysmex XN-430	37	41.23	0.66	1.6	41.1	38.7 - 43.8	37	53.84	0.85	1.6	53.9	50.6 - 57.1
Sysmex XN-450	12	41.21	0.41	1.0	41.3	38.7 - 43.7	12	53.78	0.48	0.9	53.9	50.5 - 57.1
Sysmex XN-530	5	41.25	0.49	1.2	41.2	38.7 - 43.8	5	53.70	0.54	1.0	53.8	50.4 - 57.0
Sysmex XN-550	22	41.40	0.73	1.8	41.4	38.9 - 43.9	22	54.07	0.87	1.6	54.3	50.8 - 57.4
Sysmex XS-1000i	15	41.82	0.61	1.4	41.7	39.3 - 44.4	14	55.00	0.74	1.3	55.2	51.7 - 58.3
Specimen MX-4												
All Method	119	41.33	0.61	1.5	41.3	38.8 - 43.9						
All Sysmex XN/XS Instruments	119	41.33	0.61	1.5	41.3	38.8 - 43.9						
Sysmex XN-1000	20	41.08	0.38	0.9	41.1	38.6 - 43.6						
Sysmex XN-330	9	41.10	0.35	0.9	41.0	38.6 - 43.6						
Sysmex XN-430	37	41.31	0.66	1.6	41.3	38.8 - 43.8						
Sysmex XN-450	12	41.15	0.39	0.9	41.2	38.6 - 43.7						
Sysmex XN-530	5	41.18	0.58	1.4	41.3	38.7 - 43.7						
Sysmex XN-550	22	41.47	0.65	1.6	41.4	38.9 - 44.0						
Sysmex XS-1000i	14	41.96	0.46	1.1	42.0	39.4 - 44.5						
Specimen MX-5												

HEMATOLOGY W/ 5 or 6-PART DIFFERENTIAL-PLATELET COUNT (x 10⁹/L)

Specimen MX-1							Specimen MX-2					
<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	120	48.7	3.8	7.7	49	36 - 61	118	407.9	13.1	3.2	409	305 - 510
All Sysmex XN/XS Instruments	120	48.7	3.8	7.7	49	36 - 61	118	407.9	13.1	3.2	409	305 - 510
Sysmex XN-1000	20	47.3	3.3	6.9	47	35 - 60	20	411.0	10.3	2.5	413	308 - 514
Sysmex XN-330	10	48.1	4.0	8.3	48	36 - 61	10	409.0	13.6	3.3	411	306 - 512
Sysmex XN-430	37	48.6	3.4	6.9	49	36 - 61	37	407.9	14.2	3.5	411	305 - 510
Sysmex XN-450	11	48.0	4.2	8.8	49	36 - 60	12	407.0	22.8	5.6	412	305 - 509
Sysmex XN-530	5	47.8	1.7	3.6	48	35 - 60	5	418.0	11.4	2.7	415	313 - 523
Sysmex XN-550	22	48.0	3.2	6.8	49	36 - 61	21	410.0	10.2	2.5	409	307 - 513
Sysmex XS-1000i	15	53.3	3.2	5.9	53	39 - 67	15	390.3	12.2	3.1	394	292 - 488

Specimen MX-3							Specimen MX-4					
<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	120	203.9	7.3	3.6	204	152 - 255	117	409.4	13.9	3.4	411	307 - 512
All Sysmex XN/XS Instruments	120	203.9	7.3	3.6	204	152 - 255	117	409.4	13.9	3.4	411	307 - 512
Sysmex XN-1000	20	207.0	8.5	4.1	205	155 - 259	20	414.2	15.7	3.8	414	310 - 518
Sysmex XN-330	10	205.6	5.3	2.6	206	154 - 257	9	409.0	11.0	2.7	408	306 - 512
Sysmex XN-430	37	202.6	7.4	3.7	202	151 - 254	37	408.0	12.6	3.1	411	305 - 510
Sysmex XN-450	12	203.8	10.2	5.0	207	152 - 255	12	414.8	21.7	5.2	418	311 - 519
Sysmex XN-530	5	205.5	3.7	1.8	205	154 - 257	5	425.8	7.6	1.8	423	319 - 533
Sysmex XN-550	22	202.8	7.7	3.8	204	152 - 254	21	408.2	12.6	3.1	409	306 - 511
Sysmex XS-1000i	15	204.9	6.9	3.4	205	153 - 257	14	395.1	8.2	2.1	397	296 - 494

Specimen MX-5						
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	118	204.3	6.6	3.2	204	153 - 256
All Sysmex XN/XS Instruments	118	204.3	6.6	3.2	204	153 - 256
Sysmex XN-1000	20	205.2	7.2	3.5	206	153 - 257
Sysmex XN-330	9	203.7	6.7	3.3	204	152 - 255
Sysmex XN-430	37	204.4	6.4	3.1	205	153 - 256
Sysmex XN-450	12	204.7	7.5	3.7	205	153 - 256
Sysmex XN-530	5	206.0	6.4	3.1	205	154 - 258
Sysmex XN-550	22	202.1	7.6	3.8	203	151 - 253
Sysmex XS-1000i	14	203.6	6.4	3.1	203	152 - 255

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

Specimen MX-1							Specimen MX-2					
<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	116	59.68	1.89	3.2	59.3	54.0 - 65.4	116	55.09	1.69	3.1	54.7	50.0 - 60.2
All Sysmex XN/XS Instruments	116	59.68	1.89	3.2	59.3	54.0 - 65.4	116	55.09	1.69	3.1	54.7	50.0 - 60.2
Sysmex XN-1000	19	63.17	0.84	1.3	63.1	60.6 - 65.7	19	58.37	0.60	1.0	58.4	56.5 - 60.2
Sysmex XN-330	9	59.13	1.10	1.9	59.1	55.8 - 62.5	9	54.20	0.64	1.2	54.3	52.2 - 56.2
Sysmex XN-430	37	58.82	1.10	1.9	58.7	55.5 - 62.2	37	54.43	0.85	1.6	54.4	51.8 - 57.0
Sysmex XN-450	11	59.32	0.54	0.9	59.2	57.6 - 61.0	11	54.65	0.96	1.8	55.0	51.7 - 57.6
Sysmex XN-530	5	59.20	1.20	2.0	58.8	55.5 - 62.9	5	54.63	1.23	2.2	54.8	50.9 - 58.4
Sysmex XN-550	21	58.74	1.13	1.9	58.9	55.3 - 62.2	21	54.83	0.93	1.7	54.7	52.0 - 57.7
Sysmex XS-1000i	14	59.49	1.47	2.5	59.8	55.0 - 63.9	14	53.80	0.77	1.4	53.8	51.4 - 56.2
Specimen MX-3							Specimen MX-4					
All Method	116	47.82	1.45	3.0	47.6	43.4 - 52.2	114	55.22	1.73	3.1	54.8	50.0 - 60.4
All Sysmex XN/XS Instruments	116	47.82	1.45	3.0	47.6	43.4 - 52.2	114	55.22	1.73	3.1	54.8	50.0 - 60.4
Sysmex XN-1000	19	50.35	0.71	1.4	50.4	48.2 - 52.5	19	58.45	0.68	1.2	58.7	56.4 - 60.5
Sysmex XN-330	9	47.91	0.67	1.4	48.0	45.9 - 50.0	8	55.24	0.70	1.3	55.2	53.1 - 57.4
Sysmex XN-430	37	47.36	1.02	2.2	47.3	44.2 - 50.5	37	54.57	1.09	2.0	54.4	51.3 - 57.9
Sysmex XN-450	11	47.40	0.74	1.6	47.5	45.1 - 49.7	11	55.10	0.60	1.1	55.0	53.3 - 56.9
Sysmex XN-530	5	47.28	0.90	1.9	47.4	44.5 - 50.0	5	54.98	0.49	0.9	54.8	53.4 - 56.5
Sysmex XN-550	21	47.48	0.75	1.6	47.5	45.2 - 49.8	21	54.44	0.78	1.4	54.4	52.1 - 56.8
Sysmex XS-1000i	14	46.57	1.11	2.4	46.6	43.2 - 50.0	13	53.77	0.96	1.8	54.0	50.8 - 56.7
Specimen MX-5												
All Method	114	47.79	1.55	3.3	47.5	43.1 - 52.5						
All Sysmex XN/XS Instruments	114	47.79	1.55	3.3	47.5	43.1 - 52.5						
Sysmex XN-1000	19	50.44	0.64	1.3	50.3	48.5 - 52.4						
Sysmex XN-330	8	47.19	1.12	2.4	47.3	43.8 - 50.6						
Sysmex XN-430	37	47.50	0.76	1.6	47.4	45.2 - 49.8						
Sysmex XN-450	11	47.60	0.78	1.6	47.3	45.2 - 50.0						
Sysmex XN-530	5	47.50	0.87	1.8	47.5	44.8 - 50.2						
Sysmex XN-550	21	47.54	1.20	2.5	47.4	43.9 - 51.2						
Sysmex XS-1000i	13	45.85	0.77	1.7	45.6	43.5 - 48.2						

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

<i>Instrument</i>	Specimen MX-1						Specimen MX-2					
	<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	116	15.35	1.04	6.8	15.4	12.2 - 18.5	116	21.53	0.79	3.6	21.7	19.1 - 23.9
All Sysmex XN/XS Instruments	116	15.35	1.04	6.8	15.4	12.2 - 18.5	116	21.53	0.79	3.6	21.7	19.1 - 23.9
Sysmex XN-1000	19	14.36	0.95	6.6	14.3	11.5 - 17.2	19	20.10	0.35	1.7	20.1	19.0 - 21.2
Sysmex XN-330	9	15.36	0.91	5.9	15.6	12.6 - 18.1	9	21.70	0.30	1.4	21.6	20.7 - 22.7
Sysmex XN-430	37	15.65	0.98	6.3	15.5	12.6 - 18.6	37	21.69	0.34	1.6	21.7	20.6 - 22.8
Sysmex XN-450	11	15.38	0.70	4.5	15.4	13.2 - 17.5	11	21.63	0.30	1.4	21.7	20.7 - 22.6
Sysmex XN-530	5	15.48	0.59	3.8	15.5	13.7 - 17.3	5	21.88	0.05	0.2	21.9	21.7 - 22.1
Sysmex XN-550	21	15.63	0.88	5.7	15.4	12.9 - 18.3	21	21.63	0.35	1.6	21.7	20.5 - 22.7
Sysmex XS-1000i	14	15.42	1.28	8.3	15.9	11.5 - 19.3	14	22.60	0.52	2.3	22.6	21.0 - 24.2

<i>Instrument</i>	Specimen MX-3						Specimen MX-4					
	<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	116	30.80	1.20	3.9	31.0	27.1 - 34.5	114	21.44	0.80	3.7	21.6	19.0 - 23.9
All Sysmex XN/XS Instruments	116	30.80	1.20	3.9	31.0	27.1 - 34.5	114	21.44	0.80	3.7	21.6	19.0 - 23.9
Sysmex XN-1000	19	28.84	0.53	1.8	28.9	27.2 - 30.5	19	20.03	0.32	1.6	19.9	19.0 - 21.0
Sysmex XN-330	9	31.00	0.63	2.0	30.9	29.1 - 32.9	8	21.60	0.23	1.1	21.7	20.9 - 22.3
Sysmex XN-430	37	30.96	0.67	2.2	31.0	28.9 - 33.0	37	21.52	0.36	1.7	21.5	20.4 - 22.7
Sysmex XN-450	11	31.01	0.73	2.4	31.0	28.8 - 33.2	11	21.50	0.33	1.6	21.5	20.4 - 22.6
Sysmex XN-530	5	30.65	0.79	2.6	30.5	28.2 - 33.1	5	21.53	0.28	1.3	21.6	20.6 - 22.4
Sysmex XN-550	21	30.94	0.62	2.0	31.0	29.0 - 32.9	21	21.68	0.30	1.4	21.7	20.7 - 22.6
Sysmex XS-1000i	14	32.46	0.92	2.8	32.4	29.6 - 35.3	13	22.67	0.46	2.0	22.8	21.2 - 24.1

