

MEDICAL LABORATORY EVALUATION

PARTICIPANT SUMMARY

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Hematology, Coagulation,
Blood Bank, Urinalysis, PPM
2018 MLE-M2

**ACP | Medical Laboratory
Evaluation** 

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

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EVALUATION CRITERIA

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

Qualitative

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

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

Quantitative

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

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

*Whichever is greater

HEMOCUE HEMATOLOGY–HEMOGLOBIN (g/dL)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen HQ-3</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen HQ-4</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>				<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
HemoCue	35	12.97	0.35	2.7	13.0	12.0 - 13.9	35	4.93	0.27	5.5	4.9	4.5 - 5.3	

HEMOCUE HEMATOLOGY–GLUCOSE (mg/dL)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen HQ-3</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen HQ-4</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>				<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	31	108.1	5.5	5.1	108	86 - 130	32	51.3	4.9	9.6	50	39 - 64	
All HemoCue Methods	30	108.3	5.5	5.0	108	86 - 130	31	51.5	4.9	9.4	50	39 - 64	
HemoCue Glucose 201/+	29	108.2	5.5	5.1	108	86 - 130	30	51.5	4.9	9.6	50	39 - 64	

SEDIMENTATION RATE (MM/HR)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen ES-3</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen ES-4</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>				<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	120	7.8	2.6	33.0	8	2 - 14	121	54.4	12.4	22.8	54	29 - 80	
All Automated Methods	31	7.6	2.9	38.0	7	1 - 14	34	65.7	13.9	21.2	63	37 - 94	
All Manual Methods	85	7.9	2.4	29.8	8	3 - 13	87	51.4	11.2	21.9	50	28 - 74	
All Vital Diagnostics Methods	18	6.9	1.0	14.4	7	4 - 9	20	63.9	9.5	14.9	63	44 - 83	
Vital Diagnostics Excyte M/10	12	7.7	2.2	29.1	7	3 - 13	12	63.4	6.9	10.8	65	49 - 78	
Westergren - diluted	72	7.6	2.3	30.5	8	2 - 13	74	52.0	11.2	21.6	50	29 - 75	

SEDIMAT SEDIMENTATION RATE (MM/HR)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen MAT-3</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen MAT-4</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>				<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Polymedco Sedimat 15	13	2.2	0.9	41.7	2	0 - 4	13	72.5	7.1	9.9	74	58 - 87	

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	6.74	0.19	2.8	6.7	5.7 - 7.8	12	7.19	0.25	3.5	7.1	6.1 - 8.3
All Abbott Cell-Dyn Instruments	12	6.74	0.19	2.8	6.7	5.7 - 7.8	12	7.19	0.25	3.5	7.1	6.1 - 8.3
Abbott Cell-Dyn Ruby	10	6.75	0.21	3.1	6.8	5.7 - 7.8	10	7.22	0.26	3.7	7.1	6.1 - 8.3
	Specimen CL-8						Specimen CL-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	3.19	0.12	3.8	3.2	2.7 - 3.7	12	7.16	0.24	3.3	7.1	6.0 - 8.3
All Abbott Cell-Dyn Instruments	12	3.19	0.12	3.8	3.2	2.7 - 3.7	12	7.16	0.24	3.3	7.1	6.0 - 8.3
Abbott Cell-Dyn Ruby	10	3.18	0.13	4.2	3.2	2.7 - 3.7	10	7.15	0.26	3.6	7.1	6.0 - 8.3
	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	3.24	0.11	3.5	3.3	2.7 - 3.8						
All Abbott Cell-Dyn Instruments	12	3.24	0.11	3.5	3.3	2.7 - 3.8						
Abbott Cell-Dyn Ruby	10	3.27	0.10	3.2	3.3	2.7 - 3.8						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	6.340	0.151	2.4	6.29	5.95 - 6.73	12	4.709	0.110	2.3	4.70	4.42 - 5.00
All Abbott Cell-Dyn Instruments	12	6.340	0.151	2.4	6.29	5.95 - 6.73	12	4.709	0.110	2.3	4.70	4.42 - 5.00
Abbott Cell-Dyn Ruby	10	6.370	0.141	2.2	6.30	5.98 - 6.76	10	4.728	0.106	2.2	4.70	4.44 - 5.02
	Specimen CL-8						Specimen CL-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	2.113	0.066	3.1	2.11	1.98 - 2.24	12	4.680	0.113	2.4	4.67	4.39 - 4.97
All Abbott Cell-Dyn Instruments	12	2.113	0.066	3.1	2.11	1.98 - 2.24	12	4.680	0.113	2.4	4.67	4.39 - 4.97
Abbott Cell-Dyn Ruby	10	2.133	0.041	1.9	2.14	2.00 - 2.27	10	4.702	0.107	2.3	4.69	4.41 - 4.99
	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	2.111	0.070	3.3	2.10	1.98 - 2.24						
All Abbott Cell-Dyn Instruments	12	2.111	0.070	3.3	2.10	1.98 - 2.24						
Abbott Cell-Dyn Ruby	10	2.130	0.054	2.6	2.11	2.00 - 2.26						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	17.86	0.35	1.9	18.0	16.6 - 19.2	12	13.39	0.38	2.8	13.5	12.4 - 14.4
All Abbott Cell-Dyn Instruments	12	17.86	0.35	1.9	18.0	16.6 - 19.2	12	13.39	0.38	2.8	13.5	12.4 - 14.4
Abbott Cell-Dyn Ruby	10	17.90	0.36	2.0	18.0	16.6 - 19.2	10	13.42	0.41	3.0	13.6	12.4 - 14.4
<u>Instrument</u>	Specimen CL-8						Specimen CL-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	5.59	0.15	2.6	5.6	5.1 - 6.0	12	13.31	0.33	2.5	13.4	12.3 - 14.3
All Abbott Cell-Dyn Instruments	12	5.59	0.15	2.6	5.6	5.1 - 6.0	12	13.31	0.33	2.5	13.4	12.3 - 14.3
Abbott Cell-Dyn Ruby	10	5.57	0.15	2.7	5.6	5.1 - 6.0	10	13.32	0.36	2.7	13.5	12.3 - 14.3
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	12	5.61	0.13	2.4	5.6	5.2 - 6.1						
All Abbott Cell-Dyn Instruments	12	5.61	0.13	2.4	5.6	5.2 - 6.1						
Abbott Cell-Dyn Ruby	10	5.58	0.12	2.1	5.6	5.1 - 6.0						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	50.13	1.89	3.8	49.5	47.1 - 53.2	12	37.34	1.21	3.3	37.1	35.1 - 39.6
All Abbott Cell-Dyn Instruments	12	50.13	1.89	3.8	49.5	47.1 - 53.2	12	37.34	1.21	3.3	37.1	35.1 - 39.6
Abbott Cell-Dyn Ruby	10	50.18	2.06	4.1	49.4	47.1 - 53.2	10	37.33	1.33	3.6	37.1	35.0 - 39.6
<u>Instrument</u>	Specimen CL-8						Specimen CL-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	15.09	0.49	3.2	15.1	14.1 - 16.0	12	37.26	1.27	3.4	37.3	35.0 - 39.5
All Abbott Cell-Dyn Instruments	12	15.09	0.49	3.2	15.1	14.1 - 16.0	12	37.26	1.27	3.4	37.3	35.0 - 39.5
Abbott Cell-Dyn Ruby	10	15.20	0.42	2.8	15.2	14.2 - 16.2	10	37.30	1.39	3.7	37.4	35.0 - 39.6
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	12	15.04	0.52	3.5	14.9	14.1 - 16.0						
All Abbott Cell-Dyn Instruments	12	15.04	0.52	3.5	14.9	14.1 - 16.0						
Abbott Cell-Dyn Ruby	10	15.15	0.48	3.1	15.1	14.2 - 16.1						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	350.4	19.7	5.6	345	262 - 439	12	248.0	7.2	2.9	248	186 - 310
All Abbott Cell-Dyn Instruments	12	350.4	19.7	5.6	345	262 - 439	12	248.0	7.2	2.9	248	186 - 310
Abbott Cell-Dyn Ruby	10	350.2	21.6	6.2	345	262 - 438	10	249.2	7.2	2.9	248	186 - 312
<u>Instrument</u>	Specimen CL-8						Specimen CL-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	74.0	4.0	5.5	73	55 - 93	12	246.1	9.4	3.8	243	184 - 308
All Abbott Cell-Dyn Instruments	12	74.0	4.0	5.5	73	55 - 93	12	246.1	9.4	3.8	243	184 - 308
Abbott Cell-Dyn Ruby	10	74.7	4.0	5.3	74	56 - 94	10	246.7	10.2	4.1	247	185 - 309
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	12	73.9	5.4	7.3	74	55 - 93						
All Abbott Cell-Dyn Instruments	12	73.9	5.4	7.3	74	55 - 93						
Abbott Cell-Dyn Ruby	10	73.8	5.9	8.0	73	55 - 93						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	52.47	1.32	2.5	52.2	48.5 - 56.5	12	66.73	1.72	2.6	66.7	61.5 - 72.0
All Abbott Cell-Dyn Instruments	12	52.47	1.32	2.5	52.2	48.5 - 56.5	12	66.73	1.72	2.6	66.7	61.5 - 72.0
Abbott Cell-Dyn Ruby	10	52.64	1.40	2.7	52.8	48.4 - 56.9	10	66.92	1.86	2.8	66.8	61.3 - 72.5
<u>Instrument</u>	Specimen CL-8						Specimen CL-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	45.55	1.39	3.1	45.5	41.3 - 49.8	12	66.00	1.46	2.2	66.2	61.6 - 70.4
All Abbott Cell-Dyn Instruments	12	45.55	1.39	3.1	45.5	41.3 - 49.8	12	66.00	1.46	2.2	66.2	61.6 - 70.4
Abbott Cell-Dyn Ruby	10	45.76	1.44	3.2	46.2	41.4 - 50.1	10	65.96	1.62	2.5	66.1	61.0 - 70.9
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	12	44.62	1.27	2.8	44.4	40.8 - 48.5						
All Abbott Cell-Dyn Instruments	12	44.62	1.27	2.8	44.4	40.8 - 48.5						
Abbott Cell-Dyn Ruby	10	44.80	1.32	3.0	44.6	40.8 - 48.8						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	38.98	1.91	4.9	39.2	33.2 - 44.8	12	24.00	2.32	9.7	24.4	17.0 - 31.0
All Abbott Cell-Dyn Instruments	12	38.98	1.91	4.9	39.2	33.2 - 44.8	12	24.00	2.32	9.7	24.4	17.0 - 31.0
Abbott Cell-Dyn Ruby	10	38.64	1.92	5.0	39.0	32.8 - 44.5	10	23.76	2.51	10.6	24.0	16.2 - 31.3
<u>Instrument</u>	Specimen CL-8						Specimen CL-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	44.15	2.39	5.4	44.2	36.9 - 51.4	12	25.35	1.44	5.7	25.0	21.0 - 29.7
All Abbott Cell-Dyn Instruments	12	44.15	2.39	5.4	44.2	36.9 - 51.4	12	25.35	1.44	5.7	25.0	21.0 - 29.7
Abbott Cell-Dyn Ruby	10	43.94	2.61	5.9	43.2	36.1 - 51.8	10	25.42	1.60	6.3	25.0	20.6 - 30.3
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	12	44.82	1.95	4.3	45.0	38.9 - 50.7						
All Abbott Cell-Dyn Instruments	12	44.82	1.95	4.3	45.0	38.9 - 50.7						
Abbott Cell-Dyn Ruby	10	44.72	2.16	4.8	44.7	38.2 - 51.3						

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

<u>Instrument</u>	Specimen CL-6						Specimen CL-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	5.15	0.71	13.9	5.2	3.0 - 7.3	12	4.88	0.86	17.6	4.7	2.2 - 7.5
All Abbott Cell-Dyn Instruments	12	5.15	0.71	13.9	5.2	3.0 - 7.3	12	4.88	0.86	17.6	4.7	2.2 - 7.5
Abbott Cell-Dyn Ruby	10	5.34	0.61	11.4	5.4	3.5 - 7.2	10	4.92	0.96	19.5	4.7	2.0 - 7.8
<u>Instrument</u>	Specimen CL-8						Specimen CL-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	6.53	0.83	12.7	6.8	4.0 - 9.1	12	4.37	0.18	4.0	4.4	3.8 - 4.9
All Abbott Cell-Dyn Instruments	12	6.53	0.83	12.7	6.8	4.0 - 9.1	12	4.37	0.18	4.0	4.4	3.8 - 4.9
Abbott Cell-Dyn Ruby	10	6.56	0.92	14.1	7.1	3.7 - 9.4	10	4.32	0.15	3.4	4.3	3.8 - 4.8
<u>Instrument</u>	Specimen CL-10											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	12	6.82	1.09	16.1	6.5	3.5 - 10.1						
All Abbott Cell-Dyn Instruments	12	6.82	1.09	16.1	6.5	3.5 - 10.1						
Abbott Cell-Dyn Ruby	10	6.62	1.10	16.6	6.3	3.3 - 10.0						

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

<u><i>Instrument</i></u>	Specimen CL-6						Specimen CL-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	12	3.18	0.15	4.6	3.3	2.7 - 3.7	12	4.15	0.14	3.3	4.2	3.7 - 4.6
All Abbott Cell-Dyn Instruments	12	3.18	0.15	4.6	3.3	2.7 - 3.7	12	4.15	0.14	3.3	4.2	3.7 - 4.6
Abbott Cell-Dyn Ruby	10	3.16	0.15	4.8	3.2	2.7 - 3.7	10	4.16	0.15	3.6	4.2	3.7 - 4.7
Specimen CL-8						Specimen CL-9						
All Method	12	3.43	0.23	6.6	3.4	2.7 - 4.2	12	4.08	0.13	3.3	4.1	3.6 - 4.5
All Abbott Cell-Dyn Instruments	12	3.43	0.23	6.6	3.4	2.7 - 4.2	12	4.08	0.13	3.3	4.1	3.6 - 4.5
Abbott Cell-Dyn Ruby	10	3.36	0.15	4.5	3.4	2.9 - 3.9	10	4.10	0.14	3.4	4.2	3.6 - 4.6
Specimen CL-10												
All Method	12	3.40	0.43	12.8	3.5	2.0 - 4.8						
All Abbott Cell-Dyn Instruments	12	3.40	0.43	12.8	3.5	2.0 - 4.8						
Abbott Cell-Dyn Ruby	10	3.50	0.40	11.4	3.7	2.3 - 4.7						

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

<u><i>Instrument</i></u>	Specimen CL-6						Specimen CL-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	12	0.23	0.29	123.2	0.2	0.0 - 1.1	12	0.28	0.23	81.8	0.2	0.0 - 1.0
All Abbott Cell-Dyn Instruments	12	0.23	0.29	123.2	0.2	0.0 - 1.1	12	0.28	0.23	81.8	0.2	0.0 - 1.0
Abbott Cell-Dyn Ruby	10	0.26	0.31	120.4	0.2	0.0 - 1.2	10	0.30	0.25	85.0	0.2	0.0 - 1.1
Specimen CL-8						Specimen CL-9						
All Method	12	0.35	0.28	80.3	0.2	0.0 - 1.2	12	0.18	0.08	41.1	0.2	0.0 - 0.5
All Abbott Cell-Dyn Instruments	12	0.35	0.28	80.3	0.2	0.0 - 1.2	12	0.18	0.08	41.1	0.2	0.0 - 0.5
Abbott Cell-Dyn Ruby	10	0.38	0.30	79.8	0.2	0.0 - 1.3	10	0.18	0.08	46.5	0.2	0.0 - 0.5
Specimen CL-10												
All Method	12	0.32	0.31	98.7	0.2	0.0 - 1.3						
All Abbott Cell-Dyn Instruments	12	0.32	0.31	98.7	0.2	0.0 - 1.3						
Abbott Cell-Dyn Ruby	10	0.34	0.34	101.0	0.2	0.0 - 1.4						

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

<u>Instrument</u>	Specimen SYX-6						Specimen SYX-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	80	7.17	0.28	3.9	7.1	6.0 - 8.3	80	8.09	0.26	3.2	8.1	6.8 - 9.4
All Sysmex Instruments	80	7.17	0.28	3.9	7.1	6.0 - 8.3	80	8.09	0.26	3.2	8.1	6.8 - 9.4
Sysmex KX-21N & K-800, 1000, 4500	30	7.06	0.15	2.1	7.1	6.0 - 8.2	31	7.97	0.21	2.6	7.9	6.7 - 9.2
Sysmex pocH-100i	14	6.82	0.12	1.7	6.8	5.7 - 7.9	14	7.90	0.14	1.8	7.9	6.7 - 9.1
Sysmex XP-300	35	7.39	0.20	2.8	7.4	6.2 - 8.5	34	8.29	0.18	2.2	8.3	7.0 - 9.6
	Specimen SYX-8						Specimen SYX-9					
All Method	80	2.82	0.11	3.9	2.8	2.3 - 3.3	80	8.10	0.26	3.2	8.1	6.8 - 9.4
All Sysmex Instruments	80	2.82	0.11	3.9	2.8	2.3 - 3.3	80	8.10	0.26	3.2	8.1	6.8 - 9.4
Sysmex KX-21N & K-800, 1000, 4500	31	2.79	0.09	3.1	2.8	2.3 - 3.3	31	7.99	0.25	3.1	8.0	6.7 - 9.2
Sysmex pocH-100i	14	2.71	0.07	2.7	2.7	2.3 - 3.2	14	7.91	0.15	1.8	7.9	6.7 - 9.2
Sysmex XP-300	35	2.88	0.10	3.5	2.9	2.4 - 3.4	34	8.29	0.15	1.8	8.3	7.0 - 9.6
	Specimen SYX-10											
All Method	80	2.80	0.12	4.2	2.8	2.3 - 3.3						
All Sysmex Instruments	80	2.80	0.12	4.2	2.8	2.3 - 3.3						
Sysmex KX-21N & K-800, 1000, 4500	31	2.76	0.12	4.3	2.8	2.3 - 3.2						
Sysmex pocH-100i	14	2.73	0.10	3.6	2.7	2.3 - 3.2						
Sysmex XP-300	35	2.85	0.10	3.4	2.8	2.4 - 3.3						

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

<u><i>Instrument</i></u>	Specimen SYX-6						Specimen SYX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	79	6.258	0.086	1.4	6.25	5.88 - 6.64	79	4.268	0.066	1.5	4.25	4.01 - 4.53
All Sysmex Instruments	79	6.258	0.086	1.4	6.25	5.88 - 6.64	79	4.268	0.066	1.5	4.25	4.01 - 4.53
Sysmex KX-21N & K-800, 1000, 4500	31	6.255	0.106	1.7	6.26	5.87 - 6.64	30	4.256	0.048	1.1	4.25	4.00 - 4.52
Sysmex pocH-100i	14	6.332	0.108	1.7	6.33	5.95 - 6.72	14	4.365	0.064	1.5	4.37	4.10 - 4.63
Sysmex XP-300	35	6.239	0.054	0.9	6.23	5.86 - 6.62	35	4.241	0.048	1.1	4.25	3.98 - 4.50

<u><i>Instrument</i></u>	Specimen SYX-8						Specimen SYX-9					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	79	2.389	0.031	1.3	2.39	2.24 - 2.54	80	4.266	0.066	1.5	4.26	4.01 - 4.53
All Sysmex Instruments	79	2.389	0.031	1.3	2.39	2.24 - 2.54	80	4.266	0.066	1.5	4.26	4.01 - 4.53
Sysmex KX-21N & K-800, 1000, 4500	30	2.384	0.028	1.2	2.39	2.24 - 2.53	31	4.264	0.052	1.2	4.26	4.00 - 4.52
Sysmex pocH-100i	14	2.414	0.042	1.7	2.42	2.26 - 2.56	14	4.338	0.086	2.0	4.35	4.07 - 4.60
Sysmex XP-300	35	2.383	0.024	1.0	2.39	2.23 - 2.53	34	4.244	0.039	0.9	4.25	3.98 - 4.50

<u><i>Instrument</i></u>	Specimen SYX-10					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	79	2.387	0.034	1.4	2.39	2.24 - 2.54
All Sysmex Instruments	79	2.387	0.034	1.4	2.39	2.24 - 2.54
Sysmex KX-21N & K-800, 1000, 4500	30	2.383	0.035	1.5	2.39	2.23 - 2.53
Sysmex pocH-100i	14	2.417	0.032	1.3	2.42	2.27 - 2.57
Sysmex XP-300	35	2.379	0.028	1.2	2.38	2.23 - 2.53

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

<u>Instrument</u>	<u>Specimen SYX-6</u>						<u>Specimen SYX-7</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	80	17.88	0.28	1.5	17.9	16.6 - 19.2	79	11.91	0.18	1.5	11.9	11.0 - 12.8
All Sysmex Instruments	80	17.88	0.28	1.5	17.9	16.6 - 19.2	79	11.91	0.18	1.5	11.9	11.0 - 12.8
Sysmex KX-21N & K-800, 1000, 4500	31	17.86	0.23	1.3	17.9	16.6 - 19.2	31	11.86	0.14	1.1	11.9	11.0 - 12.7
Sysmex pocH-100i	14	18.14	0.24	1.3	18.2	16.8 - 19.5	14	12.06	0.27	2.2	12.1	11.2 - 13.0
Sysmex XP-300	35	17.79	0.27	1.5	17.8	16.5 - 19.1	35	11.90	0.18	1.5	11.9	11.0 - 12.8

<u>Instrument</u>	<u>Specimen SYX-8</u>						<u>Specimen SYX-9</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	79	6.11	0.14	2.4	6.1	5.6 - 6.6	80	11.92	0.18	1.5	11.9	11.0 - 12.8
All Sysmex Instruments	79	6.11	0.14	2.4	6.1	5.6 - 6.6	80	11.92	0.18	1.5	11.9	11.0 - 12.8
Sysmex KX-21N & K-800, 1000, 4500	30	6.11	0.14	2.2	6.1	5.6 - 6.6	31	11.88	0.14	1.2	11.9	11.0 - 12.8
Sysmex pocH-100i	14	6.18	0.16	2.6	6.2	5.7 - 6.7	14	12.00	0.22	1.8	12.1	11.1 - 12.9
Sysmex XP-300	35	6.09	0.14	2.3	6.1	5.6 - 6.6	35	11.91	0.18	1.5	11.9	11.0 - 12.8

<u>Instrument</u>	<u>Specimen SYX-10</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	79	6.12	0.13	2.0	6.1	5.6 - 6.6
All Sysmex Instruments	79	6.12	0.13	2.0	6.1	5.6 - 6.6
Sysmex KX-21N & K-800, 1000, 4500	31	6.11	0.13	2.1	6.1	5.6 - 6.6
Sysmex pocH-100i	14	6.14	0.12	2.0	6.2	5.7 - 6.6
Sysmex XP-300	35	6.09	0.14	2.3	6.1	5.6 - 6.6

SYSMEX HEMATOLOGY W/ AUTOMATED DIFFERENTIAL–HEMATOCRIT (percent)

<u>Instrument</u>	Specimen SYX-6						Specimen SYX-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	80	48.84	1.45	3.0	48.5	45.9 - 51.8	79	32.10	1.02	3.2	31.9	30.1 - 34.1
All Sysmex Instruments	80	48.84	1.45	3.0	48.5	45.9 - 51.8	79	32.10	1.02	3.2	31.9	30.1 - 34.1
Sysmex KX-21N & K-800, 1000, 4500	31	48.16	1.00	2.1	48.2	45.2 - 51.1	31	31.56	0.59	1.9	31.5	29.6 - 33.5
Sysmex pocH-100i	14	51.15	1.24	2.4	51.3	48.0 - 54.3	14	34.14	0.78	2.3	34.2	32.0 - 36.2
Sysmex XP-300	34	48.62	0.51	1.1	48.5	45.7 - 51.6	35	31.86	0.43	1.4	31.8	29.9 - 33.8
Specimen SYX-8												
All Method	78	16.76	0.49	2.9	16.7	15.7 - 17.8	79	32.08	0.95	3.0	31.9	30.1 - 34.1
All Sysmex Instruments	78	16.76	0.49	2.9	16.7	15.7 - 17.8	79	32.08	0.95	3.0	31.9	30.1 - 34.1
Sysmex KX-21N & K-800, 1000, 4500	31	16.46	0.33	2.0	16.5	15.4 - 17.5	31	31.63	0.60	1.9	31.8	29.7 - 33.6
Sysmex pocH-100i	14	17.71	0.57	3.2	17.8	16.6 - 18.8	14	33.95	1.13	3.3	34.1	31.9 - 36.0
Sysmex XP-300	35	16.75	0.24	1.4	16.7	15.7 - 17.8	35	31.84	0.33	1.0	31.8	29.9 - 33.8
Specimen SYX-9												
All Method	78	16.78	0.51	3.0	16.7	15.7 - 17.8	79	32.08	0.95	3.0	31.9	30.1 - 34.1
All Sysmex Instruments	78	16.78	0.51	3.0	16.7	15.7 - 17.8	79	32.08	0.95	3.0	31.9	30.1 - 34.1
Sysmex KX-21N & K-800, 1000, 4500	30	16.50	0.38	2.3	16.5	15.5 - 17.5	31	31.63	0.60	1.9	31.8	29.7 - 33.6
Sysmex pocH-100i	14	17.70	0.45	2.5	17.8	16.6 - 18.8	14	33.95	1.13	3.3	34.1	31.9 - 36.0
Sysmex XP-300	34	16.69	0.19	1.2	16.7	15.6 - 17.7	35	31.84	0.33	1.0	31.8	29.9 - 33.8
Specimen SYX-10												
All Method	78	16.78	0.51	3.0	16.7	15.7 - 17.8	79	32.08	0.95	3.0	31.9	30.1 - 34.1
All Sysmex Instruments	78	16.78	0.51	3.0	16.7	15.7 - 17.8	79	32.08	0.95	3.0	31.9	30.1 - 34.1
Sysmex KX-21N & K-800, 1000, 4500	30	16.50	0.38	2.3	16.5	15.5 - 17.5	31	31.63	0.60	1.9	31.8	29.7 - 33.6
Sysmex pocH-100i	14	17.70	0.45	2.5	17.8	16.6 - 18.8	14	33.95	1.13	3.3	34.1	31.9 - 36.0
Sysmex XP-300	34	16.69	0.19	1.2	16.7	15.6 - 17.7	35	31.84	0.33	1.0	31.8	29.9 - 33.8