<i>Instrument</i>	Specimen MX-5					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	114	30.74	1.32	4.3	30.8	26.7 - 34.7
All Sysmex XN/XS Instruments	114	30.74	1.32	4.3	30.8	26.7 - 34.7
Sysmex XN-1000	19	28.63	0.66	2.3	28.6	26.6 - 30.6
Sysmex XN-330	8	31.28	1.01	3.2	31.1	28.2 - 34.3
Sysmex XN-430	37	30.92	0.64	2.1	31.1	28.9 - 32.9
Sysmex XN-450	11	30.83	0.41	1.3	30.8	29.5 - 32.1
Sysmex XN-530	5	31.15	0.40	1.3	31.3	29.9 - 32.4
Sysmex XN-550	21	30.70	0.86	2.8	30.8	28.1 - 33.3
Sysmex XS-1000i	13	32.75	0.74	2.2	32.7	30.5 - 35.0

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

<u>Instrument</u>	Specimen MX-1						Specimen MX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	114	0.83	0.36	43.1	0.6	0.0 - 1.9	116	1.13	0.48	42.6	1.0	0.0 - 2.6
All Sysmex XN/XS Instruments	114	0.83	0.36	43.1	0.6	0.0 - 1.9	116	1.13	0.48	42.6	1.0	0.0 - 2.6
Sysmex XN-1000	19	1.53	0.24	15.6	1.5	0.8 - 2.3	19	2.14	0.20	9.1	2.2	1.5 - 2.8
Sysmex XN-330	9	0.53	0.13	24.8	0.6	0.1 - 1.0	9	0.92	0.19	20.1	0.9	0.3 - 1.5
Sysmex XN-430	37	0.70	0.18	26.3	0.6	0.1 - 1.3	37	0.91	0.15	16.7	0.9	0.4 - 1.4
Sysmex XN-450	11	0.68	0.19	28.5	0.6	0.0 - 1.3	11	0.91	0.22	23.8	1.0	0.2 - 1.6
Sysmex XN-530	5	0.68	0.15	22.2	0.6	0.2 - 1.2	5	0.88	0.10	10.9	0.9	0.5 - 1.2
Sysmex XN-550	21	0.68	0.16	23.8	0.6	0.1 - 1.2	21	0.92	0.17	18.7	0.9	0.4 - 1.5
Sysmex XS-1000i	13	0.84	0.25	29.8	0.9	0.0 - 1.6	14	1.06	0.17	16.3	1.1	0.5 - 1.6

<u>Instrument</u>	Specimen MX-3						Specimen MX-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	116	1.74	0.70	40.4	1.6	0.0 - 3.9	114	1.15	0.48	42.1	1.0	0.0 - 2.6
All Sysmex XN/XS Instruments	116	1.74	0.70	40.4	1.6	0.0 - 3.9	114	1.15	0.48	42.1	1.0	0.0 - 2.6
Sysmex XN-1000	19	3.18	0.40	12.5	3.2	1.9 - 4.4	19	2.14	0.12	5.5	2.1	1.7 - 2.5
Sysmex XN-330	9	1.37	0.25	18.3	1.4	0.6 - 2.2	8	0.83	0.15	18.0	0.9	0.3 - 1.3
Sysmex XN-430	37	1.42	0.28	19.8	1.4	0.5 - 2.3	37	0.92	0.13	13.8	0.9	0.5 - 1.4
Sysmex XN-450	11	1.50	0.35	23.1	1.5	0.4 - 2.6	11	0.91	0.25	27.1	0.9	0.1 - 1.7
Sysmex XN-530	5	1.40	0.26	18.4	1.4	0.6 - 2.2	5	0.93	0.13	13.6	0.9	0.5 - 1.4
Sysmex XN-550	21	1.46	0.28	19.2	1.5	0.6 - 2.3	21	0.93	0.21	22.6	0.9	0.2 - 1.6
Sysmex XS-1000i	14	1.62	0.20	12.1	1.6	1.0 - 2.3	13	1.18	0.16	13.9	1.2	0.6 - 1.7

<u>Instrument</u>	Specimen MX-5					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	114	1.75	0.70	39.8	1.5	0.0 - 3.9
All Sysmex XN/XS Instruments	114	1.75	0.70	39.8	1.5	0.0 - 3.9
Sysmex XN-1000	19	3.19	0.28	8.9	3.2	2.3 - 4.1
Sysmex XN-330	8	1.39	0.21	15.1	1.4	0.7 - 2.1
Sysmex XN-430	37	1.42	0.19	13.1	1.4	0.8 - 2.0
Sysmex XN-450	11	1.49	0.37	24.6	1.5	0.3 - 2.6
Sysmex XN-530	5	1.40	0.24	17.5	1.4	0.6 - 2.2
Sysmex XN-550	21	1.46	0.31	21.0	1.5	0.5 - 2.4
Sysmex XS-1000i	13	1.60	0.19	12.0	1.6	1.0 - 2.2

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

<u><i>Instrument</i></u>	Specimen MX-1						Specimen MX-2					
	<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	116	15.69	0.62	4.0	15.6	13.8 - 17.6	116	14.51	0.57	3.9	14.5	12.8 - 16.3
All Sysmex XN/XS Instruments	116	15.69	0.62	4.0	15.6	13.8 - 17.6	116	14.51	0.57	3.9	14.5	12.8 - 16.3
Sysmex XN-1000	19	16.16	0.44	2.7	16.3	14.8 - 17.5	19	14.56	0.51	3.5	14.6	13.0 - 16.2
Sysmex XN-330	9	15.62	0.54	3.4	15.5	14.0 - 17.3	9	14.78	0.47	3.2	14.6	13.3 - 16.2
Sysmex XN-430	37	15.64	0.59	3.8	15.6	13.8 - 17.5	37	14.66	0.53	3.6	14.6	13.0 - 16.3
Sysmex XN-450	11	15.75	0.58	3.7	15.7	14.0 - 17.6	11	14.56	0.59	4.0	14.6	12.8 - 16.4
Sysmex XN-530	5	15.95	0.83	5.2	16.1	13.4 - 18.5	5	14.45	0.75	5.2	14.3	12.1 - 16.8
Sysmex XN-550	21	15.69	0.63	4.0	15.9	13.8 - 17.6	21	14.50	0.50	3.5	14.4	12.9 - 16.1
Sysmex XS-1000i	14	15.11	0.53	3.5	15.1	13.5 - 16.7	14	13.91	0.56	4.0	13.9	12.2 - 15.6

<u><i>Instrument</i></u>	Specimen MX-3						Specimen MX-4					
	<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	115	12.74	0.52	4.1	12.8	11.1 - 14.3	114	14.45	0.59	4.1	14.4	12.6 - 16.3
All Sysmex XN/XS Instruments	115	12.74	0.52	4.1	12.8	11.1 - 14.3	114	14.45	0.59	4.1	14.4	12.6 - 16.3
Sysmex XN-1000	19	12.84	0.38	3.0	12.8	11.7 - 14.0	19	14.52	0.56	3.9	14.3	12.8 - 16.2
Sysmex XN-330	9	12.62	0.58	4.6	12.7	10.8 - 14.4	8	14.50	0.52	3.6	14.3	12.9 - 16.1
Sysmex XN-430	37	12.82	0.51	4.0	12.9	11.3 - 14.4	37	14.59	0.62	4.2	14.6	12.7 - 16.5
Sysmex XN-450	11	12.80	0.41	3.2	12.8	11.5 - 14.1	11	14.50	0.52	3.6	14.4	12.9 - 16.1
Sysmex XN-530	5	12.88	0.63	4.9	12.8	10.9 - 14.8	5	14.58	0.68	4.7	14.6	12.5 - 16.7
Sysmex XN-550	21	12.88	0.48	3.7	12.9	11.4 - 14.4	21	14.50	0.40	2.8	14.6	13.2 - 15.8
Sysmex XS-1000i	14	12.04	0.52	4.3	12.1	10.4 - 13.6	13	13.77	0.52	3.8	13.8	12.2 - 15.4

<u><i>Instrument</i></u>	Specimen MX-5					
	<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	114	12.72	0.49	3.8	12.7	11.2 - 14.2
All Sysmex XN/XS Instruments	114	12.72	0.49	3.8	12.7	11.2 - 14.2
Sysmex XN-1000	19	12.96	0.36	2.8	13.1	11.8 - 14.1
Sysmex XN-330	8	12.59	0.43	3.4	12.7	11.2 - 13.9
Sysmex XN-430	37	12.70	0.53	4.2	12.6	11.1 - 14.3
Sysmex XN-450	11	12.86	0.28	2.2	12.9	12.0 - 13.7
Sysmex XN-530	5	12.85	0.17	1.3	12.9	12.3 - 13.4
Sysmex XN-550	21	12.77	0.53	4.1	12.9	11.1 - 14.4
Sysmex XS-1000i	13	12.25	0.44	3.6	12.2	10.9 - 13.6

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

<u><i>Instrument</i></u>	Specimen MX-1						Specimen MX-2					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	83	9.16	0.77	8.4	8.9	6.8 - 11.5	83	8.26	0.61	7.4	8.1	6.4 - 10.1
All Sysmex XN/XS Instruments	116	8.42	1.78	21.1	8.9	3.0 - 13.8	116	7.74	1.42	18.3	8.1	3.4 - 12.0
Sysmex XN-1000	19	4.77	0.13	2.8	4.8	4.3 - 5.2	19	4.83	0.14	2.8	4.8	4.4 - 5.3
Sysmex XN-330	9	9.36	0.71	7.6	9.2	7.2 - 11.5	9	8.40	0.46	5.5	8.4	7.0 - 9.8
Sysmex XN-430	37	9.19	0.83	9.1	9.1	6.6 - 11.7	37	8.32	0.65	7.8	8.3	6.3 - 10.3
Sysmex XN-450	11	8.86	0.64	7.2	9.1	6.9 - 10.8	11	8.25	0.62	7.6	8.1	6.3 - 10.2
Sysmex XN-530	5	8.70	0.42	4.8	8.7	7.4 - 10.0	5	8.18	0.82	10.0	7.8	5.7 - 10.7
Sysmex XN-550	21	9.27	0.79	8.5	9.3	6.9 - 11.7	21	8.11	0.58	7.2	7.9	6.3 - 9.9
Sysmex XS-1000i	14	8.99	0.92	10.2	8.9	6.2 - 11.8	14	8.60	0.67	7.8	8.6	6.5 - 10.7

<u><i>Instrument</i></u>	Specimen MX-3						Specimen MX-4					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	83	7.34	0.60	8.2	7.1	5.5 - 9.2	82	8.29	0.69	8.4	8.0	6.2 - 10.4
All Sysmex XN/XS Instruments	116	6.93	1.11	16.0	7.1	3.5 - 10.3	114	7.75	1.45	18.7	8.0	3.4 - 12.1
Sysmex XN-1000	19	4.79	0.10	2.1	4.8	4.4 - 5.2	19	4.86	0.06	1.2	4.9	4.6 - 5.1
Sysmex XN-330	9	7.10	0.46	6.5	7.0	5.7 - 8.5	8	7.84	0.42	5.4	7.8	6.5 - 9.1
Sysmex XN-430	37	7.43	0.60	8.1	7.4	5.6 - 9.3	37	8.39	0.71	8.5	8.5	6.2 - 10.6
Sysmex XN-450	11	7.29	0.60	8.3	7.3	5.4 - 9.2	11	7.99	0.59	7.3	8.0	6.2 - 9.8
Sysmex XN-530	5	7.80	0.80	10.3	8.0	5.3 - 10.3	5	8.00	0.54	6.7	8.1	6.3 - 9.7
Sysmex XN-550	21	7.24	0.61	8.4	7.2	5.4 - 9.1	21	8.46	0.72	8.6	8.7	6.2 - 10.7
Sysmex XS-1000i	14	7.39	0.80	10.8	7.8	4.9 - 9.8	13	8.60	0.67	7.8	8.6	6.5 - 10.7

<u><i>Instrument</i></u>	Specimen MX-5					
	<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	82	7.44	0.71	9.5	7.1	5.3 - 9.6
All Sysmex XN/XS Instruments	114	7.01	1.18	16.8	7.1	3.4 - 10.6
Sysmex XN-1000	19	4.78	0.17	3.6	4.8	4.2 - 5.4
Sysmex XN-330	8	7.56	0.65	8.6	7.6	5.6 - 9.6
Sysmex XN-430	37	7.46	0.73	9.7	7.5	5.2 - 9.7
Sysmex XN-450	11	7.22	0.67	9.3	7.1	5.2 - 9.3
Sysmex XN-530	5	7.10	0.52	7.3	7.1	5.5 - 8.7
Sysmex XN-550	21	7.52	0.76	10.1	7.2	5.2 - 9.9
Sysmex XS-1000i	13	7.53	0.55	7.3	7.3	5.8 - 9.2

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

<i>Instrument</i>	Specimen MX-1						Specimen MX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	96	16.01	0.85	5.3	16.0	13.4 - 18.6	97	14.75	0.75	5.1	14.6	12.4 - 17.1
All Sysmex XN/XS Instruments	96	16.01	0.85	5.3	16.0	13.4 - 18.6	97	14.75	0.75	5.1	14.6	12.4 - 17.1
Sysmex XN-1000	18	15.51	0.57	3.7	15.6	13.8 - 17.3	18	14.33	0.38	2.7	14.3	13.1 - 15.5
Sysmex XN-330	9	16.67	0.96	5.8	17.0	13.7 - 19.6	9	14.91	0.54	3.6	14.6	13.2 - 16.6
Sysmex XN-430	35	16.16	0.96	6.0	16.1	13.2 - 19.1	36	14.92	0.80	5.4	15.0	12.5 - 17.4
Sysmex XN-450	11	16.06	0.56	3.5	16.1	14.3 - 17.8	11	14.81	0.86	5.8	14.8	12.2 - 17.4
Sysmex XN-530	5	15.95	0.71	4.5	15.7	13.8 - 18.1	5	15.15	0.88	5.8	15.4	12.5 - 17.8
Sysmex XN-550	18	15.92	0.75	4.7	15.9	13.6 - 18.2	18	14.60	0.82	5.6	14.4	12.1 - 17.1
	Specimen MX-3						Specimen MX-4					
All Method	97	13.00	0.73	5.6	12.9	10.8 - 15.2	96	14.57	0.72	4.9	14.6	12.4 - 16.8
All Sysmex XN/XS Instruments	97	13.00	0.73	5.6	12.9	10.8 - 15.2	96	14.57	0.72	4.9	14.6	12.4 - 16.8
Sysmex XN-1000	18	12.67	0.57	4.5	12.7	10.9 - 14.4	18	14.12	0.45	3.2	14.0	12.7 - 15.5
Sysmex XN-330	9	13.29	0.64	4.8	13.3	11.3 - 15.2	8	14.83	0.94	6.3	14.7	12.0 - 17.7
Sysmex XN-430	36	12.96	0.72	5.5	12.9	10.8 - 15.2	36	14.54	0.64	4.4	14.7	12.6 - 16.5
Sysmex XN-450	11	13.05	0.76	5.8	12.8	10.7 - 15.4	11	14.88	0.81	5.4	14.8	12.4 - 17.3
Sysmex XN-530	5	13.75	0.62	4.5	13.6	11.8 - 15.7	5	14.40	0.46	3.2	14.4	13.0 - 15.8
Sysmex XN-550	18	13.02	0.81	6.2	13.0	10.5 - 15.5	18	14.76	0.79	5.4	14.7	12.3 - 17.2
	Specimen MX-5											
All Method	96	13.19	0.78	5.9	13.3	10.8 - 15.6						
All Sysmex XN/XS Instruments	96	13.19	0.78	5.9	13.3	10.8 - 15.6						
Sysmex XN-1000	18	12.83	0.58	4.5	13.0	11.0 - 14.6						
Sysmex XN-330	8	13.51	0.49	3.6	13.6	12.0 - 15.0						
Sysmex XN-430	36	13.19	0.85	6.4	13.1	10.6 - 15.8						
Sysmex XN-450	11	13.25	0.83	6.3	13.4	10.7 - 15.8						
Sysmex XN-530	5	13.78	0.88	6.4	14.1	11.1 - 16.5						
Sysmex XN-550	18	13.28	0.75	5.6	13.6	11.0 - 15.6						

2022 M1

BLOOD CELL IDENTIFICATION

Specimens BC-1 through BC-6

CASE HISTORY:

A 62-year-old male presented to a walk-in clinic requesting to be tested for COVID-19. Complaints include loss of appetite, shortness of breath, and fatigue. He does not smoke or drink alcohol. He has not had any medical care since before the pandemic began and is not vaccinated for COVID-19 or influenza. Upon physical examination, the patient's abdomen was distended and his spleen was enlarged and tender. Rapid antigen tests for SARS-CoV-2 and influenza were negative.

A CBC was performed, and significant results appear below.

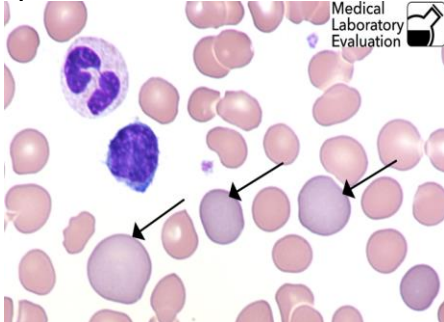
Test	Results	Reference Range
WBC	78 x 10 ⁹ /L	4.5 - 11.5 x 10 ⁹ /L
RBC	4.27 x 10 ¹² /L	4.6 - 6.0 x 10 ¹² /L
HGB	12.9 g/dL	14.0 - 18.0 g/dL
HCT	37 %	40 - 54 %
PLT	399 x 10 ⁹ /L	150 - 450 x 10 ⁹ /L
MCV	86 fL	80 - 94 fL
MCH	30 pg	27 - 32 pg
MCHC	35 g/dL	32 - 36 g/dL
RDW	15 %	11.5 - 14.5 %

This patient was diagnosed with **Chronic Myelocytic Leukemia (CML)**.

CML is a myeloproliferative disorder in which a chromosomal defect leads to the excess production and over-accumulation of white blood cells. Affected cells produce abnormal proteins that trigger uncontrolled production of myeloid progenitor cells. The myeloid cell line includes myelocytes, neutrophils, basophils, and eosinophils. The genetic translocation called "Philadelphia chromosome" is present in nearly all patients with CML. The most common symptoms at presentation are fatigue and loss of energy. These and other nonspecific symptoms reflect the increase in the number and mass of the accumulating leukemic cells. At diagnosis, most patients are in the chronic or stable phase, and many early cases are found incidentally upon routine testing. CML usually progresses through three phases: chronic, accelerated, and blastic. Eventually, most cases transform from chronic to acute leukemia, terminating in blastic transformation or "blast crisis." As the disease progresses, there is an increase in clinical symptoms, adverse changes in laboratory values, and decreased response to therapy.

BLOOD CELL IDENTIFICATION

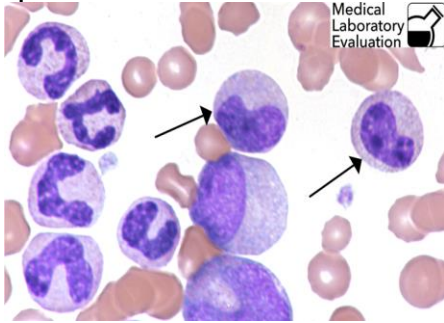
Specimen BC-1



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Polychromatophilic red cell	126	94.74%	Acceptable
Macrocyte	4	3.01%	

The arrows in this photograph point to **polychromatophilic red blood cells**. These immature red cells have a distinctive gray-blue color from the diffused residual RNA that will be absorbed later as they fully mature. They are slightly larger than the mature RBCs in the surrounding field. Presence of polychromatophilic red cells in the peripheral smear (aka, polychromasia) is an indicator of increased bone marrow activity. When the bone marrow cannot keep up with the need for new red cells, either due to hemolysis or bleeding, it compensates by releasing cells into circulation before they are fully mature. These immature cells could be identified as reticulocytes when examined with a supravital stain such as New Methylene Blue. To view another photo of polychromatophilic RBCs, see 2020 M2 Specimen BC-8.

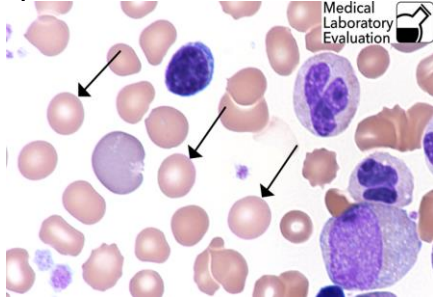
Specimen BC-2



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Metamyelocyte	70	52.63%	Acceptable
Immature/abnormal cell – referred	56	42.11%	Acceptable
Monocyte	4	3.01%	

The arrows in this photograph point to **metamyelocytes**. This is the stage of development after the myelocyte and before the band neutrophil. In contrast with the immature cell in the center of this field, the arrowed metamyelocytes have more mature features such as indented nuclei with clumped chromatin and more secondary pink/neutrophilic granules in the cytoplasm. Metamyelocytes are not typically seen in the normal peripheral blood smear.

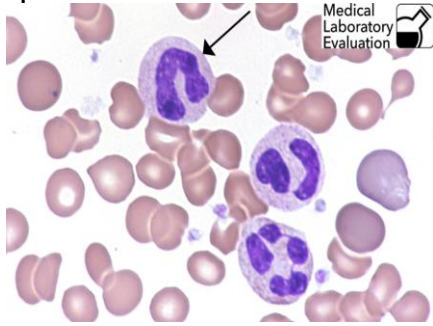
Specimen BC-3



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Erythrocyte, normal	127	95.49%	Acceptable
Microcyte	4	3.01%	

The arrows in this photograph point to **normal erythrocytes**. As a “rule of thumb”, the nucleus of a small, mature lymphocyte can be used to provide a relative measurement of the size of the surrounding red blood cells. The arrowed cells are approximately the same size as the nucleus of the normal lymphocyte nearby. The arrowed cells are uniform in color, and the area of central pallor covers about one-third of each cell. To view another photo of normal erythrocytes, see 2021 M2 BC-9.

Specimen BC-4

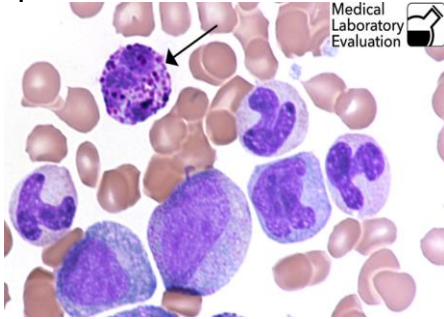


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Neutrophil – segmented or band	133	100%	Acceptable

The arrow in this photograph points to a band neutrophil. The band neutrophil is a less mature stage of development than the segmented neutrophil. The nucleus is indented greater than 50% of its width, resulting in a S, C, or U-shaped nucleus. The sides of the nuclear band are parallel, with visible chromatin in between. The cytoplasm of this cell is pink and filled with fine, smooth, violet and pink granules. To view another photo of a normal band neutrophil, see 2020 M3 Specimen BC-17.