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

<u><i>Instrument</i></u>	Specimen SYX-6						Specimen SYX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	80	277.7	14.5	5.2	277	208 - 348	78	189.8	8.9	4.7	190	142 - 238
All Sysmex Instruments	80	277.7	14.5	5.2	277	208 - 348	78	189.8	8.9	4.7	190	142 - 238
Sysmex KX-21N & K-800, 1000, 4500	31	280.3	15.3	5.5	278	210 - 351	30	191.5	11.4	6.0	190	143 - 240
Sysmex pocH-100i	14	267.2	15.3	5.7	267	200 - 335	14	187.8	8.3	4.4	187	140 - 235
Sysmex XP-300	34	280.6	9.9	3.5	281	210 - 351	35	190.0	8.0	4.2	191	142 - 238

<u><i>Instrument</i></u>	Specimen SYX-8						Specimen SYX-9					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	80	61.3	4.4	7.1	61	45 - 77	80	188.8	10.1	5.4	189	141 - 237
All Sysmex Instruments	80	61.3	4.4	7.1	61	45 - 77	80	188.8	10.1	5.4	189	141 - 237
Sysmex KX-21N & K-800, 1000, 4500	29	60.7	2.6	4.2	60	45 - 76	31	190.2	10.0	5.3	190	142 - 238
Sysmex pocH-100i	14	61.6	3.8	6.1	62	46 - 77	14	184.6	10.4	5.6	184	138 - 231
Sysmex XP-300	35	61.7	5.1	8.3	62	46 - 78	35	189.3	10.0	5.3	190	141 - 237

<u><i>Instrument</i></u>	Specimen SYX-10					
<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	
All Method	79	61.3	4.0	6.5	61	46 - 77
All Sysmex Instruments	79	61.3	4.0	6.5	61	46 - 77
Sysmex KX-21N & K-800, 1000, 4500	30	61.6	3.7	6.0	62	46 - 78
Sysmex pocH-100i	14	62.2	3.3	5.3	62	46 - 78
Sysmex XP-300	35	60.7	4.4	7.2	61	45 - 76

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

<u>Instrument</u>	Specimen SYX-6						Specimen SYX-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	72	47.88	1.11	2.3	48.0	44.5 - 51.3	72	31.36	1.29	4.1	31.5	27.4 - 35.3
All Sysmex Instruments	72	47.88	1.11	2.3	48.0	44.5 - 51.3	72	31.36	1.29	4.1	31.5	27.4 - 35.3
Sysmex KX-21N & K-800, 1000, 4500	29	48.03	1.03	2.1	48.2	44.9 - 51.2	29	31.80	0.88	2.8	31.6	29.1 - 34.5
Sysmex pocH-100i	13	47.04	0.96	2.0	47.0	44.1 - 50.0	13	30.22	1.16	3.8	30.2	26.7 - 33.8
Sysmex XP-300	30	48.11	1.10	2.3	48.2	44.8 - 51.5	30	31.44	1.41	4.5	31.9	27.2 - 35.7
Specimen SYX-8												
All Method	71	10.29	1.27	12.3	10.2	6.4 - 14.1	72	31.30	1.19	3.8	31.4	27.7 - 34.9
All Sysmex Instruments	71	10.29	1.27	12.3	10.2	6.4 - 14.1	72	31.30	1.19	3.8	31.4	27.7 - 34.9
Sysmex KX-21N & K-800, 1000, 4500	29	10.70	1.19	11.1	10.5	7.1 - 14.3	29	31.69	1.09	3.4	31.7	28.4 - 35.0
Sysmex pocH-100i	13	9.11	0.87	9.6	9.1	6.4 - 11.8	13	30.13	0.84	2.8	29.8	27.6 - 32.7
Sysmex XP-300	30	10.56	1.43	13.5	10.5	6.2 - 14.9	30	31.43	1.11	3.5	31.7	28.0 - 34.8
Specimen SYX-9												
Specimen SYX-10												
All Method	71	9.83	1.45	14.7	10.0	5.4 - 14.2						
All Sysmex Instruments	71	9.83	1.45	14.7	10.0	5.4 - 14.2						
Sysmex KX-21N & K-800, 1000, 4500	29	10.25	1.18	11.5	10.2	6.7 - 13.8						
Sysmex pocH-100i	13	8.43	1.14	13.6	8.4	5.0 - 11.9						
Sysmex XP-300	29	10.03	1.47	14.7	10.2	5.6 - 14.5						

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

<u>Instrument</u>	Specimen SYX-6						Specimen SYX-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	72	17.20	1.20	7.0	17.1	13.6 - 20.8	72	15.69	0.90	5.8	15.6	12.9 - 18.4
All Sysmex Instruments	72	17.20	1.20	7.0	17.1	13.6 - 20.8	72	15.69	0.90	5.8	15.6	12.9 - 18.4
Sysmex KX-21N & K-800, 1000, 4500	29	17.13	1.07	6.3	17.1	13.9 - 20.4	29	15.59	0.75	4.8	15.6	13.3 - 17.9
Sysmex pocH-100i	13	16.57	1.06	6.4	16.5	13.3 - 19.8	13	15.18	0.80	5.3	15.0	12.7 - 17.6
Sysmex XP-300	30	17.54	1.28	7.3	17.4	13.6 - 21.4	30	16.00	0.99	6.2	15.9	13.0 - 19.0
	Specimen SYX-8						Specimen SYX-9					
All Method	71	18.90	1.27	6.7	18.9	15.0 - 22.8	72	15.86	0.98	6.2	15.8	12.9 - 18.9
All Sysmex Instruments	71	18.90	1.27	6.7	18.9	15.0 - 22.8	72	15.86	0.98	6.2	15.8	12.9 - 18.9
Sysmex KX-21N & K-800, 1000, 4500	29	18.85	1.32	7.0	18.7	14.8 - 22.9	29	16.18	0.83	5.1	16.2	13.6 - 18.7
Sysmex pocH-100i	13	17.75	1.62	9.1	17.9	12.8 - 22.7	13	14.79	0.80	5.4	14.7	12.3 - 17.3
Sysmex XP-300	30	19.29	1.06	5.5	19.0	16.1 - 22.5	30	16.01	0.88	5.5	16.0	13.3 - 18.7
	Specimen SYX-10											
All Method	71	18.69	1.63	8.7	18.6	13.7 - 23.6						
All Sysmex Instruments	71	18.69	1.63	8.7	18.6	13.7 - 23.6						
Sysmex KX-21N & K-800, 1000, 4500	29	18.76	1.40	7.5	18.5	14.5 - 23.0						
Sysmex pocH-100i	13	17.74	1.51	8.5	17.2	13.1 - 22.3						
Sysmex XP-300	29	19.04	1.78	9.4	19.1	13.6 - 24.4						

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

<i>Instrument</i>	Specimen HD-6						Specimen HD-7					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	521	7.69	0.34	4.5	7.7	6.5 - 8.9	523	2.03	0.16	8.1	2.0	1.7 - 2.4
All Abbott Cell-Dyn Instruments	143	7.64	0.41	5.4	7.6	6.4 - 8.8	142	2.06	0.16	7.5	2.1	1.7 - 2.4
All ABX Instruments	83	7.67	0.23	3.0	7.7	6.5 - 8.9	81	2.00	0.07	3.7	2.0	1.7 - 2.3
All Boule (CDS) Instruments	137	7.49	0.21	2.8	7.5	6.3 - 8.7	139	1.86	0.09	4.9	1.8	1.5 - 2.2
All COULTER Instruments	140	7.94	0.25	3.1	7.9	6.7 - 9.2	144	2.16	0.10	4.7	2.2	1.8 - 2.5
All Danam/Drew Scientific Instruments	10	8.00	0.27	3.4	8.1	6.8 - 9.2	10	2.16	0.12	5.4	2.1	1.8 - 2.5
Abbott Cell-Dyn 1700	16	8.30	0.32	3.9	8.4	7.0 - 9.6	16	2.20	0.10	4.7	2.2	1.8 - 2.6
Abbott Cell-Dyn 1800	46	7.42	0.36	4.8	7.4	6.3 - 8.6	45	1.95	0.10	5.1	1.9	1.6 - 2.3
Abbott Cell-Dyn Emerald	80	7.63	0.31	4.1	7.7	6.4 - 8.8	80	2.10	0.14	6.8	2.1	1.7 - 2.5
Boule (CDS) Medonic M series	132	7.48	0.20	2.7	7.5	6.3 - 8.7	133	1.85	0.09	4.6	1.8	1.5 - 2.2
COULTER AcT diff/diff 2	133	7.92	0.24	3.1	7.9	6.7 - 9.2	137	2.16	0.10	4.7	2.2	1.8 - 2.5
Drew Scientific D3	10	8.00	0.27	3.4	8.1	6.8 - 9.2	10	2.16	0.12	5.4	2.1	1.8 - 2.5
Horiba ABX Micros/45/60	83	7.67	0.23	3.0	7.7	6.5 - 8.9	81	2.00	0.07	3.7	2.0	1.7 - 2.3

<i>Instrument</i>	Specimen HD-8						Specimen HD-9					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	515	7.69	0.35	4.6	7.7	6.5 - 8.9	513	7.44	0.42	5.7	7.5	6.3 - 8.6
All Abbott Cell-Dyn Instruments	141	7.64	0.42	5.6	7.6	6.4 - 8.8	141	7.52	0.46	6.1	7.5	6.3 - 8.7
All ABX Instruments	80	7.63	0.18	2.3	7.6	6.4 - 8.8	82	7.54	0.23	3.0	7.5	6.4 - 8.7
All Boule (CDS) Instruments	139	7.51	0.25	3.4	7.5	6.3 - 8.7	134	7.03	0.29	4.2	7.0	5.9 - 8.1
All COULTER Instruments	139	7.95	0.24	3.0	8.0	6.7 - 9.2	138	7.72	0.23	3.0	7.7	6.5 - 8.9
All Danam/Drew Scientific Instruments	10	7.98	0.26	3.3	8.0	6.7 - 9.2	10	7.71	0.14	1.9	7.7	6.5 - 8.9
Abbott Cell-Dyn 1700	16	8.43	0.37	4.4	8.4	7.1 - 9.7	16	8.03	0.40	5.0	8.0	6.8 - 9.3
Abbott Cell-Dyn 1800	46	7.40	0.38	5.1	7.4	6.2 - 8.6	45	7.14	0.35	4.9	7.1	6.0 - 8.3
Abbott Cell-Dyn Emerald	79	7.63	0.30	4.0	7.6	6.4 - 8.8	79	7.62	0.35	4.6	7.6	6.4 - 8.8
Boule (CDS) Medonic M series	132	7.48	0.23	3.1	7.5	6.3 - 8.7	128	6.99	0.25	3.6	7.0	5.9 - 8.1
COULTER AcT diff/diff 2	133	7.95	0.23	2.9	8.0	6.7 - 9.2	132	7.72	0.23	3.0	7.7	6.5 - 8.9
Drew Scientific D3	10	7.98	0.26	3.3	8.0	6.7 - 9.2	10	7.71	0.14	1.9	7.7	6.5 - 8.9
Horiba ABX Micros/45/60	80	7.63	0.18	2.3	7.6	6.4 - 8.8	82	7.54	0.23	3.0	7.5	6.4 - 8.7

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

Specimen HD-10

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	522	2.03	0.17	8.2	2.0	1.7 - 2.4
All Abbott Cell-Dyn Instruments	144	2.08	0.15	7.3	2.1	1.7 - 2.4
All ABX Instruments	83	1.99	0.07	3.6	2.0	1.6 - 2.3
All Boule (CDS) Instruments	138	1.85	0.09	4.8	1.8	1.5 - 2.2
All COULTER Instruments	141	2.16	0.10	4.8	2.2	1.8 - 2.5
All Danam/Drew Scientific Instruments	10	2.18	0.10	4.7	2.2	1.8 - 2.6
Abbott Cell-Dyn 1700	16	2.24	0.12	5.4	2.2	1.9 - 2.6
Abbott Cell-Dyn 1800	45	1.97	0.09	4.6	2.0	1.6 - 2.3
Abbott Cell-Dyn Emerald	82	2.11	0.14	6.5	2.1	1.7 - 2.5
Boule (CDS) Medonic M series	131	1.84	0.08	4.3	1.8	1.5 - 2.2
COULTER AcT diff/diff 2	135	2.16	0.10	4.8	2.2	1.8 - 2.5
Drew Scientific D3	10	2.18	0.10	4.7	2.2	1.8 - 2.6
Horiba ABX Micros/45/60	83	1.99	0.07	3.6	2.0	1.6 - 2.3

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

Specimen HD-6

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	518	4.632	0.121	2.6	4.65	4.35 - 4.91
All Abbott Cell-Dyn Instruments	144	4.534	0.139	3.1	4.54	4.26 - 4.81
All ABX Instruments	84	4.630	0.098	2.1	4.64	4.35 - 4.91
All Boule (CDS) Instruments	139	4.679	0.070	1.5	4.68	4.39 - 4.96
All COULTER Instruments	141	4.679	0.112	2.4	4.68	4.39 - 4.96
All Danam/Drew Scientific Instruments	10	4.625	0.097	2.1	4.62	4.34 - 4.91
Abbott Cell-Dyn 1700	16	4.656	0.100	2.1	4.70	4.37 - 4.94
Abbott Cell-Dyn 1800	46	4.615	0.096	2.1	4.65	4.33 - 4.90
Abbott Cell-Dyn Emerald	81	4.463	0.125	2.8	4.47	4.19 - 4.74
Boule (CDS) Medonic M series	133	4.677	0.070	1.5	4.68	4.39 - 4.96
COULTER AcT diff/diff 2	135	4.674	0.116	2.5	4.68	4.39 - 4.96
Drew Scientific D3	10	4.625	0.097	2.1	4.62	4.34 - 4.91
Horiba ABX Micros/45/60	84	4.630	0.098	2.1	4.64	4.35 - 4.91

Specimen HD-7

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
516	2.278	0.065	2.9	2.27	2.14 - 2.42
143	2.275	0.086	3.8	2.28	2.13 - 2.42
83	2.248	0.040	1.8	2.25	2.11 - 2.39
136	2.260	0.038	1.7	2.26	2.12 - 2.40
142	2.313	0.059	2.5	2.31	2.17 - 2.46
10	2.283	0.047	2.0	2.28	2.14 - 2.42
16	2.313	0.043	1.9	2.32	2.17 - 2.46
46	2.353	0.050	2.1	2.36	2.21 - 2.50
80	2.223	0.071	3.2	2.22	2.08 - 2.36
131	2.258	0.038	1.7	2.26	2.12 - 2.40
135	2.315	0.059	2.6	2.31	2.17 - 2.46
10	2.283	0.047	2.0	2.28	2.14 - 2.42
83	2.248	0.040	1.8	2.25	2.11 - 2.39

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

<u>Instrument</u>	Specimen HD-8						Specimen HD-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	516	4.632	0.116	2.5	4.65	4.35 - 4.91	515	6.391	0.189	3.0	6.43	6.00 - 6.78
All Abbott Cell-Dyn Instruments	144	4.527	0.133	2.9	4.54	4.25 - 4.80	141	6.184	0.169	2.7	6.20	5.81 - 6.56
All ABX Instruments	83	4.624	0.085	1.8	4.64	4.34 - 4.91	84	6.458	0.135	2.1	6.46	6.07 - 6.85
All Boule (CDS) Instruments	138	4.670	0.069	1.5	4.67	4.38 - 4.96	136	6.491	0.105	1.6	6.51	6.10 - 6.89
All COULTER Instruments	141	4.693	0.101	2.2	4.68	4.41 - 4.98	142	6.466	0.136	2.1	6.48	6.07 - 6.86
All Danam/Drew Scientific Instruments	10	4.615	0.096	2.1	4.62	4.33 - 4.90	10	6.275	0.162	2.6	6.30	5.89 - 6.66
Abbott Cell-Dyn 1700	16	4.678	0.055	1.2	4.68	4.39 - 4.96	15	6.375	0.062	1.0	6.40	5.99 - 6.76
Abbott Cell-Dyn 1800	45	4.578	0.101	2.2	4.59	4.30 - 4.86	44	6.143	0.125	2.0	6.14	5.77 - 6.52
Abbott Cell-Dyn Emerald	81	4.470	0.118	2.6	4.49	4.20 - 4.74	80	6.169	0.174	2.8	6.17	5.79 - 6.54
Boule (CDS) Medonic M series	132	4.668	0.068	1.4	4.67	4.38 - 4.95	130	6.486	0.104	1.6	6.51	6.09 - 6.88
COULTER AcT diff/diff 2	135	4.691	0.102	2.2	4.68	4.40 - 4.98	135	6.465	0.139	2.1	6.48	6.07 - 6.86
Drew Scientific D3	10	4.615	0.096	2.1	4.62	4.33 - 4.90	10	6.275	0.162	2.6	6.30	5.89 - 6.66
Horiba ABX Micros/45/60	83	4.624	0.085	1.8	4.64	4.34 - 4.91	84	6.458	0.135	2.1	6.46	6.07 - 6.85
Specimen HD-10												
All Method	520	2.275	0.063	2.8	2.27	2.13 - 2.42						
All Abbott Cell-Dyn Instruments	143	2.271	0.081	3.6	2.28	2.13 - 2.41						
All ABX Instruments	82	2.243	0.041	1.8	2.24	2.10 - 2.38						
All Boule (CDS) Instruments	137	2.252	0.038	1.7	2.25	2.11 - 2.39						
All COULTER Instruments	143	2.314	0.053	2.3	2.31	2.17 - 2.46						
All Danam/Drew Scientific Instruments	10	2.289	0.043	1.9	2.28	2.15 - 2.43						
Abbott Cell-Dyn 1700	16	2.281	0.039	1.7	2.28	2.14 - 2.42						
Abbott Cell-Dyn 1800	45	2.351	0.058	2.5	2.34	2.20 - 2.50						
Abbott Cell-Dyn Emerald	81	2.224	0.061	2.7	2.22	2.09 - 2.36						
Boule (CDS) Medonic M series	131	2.251	0.037	1.7	2.25	2.11 - 2.39						
COULTER AcT diff/diff 2	136	2.315	0.053	2.3	2.32	2.17 - 2.46						
Drew Scientific D3	10	2.289	0.043	1.9	2.28	2.15 - 2.43						
Horiba ABX Micros/45/60	82	2.243	0.041	1.8	2.24	2.10 - 2.38						

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

<u>Instrument</u>	Specimen HD-6						Specimen HD-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	522	13.44	0.28	2.1	13.4	12.4 - 14.4	521	5.92	0.16	2.7	5.9	5.5 - 6.4
All Abbott Cell-Dyn Instruments	144	13.45	0.34	2.6	13.4	12.5 - 14.4	144	5.96	0.23	3.8	5.9	5.5 - 6.4
All ABX Instruments	82	13.51	0.19	1.4	13.5	12.5 - 14.5	81	5.95	0.11	1.8	6.0	5.5 - 6.4
All Boule (CDS) Instruments	136	13.39	0.16	1.2	13.4	12.4 - 14.4	136	5.92	0.09	1.5	5.9	5.5 - 6.4
All COULTER Instruments	142	13.41	0.33	2.4	13.4	12.4 - 14.4	142	5.89	0.15	2.5	5.9	5.4 - 6.4
All Danam/Drew Scientific Instruments	10	13.57	0.26	1.9	13.5	12.6 - 14.6	10	5.86	0.20	3.3	5.9	5.4 - 6.3
Abbott Cell-Dyn 1700	16	13.60	0.22	1.6	13.6	12.6 - 14.6	16	6.18	0.11	1.8	6.2	5.7 - 6.7
Abbott Cell-Dyn 1800	46	13.68	0.37	2.7	13.7	12.7 - 14.7	46	6.13	0.20	3.3	6.1	5.6 - 6.6
Abbott Cell-Dyn Emerald	82	13.31	0.30	2.2	13.3	12.3 - 14.3	81	5.81	0.14	2.4	5.8	5.4 - 6.3
Boule (CDS) Medonic M series	130	13.39	0.17	1.3	13.4	12.4 - 14.4	130	5.92	0.09	1.5	5.9	5.5 - 6.4
COULTER AcT diff/diff 2	135	13.41	0.33	2.5	13.4	12.4 - 14.4	135	5.90	0.15	2.6	5.9	5.4 - 6.4
Drew Scientific D3	10	13.57	0.26	1.9	13.5	12.6 - 14.6	10	5.86	0.20	3.3	5.9	5.4 - 6.3
Horiba ABX Micros/45/60	82	13.51	0.19	1.4	13.5	12.5 - 14.5	81	5.95	0.11	1.8	6.0	5.5 - 6.4

<u>Instrument</u>	Specimen HD-8						Specimen HD-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	522	13.46	0.27	2.0	13.5	12.5 - 14.4	516	18.41	0.35	1.9	18.4	17.1 - 19.8
All Abbott Cell-Dyn Instruments	143	13.49	0.32	2.4	13.5	12.5 - 14.5	141	18.48	0.45	2.4	18.5	17.1 - 19.8
All ABX Instruments	83	13.50	0.20	1.5	13.5	12.5 - 14.5	84	18.43	0.30	1.7	18.5	17.1 - 19.8
All Boule (CDS) Instruments	135	13.37	0.17	1.3	13.4	12.4 - 14.4	136	18.31	0.29	1.6	18.3	17.0 - 19.6
All COULTER Instruments	140	13.49	0.27	2.0	13.5	12.5 - 14.5	141	18.46	0.35	1.9	18.5	17.1 - 19.8
All Danam/Drew Scientific Instruments	10	13.49	0.30	2.2	13.4	12.5 - 14.5	10	18.40	0.46	2.5	18.4	17.1 - 19.7
Abbott Cell-Dyn 1700	16	13.59	0.26	1.9	13.6	12.6 - 14.6	15	18.52	0.28	1.5	18.6	17.2 - 19.9
Abbott Cell-Dyn 1800	45	13.71	0.34	2.5	13.7	12.7 - 14.7	44	18.75	0.45	2.4	18.7	17.4 - 20.1
Abbott Cell-Dyn Emerald	82	13.35	0.27	2.0	13.4	12.4 - 14.3	80	18.33	0.37	2.0	18.4	17.0 - 19.7
Boule (CDS) Medonic M series	128	13.38	0.17	1.3	13.4	12.4 - 14.4	129	18.32	0.29	1.6	18.3	17.0 - 19.7
COULTER AcT diff/diff 2	133	13.49	0.27	2.0	13.5	12.5 - 14.5	134	18.46	0.35	1.9	18.5	17.1 - 19.8
Drew Scientific D3	10	13.49	0.30	2.2	13.4	12.5 - 14.5	10	18.40	0.46	2.5	18.4	17.1 - 19.7
Horiba ABX Micros/45/60	83	13.50	0.20	1.5	13.5	12.5 - 14.5	84	18.43	0.30	1.7	18.5	17.1 - 19.8