BLOOD CELL IDENTIFICATION

Specimen BC-5

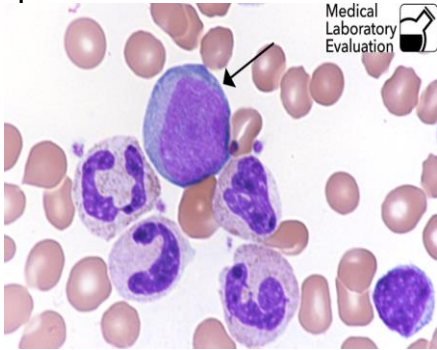


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Basophil, any stage	132	99.25%	Acceptable

The arrow in this photograph points to a **basophil**. The characteristic large, dense, blue-black granules protrude from the cytoplasmic edge, and may be so numerous that they obscure the features of the nucleus. To view another photo of a basophil, see 2021 M3 BC-13.

BLOOD CELL IDENTIFICATION

Specimen BC-6



Medical
Laboratory
Evaluation

<u>Identification</u>	<u>Labs</u>	<u>Percent</u>
Blast cell	50	37.59%
Immature/abnormal cell – referred	72	54.14%
Prolymphocyte	4	3.01%
Myelocyte cell	4	3.01%

Performance
Not graded – Educational challenge

The arrow in this ungraded educational challenge points to a **blast cell**. The blast is the earliest stage of white blood cell development, normally found only in the bone marrow. Blasts in the peripheral blood are an abnormal finding. This myeloblast has a very high nucleus to cytoplasm ratio. The scant amount of cytoplasm present is deeply basophilic (blue) and without visible granules. The nucleus is light red-purple, with fine nuclear chromatin and one or more prominent nucleoli. The fact that this cell is surrounded by various stages of granulocytes provides a clue to its lineage. To view another blast, see 2019 M2 BC-11.

References:

Besa, E. C. "Chronic Myelogenous Leukemia (CML)." Medscape. Updated: Nov 05, 2021. Accessed March 18, 2022. Available at: <https://emedicine.medscape.com/article/199425-overview>

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

Faderl, S., Kantarjian, H.M.: "Chronic Myelogenous Leukemia and Other Myeloproliferative Disorders." *ACP Medicine*. Ed. D. C. Dale. New York: WebMD, Inc., 2004. 2508-2510.

O'Connor, B. H.: *A Color Atlas and Instruction Manual of Peripheral Blood Cell Morphology*. Williams & Wilkins, Baltimore MD, 1984.

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

BLOOD BANK

ABO GROUP

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-1	Group A	5	100%	Acceptable
BB-2	Group O	5	100%	Acceptable
BB-3	Group B	5	100%	Acceptable
BB-4	Group A	5	100%	Acceptable
BB-5	Group B	5	100%	Acceptable

RH FACTOR (D TYPE)

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
BB-1	Rh Positive	14	100%	Acceptable
BB-2	Rh Positive	14	100%	Acceptable
BB-3	Rh Positive	14	100%	Acceptable
BB-4	Rh Negative	14	100%	Acceptable
BB-5	Rh Negative	14	100%	Acceptable

UNEXPECTED ANTIBODY DETECTION

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-1	Unexpected antibody detected	5	100%	Acceptable
AB-2	No unexpected antibody detected	5	100%	Acceptable
AB-3	Unexpected antibody detected	5	100%	Acceptable
AB-4	No unexpected antibody detected	5	100%	Acceptable
AB-5	No unexpected antibody detected	3	60.00%	Acceptable
	Unexpected antibody detected	2	40.00%	

Specimen AB-5 is not graded due to lack of participant consensus

BLOOD BANK

ANTIBODY IDENTIFICATION

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-1	Anti-Fy ^a	1	100%	Acceptable
AB-2	No antibody detected	1	100%	Acceptable
AB-3	Anti-K	1	100%	Acceptable
AB-4	No antibody detected	1	100%	Acceptable
AB-5	No antibody detected	1	100%	Acceptable

COMPATIBILITY TESTING

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-1	Not Compatible	5	100%	Acceptable
AB-2	Compatible	5	100%	Acceptable
AB-3	Compatible	3	60.00%	Not graded
	Not Compatible	2	40.00%	
AB-4	Compatible	5	100%	Acceptable
AB-5	Compatible	3	60.00%	Not graded
	Not Compatible	2	40.00%	

Specimens AB-3 and AB-5 are not graded due to lack of participant consensus.

PROTHROMBIN TIME (seconds)

<u>Reagent/Instrument</u>	Specimen CG-1						Specimen CG-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	21	30.07	3.25	10.8	29.9	25.5 - 34.6	21	10.46	0.56	5.3	10.4	8.8 - 12.1
Dade Innovin												
Dade Behring BFT II	5	30.00	0.85	2.8	30.0	25.5 - 34.5	5	9.50	0.01	0.0	9.5	8.0 - 11.0
Sysmex CA-500/600 series	11	29.65	0.69	2.3	29.7	25.2 - 34.2	11	10.45	0.22	2.1	10.4	8.8 - 12.1
All Coagulation Instruments	18	29.71	0.68	2.3	29.7	25.2 - 34.2	18	10.30	0.41	3.9	10.4	8.7 - 11.9
	Specimen CG-3						Specimen CG-4					
All Method	21	10.96	0.89	8.1	10.9	9.3 - 12.7	21	18.46	0.89	4.8	18.4	15.6 - 21.3
Dade Innovin												
Dade Behring BFT II	5	9.95	0.07	0.7	10.0	8.4 - 11.5	5	18.55	0.92	5.0	18.6	15.7 - 21.4
Sysmex CA-500/600 series	11	12.25	3.93	32.1	11.0	10.4 - 14.1	11	18.44	0.37	2.0	18.4	15.6 - 21.3
All Coagulation Instruments	18	10.91	0.95	8.7	11.0	9.2 - 12.6	18	18.45	0.44	2.4	18.4	15.6 - 21.3
	Specimen CG-5											
All Method	21	13.50	0.89	6.6	13.2	11.4 - 15.6						
Dade Innovin												
Dade Behring BFT II	5	12.70	0.14	1.1	12.7	10.7 - 14.7						
Sysmex CA-500/600 series	11	13.21	0.29	2.2	13.0	11.2 - 15.2						
All Coagulation Instruments	18	13.13	0.33	2.5	13.0	11.1 - 15.2						

PROTHROMBIN TIME–INTERNATIONAL NORMALIZED RATIO (INR)

<u>Reagent/Instrument</u>	Specimen CG-1						Specimen CG-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	21	3.03	0.26	8.7	3.0	2.5 - 3.5	21	0.98	0.05	5.5	1.0	0.8 - 1.2
Dade Innovin												
Dade Behring BFT II	5	2.80	0.14	5.1	2.8	2.3 - 3.3	5	1.00	0.01	0.0	1.0	0.8 - 1.2
Sysmex CA-500/600 series	11	2.98	0.13	4.5	3.0	2.5 - 3.5	11	0.99	0.05	5.4	1.0	0.8 - 1.2
All Coagulation Instruments	18	2.95	0.15	4.9	2.9	2.5 - 3.4	18	0.99	0.05	5.0	1.0	0.8 - 1.2
	Specimen CG-3						Specimen CG-4					
All Method	21	1.06	0.07	7.0	1.1	0.9 - 1.3	21	1.84	0.12	6.6	1.8	1.5 - 2.2
Dade Innovin												
Dade Behring BFT II	5	1.10	0.01	0.0	1.1	0.9 - 1.3	5	1.80	0.14	7.9	1.8	1.5 - 2.1
Sysmex CA-500/600 series	11	1.20	0.40	33.5	1.1	1.0 - 1.4	11	1.82	0.06	3.3	1.8	1.5 - 2.1
All Coagulation Instruments	18	1.08	0.06	5.3	1.1	0.9 - 1.3	18	1.82	0.07	3.8	1.8	1.5 - 2.1
	Specimen CG-5											
All Method	21	1.33	0.06	4.4	1.3	1.1 - 1.6						
Dade Innovin												
Dade Behring BFT II	5	1.35	0.07	5.2	1.4	1.1 - 1.6						
Sysmex CA-500/600 series	11	1.30	0.04	3.4	1.3	1.1 - 1.5						
All Coagulation Instruments	18	1.31	0.05	3.8	1.3	1.1 - 1.6						

ACTIVATED PARTIAL THROMBOPLASTIN (seconds)

<u>Reagent/Instrument</u>	Specimen CG-1						Specimen CG-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	55.4	9.8	17.7	51	47 - 64	13	26.7	2.5	9.3	26	22 - 31
Dade Actin FSL Sysmex CA-500/600 series	5	50.2	1.9	3.8	51	42 - 58	5	25.4	1.1	4.5	25	21 - 30
	Specimen CG-3						Specimen CG-4					
All Method	13	28.3	7.1	25.1	25	24 - 33	13	35.3	5.6	15.9	33	29 - 41
Dade Actin FSL Sysmex CA-500/600 series	5	25.0	0.7	2.8	25	21 - 29	5	32.4	0.9	2.8	33	27 - 38
	Specimen CG-5											
All Method	13	30.4	3.9	12.8	28	25 - 35						
Dade Actin FSL Sysmex CA-500/600 series	5	28.6	1.9	6.8	28	24 - 33						

Fibrinogen (mg/dL)

One participant reported Fibrinogen. The vendor assay values on a Sysmex CA-540 for specimens CG-1 through CG-5 are: 208 mg/dL, 201 mg/dL, 394 mg/dL, 195 mg/dL, and 132 mg/dL, respectively.

COAGUCHEK XS PLUS PROTHROMBIN TIME (seconds)

<u>Instrument</u>	Specimen XS-1						Specimen XS-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	20	14.89	0.25	1.7	14.9	12.6 - 17.2	20	32.31	1.30	4.0	32.4	27.4 - 37.2
All Roche CoaguChek XS Plus Instruments	20	14.89	0.25	1.7	14.9	12.6 - 17.2	20	32.31	1.30	4.0	32.4	27.4 - 37.2
Roche CoaguChek XS Plus - Waived	10	14.91	0.33	2.2	14.8	12.6 - 17.2	10	31.94	1.40	4.4	31.9	27.1 - 36.8
Roche CoaguChek XS Plus	8	14.86	0.11	0.8	14.9	12.6 - 17.1	8	32.82	1.06	3.2	32.9	27.8 - 37.8
<u>Instrument</u>	Specimen XS-3						Specimen XS-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	10	24.15	0.07	0.3	24.2	20.5 - 27.8	10	15.10	0.14	0.9	15.1	12.8 - 17.4
All Roche CoaguChek XS Plus Instruments	5	24.15	0.07	0.3	24.2	20.5 - 27.8	5	15.10	0.14	0.9	15.1	12.8 - 17.4
Roche CoaguChek XS Plus	5	24.15	0.07	0.3	24.2	20.5 - 27.8	5	15.10	0.14	0.9	15.1	12.8 - 17.4
<u>Instrument</u>	Specimen XS-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	31.75	0.07	0.2	31.8	26.9 - 36.6						
All Roche CoaguChek XS Plus Instruments	5	31.75	0.07	0.2	31.8	26.9 - 36.6						
Roche CoaguChek XS Plus	5	31.75	0.07	0.2	31.8	26.9 - 36.6						

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

<u>Instrument</u>	Specimen XS-1						Specimen XS-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	29	1.24	0.05	4.0	1.2	1.0 - 1.5	29	2.69	0.11	4.2	2.7	2.2 - 3.1
All Roche CoaguChek XS Plus Instruments	29	1.24	0.05	4.0	1.2	1.0 - 1.5	29	2.69	0.11	4.2	2.7	2.2 - 3.1
Roche CoaguChek XS Plus - Waived	22	1.25	0.05	4.1	1.2	1.0 - 1.5	22	2.68	0.11	4.0	2.7	2.2 - 3.1
Roche CoaguChek XS Plus	7	1.21	0.04	3.1	1.2	1.0 - 1.4	7	2.71	0.13	5.0	2.7	2.3 - 3.2
<u>Instrument</u>	Specimen XS-3						Specimen XS-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	10	2.00	0.08	4.1	2.0	1.7 - 2.3	10	1.30	0.01	0.0	1.3	1.1 - 1.5
All Roche CoaguChek XS Plus Instruments	10	2.00	0.08	4.1	2.0	1.7 - 2.3	10	1.30	0.01	0.0	1.3	1.1 - 1.5
<u>Instrument</u>	Specimen XS-5											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	10	2.65	0.10	3.8	2.6	2.2 - 3.1						
All Roche CoaguChek XS Plus Instruments	10	2.65	0.10	3.8	2.6	2.2 - 3.1						

COAGUCHECK XS - INTERNATIONAL NORMALIZED RATIO (INR)

<u>Instrument</u>	Specimen INX-1						Specimen INX-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	89	1.28	0.04	3.5	1.3	1.0 - 1.5	88	2.93	0.11	3.6	3.0	2.4 - 3.4
Roche CoaguChek XS	89	1.28	0.04	3.5	1.3	1.0 - 1.5	88	2.93	0.11	3.6	3.0	2.4 - 3.4

i-Stat PROTHROMBIN TIME (seconds)

<u>Instrument</u>	Specimen PTI-1						Specimen PTI-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	8	27.47	0.12	0.4	27.4	23.3 - 31.6	8	15.90	1.41	8.9	15.7	13.5 - 18.3
i-Stat Prothrombin Time	8	27.47	0.12	0.4	27.4	23.3 - 31.6	8	15.90	1.41	8.9	15.7	13.5 - 18.3

<u>Instrument</u>	Specimen PTI-3						Specimen PTI-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	8	15.57	1.10	7.1	15.5	13.2 - 18.0	8	14.97	0.75	5.0	15.0	12.7 - 17.3
i-Stat Prothrombin Time	8	15.57	1.10	7.1	15.5	13.2 - 18.0	8	14.97	0.75	5.0	15.0	12.7 - 17.3

<u>Instrument</u>	Specimen PTI-5					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	8	27.40	2.51	9.1	27.6	23.2 - 31.6
i-Stat Prothrombin Time	8	27.40	2.51	9.1	27.6	23.2 - 31.6

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

<u>Instrument</u>	Specimen PTI-1						Specimen PTI-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	8	2.40	0.01	0.0	2.4	2.0 - 2.8	8	1.33	0.15	11.5	1.3	1.1 - 1.6
i-Stat Prothrombin Time	8	2.40	0.01	0.0	2.4	2.0 - 2.8	8	1.33	0.15	11.5	1.3	1.1 - 1.6

<u>Instrument</u>	Specimen PTI-3						Specimen PTI-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	8	1.30	0.10	7.7	1.3	1.1 - 1.5	8	1.27	0.06	4.6	1.3	1.0 - 1.5
i-Stat Prothrombin Time	8	1.30	0.10	7.7	1.3	1.1 - 1.5	8	1.27	0.06	4.6	1.3	1.0 - 1.5

<u>Instrument</u>	Specimen PTI-5					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	8	2.37	0.25	10.6	2.4	2.0 - 2.8
i-Stat Prothrombin Time	8	2.37	0.25	10.6	2.4	2.0 - 2.8

FLUID CELL COUNT – WHITE BLOOD CELL COUNT (µL)

<u>Instrument</u>	Specimen BF-1						Specimen BF-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	3	-	-	-	300	Not graded	3	-	-	-	8	Not graded

FLUID CELL COUNT – RED BLOOD CELL COUNT (µL)

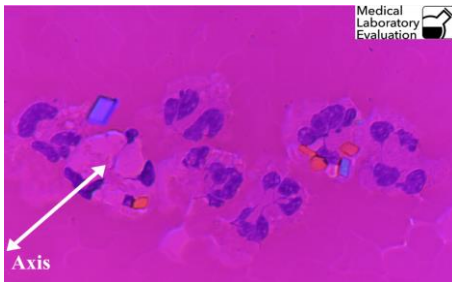
<u>Instrument</u>	Specimen BF-1						Specimen BF-2					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	3	-	-	-	1200	Not graded	3	-	-	-	0	Not graded

**2022 M1
FLUID CRYSTAL IDENTIFICATION
Specimens FC-1 and FC-2**

Microscopic examination of synovial fluid for crystals is an important diagnostic test in the evaluation of arthritis. Some crystals can be identified by their unique shape or morphology alone. Others need specialized techniques for identification. Using compensated polarized light helps us to identify crystals based on their optical differences. The compensator 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 when a crystal is 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 light to pass through unchanged, or impedes and causes the light to take a different path.

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, the way anisotropic crystals interact with light is dependent on the position of the crystal. Anisotropic crystals have an internal structure that will cause a ray of light to split into two rays, each traveling in a different direction, resulting in different colors. This property of splitting light is called **birefringence** or double refraction. A light beam hitting the anisotropic crystal from one direction or angle will react differently than a light beam hitting the same crystal at a different angle.

Specimen FC-1

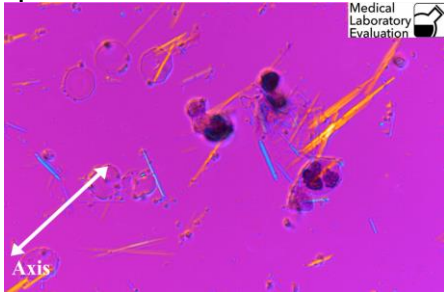


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
CPPD crystals	5	100%	Acceptable

The objects in this photograph are **calcium pyrophosphate dihydrate (CPPD) crystals**. Calcium pyrophosphate crystals cause calcium pyrophosphate disease, a condition commonly called pseudogout. CPPD crystals are usually rhomboidal (seen here) or rod-shaped and occasionally needle shaped. These crystals demonstrate **positive birefringence**. The two blue crystals located at 3 and 10 o'clock are aligned with/parallel to the axis. The pink-red-orange crystals are perpendicular to the compensator filter/axis. The presence of several polymorphonuclear white blood cells in this fluid specimen is a sign of acute inflammation. To view another photo of CPPD crystals, see 2020 M3 Specimen FC-6.

2021 M3
FLUID CRYSTAL IDENTIFICATION

Specimen FC-2



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

The objects in this photograph are **monosodium urate (MSU) crystals**. MSU crystals are usually thin and needle-like with pointed ends. They can be either intracellular or extracellular. MSU crystals are associated with gout, which is a common crystal-induced inflammatory arthritis. The crystals form in joints and tissues when the uric acid level is elevated. They cause inflammation and soft tissue damage, resulting in painful swelling, usually in one joint. The base of the big toe is often affected. Gout is caused by either decreased excretion of uric acid into the urine, or increased production of uric acid. The many factors that contribute to gout include alcohol use, purine-rich diets, obesity and the metabolic syndrome, and dehydration or use of diuretic agents. Since there are other needle-shaped crystals, examination with a red plate compensator can help with identification. MSU crystals are **negatively birefringent**, meaning the crystals lying parallel (aligned with) the axis are yellow, and the crystals lying perpendicular to the axis are blue. To view another photo of MSU, see 2021 M1 Specimen FC-2.

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MICROALBUMIN, DIPSTICK

Specimen UM-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/L</u>	<u>20 mg/L</u>	<u>30 mg/L</u>	<u>50 mg/L</u>	<u>80 mg/L</u>	<u>100 mg/L</u>	<u>150 mg/L</u>	<u>+ (4 - 8 mg/dL)</u>	<u>++ (>8 mg/dL)</u>
ALL METHODS	23	-	1	-	1	1	19	-	1	-	-
Consult Diagnostics Reagent Strips	2	-	-	-	-	-	2	-	-	-	-
McKesson Reagent Strips	1	-	-	-	1	-	-	-	-	-	-
Other Dipstick Method	1	-	1	-	-	-	-	-	-	-	-
Roche Micral - 1 minute	1	-	-	-	-	1	-	-	-	-	-
Siemens Clinitek Microalbumin	17	-	-	-	-	-	16	-	1	-	-
UriScan Reagent Strips	1	-	-	-	-	-	1	-	-	-	-

CREATININE, DIPSTICK

Specimen UM-1

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/dL</u>	<u>30 mg/dL</u>	<u>50 mg/dL</u>	<u>100 mg/dL</u>	<u>200 mg/dL</u>	<u>300 mg/dL</u>
ALL METHODS	24	-	-	-	7	11	4	2
Consult Diagnostics Reagent Strips	2	-	-	-	2	-	-	-
McKesson Reagent Strips	1	-	-	-	1	-	-	-
Other Dipstick Method	1	-	-	-	1	-	-	-
Siemens Clinitek Microalbumin	17	-	-	-	3	8	4	2
Siemens Multistix Pro	2	-	-	-	-	2	-	-
UriScan Reagent Strips	1	-	-	-	-	1	-	-

MICROALBUMIN, QUANTITATIVE (mg/L)

<u>Method</u>	Specimen UM-1					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	36	121.35	6.51	5.4	121.1	84.9 - 157.8
All Alere Afinion Analyzers	6	122.45	3.85	3.1	121.7	85.7 - 159.2
Alere Afinion AS100	5	122.78	4.20	3.4	122.5	85.9 - 159.7
Beckman AU	11	119.19	3.45	2.9	120.0	83.4 - 155.0
Siemens Dimension	9	123.28	10.16	8.2	124.0	86.2 - 160.3

CREATININE, URINE (mg/dL)

<u>Method</u>	Specimen UM-1					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	33	70.26	5.75	8.2	70.5	58.3 - 82.3
All Alere Afinion Analyzers	6	69.70	4.31	6.2	68.7	57.8 - 81.6
Alere Afinion AS100	5	69.54	4.80	6.9	68.4	57.7 - 81.4
Beckman AU	9	64.02	2.02	3.2	64.0	53.1 - 75.0
Siemens Dimension	7	71.21	2.10	2.9	71.0	59.1 - 83.4

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-1	Yeast/fungal elements absent	38	52.05%	Acceptable
	Yeast/fungal elements present	35	47.95%	

Organism present in specimen K-1: *Fusobacterium nucleatum*. This challenge was graded by referee consensus.

Fusobacterium nucleatum are anaerobic non-spore forming pleomorphic bacteria. They are gram-negative slender bacilli that can be spindle-shaped with sharply pointed ends or rods with parallel sides and rounded ends. On KOH, they can be confused with fungal elements due to their slender fibrous appearance.

K-2	Yeast/fungal elements absent	29	39.73%	Acceptable
	Yeast/fungal elements present	44	60.27%	

Organism present in specimen K-2: *Nocardia brasiliensis*. This challenge was graded by referee consensus.

Chronic skin infections called mycetomas can be either fungal (Eumycetoma) or bacterial (Actinomycetoma) in nature. Bacterial mycetomas are generally caused by organisms in the Actinomycetes group such as *Nocardia brasiliensis*. On a KOH preparation *N. brasiliensis* appear as filamentous branches and can easily be confused with fungal hyphae. Key factors in differentiating *N. brasiliensis* from fungi are hyphae/filament size and presence or absence of septae. Fungi typically have broad, branching hyphae with septa, while *N. brasiliensis* are stringy with much smaller, thin aseptate filaments.