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

Specimen HD-10

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	520	5.93	0.15	2.6	5.9	5.5 - 6.4
All Abbott Cell-Dyn Instruments	144	5.96	0.22	3.7	5.9	5.5 - 6.4
All ABX Instruments	83	5.94	0.10	1.6	6.0	5.5 - 6.4
All Boule (CDS) Instruments	137	5.91	0.10	1.7	5.9	5.4 - 6.4
All COULTER Instruments	140	5.92	0.13	2.1	5.9	5.5 - 6.4
All Danam/Drew Scientific Instruments	10	5.85	0.22	3.7	5.8	5.4 - 6.3
Abbott Cell-Dyn 1700	15	6.18	0.15	2.4	6.2	5.7 - 6.7
Abbott Cell-Dyn 1800	45	6.13	0.19	3.1	6.1	5.7 - 6.6
Abbott Cell-Dyn Emerald	81	5.82	0.11	1.9	5.8	5.4 - 6.3
Boule (CDS) Medonic M series	130	5.91	0.10	1.6	5.9	5.4 - 6.4
COULTER AcT diff/diff 2	134	5.91	0.13	2.2	5.9	5.5 - 6.4
Drew Scientific D3	10	5.85	0.22	3.7	5.8	5.4 - 6.3
Horiba ABX Micros/45/60	83	5.94	0.10	1.6	6.0	5.5 - 6.4

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

Specimen HD-6

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	523	38.02	1.43	3.8	37.9	35.7 - 40.3
All Abbott Cell-Dyn Instruments	144	39.16	1.26	3.2	39.2	36.8 - 41.6
All ABX Instruments	82	37.19	0.78	2.1	37.2	34.9 - 39.5
All Boule (CDS) Instruments	139	36.77	0.82	2.2	36.8	34.5 - 39.0
All COULTER Instruments	142	38.51	0.99	2.6	38.5	36.2 - 40.9
All Danam/Drew Scientific Instruments	10	39.36	0.78	2.0	39.2	36.9 - 41.8
Abbott Cell-Dyn 1700	15	38.63	1.26	3.3	38.4	36.3 - 41.0
Abbott Cell-Dyn 1800	46	39.97	1.16	2.9	40.1	37.5 - 42.4
Abbott Cell-Dyn Emerald	81	38.80	1.11	2.9	38.8	36.4 - 41.2
Boule (CDS) Medonic M series	133	36.79	0.82	2.2	36.8	34.5 - 39.0
COULTER AcT diff/diff 2	135	38.48	1.00	2.6	38.5	36.1 - 40.8
Drew Scientific D3	10	39.36	0.78	2.0	39.2	36.9 - 41.8
Horiba ABX Micros/45/60	82	37.19	0.78	2.1	37.2	34.9 - 39.5

Specimen HD-7

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
521	16.74	0.90	5.4	16.8	15.7 - 17.8
142	17.55	0.60	3.4	17.6	16.4 - 18.7
83	15.81	0.31	2.0	15.8	14.8 - 16.8
139	15.90	0.35	2.2	15.9	14.9 - 16.9
142	17.18	0.47	2.7	17.1	16.1 - 18.3
10	17.75	0.43	2.4	17.7	16.6 - 18.9
15	17.07	0.47	2.8	17.1	16.0 - 18.1
46	17.95	0.51	2.8	18.0	16.8 - 19.1
79	17.42	0.54	3.1	17.4	16.3 - 18.5
133	15.91	0.35	2.2	15.9	14.9 - 16.9
135	17.19	0.47	2.7	17.1	16.1 - 18.3
10	17.75	0.43	2.4	17.7	16.6 - 18.9
83	15.81	0.31	2.0	15.8	14.8 - 16.8

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

<i><u>Instrument</u></i>	Specimen HD-8						Specimen HD-9					
	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	519	38.03	1.36	3.6	38.0	35.7 - 40.4	514	53.17	1.46	2.7	53.2	49.9 - 56.4
All Abbott Cell-Dyn Instruments	143	39.11	1.13	2.9	39.1	36.7 - 41.5	141	53.75	1.54	2.9	53.8	50.5 - 57.0
All ABX Instruments	83	37.09	0.70	1.9	37.1	34.8 - 39.4	84	53.25	1.22	2.3	53.3	50.0 - 56.5
All Boule (CDS) Instruments	138	36.86	0.82	2.2	36.9	34.6 - 39.1	135	52.07	1.13	2.2	52.1	48.9 - 55.2
All COULTER Instruments	140	38.58	0.96	2.5	38.4	36.2 - 40.9	141	53.53	1.16	2.2	53.6	50.3 - 56.8
All Danam/Drew Scientific Instruments	10	39.25	0.80	2.0	39.4	36.8 - 41.7	10	53.41	1.50	2.8	53.9	50.2 - 56.7
Abbott Cell-Dyn 1700	15	38.87	1.06	2.7	39.0	36.5 - 41.2	15	53.31	1.74	3.3	53.6	50.1 - 56.6
Abbott Cell-Dyn 1800	45	39.55	1.26	3.2	39.6	37.1 - 42.0	44	53.79	1.53	2.8	53.8	50.5 - 57.1
Abbott Cell-Dyn Emerald	81	38.90	1.00	2.6	39.0	36.5 - 41.3	80	53.79	1.52	2.8	54.0	50.5 - 57.1
Boule (CDS) Medonic M series	132	36.88	0.82	2.2	36.9	34.6 - 39.1	129	52.10	1.14	2.2	52.2	48.9 - 55.3
COULTER AcT diff/diff 2	134	38.56	0.97	2.5	38.4	36.2 - 40.9	134	53.51	1.17	2.2	53.6	50.3 - 56.8
Drew Scientific D3	10	39.25	0.80	2.0	39.4	36.8 - 41.7	10	53.41	1.50	2.8	53.9	50.2 - 56.7
Horiba ABX Micros/45/60	83	37.09	0.70	1.9	37.1	34.8 - 39.4	84	53.25	1.22	2.3	53.3	50.0 - 56.5
Specimen HD-10												
All Method	521	16.71	0.88	5.3	16.7	15.7 - 17.8						
All Abbott Cell-Dyn Instruments	144	17.50	0.59	3.4	17.6	16.4 - 18.6						
All ABX Instruments	82	15.75	0.34	2.1	15.7	14.8 - 16.7						
All Boule (CDS) Instruments	138	15.90	0.37	2.3	15.9	14.9 - 16.9						
All COULTER Instruments	143	17.14	0.43	2.5	17.1	16.1 - 18.2						
All Danam/Drew Scientific Instruments	10	17.72	0.41	2.3	17.8	16.6 - 18.8						
Abbott Cell-Dyn 1700	15	16.82	0.41	2.5	16.8	15.8 - 17.9						
Abbott Cell-Dyn 1800	45	17.86	0.56	3.1	17.8	16.7 - 19.0						
Abbott Cell-Dyn Emerald	81	17.46	0.47	2.7	17.5	16.4 - 18.6						
Boule (CDS) Medonic M series	132	15.91	0.38	2.4	15.9	14.9 - 16.9						
COULTER AcT diff/diff 2	136	17.15	0.43	2.5	17.1	16.1 - 18.2						
Drew Scientific D3	10	17.72	0.41	2.3	17.8	16.6 - 18.8						
Horiba ABX Micros/45/60	82	15.75	0.34	2.1	15.7	14.8 - 16.7						

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

<u><i>Instrument</i></u>	Specimen HD-6						Specimen HD-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	523	265.4	20.2	7.6	267	199 - 332	516	74.5	9.2	12.4	73	55 - 94
All Abbott Cell-Dyn Instruments	144	270.1	18.0	6.7	270	202 - 338	143	76.5	12.1	15.8	74	57 - 96
All ABX Instruments	84	277.2	14.3	5.2	277	207 - 347	83	81.9	6.5	7.9	82	61 - 103
All Boule (CDS) Instruments	138	243.5	13.3	5.5	244	182 - 305	135	67.5	4.8	7.1	67	50 - 85
All COULTER Instruments	142	273.3	14.0	5.1	273	204 - 342	141	74.7	6.3	8.4	74	56 - 94
All Danam/Drew Scientific Instruments	10	280.1	13.3	4.8	282	210 - 351	10	82.0	12.3	15.0	84	61 - 103
Abbott Cell-Dyn 1700	16	265.1	19.8	7.5	263	198 - 332	16	67.8	7.2	10.6	68	50 - 85
Abbott Cell-Dyn 1800	46	273.6	16.3	5.9	275	205 - 343	46	70.4	5.7	8.1	70	52 - 88
Abbott Cell-Dyn Emerald	81	269.1	18.6	6.9	269	201 - 337	80	81.9	13.0	15.9	82	61 - 103
Boule (CDS) Medonic M series	132	242.8	12.8	5.3	242	182 - 304	130	67.3	5.0	7.4	67	50 - 85
COULTER AcT diff/diff 2	135	273.6	13.8	5.0	273	205 - 343	134	74.9	6.3	8.5	74	56 - 94
Drew Scientific D3	10	280.1	13.3	4.8	282	210 - 351	10	82.0	12.3	15.0	84	61 - 103
Horiba ABX Micros/45/60	84	277.2	14.3	5.2	277	207 - 347	83	81.9	6.5	7.9	82	61 - 103
<u><i>Instrument</i></u>	Specimen HD-8						Specimen HD-9					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	524	264.7	20.5	7.7	266	198 - 331	517	320.4	26.6	8.3	322	240 - 401
All Abbott Cell-Dyn Instruments	145	268.8	18.1	6.7	269	201 - 337	143	329.4	29.4	8.9	326	247 - 412
All ABX Instruments	83	277.2	13.0	4.7	276	207 - 347	82	319.9	15.4	4.8	320	239 - 400
All Boule (CDS) Instruments	138	241.8	13.2	5.5	243	181 - 303	136	293.9	18.3	6.2	294	220 - 368
All COULTER Instruments	143	273.3	14.0	5.1	273	204 - 342	142	335.7	16.4	4.9	335	251 - 420
All Danam/Drew Scientific Instruments	10	281.3	14.1	5.0	285	210 - 352	10	330.3	22.8	6.9	334	247 - 413
Abbott Cell-Dyn 1700	16	261.3	20.7	7.9	261	195 - 327	16	349.4	29.6	8.5	345	262 - 437
Abbott Cell-Dyn 1800	46	270.4	17.0	6.3	272	202 - 338	45	348.4	25.1	7.2	351	261 - 436
Abbott Cell-Dyn Emerald	82	269.4	18.1	6.7	269	202 - 337	80	315.3	21.2	6.7	314	236 - 395
Boule (CDS) Medonic M series	133	241.1	12.8	5.3	242	180 - 302	129	293.0	16.7	5.7	293	219 - 367
COULTER AcT diff/diff 2	136	273.7	13.9	5.1	274	205 - 343	135	336.2	16.2	4.8	335	252 - 421
Drew Scientific D3	10	281.3	14.1	5.0	285	210 - 352	10	330.3	22.8	6.9	334	247 - 413
Horiba ABX Micros/45/60	83	277.2	13.0	4.7	276	207 - 347	82	319.9	15.4	4.8	320	239 - 400

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

Specimen HD-10

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	518	74.0	9.2	12.4	73	55 - 93
All Abbott Cell-Dyn Instruments	144	76.6	12.3	16.1	76	57 - 96
All ABX Instruments	83	81.9	6.1	7.5	82	61 - 103
All Boule (CDS) Instruments	139	66.8	5.2	7.7	67	50 - 84
All COULTER Instruments	144	74.0	6.3	8.5	73	55 - 93
All Danam/Drew Scientific Instruments	10	85.1	8.0	9.3	85	63 - 107
Abbott Cell-Dyn 1700	16	66.7	6.3	9.4	66	50 - 84
Abbott Cell-Dyn 1800	45	71.6	6.0	8.3	71	53 - 90
Abbott Cell-Dyn Emerald	83	81.6	14.1	17.2	82	61 - 103
Boule (CDS) Medonic M series	133	66.7	5.2	7.8	67	50 - 84
COULTER AcT diff/diff 2	137	74.1	6.1	8.3	74	55 - 93
Drew Scientific D3	10	85.1	8.0	9.3	85	63 - 107
Horiba ABX Micros/45/60	83	81.9	6.1	7.5	82	61 - 103

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

Specimen HD-6

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	508	29.90	4.24	14.2	31.6	17.1 - 42.7
All Abbott Cell-Dyn Instruments	141	27.52	2.71	9.9	28.2	19.3 - 35.7
All ABX Instruments	79	23.17	2.74	11.8	23.1	14.9 - 31.4
All Boule (CDS) Instruments	135	32.47	0.92	2.8	32.5	29.7 - 35.3
All COULTER Instruments	132	33.49	0.95	2.8	33.5	30.6 - 36.4
All Danam/Drew Scientific Instruments	10	30.92	0.89	2.9	31.0	28.2 - 33.6
Abbott Cell-Dyn 1700	17	28.63	1.45	5.1	28.2	24.2 - 33.0
Abbott Cell-Dyn 1800	46	24.30	1.74	7.1	24.1	19.0 - 29.6
Abbott Cell-Dyn Emerald	76	29.16	1.24	4.3	29.1	25.4 - 32.9
Boule (CDS) Medonic M series	131	32.42	0.87	2.7	32.5	29.7 - 35.1
COULTER AcT diff/diff 2	130	33.49	0.95	2.8	33.5	30.6 - 36.4
Drew Scientific D3	10	30.92	0.89	2.9	31.0	28.2 - 33.6
Horiba ABX Micros/45/60	79	23.17	2.74	11.8	23.1	14.9 - 31.4

Specimen HD-7

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
507	55.82	7.25	13.0	58.8	34.0 - 77.6
140	51.67	3.48	6.7	52.2	41.2 - 62.2
78	43.84	4.73	10.8	43.2	29.6 - 58.1
136	61.26	1.90	3.1	61.2	55.5 - 67.0
133	61.43	1.50	2.4	61.5	56.9 - 66.0
10	57.66	1.12	1.9	57.7	54.3 - 61.1
17	53.51	1.77	3.3	54.0	48.1 - 58.9
45	47.69	2.25	4.7	47.2	40.9 - 54.5
76	53.51	1.99	3.7	53.6	47.5 - 59.5
130	61.18	1.87	3.1	61.1	55.5 - 66.8
131	61.43	1.47	2.4	61.5	57.0 - 65.9
10	57.66	1.12	1.9	57.7	54.3 - 61.1
78	43.84	4.73	10.8	43.2	29.6 - 58.1

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

<u><i>Instrument</i></u>	Specimen HD-8						Specimen HD-9					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	508	29.93	4.19	14.0	31.7	17.3 - 42.5	507	48.75	6.36	13.1	49.8	29.6 - 67.9
All Abbott Cell-Dyn Instruments	141	27.62	2.70	9.8	28.3	19.5 - 35.8	142	44.78	2.94	6.6	45.7	35.9 - 53.7
All ABX Instruments	77	23.01	2.41	10.5	22.8	15.7 - 30.3	77	39.00	2.88	7.4	38.8	30.3 - 47.7
All Boule (CDS) Instruments	136	32.61	0.95	2.9	32.6	29.7 - 35.5	137	56.39	1.15	2.0	56.5	52.9 - 59.9
All COULTER Instruments	133	33.37	0.96	2.9	33.4	30.4 - 36.3	134	50.72	1.02	2.0	50.6	47.6 - 53.8
All Danam/Drew Scientific Instruments	10	30.38	0.50	1.6	30.3	28.8 - 31.9	10	48.44	0.87	1.8	48.2	45.8 - 51.1
Abbott Cell-Dyn 1700	17	29.31	1.76	6.0	28.8	24.0 - 34.7	17	45.99	1.62	3.5	45.8	41.1 - 50.9
Abbott Cell-Dyn 1800	46	24.57	1.80	7.3	24.3	19.1 - 30.0	44	40.97	1.54	3.7	40.7	36.3 - 45.6
Abbott Cell-Dyn Emerald	77	29.11	1.46	5.0	29.1	24.7 - 33.5	78	46.63	1.22	2.6	46.8	42.9 - 50.3
Boule (CDS) Medonic M series	131	32.56	0.93	2.8	32.6	29.7 - 35.4	131	56.34	1.13	2.0	56.5	52.9 - 59.8
COULTER AcT diff/diff 2	131	33.37	0.92	2.8	33.4	30.6 - 36.2	132	50.69	1.01	2.0	50.6	47.6 - 53.8
Drew Scientific D3	10	30.38	0.50	1.6	30.3	28.8 - 31.9	10	48.44	0.87	1.8	48.2	45.8 - 51.1
Horiba ABX Micros/45/60	77	23.01	2.41	10.5	22.8	15.7 - 30.3	77	39.00	2.88	7.4	38.8	30.3 - 47.7
Specimen HD-10												
All Method	507	55.75	7.48	13.4	58.9	33.3 - 78.2						
All Abbott Cell-Dyn Instruments	139	51.76	3.57	6.9	52.4	41.0 - 62.5						
All ABX Instruments	79	43.09	4.44	10.3	42.4	29.7 - 56.5						
All Boule (CDS) Instruments	135	60.98	1.74	2.8	61.0	55.7 - 66.2						
All COULTER Instruments	131	61.51	1.65	2.7	61.3	56.5 - 66.5						
All Danam/Drew Scientific Instruments	10	57.73	1.13	2.0	57.5	54.3 - 61.2						
Abbott Cell-Dyn 1700	17	53.33	2.16	4.0	53.5	46.8 - 59.8						
Abbott Cell-Dyn 1800	45	47.70	3.05	6.4	47.8	38.5 - 56.9						
Abbott Cell-Dyn Emerald	77	53.66	2.14	4.0	53.6	47.2 - 60.1						
Boule (CDS) Medonic M series	130	60.90	1.67	2.7	61.0	55.8 - 66.0						
COULTER AcT diff/diff 2	130	61.50	1.66	2.7	61.3	56.5 - 66.5						
Drew Scientific D3	10	57.73	1.13	2.0	57.5	54.3 - 61.2						
Horiba ABX Micros/45/60	79	43.09	4.44	10.3	42.4	29.7 - 56.5						

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

Specimen HD-10

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	502	11.87	5.59	47.1	10.3	0.0 - 28.7
All Abbott Cell-Dyn Instruments	138	14.38	3.31	23.0	13.4	4.4 - 24.4
All ABX Instruments	79	21.43	2.87	13.4	21.6	12.8 - 30.1
All Boule (CDS) Instruments	136	9.09	1.94	21.3	9.0	3.2 - 15.0
All COULTER Instruments	134	6.86	1.20	17.6	6.8	3.2 - 10.5
All Danam/Drew Scientific Instruments	10	9.55	0.68	7.1	9.6	7.5 - 11.6
Abbott Cell-Dyn 1700	17	12.69	1.60	12.6	12.7	7.9 - 17.5
Abbott Cell-Dyn 1800	43	18.40	1.96	10.7	18.6	12.5 - 24.3
Abbott Cell-Dyn Emerald	77	12.54	1.95	15.6	12.2	6.6 - 18.4
Boule (CDS) Medonic M series	129	9.13	1.92	21.0	9.3	3.3 - 14.9
COULTER AcT diff/diff 2	132	6.87	1.20	17.5	6.8	3.2 - 10.5
Drew Scientific D3	10	9.55	0.68	7.1	9.6	7.5 - 11.6
Horiba ABX Micros/45/60	79	21.43	2.87	13.4	21.6	12.8 - 30.1

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

Specimen HD-6

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	503	62.11	2.44	3.9	61.9	54.7 - 69.5
All Abbott Cell-Dyn Instruments	137	63.60	1.25	2.0	63.8	59.8 - 67.4
All ABX Instruments	78	65.40	1.20	1.8	65.5	61.8 - 69.1
All Boule (CDS) Instruments	129	59.54	1.07	1.8	59.5	56.3 - 62.8
All COULTER Instruments	134	61.40	0.90	1.5	61.4	58.6 - 64.2
All Danam/Drew Scientific Instruments	10	63.62	0.60	0.9	63.7	61.8 - 65.5
Abbott Cell-Dyn 1700	17	62.43	1.75	2.8	62.9	57.1 - 67.7
Abbott Cell-Dyn 1800	45	63.32	1.09	1.7	63.4	60.0 - 66.7
Abbott Cell-Dyn Emerald	75	63.91	1.21	1.9	64.2	60.2 - 67.6
Boule (CDS) Medonic M series	126	59.55	0.99	1.7	59.5	56.5 - 62.6
COULTER AcT diff/diff 2	131	61.38	0.90	1.5	61.4	58.6 - 64.1
Drew Scientific D3	10	63.62	0.60	0.9	63.7	61.8 - 65.5
Horiba ABX Micros/45/60	78	65.40	1.20	1.8	65.5	61.8 - 69.1

Specimen HD-7

<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
503	32.48	2.73	8.4	32.2	24.2 - 40.7
140	34.09	1.62	4.7	34.1	29.2 - 39.0
80	35.26	2.19	6.2	35.4	28.6 - 41.9
133	30.06	2.42	8.0	30.0	22.8 - 37.4
134	31.51	1.33	4.2	31.5	27.5 - 35.6
10	33.02	1.35	4.1	33.3	28.9 - 37.1
17	33.50	1.85	5.5	33.3	27.9 - 39.1
46	34.18	1.66	4.9	34.3	29.2 - 39.2
76	34.12	1.50	4.4	34.1	29.6 - 38.7
127	30.12	2.41	8.0	30.0	22.8 - 37.4
131	31.50	1.32	4.2	31.5	27.5 - 35.5
10	33.02	1.35	4.1	33.3	28.9 - 37.1
80	35.26	2.19	6.2	35.4	28.6 - 41.9

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

<u><i>Instrument</i></u>	Specimen HD-8						Specimen HD-9					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	501	62.15	2.50	4.0	62.0	54.6 - 69.7	502	38.10	4.62	12.1	36.2	24.2 - 52.0
All Abbott Cell-Dyn Instruments	139	63.47	1.43	2.3	63.6	59.1 - 67.8	142	41.11	2.67	6.5	41.1	33.0 - 49.2
All ABX Instruments	76	65.48	1.29	2.0	65.5	61.6 - 69.4	78	45.03	2.00	4.4	45.4	39.0 - 51.1
All Boule (CDS) Instruments	133	59.36	1.48	2.5	59.4	54.9 - 63.8	133	33.62	1.50	4.5	33.7	29.1 - 38.2
All COULTER Instruments	134	61.59	0.91	1.5	61.5	58.8 - 64.4	135	35.22	0.97	2.8	35.3	32.2 - 38.2
All Danam/Drew Scientific Instruments	10	64.26	0.28	0.4	64.3	63.4 - 65.1	10	40.95	0.88	2.1	41.3	38.3 - 43.6
Abbott Cell-Dyn 1700	17	61.82	1.73	2.8	62.1	56.6 - 67.1	17	38.05	1.27	3.3	38.2	34.2 - 41.9
Abbott Cell-Dyn 1800	46	63.14	1.25	2.0	63.4	59.3 - 66.9	46	38.67	1.25	3.2	38.9	34.9 - 42.5
Abbott Cell-Dyn Emerald	77	63.95	1.33	2.1	63.9	59.9 - 68.0	77	43.20	1.22	2.8	43.3	39.5 - 46.9
Boule (CDS) Medonic M series	127	59.49	1.37	2.3	59.4	55.3 - 63.7	126	33.76	1.39	4.1	33.8	29.5 - 38.0
COULTER AcT diff/diff 2	131	61.58	0.89	1.4	61.5	58.9 - 64.3	132	35.22	0.94	2.7	35.3	32.4 - 38.1
Drew Scientific D3	10	64.26	0.28	0.4	64.3	63.4 - 65.1	10	40.95	0.88	2.1	41.3	38.3 - 43.6
Horiba ABX Micros/45/60	76	65.48	1.29	2.0	65.5	61.6 - 69.4	78	45.03	2.00	4.4	45.4	39.0 - 51.1
Specimen HD-10												
All Method	502	32.43	2.75	8.5	32.4	24.1 - 40.7						
All Abbott Cell-Dyn Instruments	138	33.89	1.58	4.7	33.8	29.1 - 38.7						
All ABX Instruments	80	35.47	2.01	5.7	35.6	29.4 - 41.5						
All Boule (CDS) Instruments	134	29.97	2.57	8.6	29.5	22.2 - 37.7						
All COULTER Instruments	135	31.52	1.31	4.2	31.6	27.5 - 35.5						
All Danam/Drew Scientific Instruments	10	32.72	1.04	3.2	32.9	29.5 - 35.9						
Abbott Cell-Dyn 1700	17	33.95	1.53	4.5	33.6	29.3 - 38.6						
Abbott Cell-Dyn 1800	45	33.95	1.94	5.7	33.6	28.1 - 39.8						
Abbott Cell-Dyn Emerald	75	33.91	1.28	3.8	34.1	30.0 - 37.8						
Boule (CDS) Medonic M series	128	30.04	2.53	8.4	29.5	22.4 - 37.7						
COULTER AcT diff/diff 2	132	31.53	1.31	4.1	31.6	27.6 - 35.5						
Drew Scientific D3	10	32.72	1.04	3.2	32.9	29.5 - 35.9						
Horiba ABX Micros/45/60	80	35.47	2.01	5.7	35.6	29.4 - 41.5						

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

<i><u>Instrument</u></i>	Specimen DIF-6						Specimen DIF-7					
	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	13	24.81	0.57	2.3	24.9	21.0 - 28.6	13	9.64	0.18	1.9	9.7	8.1 - 11.1
All COULTER Instruments	13	24.81	0.57	2.3	24.9	21.0 - 28.6	13	9.64	0.18	1.9	9.7	8.1 - 11.1
COULTER UniCel DxH 600	10	24.97	0.15	0.6	24.9	21.2 - 28.8	10	9.70	0.06	0.7	9.7	8.2 - 11.2
<i><u>Instrument</u></i>	Specimen DIF-8						Specimen DIF-9					
	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	13	4.16	0.16	3.8	4.1	3.5 - 4.8	13	9.56	0.30	3.1	9.6	8.1 - 11.0
All COULTER Instruments	13	4.16	0.16	3.8	4.1	3.5 - 4.8	13	9.56	0.30	3.1	9.6	8.1 - 11.0
COULTER UniCel DxH 600	10	4.07	0.05	1.3	4.1	3.4 - 4.7	10	9.65	0.15	1.6	9.7	8.2 - 11.1
<i><u>Instrument</u></i>	Specimen DIF-10											
	<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	13	4.17	0.21	4.9	4.2	3.5 - 4.8						
All COULTER Instruments	13	4.17	0.21	4.9	4.2	3.5 - 4.8						
COULTER UniCel DxH 600	10	4.08	0.15	3.6	4.1	3.4 - 4.7						

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

<i><u>Instrument</u></i>	Specimen DIF-6						Specimen DIF-7					
	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	13	6.397	0.157	2.5	6.39	6.01 - 6.79	13	4.171	0.092	2.2	4.17	3.92 - 4.43
All COULTER Instruments	13	6.397	0.157	2.5	6.39	6.01 - 6.79	13	4.171	0.092	2.2	4.17	3.92 - 4.43
COULTER UniCel DxH 600	10	6.337	0.076	1.2	6.37	5.95 - 6.72	10	4.122	0.051	1.2	4.10	3.87 - 4.37
<i><u>Instrument</u></i>	Specimen DIF-8						Specimen DIF-9					
	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	13	2.605	0.046	1.8	2.60	2.44 - 2.77	13	4.153	0.087	2.1	4.13	3.90 - 4.41
All COULTER Instruments	13	2.605	0.046	1.8	2.60	2.44 - 2.77	13	4.153	0.087	2.1	4.13	3.90 - 4.41
COULTER UniCel DxH 600	10	2.583	0.028	1.1	2.59	2.42 - 2.74	10	4.110	0.039	1.0	4.11	3.86 - 4.36
<i><u>Instrument</u></i>	Specimen DIF-10											
	<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	13	2.605	0.042	1.6	2.59	2.44 - 2.77						
All COULTER Instruments	13	2.605	0.042	1.6	2.59	2.44 - 2.77						
COULTER UniCel DxH 600	10	2.582	0.026	1.0	2.59	2.42 - 2.74						

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

<u>Instrument</u>	Specimen DIF-6						Specimen DIF-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	19.82	0.32	1.6	19.8	18.4 - 21.3	13	11.77	0.21	1.7	11.8	10.9 - 12.6
All COULTER Instruments	13	19.82	0.32	1.6	19.8	18.4 - 21.3	13	11.77	0.21	1.7	11.8	10.9 - 12.6
COULTER UniCel DxH 600	10	19.68	0.19	1.0	19.8	18.3 - 21.1	10	11.67	0.19	1.6	11.7	10.8 - 12.5

<u>Instrument</u>	Specimen DIF-8						Specimen DIF-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	6.67	0.09	1.4	6.7	6.2 - 7.2	13	11.75	0.21	1.8	11.7	10.9 - 12.6
All COULTER Instruments	13	6.67	0.09	1.4	6.7	6.2 - 7.2	13	11.75	0.21	1.8	11.7	10.9 - 12.6
COULTER UniCel DxH 600	10	6.62	0.04	0.6	6.6	6.1 - 7.1	10	11.68	0.20	1.7	11.7	10.8 - 12.6

<u>Instrument</u>	Specimen DIF-10					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	6.68	0.12	1.7	6.6	6.2 - 7.2
All COULTER Instruments	13	6.68	0.12	1.7	6.6	6.2 - 7.2
COULTER UniCel DxH 600	10	6.62	0.04	0.6	6.6	6.1 - 7.1

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

<u>Instrument</u>	Specimen DIF-6						Specimen DIF-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	62.91	1.32	2.1	63.2	59.1 - 66.7	13	36.46	0.89	2.4	36.5	34.2 - 38.7
All COULTER Instruments	13	62.91	1.32	2.1	63.2	59.1 - 66.7	13	36.46	0.89	2.4	36.5	34.2 - 38.7
COULTER UniCel DxH 600	10	63.53	0.82	1.3	63.6	59.7 - 67.4	10	36.68	0.59	1.6	36.6	34.4 - 38.9

<u>Instrument</u>	Specimen DIF-8						Specimen DIF-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	20.56	0.39	1.9	20.5	19.3 - 21.8	13	36.45	0.95	2.6	36.5	34.2 - 38.7
All COULTER Instruments	13	20.56	0.39	1.9	20.5	19.3 - 21.8	13	36.45	0.95	2.6	36.5	34.2 - 38.7
COULTER UniCel DxH 600	10	20.68	0.19	0.9	20.7	19.4 - 22.0	10	36.68	0.58	1.6	36.7	34.4 - 38.9

<u>Instrument</u>	Specimen DIF-10					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	20.53	0.41	2.0	20.6	19.2 - 21.8
All COULTER Instruments	13	20.53	0.41	2.0	20.6	19.2 - 21.8
COULTER UniCel DxH 600	10	20.67	0.19	0.9	20.6	19.4 - 22.0

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

<u>Instrument</u>	<u>Specimen DIF-6</u>						<u>Specimen DIF-7</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	482.2	16.8	3.5	484	361 - 603	13	250.1	11.0	4.4	250	187 - 313
All COULTER Instruments	13	482.2	16.8	3.5	484	361 - 603	13	250.1	11.0	4.4	250	187 - 313
COULTER UniCel DxH 600	10	475.2	12.7	2.7	477	356 - 594	10	250.2	7.6	3.0	251	187 - 313

<u>Instrument</u>	<u>Specimen DIF-8</u>						<u>Specimen DIF-9</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	85.4	4.0	4.7	84	64 - 107	13	247.8	10.7	4.3	251	185 - 310
All COULTER Instruments	13	85.4	4.0	4.7	84	64 - 107	13	247.8	10.7	4.3	251	185 - 310
COULTER UniCel DxH 600	10	82.8	1.2	1.4	83	62 - 104	10	246.7	8.7	3.5	250	185 - 309

<u>Instrument</u>	<u>Specimen DIF-10</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	85.2	3.9	4.6	84	63 - 107
All COULTER Instruments	13	85.2	3.9	4.6	84	63 - 107
COULTER UniCel DxH 600	10	83.0	2.2	2.6	82	62 - 104

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

<u>Instrument</u>	<u>Specimen DIF-6</u>						<u>Specimen DIF-7</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	68.76	1.25	1.8	69.0	65.0 - 72.6	13	60.33	0.98	1.6	60.1	57.3 - 63.3
All COULTER Instruments	13	68.76	1.25	1.8	69.0	65.0 - 72.6	13	60.33	0.98	1.6	60.1	57.3 - 63.3
COULTER UniCel DxH 600	10	69.33	0.48	0.7	69.3	67.8 - 70.8	10	60.78	0.67	1.1	60.8	58.7 - 62.8

<u>Instrument</u>	<u>Specimen DIF-8</u>						<u>Specimen DIF-9</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	52.28	0.99	1.9	52.5	49.2 - 55.3	13	60.38	0.76	1.3	60.4	58.0 - 62.7
All COULTER Instruments	13	52.28	0.99	1.9	52.5	49.2 - 55.3	13	60.38	0.76	1.3	60.4	58.0 - 62.7
COULTER UniCel DxH 600	10	52.77	0.36	0.7	52.9	51.6 - 53.9	10	60.78	0.64	1.1	61.0	58.8 - 62.8

<u>Instrument</u>	<u>Specimen DIF-10</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	52.60	1.01	1.9	52.4	49.5 - 55.7
All COULTER Instruments	13	52.60	1.01	1.9	52.4	49.5 - 55.7
COULTER UniCel DxH 600	10	52.98	1.07	2.0	52.8	49.7 - 56.3

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

<u>Instrument</u>	<u>Specimen DIF-6</u>						<u>Specimen DIF-7</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	20.58	1.47	7.1	20.0	16.1 - 25.0	13	28.88	1.75	6.1	28.1	23.6 - 34.2
All COULTER Instruments	13	20.58	1.47	7.1	20.0	16.1 - 25.0	13	28.88	1.75	6.1	28.1	23.6 - 34.2
COULTER UniCel DxH 600	10	19.75	0.40	2.0	19.8	18.5 - 21.0	10	27.82	0.69	2.5	27.9	25.7 - 29.9
<u>Instrument</u>	<u>Specimen DIF-8</u>						<u>Specimen DIF-9</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	38.06	1.63	4.3	37.5	33.1 - 43.0	13	29.05	1.23	4.2	29.2	25.3 - 32.8
All COULTER Instruments	13	38.06	1.63	4.3	37.5	33.1 - 43.0	13	29.05	1.23	4.2	29.2	25.3 - 32.8
COULTER UniCel DxH 600	10	37.27	0.37	1.0	37.3	36.1 - 38.4	10	28.38	0.70	2.5	28.2	26.2 - 30.5
<u>Instrument</u>	<u>Specimen DIF-10</u>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	13	37.75	2.01	5.3	37.6	31.7 - 43.8						
All COULTER Instruments	13	37.75	2.01	5.3	37.6	31.7 - 43.8						
COULTER UniCel DxH 600	10	36.78	1.42	3.9	37.3	32.5 - 41.1						

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

<u>Instrument</u>	<u>Specimen DIF-6</u>						<u>Specimen DIF-7</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	6.29	0.82	13.0	6.4	3.8 - 8.8	13	4.79	0.75	15.7	4.9	2.5 - 7.1
All COULTER Instruments	13	6.29	0.82	13.0	6.4	3.8 - 8.8	13	4.79	0.75	15.7	4.9	2.5 - 7.1
COULTER UniCel DxH 600	10	6.72	0.37	5.4	6.7	5.6 - 7.9	10	5.25	0.49	9.4	5.1	3.7 - 6.8
<u>Instrument</u>	<u>Specimen DIF-8</u>						<u>Specimen DIF-9</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	2.52	0.71	28.2	2.3	0.3 - 4.7	13	4.69	0.59	12.6	4.7	2.9 - 6.5
All COULTER Instruments	13	2.52	0.71	28.2	2.3	0.3 - 4.7	13	4.69	0.59	12.6	4.7	2.9 - 6.5
COULTER UniCel DxH 600	10	2.72	0.48	17.6	2.9	1.2 - 4.2	10	4.97	0.37	7.4	5.0	3.8 - 6.1
<u>Instrument</u>	<u>Specimen DIF-10</u>											
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>						
All Method	13	2.66	0.93	35.1	2.7	0.0 - 5.5						
All COULTER Instruments	13	2.66	0.93	35.1	2.7	0.0 - 5.5						
COULTER UniCel DxH 600	10	3.12	0.55	17.5	3.2	1.4 - 4.8						

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

<u><i>Instrument</i></u>	Specimen DIF-6						Specimen DIF-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	13	4.11	0.29	7.0	4.1	3.2 - 5.0	13	5.92	0.36	6.1	6.0	4.8 - 7.0
All COULTER Instruments	13	4.11	0.29	7.0	4.1	3.2 - 5.0	13	5.92	0.36	6.1	6.0	4.8 - 7.0
COULTER UniCel DxH 600	10	4.12	0.24	5.8	4.1	3.3 - 4.9	10	6.15	0.21	3.4	6.3	5.5 - 6.8
Specimen DIF-8						Specimen DIF-9						
All Method	13	7.05	0.38	5.4	6.9	5.9 - 8.2	13	5.77	0.33	5.8	5.6	4.7 - 6.8
All COULTER Instruments	13	7.05	0.38	5.4	6.9	5.9 - 8.2	13	5.77	0.33	5.8	5.6	4.7 - 6.8
COULTER UniCel DxH 600	10	7.13	0.46	6.4	6.9	5.7 - 8.6	10	5.85	0.40	6.9	5.7	4.6 - 7.1
Specimen DIF-10												
All Method	13	6.98	0.39	5.7	6.8	5.7 - 8.2						
All COULTER Instruments	13	6.98	0.39	5.7	6.8	5.7 - 8.2						
COULTER UniCel DxH 600	10	7.12	0.37	5.2	7.2	6.0 - 8.3						

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

<u><i>Instrument</i></u>	Specimen DIF-6						Specimen DIF-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	13	0.25	0.26	103.0	0.1	0.0 - 1.1	13	0.08	0.12	142.7	0.0	0.0 - 0.5
All COULTER Instruments	13	0.25	0.26	103.0	0.1	0.0 - 1.1	13	0.08	0.12	142.7	0.0	0.0 - 0.5
COULTER UniCel DxH 600	10	0.08	0.04	49.0	0.1	0.0 - 0.3	10	0.00	0.01	0.0	0.0	0.0 - 0.1
Specimen DIF-8						Specimen DIF-9						
All Method	13	0.03	0.05	171.3	0.0	0.0 - 0.2	13	0.10	0.13	126.5	0.0	0.0 - 0.5
All COULTER Instruments	13	0.03	0.05	171.3	0.0	0.0 - 0.2	13	0.10	0.13	126.5	0.0	0.0 - 0.5
COULTER UniCel DxH 600	10	0.00	0.01	0.0	0.0	0.0 - 0.1	10	0.02	0.04	245.0	0.0	0.0 - 0.2
Specimen DIF-10												
All Method	13	0.00	0.01	0.0	0.0	0.0 - 0.1						
All COULTER Instruments	13	0.00	0.01	0.0	0.0	0.0 - 0.1						
COULTER UniCel DxH 600	10	0.00	0.01	0.0	0.0	0.0 - 0.1						

BLOOD LEAD (µg/dL)

<u>Instrument</u>	Specimen LED-6						Specimen LED-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	21	41.88	4.43	10.6	42.3	37.6 - 46.1	21	13.82	2.02	14.6	13.7	9.8 - 17.9
All Magellan Diagnostics Methods	21	41.88	4.43	10.6	42.3	37.6 - 46.1	21	13.82	2.02	14.6	13.7	9.8 - 17.9
Magellan Diagnostics LeadCare II	21	41.88	4.43	10.6	42.3	37.6 - 46.1	21	13.82	2.02	14.6	13.7	9.8 - 17.9

<u>Instrument</u>	Specimen LED-8						Specimen LED-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	5	3.85	0.49	12.7	4.2	0.0 - 7.9	5	40.55	1.48	3.7	39.5	36.4 - 44.7
All Magellan Diagnostics Methods	5	3.85	0.49	12.7	4.2	0.0 - 7.9	5	40.55	1.48	3.7	39.5	36.4 - 44.7

<u>Instrument</u>	Specimen LED-10					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	5	14.85	0.21	1.4	14.7	10.8 - 18.9
All Magellan Diagnostics Methods	5	14.85	0.21	1.4	14.7	10.8 - 18.9

RETICULOCYTE COUNT (percent)

<u>Instrument</u>	Specimen RT-3						Specimen RT-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	29	7.62	1.32	17.3	7.2	4.9 - 10.3	29	1.33	0.22	16.8	1.3	0.8 - 1.8
All Automated Methods	16	7.03	0.67	9.6	7.0	4.9 - 9.2	17	1.27	0.18	13.8	1.3	0.8 - 1.7
All Manual Methods	13	8.75	2.58	29.4	7.9	3.5 - 14.0	12	1.42	0.26	18.5	1.4	0.8 - 2.0
Sysmex XN-1000	12	6.91	0.45	6.5	7.0	4.8 - 9.0	12	1.28	0.12	9.3	1.3	0.8 - 1.7

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

<u><i>Instrument</i></u>	Specimen BCX-6						Specimen BCX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	122	53.23	0.77	1.4	53.3	50.0 - 56.5	123	40.88	0.62	1.5	40.9	38.4 - 43.4
All ABX Instruments	90	53.33	0.76	1.4	53.3	50.1 - 56.6	90	40.94	0.61	1.5	41.0	38.4 - 43.4
All COULTER Instruments	33	52.87	0.82	1.6	53.1	49.6 - 56.1	34	40.66	0.67	1.7	40.7	38.2 - 43.1
ABX Pentra 60C+	79	53.36	0.74	1.4	53.4	50.1 - 56.6	79	40.93	0.63	1.5	41.0	38.4 - 43.4
ABX Pentra 80 / XL 80	10	53.13	0.89	1.7	53.1	49.9 - 56.4	10	41.06	0.49	1.2	41.0	38.5 - 43.6
COULTER AcT 5diff	33	52.87	0.82	1.6	53.1	49.6 - 56.1	34	40.66	0.67	1.7	40.7	38.2 - 43.1
	Specimen BCX-8						Specimen BCX-9					
All Method	124	28.79	0.45	1.6	28.8	27.0 - 30.6	124	49.38	0.78	1.6	49.5	46.4 - 52.4
All ABX Instruments	90	28.84	0.43	1.5	28.8	27.1 - 30.6	90	49.41	0.77	1.6	49.5	46.4 - 52.4
All COULTER Instruments	34	28.67	0.47	1.6	28.7	26.9 - 30.4	34	49.28	0.79	1.6	49.3	46.3 - 52.3
ABX Pentra 60C+	79	28.81	0.44	1.5	28.8	27.0 - 30.6	79	49.43	0.78	1.6	49.6	46.4 - 52.4
ABX Pentra 80 / XL 80	10	29.02	0.40	1.4	28.9	27.2 - 30.8	10	49.30	0.81	1.6	49.5	46.3 - 52.3
COULTER AcT 5diff	34	28.67	0.47	1.6	28.7	26.9 - 30.4	34	49.28	0.79	1.6	49.3	46.3 - 52.3
	Specimen BCX-10											
All Method	123	32.07	0.48	1.5	32.1	30.1 - 34.0						
All ABX Instruments	89	32.09	0.44	1.4	32.1	30.1 - 34.1						
All COULTER Instruments	34	31.99	0.56	1.8	32.1	30.0 - 34.0						
ABX Pentra 60C+	78	32.09	0.44	1.4	32.1	30.1 - 34.1						
ABX Pentra 80 / XL 80	10	32.18	0.43	1.3	32.1	30.2 - 34.2						
COULTER AcT 5diff	34	31.99	0.56	1.8	32.1	30.0 - 34.0						

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

<u><i>Instrument</i></u>	Specimen BCX-6						Specimen BCX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	123	251.9	10.3	4.1	253	188 - 315	123	149.0	7.3	4.9	148	111 - 187
All ABX Instruments	90	252.6	10.1	4.0	253	189 - 316	90	148.9	6.8	4.6	149	111 - 187
All COULTER Instruments	33	250.0	10.9	4.4	251	187 - 313	33	149.2	8.7	5.8	148	111 - 187
ABX Pentra 60C+	79	251.7	9.7	3.9	253	188 - 315	79	148.6	6.6	4.5	148	111 - 186
ABX Pentra 80 / XL 80	10	258.9	11.3	4.4	262	194 - 324	10	151.4	8.3	5.5	153	113 - 190
COULTER AcT 5diff	33	250.0	10.9	4.4	251	187 - 313	33	149.2	8.7	5.8	148	111 - 187
	Specimen BCX-8						Specimen BCX-9					
All Method	123	110.8	5.3	4.7	111	83 - 139	123	490.1	16.8	3.4	490	367 - 613
All ABX Instruments	90	110.9	5.5	4.9	111	83 - 139	89	493.7	15.6	3.2	494	370 - 618
All COULTER Instruments	33	110.7	4.7	4.3	110	83 - 139	34	480.7	16.3	3.4	478	360 - 601
ABX Pentra 60C+	79	111.1	5.4	4.9	112	83 - 139	79	493.1	15.9	3.2	492	369 - 617
ABX Pentra 80 / XL 80	10	109.0	5.8	5.4	109	81 - 137	10	503.0	18.3	3.6	501	377 - 629
COULTER AcT 5diff	33	110.7	4.7	4.3	110	83 - 139	34	480.7	16.3	3.4	478	360 - 601
	Specimen BCX-10											
All Method	124	219.5	8.9	4.1	219	164 - 275						
All ABX Instruments	90	219.8	8.7	4.0	220	164 - 275						
All COULTER Instruments	34	218.6	9.7	4.4	217	163 - 274						
ABX Pentra 60C+	79	219.7	8.5	3.9	220	164 - 275						
ABX Pentra 80 / XL 80	10	220.5	10.5	4.8	219	165 - 276						
COULTER AcT 5diff	34	218.6	9.7	4.4	217	163 - 274						

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

<u><i>Instrument</i></u>	Specimen BCX-6						Specimen BCX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	122	54.19	3.82	7.1	54.0	42.7 - 65.7	123	45.74	3.88	8.5	45.9	34.1 - 57.4
All ABX Instruments	89	54.83	3.72	6.8	54.9	43.6 - 66.1	90	45.73	3.89	8.5	45.7	34.0 - 57.4
All COULTER Instruments	34	52.12	4.12	7.9	52.4	39.7 - 64.5	34	46.18	4.53	9.8	46.8	32.5 - 59.8
ABX Pentra 60C+	78	55.06	3.43	6.2	55.0	44.7 - 65.4	79	45.77	3.86	8.4	45.9	34.1 - 57.4
ABX Pentra 80 / XL 80	10	52.48	5.01	9.5	50.3	37.4 - 67.6	10	45.13	4.35	9.6	44.4	32.0 - 58.2
COULTER AcT 5diff	34	52.12	4.12	7.9	52.4	39.7 - 64.5	34	46.18	4.53	9.8	46.8	32.5 - 59.8
	Specimen BCX-8						Specimen BCX-9					
All Method	124	58.28	3.96	6.8	58.9	46.4 - 70.2	123	51.11	3.76	7.3	51.4	39.8 - 62.4
All ABX Instruments	88	59.93	2.87	4.8	60.0	51.3 - 68.6	90	51.94	3.28	6.3	51.8	42.1 - 61.8
All COULTER Instruments	34	54.55	3.20	5.9	54.3	44.9 - 64.2	34	48.54	4.39	9.0	48.8	35.3 - 61.8
ABX Pentra 60C+	78	60.04	2.79	4.7	60.0	51.6 - 68.5	78	52.28	2.75	5.3	52.0	44.0 - 60.6
ABX Pentra 80 / XL 80	10	57.67	4.02	7.0	57.6	45.6 - 69.8	10	48.10	3.67	7.6	47.5	37.1 - 59.1
COULTER AcT 5diff	34	54.55	3.20	5.9	54.3	44.9 - 64.2	34	48.54	4.39	9.0	48.8	35.3 - 61.8
	Specimen BCX-10											
All Method	122	67.94	4.04	6.0	69.1	55.8 - 80.1						
All ABX Instruments	88	69.98	2.40	3.4	70.3	62.7 - 77.2						
All COULTER Instruments	33	62.44	2.62	4.2	62.9	54.5 - 70.3						
ABX Pentra 60C+	76	70.22	1.93	2.8	70.3	64.4 - 76.1						
ABX Pentra 80 / XL 80	10	67.12	3.23	4.8	67.0	57.4 - 76.9						
COULTER AcT 5diff	33	62.44	2.62	4.2	62.9	54.5 - 70.3						

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

<u>Instrument</u>	Specimen BCX-6						Specimen BCX-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	124	35.22	4.22	12.0	35.5	22.5 - 47.9	123	41.27	4.53	11.0	41.3	27.6 - 54.9
All ABX Instruments	90	36.18	3.98	11.0	36.5	24.2 - 48.2	90	42.14	4.26	10.1	42.4	29.3 - 55.0
All COULTER Instruments	34	32.69	3.81	11.6	32.9	21.2 - 44.2	34	38.48	4.99	13.0	38.0	23.5 - 53.5
ABX Pentra 60C+	79	35.89	3.75	10.4	36.3	24.6 - 47.2	79	42.00	4.16	9.9	42.2	29.5 - 54.5
ABX Pentra 80 / XL 80	10	38.95	4.77	12.2	40.3	24.6 - 53.3	10	43.46	5.13	11.8	44.6	28.0 - 58.9
COULTER AcT 5diff	34	32.69	3.81	11.6	32.9	21.2 - 44.2	34	38.48	4.99	13.0	38.0	23.5 - 53.5
Specimen BCX-8												
All Method	122	30.09	3.15	10.5	29.9	20.6 - 39.6	123	41.96	3.83	9.1	42.4	30.4 - 53.5
All ABX Instruments	89	30.71	2.99	9.7	30.3	21.7 - 39.7	90	42.60	3.64	8.5	42.9	31.6 - 53.6
All COULTER Instruments	32	28.09	2.38	8.5	28.4	20.9 - 35.3	34	39.89	4.34	10.9	39.8	26.8 - 53.0
ABX Pentra 60C+	78	30.39	2.63	8.7	30.3	22.4 - 38.3	79	42.04	3.19	7.6	42.9	32.4 - 51.7
ABX Pentra 80 / XL 80	10	33.46	4.28	12.8	33.4	20.6 - 46.3	10	47.26	3.82	8.1	47.3	35.7 - 58.8
COULTER AcT 5diff	32	28.09	2.38	8.5	28.4	20.9 - 35.3	34	39.89	4.34	10.9	39.8	26.8 - 53.0
Specimen BCX-10												
All Method	120	23.42	2.94	12.6	23.6	14.5 - 32.3						
All ABX Instruments	87	24.22	2.50	10.3	24.0	16.7 - 31.8						
All COULTER Instruments	32	20.95	2.18	10.4	20.4	14.4 - 27.6						
ABX Pentra 60C+	76	23.97	2.05	8.6	24.0	17.8 - 30.2						
ABX Pentra 80 / XL 80	10	27.96	3.75	13.4	27.9	16.7 - 39.3						
COULTER AcT 5diff	32	20.95	2.18	10.4	20.4	14.4 - 27.6						