WAIVED HEMATOLOGY–HEMOGLOBIN (g/dL)

<u><i>Instrument</i></u>	<u>Specimen HD-1</u>						<u>Specimen HD-2</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>	<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	77	6.40	1.12	17.4	6.0	4.1 - 8.7	63	17.48	0.91	5.2	17.7	15.6 - 19.4
All HemoCue 301/801	10	9.19	0.26	2.9	9.3	8.5 - 9.9	1	-	-	-	21.5	19.9 - 23.1
All Stanbio Methods	11	6.04	0.22	3.7	6.1	5.5 - 6.5	11	17.45	1.22	7.0	18.1	15.0 - 19.9
Alere (Stanbio) HemoPoint H2	11	6.04	0.22	3.7	6.1	5.5 - 6.5	11	17.45	1.22	7.0	18.1	15.0 - 19.9
HemoCue 201/+	54	5.99	0.14	2.3	6.0	5.5 - 6.5	51	17.56	0.70	4.0	17.6	16.1 - 19.0
HemoCue 801	9	9.26	0.17	1.9	9.3	8.6 - 10.0	1	-	-	-	21.5	Not graded

WAIVED HEMATOLOGY–HEMATOCRIT (percent)

<u><i>Instrument</i></u>	<u>Specimen HD-1</u>						<u>Specimen HD-2</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>	<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	17.72	1.39	7.8	18.0	14.9 - 20.5	10	52.03	1.44	2.8	52.2	48.9 - 55.2

URINALYSIS DIPSTICK–SPECIFIC GRAVITY

Specimen UA-1

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	571	1.0175	0.0047	0.5	1.020	1.007 - 1.028
All Roche Methods	9	1.0122	0.0027	0.3	1.010	1.002 - 1.023
All Siemens Methods	435	1.0190	0.0037	0.4	1.020	1.009 - 1.030
Consult Diagnostics Urine Analyzer	7	1.0136	0.0024	0.2	1.015	1.003 - 1.024
Diagnostic Test Group Clarity Urocheck 120	9	1.0139	0.0022	0.2	1.015	1.003 - 1.024
Henry Schein Urispec / Urispec Plus	19	1.0139	0.0040	0.4	1.015	1.003 - 1.024
McKesson 120 Urine Analyzer	26	1.0140	0.0020	0.2	1.015	1.004 - 1.025
McKesson Reagent Strips	7	1.0129	0.0057	0.6	1.010	1.002 - 1.023
Roche Chemstrips	21	1.0083	0.0033	0.3	1.010	0.998 - 1.019
Roche Urisys	7	1.0129	0.0027	0.3	1.015	1.002 - 1.023
Siemens Clinitek Advantus	11	1.0191	0.0021	0.2	1.020	1.009 - 1.030
Siemens Clinitek Status / Status+	307	1.0200	0.0001	0.0	1.020	1.010 - 1.030
Siemens Multistix Pro	15	1.0167	0.0049	0.5	1.020	1.006 - 1.027
Siemens Reagent Strips	72	1.0119	0.0047	0.5	1.010	1.001 - 1.022

URINALYSIS DIPSTICK-pH

Specimen UA-1

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	582	-	1	-	-	1	1	2	16	143	304	113	1
BTNX Rapid Response Test Strips	1	-	-	-	-	-	-	-	-	1	-	-	-
Consult Diagnostics Reagent Strips	3	-	-	-	-	-	-	-	1	2	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	-	-	-	-	-	6	1	-	-
CTMI CT-120 Urine Analyzer	3	-	-	-	-	1	-	-	-	1	1	-	-
Diagnostic Test Group Clarity Urocheck	3	-	-	-	-	-	-	-	-	2	1	-	-
Diagnostic Test Group Clarity Urocheck 120	10	-	-	-	-	-	-	-	-	6	4	-	-
Germaine Labs AimStrip Urine Analyzer	2	-	-	-	-	-	-	-	-	2	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	1	-	-
Henry Schein Urispec / Urispec Plus	20	-	-	-	-	-	-	-	11	-	9	-	-
McKesson 120 Urine Analyzer	26	-	-	-	-	-	-	-	-	14	12	-	-
McKesson Reagent Strips	8	-	-	-	-	-	-	1	-	3	3	-	1
Medline 120 Urine Analyzer	3	-	-	-	-	-	-	-	-	2	1	-	-
Medline Urinalysis Reagent Strips	4	-	-	-	-	-	-	-	1	1	2	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	-	-	1	-	-
Other Dipstick Method	3	-	-	-	-	-	-	-	-	1	2	-	-
Roche Chemstrips	24	-	-	-	-	-	-	-	2	1	21	-	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche SuperUA/ChemstripUA	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche Urisys	7	-	-	-	-	-	-	-	1	-	6	-	-
Siemens Clinitek 10 / 100	1	-	-	-	-	-	-	-	-	-	1	-	-
Siemens Clinitek 50	3	-	-	-	-	-	-	-	-	2	1	-	-
Siemens Clinitek 500	1	-	-	-	-	-	-	-	-	-	1	-	-
Siemens Clinitek Advantus	12	-	-	-	-	-	-	-	-	1	11	-	-
Siemens Clinitek Status / Status+	342	-	1	-	-	-	-	-	-	85	148	108	-
Siemens Multistix Pro	14	-	-	-	-	-	-	-	-	3	11	-	-
Siemens Reagent Strips	77	-	-	-	-	-	1	1	-	7	63	5	-
Teco Diagnostics URS	1	-	-	-	-	-	-	-	-	1	-	-	-
Uriscan Optima	1	-	-	-	-	-	-	-	-	1	-	-	-
UriScan Reagent Strips	2	-	-	-	-	-	-	-	-	1	1	-	-

URINALYSIS DIPSTICK–PROTEIN QUALITATIVE

Specimen UA-1

<u>Method</u>	<i>Participant Results</i>												
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>10 - 20 mg/dL</u>	<u>30 - 70 mg/dL</u>	<u>75 mg/dL</u>	<u>100 - 200 mg/dL</u>	<u>≥300 - 600 mg/dL</u>	<u>>600 or ≥1000 mg/dL</u>
ALL METHODS	588	1	-	5	107	114	3	-	3	-	180	174	1
BTNX Rapid Response Test Strips	1	-	-	-	1	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	-	-	-	3	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	2	4	-	-	-	-	-	-	1
CTMI CT-120 Urine Analyzer	3	1	-	-	-	2	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	3	-	-	-	2	1	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	-	-	-	4	5	-	-	-	-	-	1	-
Germaine Labs AimStrip Urine Analyzer	2	-	-	-	1	1	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	1	-	-
Henry Schein Urispec / Urispec Plus	19	-	-	-	-	-	-	-	1	-	18	-	-
Immunostics Detector Urine Strips	1	-	-	-	-	-	1	-	-	-	-	-	-
McKesson 120 Urine Analyzer	25	-	-	-	13	10	-	-	-	-	1	1	-
McKesson Reagent Strips	8	-	-	-	4	3	1	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	-	-	-	2	2	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	4	-	-	-	1	1	-	-	-	-	2	-	-
NDC Pro Advantage	1	-	-	-	-	1	-	-	-	-	-	-	-
Other Dipstick Method	3	-	-	-	1	1	-	-	-	-	1	-	-
PSS Select Reagent Strips	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche Chemstrips	28	-	-	1	14	6	-	-	-	-	6	1	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche SuperUA/ChemstripUA	1	-	-	-	-	-	-	-	1	-	-	-	-
Roche Urisys	7	-	-	-	-	-	-	-	1	-	6	-	-
Siemens Clinitek 10 / 100	1	-	-	-	-	-	-	-	-	-	1	-	-
Siemens Clinitek 50	3	-	-	-	-	-	-	-	-	-	1	2	-
Siemens Clinitek 500	1	-	-	-	-	-	-	-	-	-	1	-	-
Siemens Clinitek Advantus	12	-	-	-	7	-	-	-	-	-	5	-	-
Siemens Clinitek Atlas	2	-	-	-	-	-	-	-	-	-	1	1	-
Siemens Clinitek Status / Status+	338	-	-	-	26	49	-	-	-	-	106	157	-
Siemens Multistix Pro	13	-	-	-	1	5	1	-	-	-	3	3	-
Siemens Reagent Strips	80	-	-	2	25	20	-	-	-	-	25	8	-
Siemens Uristix	1	-	-	-	-	1	-	-	-	-	-	-	-
Teco Diagnostics URS	1	-	-	-	-	1	-	-	-	-	-	-	-
Uriscan Optima	1	-	-	1	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	2	-	-	1	-	1	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–GLUCOSE

Specimen UA-1

<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	589	584	-	1	1	2	-	1	-	-	-	
BTNX Rapid Response Test Strips	1	1	-	-	-	-	-	-	-	-	-	
Consult Diagnostics Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	
Consult Diagnostics Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-	
CTMI CT-120 Urine Analyzer	3	2	-	1	-	-	-	-	-	-	-	
Diagnostic Test Group Clarity Urocheck	4	4	-	-	-	-	-	-	-	-	-	
Diagnostic Test Group Clarity Urocheck 120	9	9	-	-	-	-	-	-	-	-	-	
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	24	24	-	-	-	-	-	-	-	-	-	
McKesson Reagent Strips	8	8	-	-	-	-	-	-	-	-	-	
Medline 120 Urine Analyzer	5	5	-	-	-	-	-	-	-	-	-	
Medline Urinalysis Reagent Strips	4	4	-	-	-	-	-	-	-	-	-	
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-	
Other Dipstick Method	3	3	-	-	-	-	-	-	-	-	-	
Roche Chemstrips	27	27	-	-	-	-	-	-	-	-	-	
Roche Criterion Analyzer	1	1	-	-	-	-	-	-	-	-	-	
Roche SuperUA/ChemstripUA	1	1	-	-	-	-	-	-	-	-	-	
Roche Urisys	7	7	-	-	-	-	-	-	-	-	-	
Siemens Clinitek 10 / 100	1	1	-	-	-	-	-	-	-	-	-	
Siemens Clinitek 50	3	3	-	-	-	-	-	-	-	-	-	
Siemens Clinitek 500	1	1	-	-	-	-	-	-	-	-	-	
Siemens Clinitek Advantus	12	12	-	-	-	-	-	-	-	-	-	
Siemens Clinitek Status / Status+	343	341	-	-	1	-	-	1	-	-	-	
Siemens Multistix Pro	13	12	-	-	-	1	-	-	-	-	-	
Siemens Reagent Strips	79	78	-	-	-	1	-	-	-	-	-	
Siemens Uristix	1	1	-	-	-	-	-	-	-	-	-	
Teco Diagnostics URS	1	1	-	-	-	-	-	-	-	-	-	
Uriscan Optima	1	1	-	-	-	-	-	-	-	-	-	
UriScan Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	