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

<i>Instrument</i>	Specimen BCX-6						Specimen BCX-7					
	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>	<i>Labs</i>	<i>Mean</i>	<i>SD</i>	<i>CV</i>	<i>Median</i>	<i>Range</i>
All Method	120	1.55	0.59	38.0	1.5	0.0 - 3.4	123	1.66	0.66	39.8	1.6	0.0 - 3.7
All ABX Instruments	88	1.42	0.56	39.8	1.3	0.0 - 3.2	90	1.52	0.58	38.0	1.4	0.0 - 3.3
All COULTER Instruments	33	1.98	0.57	29.0	1.9	0.2 - 3.7	34	2.10	0.82	39.0	2.0	0.0 - 4.6
ABX Pentra 60C+	77	1.45	0.58	39.9	1.3	0.0 - 3.2	79	1.52	0.58	38.1	1.4	0.0 - 3.3
ABX Pentra 80 / XL 80	10	1.21	0.42	34.7	1.1	0.0 - 2.5	10	1.57	0.63	40.1	1.4	0.0 - 3.5
COULTER AcT 5diff	33	1.98	0.57	29.0	1.9	0.2 - 3.7	34	2.10	0.82	39.0	2.0	0.0 - 4.6
	Specimen BCX-8						Specimen BCX-9					
All Method	122	1.52	0.76	49.9	1.4	0.0 - 3.8	120	1.96	0.70	35.9	1.9	0.0 - 4.1
All ABX Instruments	89	1.29	0.64	49.3	1.3	0.0 - 3.2	87	1.86	0.73	39.2	1.7	0.0 - 4.1
All COULTER Instruments	34	2.22	0.87	39.0	2.2	0.0 - 4.9	33	2.21	0.56	25.6	2.2	0.5 - 4.0
ABX Pentra 60C+	78	1.32	0.64	48.8	1.3	0.0 - 3.3	76	1.95	0.72	36.9	1.9	0.0 - 4.1
ABX Pentra 80 / XL 80	10	1.15	0.51	44.4	1.4	0.0 - 2.7	10	1.21	0.50	41.3	1.1	0.0 - 2.8
COULTER AcT 5diff	34	2.22	0.87	39.0	2.2	0.0 - 4.9	33	2.21	0.56	25.6	2.2	0.5 - 4.0
	Specimen BCX-10											
All Method	123	1.67	0.67	39.8	1.6	0.0 - 3.7						
All ABX Instruments	88	1.42	0.50	35.1	1.4	0.0 - 3.0						
All COULTER Instruments	33	2.25	0.58	25.6	2.1	0.5 - 4.0						
ABX Pentra 60C+	77	1.49	0.48	32.3	1.5	0.0 - 3.0						
ABX Pentra 80 / XL 80	10	0.92	0.21	23.4	1.0	0.2 - 1.6						
COULTER AcT 5diff	33	2.25	0.58	25.6	2.1	0.5 - 4.0						

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

<i><u>Instrument</u></i>	Specimen BCX-6						Specimen BCX-7					
	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	122	6.86	1.34	19.6	6.8	2.8 - 10.9	122	10.10	1.57	15.5	10.2	5.3 - 14.8
All ABX Instruments	89	7.20	1.16	16.0	7.1	3.7 - 10.7	88	10.42	1.36	13.0	10.5	6.3 - 14.6
All COULTER Instruments	33	5.93	1.39	23.5	5.7	1.7 - 10.2	33	9.37	1.65	17.6	9.1	4.4 - 14.4
ABX Pentra 60C+	78	7.22	1.16	16.1	7.1	3.7 - 10.8	78	10.46	1.41	13.5	10.6	6.2 - 14.7
ABX Pentra 80 / XL 80	10	7.03	1.21	17.2	6.7	3.4 - 10.7	10	9.64	1.74	18.1	10.1	4.4 - 14.9
COULTER AcT 5diff	33	5.93	1.39	23.5	5.7	1.7 - 10.2	33	9.37	1.65	17.6	9.1	4.4 - 14.4

<i><u>Instrument</u></i>	Specimen BCX-8						Specimen BCX-9					
	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	122	7.59	1.73	22.8	7.6	2.3 - 12.8	123	3.17	0.58	18.4	3.1	1.4 - 5.0
All ABX Instruments	88	7.71	1.67	21.7	7.8	2.7 - 12.8	89	3.11	0.57	18.2	3.1	1.4 - 4.9
All COULTER Instruments	34	7.28	1.87	25.7	7.4	1.6 - 12.9	34	3.31	0.61	18.5	3.3	1.4 - 5.2
ABX Diagnostics Pentra 60C+	77	7.77	1.69	21.8	7.8	2.6 - 12.9	77	3.08	0.53	17.2	3.1	1.4 - 4.7
ABX Diagnostics Pentra 80 / XL 80	10	7.31	1.62	22.1	7.7	2.4 - 12.2	10	3.13	0.64	20.4	3.2	1.2 - 5.1
COULTER AcT 5diff	34	7.28	1.87	25.7	7.4	1.6 - 12.9	34	3.31	0.61	18.5	3.3	1.4 - 5.2

<i><u>Instrument</u></i>	Specimen BCX-10					
	<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	124	3.94	0.78	19.7	4.0	1.6 - 6.3
All ABX Instruments	89	3.69	0.65	17.5	3.8	1.7 - 5.7
All COULTER Instruments	34	4.54	0.69	15.2	4.5	2.4 - 6.7
ABX Diagnostics Pentra 60C+	78	3.72	0.62	16.7	3.8	1.8 - 5.6
ABX Diagnostics Pentra 80 / XL 80	10	3.52	0.87	24.6	3.7	0.9 - 6.2
COULTER AcT 5diff	34	4.54	0.69	15.2	4.5	2.4 - 6.7

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

<u><i>Instrument</i></u>	Specimen BCX-6						Specimen BCX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	89	0.35	0.05	14.4	0.4	0.1 - 0.6	86	0.20	0.01	0.0	0.2	0.1 - 0.3
All ABX Instruments	89	0.35	0.05	14.4	0.3	0.1 - 0.6	86	0.20	0.01	0.0	0.2	0.1 - 0.3
All COULTER Instruments	33	7.06	0.76	10.7	7.1	4.7 - 9.4	34	4.20	0.33	7.8	4.2	3.2 - 5.2
ABX Pentra 60C+	78	0.35	0.05	14.3	0.4	0.2 - 0.6	75	0.20	0.01	0.0	0.2	0.1 - 0.3
ABX Pentra 80 / XL 80	10	0.33	0.05	14.6	0.3	0.1 - 0.5	10	0.20	0.01	0.0	0.2	0.1 - 0.3
COULTER AcT 5diff	33	7.06	0.76	10.7	7.1	4.7 - 9.4	34	4.20	0.33	7.8	4.2	3.2 - 5.2
	Specimen BCX-8						Specimen BCX-9					
All Method	89	0.39	0.04	9.9	0.4	0.2 - 0.6	89	0.30	0.01	0.0	0.3	0.2 - 0.4
All ABX Instruments	89	0.39	0.04	9.9	0.4	0.2 - 0.6	89	0.30	0.01	0.0	0.3	0.2 - 0.4
All COULTER Instruments	34	7.82	0.91	11.6	7.7	5.0 - 10.6	34	5.93	0.37	6.3	5.9	4.8 - 7.1
ABX Pentra 60C+	78	0.39	0.04	9.0	0.4	0.2 - 0.6	78	0.30	0.01	0.0	0.3	0.2 - 0.4
ABX Pentra 80 / XL 80	10	0.36	0.05	14.3	0.4	0.2 - 0.6	10	0.30	0.01	0.0	0.3	0.2 - 0.4
COULTER AcT 5diff	34	7.82	0.91	11.6	7.7	5.0 - 10.6	34	5.93	0.37	6.3	5.9	4.8 - 7.1
	Specimen BCX-10											
All Method	82	0.50	0.01	0.0	0.5	0.4 - 0.6						
All ABX Instruments	82	0.50	0.01	0.0	0.5	0.4 - 0.6						
All COULTER Instruments	32	9.65	0.51	5.3	9.6	8.1 - 11.2						
ABX Pentra 60C+	73	0.50	0.01	0.0	0.5	0.4 - 0.6						
ABX Pentra 80 / XL 80	10	0.48	0.04	8.8	0.5	0.3 - 0.7						
COULTER AcT 5diff	32	9.65	0.51	5.3	9.6	8.1 - 11.2						

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

<u><i>Instrument</i></u>	Specimen MX-6						Specimen MX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	75	23.11	0.89	3.9	23.4	19.6 - 26.6	75	7.17	0.48	6.7	7.3	6.0 - 8.3
All Sysmex XE/XT Instruments	11	21.59	0.83	3.9	21.6	18.3 - 24.9	11	7.54	0.29	3.8	7.4	6.4 - 8.7
All Sysmex XN/XS Instruments	67	23.28	0.74	3.2	23.5	19.7 - 26.8	67	7.13	0.48	6.8	7.1	6.0 - 8.3
Sysmex XN-1000	17	22.27	0.28	1.2	22.2	18.9 - 25.7	17	7.36	0.12	1.7	7.3	6.2 - 8.5
Sysmex XS-1000i	44	23.70	0.32	1.4	23.7	20.1 - 27.3	46	7.03	0.54	7.6	6.8	5.9 - 8.1
	Specimen MX-8						Specimen MX-9					
All Method	72	3.88	0.18	4.7	3.9	3.2 - 4.5	75	7.16	0.45	6.2	7.3	6.0 - 8.3
All Sysmex XE/XT Instruments	11	3.74	0.18	4.8	3.8	3.1 - 4.4	11	7.53	0.27	3.6	7.4	6.3 - 8.7
All Sysmex XN/XS Instruments	64	3.90	0.18	4.6	3.9	3.3 - 4.5	67	7.12	0.45	6.3	7.0	6.0 - 8.2
Sysmex XN-1000	17	3.78	0.07	1.8	3.8	3.2 - 4.4	17	7.36	0.14	1.9	7.4	6.2 - 8.5
Sysmex XS-1000i	46	3.92	0.24	6.2	4.0	3.3 - 4.6	46	7.03	0.49	7.0	6.8	5.9 - 8.1
	Specimen MX-10											
All Method	71	3.90	0.15	3.9	3.9	3.3 - 4.5						
All Sysmex XE/XT Instruments	11	3.71	0.20	5.3	3.8	3.1 - 4.3						
All Sysmex XN/XS Instruments	63	3.92	0.14	3.4	3.9	3.3 - 4.6						
Sysmex XN-1000	17	3.77	0.08	2.3	3.8	3.2 - 4.4						
Sysmex XS-1000i	43	3.98	0.11	2.7	4.0	3.3 - 4.6						

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

<u><i>Instrument</i></u>	Specimen MX-6						Specimen MX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	73	6.248	0.057	0.9	6.25	5.87 - 6.63	74	4.639	0.051	1.1	4.63	4.36 - 4.92
All Sysmex XE/XT Instruments	11	6.184	0.091	1.5	6.17	5.81 - 6.56	11	4.679	0.052	1.1	4.66	4.39 - 4.96
All Sysmex XN/XS Instruments	65	6.252	0.048	0.8	6.25	5.87 - 6.63	66	4.636	0.049	1.1	4.63	4.35 - 4.92
Sysmex XN-1000	17	6.276	0.071	1.1	6.26	5.89 - 6.66	17	4.643	0.056	1.2	4.64	4.36 - 4.93
Sysmex XS-1000i	45	6.244	0.040	0.6	6.25	5.86 - 6.62	45	4.634	0.048	1.0	4.63	4.35 - 4.92
	Specimen MX-8						Specimen MX-9					
All Method	73	2.396	0.036	1.5	2.40	2.25 - 2.54	74	4.641	0.048	1.0	4.64	4.36 - 4.92
All Sysmex XE/XT Instruments	11	2.493	0.029	1.2	2.49	2.34 - 2.65	11	4.683	0.057	1.2	4.71	4.40 - 4.97
All Sysmex XN/XS Instruments	67	2.390	0.029	1.2	2.40	2.24 - 2.54	66	4.638	0.044	1.0	4.64	4.35 - 4.92
Sysmex XN-1000	17	2.378	0.035	1.5	2.39	2.23 - 2.53	17	4.645	0.062	1.3	4.66	4.36 - 4.93
Sysmex XS-1000i	45	2.399	0.023	0.9	2.40	2.25 - 2.55	46	4.637	0.043	0.9	4.64	4.35 - 4.92
	Specimen MX-10											
All Method	73	2.397	0.036	1.5	2.40	2.25 - 2.55						
All Sysmex XE/XT Instruments	11	2.486	0.030	1.2	2.48	2.33 - 2.64						
All Sysmex XN/XS Instruments	67	2.392	0.031	1.3	2.40	2.24 - 2.54						
Sysmex XN-1000	17	2.380	0.035	1.5	2.38	2.23 - 2.53						
Sysmex XS-1000i	46	2.400	0.026	1.1	2.40	2.25 - 2.55						

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

<u>Instrument</u>	Specimen MX-6						Specimen MX-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	75	19.70	0.22	1.1	19.7	18.3 - 21.1	74	13.26	0.13	1.0	13.2	12.3 - 14.2
All Sysmex XE/XT Instruments	11	19.53	0.29	1.5	19.5	18.1 - 20.9	11	13.23	0.11	0.8	13.2	12.3 - 14.2
All Sysmex XN/XS Instruments	67	19.72	0.20	1.0	19.7	18.3 - 21.2	66	13.26	0.14	1.0	13.2	12.3 - 14.2
Sysmex XN-1000	17	19.62	0.16	0.8	19.6	18.2 - 21.0	17	13.25	0.12	0.9	13.3	12.3 - 14.2
Sysmex XS-1000i	46	19.77	0.20	1.0	19.8	18.3 - 21.2	45	13.28	0.14	1.1	13.2	12.3 - 14.3

<u>Instrument</u>	Specimen MX-8						Specimen MX-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	74	6.07	0.08	1.3	6.1	5.6 - 6.5	75	13.25	0.13	1.0	13.3	12.3 - 14.2
All Sysmex XE/XT Instruments	11	6.11	0.04	0.6	6.1	5.6 - 6.6	11	13.29	0.07	0.5	13.3	12.3 - 14.3
All Sysmex XN/XS Instruments	66	6.06	0.08	1.3	6.1	5.6 - 6.5	67	13.25	0.13	1.0	13.3	12.3 - 14.2
Sysmex XN-1000	17	6.08	0.08	1.3	6.1	5.6 - 6.6	16	13.26	0.06	0.5	13.3	12.3 - 14.2
Sysmex XS-1000i	46	6.05	0.09	1.4	6.1	5.6 - 6.5	46	13.26	0.14	1.0	13.3	12.3 - 14.2

<u>Instrument</u>	Specimen MX-10					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	75	6.06	0.08	1.2	6.1	5.6 - 6.5
All Sysmex XE/XT Instruments	11	6.13	0.05	0.8	6.1	5.6 - 6.6
All Sysmex XN/XS Instruments	67	6.06	0.07	1.2	6.1	5.6 - 6.5
Sysmex XN-1000	17	6.08	0.08	1.2	6.1	5.6 - 6.6
Sysmex XS-1000i	46	6.05	0.07	1.2	6.0	5.6 - 6.5

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

<u>Instrument</u>	Specimen MX-6						Specimen MX-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	74	58.02	0.90	1.6	58.1	54.5 - 61.5	73	39.32	0.59	1.5	39.3	36.9 - 41.7
All Sysmex XE/XT Instruments	11	57.74	1.07	1.8	57.8	54.2 - 61.3	11	39.47	0.56	1.4	39.4	37.1 - 41.9
All Sysmex XN/XS Instruments	66	58.04	0.89	1.5	58.2	54.5 - 61.6	65	39.31	0.60	1.5	39.3	36.9 - 41.7
Sysmex XN-1000	16	57.63	0.52	0.9	57.7	54.1 - 61.1	16	38.98	0.40	1.0	39.1	36.6 - 41.4
Sysmex XS-1000i	46	58.16	0.93	1.6	58.4	54.6 - 61.7	45	39.42	0.59	1.5	39.5	37.0 - 41.8

<u>Instrument</u>	Specimen MX-8						Specimen MX-9					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	74	18.57	0.41	2.2	18.7	17.4 - 19.7	74	39.33	0.58	1.5	39.3	36.9 - 41.7
All Sysmex XE/XT Instruments	11	19.16	0.33	1.7	19.2	18.0 - 20.4	11	39.50	0.52	1.3	39.5	37.1 - 41.9
All Sysmex XN/XS Instruments	66	18.51	0.37	2.0	18.6	17.4 - 19.7	66	39.32	0.59	1.5	39.3	36.9 - 41.7
Sysmex XN-1000	17	18.03	0.32	1.8	18.1	16.9 - 19.2	16	39.07	0.38	1.0	39.2	36.7 - 41.5
Sysmex XS-1000i	46	18.70	0.23	1.2	18.7	17.5 - 19.9	45	39.47	0.53	1.3	39.5	37.1 - 41.9

<u>Instrument</u>	Specimen MX-10					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	74	18.58	0.42	2.3	18.6	17.4 - 19.7
All Sysmex XE/XT Instruments	11	19.11	0.41	2.1	19.0	17.9 - 20.3
All Sysmex XN/XS Instruments	66	18.53	0.39	2.1	18.6	17.4 - 19.7
Sysmex XN-1000	17	18.09	0.34	1.9	18.1	17.0 - 19.2
Sysmex XS-1000i	46	18.71	0.25	1.4	18.7	17.5 - 19.9

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

<u><i>Instrument</i></u>	Specimen MX-6						Specimen MX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	75	466.3	23.9	5.1	463	349 - 583	73	226.3	7.6	3.3	226	169 - 283
All Sysmex XE/XT Instruments	11	439.1	30.1	6.8	432	329 - 549	11	218.9	10.7	4.9	223	164 - 274
All Sysmex XN/XS Instruments	67	469.3	21.6	4.6	465	351 - 587	66	226.7	7.5	3.3	226	170 - 284
Sysmex XN-1000	17	488.6	17.5	3.6	490	366 - 611	17	229.7	7.5	3.3	228	172 - 288
Sysmex XS-1000i	46	459.3	15.0	3.3	458	344 - 575	45	225.1	6.8	3.0	224	168 - 282
<u><i>Instrument</i></u>	Specimen MX-8						Specimen MX-9					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	75	66.8	5.3	8.0	67	50 - 84	74	226.7	7.5	3.3	227	170 - 284
All Sysmex XE/XT Instruments	11	66.4	6.4	9.7	65	49 - 84	11	216.7	11.5	5.3	218	162 - 271
All Sysmex XN/XS Instruments	67	66.8	5.3	7.9	67	50 - 84	67	227.2	7.2	3.2	227	170 - 284
Sysmex XN-1000	17	61.9	4.1	6.6	62	46 - 78	17	228.5	6.7	2.9	228	171 - 286
Sysmex XS-1000i	46	68.8	4.4	6.4	69	51 - 87	46	226.4	7.0	3.1	227	169 - 283
<u><i>Instrument</i></u>	Specimen MX-10											
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>						
All Method	75	66.5	5.6	8.4	67	49 - 84						
All Sysmex XE/XT Instruments	11	66.6	7.3	11.0	69	49 - 84						
All Sysmex XN/XS Instruments	67	66.5	5.5	8.3	67	49 - 84						
Sysmex XN-1000	17	61.5	4.1	6.7	62	46 - 77						
Sysmex XS-1000i	46	68.3	5.0	7.3	69	51 - 86						

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

<u><i>Instrument</i></u>	Specimen MX-6						Specimen MX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	54	56.37	3.28	5.8	55.1	46.5 - 66.2	55	47.99	2.49	5.2	47.2	40.5 - 55.5
All Sysmex XE/XT Instruments	11	63.43	0.77	1.2	63.6	61.1 - 65.8	11	51.31	2.54	4.9	52.4	43.7 - 59.0
All Sysmex XN/XS Instruments	46	55.33	1.91	3.5	54.8	49.6 - 61.1	47	47.52	2.12	4.5	47.2	41.1 - 53.9
Sysmex XN-1000	11	58.09	0.78	1.3	58.1	55.7 - 60.5	12	49.91	0.67	1.3	50.0	47.8 - 52.0
Sysmex XS-1000i	33	54.32	0.92	1.7	54.3	51.5 - 57.1	32	46.39	1.41	3.0	46.4	42.1 - 50.7
<u><i>Instrument</i></u>	Specimen MX-8						Specimen MX-9					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	55	60.92	2.29	3.8	61.0	54.0 - 67.9	55	47.66	2.56	5.4	47.1	39.9 - 55.4
All Sysmex XE/XT Instruments	11	63.93	2.12	3.3	64.5	57.5 - 70.4	11	51.77	2.16	4.2	51.8	45.2 - 58.3
All Sysmex XN/XS Instruments	46	60.57	1.75	2.9	60.8	55.3 - 65.9	47	47.09	2.02	4.3	46.9	41.0 - 53.2
Sysmex XN-1000	12	61.13	1.69	2.8	61.4	56.0 - 66.3	12	49.72	0.82	1.6	49.7	47.2 - 52.2
Sysmex XS-1000i	32	60.42	1.63	2.7	60.7	55.5 - 65.3	33	46.16	1.40	3.0	46.4	41.9 - 50.4
<u><i>Instrument</i></u>	Specimen MX-10											
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>						
All Method	55	61.83	1.93	3.1	62.3	56.0 - 67.7						
All Sysmex XE/XT Instruments	11	63.47	2.30	3.6	63.9	56.5 - 70.4						
All Sysmex XN/XS Instruments	47	61.67	1.72	2.8	62.3	56.4 - 66.9						
Sysmex XN-1000	12	61.73	1.91	3.1	62.4	56.0 - 67.5						
Sysmex XS-1000i	33	61.65	1.59	2.6	61.5	56.8 - 66.5						

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

<u>Instrument</u>	Specimen MX-6						Specimen MX-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	54	1.27	0.65	50.9	1.0	0.0 - 3.3	54	2.07	0.87	41.8	1.7	0.0 - 4.7
All Sysmex XE/XT Instruments	11	1.97	0.70	35.6	2.4	0.0 - 4.1	11	2.94	0.77	26.1	3.1	0.6 - 5.3
All Sysmex XN/XS Instruments	46	1.18	0.58	49.0	0.9	0.0 - 3.0	46	1.95	0.81	41.4	1.7	0.0 - 4.4
Sysmex XN-1000	11	2.07	0.32	15.6	2.0	1.1 - 3.1	11	3.24	0.40	12.2	3.3	2.0 - 4.5
Sysmex XS-1000i	32	0.84	0.16	18.6	0.9	0.3 - 1.4	33	1.54	0.33	21.4	1.5	0.5 - 2.6
	Specimen MX-8						Specimen MX-9					
All Method	54	1.27	0.97	76.0	1.0	0.0 - 4.2	54	2.07	0.92	44.6	1.7	0.0 - 4.9
All Sysmex XE/XT Instruments	11	3.20	0.62	19.3	3.4	1.3 - 5.1	11	3.07	0.77	25.0	3.1	0.7 - 5.4
All Sysmex XN/XS Instruments	46	0.99	0.62	62.1	0.8	0.0 - 2.9	46	1.94	0.85	44.0	1.6	0.0 - 4.5
Sysmex XN-1000	11	1.91	0.43	22.8	1.9	0.6 - 3.3	11	3.31	0.43	13.1	3.4	2.0 - 4.7
Sysmex XS-1000i	33	0.69	0.30	43.4	0.7	0.0 - 1.6	33	1.48	0.27	18.6	1.5	0.6 - 2.3
	Specimen MX-10											
All Method	53	1.14	0.87	76.9	0.8	0.0 - 3.8						
All Sysmex XE/XT Instruments	11	3.13	0.67	21.5	3.3	1.1 - 5.2						
All Sysmex XN/XS Instruments	46	0.92	0.59	64.0	0.8	0.0 - 2.7						
Sysmex XN-1000	11	1.63	0.53	32.3	1.6	0.0 - 3.3						
Sysmex XS-1000i	32	0.63	0.28	45.3	0.6	0.0 - 1.5						

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

<u>Instrument</u>	Specimen MX-6						Specimen MX-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	54	14.09	0.66	4.7	14.1	12.0 - 16.1	54	12.02	0.86	7.2	12.1	9.4 - 14.7
All Sysmex XE/XT Instruments	11	14.06	0.90	6.4	13.8	11.3 - 16.8	11	11.67	0.99	8.5	11.8	8.6 - 14.7
All Sysmex XN/XS Instruments	46	14.10	0.64	4.5	14.1	12.1 - 16.1	45	11.99	0.75	6.3	12.0	9.7 - 14.3
Sysmex XN-1000	11	14.55	0.58	4.0	14.4	12.8 - 16.4	12	12.63	1.18	9.3	12.5	9.0 - 16.2
Sysmex XS-1000i	33	13.96	0.61	4.4	14.0	12.1 - 15.9	32	11.84	0.72	6.1	11.8	9.6 - 14.1
	Specimen MX-8						Specimen MX-9					
All Method	52	15.91	0.59	3.7	16.0	14.1 - 17.7	54	12.11	0.73	6.1	12.2	9.9 - 14.4
All Sysmex XE/XT Instruments	11	14.74	0.93	6.3	15.0	11.9 - 17.6	11	11.77	0.80	6.8	11.7	9.3 - 14.2
All Sysmex XN/XS Instruments	45	16.02	0.52	3.3	16.0	14.4 - 17.6	46	12.19	0.70	5.7	12.2	10.0 - 14.3
Sysmex XN-1000	11	15.95	0.49	3.1	16.0	14.4 - 17.5	11	12.34	0.81	6.6	12.7	9.9 - 14.8
Sysmex XS-1000i	32	16.02	0.53	3.3	16.1	14.4 - 17.7	33	12.10	0.66	5.4	12.1	10.1 - 14.1
	Specimen MX-10											
All Method	54	15.90	1.03	6.4	16.2	12.8 - 19.0						
All Sysmex XE/XT Instruments	11	14.41	0.61	4.2	14.3	12.5 - 16.3						
All Sysmex XN/XS Instruments	46	16.12	0.89	5.5	16.5	13.4 - 18.8						
Sysmex XN-1000	11	15.75	0.89	5.7	15.8	13.0 - 18.5						
Sysmex XS-1000i	31	16.50	0.45	2.7	16.6	15.1 - 17.9						

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

<u><i>Instrument</i></u>	Specimen MX-6						Specimen MX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Sysmex XE/XT Instruments	11	81.64	2.87	3.5	81.8	73.0 - 90.3	11	71.07	0.47	0.7	71.2	69.6 - 72.5
All Sysmex XN/XS Instruments	46	7.61	1.80	23.6	8.1	2.2 - 13.1	46	7.08	1.48	20.9	7.7	2.6 - 11.6
Sysmex XN-1000	11	4.77	0.15	3.1	4.8	4.3 - 5.3	11	4.81	0.15	3.1	4.9	4.3 - 5.3
Sysmex XS-1000i	33	8.62	0.69	8.0	8.6	6.5 - 10.7	33	7.92	0.61	7.6	7.8	6.1 - 9.8
Specimen MX-8												
All Sysmex XE/XT Instruments	11	86.23	1.77	2.0	85.6	80.9 - 91.6	11	70.89	0.72	1.0	70.8	68.7 - 73.1
All Sysmex XN/XS Instruments	46	8.60	2.43	28.3	9.5	1.3 - 15.9	46	6.90	1.42	20.6	7.2	2.6 - 11.2
Sysmex XN-1000	11	4.77	0.13	2.8	4.7	4.3 - 5.2	11	4.79	0.14	3.0	4.8	4.3 - 5.3
Sysmex XS-1000i	33	9.96	0.87	8.7	9.9	7.3 - 12.6	33	7.64	0.75	9.9	7.7	5.3 - 9.9
Specimen MX-10												
All Sysmex XE/XT Instruments	11	86.74	2.29	2.6	86.5	79.8 - 93.7						
All Sysmex XN/XS Instruments	46	8.54	2.39	28.0	9.2	1.3 - 15.8						
Sysmex XN-1000	11	4.84	0.19	3.8	4.9	4.2 - 5.4						
Sysmex XS-1000i	33	9.89	0.97	9.8	9.9	6.9 - 12.9						

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

<u><i>Instrument</i></u>	Specimen MX-6						Specimen MX-7					
	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>	<u><i>Labs</i></u>	<u><i>Mean</i></u>	<u><i>SD</i></u>	<u><i>CV</i></u>	<u><i>Median</i></u>	<u><i>Range</i></u>
All Method	15	14.97	0.91	6.1	15.0	12.2 - 17.7	15	12.77	0.86	6.7	12.7	10.2 - 15.4
All Sysmex XN/XS Instruments	13	14.91	0.41	2.7	15.0	13.6 - 16.2	13	12.70	0.49	3.9	12.7	11.2 - 14.2
Sysmex XN-1000	11	14.88	0.44	3.0	14.9	13.5 - 16.3	11	12.70	0.54	4.2	12.7	11.0 - 14.4
Specimen MX-8												
All Sysmex XE/XT Instruments	15	15.55	0.99	6.4	15.4	12.5 - 18.6	15	12.58	1.01	8.0	12.4	9.5 - 15.6
All Sysmex XN/XS Instruments	13	15.43	0.50	3.2	15.4	13.9 - 17.0	13	12.45	0.58	4.6	12.4	10.7 - 14.2
Sysmex XN-1000	11	15.45	0.55	3.5	15.4	13.8 - 17.1	11	12.55	0.52	4.2	12.5	10.9 - 14.2
Specimen MX-10												
All Sysmex XE/XT Instruments	15	15.41	1.08	7.0	14.9	12.1 - 18.7						
All Sysmex XN/XS Instruments	13	15.42	0.95	6.1	14.9	12.5 - 18.3						
Sysmex XN-1000	11	15.40	0.97	6.3	14.9	12.4 - 18.4						

**2018 M2
BLOOD CELL IDENTIFICATION
Specimens BC-7 through BC-12**

CASE HISTORY:

64 year old male presented to a shelter-based health clinic. The patient is a homeless military veteran who often sleeps in city parks and vacant buildings. His symptoms include fever, chills, and extreme fatigue. Upon examination the patient was found to have an enlarged liver. His body weight has decreased since the last visit, when he was treated for influenza and tested positive for HIV. The patient has been non-compliant with antiviral medication due to the unpleasant side effects. A CBC was performed, and significant results appear below.

Test	Results	Normal Range
WBC	3.1 x 10 ⁹ /L	3.6 - 10.6 x 10 ⁹ /L
RBC	3.8 x 10 ¹² /L	4.2 - 6.0 x 10 ¹² /L
Hgb	11.5 g/dL	13.5 - 18.0 g/dL
Hct	34 %	40 - 54 %
MCV	89 fL	78 - 94 fL
MCH	30 pg	26 - 34 pg
MCHC	34 g/dL	32-36 g/dL
Plt	96 x 10 ⁹ /L	150 - 450 x 10 ⁹ /L

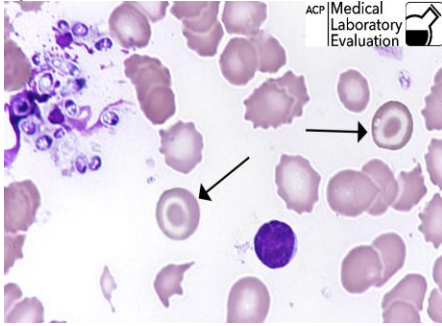
This patient was diagnosed with acute disseminated histoplasmosis.

Disseminated histoplasmosis (DH) is a fungal infection caused by the common soil fungus, *Histoplasma capsulatum*. This fungus is endemic in areas with warm climates and moist soil containing high concentrations of bird or bat droppings. The fungal spores remain viable in the environment for many years. Humans are typically infected by inhaling aerosols of contaminated dust or dirt containing the *Histoplasma* spores. Examples of aerosol-generating activities include farming, caving, cleaning out attics, barns or chicken coops, and tearing down or renovating old structures. Histoplasmosis infection may be acute or chronic, and the symptoms are often nonspecific, mimicking tuberculosis or other opportunistic infections. The severity of disease depends on the number of spores inhaled and on the health of the host's cellular immune system. Most healthy individuals that become infected have asymptomatic subclinical pulmonary infections, while some develop an acute flu-like infection which resolves spontaneously.

A latent infection can become reactivated many years after the original exposure if the patient becomes immunocompromised. Most symptomatic infections involve primary pulmonary disease; however, extrapulmonary and severe disseminated disease can occur. The spectrum of disseminated infection can range from acute, life-threatening sepsis to chronic, slowly progressive infection. In immunocompromised patients with DH, bone marrow involvement is common. Liver, spleen, lymph nodes, adrenal glands, gastrointestinal tract, and central nervous system may also be affected. DH is a common and serious opportunistic infection in patients with HIV/AIDS and should be considered in all patients with AIDS having a low CD4 count, general ill health, and elevated liver enzymes.

BLOOD CELL IDENTIFICATION

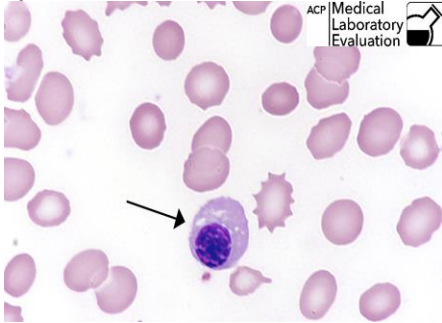
Specimen BC-7



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Target cell	173	98.30%	Acceptable
Immature abnormal cell – refer	1	0.57%	Acceptable

The arrows in this photograph point to **target cells**. In three dimensions, these red blood cells are bell-shaped rather than the normal biconcave disk shape. This is either due to the presence of an abnormal hemoglobin, decreased hemoglobin or excess membrane. The dark spot in the center, caused by the collection of abnormal hemoglobin or folds of membrane, gives the cell a bull's-eye appearance. Target cells are frequently seen in hemoglobinopathies, iron deficiency, liver disease, and hyposplenism. To view another photo of target cells, see 2015 M3 Specimen BC-16.

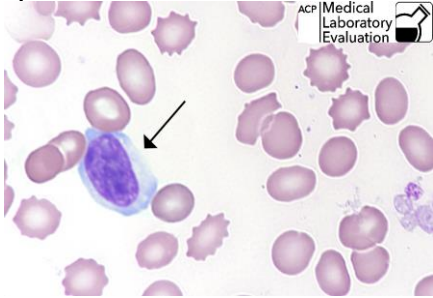
Specimen BC-8



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Nucleated red cell	139	78.98%	Acceptable
Immature/abnormal cell – refer	27	15.34%	Acceptable
Plasma cell	9	5.11%	

The arrows in this photograph points to a **nucleated red blood cell (NRBC.)** These immature erythrocytes are common in neonates, but rarely seen in the peripheral blood of healthy adults. Red cells eject their nuclei when they reach maturity; this normally occurs in the bone marrow before the cell enters the peripheral blood stream. The appearance of NRBCs is a result of the bone marrow's response to severe anemia (as in this case) or damage to the bone marrow itself, by releasing the needed RBCs into circulation before they are fully mature.

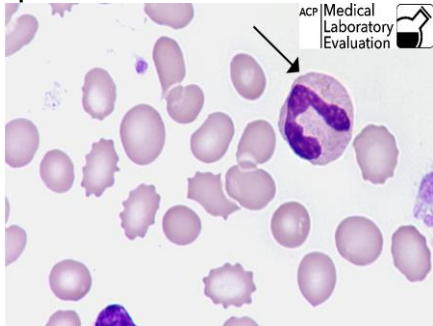
Specimen BC-9



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Lymphocyte, reactive	121	68.75%	Acceptable
Immature/abnormal cell – refer	26	14.77%	Acceptable
Lymphocyte	28	15.91%	

The arrow in this photograph points to a **reactive lymphocyte**. Reactive lymphocytes appear in a wide variety of forms, sizes and shapes. These large lymphocytes respond to immune stimuli in the body. The cytoplasm is light blue, with characteristic peripheral basophilia- a deeper blue color at the extreme border. The cytoplasmic edge of the reactive lymph tends to flow around adjacent red blood cells. The nucleus is large, and elongated or stretched, with coarse chromatin. Some participants incorrectly identified this cell as a monocyte. Monocytes tend to have folded nuclei, a large number of small light blue granules, and grayer cytoplasm lacking the dark blue periphery typical of lymphocytes. To view another photo of a reactive lymphocyte, see 2016 M3 Specimen BC-16, or 2015 M2 Specimen BC-8. To view a monocyte, see Specimen BC-11 below.

Specimen BC-10

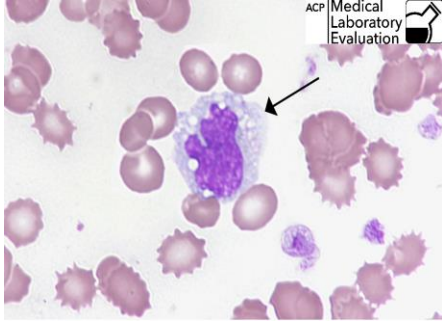


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Neutrophil-Segmented or band	174	98.86%	Acceptable

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, and have visible chromatin in between. An increase in bands cells can indicate infection, and is often referred to as a “shift to the left” because on a manual cell counter immature cells are positioned on the left side. This cell contains some small purple granules in the cytoplasm, but not enough to be considered toxic. To view a photo of toxic granulation, see 2017 Specimen BC-15.

BLOOD CELL IDENTIFICATION

Specimen BC-11

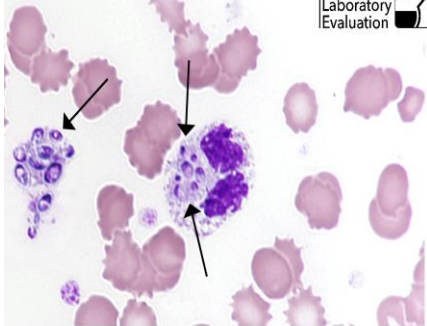


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Monocyte	175	99.43%	Acceptable

The arrow in this photograph points to a **monocyte**. The nucleus is indented and the nuclear chromatin is lacy with small clumps. The cytoplasm is abundant, pale gray-blue, and filled with swirls of minute granules that produce a cloudy or turbid appearance. The cytoplasmic membrane is irregular, with pseudopods that appear to push away adjacent red blood cells. Cytoplasmic vacuoles vary in size and are a sign of toxicity indicating recent phagocytosis. To view another photo of a monocyte, see 2016 specimen BC-5. To view a reactive lymphocyte, see Specimen BC-9 above.

BLOOD CELL IDENTIFICATION

Specimen BC-12



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>
Fungi	62	35.63%
Immature/abnormal cell-refer	58	33.33%
Protozoan, non-malarial	25	14.37%
Malaria	11	6.32%
Leukocyte w/phago bacteria	6	3.45%
Platelet, abnormal morphology	6	3.45%
Neutrophil-seg/band w/toxic	2	1.15%
Bacteria, extracellular	2	1.15%
Platelet, giant	1	0.57%
Basophil, any stage	1	0.57%

Performance

Not graded – Educational Challenge

The arrows in this ungraded educational challenge point to **fungi**. *H. capsulatum* is a thermally dimorphic fungus. This means it takes the form of a yeast at temperatures above 35°C, and exists in the form of a filamentous mold below 35°C. The yeast form pictured here is found in the human body (temperature 37°C.) Laboratorians in hematology may be the first ones to make this diagnosis upon finding small yeast cells with clear halos and eccentric chromatin inside and next to WBCs on the peripheral blood or bone marrow smear. Cultures will confirm the diagnosis of histoplasmosis after 3-6 weeks. To view another photo of *H. capsulatum* fungi, see 2008 M2 Specimen BC-12

References:

- Adenis, A. A., Aznar, C., & Couppié, P. (2014). Histoplasmosis in HIV-Infected Patients: A Review of New Developments and Remaining Gaps. *Current Tropical Medicine Reports*, 1(2), 119–128. <http://doi.org/10.1007/s40475-014-0017-8>
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4030124/>
- Henderson, L. H.: *The POL Microscopy Atlas*. 2nd ed. American Academy of Family Physicians, Leawood KS, 2003.
- Kauffman, C. A. "Mycotic Infections." *ACP Medicine*. Ed. D. C. Dale. New York: WebMD, Inc., 2004. 1846-1847.
- 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*. 2nd ed. W. B. Saunders, Philadelphia, 2002.
- Young, E. M., and M. Goldman. "Histoplasmosis and HIV Infection." HIV InSite. March 08, 2006. Accessed June 15, 2018. <http://hivinsite.ucsf.edu/InSite?page=kb-05-02-06>

BLOOD BANK

ABO GROUP

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

RH FACTOR (D TYPE)

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

The specimen BB-7 is graded to 100% referee consensus.

UNEXPECTED ANTIBODY DETECTION

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
AB-6	Unexpected antibody detected	5	100%	Acceptable
AB-7	Unexpected antibody detected	5	100%	Acceptable
AB-8	No unexpected antibody detected	5	100%	Acceptable
AB-9	No unexpected antibody detected	5	100%	Acceptable
AB-10	Unexpected antibody detected	5	100%	Acceptable

BLOOD BANK

ANTIBODY IDENTIFICATION

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

COMPATIBILITY TESTING

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

ACTIVATED PARTIAL THROMBOPLASTIN (seconds)

<u>Reagent/Instrument</u>	<u>Specimen CG-6</u>						<u>Specimen CG-7</u>					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	13	35.1	2.9	8.3	34	29 - 41	10	68.4	6.7	9.8	69	58 - 79
Dade Actin FSL												
Sysmex CA-500/600 series	9	33.6	1.6	4.7	34	28 - 39	8	66.8	6.1	9.2	67	56 - 77
Hemoliance SynthASil												
IL ACL, all models	5	38.5	3.5	9.2	39	32 - 45	4	-	-	-	71	58 - 79
IL TEST APTT-SP												
IL ACL, all models	5	38.5	0.7	1.8	39	32 - 45	4	-	-	-	79	58 - 79
<u>Specimen CG-8</u>						<u>Specimen CG-9</u>						
All Method	13	41.2	3.1	7.6	40	35 - 48	13	27.7	6.7	24.3	25	23 - 32
Dade Actin FSL												
Sysmex CA-500/600 series	9	39.4	1.1	2.9	40	33 - 46	9	24.1	0.8	3.2	24	20 - 28
Hemoliance SynthASil												
IL ACL, all models	5	45.0	2.8	6.3	45	38 - 52	5	42.0	2.8	6.7	42	35 - 49
IL TEST APTT-SP												
IL ACL, all models	5	45.5	2.1	4.7	46	38 - 53	5	29.5	0.7	2.4	30	25 - 34
<u>Specimen CG-10</u>												
All Method	13	26.6	2.8	10.6	26	22 - 31						
Dade Actin FSL												
Sysmex CA-500/600 series	9	25.0	1.2	4.9	25	21 - 29						
Hemoliance SynthASil												
IL ACL, all models	2	30.0	1.4	4.7	30	25 - 35						
IL TEST APTT-SP												
IL ACL, all models	5	30.5	2.1	7.0	31	25 - 36						

Fibrinogen (mg/dL)

One participant reported Fibrinogen. The vendor assay values on a Sysmex CA-540 for specimens CG-6 through CG-10 are: 234 mg/dL, 86 mg/dL, 236 mg/dL, 361 mg/dL, and 248 mg/dL, respectively.

RH FACTOR (Slide Method)

<u>Specimen</u>	<u>Results</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
RH-6	Rh Positive	5	100%	Acceptable
RH-7	Rh Negative	5	100%	Acceptable
RH-8	Rh Positive	5	100%	Acceptable
RH-9	Rh Negative	5	100%	Acceptable
RH-10	Rh Negative	5	100%	Acceptable

COAGUCHEK XS PLUS PROTHROMBIN TIME (seconds)

<i><u>Instrument</u></i>	Specimen XS-6						Specimen XS-7					
	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>	<i><u>Labs</u></i>	<i><u>Mean</u></i>	<i><u>SD</u></i>	<i><u>CV</u></i>	<i><u>Median</u></i>	<i><u>Range</u></i>
All Method	23	13.89	0.50	3.6	13.9	11.8 - 16.0	23	25.50	0.94	3.7	25.8	21.6 - 29.4
All Roche CoaguChek XS Plus Instruments	23	13.89	0.50	3.6	13.9	11.8 - 16.0	23	25.50	0.94	3.7	25.8	21.6 - 29.4
Roche CoaguChek XS Plus - Waived	13	14.17	1.23	8.7	13.8	12.0 - 16.3	13	25.47	1.00	3.9	25.5	21.6 - 29.3
Roche CoaguChek XS Plus	10	13.99	0.24	1.7	14.0	11.8 - 16.1	10	25.54	0.93	3.6	25.8	21.7 - 29.4
	Specimen XS-8						Specimen XS-9					
All Method	22	38.93	2.54	6.5	38.1	33.0 - 44.8	22	14.08	0.45	3.2	14.1	11.9 - 16.2
All Roche CoaguChek XS Plus Instruments	22	38.93	2.54	6.5	38.1	33.0 - 44.8	22	14.08	0.45	3.2	14.1	11.9 - 16.2
Roche CoaguChek XS Plus - Waived	13	38.20	2.48	6.5	37.6	32.4 - 44.0	13	14.10	0.53	3.8	14.1	11.9 - 16.3
Roche CoaguChek XS Plus	9	-	-	-	39.2	33.0 - 44.8	9	-	-	-	14.1	11.9 - 16.2
	Specimen XS-10											
All Method	22	38.59	2.36	6.1	37.8	32.8 - 44.4						
All Roche CoaguChek XS Plus Instruments	22	38.59	2.36	6.1	37.8	32.8 - 44.4						
Roche CoaguChek XS Plus - Waived	13	37.66	2.19	5.8	37.6	32.0 - 43.4						
Roche CoaguChek XS Plus	9	-	-	-	39.5	32.8 - 44.4						

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

<u>Instrument</u>	Specimen XS-6						Specimen XS-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	37	1.17	0.05	4.4	1.2	0.9 - 1.5	37	2.13	0.09	4.0	2.1	1.7 - 2.6
All Roche CoaguChek XS Plus Instruments	35	1.18	0.04	3.5	1.2	0.9 - 1.5	35	2.13	0.09	4.1	2.2	1.7 - 2.6
Roche CoaguChek XS Plus - Waived	26	1.18	0.04	3.3	1.2	0.9 - 1.5	26	2.12	0.09	4.3	2.1	1.6 - 2.6
Roche CoaguChek XS Plus	10	1.17	0.05	4.2	1.2	0.9 - 1.5	10	2.14	0.08	3.7	2.2	1.7 - 2.6
	Specimen XS-8						Specimen XS-9					
All Method	37	3.23	0.22	6.8	3.2	2.5 - 3.9	37	1.18	0.04	3.4	1.2	0.9 - 1.5
All Roche CoaguChek XS Plus Instruments	34	3.23	0.22	6.8	3.2	2.5 - 3.9	34	1.18	0.04	3.4	1.2	0.9 - 1.5
Roche CoaguChek XS Plus - Waived	26	3.17	0.21	6.7	3.1	2.5 - 3.9	26	1.19	0.04	3.2	1.2	0.9 - 1.5
Roche CoaguChek XS Plus	9	-	-	-	3.3	2.5 - 3.9	9	-	-	-	1.2	0.9 - 1.5
	Specimen XS-10											
All Method	37	3.21	0.19	6.0	3.2	2.5 - 3.9						
All Roche CoaguChek XS Plus Instruments	34	3.21	0.19	6.0	3.2	2.5 - 3.9						
Roche CoaguChek XS Plus - Waived	26	3.16	0.19	6.0	3.1	2.5 - 3.8						
Roche CoaguChek XS Plus	9	-	-	-	3.3	2.5 - 3.9						

COAGUCHECK XS - INTERNATIONAL NORMALIZED RATIO (INR)

<u>Instrument</u>	Specimen INX-3						Specimen INX-4					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
Roche CoaguChek XS	126	1.17	0.05	4.4	1.2	0.9 - 1.5	127	3.12	0.15	4.7	3.1	2.4 - 3.8

i-Stat PROTHROMBIN TIME (seconds)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen PTI-6</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen PTI-7</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>SD</u>				<u>CV</u>	<u>Median</u>	<u>Range</u>	
i-Stat Prothrombin Time	11	24.00	0.78	3.2	24.1	20.4 - 27.6	11	13.72	0.75	5.5	13.8	11.6 - 15.8	
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen PTI-8</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen PTI-9</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>SD</u>				<u>CV</u>	<u>Median</u>	<u>Range</u>	
i-Stat Prothrombin Time	11	13.66	0.86	6.3	13.8	11.6 - 15.8	11	13.84	0.97	7.0	13.8	11.7 - 16.0	
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen PTI-10</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
			<u>SD</u>	<u>CV</u>	<u>Median</u>								
i-Stat Prothrombin Time	11	23.56	1.18	5.0	23.9	20.0 - 27.1							

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

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen PTI-6</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen PTI-7</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>SD</u>				<u>CV</u>	<u>Median</u>	<u>Range</u>	
i-Stat Prothrombin Time	11	2.08	0.08	4.0	2.1	1.6 - 2.5	11	1.16	0.05	4.7	1.2	0.9 - 1.4	
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen PTI-8</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen PTI-9</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>SD</u>				<u>CV</u>	<u>Median</u>	<u>Range</u>	
i-Stat Prothrombin Time	11	1.16	0.09	7.7	1.2	0.9 - 1.4	11	1.16	0.11	9.8	1.2	0.9 - 1.4	
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen PTI-10</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
			<u>SD</u>	<u>CV</u>	<u>Median</u>								
i-Stat Prothrombin Time	11	2.04	0.09	4.4	2.1	1.6 - 2.5							

FLUID CELL COUNT – WHITE BLOOD CELL COUNT (µL)

<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen BF-3</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen BF-4</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>SD</u>				<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	5	3.0	1.4	47.1	3	0 - 6	5	274.5	70.0	25.5	275	134 - 415	

FLUID CELL COUNT – RED BLOOD CELL COUNT (µL)

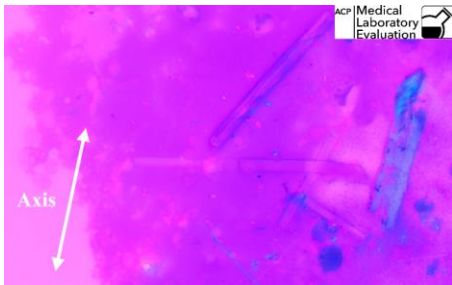
<u>Instrument</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen BF-3</u>				<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>Specimen BF-4</u>			
			<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>SD</u>				<u>CV</u>	<u>Median</u>	<u>Range</u>	
All Method	5	0.0	0.1	0.0	0	0 - 1	5	678.5	91.2	13.4	679	496 - 861	

**2018 M2
FLUID CRYSTAL IDENTIFICATION
Specimens FC-3 and FC-4**

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

Microscopic examination of synovial fluid for crystals is an important diagnostic test in the evaluation of arthritis. Some crystals can be identified by their shape or morphology alone. Others have similar shapes and need specialized techniques for identification. Using compensated polarized light helps us to identify crystals based on the optical differences described above. 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. Color produced by a crystal aligned with the slow-vibration ray of light can be used to identify the crystal. This difference in color is due to the molecular structure inside the crystal, which either allows the light to pass through unchanged, or impedes the light.