URINALYSIS DIPSTICK–KETONES

Specimen UA-1

<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	581	2	-	-	-	65	-	2	93	81	-	-	4	38	296
Consult Diagnostics Reagent Strips	3	-	-	-	-	-	-	-	3	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	-	-	-	-	6	-	-	-	-	-	1
CTMI CT-120 Urine Analyzer	3	-	-	-	-	-	-	1	1	-	-	-	1	-	
Diagnostic Test Group Clarity Urocheck	4	-	-	-	-	-	-	-	4	-	-	-	-	-	
Diagnostic Test Group Clarity Urocheck 120	9	-	-	-	-	-	-	-	9	-	-	-	-	-	
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	24	-	-	-	-	-	-	-	22	-	-	-	2	-	
McKesson Reagent Strips	8	-	-	-	-	1	-	-	2	5	-	-	-	-	
Medline 120 Urine Analyzer	5	1	-	-	-	-	-	-	4	-	-	-	-	-	
Medline Urinalysis Reagent Strips	4	-	-	-	-	-	-	-	1	2	-	-	-	1	
NDC Pro Advantage	1	-	-	-	-	-	-	-	1	-	-	-	-	-	
Other Dipstick Method	4	-	-	-	-	2	-	-	-	1	-	-	-	1	
Roche Chemstrips	24	-	-	-	-	9	-	-	15	-	-	-	-	-	
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	-	-	-	1	
Roche SuperUA/ChemstripUA	1	-	-	-	-	1	-	-	-	-	-	-	-	-	
Roche Urisys	7	-	-	-	-	-	-	-	-	-	-	1	-	6	
Siemens Clinitek 10 / 100	1	-	-	-	-	-	-	-	-	-	-	-	1	-	
Siemens Clinitek 50	3	-	-	-	-	-	-	-	-	-	-	-	2	1	
Siemens Clinitek 500	1	-	-	-	-	-	-	-	-	-	-	-	1	-	
Siemens Clinitek Advantus	12	-	-	-	-	-	-	-	7	-	-	-	5	-	
Siemens Clinitek Status / Status+	343	-	-	-	-	1	-	1	11	64	-	-	3	24	239
Siemens Multistix Pro	12	-	-	-	-	3	-	-	2	1	-	-	-	1	5
Siemens Reagent Strips	78	1	-	-	-	47	-	-	2	7	-	-	-	1	20
Uriscan Optima	1	-	-	-	-	-	-	-	1	-	-	-	-	-	
UriScan Reagent Strips	1	-	-	-	-	1	-	-	-	-	-	-	-	-	

URINALYSIS DIPSTICK–BILIRUBIN

Specimen UA-1

<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>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</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>
ALL METHODS	571	12	3	-	122	180	33	102	80	14	6	4	15	-	-
BTNX Rapid Response Test Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	1	-	-	-	-	-	2	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	1	-	-	-	-	-	6	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	3	1	-	-	-	-	-	2	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	4	-	-	-	-	-	-	3	1	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	9	-	-	-	-	-	-	6	3	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Henry Schein Urispec / Urispec Plus	20	-	-	-	1	-	-	-	-	-	5	-	14	-	-
Immunostics Detector Urine Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	25	-	-	-	-	-	-	23	1	-	-	1	-	-	-
McKesson Reagent Strips	8	-	-	-	-	-	1	7	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	-	-	-	-	-	-	2	2	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	3	1	1	-	-	-	-	1	-	-	-	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Other Dipstick Method	2	-	-	-	-	-	-	1	-	1	-	-	-	-	-
Roche Chemstrips	24	2	-	-	-	1	-	-	17	4	-	-	-	-	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Roche SuperUA/ChemstripUA	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Roche Urisys	7	-	-	-	-	-	-	5	-	-	-	2	-	-	-
Siemens Clinitek 10 / 100	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	3	-	-	-	-	3	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	11	-	-	-	1	4	-	-	6	-	-	-	-	-	-
Siemens Clinitek Status / Status+	336	2	1	-	105	153	2	36	35	2	-	-	-	-	-
Siemens Ictotest	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Siemens Multistix Pro	13	-	-	-	3	1	5	1	1	1	1	-	-	-	-
Siemens Reagent Strips	76	2	1	-	12	16	24	3	12	6	-	-	-	-	-
Uriscan Optima	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
UriScan Reagent Strips	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK-UROBILINOGEN

Specimen UA-1

<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	566	89	37	103	316	21
BTNX Rapid Response Test Strips	1	-	-	-	1	-
Consult Diagnostics Reagent Strips	3	3	-	-	-	-
Consult Diagnostics Urine Analyzer	7	6	1	-	-	-
CTMI CT-120 Urine Analyzer	3	2	1	-	-	-
Diagnostic Test Group Clarity Urocheck	3	3	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	9	1	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	2	-	-	-	-
Henry Schein One Step Plus	1	1	-	-	-	-
Henry Schein Urispec / Urispec Plus	18	17	-	1	-	-
Immunostics Detector Urine Strips	1	1	-	-	-	-
McKesson 120 Urine Analyzer	25	20	4	-	1	-
McKesson Reagent Strips	8	2	2	4	-	-
Medline 120 Urine Analyzer	4	2	-	2	-	-
Medline Urinalysis Reagent Strips	3	1	-	2	-	-
NDC Pro Advantage	1	1	-	-	-	-
Other Dipstick Method	2	-	1	1	-	-
Roche Chemstrips	24	9	9	1	5	-
Roche Criterion Analyzer	1	-	1	-	-	-
Roche SuperUA/ChemstripUA	1	-	1	-	-	-
Roche Urisys	7	2	5	-	-	-
Siemens Clinitek 10 / 100	1	-	-	1	-	-
Siemens Clinitek 50	3	1	-	1	-	1
Siemens Clinitek 500	1	-	1	-	-	-
Siemens Clinitek Advantus	11	-	1	9	1	-
Siemens Clinitek Status / Status+	336	1	1	38	286	10
Siemens Multistix Pro	13	1	1	3	7	1
Siemens Reagent Strips	74	4	7	40	14	9
Uriscan Optima	1	-	-	-	1	-
UriScan Reagent Strips	1	1	-	-	-	-

URINALYSIS DIPSTICK–BLOOD/HEMOGLOBIN

Specimen UA-1

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>±0.03</u> <u>mg/dL</u>	<u>0.06</u> <u>-</u> <u>0.10</u> <u>mg/</u> <u>dL</u>	<u>0.2 -</u> <u>0.5</u> <u>mg/</u> <u>dL</u>	<u>≥ 1.0</u> <u>mg/</u> <u>dL</u>
ALL METHODS	586	2	1	2	156	189	1	48	129	1	-	1	-	54	-	-	-	2
BTNX Rapid Response Test Strips	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	-	-	-	-	6	-	-	-	-	1	-	-	-	-
CTMI CT-120 Urine Analyzer	3	1	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-
Diagnostic Test Group Clarity Urocheck	4	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	9	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Henry Schein Urispec / Urispec Plus	20	-	-	-	1	-	-	-	-	-	-	-	-	19	-	-	-	-
Immunostics Detector Urine Strips	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	24	-	-	-	-	-	-	1	21	-	-	1	-	1	-	-	-	-
McKesson Reagent Strips	8	-	-	-	-	2	-	-	6	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	5	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	4	-	-	-	-	-	-	-	3	-	-	-	-	1	-	-	-	-
NDC Pro Advantage	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Other Dipstick Method	3	-	-	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-
Roche Chemstrips	27	-	-	-	-	3	-	-	3	-	-	-	-	21	-	-	-	-
Roche Criterion Analyzer	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Roche SuperUA/ChemstripUA	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Roche Urisys	7	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-
Siemens Clinitek 10 / 100	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	3	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	12	-	-	-	1	4	-	2	5	-	-	-	-	-	-	-	-	-
Siemens Clinitek Atlas	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	341	-	1	1	144	119	1	36	37	-	-	-	-	-	-	-	-	2
Siemens Multistix Pro	13	-	-	-	2	9	-	1	1	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	79	1	-	1	7	44	-	7	19	-	-	-	-	-	-	-	-	-
Uriscan Optima	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	2	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–LEUKOCYTE ESTERASE

Specimen UA-1

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	582	578	-	1	-	-	2	-	-	-	1	-	-
BTNX Rapid Response Test Strips	1	1	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	3	2	-	-	-	-	1	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	3	3	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	10	-	-	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	1	-	-	-	-	-	-	-	-	-	-	-
Henry Schein Uriscan / Uriscan Plus	20	20	-	-	-	-	-	-	-	-	-	-	-
Immunostics Detector Urine Strips	1	1	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	24	22	-	-	-	-	1	-	-	-	1	-	-
McKesson Reagent Strips	8	8	-	-	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	4	-	-	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	4	4	-	-	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	1	1	-	-	-	-	-	-	-	-	-	-	-
Other Dipstick Method	3	3	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrips	26	26	-	-	-	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche SuperUA/ChemstripUA	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche Uriscan	7	7	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	1	1	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	3	3	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	1	1	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	12	12	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	341	341	-	-	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	13	13	-	-	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	77	76	-	1	-	-	-	-	-	-	-	-	-
Siemens Uriscan	1	1	-	-	-	-	-	-	-	-	-	-	-
Uriscan Optima	1	1	-	-	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–NITRITE**Specimen UA-1*****Participant Results***

<u>Method</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	584	1	583
BTNX Rapid Response Test Strips	1	-	1
Consult Diagnostics Reagent Strips	3	-	3
Consult Diagnostics Urine Analyzer	7	-	7
CTMI CT-120 Urine Analyzer	3	-	3
Diagnostic Test Group Clarity Urocheck	4	-	4
Diagnostic Test Group Clarity Urocheck 120	9	-	9
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	24	-	24
McKesson Reagent Strips	8	-	8
Medline 120 Urine Analyzer	5	-	5
Medline Urinalysis Reagent Strips	4	-	4
NDC Pro Advantage	1	-	1
Other Dipstick Method	3	-	3
Roche Chemstrips	26	-	26
Roche Criterion Analyzer	1	-	1
Roche SuperUA/ChemstripUA	1	-	1
Roche Urisys	7	-	7
Siemens Clinitek 10 / 100	1	-	1
Siemens Clinitek 50	3	-	3
Siemens Clinitek 500	1	-	1
Siemens Clinitek Advantus	12	-	12
Siemens Clinitek Status / Status+	340	1	339
Siemens Multistix Pro	13	-	13
Siemens Reagent Strips	79	-	79
Siemens Uristix	1	-	1
Uriscan Optima	1	-	1
UriScan Reagent Strips	2	-	2

URINALYSIS –MICROALBUMIN (dipstick only)

Specimen UA-1

<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	38	2	-	-	1	1	-	1	33	-	-
McKesson Reagent Strips	1	1	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	1	1	-	-	-	-	-	-	-	-	-
Roche Micral - 1 minute	2	-	-	-	-	1	-	1	-	-	-
Siemens Clinitek Microalbumin	34	-	-	-	1	-	-	-	33	-	-

URINALYSIS –URINE hCG**Specimen UA-1**

<u>Method</u>	<i>Participant Results</i>		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	339	335	4
Alere Acceava hCG-Urine	1	1	-
Alere Clearview hCG Cassette	4	4	-
Alere hCG Combo Cassette	4	4	-
Alfa Scientific Instant View	4	4	-
Beckman Coulter ICON 20 hCG	4	4	-
Beckman Coulter ICON 25 hCG	20	18	2
Beckman Coulter ICON II	1	1	-
BioSign hCG	1	1	-
BTNX Rapid Response hCG	5	5	-
Cardinal Health SP Brand combo	20	20	-
Cardinal Hlth SPBrand-cassette	12	12	-
Clarity Diagnostics hCG strip/cassette	10	10	-
CONSULT diagnostics hCG Cassette	45	44	1
CONSULT diagnostics hCG Combo	8	8	-
CONSULT diagnostics hCG Dipstick	17	17	-
Henry Schein One Step	31	31	-
Henry Schein One Step Plus	25	25	-
Jant Pharmacal Accutest	2	2	-
LifeSign Status hCG	1	1	-
McKesson hCG Combo Cassette	6	6	-
McKesson hCG Urine Cassette	8	8	-
McKesson urine hCG-all 20 mIU kits	4	4	-
Medline hCG Combo Test Cassette	4	4	-
Medline hCG Test Cassette	8	8	-
NDC Pro Advantage	1	1	-
PEP (Lab Supply) HCG	1	1	-
Quidel QuickVue One-Step Combo	8	8	-
Quidel QuickVue One-Step Urine	21	21	-
Quidel QuickVue+ One-Step Combo	11	11	-
Quidel Sofia hCG	1	1	-
Sekisui OSOM Card Pregnancy	7	7	-
Sekisui OSOM hCG Combo Test	3	3	-
Siemens Clinitek Status / Status+	11	11	-
Siemens Multistix Pro	1	1	-
Stanbio QuPID	6	6	-
Stanbio QuPID One-Step Preg.	1	1	-
Stanbio QuPID Plus	1	1	-
Stanbio TRUE hCG	7	7	-
Sure-Vue hCG - 25mIU	1	1	-
Sure-Vue hCG-STAT	9	9	-

FECAL OCCULT BLOOD

<u>Method</u>	Specimen OC-1			Specimen OC-2		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	246	243	3	246	12	234
Alere Clearview iFOBT Complete	1	1	-	1	-	1
Beckman Coulter Hemoccult ICT	43	42	1	43	4	39
Guaiaac (slide) Test	137	137	-	137	4	133
Hemosure iFOB	27	26	1	27	1	26
Other Immunochemical FOB kit	30	29	1	30	3	27
Polymedco OC Auto Micro 80	4	4	-	4	-	4
Polymedco OC-Light iFOB	2	2	-	2	-	2
Quidel QuickVue iFOB	2	2	-	2	-	2

2022 M1
Urine Sediment Identification
SPECIMENS US-1 AND US-2

CASE HISTORY:

A 44-year-old female presented to her local urgent care center with fever, chills, nausea, vomiting, and abdominal and back pain. The patient has type 2 diabetes and a history of poorly controlled whole blood glucose levels. A urinalysis was performed, and the results appear below.