Specimen FC-3

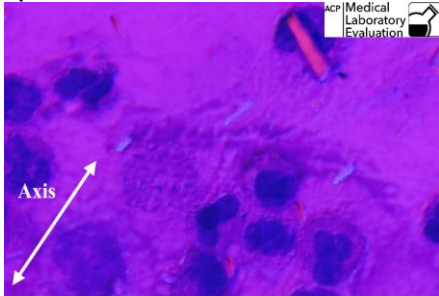


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
No crystals observed	3	60%	Ungraded
Other, not listed	1	20%	
MSU (Monosodium Urate) cry	1	20%	

The large rectangular objects in this photograph are steroid crystals. Corticosteroids (steroids) are drugs that are used to treat musculoskeletal and joint pain by reducing inflammation. Examples of steroid drugs include cortisone, triamcinolone, and prednisone. Steroids are often injected directly into the joints to treat conditions such as rheumatoid arthritis and gout. Corticosteroid crystals can be seen in synovial fluid following intra-articular injection. Steroid crystals can be confused with other needle-shaped crystals such as MSU, but steroid crystals exhibit positive birefringence, are significantly larger than MSU, and generally appear in greater numbers. Having the patient's clinical history is helpful in these cases. To view another photo of steroid crystals, see 2017 M2 Specimen FC-4. Specimen FC-1 is an ungraded challenge due to less than 80% participant consensus.

**2018 M2
FLUID CRYSTAL IDENTIFICATION**

Specimen FC-4



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
CPPD crystals	4	80%	Acceptable
Steroid crystals	1	20%	

The rectangular 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 or rod-shaped, but are occasionally needle-shaped. These crystals demonstrate positive birefringence, because they are blue in color when aligned with (parallel to) the compensator filter/axis. The pink-red crystals that are not aligned parallel to the axis are also CPPD. The large number of white blood cells in this fluid specimen indicates presence of acute inflammation. To view another photo of CPPD crystals, see 2017M1 Specimen FC-2.

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MICROALBUMIN, DIPSTICK

Specimen UM-2

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/L</u>	<u>20 mg/L</u>	<u>30 mg/L</u>	<u>50 mg/L</u>	<u>80 mg/L</u>	<u>100 mg/L</u>	<u>150 mg/L</u>	<u>+ (4 - 8 mg/dL)</u>	<u>++ (>8 mg/dL)</u>
ALL METHODS	35	-	15	-	19	-	-	-	1	-	-
Roche Micral - 1 minute	1	-	-	-	1	-	-	-	-	-	-
Siemens Clinitek Microalbumin	33	-	15	-	17	-	-	-	1	-	-

CREATININE, DIPSTICK

Specimen UM-2

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>10 mg/dL</u>	<u>30 mg/dL</u>	<u>50 mg/dL</u>	<u>100 mg/dL</u>	<u>200 mg/dL</u>	<u>300 mg/dL</u>
ALL METHODS	36	-	-	1	1	-	5	29
Siemens Clinitek Microalbumin	32	-	-	1	1	-	5	25
Siemens Multistix Pro	2	-	-	-	-	-	-	2

Graded by 91% referee consensus.

MICROALBUMIN, QUANTITATIVE

Specimen UM-2

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	64	30.53	2.12	6.9	30.3	21.3 - 39.7
Beckman AU	16	29.26	1.67	5.7	29.5	20.4 - 38.1
Siemens Dimension	20	30.18	1.37	4.5	29.9	21.1 - 39.3

CREATININE, URINE (mg/dL)

Specimen UM-2

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	58	211.81	10.45	4.9	211.9	175.8 - 247.9
Beckman AU	14	216.69	9.73	4.5	218.7	179.8 - 253.6
Siemens Dimension	17	207.12	10.37	5.0	209.7	171.9 - 242.4

WAIVED HEMATOLOGY–HEMOGLOBIN (g/dL)

<u>Instrument</u>	Specimen HD-6						Specimen HD-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	104	13.33	0.43	3.2	13.3	12.3 - 14.3	103	6.13	0.21	3.4	6.1	5.7 - 6.6
All Stanbio Methods	37	13.54	0.43	3.2	13.6	12.5 - 14.5	35	6.23	0.19	3.1	6.2	5.7 - 6.7
Alere (Stanbio) HemoPoint H2	36	13.53	0.44	3.2	13.6	12.5 - 14.5	34	6.24	0.19	3.1	6.2	5.7 - 6.7
HemoCue	67	13.22	0.38	2.9	13.2	12.2 - 14.2	68	6.08	0.20	3.3	6.1	5.6 - 6.6

WAIVED HEMATOLOGY–HEMATOCRIT (percent)

<u>Instrument</u>	Specimen HD-6						Specimen HD-7					
	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	12	36.93	3.96	10.7	38.9	29.0 - 44.9	10	15.11	3.69	24.4	15.0	7.7 - 22.5
Alere (Stanbio) HemoPoint H2	10	39.20	0.45	1.1	39.0	36.8 - 41.6	9	-	-	-	16.5	7.7 - 22.5

KOH SKIN PREPARATION

<u>Specimen</u>	<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
K-3	Yeast/fungal elements present	121	96.80%	Acceptable
	Yeast/fungal elements absent	4	3.20%	
Organism present in specimen K-3: <i>Microsporium gypseum</i> .				
K-4	Yeast/fungal elements absent	117	93.60%	Acceptable
	Yeast/fungal elements present	8	6.40%	

Organism present in specimen K-4: *Staphylococcus aureus*.

URINALYSIS DIPSTICK–SPECIFIC GRAVITY

Specimen UA-2

<u>Method</u>	<u>Labs</u>	<u>Mean</u>	<u>SD</u>	<u>CV</u>	<u>Median</u>	<u>Range</u>
All Method	729	1.0188	0.0051	0.5	1.020	1.008 - 1.029
All Iris Diagnostics Methods	10	1.0243	0.0005	0.0	1.024	1.014 - 1.035
All Refractive Index Methods	16	1.0241	0.0014	0.1	1.024	1.014 - 1.035
All Roche Methods	32	1.0109	0.0020	0.2	1.010	1.000 - 1.021
All Siemens Methods	429	1.0218	0.0028	0.3	1.020	1.011 - 1.032
Diagnostic Test Group Clarity Urocheck 120	10	1.0175	0.0026	0.3	1.018	1.007 - 1.028
Henry Schein Urispec / Urispec Plus	17	1.0147	0.0021	0.2	1.015	1.004 - 1.025
Iris Ichem VELOCITY Urine Chemistry System	10	1.0243	0.0005	0.0	1.024	1.014 - 1.035
McKesson 120 Urine Analyzer	20	1.0168	0.0025	0.2	1.015	1.006 - 1.027
Roche Chemstrips	29	1.0102	0.0025	0.2	1.010	1.000 - 1.021
Roche Urisys	26	1.0110	0.0020	0.2	1.010	1.000 - 1.021
Siemens Clinitek 50	17	1.0179	0.0025	0.2	1.020	1.007 - 1.028
Siemens Clinitek Advantus	14	1.0200	0.0001	0.0	1.020	1.010 - 1.030
Siemens Clinitek Status / Status+	378	1.0219	0.0024	0.2	1.020	1.011 - 1.032
Siemens Reagent Strips	120	1.0138	0.0040	0.4	1.015	1.003 - 1.024

URINALYSIS DIPSTICK-pH

Specimen UA-2

Participant Results

<u>Method</u>	<u>Labs</u>	<u>≤3.5</u>	<u>4.0</u>	<u>4.5</u>	<u>5.0</u>	<u>5.5</u>	<u>6.0</u>	<u>6.5</u>	<u>7.0</u>	<u>7.5</u>	<u>8.0</u>	<u>8.5</u>	<u>≥9.0</u>
ALL METHODS	741	-	-	-	3	1	2	4	279	447	4	-	1
Beckman AU	1	-	-	-	-	-	-	-	1	-	-	-	-
BTNX Rapid Response Test Strips	1	-	-	-	-	-	-	-	1	-	-	-	-
BTNX Rapid Response U120/U500	1	-	-	-	-	-	-	-	-	1	-	-	-
Consult Diagnostics Reagent Strips	3	-	-	-	-	-	-	-	3	-	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	-	-	-	-	7	-	-	-	-
CTMI CT-120 Urine Analyzer	6	-	-	-	-	-	-	-	6	-	-	-	-
Diagnostic Test Group Clarity Urocheck	3	-	-	-	-	-	-	-	2	1	-	-	-
Diagnostic Test Group Clarity Urocheck 120	9	-	-	-	-	-	-	1	8	-	-	-	-
Germaine Laboratories AimStrip	2	-	-	-	-	-	-	-	1	1	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	-	-	-	-	-	-	-	2	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	1	-	-	-	-
Henry Schein Urispec / Urispec Plus	18	-	-	-	-	-	-	-	18	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	10	-	-	-	-	-	-	-	10	-	-	-	-
McKesson 10SG Reagent Strips	6	-	-	-	-	1	-	-	3	1	-	-	1
McKesson 120 Urine Analyzer	20	-	-	-	-	-	-	1	15	4	-	-	-
Medline 120 Urine Analyzer	4	-	-	-	-	-	-	-	3	1	-	-	-
Medline Urinalysis Reagent Strips	2	-	-	-	-	-	-	-	1	1	-	-	-
Moore Medical Urine Reagent Strips	2	-	-	-	-	-	-	-	-	2	-	-	-
NDC Pro Advantage	2	-	-	-	-	-	-	-	2	-	-	-	-
Other Analyzer Method	4	-	-	-	-	-	1	-	2	1	-	-	-
Other Dipstick Method	6	-	-	-	-	-	-	-	3	3	-	-	-
pH Paper	1	-	-	-	-	-	-	-	-	1	-	-	-
Roche Chemstrip 101	2	-	-	-	-	-	-	-	2	-	-	-	-
Roche Chemstrips	34	-	-	-	-	-	-	-	32	1	1	-	-
Roche cobas u 411	1	-	-	-	-	-	-	-	1	-	-	-	-
Roche Criterion Analyzer	3	-	-	-	-	-	-	-	3	-	-	-	-
Roche Urisys	26	-	-	-	-	-	-	-	26	-	-	-	-
Siemens Clinitek 10 / 100	6	-	-	-	-	-	-	-	1	5	-	-	-
Siemens Clinitek 50	17	-	-	-	-	-	-	-	7	10	-	-	-
Siemens Clinitek 500	5	-	-	-	-	-	-	-	1	4	-	-	-
Siemens Clinitek Advantus	16	-	-	-	-	-	-	-	2	14	-	-	-
Siemens Clinitek Atlas	1	-	-	-	-	-	-	-	1	-	-	-	-
Siemens Clinitek Status / Status+	385	-	-	-	3	-	-	-	101	281	-	-	-
Siemens Hemacombistix	1	-	-	-	-	-	-	-	-	1	-	-	-
Siemens Multistix Pro	3	-	-	-	-	-	-	-	1	2	-	-	-
Siemens Reagent Strips	126	-	-	-	-	-	1	2	9	111	3	-	-
UriScan Reagent Strips	3	-	-	-	-	-	-	-	2	1	-	-	-

URINALYSIS DIPSTICK–PROTEIN QUALITATIVE

Specimen UA-2

<u>Method</u>	<i>Participant Results</i>												
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>10 - 20</u> <u>mg/dL</u>	<u>30 - 70</u> <u>mg/dL</u>	<u>75</u> <u>mg/dL</u>	<u>100 - 200</u> <u>mg/dL</u>	<u>≥300 - 600</u> <u>mg/dL</u>	<u>>600 or ≥1000</u> <u>mg/dL</u>
ALL METHODS	766	7	-	4	173	153	9	-	12	-	167	238	3
BTNX Rapid Response Test Strips	1	-	-	-	1	-	-	-	-	-	-	-	-
BTNX Rapid Response U120/U500	1	-	-	-	1	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	-	-	-	2	1	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	4	-	-	-	-	-	3	-	-
CTMI CT-120 Urine Analyzer	7	-	-	-	6	-	-	-	1	-	-	-	-
Diagnostic Test Group Clarity Urocheck	3	-	-	-	1	2	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	-	-	1	8	-	-	-	1	-	-	-	-
Germaine Laboratories AimStrip	3	-	-	-	1	1	-	-	-	-	1	-	-
Germaine Labs AimStrip Urine Analyzer	2	-	-	-	2	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	1	-	-
Henry Schein Urispec / Urispec Plus	18	-	-	-	1	-	-	-	4	-	13	-	-
Iris Ichem VELOCITY Urine Chemistry System	10	-	-	-	1	-	-	-	-	-	9	-	-
McKesson 10SG Reagent Strips	5	-	-	-	2	1	1	-	-	-	1	-	-
McKesson 120 Urine Analyzer	20	-	-	1	13	4	-	-	-	-	2	-	-
Medline 120 Urine Analyzer	4	-	-	-	2	2	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	-	-	-	1	1	-	-	-	-	-	-	-
Moore Medical Urine Reagent Strips	2	-	-	-	1	1	-	-	-	-	-	-	-
NDC Pro Advantage	2	-	-	-	2	-	-	-	-	-	-	-	-
Other Analyzer Method	3	-	-	-	-	1	-	-	1	-	1	-	-

URINALYSIS DIPSTICK-PROTEIN QUALITATIVE (cont'd)

Specimen UA-2

<u>Method</u>	<u>Participant Results</u>												
	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>10 - 20</u> <u>mg/dL</u>	<u>30 - 70</u> <u>mg/dL</u>	<u>75</u> <u>mg/dL</u>	<u>100 - 200</u> <u>mg/dL</u>	<u>≥300 - 600</u> <u>mg/dL</u>	<u>>600 or ≥1000</u> <u>mg/dL</u>
Other Dipstick Method	6	-	-	-	4	1	-	-	-	-	1	-	-
Roche Chemstrip 101	2	-	-	-	1	-	1	-	-	-	-	-	-
Roche Chemstrips	46	-	-	-	26	4	2	-	1	-	11	1	1
Roche cobas u 411	1	-	-	-	-	-	-	-	-	-	1	-	-
Roche Criterion Analyzer	3	-	-	-	2	-	-	-	-	-	1	-	-
Roche Urisys	27	1	-	1	10	-	-	-	2	-	12	1	-
Siemens Albustix	1	-	-	-	-	-	-	-	-	-	1	-	-
Siemens Clinitek 10 / 100	6	-	-	-	1	1	-	-	-	-	1	3	-
Siemens Clinitek 50	17	1	-	-	-	5	-	-	-	-	-	11	-
Siemens Clinitek 500	5	-	-	-	3	-	-	-	-	-	2	-	-
Siemens Clinitek Advantus	15	-	-	-	8	-	-	-	-	-	6	1	-
Siemens Clinitek Atlas	1	-	-	-	1	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	383	3	-	-	21	91	-	-	-	-	69	199	-
Siemens Hemacombistix	1	-	-	-	-	1	-	-	-	-	-	-	-
Siemens Multistix Pro	3	-	-	-	-	1	-	-	1	-	1	-	-
Siemens Reagent Strips	128	2	-	1	36	32	4	-	1	-	29	21	2
Siemens Uristix	12	-	-	-	8	3	1	-	-	-	-	-	-
Sulfosalicylic Acid	1	-	-	-	1	-	-	-	-	-	-	-	-
UriScan Reagent Strips	3	-	-	-	2	-	-	-	-	-	-	1	-

URINALYSIS DIPSTICK–GLUCOSE

Specimen UA-2

<u>Method</u>	<u>Labs</u>	<u>Negative or Normal</u>	<u>Trace</u>	<u>(1+)</u>	<u>Participant Results</u>				<u>30 - 100 mg/dL</u>	<u>150 - 300 mg/dL</u>	<u>500 mg/dL</u>	<u>>500 or ≥1000 or ≥2000 mg/dL</u>
					<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>					
ALL METHODS	767	763	-	-	-	-	-	2	2	-	-	
BTNX Rapid Response Test Strips	1	1	-	-	-	-	-	-	-	-	-	
BTNX Rapid Response U120/U500	1	1	-	-	-	-	-	-	-	-	-	
Consult Diagnostics Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	
Consult Diagnostics Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-	
CTMI CT-120 Urine Analyzer	6	6	-	-	-	-	-	-	-	-	-	
Diagnostic Test Group Clarity Urocheck	3	3	-	-	-	-	-	-	-	-	-	
Diagnostic Test Group Clarity Urocheck 120	10	10	-	-	-	-	-	-	-	-	-	
Germaine Laboratories AimStrip	3	3	-	-	-	-	-	-	-	-	-	
Germaine Labs AimStrip Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-	
Henry Schein One Step Plus	1	1	-	-	-	-	-	-	-	-	-	
Henry Schein Urispec / Urispec Plus	18	18	-	-	-	-	-	-	-	-	-	
Iris Ichem VELOCITY Urine Chemistry System	9	9	-	-	-	-	-	-	-	-	-	
McKesson 10SG Reagent Strips	6	6	-	-	-	-	-	-	-	-	-	
McKesson 120 Urine Analyzer	20	20	-	-	-	-	-	-	-	-	-	
Medline 120 Urine Analyzer	4	4	-	-	-	-	-	-	-	-	-	
Medline Urinalysis Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	
Moore Medical Urine Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	
NDC Pro Advantage	2	2	-	-	-	-	-	-	-	-	-	
Other Analyzer Method	3	3	-	-	-	-	-	-	-	-	-	
Other Dipstick Method	7	7	-	-	-	-	-	-	-	-	-	
Roche Chemstrip 101	2	2	-	-	-	-	-	-	-	-	-	
Roche Chemstrips	46	46	-	-	-	-	-	-	-	-	-	
Roche cobas u 411	1	1	-	-	-	-	-	-	-	-	-	
Roche Criterion Analyzer	3	3	-	-	-	-	-	-	-	-	-	
Roche Urisys	27	27	-	-	-	-	-	-	-	-	-	
Siemens Clinitek 10 / 100	6	6	-	-	-	-	-	-	-	-	-	
Siemens Clinitek 50	17	17	-	-	-	-	-	-	-	-	-	
Siemens Clinitek 500	5	5	-	-	-	-	-	-	-	-	-	
Siemens Clinitek Advantus	16	16	-	-	-	-	-	-	-	-	-	
Siemens Clinitek Atlas	2	2	-	-	-	-	-	-	-	-	-	
Siemens Clinitek Status / Status+	386	383	-	-	-	-	-	2	1	-	-	
Siemens Hemacombistix	1	1	-	-	-	-	-	-	-	-	-	
Siemens Multistix Pro	3	3	-	-	-	-	-	-	-	-	-	
Siemens Reagent Strips	128	127	-	-	-	-	-	-	1	-	-	
Siemens Uristix	11	11	-	-	-	-	-	-	-	-	-	
UriScan Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	

URINALYSIS DIPSTICK–KETONES

Specimen UA-2

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>Participant Results</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>
							<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>							
ALL METHODS	741	731	4	-	-	-	-	-	-	-	1	2	3	-	-		
BTNX Rapid Response Test Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
BTNX Rapid Response U120/U500	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
Consult Diagnostics Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-		
Consult Diagnostics Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-	-	-	-	-		
CTMI CT-120 Urine Analyzer	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diagnostic Test Group Clarity Urocheck	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diagnostic Test Group Clarity Urocheck 120	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-		
Germaine Laboratories AimStrip	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-		
Germaine Labs AimStrip Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-		
Henry Schein One Step Plus	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
Henry Schein Urispec / Urispec Plus	18	18	-	-	-	-	-	-	-	-	-	-	-	-	-		
Iris Ichem VELOCITY Urine Chemistry System	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-		
McKesson 10SG Reagent Strips	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-		
McKesson 120 Urine Analyzer	20	20	-	-	-	-	-	-	-	-	-	-	-	-	-		
Medline 120 Urine Analyzer	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-		
Medline Urinalysis Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-		
Moore Medical Urine Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-		
NDC Pro Advantage	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other Analyzer Method	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other Dipstick Method	6	4	1	-	-	-	-	-	-	-	1	-	-	-	-		
Roche Chemstrip 101	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-		
Roche Chemstrips	35	35	-	-	-	-	-	-	-	-	-	-	-	-	-		
Roche cobas u 411	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
Roche Criterion Analyzer	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-		
Roche Urisys	26	26	-	-	-	-	-	-	-	-	-	-	-	-	-		
Siemens Clinitek 10 / 100	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-		
Siemens Clinitek 50	17	17	-	-	-	-	-	-	-	-	-	-	-	-	-		
Siemens Clinitek 500	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-		
Siemens Clinitek Advantus	16	16	-	-	-	-	-	-	-	-	-	-	-	-	-		
Siemens Clinitek Atlas	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
Siemens Clinitek Status / Status+	386	382	-	-	-	-	-	-	-	-	-	2	2	-	-		
Siemens Ketostix	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
Siemens Multistix Pro	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-		
Siemens Reagent Strips	126	122	3	-	-	-	-	-	-	-	-	-	1	-	-		
Siemens Uristix	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
UriScan Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-		

URINALYSIS DIPSTICK–BILIRUBIN

Specimen UA-2

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Participant Results</u>					<u>0.5 - 1.0 mg/dL</u>	<u>2.0 - 4.0 mg/dL</u>	<u>6.0 - 10.0 mg/dL</u>	<u>>10.0 mg/dL</u>
						<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>				
ALL METHODS	722	721	-	-	1	-	-	-	-	-	-	-	-	-
BTNX Rapid Response Test Strips	1	1	-	-	-	-	-	-	-	-	-	-	-	-
BTNX Rapid Response U120/U500	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	6	6	-	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	3	3	-	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	10	-	-	-	-	-	-	-	-	-	-	-	-
Germaine Laboratories AimStrip	3	3	-	-	-	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	18	18	-	-	-	-	-	-	-	-	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	10	10	-	-	-	-	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	6	6	-	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	20	20	-	-	-	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	4	-	-	-	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Moore Medical Urine Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Other Analyzer Method	3	3	-	-	-	-	-	-	-	-	-	-	-	-
Other Dipstick Method	4	4	-	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrip 101	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrips	31	31	-	-	-	-	-	-	-	-	-	-	-	-
Roche cobas u 411	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	3	3	-	-	-	-	-	-	-	-	-	-	-	-
Roche Urisys	26	26	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	6	6	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	17	17	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	5	5	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	15	15	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Atlas	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	381	380	-	-	1	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	3	3	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	121	121	-	-	-	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–UROBILINOGEN