Color = Yellow
Appearance = Cloudy

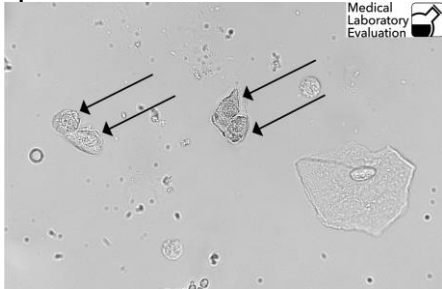
Dipstick results:

Specific Gravity = 1.025
pH = 8.0
Protein = 300 mg/dL (3+)
Glucose = 100 mg/dL
Ketones = 40 mg/dL (moderate)
Bilirubin = Negative
Urobilinogen = Normal/0.2 mg/dL
Blood = Negative
Leukocyte Esterase = Small (1+)
Nitrite = Negative

This patient was diagnosed with acute pyelonephritis. Pyelonephritis is a bacterial infection of the upper urinary tract, which includes the kidney and the ureters (the ducts that carry urine away from the kidney.) Pyelonephritis usually occurs as a result of a bacterial infection that has ascended from the lower urinary tract. Urinary tract infection is usually associated with many white blood cells and a positive leukocyte esterase test, as well as measurable amounts of protein. In this case, the positive results for protein and leukocytes indicate bacterial infection. Positive glucose and ketones are due to the patient's diabetes. A positive nitrite test is a strong indicator of the presence of a significant number of nitrate-converting bacteria. However, a negative nitrite does not rule out the possibility of a urinary tract infection. Not all urinary pathogens convert nitrate to nitrite. In addition, frequent urination can cause a false negative nitrite result because the urine has not remained in the bladder long enough for nitrite to form. This is one of the reasons that a first morning specimen is preferred for urinalysis testing.

Urine Sediment Identification

Specimen US-1

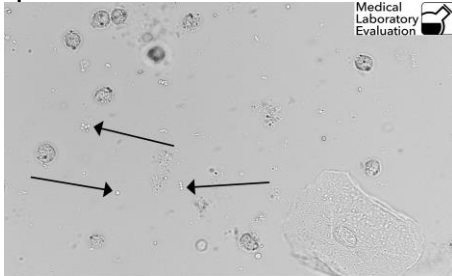


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Renal tubular epithelial (RTE)	167	52.85%	Acceptable
Transitional epithelial cell	117	37.03%	
Squamous epithelial cell	8	2.53%	
White blood cell (WBC)	6	1.90%	

The arrows in this photograph point to renal tubular epithelial cells. Three types of epithelial cells line the urinary tract: renal, transitional, and squamous. Renal tubular epithelial cells (RTE) are the most clinically significant because they originate in the kidney. Morphology varies depending on the cell's site of origin along the urinary tract. A key identifying feature of some RTEs is an elongated, cuboidal or polyhedral shape, which means having at least one flattened side, as shown here. For comparison, the white blood cell (WBC) located between the tails of the 2 arrows on the right is very round and slightly smaller than the arrowed RTE cells. The RTE nucleus is more distinct, eccentric, and is surrounded by a larger amount of granular cytoplasm than the WBC. Many participants misidentified these RTE cells as transitional epithelial (TE) cells. RTE cells are smaller than TEs, with less cytoplasm, and the nucleus appears to take up most of the space inside the renal tubular cell. In contrast, TE cells are usually spherical, 2-4 times larger than a WBC, and the size of the nucleus in a TE appears small in relation to its large volume of cytoplasm. To view a photo of transitional epithelial cells, see 2016 M1 Specimen US-2. To view another photo of renal tubular epithelial cells, see 2014 M2 Specimen US-3. This challenge was graded by referee consensus.

Urine Sediment Identification

Specimen US-2



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Bacteria	188	59.49%	Acceptable
Yeast/fungi	90	28.48%	
Fat droplets or globules	20	6.33%	
Red blood cell (RBC)	4	1.27%	

The arrows in this photograph point to bacteria. Most, but not all, urinary tract infections are caused by rod-shaped bacteria like *E. coli*. The bacteria in this case are cocci, appearing singly and in pairs, short chains, and clusters. This indicates a streptococcal or staphylococcal infection. These organisms do not convert nitrate to nitrite. Some participants misidentified these organisms as yeast. Yeast cells tend to be oval and close to the size of a red blood cell, and yeasts often form long irregular, branching chains of pseudohyphae, as well as singular budding forms. To view another photo of round cocci bacteria, see 2012 M3 Specimen US-6. To view a photo of yeast, see 2020 M2 US-4. This challenge was graded by referee consensus.

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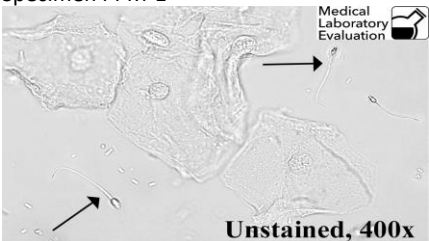
2022 M1

PROVIDER-PERFORMED MICROSCOPY (PPM)

Specimens PPM-1 through PPM-6

WET MOUNT PREPARATION

Specimen PPM-1



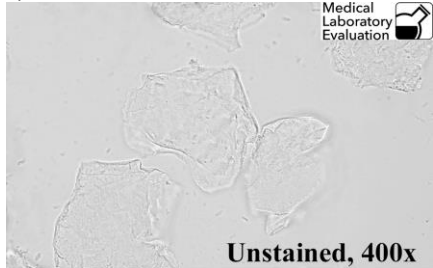
<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Spermatozoa	361	98.10%	Acceptable

The arrows in this photograph of a wet mount preparation point to **spermatozoa**. Spermatozoa have small oval heads and long, thin, filamentous tails. Some laboratorians consider sperm to be contaminants and choose not to report their presence at all. However, the laboratory may not have sufficient information about the patient to determine the clinical significance. All findings should be reported so the clinician can make informed decisions in caring for their patient. To view another photo of spermatozoa, see 2018 M1 Specimen PPM-1.

PROVIDER-PERFORMED MICROSCOPY (PPM)

KOH PREPARATION

Specimen PPM-2

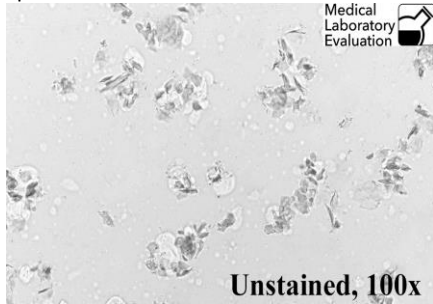


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Yeast/fungal elements absent	314	98.74%	Acceptable
Yeast/fungal elements present	4	1.26%	

Yeast and fungal elements are absent in this photograph of a vaginal KOH prep. To view a photo of yeast in a KOH preparation, see 2019 M1 Specimen PPM-2.

SCABIES DETECTION

Specimen PPM-3



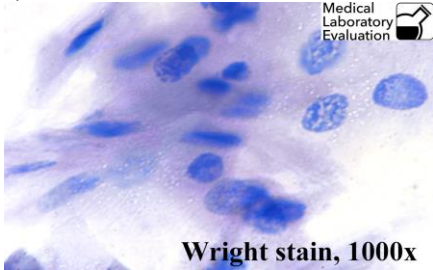
<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Scabies absent	79	81.44%	Acceptable
Scabies present	18	18.56%	

Scabies are absent in this photograph of a skin scrapings preparation. The diagnosis of scabies is often made only by the patient history and examination of the skin. 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 of scabies. To view a photo of a scabies mite, see 2020 M1 Specimen PPM-3.

PROVIDER-PERFORMED MICROSCOPY (PPM)

NASAL SMEAR

Specimen PPM-4

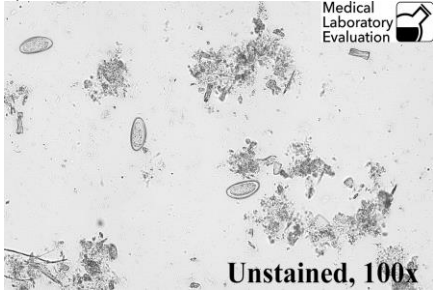


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Eosinophils absent	42	76.36%	Acceptable
Eosinophils present	13	23.64%	

Eosinophils are absent in this photograph of Wright-stained nasal mucus. The purpose of examining respiratory secretions for leukocytes (white blood cells) is to differentiate allergic conditions from infections. The eosinophil is a specific type of leukocyte that is associated with allergic conditions. “Eos” take on a unique red-orange color that makes them easy to spot and identify. The orange color of the eosinophil comes from the dye eosin, which is a component of Wright stain. There are many leukocytes present in this photo, but no orange eosinophilic cells. The cytoplasm of an eosinophil will be full of large, round, orange-staining granules. To view a photo of a positive eosinophil smear, see 2020 M1 Specimen PPM-4. This challenge was graded by referee consensus.

PINWORM PREPARATION

Specimen PPM-5



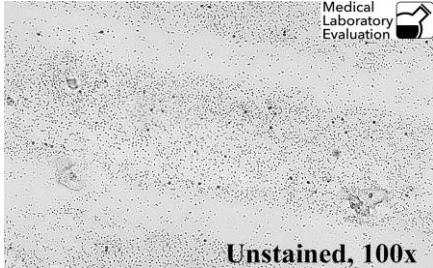
<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Pinworms/eggs present	147	98.66%	Acceptable
Pinworms/eggs absent	2	1.34%	

Pinworm eggs are present in this photograph of a perianal pinworm preparation. To view another photo of pinworm eggs, see 2019 M1 Specimen PPM-5.

PROVIDER-PERFORMED MICROSCOPY (PPM)

FERN TEST

Specimen PPM-6



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Ferning absent	97	98.98%	Acceptable
Ferning present	1	1.02%	

Ferning is absent in this photograph of air-dried vaginal secretions. The fern test is used to detect ruptured membranes during pregnancy. Amniotic fluid crystallizes when dried on a microscope slide to form a pattern resembling a leaf, unlike normal vaginal secretions or urine, which do not crystallize. To view a photo of a positive fern prep, see 2019 M3 Specimen PPM-18.

REFERENCES:

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