Specimen UA-2

<u>Method</u>	<u>Labs</u>	<i>Participant Results</i>				
		<u>Normal or 0.0 - 0.2 mg/dL or <3.2 µmol/L</u>	<u>1.0 or <2.0 mg/dL or 16 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	713	710	-	3	-	-
BTNX Rapid Response Test Strips	1	1	-	-	-	-
BTNX Rapid Response U120/U500	1	-	-	1	-	-
Consult Diagnostics Reagent Strips	3	2	-	1	-	-
Consult Diagnostics Urine Analyzer	7	7	-	-	-	-
CTMI CT-120 Urine Analyzer	6	6	-	-	-	-
Diagnostic Test Group Clarity Urocheck	3	3	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	10	-	-	-	-
Germaine Laboratories AimStrip	3	2	-	1	-	-
Germaine Labs AimStrip Urine Analyzer	2	2	-	-	-	-
Henry Schein One Step Plus	1	1	-	-	-	-
Henry Schein Urispec / Urispec Plus	18	18	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	9	9	-	-	-	-
McKesson 10SG Reagent Strips	6	6	-	-	-	-
McKesson 120 Urine Analyzer	20	20	-	-	-	-
Medline 120 Urine Analyzer	4	4	-	-	-	-
Medline Urinalysis Reagent Strips	2	2	-	-	-	-
Moore Medical Urine Reagent Strips	2	2	-	-	-	-
NDC Pro Advantage	2	2	-	-	-	-
Other Analyzer Method	3	3	-	-	-	-
Other Dipstick Method	3	3	-	-	-	-
Roche Chemstrip 101	2	2	-	-	-	-
Roche Chemstrips	31	31	-	-	-	-
Roche cobas u 411	1	1	-	-	-	-
Roche Criterion Analyzer	3	3	-	-	-	-
Roche Urisys	26	26	-	-	-	-
Siemens Clinitek 10 / 100	6	6	-	-	-	-
Siemens Clinitek 50	16	16	-	-	-	-
Siemens Clinitek 500	5	5	-	-	-	-
Siemens Clinitek Advantus	14	14	-	-	-	-
Siemens Clinitek Atlas	1	1	-	-	-	-
Siemens Clinitek Status / Status+	375	375	-	-	-	-
Siemens Multistix Pro	3	3	-	-	-	-
Siemens Reagent Strips	121	121	-	-	-	-
UriScan Reagent Strips	2	2	-	-	-	-

URINALYSIS DIPSTICK–BLOOD/HEMOGLOBIN

Specimen UA-2

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>(5+)</u>	<u>5 - 25</u> <u>Erv/µL</u>	<u>50 -</u> <u>100</u> <u>Erv/µL</u>	<u>250</u> <u>Erv/µL</u>	<u>±0.03</u> <u>mg/dL</u>	<u>0.06</u> <u>-</u> <u>0.10</u> <u>mg/</u> <u>dL</u>	<u>0.2 -</u> <u>0.5</u> <u>mg/</u> <u>dL</u>	<u>≥ 1.0</u> <u>mg/</u> <u>dL</u>
ALL METHODS	749	10	1	1	21	384	-	15	230	5	1	-	1	78	-	1	1	-
BTNX Rapid Response Test Strips	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
BTNX Rapid Response U120/U500	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	-	-	-	-	-	-	-	5	-	-	-	-	2	-	-	-	-
CTMI CT-120 Urine Analyzer	6	-	-	-	-	-	-	-	5	-	-	-	-	1	-	-	-	-
Diagnostic Test Group Clarity Urocheck	3	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	1	-	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-
Germaine Laboratories AimStrip	3	-	-	-	-	-	-	-	2	-	-	-	-	1	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Henry Schein Urispec / Urispec Plus	18	-	-	-	-	-	-	-	1	-	-	-	1	16	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	10	-	-	-	-	8	-	1	-	-	-	-	-	-	-	1	-	-
McKesson 10SG Reagent Strips	6	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	20	-	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
Moore Medical Urine Reagent Strips	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
Other Analyzer Method	3	-	-	-	-	1	-	-	-	-	-	-	-	2	-	-	-	-
Other Dipstick Method	6	-	-	-	-	3	-	-	3	-	-	-	-	-	-	-	-	-
Roche Chemstrip 101	2	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-
Roche Chemstrips	43	3	-	-	-	3	-	1	2	-	-	-	-	34	-	-	-	-
Roche cobas u 411	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Roche Criterion Analyzer	3	-	-	-	-	-	-	-	-	2	-	-	-	1	-	-	-	-
Roche Urisys	27	-	-	-	-	-	-	11	-	-	-	-	-	16	-	-	-	-
Siemens Clinitek 10 / 100	6	-	-	-	-	4	-	-	2	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	16	-	-	-	-	11	-	-	5	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	5	-	-	-	-	2	-	-	3	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	16	-	-	-	-	8	-	-	8	-	-	-	-	-	-	-	-	-
Siemens Clinitek Atlas	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	385	4	1	1	19	249	-	1	109	-	-	-	-	-	-	-	1	-
Siemens Hemacombistix	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	3	-	-	-	-	2	-	-	-	-	-	-	-	1	-	-	-	-
Siemens Reagent Strips	127	2	-	-	2	90	-	-	29	3	1	-	-	-	-	-	-	-
UriScan Reagent Strips	3	-	-	-	-	-	-	-	2	-	-	-	-	1	-	-	-	-

URINALYSIS DIPSTICK–LEUKOCYTE ESTERASE

Specimen UA-2

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Trace</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>(1+)</u>	<u>(2+)</u>	<u>(3+)</u>	<u>(4+)</u>	<u>15 or 25 µL</u>	<u>75 or 100 µL</u>	<u>250 or 500 µL</u>
ALL METHODS	756	746	4	2	-	-	1	1	-	-	2	-	-
BTNX Rapid Response Test Strips	1	1	-	-	-	-	-	-	-	-	-	-	-
BTNX Rapid Response U120/U500	1	1	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	-	-
Consult Diagnostics Urine Analyzer	7	7	-	-	-	-	-	-	-	-	-	-	-
CTMI CT-120 Urine Analyzer	6	6	-	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck	3	2	1	-	-	-	-	-	-	-	-	-	-
Diagnostic Test Group Clarity Urocheck 120	10	9	1	-	-	-	-	-	-	-	-	-	-
Germaine Laboratories AimStrip	3	3	-	-	-	-	-	-	-	-	-	-	-
Germaine Labs AimStrip Urine Analyzer	2	2	-	-	-	-	-	-	-	-	-	-	-
Henry Schein One Step Plus	1	1	-	-	-	-	-	-	-	-	-	-	-
Henry Schein Urispec / Urispec Plus	18	18	-	-	-	-	-	-	-	-	-	-	-
Iris Ichem VELOCITY Urine Chemistry System	10	10	-	-	-	-	-	-	-	-	-	-	-
McKesson 10SG Reagent Strips	6	6	-	-	-	-	-	-	-	-	-	-	-
McKesson 120 Urine Analyzer	20	20	-	-	-	-	-	-	-	-	-	-	-
Medline 120 Urine Analyzer	4	4	-	-	-	-	-	-	-	-	-	-	-
Medline Urinalysis Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-
Moore Medical Urine Reagent Strips	2	2	-	-	-	-	-	-	-	-	-	-	-
NDC Pro Advantage	2	2	-	-	-	-	-	-	-	-	-	-	-
Other Analyzer Method	3	3	-	-	-	-	-	-	-	-	-	-	-
Other Dipstick Method	6	3	1	-	-	-	-	-	-	-	2	-	-
Roche Chemstrip 101	2	2	-	-	-	-	-	-	-	-	-	-	-
Roche Chemstrips	43	42	-	-	-	-	-	1	-	-	-	-	-
Roche cobas u 411	1	1	-	-	-	-	-	-	-	-	-	-	-
Roche Criterion Analyzer	3	3	-	-	-	-	-	-	-	-	-	-	-
Roche Urisys	27	27	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 10 / 100	6	6	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 50	16	16	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek 500	5	5	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Advantus	16	16	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Atlas	1	1	-	-	-	-	-	-	-	-	-	-	-
Siemens Clinitek Status / Status+	385	383	-	2	-	-	-	-	-	-	-	-	-
Siemens Multistix Pro	3	3	-	-	-	-	-	-	-	-	-	-	-
Siemens Reagent Strips	125	123	1	-	-	-	1	-	-	-	-	-	-
Siemens Uristix	10	10	-	-	-	-	-	-	-	-	-	-	-
UriScan Reagent Strips	3	3	-	-	-	-	-	-	-	-	-	-	-

URINALYSIS DIPSTICK–NITRITE

Specimen UA-2

Participant Results

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<u>Positive</u>
ALL METHODS	757	756	1
BTNX Rapid Response Test Strips	1	1	-
BTNX Rapid Response U120/U500	1	1	-
Consult Diagnostics Reagent Strips	3	3	-
Consult Diagnostics Urine Analyzer	7	7	-
CTMI CT-120 Urine Analyzer	6	6	-
Diagnostic Test Group Clarity Urocheck	3	3	-
Diagnostic Test Group Clarity Urocheck 120	10	10	-
Germaine Laboratories AimStrip	3	3	-
Germaine Labs AimStrip Urine Analyzer	2	2	-
Henry Schein One Step Plus	1	1	-
Henry Schein Urispec / Urispec Plus	18	17	1
Iris Ichem VELOCITY Urine Chemistry System	10	10	-
McKesson 10SG Reagent Strips	6	6	-
McKesson 120 Urine Analyzer	20	20	-
Medline 120 Urine Analyzer	4	4	-
Medline Urinalysis Reagent Strips	2	2	-
Moore Medical Urine Reagent Strips	2	2	-
NDC Pro Advantage	2	2	-
Other Analyzer Method	3	3	-
Other Dipstick Method	6	6	-
Roche Chemstrip 101	2	2	-
Roche Chemstrips	43	43	-
Roche cobas u 411	1	1	-
Roche Criterion Analyzer	3	3	-
Roche Urisys	27	27	-
Siemens Clinitek 10 / 100	6	6	-
Siemens Clinitek 50	16	16	-
Siemens Clinitek 500	5	5	-
Siemens Clinitek Advantus	16	16	-
Siemens Clinitek Atlas	1	1	-
Siemens Clinitek Status / Status+	384	384	-
Siemens Multistix Pro	3	3	-
Siemens Reagent Strips	127	127	-
Siemens Uristix	10	10	-
UriScan Reagent Strips	3	3	-

URINALYSIS –MICROALBUMIN (dipstick only)

Specimen UA-2

<u>Method</u>	<u>Labs</u>	<u>Negative</u>	<i>Participant Results</i>								
			<u>10 mg/L</u>	<u>20 mg/L</u>	<u>30 mg/L</u>	<u>50 mg/L</u>	<u>80 mg/L</u>	<u>100 mg/L</u>	<u>150 mg/L</u>	<u>+ (4 - 8 mg/dL)</u>	<u>++ (>8 mg/dL)</u>
ALL METHODS	65	5	1	-	3	-	1	12	43	-	-
BTNX Rapid Response											
Microalb/Crea	1	-	-	-	-	-	-	-	1	-	-
Roche Micral - 1 minute	13	1	-	-	-	-	1	11	-	-	-
Siemens Clinitek 50	2	-	-	-	-	-	-	1	1	-	-
Siemens Clinitek Microalbumin	42	-	1	-	3	-	-	-	38	-	-
Siemens Clinitek Status / Status+	4	1	-	-	-	-	-	-	3	-	-
Siemens Reagent Strips	3	3	-	-	-	-	-	-	-	-	-

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

<u>Method</u>	<i>Participant Results</i>		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	434	429	5
Alere Acceava hCG-Urine	1	1	-
Alere Clearview 25 hCG Combo	1	1	-
Alere Clearview hCG Cassette	4	4	-
Alere Clearview hCG Combo II	1	1	-
Alere hCG Cassette	3	3	-
Alfa Scientific Instant View	5	5	-
Beckman Coulter ICON 25 hCG	21	20	1
Beckman Coulter ICON II	8	8	-
BioSign hCG	1	1	-
BTNX Rapid Response hCG	3	3	-
Cardinal Health SP Brand combo	27	27	-
Cardinal Hlth SPBrand-cassette	1	1	-
Clarity Diagnostics hCG strip/cassette	10	9	1
CONSULT diagnostics hCG Cassette	54	54	-
CONSULT diagnostics hCG Combo	11	11	-
CONSULT diagnostics hCG Dipstick	31	31	-
Germaine Laboratories AimStrip Pregnancy	2	2	-
Henry Schein One Step	62	62	-
Henry Schein Urispec / Urispec Plus	1	1	-
Immunostics Cept-D	2	1	1
Immunostics hCG Detector-urine	2	2	-
McKesson hCG Combo Cassette	5	5	-
McKesson hCG Urine Cassette	9	9	-
MediChoice hCG Combi Cassette	8	8	-
MediChoice hCG Urine Cassette	1	-	1
Medline hCG Combo Test Cassette	3	3	-
Medline hCG Test Cassette	3	3	-
Moore Medical hCG Urine	3	2	1
NDC Pro Advantage	1	1	-
Other Dipstick Method	1	1	-
PEP (Lab Supply) HCG	1	1	-
Polymedco Poly stat hCG	1	1	-
Quidel QuickVue One-Step Combo	21	21	-
Quidel QuickVue One-Step Urine	40	40	-
Quidel QuickVue+ One-Step Combo	21	21	-
Quidel Sofia hCG	2	2	-
RefuAH hCG Dipstick	9	9	-
Sekisui OSOM Card Pregnancy	9	9	-

URINALYSIS –URINE hCG (cont'd)

Specimen UA-2

<u>Method</u>	<i>Participant Results</i>		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
Sekisui OSOM hCG Combo Test	2	2	-
Siemens Clinitek Status / Status+	10	10	-
Stanbio QuPID	8	8	-
Stanbio QuPID Plus	2	2	-
Stanbio TRUE hCG	9	9	-
Sure-Vue hCG - 25mIU	2	2	-
Sure-Vue hCG-STAT	6	6	-

FECAL OCCULT BLOOD

<u>Method</u>	Specimen OC-3			Specimen OC-4		
	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>	<u>Labs</u>	<u>Positive</u>	<u>Negative</u>
ALL METHODS	288	285	3	289	3	286
Alere Clearview iFOBT Complete	1	1	-	1	-	1
Beckman Coulter Hemoccult ICT	45	44	1	45	-	45
Guaiaac (slide) Test	160	159	1	160	3	157
Hemosure iFOB	35	35	-	35	-	35
Other Immunochemical FOB kit	24	23	1	24	-	24
Polymedco OC Auto Micro 80	3	3	-	4	-	4
Polymedco OC-Light iFOB	10	10	-	10	-	10
Quidel QuickVue iFOB	6	6	-	6	-	6

2018 M2
Urine Sediment Identification
SPECIMENS US-3 AND US-4

CASE HISTORY:

A 35 year old pregnant female presented to her obstetrician's office for a prenatal checkup. A urine specimen was collected for routine urinalysis and stored in the laboratory refrigerator for 2 hours before testing. Results appear below.

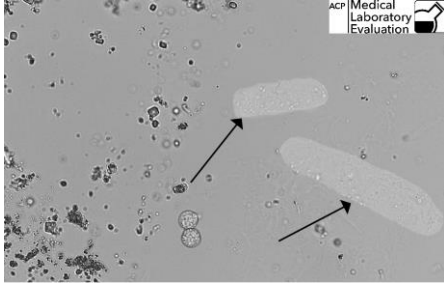
Color = Pink
Appearance = Turbid

Dipstick results:

Specific Gravity \geq 1.030
pH = 6.0
Protein = Trace
Glucose = Negative
Ketones = Trace
Bilirubin = Negative
Urobilinogen = Normal/0.2 mg/dL
Blood = Negative
Leukocyte Esterase = Negative
Nitrite = Negative

Urine Sediment Identification

Specimen US-3

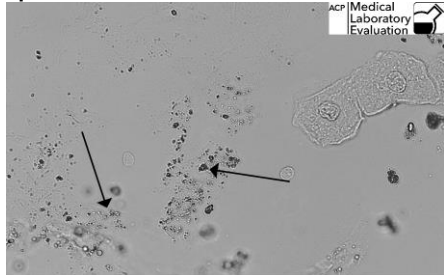


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Hyaline cast	415	87.37%	Acceptable
Waxy cast	46	9.68%	
Granular cast	5	1.05%	
Fatty cast	4	0.84%	

The arrows in this photo point to **hyaline casts**. Hyaline casts are the most commonly seen casts in the urine. They are colorless and smooth, with a finely wrinkled surface and no granules. The sides are parallel and the ends are blunt and rounded. Hyaline casts are normal, and frequently seen in the urine sediment of healthy people in small numbers. They may be increased after strenuous exercise or in renal disease. Hyaline casts are sometimes confused with waxy or finely granular casts. Waxy casts are more broad and square, with cracks and blunt ends. Granular casts appear to contain a lot of debris. To view another hyaline cast, see 2014 M1 Specimen US-2. To view a photo of a waxy cast, see 2006 M1 Specimen US-1. To view a granular cast, see 2008 M2 Specimen US-3.

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

Specimen US-4



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Amorph urate/phosphate crystal	404	85.59%	Acceptable
Indentification Unknown – Refer	13	2.75%	Acceptable
Granular cast	16	3.39%	
Fiber/fecal contamination	8	1.69%	
Fat droplets or globules	5	1.06%	
Bacteria	5	1.06%	

The arrows in this photo point to **amorphous urate crystals**. Amorphous means without shape or form. Amorphous urate crystals are normal crystals commonly seen in acidic, concentrated specimens that have been refrigerated. The specimen cup often contains a fluffy, opaque, red precipitate described as "brick dust." These urate crystals are microscopically identical to amorphous phosphate crystals, which are found in urines with alkaline pH and form a white or colorless precipitate. To view another photo of amorphous crystals, see 2014 M1 Specimen US-1.

Technical tip: Amorphous crystals can be so numerous that they obstruct the view of any other elements in the sediment. The crystals can be dissolved by heating a tube of the urine or sediment in a hot water bath or heat block.

REFERENCES:

Haber, M.H.: *Urinary Sediment: A Textbook Atlas*. Chicago, American Society of Clinical Pathologists, 1981.

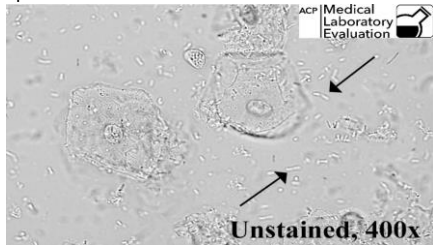
Mundt, L.A, Shanahan, K.: *Graff's Textbook of Routine Urinalysis and Body Fluids, 2nd ed.* Philadelphia: Lippincott Williams & Wilkins, 2011.

Turgeon, M.L.: *Linné & Ringsrud's Clinical Laboratory Science: Concepts, Procedures, and Clinical Applications, 7th ed.* St. Louis, Mosby, 2015.

PROVIDER-PERFORMED MICROSCOPY (PPM)

Wet Mount Preparation

Specimen PPM-7

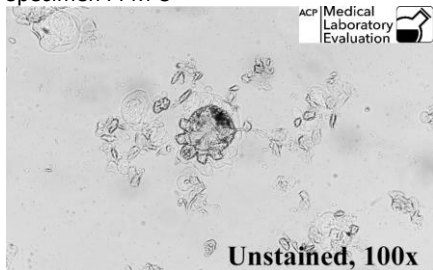


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Bacteria	452	91.13%	Acceptable
Yeast fungi	37	7.46%	

The arrows in this photograph of a vaginal wet mount point to **bacteria**. A variety of bacteria, including lactobacilli and streptococci, make up the normal vaginal flora. To view another photo of bacteria in a wet mount, see 2015 M3 Specimen PPM-13.

SCABIES IDENTIFICATION

Specimen PPM-8



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Scabies present	208	99.52%	Acceptable

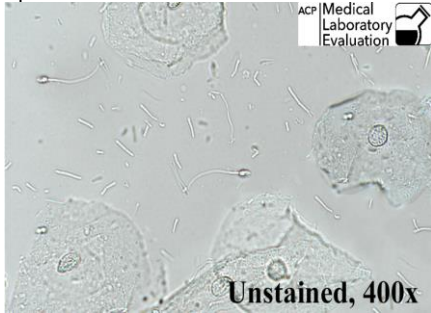
Scabies are present in this photograph of a skin scrapings preparation. The mites burrow into the skin and produce a pimple-like (papular) rash that itches. The diagnosis of scabies is often made only by the patient history and examination of the skin. Identification of the mite, its burrows, eggs, or feces (called scybala) confirms the clinical suspicion of scabies. Scabies can be difficult to find by laboratory testing, though, because mites are often few in number. The scabies mite, or human itch mite (*Sarcoptes scabiei*), is usually spread by prolonged direct personal contact with an infested person. It can also be spread indirectly by prolonged contact with infested clothing or bedding. There may be only 10-15 mites on the entire body of an infested person who is otherwise healthy, so a negative test does not rule out the diagnosis.

To view another photo of a scabies mite, see 2017 M1 Specimen PPM-3.

PROVIDER-PERFORMED MICROSCOPY (PPM)

SPERM IDENTIFICATION

Specimen PPM-9

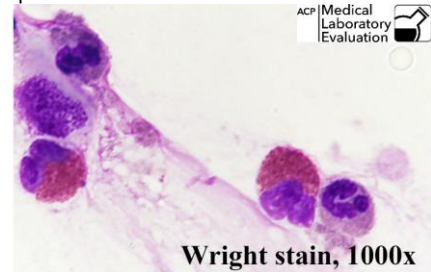


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Sperm present	331	100%	Acceptable

Two spermatozoa are present in this photograph of a vaginal wet mount preparation. To view another photo of spermatozoa, see 2017 M3 Specimen PPM-15.

Nasal Smear

Specimen PPM-10



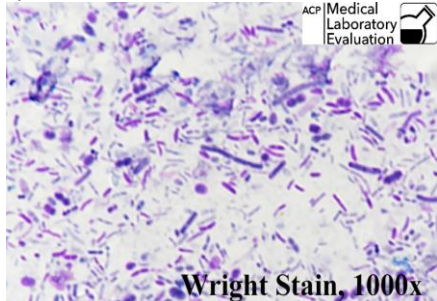
<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Eosinophils present	124	100%	Acceptable

Two eosinophils are present in this photograph of Wright-stained nasal mucus. Eosinophils are a specific type of leukocyte that is increased in response to allergic conditions. The orange color of the eosinophilic cytoplasm comes from the dye eosin, which is a component of Wright stain. This unique red-orange color makes “Eos” easy to spot and identify. The cells in this field with pink-purple cytoplasm are neutrophils. To view another photo of eosinophils in a nasal smear, see 2017 M2 Specimen PPM-10.

PROVIDER-PERFORMED MICROSCOPY (PPM)

STOOL PREPARATION

Specimen PPM-11

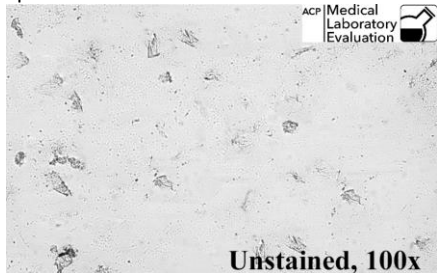


<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Leukocytes absent	151	82.51%	Acceptable
Leukocytes present	32	17.49%	

Leukocytes are absent in this photograph of a Wright stained stool preparation. The round objects in this field are yeast cells and bacteria. Notice how large the leukocytes are in PPM-10 above, which is the same magnification as this photo. To view a photo of fecal leukocytes, see 2017 M2 Specimen PPM-11.

PINWORM PREPARATION

Specimen PPM-12



<u>Identification</u>	<u>Labs</u>	<u>Percent</u>	<u>Performance</u>
Pinworms/eggs absent	206	98.56%	Acceptable
Pinworms eggs present	3	1.44%	

Pinworms/eggs are absent in this photograph of a perianal pinworm preparation. To view a photo of pinworm eggs, see 2017 M2 Specimen PPM-12.

REFERENCES:

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

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Scabies. In: Parasite Image Library at DPDx Laboratory Identification of Parasites of Public Health Concern. Centers for Disease Control and Prevention (CDC). Available at: <http://www.cdc.gov/dpdx/scabies/index.html>

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25 Massachusetts Ave NW Ste 700
Washington, DC 20001-7401
800-338-2746 • 202-261-4500 • Fax: 202-835-0440
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